

An Indirect Effect Analysis of Tourism Public Expenditure on Tourist Arrivals through Infrastructure, Accessibility, and Room Occupancy: A WarpPLS Study in Java and Bali

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ABSTRACT

The growth of the tourism sector in Indonesia depends not only on promotional efforts but also on the quality of infrastructure, destination accessibility, and supporting facilities. This study aims to analyze the indirect effect of Tourism Public Expenditure on tourist arrivals through the mediating roles of infrastructure, accessibility, and hotel room occupancy. Secondary data were collected from the Central Statistics Agency and the Ministry of Tourism for the Java and Bali regions over the 2015–2023 period. The analysis was conducted using Structural Equation Modeling with WarpPLS software. The results indicate that government spending positively influences infrastructure development and improvements in accessibility. In turn, infrastructure and accessibility significantly affect hotel room occupancy, which ultimately has a substantial impact on tourist arrivals. The influence of Tourism Public Expenditure on tourist arrivals is therefore indirect, mediated through these pathways. These findings highlight the importance of effective government spending in laying the foundation for sustainable tourism growth.

Keywords: *Tourism Government Spending, Infrastructure, Accessibility, Room Occupancy, Tourist Arrivals*

ABSTRAK

Pertumbuhan sektor pariwisata di Indonesia tidak hanya bergantung pada upaya promosi tetapi juga pada kualitas infrastruktur, aksesibilitas destinasi, dan fasilitas pendukung. Penelitian ini bertujuan untuk menganalisis pengaruh tidak langsung Belanja Publik Pariwisata terhadap kedatangan wisatawan melalui peran mediasi infrastruktur, aksesibilitas, dan hunian kamar hotel. Data sekunder dikumpulkan dari Badan Pusat Statistik dan Kementerian Pariwisata untuk wilayah Jawa dan Bali selama periode 2015–2023. Analisis dilakukan dengan menggunakan Structural Equation Modeling dengan software WarpPLS. Hasil penelitian menunjukkan bahwa belanja pemerintah berpengaruh positif terhadap pembangunan infrastruktur dan peningkatan aksesibilitas. Pada gilirannya, infrastruktur dan aksesibilitas secara signifikan memengaruhi hunian kamar hotel, yang pada akhirnya berdampak besar pada kedatangan wisatawan. Oleh karena itu, pengaruh Belanja Publik Pariwisata terhadap kedatangan wisatawan tidak langsung, dimediasi melalui jalur ini. Temuan ini menyoroti pentingnya pengeluaran pemerintah yang efektif dalam meletakkan dasar untuk pertumbuhan pariwisata berkelanjutan.

Kata kunci: *Belanja Pemerintah Pariwisata, Infrastruktur, Aksesibilitas, Hunian Kamar, Kedatangan Wisatawan*

INTRODUCTION

Tourism has increasingly become a cornerstone of Indonesia's national development strategy, not only due to its economic contribution but also because of its socio-cultural and environmental implications. The sector significantly supports employment, stimulates regional development, and promotes cross-cultural exchange. In fact, tourism has consistently contributed to more than 5% of Indonesia's GDP, with Java and Bali serving as the country's primary tourism hubs (WTTC, 2023). These two regions together host the majority of both domestic and international tourists, underlining their strategic importance in national tourism planning.

However, sustained tourism growth does not rely solely on marketing efforts or cultural appeal. It demands a strong foundation of infrastructure—roads, airports, water, sanitation—as well as accessibility and lodging services. These elements not only shape the travel experience but also determine a destination's competitiveness. According to Inskeep (1991), the success of tourism development relies heavily on well-integrated Infrastructure systems that can support tourist flows and reduce logistical bottlenecks. Moreover, Crouch & Ritchie (1999) highlight Infrastructure and accessibility as among the most influential factors in destination competitiveness, suggesting that the tourism experience begins not at the site itself, but in the journey toward it.

The government, therefore, plays a pivotal role through its budgetary allocations in shaping the long-term capacity of tourism. Public spending on transportation networks, public facilities, and tourism Infrastructure creates enabling conditions for private sector participation and enhances overall service quality (Dwyer et al., 2004). However, the impact of Tourism Public Expenditure is often indirect—it does not instantly translate into visitor numbers but instead works through intermediate variables such as infrastructure quality, ease of access, and room availability.

