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Determinants of Tourism Demand in Malaysia

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Abstract

This study examines the determinants of inbound tourism demand to Malaysia using an extended gravity model framework. The analysis incorporates economic, social, policy-related, bilateral, and external shock factors using panel data from multiple tourist source countries between 2010 and 2024. The study applies panel regression techniques, including pooled OLS, Fixed Effects, Random Effects, and PPML estimations, to identify the key factors influencing international tourist arrivals to Malaysia. The findings indicate that higher income levels, larger population sizes, favourable exchange rates, cultural proximity, safety, public health conditions, trade openness, and connectivity positively influence tourism demand, while inflation and geographical distance negatively affect the tourist arrivals. The COVID-19 pandemic is also found to have a significant adverse impact on tourism flows. The results support the extended gravity model and highlight the importance of economic stability, infrastructure development, tourism diversification, and resilience strategies in strengthening Malaysia's tourism competitiveness and ensuring sustainable tourism growth.

Keywords: Tourism Demand, Gravity Model, Malaysia, Inbound Tourism, Panel Data, Covid-19, Tourism Competitiveness

Introduction

Background of the Study

Tourism is widely recognised as one of the major contributors to economic growth, employment generation, foreign exchange earnings, and regional development in many developing countries, including Malaysia (UNWTO, 2023; WTTC, 2023). In recent years, however, the global tourism industry has experienced significant disruptions due to economic uncertainty, geopolitical instability, health crises, changing tourist behaviour, and increasing international competition. As one of the key sectors contributing to Malaysia's economy, the tourism industry faces growing pressure to remain competitive, resilient, and sustainable in

the post-pandemic environment. Although international tourism activities have gradually recovered following the COVID-19 pandemic, Malaysia continues to compete aggressively with neighbouring tourism destinations such as Thailand, Indonesia, and Vietnam in attracting international tourists. Consequently, understanding the determinants of tourism demand has become increasingly important to ensure the long-term sustainability and competitiveness of Malaysia's tourism sector.

Malaysia's strong performance in the global tourism market is closely associated with its extensive and diversified tourism endowments, which include tropical rainforests, coastal destinations, historical and heritage attractions, vibrant cultural festivals, and well-developed urban centres (Tourism Malaysia, 2023). This diversity enhances the country's ability to attract international tourists with heterogeneous preferences and travel motivations, thereby reinforcing its competitiveness as a tourism destination. According to the Malaysia Tourism Promotion Board (2023), Malaysia recorded over 30 million international tourist arrivals in 2019, generating tourism receipts exceeding RM86 billion. These figures underscore the significant contribution of tourism to national income, employment generation, and foreign exchange earnings, and highlight its central role in supporting Malaysia's overall economic development.

Tourism demand, commonly defined as the willingness and capacity of individuals to travel to a specific destination, is shaped by a complex interplay of economic, social, and policy-related factors (Song & Li, 2008; Witt & Witt, 1995). From a theoretical perspective, tourism demand can be effectively analysed within an extended gravity model framework, where bilateral tourism flows are influenced by both origin-specific and destination-specific determinants (Morley et al., 2014). Economic variables, including income levels, population size, exchange rate movements, inflation, and overall macroeconomic stability, play a fundamental role in shaping international travel decisions. Higher income levels in origin countries enhance individuals' ability to travel abroad, while favourable exchange rates improve Malaysia's price competitiveness, making it a more attractive destination for foreign visitors. Conversely, geographical distance, often used as a proxy for travel costs, is expected to exert a negative influence on tourism flows.

Beyond economic conditions, social factors also significantly influence tourism demand by shaping tourists' preferences and behavioural intentions (Prayag, 2009). In the Malaysian context, cultural affinity, perceptions of safety and security, public health conditions, and language accessibility are particularly relevant due to the country's multicultural environment and diverse international markets. Within the gravity model framework, these variables may be interpreted as forms of non-economic proximity that reduce informational and psychological barriers to travel. Positive perceptions of safety, cultural familiarity, and service accessibility enhance destination image and encourage repeat visitation, while concerns related to security or health risks may deter potential tourists.

The COVID-19 pandemic further underscored the vulnerability of the tourism sector to external shocks and global crises (UNWTO, 2021). The imposition of widespread travel restrictions, international border closures, and the accompanying economic downturn resulted in a sharp decline in international tourist arrivals, leading to significant revenue losses and employment reductions within the industry. From a modelling perspective, such

disruptions can be treated as exogenous shocks that introduce structural breaks in tourism demand patterns. This highlights the importance of incorporating resilience and recovery considerations into empirical analyses, particularly in the context of post-pandemic tourism development.

Given these dynamics, a comprehensive understanding of the determinants of tourism demand is essential for effective policy formulation and strategic planning (Dwyer et al., 2020). Through identifying the main economic, social, and policy-related factors influencing tourist arrivals, policymakers and industry stakeholders can design targeted interventions to enhance Malaysia's destination competitiveness, improve resource allocation, and strengthen the resilience of the tourism sector. Within the gravity model context, such strategies might include enhancing connectivity, maintaining competitive pricing, strengthening health and safety standards, as well as to promote cultural accessibility. In due course, a robust empirical analysis of tourism demand determinants will provide valuable insights for supporting sustainable tourism growth and long-term economic development in Malaysia.

Despite the substantial contribution of tourism to Malaysia's economic development, the industry remains highly susceptible to economic instability, global disruptions, shifting tourist preferences, and intensifying international competition. Therefore, examining the determinants of tourism demand in Malaysia is essential to better understand the factors influencing international tourist arrivals and the overall performance of the tourism sector. This area warrants further investigation as tourism demand patterns have changed significantly in recent years, particularly in the aftermath of the COVID-19 pandemic, which reshaped travel behaviour, health awareness, and destination selection preferences. Besides, various existing studies primarily concentrate on economic determinants while providing limited emphasis on the combined effects of social, policy-related, and external shock factors. Therefore, a comprehensive study is necessary to generate updated empirical evidence that can assist policymakers, tourism authorities, and industry stakeholders in developing effective tourism policies and strategies, enhancing destination competitiveness, as well as to promote the long-term sustainability and resilience of Malaysia's tourism industry.

The study is particularly timely as Malaysia intensifies efforts to revitalise the tourism sector through various tourism recovery initiatives and long-term development strategies such as Visit Malaysia 2026. A comprehensive understanding of tourism demand determinants is essential for assisting policymakers, tourism authorities, and industry stakeholders in formulating evidence-based tourism policies and strategic plans. The findings of this study can support the identification of high-potential tourism source markets, improve destination marketing strategies, strengthen tourism recovery initiatives, enhance tourism infrastructure planning, and improve Malaysia's competitiveness within the regional and global tourism market. Besides, the findings may assist the government in formulating more effective policies related to exchange rates, tourism promotion, transportation accessibility, digital tourism transformation, and crisis management strategies to improve tourism resilience against future global disruptions.

In addition, this study provides substantial practical benefits to tourism-related businesses and industry operators, including hotels, airlines, travel agencies, transportation providers,

tourism entrepreneurs, and hospitality service providers. By understanding the factors influencing tourist arrivals and travel behaviour, industry players can improve demand forecasting, develop more targeted tourism products, strengthen marketing strategies, enhance service quality, and improve customer satisfaction. The findings can also help tourism operators better respond to changing tourist preferences, market trends, and external uncertainties, thereby improving operational efficiency, business sustainability, and long-term competitiveness.

