



Predicting Global Halal Travel Industry Market Share

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The halal travel industry is one of the fastest-growing sectors in the global Islamic economic ecosystem. As the number of the world's Muslim population increases, the need for tourism services in accordance with sharia principles is also increasing. This study aims to predict the market share (market size) of the global halal travel industry using historical data for the period 2012–2017. Data was obtained from the Global Islamic Economics Report (GIER) 2018 published by Thomson Reuters. The analysis methods used include Trend Analysis, Multiplicative Decomposition, and Exponential Smoothing with Trend with the help of POM-QM software version 3. The results of the study show that in general, the market share of the global halal travel industry has experienced a significant increasing trend. Based on the forecasting accuracy indicator measured through the Mean Absolute Percentage Error (MAPE) value, the Trend Analysis and Multiplicative Decomposition methods show a relatively better level of accuracy than the Exponential Smoothing with Trend method. These findings are expected to be a reference for policymakers and industry players in formulating strategies for the development of the halal travel industry at the global level.

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INTRODUCTION

The global tourism industry has undergone significant transformation in the last two decades, one of which is marked by the emergence and development of the halal travel segment or Muslim-friendly tourism. Halal travel does not only include the travel aspect, but also involves the provision of accommodation services, halal food and beverages, worship facilities, and a social environment that supports Islamic values (Battour & Ismail, 2016). This development is in line with the increasing number of Muslim middle classes and the growth of the world's Muslim population which is projected to reach nearly 30% of the total global population by 2050 (Pew Research Center, 2017).

The Halal Travel Industry, also known as Muslim-friendly tourism, has emerged as one of the fastest-growing segments within the global tourism market. It refers to tourism products and services that comply with Islamic principles, particularly in terms of halal food, prayer facilities, modest environments, and ethical business practices. Importantly, halal tourism is not exclusive to Muslim travelers but offers inclusive services that appeal to a wider audience seeking ethical, safe, and family-oriented travel experiences.

The Global Islamic Economics Report (GIER) consistently shows that the halal travel sector is one of the major contributors to the global Islamic economy, along with the halal food, Islamic finance, and Muslim fashion sectors. In the period before 2020, the market value of halal travel showed a steady upward trend, reflecting high demand and great market potential (Thomson Reuters, 2018).

The expansion of the halal travel industry is primarily driven by the rapid growth of the global Muslim population, which exceeds 1.9 billion people, coupled with rising income levels in Muslim-majority countries. Muslim travelers represent a high-spending and increasingly mobile segment of the tourism market. Prior to the COVID-19 pandemic, Muslim travel expenditure showed strong upward trends, and post-pandemic recovery indicates renewed momentum supported by pent-up demand and digital travel platforms. Both OIC and non-OIC countries actively compete to attract Muslim travelers, recognizing halal tourism as a strategic tool for tourism diversification and economic resilience.

Muslim-majority countries such as Malaysia, Indonesia, Türkiye, Saudi Arabia, and the United Arab Emirates have positioned themselves as global halal tourism hubs. At the same time, non-Muslim-majority

countries including Japan, South Korea, Thailand, and the United Kingdom have made significant investments in halal certification, Muslim-friendly infrastructure, and cultural awareness training. The COVID-19 pandemic also reshaped tourism demand toward cleanliness, safety, and ethical practices. Halal tourism aligns closely with these values through the Islamic concept of *tayyib* (wholesome and good), enhancing consumer trust and destination competitiveness (Rusyadiana et al., 2021).

The rise of Muslim millennials and Generation Z has transformed travel behavior. These cohorts are digitally literate, experience-oriented, and value ethical consumption. Increased urbanization and a growing Muslim middle class have significantly boosted outbound tourism demand. Digitalization also plays a critical role in the development of halal travel. Mobile applications and online platforms provide services such as halal food discovery, prayer time reminders, Qibla direction, and halal accommodation booking. Artificial intelligence and big data analytics are increasingly used to personalize travel experiences and improve service efficiency.

Nonetheless, the planning and development of the halal travel industry requires the support of strong quantitative analysis, particularly in terms of future market projections. The forecasting method is important to help stakeholders understand the direction of industry growth, anticipate risks, and formulate data-driven policies. Therefore, this study focuses on the application of several time series forecasting methods to predict the market share of the global halal travel industry.