This research addresses a critical gap in the existing literature: the lack of empirical studies that investigate indirect effects of public expenditure on tourism performance through mediated variables. Previous studies tend to focus on direct correlations between spending and visitor numbers, without examining the underlying structural mechanisms that connect them. This study proposes a model that positions infrastructure development, accessibility improvement, and hotel room occupancy rates as mediators that link public spending to tourist arrivals. These pathways reflect a more holistic understanding of how tourism systems function in reality, especially in developing countries like Indonesia.

To provide a solid conceptual explanation of these relationships, this study adopts a macroeconomic perspective, with its main foundation in a grand theory that underscores the significance of government spending in stimulating growth across strategic sectors, including tourism. The central theoretical basis applied is the

Keynesian Economic Theory, which argues that fiscal policies—particularly through increased public expenditure on infrastructure and essential services—can boost aggregate demand, expand the economy’s productive capacity, and generate a multiplier effect throughout various sectors (Keynes, 1936). Within the tourism context, such investments are anticipated to lay both tangible and intangible foundations that encourage the movement of visitors, whether directly or through improvements in infrastructure, accessibility, and accommodation availability.

In addition, this research is supported by the *Public Goods Theory*, which explains that public infrastructure, transportation networks, and destination amenities fall into the category of non-excludable goods whose advantages can be enjoyed collectively. The government’s provision of these goods plays an essential role in enhancing the appeal of tourist destinations, reducing barriers to access, and building a competitive tourism environment. The integration of Keynesian economics with the principles of public goods offers a comprehensive conceptual platform to assess the indirect connection between government spending and tourist arrivals, mediated by the quality of infrastructure, accessibility, and room occupancy levels.

Furthermore, the proposed conceptual framework draws upon destination development perspectives (Inskeep, 1991) and economic approaches to tourism (Dwyer et al., 2004; Hall, 2008), both of which highlight the critical role of fiscal policy and physical infrastructure in improving tourism mobility and service capacity.

The use of WarpPLS software, which is based on Partial Least Squares Structural Equation Modeling (PLS-SEM), is particularly suitable for this research. WarpPLS allows for the exploration of complex causal relationships between latent variables, even with small to medium sample sizes and non-normal data distribution. As pointed out by Kock (2015), WarpPLS is advantageous in capturing both linear and non-linear relationships, which are common in socio-economic and tourism research settings.

Empirically, Java and Bali offer an ideal testing ground. Both regions have seen massive government investment in infrastructure, particularly after the designation of tourism as a priority sector in the RPJMN (National Medium-Term Development Plan). The fluctuations in tourist arrivals—particularly during the COVID-19 pandemic and subsequent recovery—highlight the sensitivity of tourism to structural conditions and external shocks. The following table provides a quantitative overview of tourist trends in the study regions:

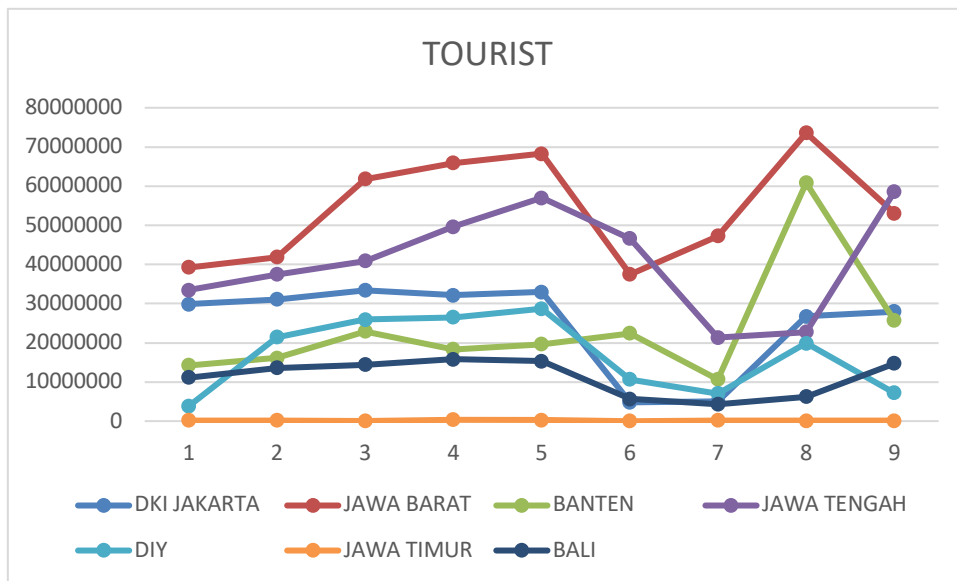


Figure 1. Tourist Arrivals in Java and Bali Provinces (2015–2023)

