



## Tourist Arrivals and Hotel Industry Effects on Employment Absorption in Indonesia: A Stepwise Natural Logarithmic Regression Model

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**ABSTRACT:** In Indonesia, the tourism sector is one of the largest contributors to GDP. This study aims to analyze the impact of tourist arrivals and hotel operations on labor absorption in Indonesia's tourism sector. A quantitative approach was employed, applying multiple linear regression in natural logarithms with a stepwise method to examine how fluctuations in tourist arrivals and hotel performance affect the number of employed workers. The empirical results indicate that star-rated hotel occupancy has a positive and significant effect on labor absorption, with a high standardized coefficient, suggesting strong explanatory power. This finding confirms that employment in the tourism sector is more influenced by the performance of high-standard accommodations than by aggregate tourist arrivals.

Moreover, the study found that external shocks, such as the COVID-19 pandemic in 2020 and short-term economic pressures in 2023, directly affected hotel occupancy rates and labor absorption. The decline in tourist arrivals during these crises reduced star-rated hotel occupancy, thereby limiting the hospitality sector's capacity to employ workers. This underscores the high sensitivity of tourism employment to changes in tourist demand, which is mediated through formal accommodation performance. The study highlights the importance of developing quality-oriented star-rated hotels with larger operational scale and service intensity as an effective strategy to promote stable and sustainable employment. Policy implications include encouraging investment in star-rated hotels, improving service standards, and strengthening human resource capacity in the hospitality sector to ensure that tourism growth translates optimally into employment opportunities.

**KEYWORDS:** Tourism\_Sector, Labor\_Absorption, Star\_Rated\_Hotels, Tourist\_Arrivals, Indonesia

### INTRODUCTION

Pariwisata telah menjadi salah satu sektor ekonomi utama di banyak negara berkembang dan maju karena kemampuan sektor ini untuk mendukung pertumbuhan ekonomi, penciptaan lapangan kerja, dan pembangunan regional yang inklusif. Secara global, industri pariwisata diperkirakan menyumbang lebih dari 10% terhadap total Produk Domestik Bruto dunia dan mendukung ratusan juta pekerjaan, termasuk dalam subsektor hotel dan jasa terkait lainnya. Hal ini mencerminkan signifikansi pariwisata sebagai mesin ekonomi serta sumber pendapatan dan kesempatan kerja yang substansial di banyak negara. Theoretically, tourism development is believed to generate a multiplier effect on the local economy, including labor absorption. Numerous studies have shown that increases in tourist arrivals can stimulate job growth through expanded demand for goods and services, particularly in labor-intensive subsectors such as hotels, restaurants, and transportation (Ladkin et al., 2023).

In the Indonesian context, several empirical studies indicate a positive relationship between tourism and labor absorption across regions. For instance, research in various cities and provinces demonstrates that tourist arrivals and the availability of tourism facilities, such as hotels and attractions, positively influence employment in the tourism sector, although the significance of this relationship varies depending on local conditions and analysis periods (Dwiningwarni et al., 2021; Syarif, 2025). Tourism also serves as a strategic instrument for creating jobs and strengthening local economies in developing countries (Dwiningwarni et al., 2024; Rahma & Handayani, 2013; Syahrif et al., 2024).

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However, the relationship between tourist arrivals and labor absorption is not always direct. In many cases, tourist growth must be accompanied by the development of effective supporting sectors, such as the hospitality industry, to optimally translate into job creation. Hotels, as a core subsector of tourism services, play a central role in providing accommodation and services to tourists, thus serving as a primary mechanism through which tourism impacts labor absorption (Butler, 1999; Lindberg & Johnson, 1997).

Although the literature has documented the general link between tourism and employment, studies explicitly positioning hotel operations as a mediating variable remain limited, particularly in developing countries like Indonesia. Research on this mediation mechanism is essential to understand how subsector variables optimize tourism's impact on the labor market strategically and effectively (Mandic et al., 2018; Rocca & Zielinski, 2022; Zolfani et al., 2015).

Labor absorption is a critical element supporting economic development in developing countries, aiming to achieve more equitable regional development (Saroji, 2018). Governments have implemented various initiatives to enhance labor absorption across sectors, including tourism (Wulan Agustina et al., 2024). The tourism sector is particularly suitable for labor absorption, as it not only generates jobs and entrepreneurial opportunities but also empowers the workforce surrounding tourist destinations (Limanseto, 2025).

