

Analysis of the Influence of Creative Economics, Digital Technology, Infrastructure, MSMEs, Tourism Objects on Tourism and the Implications on Economic Growth in Indonesia

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Abstract. The travel industry is an item that meaningfully affects forming monetary and social viewpoints. The travel industry is an area that keeps on developing quickly and has the seriousness of escalated the travel industry objections. The tight contest in the travel industry area makes not all vacationer locations in that frame of mind in Indonesia generally experience an expansion in the quantity of traveler visits consistently. Traveler visits cover the meaning of the inventive economy, advanced innovation, framework, fabricating industry, and spots as vacation destinations, socio-social, instructive and political. Advertising and advancement are vital in the travel industry. The different idea of the travel industry makes it an impetus for monetary turn of events and helps in adjusted local development. The reason for the review was to decide the impact of the imaginative economy, computerized innovation, foundation, fabricating industry and the travel industry objects on the travel industry area and financial development in Indonesia. The strategy utilized in this examination is Normal Least Square Numerous Direct Relapse and basic board information. The exploration factors utilized are the imaginative economy, advanced innovation, framework, fabricating industry and the travel industry objects which in this study are worked as free factors that influence the travel industry, what capability as the reliant variable, and monetary development, which is worked as the reliant variable with the autonomous variable the travel industry. The consequences of the review show that (1) the imaginative economy, computerized innovation, foundation, producing industry and the travel industry objects both all the while and somewhat meaningfully affect the travel industry in 34 territories in Indonesia, (2) the travel industry area in 34 regions in Indonesia makes a critical and positive difference. on the financial development of the territory, (3) the discoveries of the principal research, the extent of the impact of the imaginative economy, advanced innovation, foundation, fabricating industry, and the travel industry objects on the travel industry 34 areas in Indonesia are exceptionally predominant at 54.3 percent, (5) the discoveries of the following exploration variable the travel industry turns into the most prevailing variable influencing territorial monetary development in 34 regions in Indonesia is 88.6 percent.

Keywords: creative economy; digital technology; infrastructure; manufacturing industry; tourist attraction; tourism and economic growth

1 Introduction

Public advancement is a work to work on all parts of local area, country and state life, which is simultaneously a course of fostering the whole arrangement of state government to accomplish public objectives. Improvement exercises totally should be done to make a superior life and furthermore to adjust to what's going on in the general climate. Everybody can not be isolated from the word improvement. Everybody is obliged to complete improvement to get by in carrying on with life. By and large, the travel industry advancement has had the option to empower and speed up public monetary development where the travel industry exercises drive interest, both utilization and speculation, which thusly will prompt the creation of labor and products. During their exercises in the travel industry area, sightseers will shop and spend their cash to be consumed on the outing, accordingly straightforwardly causing market interest (the travel industry end interest) for labor and products. Moreover, the last interest for the travel industry in a roundabout way provokes an interest for capital merchandise and unrefined components (determined speculation interest) to be created to fulfill vacationer need for labor and products.

Creative industries can compete in terms of product marketing, creative economy products are an industry of lower middle class communities that need serious attention and development from local governments. Creative industries can encourage overall economic growth both directly and indirectly which provide income to the community so that consumption and public welfare can be achieved even with their own efforts and capital.

Before the pandemic, the creative economy grew rapidly and created new jobs in every region. The crisis has halted this remarkable growth, exposing the vulnerability of a sector dominated by micro-enterprises, informal work practices and few tangible assets. The block also emphasizes the importance of cultural and creative activities in preserving individual well-being and community resilience. Digital technology can accelerate the growth of the creative economy, which is a means for the lower middle class to improve their economy, it needs to be supported by labor regulation regulations and ease of doing business that can reduce production costs so that the creative economy as a means of community economic growth can compete in global marketing competition. In October 2020, the Indonesian government issued the Omnibus Law whose main objective is to improve the ease of doing business by reforming investment and tax regulations.

Economic growth in the digital age cannot be separated from the impact of technology and social media marketing. The digital marketing industry is accessible through the latest platforms and technologies. The rapid development of information technology has a significant impact on business operations. Various business activities, big or small, are using the development of digital technology to run their business. MSMEs that exist are MSMEs based on digital technology. "If MSMEs only use manual methods, they will surely lose. MSMEs that will be accessed are MSMEs that can take advantage of the momentum in this digital era well, move together towards the development of digital technology, not only collaboration, MSMEs must also take advantage of current digital facilities.

