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Star Hotel Occupancy Fluctuations in Makassar: Evidence from BPS Data and Implications for Islamic Tourism Marketing

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Abstract

Occupancy rates of star hotels in Makassar fluctuate substantially; however, empirical patterns remain poorly documented due to the absence of systematic analysis of official data. This research gap necessitates a structured empirical investigation. This study empirically examined monthly occupancy fluctuations from March 2024 to June 2025 using secondary data from BPS (Central Bureau of Statistics). A qualitative document analysis was employed, involving month-to-month change calculations, peak and trough identification, and recovery pattern assessments. The findings revealed occupancy ranging from a peak of 59.32 percent in August 2024 to a trough of 32.30 percent in March 2025, representing a range of 27.02 percentage points. The market demonstrated rapid recovery, regaining over 70 percent of lost occupancy within one month. Notably, three months were missing from the data series. From an Islamic business ethics perspective, the sharp Ramadan trough requires fair treatment of workers and the avoidance of exploitative price hikes during peak periods such as August. Marketing strategies must uphold amanah (trustworthiness) by transparently reporting data gaps and maslahah (public interest) by ensuring promotional campaigns benefit local communities, not just hotel profits. The novelty of this study lies in integrating empirical occupancy fluctuation analysis with Islamic business ethics principles specifically justice, trustworthiness, and public interest into tourism marketing strategy, an approach absent in previous research. The study concludes that strengthening evidence-based marketing requires understanding peak, trough, and recovery patterns while improving data completeness and embedding Islamic ethical principles into every strategic decision.

Keywords

Hotel Occupancy Rate (TPK); Islamic Business Ethics; Tourism Seasonality; BPS Data; Marketing Strategy

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1. INTRODUCTION

The hospitality industry serves as a critical barometer of tourism sector performance, with hotel occupancy rates providing real time insights into visitor arrivals, travel patterns, and destination competitiveness. In Makassar, the capital city of South Sulawesi and a primary gateway to eastern Indonesia, star hotels play a pivotal role in accommodating business travelers, leisure tourists, and

transit visitors who contribute to the local economy. However, beneath aggregate annual statistics lies a more nuanced reality: monthly occupancy rates of star hotels in Makassar exhibit substantial volatility that cannot be explained solely by seasonal patterns or holiday effects. Between March 2024 and June 2025, available data from Badan Pusat Statistik (BPS) Kota Makassar show that star hotel occupancy rates have ranged from a peak of 59.32 percent in August 2024 to a low of 32.30 percent in March 2025, a difference of more than 27 percentage points (BPS 2025). This disparity raises fundamental questions about the drivers of monthly fluctuations and how tourism stakeholders can leverage empirical evidence to strengthen marketing strategies.

Despite the practical importance of understanding these fluctuation patterns, existing studies have largely examined hotel occupancy either as annual averages or as simple seasonal indices, treating monthly fluctuations as noise rather than as meaningful signals for strategic marketing decisions (Busaina et al., 2023; Rahman et al., 2022; Sudiarta & Ramadhanty, 2024; Sutari et al., 2020). Moreover, prior research has not systematically integrated Islamic business ethics into the analysis of occupancy volatility, leaving a gap in normative guidance for responsible marketing in Muslim majority destinations such as Makassar. Consequently, what remains missing is an empirical approach that documents month to month changes, identifies peaks and troughs, addresses irregular data reporting, and interprets findings through ethical principles such as transparency, justice, and public interest evidence (Adanse et al., 2024; Hassan & Pitanatri, 2025; Marini et al., 2025; Razak, 2022). This study fills that gap by providing a systematic empirical reading of official BPS data while embedding Islamic ethical analysis into the interpretation of occupancy fluctuations (M. Li et al., 2023; E. H. C. Wu et al., 2022; F. Wu et al., 2020; H. Zhang & Lu, 2022).

Specifically, this study addresses the following research questions. First, what are the monthly star hotel occupancy fluctuation patterns in Makassar from March 2024 to June 2025 in terms of peak and trough periods, magnitude of month to month changes, and recovery patterns following sharp declines? Second, how do missing data months (June 2024, November 2024, and December 2024) affect the completeness of trend analysis, and how can stakeholders responsibly interpret incomplete data? Third, from the perspective of Islamic business ethics, how should hoteliers and policymakers respond to sharp occupancy declines such as the Ramadan trough in March 2025 and peak periods such as August 2024 to ensure marketing strategies uphold amanah (trustworthiness), ‘adl (justice), and maslahah (public interest)?

This study offers several key contributions. Methodologically, it prioritizes empirical reading of raw monthly BPS data over theoretical modeling, systematically documenting month to month changes, peak and trough periods, recovery patterns, and missing data points to ensure transparency and reproducibility. Contextually, it provides current evidence based on official BPS Makassar releases from

March 2024 to June 2025, with a specific focus on star hotels as the segment most relevant to higher end tourism and local economic impact (Chen et al., 2026; Velu et al., 2022). Conceptually, it integrates Islamic business ethics into tourism marketing analysis, demonstrating how principles such as amanah, ‘adl, and maslahah can guide responsible responses to occupancy volatility, including fair treatment of workers during Ramadan troughs and avoidance of exploitative price hikes during peak periods. Practically, the findings offer actionable intelligence for hotel managers and policymakers on promotional timing, resource allocation, and ethical marketing interventions that balance profitability with social benefit.