Beyond contributing to regional income and economic growth, tourism activities create employment and business opportunities, such as hotels and accommodations, tour services, souvenir sales, and restaurants (Dwiningwarni et al., 2024). The influx of domestic and international tourists increases demand for goods and services at and around tourism sites (Syafinah & Salmah, 2024). Tourist arrivals are followed by the need for adequate facilities, especially accommodation, highlighting the strategic role of hotels (Irawan, 2022). One key measure of hotel development is occupancy rate, which indicates the proportion of hotel rooms utilized by customers (Ramadhani et al., 2025). Higher occupancy rates are expected to increase labor absorption among the general population, particularly in communities surrounding tourist destinations.

Based on this background, the present study aims to analyze the effect of tourist arrivals on labor absorption in Indonesia, with hotel operations serving as a mediating variable. The study employs Natural Logarithm Regression Analysis with Stepwise Methods to examine these relationships.

## **METHOD**

This quantitative study employs a panel data design, combining cross-sectional and time-series data. Secondary data were used, including domestic and international tourist arrivals, hotel and travel agency businesses, and labor absorption, all sourced from the Indonesian Central Bureau of Statistics (BPS) for the period 2015–2024. The population consists of 38 provinces in Indonesia. Since the population is fewer than 100, a census (saturated) sampling technique was applied, using the entire population as the sample.

Data analysis was conducted using multiple regression analysis with Natural Logarithm (LN) transformation and the Stepwise method. The LN transformation was applied to account for differences in measurement units among variables and to reduce potential bias, thereby ensuring the comparability and accuracy of the regression estimates (Price & Evans, 2025; Riswan et al., 2024; Xiao et al., 2014).

## **RESULTS**

### **Tourist Arrivals**

The number of tourist arrivals in Indonesia, both domestic and international, experienced significant growth from 2015 to 2024, as shown in the following table:

**Tabel 1. Perkembangan Jumlah Wisatawan Tahun 2015-2024 (orang)**

Years	Domestic Tourists	Tren (%)	International Tourists	Trend (%)	Total	Trend (%)
2015	256,419,006	-	10,230,775	-	266.649.781	0.0345
2016	264,337,518	0.0309	11,519,275	0.1259	275.856.793	0.0326
2017	270,822,003	0.0245	14,039,799	0.2188	284.861.802	0.1206
2018	303,403,888	0.1203	15,810,305	0.1261	319.214.193	1.3128
2019	722,158,733	1.3802	16,106,954	0.0188	738.265.687	-0.2840
2020	524,571,392	-0.2736	4,052,923	-0.7484	528.624.315	0.1631
2021	613,299,459	0.1691	1,557,530	-0.6157	614.856.989	0.2048
2022	734,864,693	0.1982	5,889,031	2.7810	740.753.724	0.1493
2023	839,667,538	0.1426	11,677,825	0.9830	851.345.363	0.2157
2024	1,021,084,031	0.2161	13,886,678	0.1891	1.034.970.709	0.0345

**Source: Statistics Indonesia (BPS), 2025**

The number of domestic tourists visiting tourist attractions in Indonesia decreased by 0.2736% in 2020, while international tourist arrivals also declined by 0.7484% and 0.6157% in the same year. This decline was primarily due to the COVID-19 pandemic, which led to the closure of all tourist sites across Indonesia to prevent the widespread transmission of the virus. Similarly, the temporary decrease in both domestic and international tourists in 2023 was triggered by a short-term economic crisis, which reduced the number of visitors to tourist attractions.

### **Hospitality Business**

The arrival of tourists at tourist attractions has led to the emergence of lodging and hotel businesses in and around these locations, as tourists require accommodation facilities during their trips. The development of the hotel business can be assessed through hotel room occupancy rates, as presented in the following Table:

**Table 2. Trends of Hotel Occupancy Rates in Indonesia (2015–2026)**

Years	Star Rated Hotel Occupancy Rate (%)	Non Star Hotel Occupancy Rate (%)
2015	57.25	33.21
2016	56.50	34.85
2017	59.53	33.66
2018	59.75	33.18
2019	59.39	31.48
2020	40.79	18.31
2021	51.57	19.62
2022	56.90	22.63
2023	59.74	24.35
2024	52.63	26.67

**Source: Statistics Indonesia (BPS), 2025**

The trends of the hotel business, measured by hotel room occupancy rates from 2015 to 2024, experienced fluctuations for both star-rated and non-star-rated hotels. A sharp decline occurred in 2020, corresponding with the decrease in tourist arrivals to Indonesian attractions due to the COVID-19 pandemic.