Source: Ministry of Tourism and Creative Economy

The trend graph of tourist numbers across Java and Bali demonstrates notable fluctuations over the past nine years. A sharp decline occurred in 2020, highlighting the profound impact of the COVID-19 pandemic on Indonesia’s tourism industry. In the years that followed, a gradual recovery was observed, reflecting the resumption of travel activities in line with the easing of mobility restrictions and the public’s growing confidence in tourism.

A more detailed provincial breakdown reveals varied dynamics among the seven key provinces—DKI Jakarta, West Java, Banten, Central Java, Yogyakarta (DIY), East Java, and Bali. West Java consistently recorded the highest tourist numbers, with a substantial spike in the eighth period, suggesting a peak season in that particular year. Central Java and Banten also displayed considerable fluctuations, likely influenced by local tourism events, regional promotion campaigns, and development initiatives.

In contrast, DKI Jakarta showed a more stable and moderate trend, possibly due to its primary role as the nation's administrative and business hub. DIY and East Java followed smoother patterns with fewer dramatic changes, though their visitation trends remained positively consistent. Interestingly, Bali—despite its status as a national tourism icon—exhibited less pronounced fluctuations. This could be attributed to its dependence on international tourists, whose numbers were heavily affected by travel restrictions during the pandemic.

Overall, the chart not only illustrates regional tourism growth and distribution but also reflects the diversity of each destination’s appeal, the resilience of the tourism sector, and the challenges in developing sustainable tourism. These

insights can inform strategic planning for enhancing regional tourism competitiveness, upgrading supporting infrastructure, and improving the effectiveness of government spending in tourism-related sectors.

Given the discussion above, it is evident that the development of the tourism sector requires a comprehensive and integrated approach. In particular, there is a need to understand how government spending interacts with infrastructure provision, accessibility, and accommodation availability to influence tourist numbers. To explore these interrelationships, this study proposes a conceptual framework that systematically illustrates the links between these key variables.

The conceptual framework developed in this study aims to examine the indirect influence of Tourism Public Expenditure on tourist arrivals, mediated through Infrastructure, accessibility, and hotel occupancy. This model draws upon destination development theories (Inskeep, 1991) and tourism economics literature (Dwyer et al., 2004; Hall, 2008), which emphasize the pivotal role of fiscal policy and physical infrastructure in enhancing tourism mobility and service capacity.

In this framework, government spending is posited to affect the quality and availability of Infrastructure and public access facilities such as roads, airports, and mass transportation systems. These factors, in turn, are expected to shape accommodation demand—particularly in terms of hotel occupancy rates—which ultimately drives fluctuations in the number of tourists.

The structural relationships between these constructs are analyzed simultaneously using Structural Equation Modeling (SEM), implemented through WarpPLS software. This approach enables a nuanced examination of both direct and indirect effects within a multi-variable system. Several previous studies have discussed the variables that are the focus of this research. An explanation of each is presented below.

Government spending serves as a primary fiscal instrument playing a strategic role in developing the tourism sector. According to Sari and Nugroho (2019), appropriate budget allocation to tourism can improve the quality of infrastructure and supporting facilities, thereby enhancing destination appeal. Putra et al. (2021) found that Tourism Public Expenditures directed toward infrastructure development have a positive impact on tourism area growth. Furthermore, Dwyer et al. (2004) and Hall (2008) emphasized that public spending in tourism not only contributes directly through physical development but also stimulates private sector involvement and improves the efficiency of tourism-related services.