MSMEs must be able to take advantage of this technology in building communication and sales networks. With mastery of knowledge about this network, MSMEs can become leaders. The government must also provide support for start-ups by providing special facilities because start-up developers are usually beginners. When everyone owns a business, the income of the state will increase. "When people's incomes increase, taxes will also increase so that development will also increase,".

2 Methodology

Flow of Thought in Research

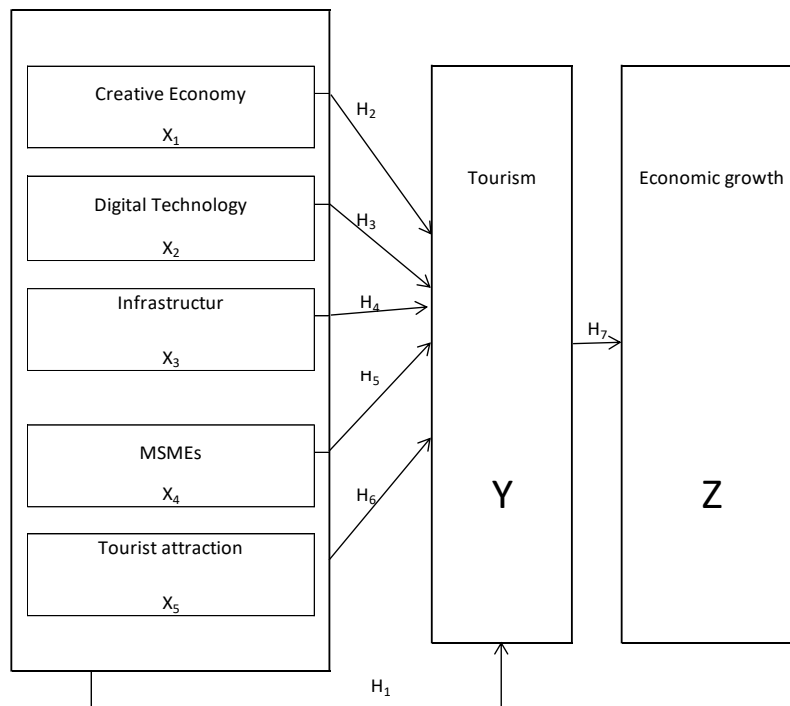


Fig.1. Research Concept Framework.

The variables of this study consist of:

1. The independent variable (X) consists of the Creative Economy (X₁), Digital Technology (X₂), Infrastructure (X₃), SMEs (X₄). And Attractions (X₅).
2. The dependent variable or the dependent variable is Tourism (Y) and Economic Growth (Z).

a. Quantitative Method

The panel data is a combination of time series and cross-sectional data. Time series data is data arranged in time order, such as daily, weekly, monthly, or yearly data. Cross-cutting data is data collected at the same time, for example from different companies, regions and countries.

b. Analysis Method

The time series data in the study consisted of 2016-2020 and the cross-section covered 34 provinces, so the total for the cross-section was 34 and 9 independent and dependent variables with a total data of 1530 data. The data in the study were obtained from several database sources of National institutions such as the National BPS, Articles, Journals, and Information from the Ministry of MSMEs and various other sources related to research.

Model One

Tourism = f (Creative Economy, Digital Technology, Employment, Investment Value, Infrastructure, Manufacturing Industry)

$$\text{Tourism} = + 1\text{EK} + 2\text{TD} + 3\text{TK} + 4\text{NI} + 5\text{INF} + 6\text{UMKM} + 7\text{OW}$$

Where:

| | | |
|--------------|---|---------------------------------|
| Tourist | = | Number of Tourist Visits |
| OAK | = | Creative Economy |
| TD | = | Digital Technology |
| kindergarten | = | Labor |
| NI | = | Tourism Sector Investment Value |
| INF | = | Tourism Infrastructure |
| MSME | = | Medium and Small Business |
| OW | = | Tourist attraction |

Model Two

Economic Growth = f(Tourism)

Economic Growth = + 1Tourism

3 Result and Discussion

Data Quality Test

Normality test

Test this by looking at the probability of Jarque Bera (JB) as follows:

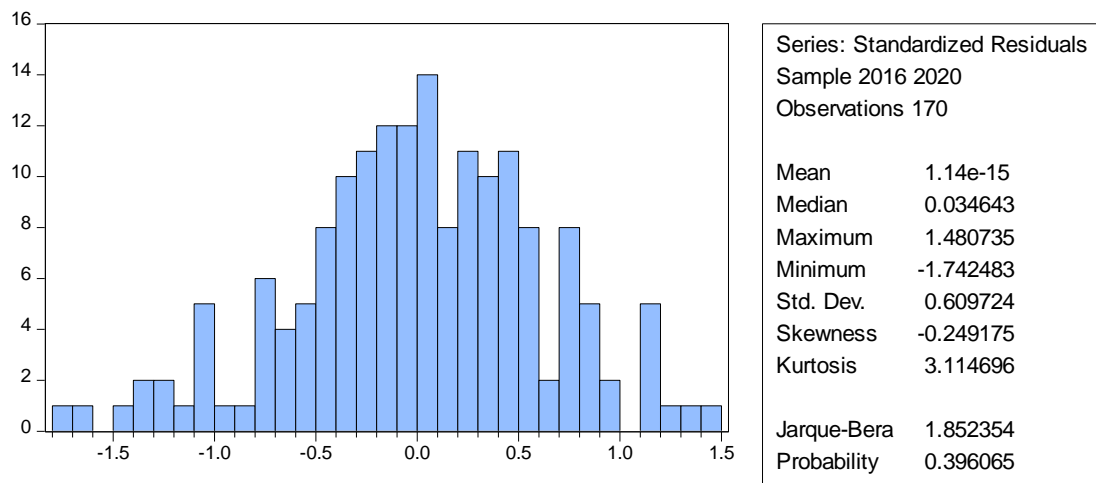


Fig.2. JB Normality Test.

- Hypothesis
 - H0 : Normal Distribution, If Prob Value > 0.05
 - H1 : Not Normal Distribution, If Prob Value < 0.05
- Test Statistics
 - Jarque-Bera = 1.852354 and Prob = 0.396065
- Rejection Area
 - If the value of Prob (0.396065) <> 0.05 then accept Ho and reject H1

d. Conclusion

Because all Prob values = 0.396065 > 0.05, then accept Ho, which means reject H1 so it can be concluded that all data are normally distributed.

Heteroscedasticity Test

In the consequences of the heteroscedasticity test, the likelihood upsides of all autonomous factors are not huge at the 5% alpha level (0.05) which shows the presence of homoscedasticity between the free factors and the residuals of every variable, coming up next are the aftereffects of the heteroscedasticity test in this review:

Table 1. Panel Data Heteroscedasticity Test Results

| | Value | df | Probability |
|-------------------|-----------|-----|-------------|
| Likelihood Ratio | 106.7704 | 34 | 0.0000 |
| LR test summary: | | | |
| | Value | df | |
| Restricted LogL | -156.6107 | 164 | |
| Unrestricted LogL | -103.2255 | 164 | |

a. Hypothesis

H0 : No Heteroscedasticity Occurs

H1 : Heteroscedasticity occurs

b. Test Statistics

LR = 106.7704 and Prob = 0.0000

c. Rejection Area

If the value of Prob (0.0000) < 0.05 then accept Ho and reject H1

d. Conclusion

Because all Prob values = 0.0000 < 0.05, then accept Ho, which means reject H1 so it can be concluded that there is no heteroscedasticity.

The LR Likelihood esteem (34 Areas) is 0.0000. This outcome shows a worth that is more modest than the alpha degree of 0.05, so it tends to be inferred that this information is liberated from heteroscedasticity issues.

Multicollinearity Test

Multicollinearity test expects to decide if there is a connection between the free factors in the review.