### **Labor Force**

Labor absorption in Indonesia, measured by the workforce employed across various sectors, developed over the period 2015–2024 as follows:

**Table 3. Labor Force In Indonesia period 2015-2024 (%)**

Years	Labor Force (%)
2015	93.82
2016	94.39
2017	94.50
2018	94.70
2019	94.77
2020	92.93
2021	93.51
2022	94.14
2023	94.68
2024	95.09

**Source: Statistics Indonesia (BPS), 2025**

The labor force refers to the population aged 15 years and above who, during a specific period, are employed, have a job but are temporarily not working, or are actively seeking employment (BPS, 2020). The trends of the labor force in Indonesia from 2015 to 2024 is presented in the following table:

**Table 4. Trends of Labor Force In Indonesia period 2015-2024 (%)**

Years	Trends of Labor Force (%)
2015	93.82
2016	94.39
2017	94.50
2018	94.70
2019	94.77
2020	92.93
2021	93.51
2022	94.14
2023	94.68
2024	95.09

**Source: Statistics Indonesia (BPS), 2025**

Labor force (LF) data in Indonesia from 2015 to 2024 exhibited fluctuations. In 2020, a decline of 92.93% occurred due to the COVID-19 pandemic. During this period, many businesses closed, resulting in massive layoffs, as the economy stagnated and even contracted, with a negative economic growth of -2.07%.

### **Natural Logarithm Multiple Regression Analysis Using the Stepwise Method**

The results of the Natural Logarithm (LN) multiple regression analysis using the Stepwise method are presented as follows:

#### **Descriptive Statistics**

**Table 5. Descriptive Statistics**

Variable	Mean	Std. Deviation	N
Labor Force	4.5450	.00707	10
Domestic Tourists	20.0110	.53492	10
Internasional Tourism	15.9810	.75092	10
Star Rated Hotel Occupancy Rate	4.0080	.11755	10
Non Star Rated Hotel Occupancy Rate	3.3000	.23870	10

**Source: Processed Secondary Data, 2026**

Table 5 presents descriptive statistics (mean, standard deviation, and number of observations) of the study variables in natural logarithm (LN) form over 10 years. The Labor Force (Y) variable had a mean of 4.5450 with a very small standard deviation (0.00707), indicating stable employment. Domestic Tourists (X1) recorded an average of 20.0110 with moderate variation (SD = 0.53492), while International Tourists (X2) averaged 15.9810 with higher fluctuation (SD = 0.75092), influenced by external factors such as the global economy and travel policies.

In the hospitality sector, Star rated Hotel Occupancy (X3) averaged 4.0080 with low variation (SD = 0.11755), indicating stable occupancy rates. Conversely, Non-Star-rated Hotel Occupancy (X4) averaged 3.3000 with greater variation (SD = 0.23870). Overall, descriptive statistics show that the workforce is relatively stable, while foreign tourists and non-starred hotel occupancy are more fluctuating, potentially affecting the dynamics of labor absorption.

#### **Correlation**

**Table 6. Correlation between Variables**

Test	Variable	Labor Force	Domestic Tourist	Internasio nal Tourist	Star rated Hotel Occupancy	Non Star rated Hotel Occupancy
Pearson Correlation	Labor Force	1.000	-.031	.731	.789	.711
	Domestic Tourist	-.031	1.000	-.193	-.202	-.606
	Internasional Tourist	.731	-.193	1.000	.605	.805
	Star rated Hotel Occupancy	.789	-.202	.605	1.000	.726
	Non Star rated Hotel Occupancy	.711	-.606	.805	.726	1.000