One of the key components of Tourism Public Expenditure in tourism is infrastructure development. This includes transportation networks, accommodation facilities, basic utilities, and other public amenities that support tourist safety and comfort (Wijaya, 2020). Inskeep (1991) highlighted the importance of integrated infrastructure planning to ensure destination accessibility and viability. Supporting

this view, Nugraha and Arifin (2018) argued that improved infrastructure quality can increase tourist interest and length of stay.

Destination accessibility is also a crucial factor influencing tourist arrivals. Accessibility refers to the ease of reaching a destination via land, sea, or air transportation, as well as access to relevant information (Susanto, 2022). Putri et al. (2019) noted that well-developed access reduces mobility barriers, thereby increasing tourism flow. Handayani (2021) further emphasized the role of accessibility as a mediating variable between infrastructure development and tourism performance outcomes.

Another important indicator of tourism performance is the hotel room occupancy rate, which reflects the level of demand for accommodation services. Kusuma and Fauzi (2020) indicated that occupancy rates often correlate with trends in visitor arrivals. Santoso et al. (2017) stated that higher occupancy is commonly driven by quality infrastructure and easy accessibility. Similarly, Lestari (2019) reported a strong positive correlation between hotel occupancy rates and tourist arrivals, highlighting its significance in tourism economic analysis.

Tourist arrivals, as the primary outcome variable in this study, represent the success of tourism development. Hadi and Sari (2020) explained that growth in tourist numbers is not only influenced by promotion but also by the synergy between infrastructure, accessibility, and accommodation services. Prasetyo (2021) affirmed that the competitiveness of tourism destinations is determined by the integration of these supporting factors.

Previous study findings underpin the development of this research's conceptual framework, as illustrated in the figure below.

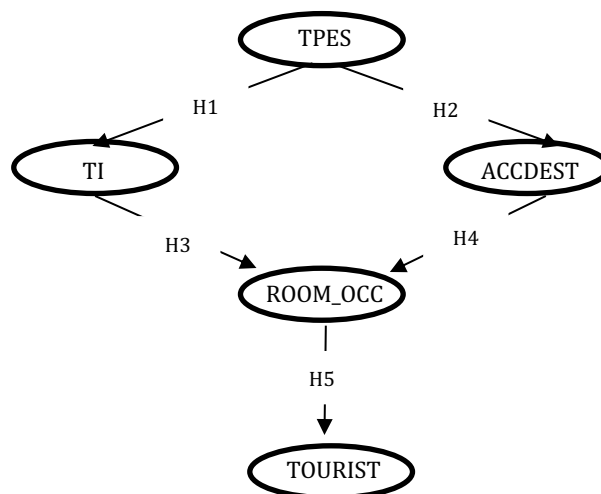


Figure 2. Research Framework

Based on this framework of thought, the hypothesis proposed in this study is as follows:

Research Hypotheses

H1: Government spending has a positive influence on tourism infrastructure.

Tourism Public Expenditure functions as a fiscal tool to stimulate national development, including the advancement of tourism-related infrastructure. A study conducted by Yuliana and Nugroho (2021) highlights that increased public investment in the tourism sector leads to substantial improvements in infrastructure such as access roads, public facilities, and other supporting amenities.

H2: Government spending has a positive influence on tourism destination accessibility.

Accessibility plays a vital role in tourism development by determining how easily visitors can reach tourist destinations. According to Wibowo (2020), increased public funding in transportation infrastructure significantly improves destination accessibility, especially in regions with limited connectivity

H3: Infrastructure positively affects hotel room occupancy rates.

Quality infrastructure—such as roads, clean water supply, and electricity—contributes significantly to enhancing visitor satisfaction and their willingness to stay longer. Putra and Astuti (2022) found that well-developed tourism infrastructure has a statistically significant impact on hotel room occupancy rates, primarily by increasing tourist convenience and mobility.

H4: Accessibility positively affects hotel room occupancy rates.

Improved accessibility, including airports, public transportation, and supporting road networks, facilitates tourist mobility and encourages longer stays. The research by Rahmawati and Kurniawan (2021) demonstrated a strong relationship between accessibility and the increase in hotel occupancy rates at major tourist destinations.

H5: Hotel room occupancy rates positively affect the number of tourists.

