Factors determining international tourist flow to tourism destinations: A systematic review

Henok Bekele Gidebo

Department of Tourism and Hotel Management, College of Business and Economics, Arba Minch University, Arba Minch, Ethiopia.

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International tourism has been growing worldwide at substantial and sustainable rates in terms of both tourist arrivals and tourism receipts. It demonstrated broad economic significance for tourism destinations around the world. This review is carried out to describe factors determining international tourist flow to international tourist destinations. The study gives insights to improve international tourist arrivals and tourism receipts at tourism destinations worldwide by providing a comprehensive summary of the results of various works of literature on international tourist flow to researchers, policy makers and practitioners. The systematic review is conducted to provide objective, replicable, systematic, and comprehensive coverage of determinants of international tourist flow. The review process comprised framing questions for review, identifying relevant works, assessing the quality of studies, summarizing the evidence, and interpreting the findings. Factors determining international tourist flow are found to be mainly related to demand factors in generating region and supply factors in destinations. Socio-cultural factors, geographical, international mobility, demographic, technological, health risk, psychological and lifestyle, and peace and security factors significantly affect international tourist flow.

Key words: Travel, tourist flow, international tourism, destination.

INTRODUCTION

Travel and tourism is the world’s largest and most diverse service industry on which many countries rely as source of revenue, employment, private sector growth and investment. Its contribution is widespread to boost consumption, infrastructure development and gross domestic product (Boniface et al., 2016; Gee and Fayos-solá, 1997). Besides generating foreign exchange earnings and alleviating the balance of payments problems encountered in many developing countries, international tourism generates employment, income, savings, investment, and economic growth (Lim, 1997; UNWTO, 2019; WTTC, 2018). For this reason, both the public and private sectors have channeled substantial resources into the tourism industry. The trend of tourist flow has been steadily increasing in tourism destinations because of globalization and market liberalization trends across the world (Keum, 2010). After achieving historic milestone of one billion people traveling the world in a
single year in 2012, international tourism continued to grow with average growth rate of 4.88% in the past five years. International tourist arrivals grew by 5% in 2018 to reach 1.4 billion marks and expected to grow in 2019 with strong momentum at the rate of 4 -5% (UNWTO, 2019).

A number of researchers have reported that theories in international tourist flow are largely linked to globalization, international trade, bi-lateral agreements, tourism demand and tourism supply (Mansfeld, 1990; Var, Mohammad and Icoz, 1990; Morley, 1992; Witt and Witt, 1995; Zhang and Jensen, 2005; Song and Li, 2008; Keum, 2010; Claveria and Torra, 2014; Adeola et al., 2018).

Tourist flows are not simply movements of people but they have an important economic significance for the tourism system. Quite simply, international tourism represents a flow of money that is earned in one place and spent in another (Boniface et al., 2016) (Figure 1).

In the past three decades considerable number of researches conducted on international tourist flow are mainly focused on tourism demand perspective (Lim, 1999; Cho, 2010; Song et al., 2010; Culiuc, 2014; Peng et al., 2015; Martins et al., 2017; Adeola et al., 2018). Several variables have been suggested as the determinants of international tourist flow. However, the determinants found in previous researches vary significantly across studies (Peng et al., 2015). These studies lack the k to provide big picture of the international tourism system and factors that can affect international tourist flow. Given the magnitude of tourism flows and the importance of the tourism industry for the global economy, it is imperative to investigate the factors determining international tourist flows. This review is made with the objective to analyze previous researches and provide the wider discourse on factors affecting international tourist flow. Therefore, this study provides comprehensive conceptual view of various works of literatures on literatures in the topic to researchers, policymakers and practitioners.

MATERIALS AND METHODS

In this research systematic review of literature is used to provide comprehensive set of factors determining international tourist flow to tourism destinations. The systematic review provides objective, replicable, systematic, and comprehensive coverage of a defined area because its aim is a conceptual consolidation across a fragmented field (Weed, 2006). To deal with the breadth of the review topic, the review process consists of framing questions for review, identifying relevant works, assessing the quality of studies, summarizing the evidence, and interpreting the findings. Three-stage procedure: planning, execution, and reporting are used to conduct this systematic review (Tranfield et al., 2003). Stage one involves setting the objectives of the research and identifying key data sources. The objective of the review is made broad in order to carry out a comprehensive review of on factors determining international tourist flow. Relevant sources of literature which include journal articles, books, conference papers and working papers published between 1990 and 2019 are reviewed to address the breadth of the subject under study Stage two. Stage two consists of identifying initial keywords keywords and search terms, search strategy, inclusion criteria, data extraction and assessed assessing study quality. The Initial search is conducted using the basic keywords: “tourism”, “travel”, “international”, “tourist”, “tourist flow”, “demand”, ”supply”, “inbound”, “outbound” and “destination”. Google Scholar is used to searching relevant work across the world of scholarly research and other relevant literature from academic publishers, professional societies, online repositories, universities and other web sites. Selection criteria of pertinent works of literature involves year of publication (1990 to 2019); international travel exposure of tourists; cross-boundary tourist flow; literatures written in English language; scholarly works with at least one aforementioned keywords in the title, abstract or keywords; literatures which report outcome using objective measures; studies conducted in international tourism setting; and types of publications which includes journal articles, books, conference papers, dissertations, and working papers, which resulted in seventy-five scholarly works. The publications literatures are selected based on aforementioned criteria to analyze and synthesize scattered sources of variables which are detrimental to international tourist flow. Data extraction is performed based on author, date, title, region, research design and outcomes to simplify the analysis process. Stage three, the data analysis is carried out based on the objectives of the review. This review is a comprehensive overview of factors affecting international tourist flow. Thus, this review is methodologically limited to descriptive rather than statistical methods in the analysis of the results. Data synthesis is the primary value-added product of a review as it produces new knowledge based on thorough data collection and careful analysis (Crossan and Apaydin, 2010; Law, Leung, Cheung, 2012). The results of the analysis are synthesized into the various category of factors. Its aim is a conceptual consolidation across a fragmented field. It uses systematic data collection procedures, descriptive and qualitative data analysis techniques, and theoretically grounded synthesis.