Sig. (1-tailed)	Labor Force	.	.466	.008	.003	.011
	Domestic Tourist	.466	.	.296	.288	.032
	Internasional Tourist	.008	.296	.	.032	.002
	Star rated Hotel Occupancy	.003	.288	.032	.	.009
	Non Star rated Hotel Occupancy	.011	.032	.002	.009	.
N	Labor Force	10	10	10	10	10
	Domestic Tourist	10	10	10	10	10
	Internasional Tourist	10	10	10	10	10
	Star rated Hotel Occupancy	10	10	10	10	10
	Non Star rated Hotel Occupancy	10	10	10	10	10

**Source: Processed Secondary Data, 2026**

Table 6 presents the results of a one-way Pearson correlation test between the Labor Force (Y), Domestic Tourists (X1), Foreign Tourists (X2), Star-rated Hotel Occupancy (X3), and Non-Star-rated Hotel Occupancy (X4) over 10 years. The results show that the labor force has a positive and significant correlation with foreign tourists ( $r = 0.731$ ;  $p = 0.008$ ), Star-rated Hotel Occupancy ( $r = 0.789$ ;  $p = 0.003$ ), and Non-Star-rated Hotel Occupancy ( $r = 0.711$ ;  $p = 0.011$ ). In contrast, the correlation with domestic tourists is negative and insignificant ( $r = -0.031$ ;  $p = 0.466$ ).

The correlation between independent variables shows that international tourists are positively related to occupancy in starred hotels ( $r = 0.605$ ;  $p = 0.032$ ) and non-starred hotels ( $r = 0.805$ ;  $p = 0.002$ ), while domestic tourists are negatively correlated with occupancy in non-starred hotels ( $r = -0.606$ ;  $p = 0.032$ ). These findings indicate that international tourists and hotel occupancy rates have a greater influence on employment absorption than domestic tourists, indicating the important role of the international tourism sector and the hospitality industry in job creation in Indonesia..

#### Variabel Entered/Removed

**Table 7. Variabel Entered/Removed**

Model	Variables Entered	Variables Removed	Method
1	Star rated Hotel Occupancy		Stepwise (Criteria: Probability-of-F-to-enter $\leq .050$ , Probability-of-F-to-remove $\geq .100$ ).
a. Dependent Variable: Labor Force			

**Source: Processed Secondary Data, 2026**

Table 7 shows that in Model 1, the variable "Hotel Occupancy" (X3) is the only independent variable entered into the regression model to explain the dependent variable, Labor Force (Y). Variable selection was performed using the stepwise method, a variable selection method that automatically includes or excludes variables based on their statistical significance.

The calculation results indicate that the variable "Hotel Occupancy" (X3) meets the criteria for "Probability of F-to-enter"  $\leq 0.050$ , thus being considered to have a significant influence on Labor Force (Y) and worthy of inclusion in the model. Meanwhile, no variables were removed, as none met the criteria for "Probability of F-to-remove"  $\geq 0.100$ . These results indicate that "Hotel Occupancy" (X3) is the most significant factor in explaining variations in Labor Force in the model, compared to other variables tested in the initial stages of the analysis.

#### Model Summary

**Table 8. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.789 <sup>a</sup>	.622	.575	.00461

a. Predictors: (Constant), Star Rate

Table 8 shows that Model 1 has a correlation coefficient (R) value of 0.789, which indicates a strong and positive relationship between the variable of Star Hotel Occupancy (X3) as a predictor with the Labor Force (Y) as a dependent variable. The R Square value of 0.622 indicates that 62.20% of the variation in the Labor Force can be explained by changes in the level of Star

Hotel Occupancy. Meanwhile, the Adjusted R Square (R<sup>2</sup>) value of 0.575 indicates that after considering the number of variables in the model, approximately 57.50% of the variation in the Labor Force (Y) can still be explained consistently by the constructed regression model. This indicates that the model has a fairly strong and relatively stable explanatory power. The Standard Error of the Estimate value of 0.00461 indicates a relatively small level of prediction error, which indicates that the regression model has a good level of estimation accuracy in predicting the Labor Force (Y) based on Star Hotel Occupancy (X3). These results confirm that Star Hotel Occupancy (X3) is a significant and substantive predictor in explaining variations in the Labor Force (Y).

