

## ANALYSIS OF TOURISM PERFORMANCE IN TEN PRIORITY TOURISM DESTINATIONS IN INDONESIA

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Article Info	Abstract
<p><b>Keywords:</b> panel data regression, priority destination, tourism indicators, tourism performance.</p> <p><b>Received:</b> March 5, 2024</p> <p><b>Approved:</b> August 13, 2024</p> <p><b>Published:</b> November 08, 2024</p>	<p>This research aimed to analyze the influence of tourism indicators on performance in 10 priority tourism destinations. The indicators were reviewed using hotel room occupancy rate (TPK) for government spending on the tourism sector (PPP), crime rate (CR), inflation, air quality index (IKU), and number of college graduates. Additionally, the research was carried out with Fixed Effect Model (FEM) with estimation method Feasible Generalized Least Square (FGLS). The result showed that TPK of star hotels (TPKB), workforce, PPP, college graduates improved tourism performance. Meanwhile, the variables inflation and TPK for non-star hotels (TPKNB) provided a negative effect on improving performance in the elite tourism sector. In conclusion, the result helped in identifying relevant indicators that influenced the improvement of tourism performance, as well as ensured related parties adopted appropriate.</p>

### How to cite:

Silalahi, R. J., & Agustina, N. (2024). Analysis of Tourism Performance in Ten Priority Tourism Destinations in Indonesia. *Jurnal Kepariwisata Indonesia: Jurnal Penelitian dan Pengembangan Kepariwisata Indonesia*, 18(2), 197–212. <https://doi.org/10.47608/jki.v18i22024.197-212>

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## INTRODUCTION

Tourism is a leading sector that significantly influences national growth and other economic fields (Verya & Afrizal, 2017). Based on previous achievements, it has contributed immensely to Gross Domestic Product (GDP) from 2015 to 2019, and is the highest foreign exchange contributor after the palm oil industry. This fastest-growing sector (Xia et al., 2022) is one of the fundamental financial columns due to the positive impact on GDP development (Purwomarwanto & Ramachandran, 2015). In addition, tourism sector provides broad and important regional economic benefits in the long term, validated by a 10% rise in local income generation, resulting in a relative increase of 2.5% and 2% in employment and benefits obtained, respectively. According to Faber and Gaubert (2019), the progress of residents depended on the production of locally traded goods and services. The role of this leading sector shows a causal relationship exists between tourism and GDP (Çağlayan et al., 2012). Therefore, tourism performance needs to be improved through sustainable development in order to realize high competitiveness. Indonesian government had designated tourism as 1 of the 9 missions that must be carried out in the next 5 years, included in the second point regarding a productive, independent and competitive economic structure (Kemenparekraf, 2021). Tourism was also contained in the 2015 to 2019 National Medium Term Development Plan (RPJMN) which focused on 5 development program namely Infrastructure, Maritime, Energy, Food and Tourism (IMEPP) for the next 5 years (Kemenpar, 2018).

Indonesian tourism mainly focuses on Bali, therefore tourism growth in other areas is still small. Therefore, the government through Cabinet Secretariat letter Number B-652/Seskab/Maritim/2015 (Setkab, 2019) prioritized 10 new tourism destinations, namely Morotai, Mandalika, Labuan Bajo, Wakatobi, Lake Toba, Tanjung Kelayang, Tanjung Lesung, Seribu Islands, Borobudur, and Bromo-Tengger-Semeru in North Maluku, West Nusa Tenggara, East Nusa Tenggara, Southeast Sulawesi, North Sumatra, Bangka Belitung Islands, Banten, DKI Jakarta, Central, and East Java, respectively (Kemenparekraf, 2021). According to the Ministry of Tourism and Creative Economy, the determination of these 10 tourism destinations is inseparable from nursed potentials and experiences offered tourists.

The possessed potentials include Lake Toba, the largest volcanic lake in Southeast Asia and Tanjung Kelayang beach which has quite large granite rocks. Additionally, the appealing Seribu Islands have advertising offices and resorts, as well as Borobudur, a world-class legacy location built in the 8th century. Tanjung Lesung is currently being transformed into an extraordinary financial zone, offering diverse experiences such as climbing Mount Anak Krakatau, Bromo-Tengger-Semeru, a favorite spot for tourists due to the history of Majapahit Kingdom, including other common attractions namely Lake Kumolo, known as being over the clouds. In the eastern part, Mandalika, a special economic area characterized by white sand beaches and clear blue seas is also regarded as an international circuit zone, Labuan Bajo beautifies the entrance to Komodo Island, Wakatobi, which offers 112 distinctive types of coral, including 750 of the 850 corals found globally, Morotai region containing remnants of war namely plane wreckage and the split sea phenomenon on Dodola Island.