RESULTS AND DISCUSSION

Factors found to be influencing international tourist flow have been explored in several studies. They vary widely in terms of dependent and independent variables, periods and levels of the data, empirical methodologies, and country of origin and destination pairs. Meta-analysis of tourism demand from 195 studies shows international tourism vary significantly across different origins, destinations, products, data frequencies, demand variable measures, modeling methods, and in terms of travel distances (Crouch and Shaw, 1992; Peng et al., 2015). The movements of people between places are highly complex and are influenced by a wide variety of interrelated variables.

Demand for international tourism

International tourism demand is the core area of researches undertaken in the theme of factors affecting international tourism in general and international tourist
flow in particular. International tourism demand is affected by a wide range of factors, such as economic, attitudinal and political factors, but the majority of the studies tend to examine the demand for international tourism by focusing predominantly on economic factors (Table 1) (Song et al., 2010).

**Supply of tourism products at tourism destinations**

The supply at the destination is the key element in the tourism system which provides the basic elements that together form the overall visitor experience. The general attractiveness of a destination significantly affects tourist flow (Sebastian et al., 2009). Accessibility, attractions and amenities of the destination area are the pull factors for international tourism (Boniface et al., 2016). A positive relationship is observed between the number of hotel rooms in the destination country and tourism inflows (Culuc, 2014). Availability of alternative or complimentary destinations, service quality, brand image, the price competitiveness of tourism products and tourist price substitute are supply side supply factors that affect international flow to destinations (Habibi, 2017). Countries with an abundance of a certain tourism resource benefit from a comparative advantage of factor endowment. However, it should be noted that these factor endowments only have an impact on tourism flows if they are developed and made accessible to tourists (Vellas and Becherel, 1995).

McKercher (1998) noted the effect of market access on international tourism. The effectiveness of marketing and promotion by the destination has its own impact in driving tourists to the destinations (Boniface et al., 2016). Marketing expenditure of destination is an important factor that affects the tourism demand at originating region (Song and Witt, 2000). Promotion is generally recognized as an important strategy to enhance the awareness of a destination and to highlight its attractiveness so as to increase the number of tourists and tourism receipts (Song et al., 2010). Comparative advantage and comparative costs also play significant role in attracting international tourists. A destinations’ comparative advantage stems from the quality of its infrastructure, superstructure and tourism know-how, level of technology and its favorable environment (Vellas and Becherel, 1995). Comparative costs are concerned with qualitative factors, especially the price-quality ratio, which plays an essential role in the comparison and the choice of tourism supply offered by competing countries or destinations. This shows that service quality is the best way to compete and to have the best comparative advantage.

Absolute advantage plays a crucial role in international tourism. Certain countries have unique tourism resources which can be exceptional natural, cultural, historical or man-made resources known all over the world. Their importance in terms of international tourism factors is determined by their uniqueness which gives a country a monopoly or a near-monopoly (Vellas and Becherel, 1995). But, in the case of natural disaster and crisis the destinations may experience declination of tourist arrivals in an affected area and create a negative image for the visitor (Habibi, 2017).