Hotel occupancy rates serve as an indicator of a destination's attractiveness and readiness to accommodate visitors. As reported by Sari and Hidayat (2023), a higher occupancy rate reflects a higher volume of tourist arrivals and longer average stays

H6: Government spending indirectly affects the number of tourists through infrastructure, accessibility, and hotel room occupancy.

Findings by Darmawan and Fitriani (2022) suggest that the influence of government spending on tourist numbers is not direct but occurs through mediating variables such as infrastructure development, improved accessibility, and better accommodation availability. This indirect pathway highlights the role of intermediate factors in maximizing the impact of public investment on tourism performance.

RESEARCH METHODS

This study utilizes panel data covering the period from 2015 to 2023. A total of 64 observations were collected for each variable, including government spending, infrastructure, accessibility, hotel room occupancy, and tourist arrivals. Each variable is represented by measurable indicators, with secondary data obtained from official national sources. The operationalization of these variables is presented in the following table.

Tabel 1. Operational Variable

Variable	Sub-variable / Indicator	Source of Data
Government Spending	Tourism Public Expenditure in the tourism sector (APBD/APBN)	Ministry of Finance (Kemenkeu)
Infrastructure	Number of hotels and restaurants	BPS, Ministry of Tourism and Creative Economy (Kemenparekraf)
Accessibility	Number of tourist destinations accessible by public transport and airports	BPS
Hotel Room Occupancy	Percentage of hotel room occupancy	BPS
Tourist Arrivals	Number of domestic and international tourists	Ministry of Tourism and Creative Economy (Kemenparekraf)

RESULTS AND DISCUSSION

Data Quality and Construct Reliability Test

Tabel 2. Construct Reliability Results (Processed Data)

Construct	AVE	Composite Reliability	Cronbach's Alpha	Interpretation
TPES	1.000	1.000	1.000	Perfectly valid and reliable
DA	0.935	0.966	0.930	Valid with high reliability
TI	0.929	0.963	0.924	Valid with high reliability
OR	1.000	1.000	1.000	Perfectly valid and reliable
TOURIST	1.000	1.000	1.000	Perfectly valid and reliable

The validity and reliability tests were conducted to assess the appropriateness of each construct used in the structural model. According to Hair et al. (2017), a

construct is considered to have good convergent validity if the Average Variance Extracted (AVE) exceeds 0.50. In addition, the construct is deemed reliable if both the Composite Reliability (CR) and Cronbach's Alpha values exceed the threshold of 0.70.

As shown in Table 1, all constructs in this study meet the criteria for both convergent validity and reliability:

- TPES, OR, and TOURIST recorded an AVE, CR, and Alpha score of 1.000, indicating perfect validity and reliability. This suggests that the measurement instruments for these constructs exhibit extremely high internal consistency and precision.
- DA and TI showed AVE values above 0.90, with CR and Alpha scores above 0.92, which aligns with the classification of high reliability and strong validity as outlined by Henseler et al. (2009).

Latent Variable Coefficients

To ensure the robustness of the structural model, this study evaluated the measurement quality using multiple criteria, including reliability, validity, collinearity, and distributional characteristics.

1. Model Fit and Predictive Power

- The R-squared (R^2) values show that the *Outcome Readiness (OR)* construct explains 35.7% of the variance, meeting the moderate threshold of ≥ 0.25 (Hair et al., 2011). Meanwhile, *Destination Attractiveness (DA)* and *Tourist Information (TI)* demonstrate low explanatory power (0.146 and 0.055 respectively), indicating limited variance explained by predictors.
- The Q^2 values for all constructs are positive, with the highest being 0.393 for *TI*, indicating acceptable predictive relevance (Chin, 1998).

2. Reliability

- Composite Reliability (CR) for TPES, OR, and TOURIST are perfect (1.000), while DA (0.674) is slightly below the acceptable threshold, and TI (0.740) meets the minimum required value of ≥ 0.70 (Hair et al., 2011).
- Cronbach's Alpha (CA) supports this evaluation, where TPES, OR, and TOURIST demonstrate perfect internal consistency (1.000). However, DA (0.031) and TI (0.296) exhibit low reliability, falling below the recommended threshold of ≥ 0.60 (Nunnally, 1978), indicating potential weaknesses in the indicators used for these constructs.