Table 2. Multicollinearity Test Results

| | PAR |
|------|--------|
| PAR | 1 |
| OAK | 0.8039 |
| COW | 0.4525 |
| TD | 0.2808 |
| MSME | 0.2847 |
| INFR | 0.2220 |

- a. Hypothesis
 H0 : There is no multicollinearity
 H1 : There is multicollinearity
- b. Test Statistics

| | PAR | Test Standard | Results |
|------|--------|---------------|-------------------------------|
| PAR | 1 | | |
| OAK | 0.8039 | < 0.80 | There is no multicollinearity |
| COW | 0.4525 | < 0.80 | There is no multicollinearity |
| TD | 0.2808 | < 0.80 | There is no multicollinearity |
| MSME | 0.2847 | < 0.80 | There is no multicollinearity |
| INFR | 0.2220 | < 0.80 | There is no multicollinearity |

- c. Rejection area
 if the correlation coefficient value < 0.80, then reject H0, Accept H1
- d. Conclusion
 Because all the values of the independent variables on PAR < 0.80, then accept H0, so it can be concluded that there are no cases of multicollinearity.

Model Selection Analysis

With the difference between the two data, the researcher took the best model, namely the Random Effect. described in the following table:

Table 3. Common Effect and Random Effect Estimation Results.

| Dependent (PAR) | Model Estimation | |
|-----------------|---------------------|---------------------|
| | CEM | BRAKE |
| C | 2.67566 0.1288 | 3.520223 0.0484* |
| OAK | 0.499815 0.0000* | 0.330721 0.0000* |
| TD | 1.145579 0.0010* | 2.001732 0.0002* |
| INFR | 0.575177 0.0086* | 0.326986 0.0433* |
| MSME | 0.358862 0.0496* | 0.599115 0.0018* |

| | | |
|--------------------|---------------------|--------------------|
| COW | 0.110847 0.0000* | 0.14762 0.0001* |
| R-squared | 0.77100 | 0.73892 |
| Adjusted R-squared | 0.76402 | 0.72182 |
| F-statistics | 110,430 | 125.5894 |
| Prob(F-statistic) | 0.00000 | 0.00000 |
| Durbin-Watson stat | 2.00016 | 2.01315 |

As indicated by Nachrowi (2006, 318), the determination of the Proper Impact technique or the Irregular Impact strategy should be possible by thinking about the reason for the examination, or there is additionally the likelihood that the information utilized as the reason for demonstrating must be handled by one strategy because of different numerical specialized issues included. base the computation.

Panel Data Estimation Results (Random Effect)

The following are the results of data estimates with a number of observations of 34 provinces in Indonesia for 5 years (2016-2020).

Table 4. Estimated Results of PAR(-1) Random Effect Model.

| Variable | Model Estimation |
|----------|---------------------|
| C | 0.246631 0.0000* |
| OAK | 0.095145 0.0305* |
| TD | 0.008528 0.0498* |
| INFR | 0.018321 0.0000* |
| MSME | 0.083752 0.0341* |
| COW | 0.035465 0.0190* |
| PAR(-1) | 0.853034 0.0000* |

From the table over, a board information examination model is made in regards to the impact of the imaginative economy, computerized innovation, framework, MSMEs and the travel industry objects on the travel industry area in 34 territories in Indonesia in slack 1 of the travel industry one year to accompany the accompanying translation:

By taking into account the outcomes from table 4.6, the specialist decides the factors that are huge and makes a positive difference and a relapse between the factors is completed again with the outcomes in table 4.7.

Table 5. REM Regression Results.

Dependent Variable: PAR

Method: Panel EGLS (Cross-section random effects)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| OAK | 0.095145 | 0.043488 | 2.187856 | 0.0305 |
| TD | 0.008528 | 0.004419 | 1.999773 | 0.0498 |
| INFR | 0.018321 | 0.003498 | 5.237171 | 0.0000 |
| MSME | 0.083752 | 0.040117 | 2.087693 | 0.0341 |
| COW | 0.035465 | 0.014932 | 2.375064 | 0.0190 |
| C | 0.246631 | 0.970520 | 0.254123 | 0.7998 |
| PAR(-1) | 0.853034 | 0.065945 | 12.93554 | 0.0000 |

$$PAR = 0.095145*EK + 0.008528*TD + 0.018321*INFR + 0.083752*UMKM + 0.035465*COW + 0.246631 + 0.853034*PAR(-1) + [CX=R]$$

Statistic test

The statistical test in this study consisted of the joint significant test (F statistic test), the individual parameter significance test (T statistical test) and the determination coefficient (R2).