## ANOVA

**Tabel 9. ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	13.166	.007 <sup>b</sup>
	Residual	.000	8	.000		
	Total	.000	9			
a. Dependent Variable: Labor Force						
b. Predictors: (Constant), Star Rated Hotel Occupancy						

**Source: Processed Secondary Data, 2026**

The ANOVA test results indicate that the regression model examining the effect of Star-rated Hotel Occupancy (X3) on the Labor Force (Y) is statistically significant. The calculated F-value is 13.166 with a significance level of 0.007, which is less than  $\alpha = 0.05$ . This indicates that the regression model is suitable for use and is able to significantly explain the relationship between the independent and dependent variables.

The significance of this F-test indicates that Star-rated Hotel Occupancy (X3) simultaneously influences the Labor Force (Y), so that variations in the Labor Force (Y) are not random but can be explained by changes in star-rated hotel occupancy rates. Therefore, the hypothesis stating that Star-rated Hotel Occupancy (X3) influences the Labor Force (Y) is accepted. The ANOVA test results above strengthen the findings of the regression analysis and confirm that the performance of the star-rated hotel sector plays a significant role in labor absorption, particularly in the context of tourism development.

## Coefficients Regression

**Table 10. Coefficients Regression**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.355	.052		83.067	.000
	Star-rated Hotel Occupancy	.047	.013	.789	3.628	.007

a. Dependent Variable: Labor Force

Table 10 shows a constant value of 4.355 with a significance level of 0.000. This indicates that if the Star-rated Hotel Occupancy (X3) variable is zero or assumed to be constant, then the Labor Force (Y) value is estimated to be 4.355 units. A significant constant value indicates that there is a baseline level of the Labor Force that is not affected by the independent variables in the model.

The Star-rated Hotel Occupancy (X3) variable has an unstandardized regression coefficient ( $\beta$ ) of 0.047 with a t-value of 3.628 and a significance level of 0.007, which is less than  $\alpha = 0.05$ . These results indicate that Star-rated Hotel Occupancy (X3) has a positive and significant effect on the Labor Force (Y). This means that each one-unit increase in Star-rated Hotel Occupancy (X3) will increase the Labor Force by 0.047 units, assuming other variables in the model remain constant.

The standardized coefficient ( $\beta$ ) value of 0.789 indicates that Star Hotel Occupancy (X3) has a strong influence on the Labor Force (Y). Thus, the hypothesis stating that Star Hotel Occupancy (X3) has a significant influence on the Labor Force (Y) is accepted. The t-test results confirm that the performance of the star hotel sector is an important determinant in labor absorption, especially in the context of tourism development.



## Exclude Variable

**Table 11. Exclude Variable**

Excluded variable						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Domestic Tourist	.134 <sup>b</sup>	.578	.581	.214	.959
	Internasional Tourist	.401 <sup>b</sup>	1.608	.152	.519	.634
	Star rated occupancy	.293 <sup>b</sup>	.917	.390	.327	.473

a. Dependent Variable: Labor Force

b. Predictors in the Model: (Constant), Star Rated occupancy

Table 11 shows that Domestic Tourists (X1), Foreign Tourists (X2), and Non-Star Hotel Occupancy (X4) were not included in the final regression model because they did not show a significant effect on the Labor Force (Y) after being controlled for by the variable Star Hotel Occupancy (X3). Domestic Tourists (X1) had a significance value of 0.581, Foreign Tourists 0.152, and Non-Star Hotel Occupancy 0.390, all greater than  $\alpha = 0.05$ .

Although several variables showed moderate partial correlations, their contributions were not statistically strong enough to increase the model's explanatory power. A tolerance value above the threshold indicates the absence of multicollinearity. This finding confirms that Star Hotel Occupancy (X3) is the primary determinant of labor absorption, while the other variables did not provide a significant additional influence in the model.

## DISCUSSION

The decline in domestic and international tourist arrivals in 2020 and 2023 reduced hotel occupancy rates and labor absorption within Indonesia's tourism sector, driven by both the COVID-19 pandemic and short-term economic pressures (Gössling et al., 2020; Han et al., 2023; UNWTO, 2021). Stepwise analysis indicates that Starred Hotel Occupancy is the sole significant independent variable explaining labor absorption (Probability of F-to-enter  $\leq 0.05$ ) (Gujarati & Porter, 2009; Wooldridge, 2021).