**Socio-cultural factors determining international tourist flow**

Culture is one of the issues that has been identified by numerous researchers as determinant factor for international tourist flow (Master and Prideaux, 2000; Reisinger and Turner, 1997, 2002; Sussmann and Rashcovsky, 1997). Cultural factors can both cause and obstruct international tourist flow. A great difference in cultural environment between two countries is a motivating factor but can also limit international tourism and prevent mass tourism. Bypassing this obstacle depends on the services and equipment available to tourists who speak a different language than that of the

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**Figure 1.** International tourist arrivals (million) and tourism receipts (USD billion). Source: World tourism organization (UNWTO), July 2019.
Table 1. Demand factors influencing international tourist flow.

| Author/s | Factors affecting demand for international tourism |
|----------|---------------------------------------------------|
| Lim (1999), Song and Witt (2000) | Income, transportation costs, relative tourism prices, promotion expenditure of tourism destination, and availability of special events |
| Seyidov and Adomaitiené (2016) Narayan (2004) | Availability of money and leisure time |
| Eryğiş et al. (2010) | GDP per capita and bi-lateral trade volume between countries |
| Prideaux (2005) | Price, personal financial capacity to travel and budget, destination image and destination competitiveness |
| Var et al. (1990) | Available of substitute destinations, the per capita income of generating country and relative exchange rate |
| Crouch (1994) Dritsakis (2004); Garin-Munoz (2007) | Income in the tourist originating country; cost of living; transportation cost between countries; currency exchange rate between the pairs of destination and originating countries; and other price factors like inflation |
| Li et al. (2005), Law (2000) | Accommodation costs, travel cost, substitute price, marketing expenditures |
| Divisekera (2010) Garin-Munoz (2006) | Relative prices and real income, international connectivity, stage of economic development in the generating area and levels of affluence and the relative cost of the visit |
| Mansfeld (1990) | Availability of free time; availability of disposable money; availability of paid holidays; and the per capita income of tourists |
| Crouch (1994a, b), Lim (1997, 1999), Song and Li (2008) | Income, prices, exchange rate, cost of transportation, and marketing effectiveness, cost of tourist service, inflation, distance, time, tourist appeal, publicity, information, weather and language |
| Martins et al. (2017) | Depreciation of the national currency of destination country, and a decline of relative domestic prices in originating country |
| Vellas and Becherel (1995) | Inflation, exchange rates, prices, the availability of leisure time and relative household incomes |
| Hiemstra and Wong (2002) | Personal disposable income; the cost of living for tourists in the destination country; tourists' living costs in substitute destinations; transport cost between the origin and destination; transport costs to substitute destinations; and the volume of trade exports and imports between origin and destination countries |
| Turner et al. (1998) | Strong trade ties, real exchange rate, an appreciation of the origin's currency, depreciation of destination's currency, economic relations between two countries |
| Culiuc (2014) | Strong trade ties, real exchange rate, an appreciation of the origin's currency, depreciation of destination's currency, economic relations between two countries |

International tourists tend to be more heterogenous and individualistic in their demands and expectations; more culturally diverse in terms of ethnic origin as well as their range of lifestyle choice (Chowdhary, 2013). Cultural distance among countries negatively affects tourist flow to exotic destinations (Lew and McKenzie, 2006). Common language plays positive role in determining tourism flows (Eilat and Einav, 2004). International connectivity in terms of cultural ties between countries as significantly affect international tourist flow. Tourism also responds stronger to linguistic ties (Culiuc, 2014). Hospitality culture of destination is an important issue in attracting tourism. Regarding the cultural and natural heritages, UNESCO designated world heritage sites are significant pull factors (Cho, 2010). Increased number of women in work force, rise in number of two-income households, improvement in quality of life, international mobility, greater complexity of life, and increased competition in life is positively related to international tourist flow (Chowdhary, 2013).

Geographical factors affecting international flow of tourists

A number of attempts have been made to explain the factors that affect tourist flows in geographic terms. Distances between countries found to be determinant factor in international tourist flow the greater the distance, the smaller the volume of flow. The friction of distance which refers to the cost in time and money of longer
journeys restrain flows between the country of origin and more distant destinations (Boniface et al., 2016).

McKercher (1998) stated that more proximate destinations exhibited a competitive advantage over destinations that offered similar products but were less proximate. Distance and tourism climate index are the main variables influencing the volume of flows (Pearce, 1995; Eryiğit et al., 2010). Location and dependencies between destinations of either a competitive or complementary nature have implications in tourists' preference of tourism destinations and flow (Crouch and Ritchie, 1999). Common border and distance are important in determining tourism flows, especially for less developed countries (Eilat and Einav, 2004). Countries with similar demand conditions tend to be geographically close, often bordering each other. This factor increases the accessibility of countries to each other is also a significant geographic factor in determining international tourist flow (Vellas and Becherel, 1995). Distance between the two countries has a negative impact on tourism. Contiguity is beneficial for tourism as a common border leads to a larger number of tourists between two countries (Culiuc, 2014). Most tourists prefer to visit proximal countries with good accessibility. The accessibility of countries is the main concern to most international tourists. Most travelers visit the major cities of a country which are usually well connected by air (Cho, 2010). Diverse climatic conditions and scenic attractions of destinations also attract a large number of international tourists (Chowdhary, 2013).