1. F Uji test

Table 6. F Test Results

| Weighted Statistics | |
|---------------------|----------|
| R-squared | 0.738922 |
| Adjusted R-squared | 0.721816 |
| F-statistics | 175.0288 |
| Prob(F-statistic) | 0.000000 |
| Durbin-Watson stat | 2.031418 |

The F test is utilized to see whether there is a concurrent impact of the imaginative economy, computerized innovation, work, framework, interest in the assembling business and the travel industry objects on the travel industry in 34 regions in Indonesia. years 2016-2020 utilizing an irregular impact model that has a likelihood worth of 0.000000, and that implies the likelihood esteem is more modest than alpha 5% (0.05), so it very well may be reasoned that the F test is huge and the free factors mutually influence the reliant variable.

2. T Uji test

Here are the results of the t-statistics of each independent variable:

Table 7. T-Statistics Test Results Model 1 (REM)

| Variable | Analysis Test | Prob Standard |
|----------|-------------------------------------|---------------|
| OAK | 0.330721 2.187856 (0.0305)** | 0.05 |
| TD | 2.001732 3.751995 (0.0002)** | 0.05 |
| INFR | 0.326986 2.03663 (0.0433)** | 0.05 |
| MSME | 0.599115 3.171327 (0.0018)** | 0.05 |
| COW | 0.147620 4.151123 (0.0001)** | 0.05 |
| C | 3.520223 2.005487 (0.0484)** | 0.05 |
| PAR(-1) | 1.037904 32.81789 (0.00000)** | 0.05 |

Table 8. T-Statistics Test Results Model 2

| Dependent Variable: PE | | | | |
|---|-------------|--------------------|-------------|--------|
| Method: Panel EGLS (Cross-section random effects) | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| PAR | 0.338300 | 0.059798 | 5.657397 | 0.0000 |
| C | 11.59931 | 0.913382 | 12.69930 | 0.0000 |
| PAR(1) | 0.098962 | 0.027858 | 3.552407 | 0.0007 |
| PAR(2) | 0.043031 | 0.014727 | 2.921837 | 0.0048 |
| PAR(3) | -0.009554 | 0.008978 | -1.064137 | 0.2913 |
| Weighted Statistics | | | | |
| R-squared | 0.530683 | Mean dependent var | 0.526220 | |
| Adjusted R-squared | 0.500885 | SD dependent var | 0.041875 | |

| | | | |
|--------------------|----------|--------------------|----------|
| F-statistics | 17.80938 | Sum squared resid | 0.055139 |
| Prob (F-statistic) | 0.000000 | Durbin-Watson stat | 2.019944 |

From tables 7 and 8 it tends to be seen that every free factor distinctively affects the reliant variable.

- a. The Influence of the Creative Economy on the Tourism Sector in 34 provinces in Indonesia. The consequences of the examination show that the imaginative economy esteem has a t-measurement of 2.187856 with a likelihood of 0.0305 and a relapse coefficient of 0.330721, and that intends that in this study the imaginative economy variable affects alpha 5% on the travel industry in 34 regions in Indonesia.
- b. The Effect of Digital Technology on the Tourism Sector in 34 provinces in Indonesia. The consequences of the examination show that the worth of computerized innovation has a t-measurement of 3.751995 with a likelihood of 0.0002 and a relapse coefficient of 2.001732, and that really intends that in this study the computerized innovation variable affects alpha 5% on the travel industry in 34 regions in Indonesia.
- c. The Effect of Infrastructure on the Tourism Sector in 34 provinces in Indonesia. The consequences of the examination show that the worth of Framework has a t-measurement of 2.03663 with a likelihood of 0.0433 and a relapse coefficient of 0.326986, and that really intends that in this study the Foundation variable affects alpha 5% on the travel industry in 34 regions in Indonesia.
- d. The Influence of MSMEs on the Tourism Sector in 34 provinces in Indonesia. The results of the analysis show that the value of MSMEs has a t-statistic of 3.171327 with a probability of 0.0018 and a regression coefficient of 0.599115, which means that in this study the MSME variable has a positive and insignificant effect on alpha 5% on tourism in 34 provinces in Indonesia. Indonesia.
- e. The Influence of Tourism Objects on the Tourism Sector in 34 provinces in Indonesia. The consequences of the examination show that the travel industry object esteem has a t-measurement of 4.151123 with a likelihood of 0.0001 and a relapse coefficient of 0.147620, and that intends that in this study the travel industry object variable affects alpha 5% on the travel industry in 34 regions in Indonesia.
- f. The Effect of Economic Growth on the Tourism Sector in 34 provinces in Indonesia. The consequences of the examination show that the worth of the travel industry in has a t-measurement of 5.657397 with a likelihood of 0.0000 and a relapse coefficient of 0.0000, and that intends that in this study the travel industry variable affects alpha 5% on the travel industry in 34 regions in Indonesia.
- g. Effect of economic growth in lag one and lag two on the tourism sector in 34 provinces in Indonesia. The consequences of the examination show that the travel industry esteem in slack one has a t-measurement of 3.552407 and a slack of two t-insights of 2.921837 with a likelihood of (0.0007; 0.0048) and a relapse coefficient of slack 1 (0.098962), slack 2 (0.043031), this can be deciphered that in this study the monetary development factors slack one and slack two decidedly affect the travel industry variable to some degree and essentially at alpha 5% on the travel industry slack one and slack 2 out of 34 regions in Indonesia.