Government Regulation (PP) Number 50 of 2011 concerning the National Tourism Improvement Ace Arrange (RIPPARNAS) for 2010 to 2025 focuses on regional tourism



destination development, attractiveness, availability, open foundation, and offices, including community strengthening, and the establishment of ventures in this sector. The national development process certainly applies to each province in implementing tourism growth. Based on this, the inclusion of 10 priority tourism destinations accompanied by the national development process was expected to further improve performance. Despite the increased performance recorded from 2015 to 2019, the established policies were still not optimal. A few unrealized tourism execution objectives implemented by the government, are shown in Table 1.

**Table 1.** National Tourism Sector Achievements

Years	Target and Realization	Indicator			
		Contribution to GDP (%)	Foreign Exchange (Trillion IDR)	Labor (Million people)	Foreign Tourists (Million Visits)
(1)	(2)	(3)	(4)	(5)	(6)
2015	Target	4.32	144	11.4	10
	Realization	4.25	175.71	10.36	10.41
2016	Target	4.5	172	11.8	12
	Realization	4.13	176.23	12.28	12.02
2017	Target	5	200	12	15
	Realization	5	202.13	12.6	14.04
2018	Target	5.25	223	12.6	17
	Realization	5.25	224	12.7	15.81
2019	Target	5.5	280	13	20
	Realization	4.8	197	12.9	16.1

Source: Kemenparekraf/Baparekraf Strategic Plan 2020-2024, 2020

This showed that certain contributions to Gross Domestic Product (GDP) have not been realized optimally. In 2016 and 2019, realization of tourism contribution did not reach the target set by the government. Similarly, foreign exchange experienced a decline in 2015 and 2019. Regarding tourism sector workforce during these years, the intended labor absorption was not achieved. The number of foreign tourist visits in 2017 to 2019 did not reach the proposed target, even though an increase was reportedly recorded from 2015 to 2019. The inability to reach specific target is certainly not in line with the intended objectives of the government in implementing development policies to improve tourism performance.

Based on the perspective, this current research aimed to measure tourism performance in 10 priority destinations, using the variables of hotel room occupancy rate (TPK), government spending on tourism sector (PPP), crime rate (CR), inflation, air quality index (IKU), and number of college graduates. These variables also represent tourism performance indicators, and have been adjusted at the provincial level. Additionally, the results obtained were intended to determine the influence of the indicators, including aiding the relevant parties in formulating laws intended to improve and optimize tourism performance.

The Law of Indonesia Number 10 of 2009 concerning Tourism, stated that this sector comprised an assortment of visitor exercises, supported by different offices and administrations established by the community, business visionaries, and territorial governments. Furthermore, United Nations World Tourism Organization (UNWTO) characterized tourism as a social, cultural and economic phenomena connected to the



development of places outside the homes of tourists, as well as delightfully carrying out visitor exercises.

Tourism is a multidimensional and complex economic sector, characterized by related execution. It is impacted by numerous indicators, namely infrastructure quality, financial conditions, security and wellbeing, cost levels, government arrangements, natural supportability, workforce abilities, including social assets (Assaf & Josiassen, 2012). Tourism performance in terms of quality, focuses on tourists, employees and management processes in balancing needs, associated with managing this sector. This crucial element determines the prosperity of related businesses and can be viewed from the quality of services provided (Marlyana & Khoiriyah, 2015). Meanwhile, the measurements of tourism benefit incorporate security, consolation, environmental protection, invitingness, competence, compassion, unwavering quality, responsiveness, respectfulness and trustworthiness (Sangkaeng et al., 2015). Tourism performance in terms of quantity focuses on contribution to the development process of this sector, including diverse economic activities. Croes and Kubickova (2013, as cited in Hanafiah & Zulkifly, 2019) stated that this variable was assessed using performance indicators over time, such as growth perceived as a measure of the industrial foundation economic structure (tourism added value to Gross Regional Domestic Product (GRDP)). Therefore, tourism performance was measured through the growth of GRDP in the accommodation, food and beverage sectors.