An unfavorable climate provides a strong impetus to travel (Boniface et al., 2016). Tourists like to visit those destinations with mild variations of temperature or seasonal changes. Large temperature variation or distinctive seasons in a country have a negative impact on the total tourist arrivals in a year. Usually people like to visit a place during its best season in terms of its climate and natural beauty. Concerning the environmental condition, CO₂ emission is a positive and significant factor for tourists in selecting a country to visit. Certainly, a person may not like to visit a country that is heavily polluted (Cho, 2010). Climatic change, the source of critical changes in scenery and nature is a particular driver of unexpected extreme natural events and weather conditions. The rising trend in the storms, floods, earthquakes and volcanic eruptions can deter the flow of international tourists to places of natural calamity (Petermann et al., 2005). Distance, tourism climate index, and population number are identified as the main variables in influencing the volume of flows of international tourists (Pearce, 1995; Eryiğit et al., 2010).

International mobility of tourists
Transportation is the means to reach the destination and also the means of movement at the destination. It is acknowledged as one of the most significant factors to have contributed to the international development of tourism. International travel has become much more accessible, faster, and affordable to more people in recent decades and international mobility is dominated by air transport (Frändberg and Vilhelmson, 2003). Major steps in the development of international tourism have been linked with advancements in transport. Technological, infrastructural, and organizational developments of air transport gradually increased the accessibility in terms of time and cost of faraway places (Graham, 2000). Push factors for international travel are mainly concerned with mobility (Boniface et al., 2016). Analysis of cross-border tourism by Timothy (1995a, b, 1998) found that physical barriers such as fortifications and demarcation markers and the severity of crossing formalities such as visas, customs procedures, and quarantine measures have impact on international travel. Transportation accessibility, distance, time, and destination knowledge are major determinants in choosing and traveling to international destinations (Lew and McKercher, 2006). Availability and quality of road, rail, water and air transportation service and infrastructural development to support international mobility are among the major determinants of international tourism. The presence of a direct flight is positively associated with tourism flows (Culiuc, 2014). Entry formalities in the form of official documents and endorsements which need to be procured well in advance are significant especially for countries with strict entry formality. Agreed measures for easing the movement of people travelling across border with lax controls improves number of flow but inadequate facilitation measures can hinder the conditions of demand between countries geographically close to each other (Vellas and Becherel, 1995). In addition, provision of electronic visa and visa on arrival increases tourist flow to a country.

Demographic variables of international tourists
One of the most important explanatory variables of tourism flow is population in country of origin (Crouch, 1994; Lim, 1997; Turner et al., 1998). The larger the population masses of country, the greater the flow between them (Boniface et al., 2016). Demography determines trends in international tourism supply and demand. International tourists tend to be better educated and more interested in continuing education (Chowdhary, 2013). Population volume, the percentage of active population, its geographical distribution, availability of skilled labor and the apportionment by age band has effect on both the demand and supply of international tourism (Vellas and Becherel, 1995). Rise in small household size, late marriage, affluent old age people,
life expectancy, and level of education in developed countries especially in generating region are related to more amount of international travel for tourism (Chowdhary, 2013).

**Psychological and lifestyle of international tourists**

From consumer behavior perspective tourist needs and habit of traveling are the significant factors for international travel (Djeri and Plavša, 2007). Desire to social-interaction, escape, rest and relaxation, destination image, and quality are most important factors for international tourists (Hsu et al., 2009). Research into international flows has generally focused on international competitiveness and destination choice (Chon and Mayer, 1995; Pearce, 1997). But, competitiveness is both relative and multidimensional (Prideaux, 2005). Analysis of cross-border tourism by Timothy (1995a, 1995b, 1998) found that psychological barriers that include cultural differences, and perceptions of safety and economic factors, all influence cross boundary flows. Fashions for international travel has also important role in determining international tourist flow (Eilat and Einav, 2004). Personality, motivation, and emotional values affect travelers choice of international destination and tourist flow (Lew and McKercher, 2006). Family obligations; obligations to one’s workplace; and values and norms of tourism behavior prevailing among one’s reference group are also significant factors that affect flow of international tourists (Mansfeld, 1990).

The pressures of city life provides the urge to travel away from the usual environment (Boniface et al., 2016). International tourism demand has lagged dependent variable such as habit persistence, word-of-mouth and changing travel tastes (Crouch, 1994a, b; Lim, 1997, 1999; Song and Li, 2008). Personal factors of individual tastes and preferences influence tourism demand. Consequently, tourism destinations must research the tastes and preferences of the generating market, notably by conducting market surveys (Vellas and Becherel, 1995). Demand for international relies on consumer tastes, personal preferences, consumer expectations, habit persistence, the ‘word-of-mouth’ effect and time trend or fashion are all important factors for tourism demand (Song and Witt, 2000; Prideaux, 2005). International tourists tend to be more healthy and interested in more active pursuit; more leisureed in terms of hours of work and holiday entitlements; more traveled for work or business as well as leisure and holidays with frequent international travel experience (Chowdhary, 2013).