3. Convergent Validity

- All constructs have AVE values ≥ 0.5 , suggesting that the convergent validity criterion is met (Fornell & Larcker, 1981). This means that each indicator shares more variance with its construct than with error variance.

4. Collinearity Diagnostics

- The Full Collinearity VIF values are all below the 3.3 cut-off, indicating no serious multicollinearity and confirming the statistical independence of constructs (Kock & Lynn, 2012).

5. Normality and Distribution Characteristics

- Based on skewness and kurtosis, the data for all variables fall within acceptable ranges (Hair et al.; Kline, 2011), except for *TPES* which shows positive skewness (1.489) and high kurtosis (3.348), slightly deviating from perfect normality.
- Despite this, Robust Jarque-Bera (RJB) confirms that normality is achieved for all constructs, ensuring the reliability of PLS-SEM assumptions.
- The unimodality assumption is also met across all variables (Kock), suggesting a single distribution peak and supporting the robustness of the estimations.

Based on the destination competitiveness model by Ritchie and Crouch (2003) and the destination lifecycle theory proposed by Butler (1980), the low value of *Destination Attractiveness* in this study may be attributed to the suboptimal condition of supporting factors such as infrastructure and accessibility. This is further supported by the pull-push travel motivation theory (Dann, 1977), which emphasizes the importance of external pull factors in attracting tourists. Accordingly, government spending that is not fully allocated to these critical components may result in a diminished perception of the destination’s appeal among potential visitors.

Tabel 3. Tabel Latent Variable Coefficients (data processed)

Indicator	TPES	DA	TI	OR	TOURIST	Good Criteria According to Experts
R-squared (R ²)		0.146	0.055	0.357	0.088	≥ 0.25 = moderate (Hair et al., 2011)
Adj. R-squared		0.132	0.040	0.336	0.073	-
Composite Reliability (CR)	1.000	0.674	0.740	1.000	1.000	≥ 0.7 = good (Hair et al., 2011)
Cronbach’s Alpha (CA)	1.000	0.031	0.296	1.000	1.000	≥ 0.6 = acceptable

Indicator	TPES	DA	TI	OR	TOURIST	Good Criteria According to Experts
						(Nunnally, 1978)
AVE (Avg. Var. Extracted)	1.000	0.508	0.587	1.000	1.000	≥ 0.5 = valid (Fornell & Larcker, 1981)
Full Collinearity VIF	1.096	1.557	1.602	1.611	1.166	< 3.3 = acceptable (Kock & Lynn, 2012)
Q-squared (Predictive relevance)	0.146	0.077	0.393	0.099	0.099	> 0 = predictive relevance (Chin, 1998)
Skewness	1.489	-0.158	-0.147	0.201	0.678	-1 ≤ Sk ≤ +1 = normal (Hair et al.)
Kurtosis (Exc. Kurtosis)	3.348	-0.990	-0.58x4	-0.599	-0.400	< 10 = acceptable (Kline, 2011)
Unimodal-RS / KMV	Yes	Yes	Yes	Yes	Yes	Unimodality confirmed (Kock)
Normal-JB / RJB	No/Yes	Yes	Yes	Yes	Yes	Normality achieved under Robust Jarque-Bera (RJB)

Multicollinearty Test

Full Collinearity VIF (Variance Inflation Factor) is used to detect potential multicollinearity among latent constructs in a PLS-SEM model. According to Kock and Lynn (2012).

Table 4. Full Collinearity VIF Values from SEM-PLS Output

Konstruk Full Collin. VIF	
TPES	1.096
DA	1.557
TI	1.602
OR	1.611
TOURIST	1.166

VIF value below 3.3 indicates the absence of both vertical and lateral multicollinearity, ensuring that the model's estimates are not distorted by overlapping variance among variables.

Q-Squared Test (Predictive Relevance)

The Q-squared (Q^2) value is a predictive measure in PLS-SEM that assesses the model's out-of-sample predictive relevance through a blindfolding procedure. According to Chin (1998), Q^2 values greater than zero indicate that the model has predictive relevance for a particular endogenous construct. Higher Q^2 values reflect stronger predictive accuracy.