From an Islamic business ethics perspective, which is introduced here early given its centrality to this study, the sharp occupancy decline observed in March 2025 (32.30 percent) coinciding with Ramadan requires special attention. Rather than resorting to deceptive discounting or exploitative practices, hoteliers are ethically obliged to treat workers fairly and maintain transparent pricing. Conversely, the peak period of August 2024 (59.32 percent) demands restraint from excessive price surges (ghubn fahisy) that burden consumers. These ethical considerations, rooted in Maqasid al Shari’ah particularly the protection of property (hifz al mal) and fairness in commercial transactions, run throughout the analysis and inform all subsequent strategic recommendations. By integrating Islamic ethical analysis from the outset, this study moves beyond profit maximization logic to evaluate whether marketing strategies derived from BPS fluctuation data uphold al ‘adl wal ihsan (justice and benevolence), thereby offering not only tactical guidance for stabilizing occupancy but also a moral compass for hoteliers and policymakers in Makassar and beyond.

Literature Review

This research is grounded in the integration of Tourism Demand Theory, Seasonality Theory, and Marketing Strategy Theory, which together form a conceptual framework that links empirical occupancy patterns to strategic marketing decisions. The conceptual framework operates as follows. At the input level, monthly star hotel occupancy data from BPS Makassar provide raw empirical evidence. These data are then analyzed through three analytical dimensions: the magnitude of month-to-month changes, the identification of peak and trough periods, and the pattern of occupancy recovery following sharp declines. These dimensions serve as intervening variables that translate raw data into actionable intelligence. At the output level, this intelligence informs marketing strategy decisions including promotional timing, pricing adjustments, and resource allocation. Overlaying the entire framework is the normative lens of Islamic business ethics, comprising the principles of amanah (trustworthiness), 'adl (justice), tawazun (balance), and maslahah (public interest), which evaluate whether the resulting marketing strategies are ethically permissible and socially beneficial. This integrated framework

ensures that empirical findings are not only strategically useful but also normatively grounded.

Tourism Demand Theory, as articulated by Song & Li (2008),, explains how tourist flows are determined by a combination of push factors originating from generating regions and pull factors originating from destination regions. Seasonality Theory, developed by Butler (2001),, posits that tourism demand is inherently temporal, with predictable peaks and troughs that create challenges for capacity management, revenue optimization, and workforce planning. Marketing Strategy Theory, articulated by Kotler & Lane (2016), establishes that effective marketing requires segmentation, targeting, and positioning based on empirical evidence about customer behavior and market dynamics. The integration of these three theoretical perspectives allows this study to examine how monthly occupancy fluctuation patterns translate into strategic marketing decisions (Chen et al., 2026; Kumar & Ekka, 2024; Velu et al., 2022).

A critical synthesis of prior literature reveals several significant gaps. First, existing studies have predominantly examined hotel occupancy using annual averages or seasonal indices, thereby treating monthly fluctuations as statistical noise rather than as meaningful signals for strategic decision making (Contessi et al., 2024; Rojas & Jatowt, 2025; Song & Zhang, 2025). What is missing is an empirical approach that systematically documents month-to-month changes, identifies specific peak and trough periods, and measures recovery speed following sharp declines (Kumar & Ekka, 2024; Nhamo et al., 2020). Second, most studies assume complete and continuous data, yet in practice, official statistics often contain missing months that complicate trend analysis. The literature has not adequately addressed how to derive actionable insights from incomplete occupancy data. Third, and most critically, no prior study has integrated Islamic business ethics into the analysis of hotel occupancy fluctuations. While Islamic finance and halal tourism have received growing attention, the ethical evaluation of marketing responses to demand volatility remains entirely absent. This study addresses these three gaps by providing a systematic empirical reading of BPS data, transparently documenting data limitations, and embedding Islamic ethical principles into the interpretation of occupancy patterns (Nhamo et al., 2020; Tian et al., 2021; D. C. Wu et al., 2025).

From the perspective of Islamic business ethics, which provides a normative framework for this study, the analysis draws on classical and contemporary scholarship. Al-Ghazali's (d. 1111) elaboration of the ethics of commercial transactions emphasizes that honesty, transparency, and the avoidance of deception are religious obligations, not merely optional virtues. In the context of hotel occupancy, this means that marketing claims based on BPS data must be accurate and that price adjustments during peak or trough periods must avoid both exploitative surges (ghubn fahisy) and deceptive discounting that conceals poor service quality. (Binesh et al., 2024; Chen et al., 2025a) articulates the maqasid al-Shari'ah framework, arguing that all economic activities including tourism marketing must ultimately

serve the broader objectives of protecting religion, life, intellect, lineage, and property. Applying this to hotel occupancy, marketing strategies designed to stabilize demand during trough periods or maximize revenue during peak periods must not violate the protection of property through fraud or the protection of human dignity through unfair treatment of workers or guests. Ibn Khaldun's (d. 1406) concept of 'asabiyyah (social solidarity) and his analysis of market dynamics further suggest that pricing practices during periods of scarcity or abundance must consider the public interest (maslahah) rather than narrow private gain. Together, these classical Islamic perspectives provide a rich ethical foundation for evaluating how hoteliers and policymakers should respond to occupancy fluctuations.

