

UDC 33

Elasticity of Demand in Tourism and Hospitality

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Abstract. This paper is concerned with the elasticity of demand in tourism and hospitality industries. The first part is a brief market review, explaining the role of tourism and hospitality in economics. The following parts determine demand in tourism and hospitality, its determinants and elasticity. The final part deals with the recent trend of the extreme tourism – space tourism.

Keywords: demand; elasticity; hospitality; space tourism; tourism.

A brief market review

Tourism is traveling to and staying in places for recreational, leisure or business purposes. Tourism comprises hospitality and transportation services. Hospitality is a part of service industry that includes food services, entertainment and accommodation. Both tourism and hospitality are major industries. In 2012 total economics contribution of tourism in GDP was about 9% or US\$ 6.6 trillion.

Tourism is important and in many cases vital for many countries. It creates opportunities for employment in service sector of economy. In 2012 tourism contributed 260 million in jobs. Besides, tourism & travel stimulates investments and generates export. In 2012 this sector contributed about 5 % or US\$ 760 billion in investments and about 5 % or US\$ 1.2 trillion in export [13]. Tourism sector also contributes to decreasing income inequality [11].

Developing of tourism industry has a positive impact on infrastructure and other industries' growth which is beneficial for both tourists and local citizens. A great example would be preparation for the Olympic Games in Sochi or any other host city. It is expected that up to 300 thousand tourists will visit Sochi during the Olympics. According to the head of Federal Tourism Agency of Russia Alexander Rodkov, 'It is important to make Sochi comfortable for visitors as we prepare for the Olympics'. More than 1 trillion rubles was invested in developing Sochi's infrastructure [14].

The economic importance of tourism can be measured by looking at the ratio of travel receipts relative to GDP. (Appendix, Fig.1) For example, in EU the ratio of travel receipts to GDP is one of the highest in Malta and Cyprus (14% and 10.2 % accordingly as of 2011) which confirms the importance of international tourism in these island nations. The ratio is even higher in Finland – it's 15 %. The highest international travel receipt in 2001 was in Spain and France, followed by Italy, Germany and United Kingdom. (Appendix, Fig. 2) [3].

All the examples above prove that tourism and hospitality sectors should be studied and analyzed. This includes researching and analyzing demand for tourism services.

Demand of tourism and hospitality

Tourism demand and its elasticity depend on many factors such as population, income, own and substitute price, taste and et cetera. Own and substitute price elasticity and income elasticity are used to describe tourism demand. Elasticity measures percentage change in tourism demand as a result of percentage change in price or income. Price and income elasticity are very useful to consider in relation to pricing, exchange rate and taxation.

A large number of empirical studies have attempted to estimate the price elasticity of demand for international tourism and the results vary. A wide range of products is involved in tourism. It makes it difficult to obtain appropriate measure of prices to calculate price elasticity. There are at

least two prices to consider: the price of travelling to the destination and the price of living for tourists in the destination. An average price elasticity of demand for international tourism is around -0.6 to -0.8 to -2. (Table 1) Tourism demand varies significantly as it depends on tourists' origin, destination and purpose of the travel so it can be both inelastic and elastic. Tourists who travel for business seem to be less sensitive to the price changes. It can be explained by the fact that business travels have less or none alternatives as opposed to leisure travels. Business travelers generally have less flexibility to postpone or cancel their trips. Holiday tourism and visiting friends and relatives (VFR) tourism are price sensitive markets. [1]

In some cases, including business tourism, price elasticity of demand can be positive. It means that more expensive (the Veblen effect) or more exclusive (the snob effect) destinations attract more tourists. For business tourism it may relate to the fact that the place's profitability is more important to the travelers than their trip expenses. [5]

Table 1: Average price elasticity of demand for tourism by destination and purpose

Countries							Purpose of travel		
France	Germany	Spain	The Netherlands	Ireland	Italy	US	Holidays	Business	VFR
-0.53	-0.33	-1.38	-0.61	-1.86	0.49	-0.42	-1.23	0.18	-0.93

Italy has a positive price elasticity value probably due to the large number of business and VFR travel to UK.

Price discrimination can be found in tourism industry because of different demand and its elasticity. For example, hotel chain Marriott consists different brands for different consumers, such as luxurious Bvlgari Hotel & Resort, the Ritz-Carlton; the Marriott Hotels & Resort (five stars hotels for business, individual and group travelers), Courtyard (four stars hotel for business travelers) and so on. [8]

Airlines and other travel companies use price discrimination to sell travel products and services to different market segments. For example, usually last-minute booked tickets are more expensive than tickets booked in advance. There are various booking classes for different prices and sometimes airlines use restrictions to make sure the market segments buy in the booking range that was established for them. For example Delta Air Lines has various group sales for groups consisting of at least 10 passengers or a wide range of fare classes from Economy to First/Business. [2]

The price of foreign currency is also important in international tourism demand. Tourists have to have currency of the country they are visiting in order to spend during their trip. Changes in currency exchange rate alter the prices paid for foreign goods by tourists in their home currencies. For example, travelling from US to UK decreases by 1.4% for every 1% increase in dollar/pound exchange rate [4].