DATA AND METHODOLOGY

This study tries to predict the market size of the industry *Halal Travel* globally. The data used is the market share of the Industry *Halal Travel* worldwide from 2012 to 2017. Data taken from *Global Islamic Economics Report (GIER) 2018* published by Thomson Reuters. The prediction methods used in this study are three methods *forecasting*, yakni ; (1) Trend Analysis, (2) Multiplicative Decomposition, dan (3) Exponential Smoothing with Trend. *Software* used as an auxiliary tool is POM-QM Version 3. POM-QM stands for Production and Operations Management -- Quantitative Methods, an operations management software developed by Pearson Prentice Hall USA.

Forecasting the development of the halal travel industry is essential for policy planning, investment decisions, and strategic tourism management. Prediction methods can be broadly classified into classical time-

series models, econometric models, machine learning approaches, and hybrid frameworks.

prediction of the total market share of the industry *Halal Travel* worldwide for the foreseeable future is as attached in the following table.

RESULTS AND DISCUSSION

Based on the results of data processing that has been carried out, the results of the calculation of the

Table 1. Global Halal Travel Industry Prediction Calculation Results (USD Billion)

| | Trend Analysis | Multiplicative Decomposition | Exponential Smoothing |
|-------|----------------|------------------------------|-----------------------|
| 2012 | 1088 | 1088 | 1088 |
| 2013 | 1292 | 1292 | 1292 |
| 2014 | 1128 | 1128 | 1128 |
| 2015 | 1173 | 1173 | 1173 |
| 2016 | 1245 | 1245 | 1245 |
| 2017 | 1303 | 1303 | 1303 |
| 2018* | 182,27 | 183,37 | 183,11 |
| 2019* | 190,72 | 190,46 | 193,74 |
| 2020* | 199,18 | 200,57 | |
| 2021* | 207,64 | 207,52 | |
| 2022* | 216,1 | 217,76 | |
| MAP | 0,02 | 0,02 | 0,04 |

*Prediction results

Based on table 1, in general, the market share of the *Halal Travel* Industry around the world from 2012 to 2017 has increased significantly. If in 2012 the value was only 1088 billion USD, the market share of the *Halal Travel* Industry in the world in 2017 increased to 1303 billion USD, or an increase of 19.7%.

The results of the calculation of the prediction of the market share of the *Halal Travel* industry worldwide in 2018 for the trend analysis approach

decreased slightly to 1302 billion USD, but increased to 1330 and 1358 billion USD in 2019 and 2020. The market share of the *Halal Travel* Industry worldwide in 2021 and 2022 is predicted to increase to 1386 and 1414 billion USD. The following is a graph of the *trend analysis* method (regress over time) for the global *Halal Travel* Industry market share where the black line is real data and the blue dotted line is the prediction data.

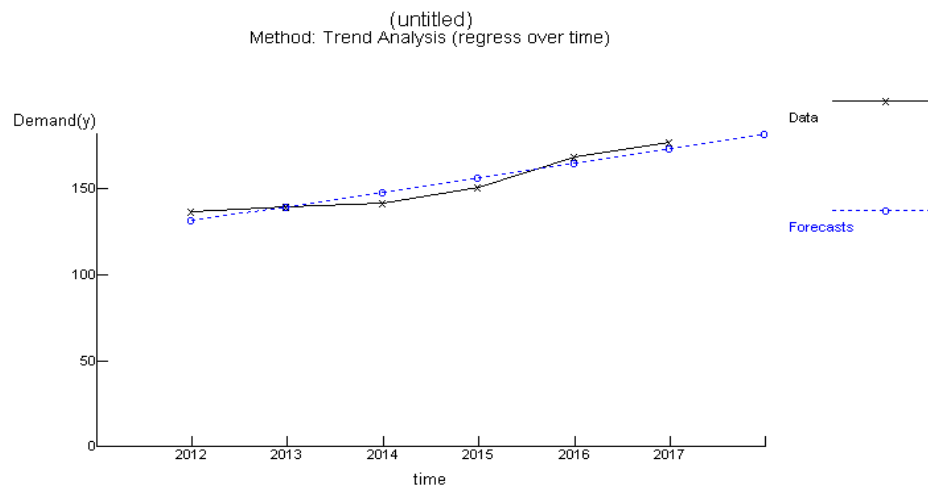


Figure 1. Method *Trend Analysis*

The results of the calculation of the predicted market share of *the Halal Travel* industry worldwide in 2018 for the Multiplicative Decomposition approach have decreased to 1247 billion USD, but increased to 1342 billion USD in 2019 and fell back to 1292 billion USD in 2020. The market share of the *worldwide Halal*