The relationship between fluctuation magnitude and marketing strategy can be explained through multiple mechanisms. Periods of sharp decline signal the need for immediate promotional interventions, while periods of rapid recovery indicate the presence of latent demand that can be activated through appropriate marketing channels. The pattern of fluctuation magnitude over time reveals whether demand volatility is increasing or decreasing, informing long-term strategic planning. Understanding which months typically follow sharp declines versus which months follow gradual changes enables hotel managers to develop predictive models for occupancy forecasting (Chen et al., 2025b; Liu et al., 2026; Manoharan & Ashtikar, 2025). However, detailed presentation of Makassar-specific data, including specific percentage points and monthly comparisons, belongs in the findings section rather than the literature review. The literature review establishes the theoretical mechanisms and identifies what prior studies have missed, leaving empirical illustration to the results chapter.

Similarly, the identification of peak and trough periods provides essential intelligence for tourism marketing strategy. Peak periods represent opportunities for revenue maximization through yield management and upselling, while trough periods represent challenges that require demand stimulation through promotional pricing, event hosting, or targeted advertising. The gap between peak and trough occupancy indicates the potential revenue uplift that could be achieved through successful demand stimulation during low periods. Comparing peak and trough timing across multiple years would enable identification of stable seasonal patterns. Again, the specific occupancy percentages for Makassar are empirical findings that should be presented in the results section, not repeated in the literature review.

Regarding occupancy recovery patterns, rapid recovery suggests that sharp declines were caused by temporary factors, while slow recovery suggests structural issues requiring more fundamental interventions. The relationship between recovery patterns and marketing strategy operates through several mechanisms. Rapid recovery indicates that latent demand exists and can be activated through appropriate marketing channels, suggesting that promotional spending during trough periods may be highly effective. The speed of recovery provides guidance for resource allocation: if recovery is typically rapid, hotels may choose to ride out short-term troughs without aggressive discounting; if recovery is

typically slow, proactive demand stimulation may be necessary. Comparing recovery patterns across different types of declines enables development of contingency plans tailored to specific disruption types. Empirical illustration using Makassar data belongs in the findings chapter.

Regarding data completeness, the availability of complete and consistent monthly data is essential for accurate analysis of hotel occupancy fluctuations. Missing months create gaps in the time series that complicate trend identification, seasonal pattern detection, and the calculation of accurate average occupancy rates. The relationship between data completeness and marketing strategy operates through several mechanisms. Missing months create uncertainty about whether observed fluctuations are accurate representations of true occupancy patterns or artifacts of incomplete data. Missing months prevent the calculation of accurate year-over-year comparisons that would enable identification of growth trends independent of seasonal effects. Missing months complicate the development of predictive models that could forecast future occupancy based on historical patterns. The presence of missing months highlights the importance of systematic data collection and reporting protocols that ensure consistency and completeness over time (Chen et al., 2025b; Liu et al., 2026; Manoharan & Ashtikar, 2025). The specific missing months in the Makassar dataset and their implications for analysis are presented in the findings section.

The integration of Islamic business ethics into this study draws on four core ethical pillars derived from the Quran and Sunnah, as elaborated by contemporary scholars such as (N. Li et al., 2025; Mahalakshmi & Bharath, 2025; D. Zhang & Wu, 2023), who links Islamic ethics to macroeconomic stability and social justice, who applies Islamic business ethics to organizational decision making. First, amanah (trustworthiness) requires that BPS data on occupancy rates be reported accurately and that marketing claims based on those data avoid exaggeration or deception, as transparency is a fundamental obligation in Islamic commerce. Second, 'adl (justice) prohibits exploitative pricing during peak occupancy periods, as raising prices excessively to capture consumer surplus constitutes ghubn fahisy (harmful fraud). Third, tawazun (balance) guides hoteliers to avoid both panic discounting during trough periods and price gouging during recovery periods, instead seeking pricing strategies that ensure fair profit without harming consumers. Fourth, maslahah (public interest) demands that marketing strategies derived from occupancy fluctuation data contribute to broader social welfare, including maintaining service quality during low occupancy periods and avoiding layoffs that would harm workers' livelihoods. Al-Ghazali's elaboration of maqasid al-Shari'ah emphasizes that all commercial transactions must ultimately protect religion, life, intellect, lineage, and property (hifz al-din, al-nafs, al-'aql, al-nasl, al-mal). Applying this to hotel occupancy, marketing strategies that respond to trough periods through aggressive discounting may violate the protection of property if they lead to unsustainable losses, while strategies that exploit peak periods through price surges violate the

protection of property for consumers. Ibn Khaldun's analysis of market dynamics in the Muqaddimah further suggests that prices are determined by the interaction of supply and demand, but that state intervention may be justified to prevent unfair practices when market conditions are distorted by hoarding, monopoly, or asymmetric information. Together these classical and contemporary perspectives provide a robust ethical framework that transforms raw occupancy data into ethically grounded marketing decisions aligned with Maqasid al-Shari'ah.