Based on research conducted by Assaf and Josiassen (2012), tourism performance is influenced by several indicators, considering the complex segment of this sector. Few indicators that impacted this framework was viewed from TPK of star hotels (TPKB) and TPK of non-star hotels (TPKNB), financial conditions in terms of government consumption and tourism workforce, as well as security and wellbeing represented by wrongdoing rates. Cost levels were assessed based on the expansion rate, while natural maintainability measured through workforce abilities impacted the quality of instruction.

Windayani and Budhi (2017) stated that TPK, tourist expenditure, and labor absorption improved tourism sector economy. However, Mataković and Mataković (2019) stated that crime levels reduced tourism performance. Yazgan-Pektaş and Ünlüönen (2020) also reported that it was negatively affected by inflation, for example high inflation rate reduced tourist spending. According to Vaduva et al. (2020), college graduates who work in tourism sector offered better performance in terms of improving tourism. Eusébio et al., (2021) stated that good air quality increased the number of tourist visits. Additionally, the results are consistent with the research by Haribudiman et al. (2023) that the restoration of natural resources and the ecosystems, incorporating integrated planning in land use, economic growth, strengthening socio-demographics, and a sustainable environment increased carrying capacity in tourism development. Popato'on et al. (2021) further stated that the financing of this sector by the government played a positive role in improving performance.

Tourism performance was measured through the growth of GRDP in the accommodation, food and beverage sectors. According to Assaf and Josiassen (2012), it is also influenced by several indicators, namely infrastructure assessed by TPK, economic conditions measured in respect to government spending on tourism sector, employment, security, safety and health depicted by the crime rate, price level incited in respect to inflation rate, environmental sustainability determined through air quality, including the

skills and training of workforce which are impacted by the quality of education. Based on the research, qualitative method focused on countries level was used to measure tourism performance. Therefore, by using variables from the investigation conducted by Assaf and Josiassen (2012), the research novelty assessed tourism performance using quantitative methods focused on 10 priority destinations in Indonesia.

## METHODOLOGY

This research used secondary data, sourced from BPS, Ministry of Finance DJPb, Ministry of Education and Culture Ristekdikti, Ministry of Environment and Forestry (Menlhk). This consisted of TPKB, TPKNB, workforce, PPP, college graduates, inflation, crime rate, and IKU from 10 provinces categorized as priority destinations from 2015 to 2019.

The panel data regression analysis was used to examine the implications of these indicators on tourism performance in 10 priority destinations. In addition, this analytic method comprised several stages (Baltagi, 2005), namely:

1. Model specifications consisted of Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). CEM is the simplest estimation on panel data, and according to Gujarati and Porter (2013), the model assumes that individual behavior regarding explanatory variables occasionally was not differentiated. The estimation used is Ordinary Least Squares (OLS) due to the provision of consistent and efficient estimates of the common  $\alpha$  and slope vector  $\beta$ , represented the following equation (Greene, 2012):

$$y_{it} = \alpha + x'_{it}\beta + u_{it} \quad \dots(1)$$

with,

$$u_{it} = u_i + v_{it} \quad \dots(2)$$

FEM focuses on the assumption that the slope of the regression coefficient does not vary between individuals in other words, the slope is occasionally constant between cross-section units. The formula for fixed effects also shows that differences between groups can be captured. This model is estimated using OLS, Generalized Least Square (GLS), Feasible Generalized Least Square (FGLS), and FGLS-Seemingly Unrelated Regression (SUR). FEM equation is generally stated as follows:

$$y_{it} = x'_{it}\beta + \alpha + u_{it} \quad \dots(3)$$

$$y_{it} = x'_{it}\beta + (\alpha + u_i) + v_{it} \quad \dots(4)$$

$$y_{it} = \alpha_i + x'_{it}\beta + v_{it} \quad \dots(5)$$

REM accommodates differences in characteristics between cross-section and inter-time units, as stated in the error component. This consists of two components, namely cross-section and time errors. Meanwhile, the individual effect on REM was characterized as a random component due to the relations with