Furthermore, the study contributes to broader socio-economic development through supporting employment generation, stimulating local economic activities, encouraging tourism investment, and promoting balanced regional development. Strengthening tourism demand can generate significant multiplier effects across various sectors, particularly among small and medium enterprises (SMEs), local tourism operators, hospitality businesses, transportation services, and rural communities that rely heavily on tourism-related activities for income and employment opportunities. Therefore, improving tourism performance can contribute not only to national economic growth but also to community well-being and inclusive economic development.

From an academic perspective, this study contributes to the existing literature on tourism economics and tourism demand modelling by extending the application of the gravity model through integrating economic, social, policy-related, and external shock variables within a unified analytical framework. Unlike many previous studies that primarily focus on economic determinants, this study provides updated post-pandemic empirical evidence on tourism demand behaviour in Malaysia using a more comprehensive and multidimensional approach. Consequently, the study contributes theoretically, methodologically, and empirically to the tourism literature while also offering practical insights that can improve the effectiveness of tourism development strategies and support the long-term sustainability and resilience of Malaysia's tourism industry.

Problem Statement

Despite tourism's substantial contribution to Malaysia's economic growth, employment, and foreign exchange earnings, its demand remains highly volatile and vulnerable to uncertainty (WTTC, 2023). Fluctuations in international tourist arrivals suggest strong sensitivity to both economic factors, such as income levels, exchange rates, and travel costs, along with the non-economic factors, including safety perceptions, health risks, and cultural accessibility. This raises concerns about the sector's long-term sustainability and resilience.

Existing studies generally emphasis on selected economic determinants, frequently neglecting the integrated effects of social, policy-related, and bilateral factors (Song et al., 2012). Likewise, limited attention has been given to include the structural shocks and global disruptions, which have become increasingly important in shaping tourism flows.

The COVID-19 pandemic further exposed the sector's vulnerability, significantly disrupting international travel and altering tourist behaviour, risk perceptions, and preferences (UNWTO, 2021). This underscores the need to reassess tourism demand determinants in the context of post-pandemic recovery.

Even if the gravity model is extensively applied in trade analysis, its application to tourism demand in Malaysia remains underdeveloped, particularly when extended to include social and policy variables (Morley et al., 2014). Therefore, a comprehensive empirical approach integrating economic, non-economic, and crisis-related factors within an extended gravity framework is essential.

Addressing this gap is critical for producing robust empirical evidence to support policymaking, enhance destination competitiveness, and strengthen the long-term sustainability and resilience of Malaysia's tourism sector.

Research Objectives

The primary objective of this study is to examine the determinants of inbound tourism demand to Malaysia by employing an extended gravity model framework that incorporates economic, social, policy-related, and external shock factors influencing international tourism flows.

Specifically, the study aims to:

1. To analyse the impact of economic factors, namely income levels, population size, exchange rates, and inflation, on international tourism demand to Malaysia.
2. To examine the effect of geographical distance and other bilateral factors on tourist arrivals to Malaysia within the gravity model framework.
3. To evaluate the influence of social factors, including cultural proximity, safety and security perceptions, public health conditions, and language accessibility, on tourism demand.
4. To investigate the role of policy-related and structural factors, such as trade openness, tourism infrastructure, and bilateral connectivity, in facilitating inbound tourism flows to Malaysia.
5. To assess the impact of external shocks, particularly the COVID-19 pandemic, on international tourism demand and tourism recovery patterns in Malaysia.
6. To develop an extended gravity model that provides a comprehensive empirical explanation of the determinants of inbound tourism demand to Malaysia.

Research Questions

Based on the research objectives, the study seeks to address the following research questions:

1. How do economic factors, namely income levels, population size, exchange rates, and inflation, influence international tourism demand to Malaysia?
2. What is the effect of geographical distance and other bilateral factors on tourist arrivals to Malaysia within the gravity model framework?
3. How do social factors, including cultural proximity, safety and security perceptions, public health conditions, and language accessibility, affect tourism demand to Malaysia?
4. To what extent do policy-related and structural factors, such as trade openness, tourism infrastructure, and bilateral connectivity, facilitate inbound tourism flows to Malaysia?
5. What is the impact of external shocks, particularly the COVID-19 pandemic, on international tourism demand and tourism recovery patterns in Malaysia?

6. How effectively does the extended gravity model explain the determinants of inbound tourism demand to Malaysia?

Research Hypotheses

Based on the theoretical and empirical literature on tourism demand, this study proposes the following hypotheses:

Economic Factors

H1: Income level (GDP per capita) of origin countries has a positive effect on inbound tourism demand to Malaysia.

Justification: Higher income levels increase individuals' purchasing power and ability to travel internationally, thereby increasing tourist arrivals.

H2: Population size of origin countries has a positive effect on inbound tourism demand to Malaysia.

Justification: Larger populations represent a greater pool of potential travellers, leading to higher outbound tourism flows.

H3: Exchange rate (depreciation of Malaysian Ringgit) has a positive effect on inbound tourism demand to Malaysia.

Justification: A weaker domestic currency enhances price competitiveness, making Malaysia a more affordable destination for foreign tourists.

H4: Inflation rate in Malaysia has a negative effect on inbound tourism demand.

Justification: Higher inflation increases the cost of goods and services, reducing destination attractiveness and affordability.

Bilateral / Gravity Factors

H5: Geographical distance between Malaysia and origin countries has a negative effect on tourism demand.

Justification: Distance proxies travel costs (time and expenses), which discourage long-haul travel.

Social Factors

H6: Cultural proximity (e.g., shared language, cultural similarity) has a positive effect on inbound tourism demand.

Justification: Cultural familiarity reduces informational and psychological barriers, increasing travel likelihood.

H7: Perceived safety and security in Malaysia have a positive effect on tourism demand.

Justification: Tourists prefer destinations with stable and secure environments.

H8: Public health conditions have a positive effect on inbound tourism demand.

Justification: Strong healthcare systems and low health risks enhance tourist confidence, particularly in the post-pandemic context.

Policy and Structural Factors

H9: Trade openness and bilateral connectivity have a positive effect on tourism demand.

Justification: Greater economic integration and connectivity reduce travel barriers and facilitate movement between countries.

External Shock

H10: The COVID-19 pandemic has a negative effect on inbound tourism demand to Malaysia.

Justification: Travel restrictions, health concerns, and international economic disruptions significantly reduced international travel flows.

Conceptual Framework

The conceptual framework of this study is developed based on the extended gravity model of tourism demand. The framework explains that inbound tourism demand to Malaysia is influenced by a combination of economic factors, bilateral and geographical factors, social factors, policy-related and structural factors, as well as external shocks.

In this framework, inbound tourism demand to Malaysia (measured by international tourist arrivals) serves as the dependent variable, while the identified determinants function as independent variables.