2. METHODS

Research Design and Approach

This research uses a qualitative descriptive approach with document analysis. The qualitative method is particularly superior for this dataset because monthly occupancy data from BPS contain irregularities including missing months, inconsistent reporting lags, and potential transcription errors between primary releases and secondary compilations. A qualitative document analysis allows the researcher to examine each data point in its original institutional context, verify figures against multiple sources, and interpret fluctuations with attention to the specific circumstances (such as Ramadan timing or data gaps) that quantitative methods would treat as noise or missing values. Unlike purely statistical approaches that require complete and uniform data, qualitative document analysis enables systematic handling of imperfect real world data while maintaining transparency about limitations. This approach emphasizes understanding the meaning of occupancy fluctuations based on empirical evidence and the institutional context in which these data are produced (Bowen, 2009). Descriptive qualitative research focuses on answering research questions related to what, when, where, and how occupancy fluctuations occur, ultimately examining them in depth to discover patterns that emerge from the monthly data series (Creswell & Miller, 2000).

The research object of this study is the monthly star hotel occupancy rate (Tingkat Penghunian Kamar or TPK) in Makassar as published by Badan Pusat Statistik (BPS) Kota Makassar. The unit of analysis consists of monthly occupancy data from March 2024 to June 2025, including the calculation of month to month changes, identification of peak and trough periods, and analysis of recovery patterns following sharp declines. The location of this research is the city of Makassar, the capital of South Sulawesi Province and a primary gateway to eastern Indonesia, selected because it is a strategic tourism destination with a significant concentration of star hotels serving business travelers, leisure tourists, and transit visitors.

Data Sources and Document Selection

In determining data sources, this study uses purposive document selection rather than statistical sampling. Since the study aims to analyze all available official BPS data within a defined timeframe

rather than generalizing from a sample to a population, the concept of sampling in the statistical sense is conceptually unnecessary (Sugiyono, 2022). Instead, the study applies purposive selection criteria to ensure that only authoritative, relevant, and verifiable documents are included. The selection criteria are: (1) the document must be an official government publication from BPS Kota Makassar, (2) it must contain monthly star hotel occupancy rates for Makassar, (3) it must be publicly accessible and verifiable, and (4) the time period covered must be from March 2024 to June 2025. Based on these criteria, the data sources include monthly Berita Resmi Statistik (BRS) releases on Perkembangan Pariwisata from BPS Kota Makassar, as well as a consolidated naskah that compiled these data into a single table. A complete list of individual BPS release dates is provided in Appendix A (available upon request), rather than occupying space in the main text.

Primary data were obtained directly from each monthly BPS release, including the publication date, the month to which the data refer, and the reported TPK percentage. Secondary data were obtained from the consolidated naskah and from the BPS Kota Makassar official website, serving as validation tools to verify the accuracy of primary data extraction.

Data Collection and Validity

Data collection was performed by systematically retrieving each monthly BPS release from www.makassarkota.bps.go.id, extracting occupancy figures, and compiling them into an analysis worksheet. To ensure data validity, this study employed triangulation adapted from the credibility framework of Sekaran and Bougie (2016). Source triangulation was performed by comparing the original BPS releases against the consolidated naskah figures, which confirmed perfect agreement with zero discrepancies. Method triangulation was conducted by independently calculating month to month changes and verifying them against the differences between consecutive reported figures. Time triangulation was achieved by collecting data across a 16 month period, allowing confirmation that observed patterns such as the August 2024 peak and March 2025 trough were not isolated anomalies. Member checking was conducted by returning the compiled dataset to the original naskah author for verification.

For transferability, detailed contextual information about Makassar as a tourism destination, the 16 month timeframe, the specific missing months (June 2024, November 2024, December 2024), and BPS data collection procedures is provided to enable readers to assess applicability to other destinations. Dependability was ensured by documenting all research stages from planning, data extraction, analysis, to interpretation in an audit trail maintained in the accompanying Excel workbook. Confirmability was achieved by grounding all findings in empirical evidence from BPS releases, with assumptions such as the Ramadan effect explicitly distinguished from direct observations and data limitations transparently

acknowledged.

Data Processing and Analysis Framework

The analysis followed a structured five step framework that moves systematically from raw data to interpreted findings. Step one was data editing and verification, in which each extracted occupancy figure was checked against its original BPS release, typographical errors were corrected, date formats were standardized, and any discrepancies between the naskah and primary sources were resolved by referring back to the original releases. Step two was coding and categorization, in which data were organized using codes derived from the research questions: month identification, year, occupancy percentage, source release date, month to month change, direction of change, peak months, trough months, missing months, and recovery patterns. Peak months were highlighted in green and trough months in red for visual identification.

Step three was data reduction, in which only information relevant to occupancy fluctuations, peak and trough identification, and recovery patterns was retained. Three missing months (June 2024, November 2024, December 2024) were identified and excluded from change calculations. Step four was data presentation, in which the reduced data were organized into analytical tables presenting monthly occupancy figures, statistical summaries (mean, median, standard deviation, range), month to month changes, and peak and trough identification. Step five was interpretation and conclusion drawing, in which findings were linked to Tourism Demand Theory, Seasonality Theory, and Marketing Strategy Theory, as well as to the Islamic business ethics framework of amanah, 'adl, tawazun, and maslahah. For example, the sharp decline from February 2025 to March 2025 (17.91 percentage points) followed by rapid recovery to April 2025 (13.05 percentage points) was interpreted through Seasonality Theory with specific attention to the Ramadan period in Makassar, while the presence of three missing months was interpreted for its implications on evidence based marketing decisions requiring transparency (amanah). This five step framework ensures that the analysis is systematic, transparent, and replicable (Sekaran & Bougie, 2016).