the population from which the sample was randomly drawn. REM was estimated using GLS which accommodates the possibility, the resulting individual effects correlated with respective error and time. The model equation is stated as follows:

$$y_{it} = x'_{it}\beta + (\alpha + u_i) + v_{it} \quad \dots(6)$$

The model equation used in this research is as follows:

$$\begin{aligned} \ln\widehat{PDRB}_{it} = & \alpha_i + \beta_1TPKB_{it} + \beta_2TPKNB_{it} + \beta_3\ln TK_{it} + \beta_4PPP_{it} \\ & + \beta_5\ln LPT_{it} + \beta_6Inflasi_{it} + \beta_7IKU_{it} + \beta_8CR_{it} \quad \dots(7) \end{aligned}$$

Where:

$\ln\widehat{PDRB}$  : natural log of tourism GRDP (percent)

$TPKB$  : star hotel room occupancy rate (percent)

$TPKNB$  : non-star hotel room occupancy rate (percent)

$\ln TK$  : natural logarithm of tourism sector workforce (percent)

$PPP$  : proportion of government spending (percent)

$\ln LPT$  : natural logarithm of college graduates (percent)

$Inflation$  : general inflation per province (percent)

$IKU$  : air quality index (value)

$CR$  : crime rate (cases)

$i$  : 1, 2, 3, ..., N

$t$  : 1, 2, 3, ..., T

$\alpha$  : intercept

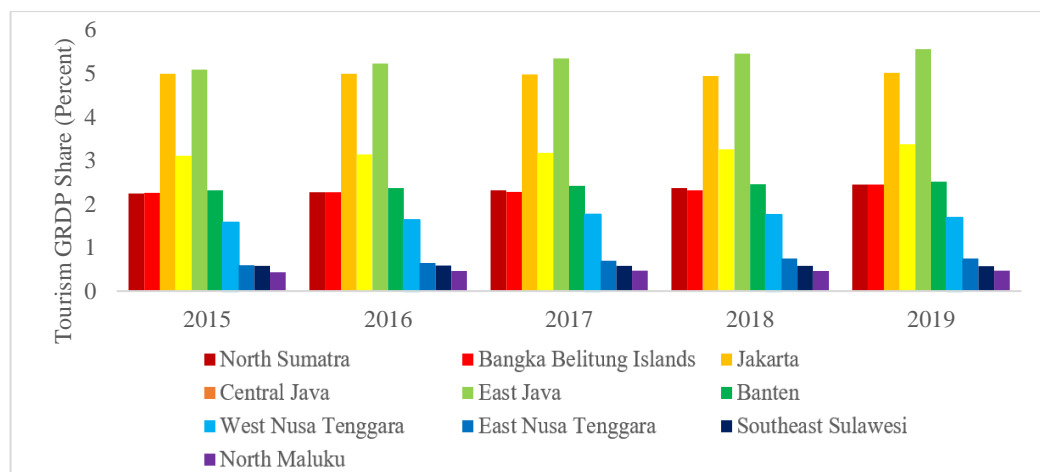
2. Selection of the Best Model. Several methods such as Chow, Hausman, and Breusch-Pagan Lagrange Multiplier (BP-LM) Tests can be used to identify the best model. Chow test is used to determine the best model between CEM and FEM. The tested model is FEM following the Fisher distribution. However, Hausman test was used to ascertain the best model between REM and FEM. The tested model is REM, based on the chi square asymptote distribution ( $\chi^2$ ). According to Gujarati and Porter (2013), REM does not allow the correlation between individual error components, as well as autocorrelation in both cross-section and time series units. The error effects of the regression components must also not correlate with any of the explanatory variables included in the model. Meanwhile, BP-LM was used to decipher the best model between CEM and REM. The tested model is REM following the chi square distribution with one degree of freedom,  $\chi^2_{(1)}$ .
3. Test the residual variance-covariance structure during analysis using panel data regression. The classical assumption test is often violated, and this incident is unavoidable. However, this violation was overcome by adjusting an estimate using the residual variance-covariance structure test. The aim was to ascertain whether there was a violation of the heteroscedasticity assumption (LM test) and cross-sectional correlation ( $\lambda$ LM test).
4. Classical assumption test, comprising normality, homoscedasticity, autocorrelation tests, focused on multicollinearity. This test was conducted to

ensure that the selected model showed parameter estimation results of several desired statistical properties.