**Influence of technology on international tourism**

Technical innovation in the tourism sector mainly involves super-structures, information and promotion, product development and marketing. Lack of information is the main variables influencing the volume of flows (Pearce, 1995). Destinations usually involve innovation and technological progress in order to maintain and increase their comparative advantage. Tourism superstructures increasingly use new technology, particularly in the accommodation, catering and reservations sectors. Innovation can bring down costs like new materials, energy savings, electronic data transmission, newmanagement, reservations and payment techniques but also create new tourism products like leisure centers and holiday centers.

Tourism marketing is probably the area which has benefited the most from advances in technology with the development of real-time management software for information, availability, reservations, invoicing and payment using smart cards. Information and communication technology increased promotion and distribution of products on the internet. Multimedia information provision in customers’ homes enhanced promotional possibilities such as direct marketing, reducing the traditional role of travel intermediaries, customer database development and its role in marketing information systems. It gives way to develop customized products for consumers, relationship marketing with repeat buyers and other targeted customers and stakeholders. It also stimulates creation of virtual enterprises networks of micro-businesses and creates major opportunities for access to international markets at low costs (Chowdhary, 2013).

The tourism industry has become one of the largest users of modern information technology. Global distribution system (GDS), a computerized network system that enables transactions between travel industry service providers, mainly airlines, hotels, car rental companies, and travel agencies, makes tourism products available to various groups of customers in a simple and efficient way. The development and implementation of modern information technology products in tourism sector represent a response to constant and rapid changes that characterize the tourist market and the chance to gain competitiveness and foster further development of tourism at the global level (Radulovic, 2013). This allows international tourists to get information about various tourism destinations and their products. In return ease of access for these information increases the tendency of potential travelers to take a trip to international destinations. International tourists tend to be more exposed to media and information; more computer literate with ownership of personal computers, tabs or smartphones and access to the internet (Chowdhary, 2013).

**Peace and security at tourism destinations**

A number of researchers have postulated that increasing
flows between countries involved national politics, international relations, and world peace (D’amore, 1998; Hobson and Ko, 1994; Var et al., 1997). Regulatory framework of government on safety, have their implication on number of arrivals (Chowdhary, 2013). Determinants of destination competitiveness include safety and security (Crouch and Ritchie, 1999). Destination risk is shown to be quite important for destination choice of international tourists (Elliat and Einav, 2004). Non-economic factors such as political stability, terrorist attacks and crime influence international tourism demand (Naude and Saayman, 2005; Athanasopoulos and Hyndman, 2008; Habibi, 2017; Chu, 2011; Habibi, 2017). Political stability and personal safety of tourists positively contributes to international tourism demand (Naude and Saayman, 2005). Political instability and upheaval are strong dissuading factors (Vellas and Becherel, 1995). Questions of security and tourist risks are accordingly becoming increasingly important for the future of travel. Today, a great need for security is apparent in all tourist target groups, where security covers a wide range (Petermann et al., 2005). Political instability and upheaval are strong dissuading factors (Vellas and Becherel, 1995). Questions of security and tourist risks are accordingly becoming increasingly important for the future of travel. Today, a great need for security is apparent in all tourist target groups, where security covers a wide range (Petermann et al., 2005). Political instability and upheaval are strong dissuading factors (Vellas and Becherel, 1995). Questions of security and tourist risks are accordingly becoming increasingly important for the future of travel. Today, a great need for security is apparent in all tourist target groups, where security covers a wide range (Petermann et al., 2005). Political instability and upheaval are strong dissuading factors (Vellas and Becherel, 1995).

Tourists avoid countries with ongoing armed conflicts and terrorism (Culiuc, 2014). Terrorism has negative impacts on international tourist flow to tourism destinations (Drakos and Kutan, 2003; Enders and Sandler, 1991; Wahab, 1996; Goldman and Neubauer-Shani, 2017). Terrorist attacks aimed at major cities, tourist centers and infrastructure and directly at tourists resulted in tourists avoid these destinations. The greatest impact on tourist demand comes from terrorist attacks where tourists and locals are the direct target or victims of the attack. The new security risks and crises takes growing shift in wars from the state level to ethnic and religious armed conflict. Tourists’ perception of risks and security significantly affects the image of a destination, overall satisfaction and international tourist flow to such destinations (Petermann et al., 2005). Demand for international tourism relies on the interaction of a large range of factors that include government regulations, international political/military tensions, concerns for personal safety, fear of crime, wars, terrorism, and the state of international relations (Prideaux, 2005).