3. FINDINGS AND DISCUSSION

Descriptive Analysis of Monthly Star Hotel Occupancy in Makassar

This study analyzes the monthly fluctuations of star hotel occupancy rates (Tingkat Penghunian Kamar or TPK) in Makassar based on official BPS Kota Makassar data releases from March 2024 to June 2025. The research examines occupancy patterns including month to month changes, peak and trough periods, and recovery patterns following sharp declines. Data were obtained from monthly Berita Resmi Statistik publications and verified through comparison with the original naskah.

Table 1. Monthly Star Hotel Occupancy Rates in Makassar

No	Month	Year	TPK (%)	Source Release Date
1	March	2024	47.94	BPS Makassar, 2 May 2024
2	April	2024	45.65	BPS Makassar, 5 June 2024
3	May	2024	53.41	BPS Makassar, 1 July 2024
4	July	2024	58.32	BPS Makassar, 2 September 2024
5	August	2024	59.32	BPS Makassar, 1 October 2024
6	Sept	2024	56.51	BPS Makassar, 1 November 2024
7	October	2024	57.50	BPS Makassar, 3 December 2024
8	January	2025	49.95	BPS Makassar, 10 April 2025
9	Feb	2025	50.21	BPS Makassar, 11 April 2025
10	March	2025	32.30	BPS Makassar, 6 May 2025
11	April	2025	45.35	BPS Makassar, 5 June 2025
12	May	2025	44.62	BPS Makassar, 4 July 2025
13	June	2025	46.95	BPS Makassar, 4 August 2025

Source: Processed from BPS Kota Makassar monthly releases (2024-2025)

Table 1 shows the monthly star hotel occupancy rates in Makassar over a 16 month period from March 2024 to June 2025. A total of 13 monthly observations were available, with three months missing from the series: June 2024, November 2024, and December 2024. The table reveals substantial variation in occupancy rates, ranging from a peak of 59.32 percent in August 2024 to a trough of 32.30 percent in March 2025. The data demonstrate that occupancy rates during 2024 generally remained above 45 percent from March through October, with a clear peak during the July to August period. The 2025 data

show greater volatility, with a dramatic decline in March followed by a strong recovery in April.

Overview of Available Data

Table 2 presents a statistical summary of the available occupancy data, providing an overview of central tendency, dispersion, and the range of occupancy values across the 13 available months.

Table 2. Statistical Summary of Star Hotel Occupancy in Makassar

Indicator	Value	Unit
Number of observations	13	months
Mean occupancy	49.85	percent
Median occupancy	49.95	percent
Standard deviation	7.43	percent
Highest occupancy	59.32	percent
Lowest occupancy	32.30	percent
Range (max-min)	27.02	percentage points
Missing months	3	months

Source: Processed from BPS Kota Makassar monthly releases (2024-2025)

Table 2 shows that the mean occupancy across the 13 available months is 49.85 percent with a median of 49.95 percent, indicating that the distribution of occupancy values is relatively symmetrical. The standard deviation of 7.43 percent indicates moderate variation in occupancy rates from month to month. The range of 27.02 percentage points between the highest occupancy (59.32 percent in August 2024) and the lowest occupancy (32.30 percent in March 2025) demonstrates substantial volatility in Makassar's star hotel market. The table also notes that three months (June 2024, November 2024, and December 2024) have no available data, which limits the completeness of the time series analysis.

Month to Month Fluctuation Analysis

Table 3 presents the calculation of month to month changes in occupancy for consecutive months where both months had available data. This analysis reveals the magnitude and direction of occupancy fluctuations over time.

Table 3. Month to Month Occupancy Fluctuations in Makassar

Period	From TPK (%)	To TPK (%)	Change (percentage points)	Direction
March to April 2024	47.94	45.65	-2.29	Decline
April to May 2024	45.65	53.41	+7.76	Increase
May to July 2024	53.41	58.32	+4.91*	Increase
July to August 2024	58.32	59.32	+1.00	Increase
August to September 2024	59.32	56.51	-2.81	Decline
September to October 2024	56.51	57.50	+0.99	Increase
October 2024 to January 2025	57.50	49.95	-7.55*	Decline
January to February 2025	49.95	50.21	+0.26	Increase
February to March 2025	50.21	32.30	-17.91	Decline
March to April 2025	32.30	45.35	+13.05	Increase
April to May 2025	45.35	44.62	-0.73	Decline
May to June 2025	44.62	46.95	+2.33	Increase

Note: Changes marked with an asterisk (*) involve a missing month in between (June 2024 for May-July; November and December 2024 for October-January)

Source: Processed from BPS Kota Makassar monthly releases (2024-2025)

Table 3 reveals substantial variation in the magnitude of month to month occupancy fluctuations. The changes range from a decline of 17.91 percentage points (February to March 2025) to an increase of 13.05 percentage points (March to April 2025). The largest positive fluctuation occurred between March and April 2025, representing a sharp recovery following the deepest trough in the series. The largest

negative fluctuation occurred between February and March 2025, representing the most dramatic month to month drop in the entire observation period.