5. Test the significance of the model, by determining how well the independent variables can explain the dependent variable in the model. This was realized using F and t tests, through the adjusted  $R^2$  value. The coefficient of determination ( $R^2$ ) showed the sample regression line would fit the data. Additionally, simultaneous tests were carried out to determine the overall significance of the estimated regression model. This included testing the influence of the independent variables on the dependent variable. Hypothesis testing of independent variables as individual partial regression was carried out using t test. It was implicitly assumed that each significance test was based on a separate sample when evaluating the individual significance of observed partial regression coefficients.
6. Model interpretation is in accordance with the results of the estimation obtained.

## FINDINGS AND DISCUSSION

Tourism performance was assessed based on the economic growth of this sector. The provision of accommodation, food and beverage played a significant role in contributing to income generation. Therefore, economic growth was assessed based on GRDP in the accommodation, food and beverage sector. Tourism GRDP increased by an average of IDR 19 to 25 Trillion, considering the total share there was no significant increase from 2015 to 2019. This implied that the share of tourism GRDP was relatively constant for 10 priority destination provinces. DKI Jakarta, Central Java, and East Java were the 3 provinces that contributed the highest from 2015 to 2019. Meanwhile, West Nusa Tenggara, and East Nusa Tenggara, Southeast Sulawesi and North Maluku contributed the lowest share of tourism GRDP. The provinces of East Nusa Tenggara, Southeast Sulawesi, and North Maluku contributed less than 1% of the total GRDP share, as shown in Figure 1.



**Figure 1.** Share tourism GRDP in 10 provinces as priority destinations 2015 – 2019 (percent)  
 Source: Data processed, 2024

TPK was the main indicator used to measure the availability of accommodation at a destination. This indicator was divided into two parts, namely TPKB and TPKNB. The

development of TPKB in 10 priority destinations fluctuated and tends to increase with an average of 48.58% to 51.39% from 2015 to 2018 but reduced to 48.71% in 2019. Meanwhile, the development of TPKNB decreased with an average of 36.00% to 29.78% from 2015 to 2019. The decline in TPKB and TPKNB was due to a decrease in the number of tourist visits, mainly caused by natural disasters. A typical example is the earthquake incident that occurred in Lombok in August 2019, resulting in the cancellation of more than 75% of foreign tourist visits from August to December 2019.

Labor is another indicator used to measure tourism performance. The development tends to increase, where DKI Jakarta, Central Java, and East Java had high labor absorption in tourism sector compared to other provinces. In addition, PPP is part of the fiscal policy that regulates income and costs recorded in the State Revenue and Expenditure Budget (APBN). PPP from 2015 to 2019 fluctuated, with the highest expenditure recorded in DKI Jakarta, followed by West Nusa Tenggara and North Sumatra. This is in line with the significant increase in PPP channeled to the 10 provinces.

Education level was used to measure the ability and knowledge of Human Resources (HR). In measuring the performance of tourism sector, college graduates were used to describe individual qualities and abilities. An increase was recorded in the number of college graduates from 2015 to 2019, which was observed in the following four provinces Bangka Belitung Islands, Central Java, East Java, and Banten. A consistent increase in the number of college graduates tend to have an impact on the quality of human resources every year. The high and low number of college graduates is inseparable from the influence of the number of universities in a region. Therefore, the inequality in the number of graduates depends on the development of universities in each region. This also has an influence on the acceptance quota for prospective students, who are expected to work or create jobs on graduation. The role of college graduates is important in tourism performance.

Inflation is defined as an increase in the prices of goods that occurs in a certain year. Therefore, in measuring tourism performance, it is used to determine price levels in an area. The following 8 provinces, DKI Jakarta, Central Java, East Java, Banten, West Nusa Tenggara, East Nusa Tenggara, Southeast Sulawesi, and North Maluku, maintained stable inflation rates. Meanwhile, North Sumatra and Bangka Belitung Islands recorded unstable inflation rate. In 2016, it rose to approximately 6% due to the spike in prices of basic commodities.