Dependent Variable

- **Inbound Tourism Demand to Malaysia**
  - International tourist arrivals

Independent Variables

1. Economic Factors

- Income levels (GDP per capita)
- Population size
- Exchange rates
- Inflation rates

2. Geographical and Bilateral Factors

- Geographical distance
- Regional proximity
- Historical ties
- Shared borders

3. Social Factors

- Cultural proximity
- Safety and security perceptions
- Public health conditions
- Language accessibility

4. Policy-Related and Structural Factors

- Trade openness
- Tourism infrastructure
- Bilateral connectivity
- Transportation accessibility

5. External Shocks

- COVID-19 pandemic
- Global crises/disruptions
- Travel restrictions

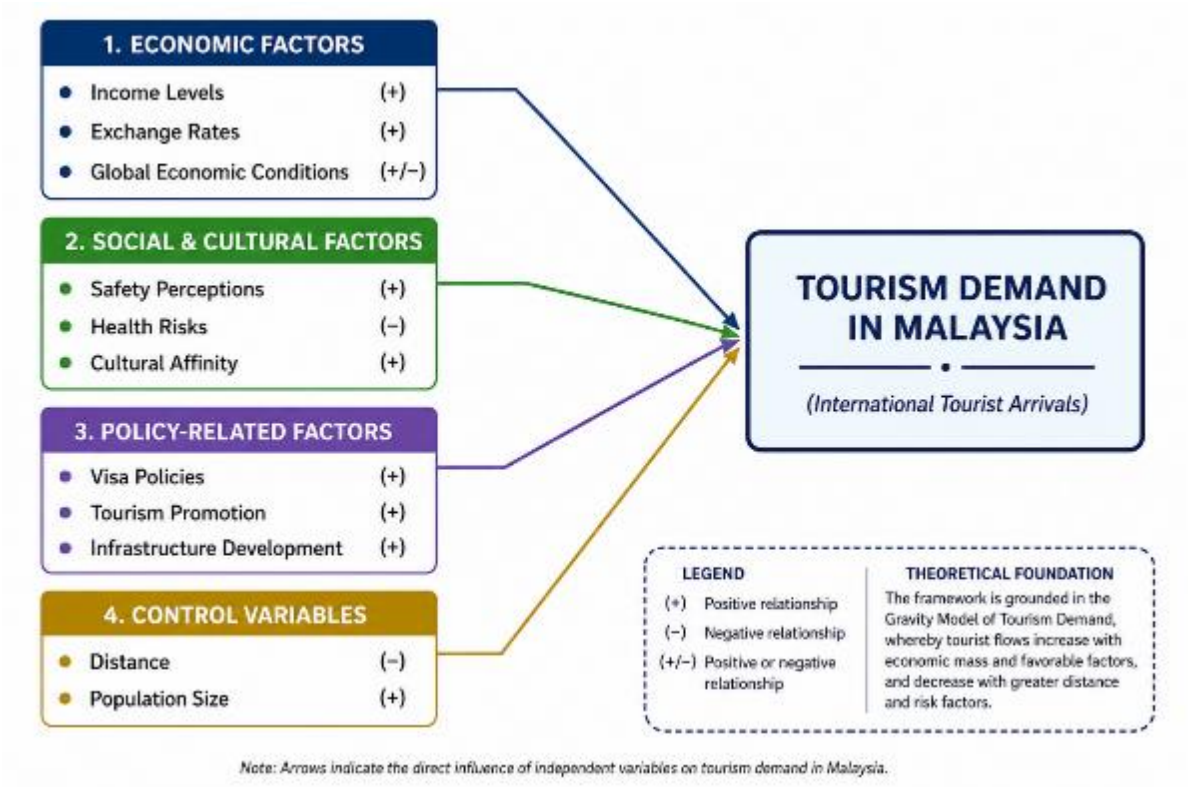

Figure 1: Conceptual Framework of the Determinants of Tourism Demand in Malaysia

The conceptual framework is grounded in the extended gravity model of tourism demand, which explains international tourist flows based on economic capacity, resistance factors, and additional structural influences. Economic factors such as income levels, exchange rates, and global economic conditions capture tourists' ability and willingness to travel, while social and cultural factors, including safety perceptions, health risks, and cultural affinity, reflect behavioural and perceptual influences on destination choice. Policy-related factors, such as visa policies, tourism promotion, and infrastructure development, represent institutional mechanisms that facilitate or constrain tourism flows. In line with the traditional gravity model, control variables such as geographical distance and population size are included to account for travel costs and market potential. Overall, the framework provides a comprehensive and integrated approach to analysing the determinants of inbound tourism demand to Malaysia.

Theoretical Underpinning

The framework is grounded in the Gravity Model Theory, which suggests that tourism flows between two countries are positively associated with economic size and negatively associated with geographical distance (Tinbergen, 1962; Anderson, 2011). The study extends the traditional gravity model by incorporating social, policy-related, and external shock variables to provide a more comprehensive explanation of tourism demand behaviour (Morley et al., 2014).

Expected Relationships

- Economic growth, stronger currency purchasing power, better infrastructure, and cultural proximity are expected to positively influence tourism demand.

- Geographical distance, inflation, health crises, and external shocks are expected to negatively affect tourist arrivals.
- Policy support and bilateral connectivity are expected to facilitate tourism flows and strengthen tourism recovery.

Literature Review

Economic Determinants of Tourism Demand

Ghosh (2021) investigates tourism demand for Australia from 15 Asian countries (1991–2018) using an augmented panel gravity model with common correlated effects (CCE). The study finds that tourist arrivals increase with per capita GDP of both origin and destination countries and with globalization, while greater distance and higher prices reduce arrivals, consistent with economic theory.

Heriqbaldi et al. (2023) analyse tourism demand in ASEAN from 10 member countries and 22 origin countries (2007–2019) using a panel gravity model. The study finds that cultural distance, income, and price competitiveness positively influence arrivals, while geographic distance reduces them. Gains in relative price competitiveness encourage substitution from alternative destinations. ASEAN free trade agreements boost intraregional tourism, and weaker ASEAN currencies with lower consumer prices also stimulate arrivals, though declines in tourist income, such as during COVID-19, can reduce inflows.

Ibragimov et al. (2021) analyse the determinants of tourist arrivals to Central Asia using gravity models and panel data from 108 countries (2008–2018). The findings show that tourism demand is highly sensitive to distance but relatively price inelastic, with travel cost sensitivity higher for visitors from the Americas than from Asia–Pacific. Common language and shared borders strongly boost arrivals, while political instability at destinations deters tourism; in contrast, instability in origin countries within Asia–Pacific increases outbound travel to Central Asia.

Izadi Yazdanabadi and Ashtiani (2024) use a gravity model with panel data (2000–2020) to examine factors influencing inbound tourism to Iran. The study finds that higher per capita GDP, population density, favourable exchange rates, and shared religion strongly increase tourist arrivals, while common language has a positive but slightly weaker effect. Greater geographic distance significantly reduces tourism, aligning with gravity theory.

Khalid et al. (2019) examine how economic and financial crises affect international tourism using a gravity model with data from 200 countries (1995–2010). The study finds that inflation crises reduce tourism flows in both origin and destination countries. Domestic debt crises increase arrivals in host countries but reduce tourism services in origin countries, while the effects of banking and other crises vary by region, with particularly negative impacts on host countries in the Americas and Latin America–Caribbean.