Policy implications of international tourist flow

The future of tourism will continue to be impacted by a range of current and emerging economic, social, political, environmental and technological changes, bringing new and often unseen challenges, threats and opportunities. Countries should closely track changes in trends of those variables and plan ahead to manage their tourism sector. Demographic and social trends, consumer trends, technological developments, safety and security and climate change needs policy attention. Government policy directions can affect international tourist flow through providing supporting infrastructure; regulating markets and access; ensuring the sustainable development of natural and cultural resources; stimulating inclusive and sustainable tourism growth; setting standards (for example safety and security, quality, training, environmental); and responding to crises and disasters affecting the industry. Policy should also address issues related to strategic and thematic approaches to product development; effective promotion and marketing programs; digitalization of tourism; supporting a competitive and sustainable tourism industry; offering seamless transport, travel facilitation and reduce barriers to travel, encouraging small and medium enterprise financing, innovation and entrepreneurship; improving service quality; simplifying regulations and adjusting to growth of the shared economy; fostering long-term investment; stimulating domestic tourism; addressing labor supply challenges

Health risks at tourism destinations

As a result of the growth of long-distance travel to countries with different climatic and hygienic conditions, travelers are at risk from a very wide range of infectious diseases. Health risk factors of travelers are related with transportation means, nutritional and living conditions, climatic conditions, natural or human-related disasters and individual habits of travelers (Roupa et al., 2012).

The greater people’s mobility, for example as a result of tourist activities, the faster the consequences can spread. SARS-CoV, ebola, malaria, cholera, dengue, yellow fever and HIV are some of health risks that face international travelers. New and old infectious diseases appear everywhere and more frequently and spread faster (Petermann et al., 2005). Demand for international tourism relies on the health epidemics and concerns for personal safety in tourist destinations (Prideaux, 2005). Malaria, dengue, yellow fever and ebola are significant determinants of international tourism flows (Rosselló et al., 2017). Tourists are reluctant to travel to countries with different infectious diseases (Page, 2009). Trips to less developed countries with a prevalence of these diseases are still growing (Leder et al. 2013). Malaria and yellow fever to be the diseases that play the most decisive role in explaining tourist destination choices and eradication of this disease is associated with increase in tourist arrivals and receipt by a destination (Rosselló et al., 2017). Increasing number of epidemics and plagues; natural disasters and extreme weather conditions become increasingly frequent feature worldwide, with a growing scale of damage have resulted in decline of international tourist flow to the affected areas (Petermann et al., 2005).
and improving sector skills; and strengthening the long-term sustainability of destinations.

Conclusion

International tourist flow is mainly determined by demand factors at originating countries and supply factors at destination countries. Income, leisure time, cost of travel, relative price of destinations, relative exchange rate and marketing are significant factors in demand for international tourism. Supply factors include accessibility of the destination, attraction, tourism infrastructure and amenities, accommodation, service quality, price competitiveness, general attractiveness and destination image, special events, and disaster and crises in tourism destinations are determinant factors that affect international tourist flow. Socio-cultural factors which include cultural distance, common language, cultural ties, linguistic ties and hospitality culture of the destination have significant effect on international tourist flow. Distance between generating countries and destination country, tourism climate index, location of destination, common borders and favorable climatic conditions are geographic factors affecting international tourism. Fortification and demarcation markers, severity of crossing formalities like visa and custom procedures, availability of transportation infrastructure and service between countries or across region affects international mobility of tourists. Psychological and lifestyle factors affecting international tourist flow include desire for recreation, perception of safety of destination, time trend or fashion, personality, motivation, emotional value, pressure of city life at originating country, habit persistence, consumer tests and preference, consumer expectation and frequent international travel experience. Access to the internet, reservation system, online marketing, and ownership of personal computer, tabs and smartphones are technological factors which determine the demand for international travel. Peace and security also play crucial role in determining international tourism. National politics and international relations, security and safety of tourists, political instability, terrorist attacks, crime, armed conflict and war in destination areas affects international tourist flow. In addition, health risk factors which include spread of infectious disease and health standards of destinations affect tourist flow. Therefore, policy makers and practitioners should pay great attention to the aforementioned factors in order to boost international arrival and improve tourism receipt at tourism destinations.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

Adeola O, Boso N, Evans O (2018). Drivers of international tourism demand in Africa. Business Economics 53(1):25-36.

Attanasopoulos G, Hyndman JR (2008). Modeling and forecasting Australian domestic tourism. Tourism Management 29(1):19-31.

Boniface B, Cooper R, Cooper C (2016). Worldwide Destinations: The Geography of Travel and Tourism (7th ed.). London: Routledge.

Cho V (2010). A study of the non-economic determinants in tourism demand. International Journal of Tourism Research 12(4):307-320.

Chowdhary N (2013). Tourism demand trends. Indian Institute of Tourism and Travel Management. Tour Guiding Series.

Chon K, Mayer KJ (1995). Destination Competitiveness Models and Their Application in Las Vegas. Journal of Tourism Systems and Quality Management 1:69-75.

Chu FL (2011). A piecewise linear approach to modeling and forecasting demand for Macau tourism. Tourism Management 32(6):1414-1420.

Claveria O, Torra S (2014). Forecasting tourism demand to Catalonia: Neural networks vs. time series models. Economic Modelling 36:220-228.

Crosman MM, Apaydin M (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. Journal of Management Studies 47(6):1154-1191.

Crouch GI (1994a). The study of international tourism demand: A review of findings. Journal of Travel Research 33(1):12-23.