Travel Industry in 2021 is predicted to increase to 1389 and drop to 1336 billion USD in 2022. The following is a graph of the results of the *Multiplicative Decomposition method for the global Halal Travel Industry market share* where the black line is real data and the blue dotted line is the prediction data. The red color is a *trend line*.

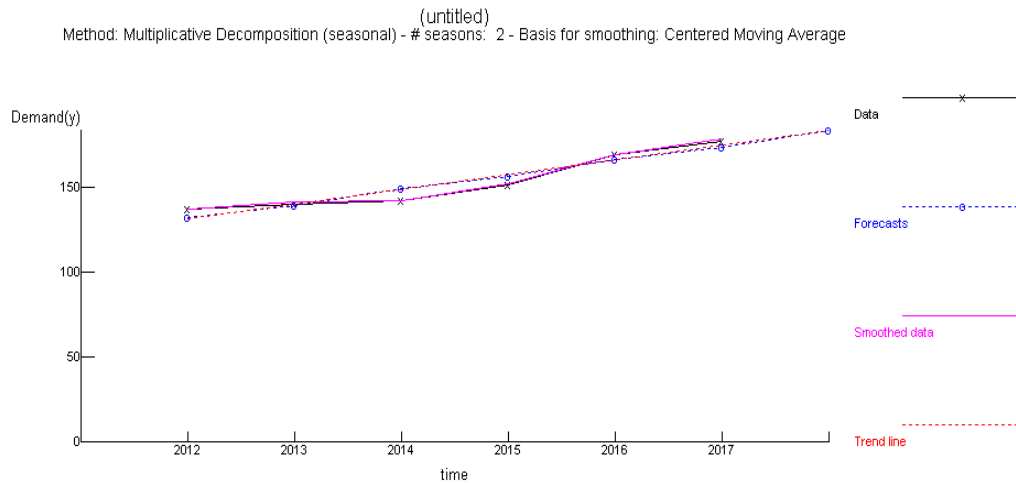


Figure 2. Method *Multiplicative Decomposition*

Finally, the results of the measurement of *the Exponential Smoothing with trend method*. The results of the calculation of the predicted market share of *the Halal Travel* industry around the world for the Exponential Smoothing approach with a trend only covers 2 years, namely 2018 and 2019. In 2018, the global *halal travel*

market share was predicted to increase to 1313 billion USD, and increased again in 2019 to 1351 billion USD. The following is a graph of the *Exponential Smoothing with trend method for the global Halal Travel Industry market share* where the black line is real data and the blue dotted line is the prediction data.

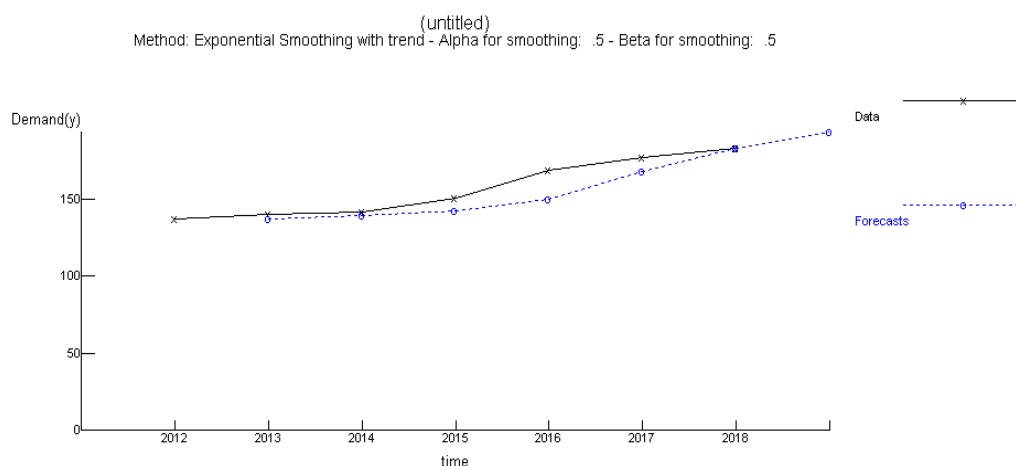


Figure 3. Method *Exponential Smoothing with Trend*

The MAPE (Mean Absolute Percent Error) value or average error percentage value for the three