Nguyen (2021) examines domestic tourism demand in ASEAN countries, focusing on income and price effects. The study finds that domestic tourism remains a luxury good and is negatively affected by higher prices. Outbound travel to neighbouring countries acts as a substitute for domestic tourism. At comparable income and price levels, domestic travel is

highest among Indonesians and lowest among Laotians, with other ASEAN countries in between.

Nguyen (2025) models international air travel demand using data from 11 major source countries to Singapore (1989–2019). The study finds that source-country GDP per capita, population size, and bilateral trade significantly increase air travel demand, while higher crude oil prices reduce it. Air travel to Singapore remains a luxury good. Major shocks such as the 1998 Asian financial crisis and the 2003 SARS outbreak significantly depressed demand, and the effects of key determinants vary across source regions.

Permatasari and Esquivias (2020) analyse international tourism demand in Indonesia using a dynamic panel model. The results show that tourists' income, favourable relative prices, and accommodation capacity increase tourism expenditure, while distance reduces it. Major shocks from the 2002 and 2005 terrorist attacks and the 2008 global financial crisis significantly depressed demand, with income exerting a positive but relatively weak effect.
Raifu and Afolabi (2026) assess the impact of inflation on Nigeria's tourism sector using quarterly data from 1995Q1–2020Q4. Employing tourism arrivals and receipts for robustness, the results consistently show a negative relationship: higher inflation discourages international tourist arrivals and reduces tourism revenue.

Shah et al. (2022) investigate international tourism demand in India using data from the top 15 source countries (1991–2019) with an augmented gravity model and two-step panel fixed effects. The study finds that Indian income, shared language, similarity, common SAARC membership, and shared borders positively influence tourist arrivals, while distance and India's domestic exchange rate reduce demand. Origin-country income also boosts arrivals, whereas relative prices in origin countries have no significant effect.

Tan and Soon (2023) examine price effects on tourist arrivals to Malaysia from 21 countries using panel data for 2000–2019. The results show that price and income raise tourism demand from Asian countries but reduce demand from ASEAN and Western markets. Singapore and Indonesia act as substitute destinations, while Thailand is complementary. Travel costs are insignificant, and exchange rate effects differ by region, highlighting strong regional heterogeneity in price sensitivity.

Ulucak et al. (2020) analyse demand-side determinants of international tourist arrivals to Turkey using an augmented gravity model for 25 major source countries (1998–2017). The results show that higher income, favourable exchange rates, and globalization increase arrivals, while higher prices, violence or terrorism, household debt, and distance reduce tourism demand.

Wamboye et al. (2020) examine international tourism demand for Tanzania using panel data from its top 15 source countries (2000–2016). The study finds that tourists' income and Tanzania's infrastructure development are the primary drivers of inbound tourism, with results robust across models and samples.

Yerdelen Tatoglu and Gul (2020) analyse international tourist flows using a panel gravity model covering tourism from 30 origin countries to the 14 most-visited destinations (2008–

2016). The results show that tourist arrivals are primarily driven by economic factors, particularly income and trade, while distance has a significant negative effect, consistent with gravity theory.

Policy, Institutional Quality, and Governance

Agu et al. (2026) investigate the effects of terrorism on international tourism, foreign aid inflows, trade, and economic growth in Sub-Saharan Africa, while assessing the moderating role of institutional quality. Using panel data from 40 SSA countries between 2010 and 2020 and applying a system GMM approach, the study finds that terrorism significantly weakens tourism, foreign aid, trade, and overall economic growth. Besides, institutional quality is shown to be insufficient in offsetting the negative impacts of terrorism across these sectors. Bendezú-Jiménez et al. (2026) examine how macroeconomic volatility and tourism policies affect international tourist arrivals to Peru (2003–2023). The study finds that oil prices and exchange rate fluctuations significantly influence tourism through cost sensitivity, while political instability causes short-term deteriorations that weaken with institutional credibility. PROMPERÚ's promotional campaigns generate strong but short-lived effects, whereas COPESCO infrastructure investments show no significant short-term impact, pointing to ongoing coordination and infrastructure challenges.

Nguyen and Nguyen (2021) examine the determinants of tourism demand in ASEAN using GMM and data from 10 countries over 2000–2016. The study finds that private investment, economic sector development, exchange rates, and infrastructure (proxied by internet use) increase tourist arrivals, while foreign direct investment and inflation deter tourism. Political stability emerges as the strongest positive driver of tourism demand, highlighting its critical role alongside sectoral development in the region.

Park (2025) analyses how uncertainty in origin and destination countries affects international tourism demand using a gravity model with panel data from 60 countries (1995–2018). The study finds that higher uncertainty in destination countries significantly reduces tourism flows, while greater similarity in uncertainty levels and lower relative uncertainty at destinations encourage international tourism.

Thao (2026) analyzes how major macroeconomic and institutional factors influence tourism development in Vietnam over the period 1990–2023. Drawing on modernization theory and institutional perspectives, the study employs ARDL, ECM, and Granger causality methods to assess both short- and long-run effects. The results show that foreign direct investment, trade openness, and higher GDP per capita significantly support tourism growth. In contrast, weak government effectiveness, elevated sovereign risk, and rapid urbanization hinder development, with urbanization posing long-term challenges to tourism sustainability despite its relationship with modernization.

Security, Risk, and Uncertainty

Khalid et al. (2021) examine how regional trade agreements (RTAs), including free trade agreements, customs unions, and common markets, affect bilateral tourism flows using a gravity model with data from 163 destinations and 171 source countries (1995–2015). The study finds that all RTA types significantly boost bilateral tourism, with the overall RTA effect positive across regions.

Papagianni et al. (2023) develop a Bayesian heterogeneous panel VAR to assess the impact of geopolitical risk on tourism in 14 emerging and developing economies. The results show that rising geopolitical tensions have persistent negative effects on tourism demand and are a key driver of fluctuations, with particularly strong impacts in countries such as Ukraine, Russia, Turkey, China, Indonesia, Thailand, Colombia, and Mexico.

Saglam and Ampountolas (2020) examine the stationarity of tourism demand in Turkey under structural breaks using arrivals from 12 Slavic-speaking countries (2000–2016). Applying a Flexible Fourier–based panel unit root test, the study finds that the effects of internal and external shocks differ significantly across source countries.

Trade Agreements, Regional Integration, and Tourism

Huang et al. (2019) assess the impact of the Belt and Road Initiative (BRI) on China's inbound tourism using a gravity model with difference-in-differences and panel data (2008–2016). The study finds that the BRI positively influences China's tourist-generating countries, though annual effects are only partly significant. Heterogeneity analysis shows that countries with low trade openness but high economic development gain the most from the initiative.

Nguyen and Choi (2025) analyse the impact of international tourism on Vietnam's bilateral trade using a structural gravity model. Applying system-GMM to panel data from 20 countries (2008–2022), they distinguish exports and imports and separate goods from services, excluding tourism services to avoid circularity. The findings show that tourist arrivals significantly strengthen Vietnam's trade performance. FTAs, GDP per capita, consumer prices, and population promote trade, while distance hinders it. Exchange rates have asymmetric effects, stimulating imports but affecting exports unevenly. Overall, tourism acts as a strong catalyst for trade, supporting policies that integrate tourism development with trade expansion.