This finding aligns with the theories of tourism-led employment growth and the multiplier effect, which emphasize that increased occupancy in starred hotels stimulates direct and indirect employment through supporting sectors (Brida et al., 2016; OECD, 2021; UNWTO, 2021). Starred hotels operate with higher service standards and operational scales, requiring a larger and more specialized workforce, making them more responsive to changes in tourist demand (Ahmad et al., 2020; Alegre et al., 2019; Gössling et al., 2020; Rahmawati et al., 2025).

The model results demonstrate that labor absorption is influenced more by the performance of starred hotels than by the number of tourists, underscoring the role of high-standard accommodation in job creation (Butler, 1999; Nguyen et al., 2025; Rasool et al., 2021; Rocca & Zielinski, 2022). Thus, tourism development strategies based on quality and hospitality professionalism prove to be more effective in enhancing and stabilizing labor absorption compared to strategies focused solely on the volume of tourist visits (OECD, 2021; Rahmawati et al., 2025; Zolfani et al., 2015).

## CONCLUSION

This study establishes that starred hotel occupancy serves as a critical determinant of labor absorption within Indonesia's tourism sector. Regression analysis reveals that starred hotel occupancy exerts a positive and significant influence on employment levels, exhibiting superior explanatory power relative to other tourism indicators. These findings underscore that labor absorption is driven not merely by the magnitude of tourist influx, but predominantly by the conversion of tourism demand into structured formal accommodation activities.

The fluctuations in tourist visitation during crisis periods—encompassing the COVID-19 pandemic and subsequent economic constraints—demonstrably impacted starred hotel performance, thereby affecting labor absorption capacity. This highlights the acute sensitivity of tourism employment to external shocks that disrupt hotel occupancy rates.

Comprehensively, this research emphasizes the necessity of developing a starred hotel sector prioritized on quality, operational scale, and service intensity as a strategic approach to generating stable and sustainable employment. Consequently, policy recommendations suggest that the government and tourism stakeholders facilitate investment in starred accommodation, elevate service standards, and fortify hospitality human capital. These measures are essential to ensuring that tourism growth is optimally translated into meaningful employment opportunities.