Several tourists tend to visit destinations that are environmentally friendly and have good air quality. Based on this, the IKU was used to measure air quality in the following provinces North Sumatra, Bangka Belitung Islands, Central Java, East Java, West Nusa Tenggara, East Nusa Tenggara, Southeast Sulawesi, including North Maluku. The development of IKU shows a trend of increasingly better air quality. In DKI Jakarta and Banten, IKU development tends to decline, while the alert category seemed quite good. Furthermore, crime rate was used to describe the risk of being exposed as result of an offence committed in an area. From 2015 to 2019, a decrease was observed in crime rate. A similar incident was also reported in the development of the national crime rate.

Panel data regression analysis was conducted to evaluate the influence of the following variables TPKB, TPKNB, workforce, PPP, college graduates, inflation, crime rate, and IKU on tourism performance in 10 priority destination from 2015 to 2019. The



results of Chow test showed that F-statistic and p-value were 413.12 and 0.0001, resulting in the selection of FEM model. Subsequently, the Hausman test was carried out, obtaining a chi square and p-value of 41.81 and 0.0001, also leading to the selection of FEM. Based on the results, it is evident that the best model is FEM. Furthermore, the residual variance-covariance structure test showed that the model was heteroscedastic and there was no cross-sectional correlation. A suitable method for estimating the model, characterized by the ability to accommodate violations of heteroscedasticity, is FGLS. The selection of this method ensured the classical assumption test was only used to determine normality, while identifying multicollinearity. The results of the classical assumption test also showed that the model did not violate normality, or the occurrence of multicollinearity. The significance of the model was determined by ascertaining the adjusted R<sup>2</sup> value, F (simultaneous), and t tests (partial), as shown in Table 2.

**Table 2.** Summary of Model Significance Tests

Independent Variable	Coefficient	t-table	t-Statistic
(1)	(2)	(3)	(3)
C	6.8371	1.6938	19.6199
TPKB*	0.0052	1.6938	2.0675
TPKNB	-0.0093	1.6938	-5.0785
lnTK*	0.1036	1.6938	4.0023
PPP*	1.6123	1.6938	4.8108
lnLPT*	0.1052	1.6938	3.4299
Inflasi*	-0.0161	-1.6938	-2.0469
IKU	-0.0005	1.6938	-0.3249
CR	0.0001	-1.6938	0.4572
<b>Summary Statistics</b>			
<i>R-squared</i> :0.9998		<i>F-Statistic</i> : 10,600.9700	
<i>Adjusted R-squared</i> : 0.9997		<i>Prob(F-statistic)</i> : 0.0001	

Source: Data processed, 2024

Considering the results of the model significance test, the adjusted R<sup>2</sup> had a value of 0.9997%. This implied the independent variables were used to explain the diversity of tourism GRDP by 99.97%, while the remaining was described by other variables not included in the model. The equation formed from the estimation results using FGLS is:

$$\begin{aligned} \ln\widehat{PDRB}_{it} = & (6.8371 + \mu_i) + 0.0052TPKB_{it}^* - 0.0093TPKNB_{it} \\ & + 0.1036lnTK_{it}^* + 1.6123PPP_{it}^* + 0.1052lnLPT_{it}^* \\ & - 0.0161Inflasi_{it}^* - 0.0005IKU_{it} + 0.000189CR_{it} \quad \dots(8) \end{aligned}$$

Based on Equation 8, variables that possessed a significant influence on tourism GRDP were TPKB, workforce, PPP, college graduates, including inflation at a significance level of 5%. PPP, college graduates, tourism sector workforce, and TPKB, had a positive and significant effect on increasing GRDP. However, inflation had a negative and significant effect on increasing tourism GRDP. TPKNB, air quality (IKU) and crime rate variables did not have a significant effect in the current research. These results are in accordance with the research objective that certain indicators or variables influence tourism performance, specifically in 10 priority destinations in Indonesia.



The proportion of government outlay (PPP) had a positive and significant effect on increasing tourism GRDP, in accordance with the proposed hypothesis. The coefficient value of 1.61 implied that every 1% growth in PPP led to a rise of 1.61% of tourism GRDP, assuming the other variables were constant. PPP was perceived as capital in tourism development which improved performance. This variable had a positive impact on tourism performance, implying PPP was a crucial indicator. The rise in a particular year provided an indication that every increase in finance spent had an effect on tourism performance. The influence was proven by increased development of a destination, such as infrastructure which incited the attractiveness of an area, thereby further improving tourism performance. The results are in accordance with the research by Popato'on et al. (2021) that PPP serves as a capital in the growth of this sector, significantly and favorably impacting performance. The PPP variable, and building of public facilities that support tourist comfort reportedly improved performance. Revitalization and maintenance of tourist attractions enhanced the beauty of destinations, thereby increasing the number of visits. The government need to always increase spending on this sector annually to carry out sustainable development. The results of this research were also supported by Dritsakis (2012), which stated the government played an active role reflected in expenditure policies in terms of developing tourism sector.