Table 5. Q-squared Values of Constructs (Processed Data)

Construct Q-squared	
TPES	0.146
DA	0.146
TI	0.077
OR	0.393
TOURIST	0.099

All constructs yield Q^2 values greater than 0, confirming the model's predictive relevance for each endogenous variable (Chin, 1998). Notably, the construct *OR* (Hotel Room Occupancy) demonstrates the highest Q^2 value at 0.393, indicating the strongest predictive capability among the constructs. Meanwhile, *TI* (infrastructure) displays the lowest Q^2 value of 0.077, which still exceeds the minimum threshold, suggesting moderate but valid predictive relevance.

Normality and Uminodality Test

To ensure the robustness of the structural equation model, it is essential to evaluate the normality and shape of each construct's distribution. This is typically assessed using the Jarque-Bera normality test (JB), the robust Jarque-Bera test (RJB), skewness, kurtosis, and the unimodality check via Kernel Mean Vector (KMV). According to Hair et al. (2014), normal distribution is supported when skewness values lie between -1 and +1 and kurtosis (excess kurtosis) values remain below 10,

while unimodality indicates the presence of a single peak in the distribution, essential for PLS-SEM analysis (Kock, 2014).

Tabel 6. Normality, Unimodality, and Distribution Characteristics of Constructs

Construct	Normal-JB	Normal-RJB	Unimodal-KMV	Skewness	Kurtosis
TPES	No	No	Yes	1.489	3.348
DA	Yes	Yes	Yes	-0.158	-0.990
TI	Yes	Yes	Yes	-0.147	-0.584
OR	Yes	Yes	Yes	0.201	-0.599
TOURIST	Yes	Yes	Yes	0.678	-0.400

Based on the results:

- TPES failed both JB and RJB tests, indicating a deviation from normality. It also shows a skewness of 1.489, slightly above the +1 threshold, which suggests a moderately right-skewed distribution. However, since the unimodality test is fulfilled, this construct is still acceptable for use in PLS-SEM models, which are tolerant of non-normal data (Hair et al., 2014).
- All other constructs (DA, TI, OR, and TOURIST) passed both JB and RJB normality tests, showed unimodal distributions, and their skewness and kurtosis values fell within acceptable limits, indicating well-behaved and sufficiently normal distributions.

In conclusion, while TPES shows slight non-normality, the overall model remains reliable since PLS-SEM does not require strict normality assumptions. As Kock and Lynn (2012) emphasized, PLS-SEM is particularly robust when dealing with skewed or kurtotic data, as long as unimodality is satisfied.

Model Estimation Results

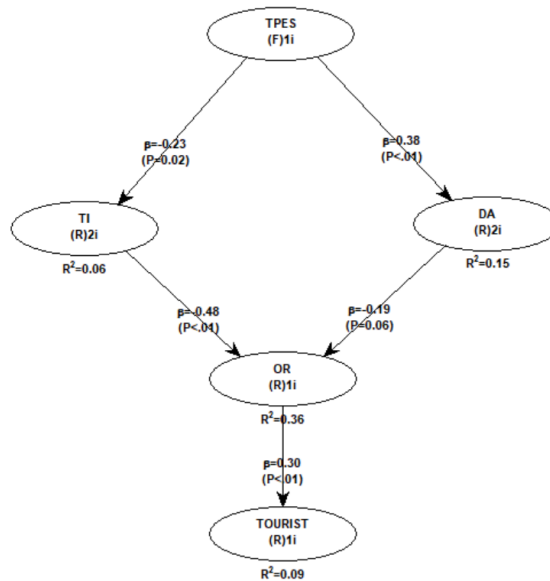


Figure 3. Model Estimation Results

Discussion

The Effect of Tourism Public Expenditure (TPES) on Tourism Outcomes

Based on the results of the structural equation modeling (SEM) using WarpPLS 8.0, Tourism Public Expenditure (TPES) has a significant positive effect on both Tourism infrastructure (TI) ($\beta = 0.23$; $p = 0.02$) and Destination Accessibility (DA) ($\beta = 0.38$; $p < 0.01$). This indicates that higher public spending in the tourism sector effectively contributes to improving the quantity or quality of infrastructure and accessibility. This finding aligns with the studies by Dwyer et al. (2012) and Hall (2008), which emphasized that government investment in tourism-related infrastructure and access (roads, airports, connectivity) plays a crucial role in enhancing destination competitiveness and visitor flow.