Taxation of goods consumed by tourists can help to raise revenues and shift tax burden from home residents to tourists. The general rule is that the highest tax rates should be on goods with the lowest price elasticities. However if both tourists and local citizens consume the goods, they both will pay the tax. So the higher domestic consumption of the good is, the lower the tax rate on that good should be. Souvenirs are a good example of goods that help to maximize tax revenue from tourists because they are made for and consumed only by tourists [10].

Income elasticity of tourism demand is generally expected to be greater than one. In other words, tourism is considered to be a luxury good. Consumers are usually sensitive to the change in their income and that's why, for example, during financial and economic crisis in 2008 and 2009 number of tourism nights spent in collective tourist accommodations in the EU countries fell by 0.6% and 2.8% accordingly. However in 2010 the number of tourism nights increased by 0.8% and that percentage accelerated to 5% in 2011 and the developing continues [3].

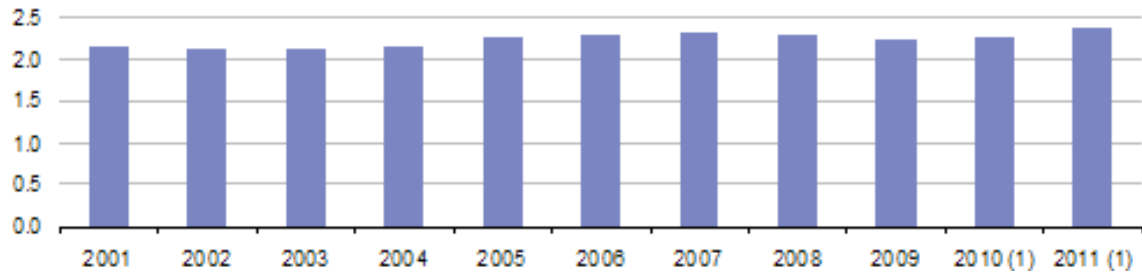


Figure 1: Number of nights spent in collective tourist accommodation, 2001-2011

Information about the values of income elasticity is also important. High values mean that demand for tourism increases significantly as income in the origin countries increases. Therefore the country of destination benefits from the long run growth of income in other countries. For example, according to some studies income elasticity of UK tourism is varies from 1.35 to 2.01 for different countries, so the UK tourism benefits well from increases in incomes in source countries. [1]

Table 2: Average income elasticity of demand for international UK tourism

France	Germany	Spain	The Netherlands	Ireland	Italy	United States
1.37	1.35	1.43	1.48	1.72	1.37	2.01

The difference in elasticity value for different origin countries can be explained by the geography factor: US are further from UK than France or Germany and require travelling overseas, so trips from US to UK are more expensive and dependent on tourists' income.

Substitute price elasticity of demand for tourism is generally expected to be positive: increases in price for one destination should drive tourists away to another destination and vice versa. Average cross-price elasticity of demand is 0.4. This means that trips to different destinations are substitutes but competitors' prices have little effect overall. However the effect can vary between different nationalities of tourists and purpose of visit. Some countries like Italy (-1.17) and Spain (-5.97) have negative cross-price elasticity of demand for UK and France tourism which means that two given destinations are complements. Cross-price elasticity value is difficult to interpret in tourism because so many factors influence demand. For example, it's possible that tourists from Spain and Italy make combined trips to UK and France [1].

Some non-price determinants of tourism demand

As mentioned earlier, tourism and hospitality demand are also influenced by non-price factors.

Political situation. Tourism industry is very sensitive to changes in political situation in the destination country and political conflicts drive tourists away. For example, in 2008 due to South Ossetia War trips to some Black Seas resorts such as Caucasus Mineral Waters were canceled and booking stopped. These days number of tourists in Abkhazia is relatively small because of difficult procedure of crossing the border and the requirement to buy insurance even for one day visit [15].

One-off events. Positive events such as concerts, festivals, competitions and etc attract tourists. For example, the Olympic Games in London had a positive impact on demand and revenue of hotels and restaurants. According to British Hospitality Association benefit to UK tourism is in the long term because extensive TV coverage boosts the number of visitors in future years [7]. One-off events can also be negative, for example, tourism demand in US fell after the 9/11 attacks in 2001.