Crouch GI (1994b). The study of international tourism demand: A survey of practice. Journal of Travel Research 32(4):41-55.

Crouch GI, Ritchie JB (1999). Tourism, competitiveness, and societal prosperity. Journal of Business Research 44(3):137-152.

Crouch GI, Shaw RN (1992). International tourism demand: A meta-analytical integration of research findings. In: P. Johnson and B. Thomas (Eds.), Choice and demand in tourism. London: Cassel.

Culic A (2014). Determinants of International Tourism. Working Paper No. 14/82. International Monetary Fund (IMF).

D’amore L (1998). Tourism: The World’ s Peace. Journal of Travel Research 27(1):35-40.

Divisekera S (2010). Economics of tourist’s consumption behavior: Some evidence from Australia. Tourism Management 31(5):629-636.

Djeri L, Plavša J (2007). Analysis of potential tourists’ behavior in the process of deciding upon a tourist destination based on a survey conducted in Bačka Region. Geographica Pannonica 11(14):70-76.

Drakos K, Kutan, AM (2003). Regional effects of terrorism in three Mediterranean Countries. Journal of Conflict Resolution 47(5):621-641.

Dritsakis N (2004). Co-integration analysis of German and British tourism demand for Greece. Tourism Management 25(1):111-119.

Eilat Y, Einav L (2004). Determinants of international tourism: A three-dimensional panel data analysis. Applied Economics 36(12):1315-1327.

Enders W, Sandler T (1991). Causality between transnational terrorism and tourism: The case of Spain. Terrorism 14(1):49-58.

Eryiğit M, Kotli E, Eryiğit R (2010). Factors affecting international tourism flows to Turkey: A gravity model approach. Tourism Economics 16(2):585-595.

Frändberg L, Vilhelmson B (2003). Personal mobility: A corporeal dimension of renationalization. The case of long-distance travel from Sweden. Environment and Planning 35(10):1751-1768.

Garin-Munoz T (2006). Inbound international tourism to Canary Islands: A dynamic panel data model. Tourism Management 27(2):281-291.

Garin-Munoz T (2007). German demand for tourism in Spain. Tourism Management 28(1):12-22.

Gee EY, Fayos-solá CE (1997). International Tourism: A Global Perspective (1st ed.). Madrid: UNWTO.

Goldman OS, Neubauer-Shani M (2017). Does International Tourism Affect Transnational Terrorism? Journal of Travel Research 56(4):451-467.

Graham A (2000). United Kingdom”, in Transport and Leisure, European Conference of Ministers of Transport. OECD publications Paris, France.
Habibi F (2017). The determinants of inbound tourism to Malaysia: a panel data analysis. Current Issues in Tourism 20(9):909-930.

Hiemstra S, Wong KF (2002). Factors affecting demand for Hong Kong tourism in Hong Kong. Journal of Travel and Tourism Marketing 19(1-2):43-62.

Hobson P, Ko G (1994). Tourism and Politics: The Implications of the change in sovereignty on the future development of Hong Kong’s tourism industry. Journal of Travel Research 32(4):2-8.

Hsu TK, Tsai YF, Wu HH. (2009). The preference analysis for tourist choice of destination: A case study of Taiwan. Tourism Management 30(2):288-297.

Keum K (2010). Tourism flows and trade theory: A panel data analysis with the gravity model. Annals of Regional Science 44(3):541-557.

Law R (2000). Back-propagation learning in improving the accuracy of neural network-based tourism demand forecasting. Tourism Management 21(4):331-340.

Law R, Leung D, Cheung C (2012). A systematic review, analysis, and evaluation of research articles in the Cornell Hospitality Quarterly. Journal of Hospitality Quarterly 53(4):365-381.

Leder K, Torresi J, Brownstein JS, Wilson ME, Keystone JS, Barnett E ... Freedman DO (2013). Travel-associated Illness Trends and Clusters, 2000-2010. Emerging Infectious Diseases 19(7):1049-1073.

Lew A, McKercher B (2006). Modeling tourist movements: A local destination analysis. Annals of Tourism Research 33(2):403-423.

Li G, Song H, Witt SF (2005). Recent developments in econometric modeling and forecasting. Journal of Travel Research 44:82-99.

Lim C (1997). Review of international tourism demand models. Annals of Tourism Research 24(4):835-849.

Lim C (1999). A meta-analytical of international tourism demand. Journal of Travel Research 37(3):273-284.

Mansfeld Y (1990). Spatial patterns of international tourist flows: towards a theoretical framework. Progress in Human Geography 14(3):372-390.

Martins LF, Gan Y, Ferreira-Lopes A (2017). An empirical analysis of the influence of macroeconomic determinants on World tourism demand. Tourism Management 61:248-260.

Master H, Prideaux B (2000). Culture and vacation satisfaction: A study of Taiwanese tourists in South East Queensland. Tourism Management 21(5):445-449.

McKercher B (1998). The effect of market access on destination choice. Journal of Travel Research 37(1):39-47.