College graduate variable has a positive and significant effect on increasing tourism GRDP, in accordance with the research hypothesis. The coefficient value of 0.105 implied that every 1% growth in college graduates increased tourism GRDP by 0.105%. assuming other variables were constant. In addition, college graduates are an important indicator for tourism sector. Human resources, and college graduates are bound to contribute skilled labor with the ability to absorb knowledge, as well as develop new ideas or innovations in tourism. Therefore, education plays an important role in terms of improving tourism performance. The results are in line with Vaduva et al. (2020), who stated that employees have better abilities in theoretical and practical terms. Individuals who had focused on studying tourism were able to understand tourism both from a theoretical and practical perspective. Learning related to this segment implied planning individual expectation for tourism programs, leading to more preparedness to work with the information obtained. The results were also in line with Chehat and Akacem (2022) that a co-integrated vector consisted of four variables, namely economic growth, tourism earning, human capital and gross fixed capital formation influencing tourism performance. Furthermore, the government is needed to increase Human Resources (HR), such as providing special scholarship assistance to tourism majors, or expand the number of universities which are still few in several destinations.

Workforce variable has a positive and significant effect on increasing tourism GRDP, in accordance with the research hypothesis. The coefficient value of 0.104 implied that every 1% growth in workforce variable increased tourism GRDP by 0.104%, assuming other variables were constant. Labor-intensive capital improves the quality of services offered, ensuring tourists are satisfied, thereby resulting in the creation of memorable experiences. Workforce also improves performance through the services provided, increasing the trust and desire of tourists to want to revisit a particular destination. The results of this research are in line with Zha and Li (2016) that labor is an important factor in improving tourism performance. In this sector, the presence of workforce enhances the

quality of services by meeting certain needs such as providing information related to tourism destinations. Additionally, trained personnel helps in developing tourism products, preserving the environment, improving the quality of destination comfort, and establishes cordial relationships with tourists. In this case, the government also plays a role in motivating individuals to work in tourism sector by providing outreach, employment training or business credit assistance.

TPKB has a positive and significant effect on increasing tourism GRDP, in accordance with the research hypothesis. The coefficient value of 0.005 depicted that every 1% growth in TPKB increased tourism GRDP by 0.005%, assuming other variables remained constant. The development of TPKB, led to an increase in the number of rooms available, an indication of the rising tourist visits. According to Karsadi (2002, as cited in Udayantini et al., 2015), the number of visits has a significant influence on hotel occupancy levels, a decrease in tourist visits led to a decline in hotel occupancy levels. Meanwhile, an increase in the number of visits, causes a rise in occupancy rate. The results were in line with Hasanah and Fadly (2019) and Dirgantara and Agustina (2022), that foreign tourists who visited Indonesia from 2010 to 2019 were dominated by youths, most of whom spent money on accommodation, food, and beverages.

Inflation has the greatest influence on reducing tourism GRDP with a variable size of 0.016. This depicted that every 1% growth reduced tourism GRDP by 0.016%, in accordance with the research hypothesis. Inflation defined as a determinant of price levels at a destination also influences tourism GRDP growth. The level of inflation in a destination affects the price levels in tourism sector, thereby influencing tourists desire to spend money. High inflation leads to exorbitant prices, restricting shopping or spending at a particular destination. This is in line with research by Yazgan-Pektaş and Ünlüönen (2020) that inflation is a determining factor in the holiday budget spent by tourists. In addition, this result is in line with Göral and Akgöz (2017), which stated guests are mindful of the prices of traveler products. A consideration of the visit bundles including traveler merchandise and administrations in respect to set objectives, led to a rise in cost competition. An increase in costs, causes a decline in the domestic market demand for tourism. In this case, the government plays a significant role in regulating inflation in 10 priority destinations, to ensure low prices are offered during tourism activities.