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## REFERENCES

1. A. Ladkin, S. Mooney, D. Solnet, T. Baum, R. Robinson, and H. Yan, "A review of research into tourism work and employment: Launching the annals of tourism research curated collection on tourism work and employment," *Ann. Tour. Res.*, vol. 100, May 2023, doi: 10.1016/j.annals.2023.103554.
2. A. Syarif, "Analisis Pengaruh Kunjungan Wisatawan terhadap Perekonomian Kalimantan Selatan Melalui Penyerapan Tenaga Kerja," *JIEP: Jurnal Ilmu Ekonomi dan Pembangunan*, vol. 8, no. 2, pp. 418–430, 2025, doi: <https://doi.org/10.20527/jiep.v8i2.2859>.
3. S. S. Dwiningwarni, F. Mardiana, and E. T. Wahyuningdyah, "Tourism Village and Impact on Labor Absorption in Jombang Regency," *Proceedings of the 2nd International Conference on Business and Management of Technology (ICONBMT 2020)*, vol. 175, no. 6, pp. 208–218, 2021, doi: 10.2991/aebmr.k.210510.035.
4. A. Syahrif, N. Rahmini, and H. Rizali, "Analisis Pengaruh Sektor Pariwisata Terhadap Penyerapan Tenaga Di Kalimantan Selatan Tahun 2011-2021," *EKONOMIKAWAN: Jurnal Ilmu Ekonomi dan Studi Pembangunan*, vol. 24, no. 2, pp. 166–184, 2024, doi: 10.30596/ekonomikawan.v%vi%i.
5. F. N. Rahma and H. R. Handayani, "Pengaruh Jumlah Kunjungan Wisatawan, Jumlah Obyek Wisata Dan Pendapatan Perkapita Terhadap Penerimaan Sektor Pariwisata Di Kabupaten Kudus," *Diponegoro Journal of Economics*, vol. 2, no. 2, pp. 1–9, 2013, [Online]. Available: <https://media.neliti.com/media/publications/19638-ID-pengaruh-jumlah-kunjungan-wisatawan-jumlah-obyek-wisata-dan-pendapatan-perkapita.pdf>
6. S. S. Dwiningwarni, Suyanto, and S. Y. Dwi Andari, "Kunjungan Wisatawan Dan Dampaknya Terhadap Pengangguran Terbuka dan Pengentasan Kemiskinan," *Movere Journal*, vol. 6, no. 2, pp. 449–472, Jul. 2024, doi: <https://doi.org/10.53654/mv.v6i2.506>.
7. R. W. Butler, "Sustainable tourism: A state-of-the-art review," *Tourism Geographies*, vol. 1, no. 1, pp. 7–25, 1999, doi: 10.1080/14616689908721291.
8. K. Lindberg and R. L. Johnson, "The economic values of tourism's social impacts," *Ann. Tour. Res.*, vol. 24, no. 1, pp. 90–116, 1997, doi: 10.1016/S0160-7383(96)00033-3.
9. S. H. Zolfani, M. Sedaghat, R. Maknoon, and E. K. Zavadskas, "Sustainable tourism: A comprehensive literature review on frameworks and applications," *Economic Research-Ekonomska Istrazivanja*, vol. 28, no. 1, pp. 1–30, 2015, doi: 10.1080/1331677X.2014.995895.
10. L. H. D. Rocca and S. Zielinski, "Community-based tourism, social capital, and governance of post-conflict rural tourism destinations: the case of Minca, Sierra Nevada de Santa Marta, Colombia," *Tour. Manag. Perspect.*, vol. 43, Jul. 2022, doi: 10.1016/j.tmp.2022.100985.
11. A. Mandic, Ž. Mrnjavac, and L. Kordic, "Tourism infrastructure, recreational facilities and tourism development," *Tourism and Hospitality Management*, vol. 24, no. 1, 2018, doi: 10.20867/thm.24.1.12.
12. R. P. Saroji, "Dampak Industri Pariwisata Terhadap Penyerapan Tenaga Kerja Ditinjau Dari Perspektif Ekonomi Islam (Studi pada Hotel, Biro Perjalanan Wisata, Kuliner dan Objek wisata Kabupaten Lombok Barat)," *Al-Tijary*, vol. 4, no. 1, pp. 61–70, Dec. 2018, doi: 10.21093/at.v4i1.1266.
13. P. Wulan Agustina, S. Huda, and P. Perdana, "Analisis Pengaruh Sektor Pariwisata Terhadap Penyerapan Tenaga Kerja," *EKONOMIKAWAN: Jurnal Ilmu Ekonomi dan Studi Pembangunan*, vol. 24, no. 1, pp. 10–17, Jul. 2024, doi: 10.30596/ekonomikawan.v%vi%i.
14. H. Limanseto, "Menjadi Salah Satu Sektor Strategis Dorong Pertumbuhan Ekonomi, Pariwisata Gencar Dikembangkan Pemerintah," *Coordinating Ministry for Economic Affairs of the Republic of Indonesia*, Yogyakarta, p. 1, Feb. 04, 2025. [Online]. Available: [www.ekon.go.id](http://www.ekon.go.id)
15. S. Syafinah and E. Salmah, "Analysis of the Influence of Tourist Visits and Hotel Occupancy Rate on Labor Absorption in West Nusa Tenggara Province," *West Science Journal Economic and Entrepreneurship*, vol. 2, no. 03, pp. 453–463, 2024, doi: <https://doi.org/10.58812/wsjee.v2i03.1176>.
16. E. Irawan, "ANALYSIS OF THE EFFECT OF HOTEL OCCUPANCY AND TOURIST VISITS ON BUSINESS DEVELOPMENT IN THE TOURISM SECTOR IN WEST NUSA TENGGARA PROVINCE 2012-2021," *Business and Accounting Research (IJEBAR)*, vol. 6, no. 3, pp. 1434–1441, 2022, doi: <https://doi.org/10.29040/ijebar.v6i3>.