3. Coefficient of Determination (R²)

From the test results of the creative economy variables, digital technology, infrastructure, manufacturing industry, and tourism objects on the tourism sector of 34 provinces in Indonesia in 2016-2020, an R² value of 0.721816 is obtained which means that the

tourism sector of 34 provinces in Indonesia is affected by 72.2% influenced by the economy. creative, digital technology, infrastructure, manufacturing industry and tourist attraction while the remaining 27.8% is influenced by variables outside this research variable.

Causality Test

In this review, a causality test was led to decide major areas of strength for how connection between financial development and the travel industry was in the subsequent model, as follows:

Table 9. Causality Test for Economic Growth and Tourism.

Pairwise Granger Causality Tests
 Samples: 2016 2020
 Lags: 2

| Null Hypothesis: | Obs | F-Statistics | Prob. |
|-------------------------------|-----|--------------|--------|
| PE does not Granger Cause PAR | 102 | 1.93586 | 0.1498 |
| PAR does not Granger Cause PE | | 5.97540 | 0.0036 |

Null Hypothesis: Obs F-Statistic Probability

1. Economic Growth = f(Tourism)
 PE does not Granger Cause PAR
 H0 = Economic growth does not affect tourism
 H1 = Economic Growth has influence Tourism
 Because the value of F Statistics (1.93586) < F table (2.069), then H0 is accepted and H1 is rejected, meaning that economic growth does not affect Tourism
2. Tourism = f(Economic Growth)
 PAR does not Granger Cause EK
 H0 = Tourism is not I will influence Economic Growth
 H1 = Tourist affect Economic Growth
 Ftable (db1 = k-1, db2 = nk-1, =5%) = 2.069
 Because the value of F Statistics (5.97540) > F table (2.069), then H0 is rejected and H1 is accepted, meaning that Tourism affects Economic Growth.
3. Conclusion
 - a. Economic growth does not affect tourism
 - b. Tourism Affects Economic Growth

4 Conclusion

Based on the results of the above research dissertation with independent variables creative economy, digital technology, employment, infrastructure investment, manufacturing industry, tourist attraction, tourism and economic growth, the researcher concludes the results as follows:

1. Creative Economy

The creative economy on the tourism sector in Indonesia. when there is an increase in the creative economy variable by 1 percent, it will increase the tourism sector in 34 provinces in Indonesia. This can increase the creative economy sector in tourist areas or the local community

will also increase the tourism sector and many tourists visit 34 provinces in Indonesia, on the contrary if the number of tourists visiting is decreasing, the original income of the creative economy in the tourism sector will also decrease. This is due to the various needs of tourists when they are at tourist sites.

2. Digital Technology

Which means that when there is an increase in the digital technology variable by 1 percent, it will also increase the level of change in the tourism sector in 34 provinces in Indonesia. This shows that if more people are looking for information and accessing promos or natural beauty of tourism in 34 provinces using internet technology through their mobile phones, the information will quickly arrive and be accepted as effective and efficient communication. Mobile phones are a means of communication,

3. MSME

MSMEs have a positive and significant influence on the tourism sector for domestic tourists to visit a tourist attraction to a tourist area in 34 provinces in Indonesia, which means that MSMEs are very sensitive to all forms of changes from services, tourism growth in an area, although There are still many processed products from MSMEs that are conventional, traditional in that the number has not been able to meet the wishes and needs of travelers, both domestic and foreign tourists, even though MSME products have not been able to compete with the manufacturing food industry, where the manufacturing industry always innovates following the wishes of consumers, especially millennial consumers. . MSMEs still maintain the uniqueness and characteristics of processed food products sold at tourist attractions.