Morley CL (1992). A microeconomic theory of international tourism demand. Annals of Tourism Research 19(2):250-267.

Narayan PK (2004). Fiji’s tourism demand: The ARDL approach to cointegration. Tourism Economics 10(2):193-206.

Naude AW, Saayman A (2005). Determinants of tourist arrivals in Africa: A panel data regression analysis. Tourism Economics 11(3):365-391.

Page SJ (2009). Current issue in tourism: The evolution of travel medicine research: a new research agenda for tourism? Tourism Management 30(2):149-157.

Pearce D (1995). Tourism Today: A Geographic Analysis. Harlow: Longmans.

Pearce D (1997). Competitive destination analysis in South East Asia. Journal of Travel Research 35(4):16-24.

Peng B, Song H, Crouch GI (2014). A meta-analysis of international tourism demand forecasting and implications for practice. Tourism Management 45:181-193.

Peng B, Song H, Crouch GI, Witt SF (2015). A Meta-Analysis of International Tourism Demand Elasticities. Journal of Travel Research 54(5):611-633.

Petermann T, Revermann C, Scherz C (2005). Future trends in tourism. Working Paper 101. Office of Technology Assessment at the German Bundestag.

Prideaux B (2005). Factors affecting bilateral tourism flows. Annals of Tourism Research 32(3):780-801.

Radulovic L (2013). The role and potential of global distribution system amadeus for tourism development at the global level. Singidunum Journal of Applied Sciences 10(1):28-38.

Reisinger Y, Turner L (1997). Cross-cultural differences in tourism: Indonesian tourists in Australia. Tourism Management 18(3):139-147.

Reisinger Y, Turner LW (2002). Cultural differences between Asian tourist markets and Australian Hosts. Part 1. Journal of Travel Research 40(3):295-315.

Rosselló J, Santana-Gallego M, Awan W (2017). Infectious disease risk and international tourism demand. Health Policy and Planning 32(4):538-548.

Roupa Z, Zikos D, Vasiliopoulos A, Diomidou M (2012). Common health risks, required precautions of travelers and their customs towards the use of travel medicine services. Materia Socio-Medica 24(2):31-134.

Sebastian V, Felix T, Yvette R (2009). Tourism destination attractiveness: attractions, facilities, and people as predictors. Tourism Analysis 14:621-636.

Seyidov J, Adomaitiené R (2016). Factors influencing local tourists’ decision-making on choosing a destination: A case of Azerbaijan. Ekonomika 95(3):112-127.

Sussmann S, Ratchovský C (1997) A cross-cultural analysis of English and French Canadians vacation travel patterns. International Journal of Hospitality Management 16(2):191–208.

Song H, Li G (2008). Tourism demand modelling and forecasting: A review of recent research. Tourism Management 29(2):203-220.

Song H, Witt SF (2000). Tourism Demand Modelling and Forecasting: Modern Economic Approaches, Pergamon, Oxford.

Song H, Li G, Witt SF, Fei B (2010). Tourism demand modelling and forecasting: how should demand be measured? Tourism Economics 16(1):63-81.

Timothy D (1995a). Political boundaries and tourism: Boarders as tourism attractions. Tourism Management 16(7):525-532.

Timothy D (1995b). International boundaries: New frontiers for tourism research. Progress in Tourism and Hospitality Research 1:141-152.

Timothy D (1998). Cross-Border partnership in tourism resource management: International parks along the US-Canada border. Journal of Sustainable Tourism 7(3-4):182-205.

Tranfield D, Denyer D, Smart P (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. British Journal of Management 14(3):207-222.

Turner LW, Reisinger Y, Witt SF (1998). Tourism demand analysis using structural equation modeling. Tourism Economics 4(4):301-323.

UNWTO (2019). Tourism Highlights. 2018 Edition. UNWTO, Madrid.

Var T, Mohammad G, Icoz O (1990). Research notes and reports. Annals of Tourism Research 17:606-638.

Vellas F, Becherel L (1995). The theoretical economic determinants of international tourism. In: International Tourism. Palgrave, London.

Wahab S (1996). Tourism and terrorism: Synthesis of the problem with emphasis on Egypt. In Pizam and Mansfeld (Eds.). Tourism, crime and international security issues pp175-186. New York, NY: John Wiley.

Weed M (2006). Sports Tourism Research 2000-2004: A Systematic Review of Knowledge and a Meta-Evaluation of Methods. Journal of Sport and Tourism 11(1):5-30.

Witt SF, Witt CA (1995). Forecasting tourism demand. A review of empirical research. International Journal of Forecasting 11(3):437-475.

WTTC (2018). The economic impact of travel and tourism. London, UK. Zhang J, Jensen C (2005). Comparative advantage in tourism: A supply-side analysis of tourism flows, 5th Congress of the European Regional Science Association: Land Use and Water Management in a Sustainable Network Society, pp. 23-27, Amsterdam, The Netherlands.