Table 3. Individual effects of 10 provinces as priority destinations

No.	Province	Individual Effects
(1)	(2)	(3)
1	DKI Jakarta	3.0309
2	East Java	2.6003
3	Central Java	1.5611
4	Banten	0.6647
5	North Sumatera	0.8989
6	Bangka Belitung Islands	-0.7661
7	West Nusa Tenggara	-0.8569
8	Southeast Sulawesi	-1.9001
9	East Nusa Tenggara	-2.0803
10	North Maluku	-3.1525

Source: Data processed, 2024



FEM estimation model was used, resulting in the assumption that there were differences in characteristics between individual effects. Therefore, each province is expected to have a different intercept. The individual effect value shows tourism performance as viewed from GDP of each priority destination, assuming all other independent variables are constant. Both positive and negative individual effect values tend to increase and decrease the percentage of tourism GDP, respectively. The estimation results showed that the 3 provinces with the largest individual effect values were DKI Jakarta, Central Java, and East Java, as shown in Table 3. The highest and lowest individual effect values of 3.0309 and -3.1525 were realized in DKI Jakarta and North Maluku, respectively. This is also in line with the results of the descriptive analysis of variables thought to influence tourism performance. Additionally, DKI Jakarta, Central Java, and East Java showed better performance than other priority destination provinces.

## CONCLUSION

In conclusion, this research aimed to examine the impact of indicators on tourism performance in 10 priority destinations. Tourism performance was measured based on GRDP of this sector. However, the indicators were reviewed using the variables TPK, PPP on tourism sector, crime rate, inflation, IKU, and number of college graduates. By using these indicators, the provinces with the greatest influence in improving tourism performance were DKI Jakarta, East Java, and Central Java, while the lowest was North Maluku.

Based on the results, TPKB, workforce, PPP, and college graduates had a positive influence on tourism performance in 10 priority destinations. Inflation had a negative effect, while TPKNB, crime rate and IKU had no influence on tourism performance.

The results are expected to offer information and guidance for related parties in providing an overview of tourism conditions in Indonesia, specifically in 10 priority destinations which had great potential to be further improved. The contribution of this research could also be useful for enhancing collaboration among the various factors explored. The exceptional coordination qualities from stakeholders led to the advancement of tourism, both quantitatively and qualitatively, such as perceptions of tourist experiences and pleasant feelings.

In order to improve tourism performance, cooperation between the community and the government was needed, through increased promotion of tourism destinations, specifically 10 priority destinations. Promotion was realized by taking advantage of increasingly advanced technological developments such as the development of social media with various platforms namely YouTube, TikTok, Instagram, Twitch, etc. In addition, tourism promotion included the participations of public figures or influencers. This was also supported by improving and enhancing infrastructure such as building roads, and funding facilities that sustained tourist accessibility. TPK needed to be increased to have a greater influence on tourism performance. This was realized by focusing on marketing or collaborating with travel aggregators namely Traveloka, Tiket.com, and Airy Rooms. Non-star hotels required special attention both in terms of service from workers, to increasing the number of rooms, and quality of experience offered to tourists. A specific way to provide an impressive experience and service from hotel accommodation was to show friendly attitude and respect for tourist privacy.



The variables related to inflation had a negative influence on tourism performance. Therefore, the government should be able to maintain inflation stability through various regulations, including monetary and other fiscal policies that could ensure inflation rate remained consistent. IKU and crime rate were not significant, because the selection of variables were inappropriate in describing the impact of environmental and social conditions on tourism performance. In addition, crime rate and intervention events did not always have a significant influence on the number of tourists visits. These indicators caused a decrease in the number of visits, where the pattern of immediate or non-delayed impacts was only observed in terrorism and natural disasters.

Due to the availability of data, there were limitations in the use of several research variables. Some of the variables used did not specifically describe tourism, such as the general investment. Therefore, future research needed to use variables that could specifically describe tourism indicators, such as investment, college graduates majoring in tourism, and number of workers.

## ACKNOWLEDGEMENT

The authors are grateful to all parties, specifically institutions that provided freely accessible data in writing this research, namely sourced from BPS, the Ministry of Finance DJPb, the Ministry of Education and Culture Ristekdikti, as well as the Ministry of Environment and Forestry (Menlhk).

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