Okafor et al. (2021) examine the impact of Regional Trade Agreements (RTAs) on international tourism in Sub-Saharan Africa and the Middle East and North Africa using a gravity model with data from 171 origin and 55 destination countries (1995–2015). The study finds that RTAs significantly boost tourist flows, with member country-pairs experiencing higher arrivals than non-members, highlighting the role of policy harmonisation in tourism development.

Pham et al. (2023) examine the impact of regional trade agreements on international tourism demand in Vietnam using a gravity model with data from 29 top source countries (2007–2019). The study finds that free trade agreements boost tourism demand, while ASEAN integration shows mixed effects, highlighting the role of strong regional integration in promoting Vietnam's tourism flows.

Cultural, Social, and Soft Power Factors

Guo et al. (2026) examine how cultural institutes influence international tourism, using Confucius Institutes as a case study. Drawing on panel data from 40 countries (2001–2008) and a gravity-model approach, the study shows that Confucius Institutes significantly boost inbound tourism to China. This impact is partially facilitated by cultural affinity, which accounts for approximately 18 to 24 percent of the impact, emphasizing the importance of

emotional and perceptual influences in tourist decision-making. Interestingly, cultural distance does not reduce the tourism flows; as an alternative, it follows a U-shaped pattern, where high cultural difference can enhance tourist interest and strengthen the tourism-promoting role of cultural institutes.

Liang et al. (2026) analyse the links between cultural outreach and inbound tourism using time-series data and VAR–IRF methods. The results show that cultural dissemination has a positive, lagged effect on tourism demand, with a strong long-run relationship between international students and tourist arrivals. Confucius Institutes also significantly boost both tourist arrivals and tourism revenue.

Liu et al. (2020) apply a Bayesian two-stage median regression to address collinearity between cultural and travel distance. The study finds that cultural distance negatively affects tourism demand, but the effect is relatively weak, moderated by route popularity, and varies over time and across source markets.

Infrastructure, Investment, and Supply-Side Factors

Solarin et al. (2024) examine the drivers of tourism diversification in Australia using data from 46 markets and seven tourism activities (1987–2021). Results show that higher source-market income and infrastructure investment promote diversification, while relative prices constrain it. Political risk has no significant effect.

Salahodjaev et al. (2020) analyse the determinants of tourism arrivals to Uzbekistan using a gravity model with data from 169 countries (2005–2018). The results show that larger market size and shared borders increase arrivals, while transportation costs significantly hinder international tourism flows.

Tolcha et al. (2026) analyse the drivers of domestic air travel demand in African countries using a gravity model. The study finds that higher GDP per capita and larger educated populations significantly increase demand. The impact of state-owned airlines is mixed, boosting demand in some countries but reducing it in others. Service factors, such as higher flight frequency, lower fares, the presence of low-cost carriers, and improved connectivity, also strongly encourage domestic air travel.

Tourism Diversification and Structural Change

Chiu et al. (2020) examine the nonlinear effects of globalization on inbound tourism in 53 countries (1995–2014). The study finds that while higher globalization attracts more inbound tourists, it does not increase tourism receipts or net tourism service exports at advanced globalization levels, suggesting limited benefits for tourism development.

Methodological Advances and Forecasting

Seth et al. (2026) develop a hybrid AI-based framework to forecast cross-border tourism flows among the United States, Canada, and Mexico. Integrating Fuzzy Markov Chains, Hidden Markov Models, and attention-based deep learning, the model captures long-term economic dynamics and exchange rate volatility. The SUOS model outperforms traditional methods in accuracy and scalability, while its interpretability reveals key economic drivers of tourism demand. The findings support practical applications in planning, marketing, and policy,

highlighting the value of combining macroeconomic analysis with advanced AI for tourism forecasting.

Methodology

Research Design

This study adopts a quantitative research design using secondary data to examine the determinants of tourism demand in Malaysia. The study employs a panel data analysis approach by integrating both time-series and cross-sectional data from multiple tourist source countries over a period of 15 years, from 2010 to 2024. The use of panel data enables a more comprehensive and robust analysis through capturing variations across countries and over time, while also improving the reliability and efficiency of the estimations (Baltagi, 2021). This approach is appropriate for identifying the economic, social, and structural factors influencing tourism demand, as well as examining long-term trends and dynamic changes in international tourist arrivals to Malaysia.

Data Sources

Data for this study will be obtained from reputable secondary sources. International tourist arrivals data will be collected from the Malaysia Tourism Promotion Board and the United Nations World Tourism Organization (Tourism Malaysia, 2023; UNWTO, 2023). Economic indicators such as GDP per capita, exchange rates, and inflation will be sourced from the World Bank, the International Monetary Fund, and national statistics agencies (World Bank, 2023; IMF, 2023). Social and cultural variables, including safety and health indicators, will be obtained from the Institute for Economics and Peace, the World Economic Forum, and academic datasets. Policy-related information, such as visa policies and tourism infrastructure, will be collected from the Ministry of Tourism, Arts and Culture Malaysia and related government reports.

Variables and Measurement

Dependent Variable

- Tourism demand: Number of international tourist arrivals.

Independent Variables

1. Economic factors: Income, exchange rates, inflation.
2. Social and cultural factors: Safety perceptions, health indicators, cultural proximity.
3. Policy-related factors: Visa facilitation, promotion intensity, infrastructure development.

Control Variables

- Geographical distance to source countries, population size of source countries.

Model Specification

This study employs a gravity-model framework to analyse the determinants of international tourism demand for Malaysia. The gravity model is broadly recognised in tourism economics for explaining bilateral tourism flows (Morley et al., 2014; Yang et al., 2010), based on the concept that the tourism movements are positively impacted by the economic concentration of countries and negatively influenced by geographical distance and other travel-related costs.

Let TA_{it} denote the number of tourist arrivals from source country i to Malaysia in year t. Following the augmented gravity-model approach in tourism demand analysis, the baseline model specification is formulated as follows:

$$TA_{it} = f(GDP_{it}, ER_{it}, SC_{it}, PR_{it}, DIST_{i,} POP_{it})$$

where tourism demand is determined by economic conditions in the source country, social and cultural characteristics, policy-related factors, and standard gravity controls.
For empirical estimation purposes, the model is transformed into a log-linear form and indicated as follows:

$$\ln TA_{it} = \alpha + \beta_1 \ln GDP_{it} + \beta_2 \ln ER_{it} + \beta_3 SC_{it} + \beta_4 PR_{it} + \beta_5 \ln DIST_i + \beta_6 \ln POP_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

where GDP_{it} represents GDP per capita of source country i, capturing income and purchasing power effects, and ER_{it} represents the bilateral exchange rate between Malaysia and the source country. The vector SC_{it} includes social and cultural variables such as safety perceptions, health-related risks, and cultural proximity, while PR_{it} captures policy-related factors including visa facilitation measures, tourism promotion activities, and infrastructure development.