Several periods showed relatively stable month to month changes. The smallest positive fluctuation was 0.26 percentage points (January to February 2025), followed by 0.99 percentage points (September to October 2024) and 1.00 percentage point (July to August 2024). The smallest negative fluctuation was 0.73 percentage points (April to May 2025), followed by 2.29 percentage points (March to April 2024) and 2.81 percentage points (August to September 2024).

The pattern of fluctuations reveals that the market experienced its most stable period during the middle of 2024, from April through October, where changes were generally moderate and predictable. The market experienced its most volatile period during early 2025, with dramatic swings in both directions within a three month period from February to April 2025.

Peak and Trough Identification

Table 4 presents the identification of peak occupancy months (highest three values) and trough occupancy months (lowest three values) within the available data series.

Table 4. Peak and Trough Occupancy Months in Makassar

Category	**Rank**	**Month**	**Year**	**TPK (%)**
Peak	1	August	2024	59.32
Peak	2	July	2024	58.32
Peak	3	October	2024	57.50
Trough	1	March	2025	32.30
Trough	2	April	2024	45.65
Trough	3	May	2025	44.62

Source: Processed from BPS Kota Makassar monthly releases (2024-2025)

Table 4 shows that the peak occupancy period occurred in July and August 2024, with occupancy rates of 58.32 percent and 59.32 percent respectively. October 2024 also showed strong performance at 57.50 percent, ranking as the third highest occupancy in the series. The trough period occurred in March 2025 with occupancy of 32.30 percent, substantially below any other month in the series. The second

lowest occupancy was 45.65 percent in April 2024, followed by 44.62 percent in May 2025, both of which are considerably higher than the March 2025 trough.

The gap between the highest peak (59.32 percent in August 2024) and the lowest trough (32.30 percent in March 2025) is 27.02 percentage points, representing a substantial range that has significant implications for marketing strategy and revenue management.

Discussion

The Empirical Pattern of Monthly Star Hotel Occupancy Fluctuations in Makassar

The findings from Tables 1 through 6 reveal that star hotel occupancy in Makassar follows a pattern characterized by both predictable seasonal elements and episodic volatility. The peak occupancy observed in July and August 2024, with rates of 58.32 percent and 59.32 percent respectively, aligns with the dry season in eastern Indonesia and the school holiday period. This finding is consistent with Tourism Demand Theory (Song & Li, 2008), which explains that tourist flows are determined by a combination of push factors from generating regions and pull factors from destination regions. The dry season represents a pull factor that makes travel to Makassar more attractive due to favorable weather conditions for outdoor activities and sightseeing. School holidays represent a push factor that enables families to travel during scheduled breaks from academic routines, increasing the pool of potential leisure travelers.

The Head of the Makassar City Tourism Office, in an interview response documented in the original naskah, explained the seasonal pattern as follows:

> *"July and August are consistently our busiest months for star hotels. The combination of dry weather and school holidays creates ideal conditions for both leisure and business travel. Many national conventions and regional meetings are also scheduled during this period to avoid the rainy season."*

The substantial variation in occupancy across months, with a range of 27.02 percentage points between the August 2024 peak and the March 2025 trough, demonstrates that Makassar experiences meaningful seasonality that cannot be ignored in marketing planning. This finding aligns with Seasonality Theory (Butler, 2001), which posits that tourism demand is inherently temporal, with predictable peaks and troughs that create challenges for capacity management, revenue optimization, and workforce planning.

The Dramatic Fluctuations of Early 2025

The dramatic fluctuations observed in early 2025 require special attention. The sharp decline of 17.91 percentage points from February to March 2025, followed by a rapid recovery of 13.05 percentage points from March to April 2025, represents the most volatile period in the entire observation series. The timing of the March 2025 trough coincides with the beginning of the Ramadan period in 2025, which offers a compelling explanation for this pattern. Interview results from the original naskah with the Head of the Indonesian Hotel and Restaurant Association (PHRI) Makassar chapter provided context for this pattern:

> *"The March 2025 decline is not surprising to us. During Ramadan, many business travelers reduce their trips because government offices and private companies operate with reduced hours. Leisure travel also decreases as families focus on religious observances, preparing for iftar gatherings, and charitable activities. However, the week leading to Eid and the following week typically see a surge in travel as people return to their hometowns or take family vacations."*

This explanation is consistent with the rapid recovery observed in April 2025. As Ramadan ends and the Eid al Fitr holiday period begins, travel typically increases dramatically. The 13.05 percentage point increase from March to April 2025 suggests that the demand suppressed during Ramadan was released quickly once the religious observance period ended. This pattern indicates that marketing strategies designed to capture post Ramadan travel demand could be highly effective in Makassar.

From the perspective of Marketing Strategy Theory (Kotler & Lane, 2016), this finding supports the importance of environmental scanning and responsiveness to external factors. The Ramadan effect represents an external factor that is predictable in its timing but variable in its impact on occupancy. Hotels that anticipate this pattern can develop special packages for the Ramadan period, such as offers for family gatherings for iftar, quiet reflection, or pre holiday shopping trips. Alternatively, hotels could focus on corporate clients for meetings and training sessions that may still occur during Ramadan, albeit with adjusted schedules.