The Effect of TI and DA on Occupancy Rate (OR)

The results further show that Tourism infrastructure (TI) has a strong positive influence on Occupancy Rate (OR) ($\beta = 0.48$; $p < 0.01$), supporting the notion that better infrastructure boosts tourists' satisfaction and convenience, leading to increased stays and occupancy. In contrast, Destination Accessibility (DA) exerts a negative but marginally insignificant effect on OR ($\beta = -0.19$; $p = 0.06$). While this might seem counterintuitive, it can suggest that increased accessibility alone does not guarantee increased occupancy if not accompanied by adequate service quality, branding, or tourist attractions. This is in line with Buhalis (2000), who notes that accessibility must be supported by other complementary services to maximize tourism outcomes.

The Effect of OR on Tourist Visits (TOURIST)

The Occupancy Rate (OR) positively and significantly affects Tourist Visits (TOURIST) ($\beta = 0.30$; $p < 0.01$), indicating that an increase in room occupancy (a proxy for tourism performance) is associated with higher tourist arrivals. This confirms the mediating role of tourism performance between supply-side inputs (like infrastructure and accessibility) and final tourism outcomes.

R-squared (R^2) Interpretation

- TI: $R^2 = 0.06 \rightarrow 6\%$ of variance in Tourism infrastructure is explained by TPES.
- DA: $R^2 = 0.15 \rightarrow 15\%$ of variance in Accessibility is explained by TPES.
- OR: $R^2 = 0.36 \rightarrow 36\%$ of variance in Occupancy Rate is explained by TI and DA.
- TOURIST: $R^2 = 0.09 \rightarrow$ Only 9% of the variation in tourist arrivals is explained by OR.

These R^2 values indicate low to moderate explanatory power of the model. While the path relationships are statistically significant, there are likely many other external variables influencing infrastructure development, accessibility, hotel performance, and tourist arrivals. Nevertheless, this does not necessarily weaken the model. In fact, in social science research, low R^2 values are common due to the complex, multi-dimensional, and often unpredictable nature of human behavior (Hair et al., 2014).

CONCLUSION AND SUGGESTIONS

This study explores the indirect influence of government spending in the tourism sector (TPES) on tourist arrivals (TOURIST), with tourism infrastructure (TI), destination accessibility (DA), and room occupancy (OR) acting as mediating variables. The key findings of the study can be summarized as follows:

1. TPES has a statistically significant positive effect on both TI and DA, indicating that increased public budget allocations contribute to improved tourism infrastructure and enhanced access to destinations.
2. TI demonstrates a significant and positive relationship with OR, suggesting that better infrastructure conditions support higher occupancy rates in tourist accommodations.
3. DA negatively and significantly affects OR, implying that greater accessibility does not necessarily lead to increased occupancy. This may be due to uneven spatial development or insufficient quality in transportation access.
4. OR exerts a significant positive influence on TOURIST, highlighting its role as a key performance indicator for tourism development success.
5. The mediation path TPES \rightarrow TI \rightarrow OR \rightarrow TOURIST reveals a significant indirect relationship, emphasizing the importance of infrastructure and room occupancy in connecting public spending to the growth of tourist visits.

6. The highest R^2 is recorded for the OR variable (0.36), indicating that the combination of TI and DA moderately explains room occupancy variations. Meanwhile, TOURIST has a low R^2 of 0.09, reflecting the presence of other external determinants beyond the current model.
7. In the context of social science research, low R^2 values are common due to the inherently complex, multidimensional, and unpredictable nature of human behavior (Hair et al., 2014).

Suggestions

1. Central and local governments should continue prioritizing strategic investments in the tourism sector, especially in infrastructure development and maintenance, as these have been proven to enhance occupancy rates and tourist arrivals.
2. A comprehensive assessment of destination accessibility development is recommended, focusing on multimodal connectivity, transport quality, and public affordability. Improving accessibility must also ensure a more balanced spatial distribution of tourist activity.
3. Tourism industry stakeholders—particularly in accommodation and hospitality—are encouraged to collaborate with the government to optimize existing infrastructure and improve service quality, ultimately increasing room occupancy and attracting more tourists.

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