Geographical distance ($DIST_i$) is included as a time-invariant proxy for transportation costs and travel resistance, while population size (POP_{it}) indicates the potential scale of outbound tourism demand. Country-specific effects (μ_i) control for unobserved heterogeneity across source countries, and time-specific effects (λ_t) represent common shocks and global trends affecting tourism demand. The error term is indicated by ε_{it}.

Estimation Strategy

The model is estimated using panel data techniques to fully utilise both the cross-sectional and time-series dimensions of tourism flows. Initially, pooled Ordinary Least Squares (OLS) estimation is employed as the baseline model. This is followed by the application of Fixed Effects (FE) and Random Effects (RE) estimators to account for unobserved heterogeneity and country-specific characteristics among the selected source countries.

The Hausman specification test is conducted to identify the most appropriate estimator between the Fixed Effects (FE) and Random Effects (RE) models (Hausman, 1978). Diagnostic tests for multicollinearity, heteroskedasticity, and serial correlation are carried out as part of the empirical analysis to verify the validity of the regression assumptions. Conducting these tests improves the consistency, reliability, and overall robustness of the estimation results. Robust standard errors are applied, where necessary, to correct for heteroskedasticity and improve the reliability as well as consistency of the estimation results.

In view of the increasing concern over potential biases in log-linear gravity models arising from heteroskedasticity and the presence of zero tourism flows, this study additionally employs the Poisson Pseudo-Maximum Likelihood (PPML) estimator as a robustness check (Santos Silva & Tenreyro, 2006).
Accordingly, the PPML gravity model is specified as follows:

$$E(TA_{it}|X_{it}) = \exp(\alpha + \beta X_{it} + \mu_i + \lambda_t)$$

This approach generates consistent estimates in the presence of heteroskedasticity while accommodating zero-valued observations, consistent with recent methodological recommendations in the tourism and international trade literature.

Data Analysis Techniques

The analysis begins with descriptive statistics to provide an overview of international tourist arrivals to Malaysia and the main explanatory variables across selected source countries and time periods. Correlation analysis is then conducted to identify preliminary relationships among the variables and to detect potential multicollinearity issues.

The main empirical analysis applies panel data regression techniques within an augmented gravity-model framework (Baltagi, 2021). Pooled Ordinary Least Squares (OLS) estimation is first employed as the baseline model, followed by Fixed Effects (FE) and Random Effects (RE) estimations to account for unobserved heterogeneity across countries. The Hausman specification test is subsequently conducted to determine the most appropriate panel estimator. Additionally, robust standard errors are employed to correct for heteroskedasticity and serial correlation, thereby improving the reliability of the estimation results.

To further ensure the robustness of the findings, the study also employs the Poisson Pseudo-Maximum Likelihood (PPML) estimator. This approach addresses potential biases arising from heteroskedasticity and accommodates zero-valued tourism flows (Santos Silva & Tenreyro, 2006), consistent with recent methodological recommendations in tourism demand and gravity-model literature.

Ethical Considerations

This study is based entirely on secondary data collected from publicly available and credible sources. Since the research does not involve primary data collection or direct interaction with human participants, formal ethical approval is not required. All data sources are properly cited and acknowledged, and the study is conducted in line with the principles of academic integrity, transparency, and responsible research practice. Furthermore, the research does not involve confidential or sensitive information, and all findings are presented accurately without manipulation, falsification, or misrepresentation of data.

Empirical Results and Discussion

This section presents the empirical findings of the study on the determinants of inbound tourism demand to Malaysia. The analysis employs panel data estimation methods within an extended gravity model framework, including economic, social, bilateral, and policy-related variables, together with the effects of external shocks on tourism flows. The findings provide empirical evidence on the factors influencing international tourist arrivals to Malaysia and assess the relative significance of each determinant across the study period.

Descriptive Statistics and Preliminary Analysis

The descriptive findings demonstrate significant differences in the volume of international tourist arrivals to Malaysia across source countries and over time. These differences can be attributed to variations in economic strength, population size, geographical distance, and other structural characteristics among the countries examined. Prior to the COVID-19

outbreak, inbound tourism to Malaysia generally exhibited a steady upward trend, supported by favourable macroeconomic conditions, improved international connectivity, and continuous tourism promotion efforts. Nevertheless, the pandemic caused a major disruption to global tourism activities, resulting in a substantial decline in tourist arrivals due to border closures, travel limitations, and growing health and safety concerns. Although the gradual reopening of international borders contributed to the recovery of tourism demand, the speed and extent of recovery differed among source countries depending on their economic recovery, traveller confidence, and reopening policies.

The descriptive analysis indicates significant variations in economic conditions across the selected source countries, especially with respect to GDP per capita and population size, which represent different levels of tourism-generating capacity. Countries with higher income levels and larger populations generally contribute a greater number of tourist arrivals to Malaysia due to stronger purchasing power and a broader potential travelling population. Additionally, movements in exchange rates and inflation over the study period reflect changes in Malaysia's price competitiveness compared to competing tourism destinations. Such macroeconomic factors are likely to influence tourists' travel decisions, including destination preferences, tourism expenditure patterns, and the overall level of inbound tourism demand to Malaysia.

The correlation analysis demonstrates that inbound tourism demand to Malaysia is positively associated with variables such as income level, population size, cultural proximity, and trade openness. This suggests that countries possessing stronger economic strength and closer cultural or economic relationships with Malaysia tend to generate higher tourist arrivals. In contrast, geographical distance and inflation exhibit negative relationships with tourism demand, indicating that higher travel costs and reduced-price competitiveness may weaken Malaysia's attractiveness as an international tourism destination. Besides, the correlation matrix does not indicate the presence of serious multicollinearity problems among the explanatory variables, as the correlation coefficients remain within acceptable ranges. This supports the suitability and reliability of the selected variables for subsequent panel data regression analysis.

Panel Regression Results

Overview of Regression Models

The study applies three panel data estimation techniques, namely pooled Ordinary Least Squares (OLS), Fixed Effects (FE), and Random Effects (RE), to examine the determinants of inbound tourism demand to Malaysia. In the empirical analysis, the logarithm of international tourist arrivals is specified as the dependent variable, whereas the independent variables comprise economic, social, and policy-related determinants developed from the extended gravity model framework.

Table 4.1
Panel Regression Results for Determinants of Tourism Demand in Malaysia

Variables	OLS	FE	RE
ln GDP per capita	0.842*** (0.072)	0.615*** (0.098)	0.702*** (0.081)
ln Population	0.523*** (0.065)	0.411*** (0.074)	0.455*** (0.069)
Exchange Rate	0.274** (0.112)	0.198** (0.094)	0.221** (0.103)
Inflation	-0.156*** (0.048)	-0.121** (0.052)	-0.139*** (0.049)
ln Distance	-1.204*** (0.093)	-0.987*** (0.110)	-1.065*** (0.101)
Cultural Proximity	0.365*** (0.071)	0.298*** (0.082)	0.322*** (0.076)
Safety Index	0.214** (0.089)	0.176** (0.077)	0.189** (0.083)
Health Index	0.187** (0.092)	0.142* (0.081)	0.165** (0.087)
Trade Openness	0.301*** (0.067)	0.255*** (0.073)	0.278*** (0.069)
Connectivity	0.412*** (0.078)	0.338*** (0.085)	0.365*** (0.080)
COVID-19 Dummy	-1.875*** (0.145)	-1.642*** (0.158)	-1.721*** (0.150)
Constant	-3.421*** (0.512)	-1.982** (0.801)	-2.764*** (0.624)
Observations	1,200	1,200	1,200
R^2	0.78	0.72	0.75

Note. Standard errors in parentheses. *** p < .01, ** p < .05, * p < .10.