4. Tourist

Simultaneously the independent variables have an impact positive in encouraging economic growth in 34 provinces in Indonesia. This means that in the national economy, tourism is a sector that is expected to increase income through foreign exchange earnings. Indonesia is a developing country that requires a lot of foreign exchange. The country's foreign exchange reserves are used to purchase goods and services from abroad, to finance foreign trade activities, and to run the wheels of development and the economy.

Development in principle is a planned growth and change effort that is carried out consciously by a nation, state and government towards modernization in order to prosper the people both physically and mentally. The change in the development paradigm from the era of centralization to decentralization as contained in the concept of regional autonomy with its legal basis in Law Number 32 of 2004, has had consequences for regions to be able to explore and empower all their potential as regional revenues that can be used as development capital. without having to depend on the central government.

5. Economic growth

This implies that more vacationers visiting a region affect expanding local pay which makes a spot a vacation spot. The travel industry as a variable for the quantity of homegrown vacationer visits affects development in 34 territories in Indonesia.

These outcomes demonstrate that travel industry will emphatically affect expanding financial development in 34 territories in Indonesia and is exceptionally critical, implying that more sightseers visiting a region will increment provincial pay, decrease joblessness and make occupations, work in the travel industry area, and individuals' pay. . in a space that is a vacation destination. The travel industry area will have a positive and critical effect in the following two years. In the event that a vacation spot creates in the ongoing year, it will straightforwardly affect the next year.

References

- [1] Andhykha, R., Handayani, HR, & Woyanti, N. (2018). Analysis of the Effect of GRDP, Unemployment Rate, and HDI on Poverty Levels in Central Java Province. *Media Economics And Management*, 33(2), 113–123. <https://doi.org/10.24856/mem.v33i2.671>
- [2] Baeti, N. (2013). The Influence of Unemployment, Economic Growth, and Government Expenditure on Human Development in Districts/Cities in Central Java Province in 2007-2011. *Economics Development Analysis Journal*, Volume 2, No.3, pp. 85-98.
- [3] West, J., Country, P., Able, M., Positive, T., Quarter, A., Pressure, IN, Front, D., & Watched, H. (2020). The Government is Alert for the Impact of the Covid-19 Pandemic on the Indonesian Economy. April, 17–21.
- [4] Dan, K. (2019). The Effect of Regional and Bankable Credit Guarantees on the Growth of MSMEs in Banten Province (Registered at Pt. Jamkrida Banten Priode 2015-2018). 3, 1–17.
- [5] Economics, F., Bisnis, DAN, & Diponegoro, U. (2015). *POPULATION AND ECONOMIC GROWTH: A New Empirical Explanation*.
- [6] Damodar N. Gujarati, Dawn C. Porter, (2015), *Fundamentals of Econometrics*, 5th Edition Book 1, Salemba Empat Publishers
- [7] Ghozali, (2020), *Multivariate Analysis and Econometrics Edition 2*, Diponegoro University Publishing Agency.
- [8] Dumairy, (2012), *Applied Mathematics in Business and Economics*, fifth edition, BPFE-Yogyakarta.
- [9] Jonnadi, A., Amar, S., & Aimon, H. (2012). Analysis of Economic Growth and Poverty in Indonesia. *Journal of Economic Studies*, 1(1), 7098.
- [10] Sadono, (2016), *Introduction to Microeconomic Theory Third Edition*, PT. RajaGrafindo Persada Jakarta
- [11] Dominick Salvatore, (2014), *International Economics*, ninth edition, book 1, Salemba Four Publishers.
- [12] Sadono, (2016), *Introduction to Macroeconomic Theory*, Third Edition, PT. RajaGrafindo Persada, Jakarta.
- [13] R. Carter Hill, William E. Griffiths, Guay C. Lim, *Principles of Econometrics International Student Version*, John Wiley & Sons, Inc.
- [14] Kristianto, D., & Prasetya, B. (2017). The Influence of Population, HDI, and TPT on Poverty (Monetary and Multidimensional Approaches) in Indonesia. October. <https://doi.org/10.13140/RG.2.2.22675.99367>