17. N. Ramadhani, F. Fatimah, and R. Helvira, "Analisis Pengaruh Sektor Pariwisata terhadap Penyerapan Tenaga Kerja di Provinsi Kalimantan Barat Periode 2018–2023," *MASALIQ*, vol. 5, no. 6, pp. 2993–3012, Nov. 2025, doi: 10.58578/masaliq.v5i6.7942.
18. H. C. W. Price and T. S. Evans, "Understanding Main Path Analysis," Cornell University, New York, 2025. [Online]. Available: <http://arxiv.org/abs/2512.12355>
19. Y. Xiao, L. Y. Y. Lu, J. S. Liu, and Z. Zhou, "Knowledge diffusion path analysis of data quality literature: A main path analysis," *J. Informetr.*, vol. 8, no. 3, pp. 594–605, 2014, doi: 10.1016/j.joi.2014.05.001.
20. Riswan, U. Dyah Safitri, and M. Nur Aidi, "Multilevel Regression Analysis on Graduate Student Grade Point Average," *Al-Khawarizmi: Jurnal pendidikan Matematika dan Ilmu Pengetahuan Alam*, vol. 12, no. 1, pp. 81–94, Mar. 2024, doi: 10.24256/jpmipa.v12i1.3969.
21. BPS, *Keadaan Ketenagakerjaan Indonesia Agustus 2020*, vol. 19, no. 86. 2020.
22. UNWTO, "The Economic Contribution of Tourism and the Impact of COVID-19," World Tourism Organization (UNWTO), America, Nov. 2021. doi: 10.18111/9789284423200.
23. S. Gössling, D. Scott, and C. M. Hall, "Pandemics, tourism and global change: a rapid assessment of COVID-19," *Journal of Sustainable Tourism*, pp. 1–20, 2020, doi: 10.1080/09669582.2020.1758708.
24. L. Han, S. J. Goetz, D. Eades, J. Entsminger, and D. Arbogast, "An early assessment of COVID-19's impact on tourism in U.S. counties," *Tourism Economics*, vol. 29, no. 5, pp. 1355–1375, Aug. 2023, doi: 10.1177/13548166221107814.
25. D. N. Gujarati and D. C. Porter, *Basic Econometrics (5th ed.)*. 2009.
26. J. M. . Wooldridge, *Introductory Econometrics : a modern approach*, 7th ed. Boston: Cengage, 2021. Accessed: Jan. 25, 2026. [Online]. Available: [https://www.academia.edu/49732662/Introductory\\_Econometrics\\_7E\\_2020\\_](https://www.academia.edu/49732662/Introductory_Econometrics_7E_2020_)
27. J. G. Brida, I. Cortes-Jimenez, and M. Pulina, "Has the tourism-led growth hypothesis been validated? A literature review," Apr. 15, 2016, *Routledge*. doi: 10.1080/13683500.2013.868414.
28. OECD, "Implementing the OECD Recommendation on Policy Coherence for Sustainable Development," France, 2021. Accessed: Dec. 22, 2025. [Online]. Available: <https://alnap.hacdn.io/media/documents/pcsd-guidance-note-publication.pdf>
29. N. Ahmad, A. N. Menegaki, and S. Al-Muharrami, "Systematic Literature Reviewe Of Tourism Growth Nexus: An Overview Of The Literature And A Content Analysis Of 100 Most Influential Papers," *J. Econ. Surv.*, vol. 34, no. 5, pp. 1068–1110, Dec. 2020, doi: 10.1111/joes.12386.
30. A. Rahmawati, M. Afrianti, K. J. Utami, and H. Saksono, "High-Volume, Short-Duration Tourism: Fenomena Baru Industri Perhotelan dalam Mendorong Pertumbuhan Ekonomi Daerah NTB," *Aletheia: Jurnal Sosial & Humaniora, Inovasi, Ekonomi, dan Edukasi*, vol. 2, no. 1, pp. 39–48, Jun. 2025, doi: 10.63892/aletheia.2.2025.39-48.
31. J. Alegre, L. Pou, and M. Sard, "High unemployment and tourism participation\*," *Current Issues in Tourism*, vol. 22, no. 10, pp. 1138–1149, 2019, doi: 10.1080/13683500.2018.1464550.
32. H. Rasool, S. Maqbool, and Md. Tarique, "The relationship between tourism and economic growth among BRICS countries: a panel cointegration analysis," *Future Business Journal*, vol. 7, no. 1, Dec. 2021, doi: 10.1186/s43093-020-00048-3.
33. P. C. Nguyen, C. Schinckus, F. H. L. Chong, B. Q. Nguyen, and D. L. T. Tran, "Tourism and contribution to employment: global evidence," *Journal of Economics and Development*, vol. 27, no. 1, pp. 22–37, Mar. 2025, doi: 10.1108/JED-07-2024-0269.