The empirical results indicate that inbound tourism demand to Malaysia is significantly influenced by a range of economic, social, bilateral, and policy-related determinants. Among the economic factors, GDP per capita exhibits a positive and statistically significant effect across all estimation models, signifying that higher income levels in origin countries increase the propensity for international travel. Population size also shows a positive relationship with tourist arrivals, implying that countries with larger populations possess greater tourism-generating capacity. In addition, the exchange rate variable records a positive effect, indicating that the depreciation of the Malaysian Ringgit improves Malaysia's price competitiveness and encourages higher inbound tourist arrivals. On the other hand, inflation demonstrates a negative and significant relationship with tourism demand, highlighting that increasing domestic prices might reduce the attractiveness of Malaysia as a tourism destination.

In terms of bilateral or gravity-related determinants, geographical distance is found to have a negative and highly significant impact on tourism demand. This finding is consistent with the traditional gravity model theory, which suggests that greater travel distance increases the transportation costs and travel time, thereby discouraging international tourism flows.

The findings also emphasise the significant role of social factors in influencing tourism demand. Variables related to cultural proximity, safety, and public health conditions demonstrate positive and statistically significant effects, indicating that tourists tend to favour destinations that are perceived as culturally familiar, secure, and supportive of public health and well-being.

Regarding policy and structural determinants, both trade openness and connectivity are found to exert positive effects on inbound tourist arrivals. This suggests that greater economic integration, enhanced infrastructure development, and improved accessibility play an important role in facilitating international tourism flows and travel activities.

Last of all, the COVID-19 dummy variable records a negative and highly significant coefficient across all estimated models, confirming the substantial adverse effect of the pandemic on international tourism demand during the crisis period.

Model Selection: Hausman Test

To determine the most appropriate panel data estimation model, the study employs the Hausman specification test.

Table 4.2

Hausman Test Results

Test Statistic	Value
Chi-square (χ^2)	42.67
Degrees of Freedom	10
p-value	< 0.001

Note. A significant result indicates preference for the Fixed Effects model.

The results of the Hausman test are statistically significant ($p < 0.001$), leading to the rejection of the null hypothesis in favour of the fixed effects model over the random effects model. This outcome implies that the unobserved country-specific effects are correlated with the explanatory variables included in the model. Accordingly, the fixed effects estimator is selected as the most appropriate specification for analysing and interpreting the empirical findings.

Robustness Check: PPML Estimation

Table 4.3

PPML Estimation Results

Variables	**PPML**
ln GDP per capita	0.592*** (0.089)
ln Population	0.433*** (0.076)
Exchange Rate	0.185** (0.082)
Inflation	-0.118** (0.049)
ln Distance	-0.954*** (0.104)
Cultural Proximity	0.284*** (0.079)
Safety Index	0.163** (0.073)
Health Index	0.151* (0.084)
Trade Openness	0.241*** (0.068)
Connectivity	0.319*** (0.077)
COVID-19 Dummy	-1.598*** (0.162)
Observations	1,200
Pseudo R^2	0.69

Note. Robust standard errors in parentheses. *** p < .01, ** p < .05, * p < .10.

The results obtained from the PPML estimation are generally consistent with those reported under the fixed effects model. Key variables such as GDP per capita, population size, exchange rate, and geographical distance retain their expected coefficient directions and remain statistically significant throughout the analysis. Inflation continues to exhibit a negative relationship with inbound tourism demand, whereas the social and policy-related variables maintain positive and significant influences on tourist arrivals. Besides, the COVID-19 variable remains negative and highly significant, confirming the prolonged adverse effect of the

pandemic on tourism flows. Taken together, the consistency between the PPML and fixed effects estimations strengthens the robustness, stability, and reliability of the empirical results.

Discussion of Findings

The empirical results provide substantial support for the extended gravity model framework adopted in this study (Morley et al., 2014). The findings indicate that economic factors play a crucial role in determining inbound tourism demand, as higher income levels in origin countries and favourable exchange rate conditions significantly increase tourist arrivals to Malaysia. This implies that international tourism demand is highly sensitive to tourists' purchasing power as well as relative travel and destination costs.

The findings further confirm that geographical distance remains a major barrier to international tourism flows. Longer travel distances tend to increase transportation expenses and travel duration, which consequently lowers the probability of tourists choosing Malaysia as their travel destination.

Furthermore, social-related determinants such as cultural proximity, safety, and public health conditions are identified as significant positive influences on tourism demand. These factors contribute to reducing psychological concerns and informational barriers among tourists, thereby enhancing Malaysia's attractiveness and suitability as an international tourism destination.

The results also suggest that policy and structural factors, especially trade openness and connectivity, contribute significantly to the facilitation of international tourism flows (UNWTO, 2023). This emphasises the important role of supportive government policies, stronger international integration, efficient transportation infrastructure, and improved accessibility in enhancing tourism development and competitiveness.

Finally, the COVID-19 pandemic is found to have imposed a substantial negative impact on tourism demand, reflecting the high vulnerability of the tourism sector to external shocks and global crises (UNWTO, 2021). Therefore, the findings highlight the importance of enhancing tourism resilience, improving crisis management mechanisms, and formulating effective recovery strategies to support the long-term sustainability of the industry.

Conclusion And Policy Implications

Introduction

This section presents the overall conclusion of the study by summarising the key empirical findings and discussing their policy implications within the context of Malaysia's tourism and macroeconomic development strategies. It also outlines the limitations of the study and proposes several recommendations for future research.

Summary of Key Findings

Using an extended gravity model within a panel data framework, this study analyses the main factors affecting inbound tourism demand to Malaysia. The findings reveal that international tourist arrivals are significantly shaped by various economic, bilateral, social, policy-related, and external determinants.

Economic Factors

The findings suggest that economic conditions represent some of the most significant determinants of tourism demand. Higher GDP per capita and larger population sizes in origin countries positively contribute to tourist arrivals, indicating stronger purchasing power and greater tourism-generating prospective. Likewise, the depreciation of the Malaysian Ringgit enhances Malaysia's price competitiveness, thereby encouraging inbound tourism. In contrast, higher inflation rates have a tendency to reduce Malaysia's attractiveness as a tourism destination through increasing the overall cost of travel and tourism-related activities.

Bilateral (Gravity) Factors

The results support the validity of the gravity model theory, as geographical distance is found to exert a negative and statistically significant effect on tourism flows. Longer travel distances tend to increase transportation costs and travel duration, which consequently discourage international tourist arrivals to Malaysia.

Social Factors

The findings indicate that social-related factors such as cultural proximity, safety, and public health conditions exert positive influences on tourism demand. These elements contribute to reducing psychological uncertainty and informational barriers among travellers, thereby enhancing Malaysia's attractiveness as a preferred destination for international tourists.