methods above is 0.04 for *Trend Analysis* and *Multiplicative Decomposition* methods, and 0.06 for *Exponential Smoothing with Trend methods*. This means that the first 2 methods

are relatively better at predicting compared to the third method (Exponential Smoothing).

The results of data processing using three forecasting methods show that the global halal travel industry has a relatively consistent medium- to long-term growth tendency. The historical pattern for the period 2012–2017 shows an increasing trend in market value from 1,088 billion USD to 1,303 billion USD. These findings are in line with the literature that states that the growth of halal tourism is driven by increased mobility of Muslim tourists, the growth of the Muslim middle class, and the increasing awareness of destinations towards the concept of Muslim-friendly tourism as explained by [Battour and Ismail \(2016\)](#).

Based on the Trend Analysis method, the forecast results show the most stable growth direction compared to other methods. This indicates that the long-term trend component is the dominant factor in the development of the global halal travel industry. This time regression approach is suitable for use when historical data do not show strong seasonal patterns, as described in a study of classical forecasting by [Makridakis et al., \(1998\)](#). Thus, the Trend Analysis method is able to provide a macro overview of the growth potential of the halal travel market in aggregate.

The Multiplicative Decomposition method results in more fluctuating prediction patterns, reflecting more complex variations in historical data. These fluctuations can be interpreted as a reflection of the dynamics of the global tourism industry which is influenced by external factors such as global economic conditions, geopolitical stability, and tourist preferences. The decomposition approach is considered relevant in the context of the tourism industry, as the sector is inherently vulnerable to external shocks and changes in the demand cycle, as much discussed in the tourism economics literature.

Meanwhile, the Exponential Smoothing with Trend method produces a relatively more conservative short-term projection. This method gives more weight to the latest data so that it is more sensitive to changes in values at the end of the observation period. According to [Hyndman and Athanasopoulos \(2018\)](#), these characteristics make exponential smoothing more suitable for short-term forecasting, but less optimal for long-term projections when the amount of historical data is limited.

In terms of accuracy, the comparison of the Mean Absolute Percentage Error (MAPE) values shows that the Trend Analysis and Multiplicative Decomposition methods have a lower error rate than the

Exponential Smoothing with Trend method. The relatively small MAPE value indicates that the two methods are more reliable in representing the historical pattern of global halal travel market share data. These findings reinforce the argument that the selection of forecasting methods should be tailored to the characteristics of the data and the objectives of the analysis, especially in the context of strategic decision-making in the halal industry sector ([Widiastuti et al., 2020](#)).

Overall, the results of this study confirm that the global halal travel industry has strong and sustainable growth prospects. The projected increase in market value reflects the sector's strategic position in the global Islamic economic ecosystem, as highlighted in various editions of the Global Islamic Economics Report. Therefore, the results of this forecast can be used as a basis for policy formulation, investment strategies, and the development of halal destinations in various countries.

CONCLUSION

Based on the results of the prediction in the 2019 period, it is estimated that the market share of the *Halal Travel* Industry worldwide is in the range of 1330.71 Billion USD to 1351.72 Billion USD. From these results, the pessimistic prediction value is at 1330.71 Billion USD and the optimistic prediction value is 1351.72 Billion USD. Meanwhile, the realistic prediction value of the market share of the *Halal Travel* Industry worldwide is in the range of 1342.91 Billion USD. Based on statistical value indicators, in this case the MAPE value, the *Trend Analysis (regress over time)* and *Multiplicative Decomposition methods* are relatively better in predicting the market share value of the *Global Halal Travel* Industry compared to the *Exponential Smoothing with Trend method*.

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