The Challenge of Missing Months

The presence of three missing months (June 2024, November 2024, and December 2024) in the BPS data series represents a significant limitation for empirical analysis. The absence of June 2024 data creates a gap between May 2024 (occupancy 53.41 percent) and July 2024 (occupancy 58.32 percent). Without June data, it is impossible to determine whether the increase from May to July occurred gradually through June or whether there was a sharp jump between June and July. This gap also prevents calculation of the month to month change for June to July and for May to June.

The absence of November and December 2024 data creates a more substantial three month gap between October 2024 (occupancy 57.50 percent) and January 2025 (occupancy 49.95 percent). This gap means that the timing and pattern of the decline from the October peak to the January level cannot be determined. It is possible that the decline occurred gradually over November, December, and January, or that occupancy remained high through November and December before dropping sharply in January. Without data for these months, the interpretation of the year end 2024 occupancy pattern remains incomplete. The Head of BPS Makassar, as quoted in the original naskah, addressed the issue of missing data:

> *"We strive to publish data consistently every month, but occasionally there are technical constraints in data collection or processing that prevent us from releasing certain monthly figures. For June 2024 and November*

December 2024, the response rate from sampled hotels was below the threshold required for reliable estimation, so we made the decision not to publish those months to avoid misleading users of our statistics."

From the perspective of evidence based marketing strategy, this limitation highlights the importance of improving data completeness. Hotel associations and tourism authorities in Makassar could work with BPS to encourage consistent monthly reporting and to fill gaps in the data series. Without complete data, marketing decisions must be made with incomplete information, increasing the risk of misallocating resources or missing opportunities. The documentation of missing months in this study serves as a call to action for improved data collection and reporting protocols.

Implications for Tourism Marketing Strategy

The empirical findings have several implications for strengthening tourism marketing strategies in Makassar. First, the identification of July and August as peak occupancy months suggests that marketing resources should be allocated to protect and maximize demand during these periods. Yield management strategies, including advance booking promotions and rate optimization, could be implemented to capture additional revenue from the strong demand during these months. Hotels should also ensure adequate staffing and service capacity to maintain service quality during peak periods when occupancy is high.

Second, the identification of March as a trough month, particularly in 2025 when occupancy fell to 32.30 percent, suggests that targeted marketing interventions are needed to stimulate demand during this period. The timing of the March trough coinciding with Ramadan suggests that hotels could develop special packages for families gathering for Ramadan, for individuals seeking quiet reflection, or for pre holiday shopping trips. The Head of PHRI Makassar offered a practical recommendation:

"Hotels should not just accept low occupancy during Ramadan as inevitable. Some of our member hotels have successfully developed 'staycation' packages for families who want to enjoy hotel facilities during the day while preparing for iftar at home. Others have focused on corporate clients for daytime meeting packages that work around adjusted working hours."

Third, the pattern of rapid recovery following sharp declines suggests that the Makassar market is responsive to changing conditions and that promotional interventions timed to coincide with the end of trough periods could be effective. Hotels could develop transition campaigns that bridge the gap between trough and recovery periods, offering incentives for early bookings that extend into the recovery period. For example, promotions that offer discounts for stays during late March and early April could capture some of the demand that would otherwise wait until mid April to materialize.

Fourth, the presence of missing months in the BPS data highlights the importance of improving data completeness for evidence based marketing strategy. Hotel associations and tourism authorities in

Makassar could work with BPS to encourage consistent monthly reporting and to fill gaps in the data series. Without complete data, marketing decisions must be made with incomplete information, increasing the risk of misallocating resources or missing opportunities.

From the perspective of Seasonality Theory (Butler, 2001), the findings suggest that Makassar experiences both predictable seasonal peaks (July August) and event driven troughs (March during Ramadan). This hybrid pattern requires a marketing strategy that combines calendar based planning for predictable seasonal fluctuations with flexible, responsive interventions for event driven volatility. Hotels should maintain a base marketing calendar that allocates resources to peak season preparation, shoulder season promotion, and trough season stimulation, while also monitoring external factors such as the timing of religious observances that may shift from year to year.

The findings also have implications for collaboration among tourism stakeholders in Makassar. Individual hotels have limited ability to change overall demand patterns for the destination, but collective action through the tourism office or hotel association could be more effective. Joint marketing campaigns targeting specific periods, coordinated event scheduling to attract visitors during trough months, and shared data collection efforts to improve the completeness of occupancy reporting are all strategies that would benefit from stakeholder collaboration. The empirical evidence provided in this study can serve as a foundation for such collaborative efforts, providing a common understanding of the occupancy patterns that need to be addressed.

Strategies for Strengthening Tourism Marketing Based on Empirical Evidence

The Head of PHRI Makassar emphasized the importance of collaboration in implementing these strategies:

> *"No single hotel can change the overall demand pattern for Makassar. But if we work together through PHRI and the Tourism Office, we can schedule events, coordinate marketing campaigns, and share data in ways that benefit everyone. The empirical evidence from BPS data gives us a common starting point for these discussions."*

From the perspective of Marketing Strategy Theory (Kotler & Lane, 2016), the findings support the importance of segmentation, targeting, and positioning based on empirical evidence. The identification of specific months with distinct occupancy patterns enables hotels to segment the year into meaningful marketing periods rather than treating all months the same. Targeting strategies can then be developed for each segment: revenue maximization during peak months, demand stimulation during trough months, and relationship building during shoulder months. Positioning strategies can emphasize different value propositions depending on the travel motivations likely to be present during each period, such as leisure and family travel during school holidays, religious and family gatherings during

Ramadan, and business and convention travel during other periods.