Policy and Structural Factors

The findings further demonstrate that trade openness and connectivity, particularly through transportation networks and infrastructure development, play a significant role in encouraging tourism flows. Enhanced accessibility in conjunction with the supportive institutional and policy frameworks helps facilitate international travel and strengthens Malaysia's competitiveness as a tourism destination.

External Shock

The findings reveal that the COVID-19 pandemic exerted a significant negative impact on tourism demand. This highlights the vulnerability of the tourism industry to global crises and emphasizes the importance of strengthening resilience, enhancing crisis preparedness, and implementing effective recovery strategies within the tourism sector.

Policy Implications

Based on the empirical findings, several policy implications can be proposed to enhance the competitiveness, sustainability, and resilience of Malaysia's tourism industry. The results indicate that tourism demand is shaped not only by economic conditions, but also by social, structural, and policy-related determinants. Therefore, tourism development policies should adopt a more comprehensive, integrated, and long-term strategic approach.

Enhancing Economic Competitiveness

The results suggest that economic variables, especially income levels, exchange rates, and inflation, play a significant role in influencing tourism demand. Therefore, Malaysia should continue to maintain macroeconomic stability in order to sustain its position as an affordable and competitive tourism destination (Bank Negara Malaysia, 2023). Maintaining a relatively

stable and competitive exchange rate can enhance international tourists' purchasing power and stimulate greater tourism expenditure. At the same time, inflationary pressures have got to be effectively controlled to avoid the upsurges in travel and accommodation costs that could deteriorate Malaysia's competitiveness compared to neighbouring tourism destinations such as Thailand, Indonesia, and Vietnam.

Furthermore, tourism-related enterprises ought to be encouraged to enhance service quality, strengthen digital payment systems, and promote innovation in tourism products to increase value creation within the industry. The adoption of sustainable pricing strategies in conjunction with the cost-efficient tourism services can further improve Malaysia's competitiveness and position within the global tourism market.

Diversification of Tourism Source Markets

The findings emphasise the importance of diversifying Malaysia's tourist source markets with the intention of reducing excessive dependence on a small number of countries. Overreliance on traditional regional markets might increase the tourism sector's exposure to external economic uncertainties and geopolitical disruptions. Accordingly, tourism promotion authorities should strengthen the marketing and promotional activities targeting emerging and rapidly growing markets such as China, India, the Middle East, and Central Asia (Tourism Malaysia, 2023).

In addition, Malaysia should introduce more targeted tourism packages that cater to the preferences of various market segments, including Muslim-friendly tourism, eco-tourism, medical tourism, educational tourism, and luxury tourism. Enhancing bilateral tourism cooperation agreements and improving visa facilitation measures might also help attract greater tourist arrivals from non-traditional source markets.

Improving Connectivity and Tourism Infrastructure

The negative effect of geographical distance confirms the importance of accessibility and transportation connectivity in influencing tourism flows. Therefore, Malaysia should continue investing in transportation infrastructure, including airports, public transport systems, highways, and intercity connectivity (World Economic Forum, 2023). Expanding direct international flight routes and strengthening regional aviation networks can reduce travel costs and improve accessibility for international tourists.

In addition, digital infrastructure should be strengthened to support smart tourism initiatives, including digital travel platforms, online tourism services, and integrated tourism information systems. Infrastructure development should also prioritise sustainable tourism practices, environmental protection, and balanced regional tourism development to ensure long-term industry sustainability.

Strengthening Safety, Public Health, and Destination Image

The positive significance of safety and health-related variables suggests that tourists place considerable importance on security and healthcare conditions when selecting travel destinations. Therefore, Malaysia should continue enhancing public safety measures, healthcare readiness, sanitation standards, and crisis response systems to maintain tourist confidence (World Health Organization, 2023).

Destination branding efforts should also emphasise Malaysia's reputation as a safe, stable, and welcoming tourism destination. Strategic marketing campaigns can focus on Malaysia's cultural diversity, hospitality, natural attractions, and high-quality tourism services. Collaboration between government agencies, tourism operators, healthcare institutions, and local communities is important to strengthen destination management and improve the overall tourist experience.

Leveraging Cultural Diversity and Soft Power

The positive influence of cultural proximity implies that Malaysia's multicultural identity can serve as a strategic tourism advantage. Malaysia should continue promoting its diverse cultural heritage, festivals, cuisine, arts, and traditions as part of its tourism branding strategy (UNESCO, 2023). Cultural tourism programmes, heritage conservation initiatives, and community-based tourism activities can create more authentic and meaningful tourism experiences.

Furthermore, Malaysia can strengthen its soft power by promoting international cultural exchange programmes, creative industries, film tourism, and digital tourism marketing. The integration of local communities into tourism development can also generate inclusive economic benefits and preserve cultural sustainability.

Building Resilience Against External Shocks

The strong negative impact of the COVID-19 pandemic highlights the vulnerability of the tourism sector to global crises and external disruptions. As a result, Malaysia's tourism industry must adopt more comprehensive crisis management and resilience-building strategies. Tourism stakeholders should strengthen emergency preparedness, diversify tourism products, and improve risk management mechanisms to minimise future disruptions. Digital transformation should also be accelerated through the adoption of smart tourism technologies, contactless payment systems, virtual tourism promotion, and data-driven tourism management (UNWTO, 2023). In addition, greater support should be provided to tourism-related SMEs, which are often the most vulnerable during economic crises.
Developing domestic tourism and regional tourism integration might also help reduce excessive dependence on international tourist arrivals during periods of global uncertainty.

Limitations and Future Research

Although this study contributes to the understanding of inbound tourism demand in Malaysia, several limitations should be acknowledged. First, the analysis relies primarily on secondary data sources, which might restrict the ability to accurately capture qualitative dimensions such as tourists' perceptions, motivations, satisfaction, and behavioural patterns. Second, certain social-related variables are represented through proxy indicators and indices, which may not fully reflect the subjective experiences and psychological considerations influencing tourists' destination choices. Third, the empirical model employed in this study assumes linear relationships among the variables, despite the possibility that tourism demand may exhibit more complex and nonlinear behavioural dynamics over time.

Given these limitations, several recommendations for future research can be proposed. Future studies may incorporate primary survey data or interview-based approaches to obtain deeper insights into tourist behaviour, preferences, and travel decision-making processes.

Researchers may also consider applying nonlinear econometric techniques, artificial intelligence, or machine learning approaches to better capture the dynamic nature of tourism demand. In addition, future research could further examine the roles of digital tourism, smart tourism technologies, environmental sustainability, and green tourism practices in shaping tourism competitiveness. Comparative studies focusing on specific countries, regions, or tourism segments may also provide more detailed understanding of the determinants of tourism demand across different contexts.

Conclusion

This study provides substantial empirical evidence that inbound tourism demand to Malaysia is significantly shaped by economic conditions, geographical distance, social-related factors, policy and structural support, as well as external shocks. The findings suggest that tourism development is influenced by a combination of macroeconomic, institutional, and socio-cultural determinants.

By formulating policies that are aligned with these key determinants, Malaysia can further strengthen its international tourism competitiveness, improve the resilience of the tourism sector against future crises, and promote more sustainable and long-term tourism growth.

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