Ultimately, the importance of this empirical reading lies in its potential to transform monthly BPS occupancy data from raw statistics into actionable intelligence for marketing strategy. Hotel managers and tourism policymakers in Makassar now have a clear, evidence based understanding of when occupancy typically peaks, when it typically troughs, how volatile the market can be, and how quickly recovery can occur. This understanding provides a foundation for designing marketing strategies that are responsive to the actual patterns observed in the data rather than relying on intuition or generalized assumptions about seasonality. By leveraging the empirical evidence available from BPS releases, Makassar's tourism stakeholders can strengthen their marketing strategies and enhance the competitiveness of the destination.

Islamic Business Ethics Analysis of Research Findings

The empirical findings of this study, which reveal star hotel occupancy fluctuations in Makassar from March 2024 to June 2025, carry not only economic and marketing implications but also significant ethical dimensions grounded in Islamic business ethics. The principle of *amanah* (trustworthiness) demands that Badan Pusat Statistik (BPS) Kota Makassar presents occupancy data transparently and accurately, including disclosing the reasons for missing data in June 2024, November 2024, and December 2024, because the public has the right to know the actual condition of the hospitality sector. The principle of *'adl* (justice) requires hotel managers to refrain from exploiting tourists during peak periods such as August 2024 with 59.32 percent occupancy through unreasonable price hikes or unilateral cancellations that harm consumers, and equally prohibits price discrimination that is not justified by legitimate differences in service costs. The principle of *tawazun* (balance) provides guidance that the response to a sharp decline of 17.91 percentage points from February 2025 to March 2025 should not involve panic discounting that damages brand value nor reductions in service quality that harm guests, but rather promotional strategies that maintain the dignity of the business and the comfort of consumers. The principle of *maslahah* (public interest) emphasizes that marketing strategies designed based on BPS data must deliver benefits to the wider community, not merely increase hotel occupancy rates, such as prioritizing promotions for local events that involve small and medium enterprises, creating decent employment opportunities, and protecting the surrounding environment from the negative impacts of mass tourism. Consequently, the Islamic business ethics analysis enriches the understanding of occupancy fluctuations because it does not only answer the questions of when occupancy is high and low, but also addresses how business actors and the government should ethically respond to each phase of these fluctuations, transforming statistical data into a foundation not only for commercial profit but also for business blessings and social justice.

4. CONCLUSION

This study concludes that star hotel occupancy in Makassar exhibits substantial monthly fluctuations driven by climatic factors, school holidays, and religious observances such as Ramadan. The peak occurs in July and August during the dry season, while the deepest trough occurs in March 2025 during Ramadan, followed by a rapid recovery in April 2025, confirming that demand suppression during Ramadan is temporary rather than structural. The study makes three explicit theoretical contributions. First, it advances Tourism Demand Theory by demonstrating that in secondary cities like Makassar, religious observances act as temporary demand suppressors rather than permanent demand shifters. Second, it extends Seasonality Theory by introducing the concept of episodic volatility, where abrupt declines are followed by equally abrupt recoveries, challenging the assumption that tourism seasonality follows smooth and gradual transitions. Third, it integrates Islamic business ethics into marketing strategy theory, providing a normative framework that evaluates occupancy-driven marketing decisions based on justice, trustworthiness, balance, and public interest, not merely profitability. Practically, hotel managers should implement yield management with moderate rate caps during peak months, develop Ramadan-specific packages such as iftar gatherings and family staycations during trough months, and launch transition campaigns to capture latent demand during recovery periods. Additionally, the hotel association should formally request that BPS include data quality statements in monthly releases, while hotels maintain independent occupancy records to triangulate official figures, especially for months with known gaps such as June, November, and December. The most distinctive contribution of this study lies in its ethical implications: the August peak tests whether hotels practice justice by avoiding exploitative price surges, the March trough tests whether hotels practice trustworthiness by maintaining transparent pricing and service quality, and all marketing responses must ultimately serve the public interest by benefiting local businesses and protecting workers' livelihoods. Therefore, strengthening tourism marketing in Makassar requires not only knowing when occupancy peaks and troughs occur but also committing to ethical responses that uphold justice, trustworthiness, balance, and public interest as mandated by Islamic commercial ethics.

This study has several limitations. Firstly, it was conducted solely using secondary data from BPS Makassar (March 2024–June 2025), which limits generalizability to other cities or regions, and three months of data (June 2024, November 2024, December 2024) were missing, potentially affecting trend accuracy. Additionally, the research focused only on occupancy fluctuations, neglecting other factors such as pricing strategies, competition, and marketing mix, and the qualitative document analysis design did not include primary data from hotel managers or guests. Lastly, reliance on BPS data means the study cannot verify the original data collection methods. These limitations highlight the need for further research with longer time series, primary data, and comparative studies across multiple

destinations.

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