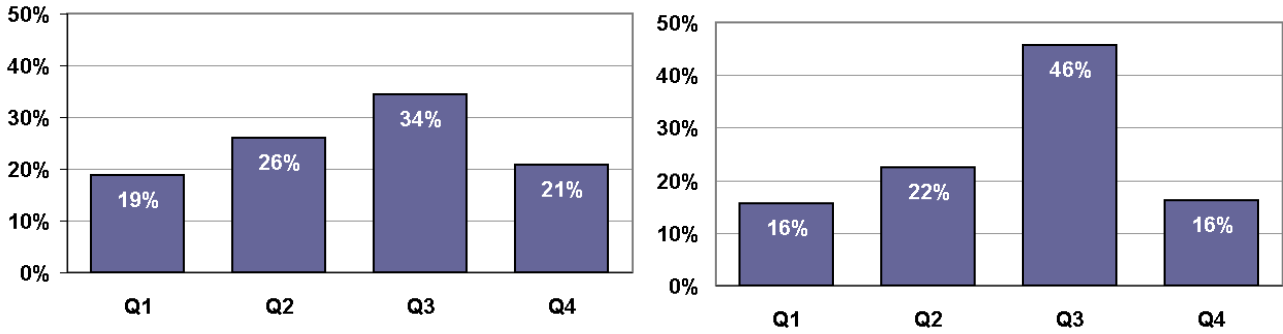


Fig. 2: Distribution of holiday trips (left) and nights spend (right) in the four quarters of 2009

There are many other factors that influence demand such as marketing, tourists' taste but their influence is difficult to measure due to lack of suitable data.

Space tourism

A number of startup companies have sprung up in recent years, hoping to create a space tourism industry. Commercial spaceflights have started in 2001. Price and income are the main determinants of currently humble demand for space tourism. There are two types of space travels: orbital and suborbital. Orbital space tourism opportunities are expensive and limited and today only Russian Space Agency provides transport for such travels. During the period 2001-2009 the price of a spaceflight has been US\$20-35 million. All of 8 space tourists who could afford such a trip are millionaires.[12] According to space tourism surveys, nearly two thirds of respondents would travel to space if price wasn't an issue. [6] It is expected that as soon as the price falls, the demand for space tourism will soar. So it can be assumed that space tourism demand is both price and income elastic. There are also non-price issues which influence demand, for example, health risks and safety, comfort and training for of space travels. However space tourism is predicted to expand and become mass attainable. Thousands of people will be travelling to orbital and suborbital destinations, the Moon or even other planets. Long training won't be required anymore and the safety of vehicles would be guaranteed.

Appendix

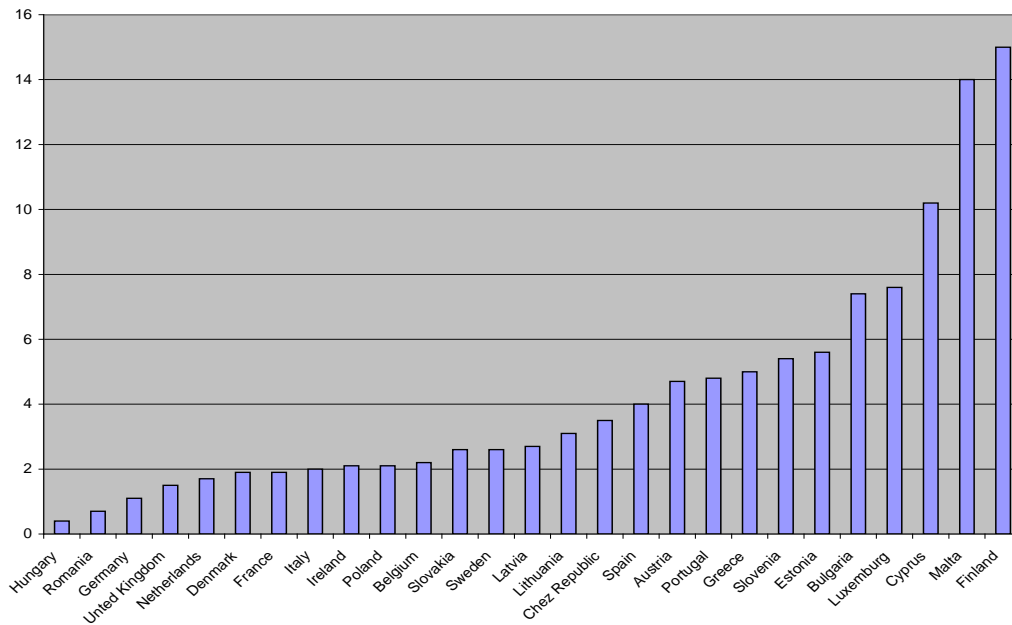


Fig. 3: International travel receipt-to-GDP ratio of EU countries in 2011

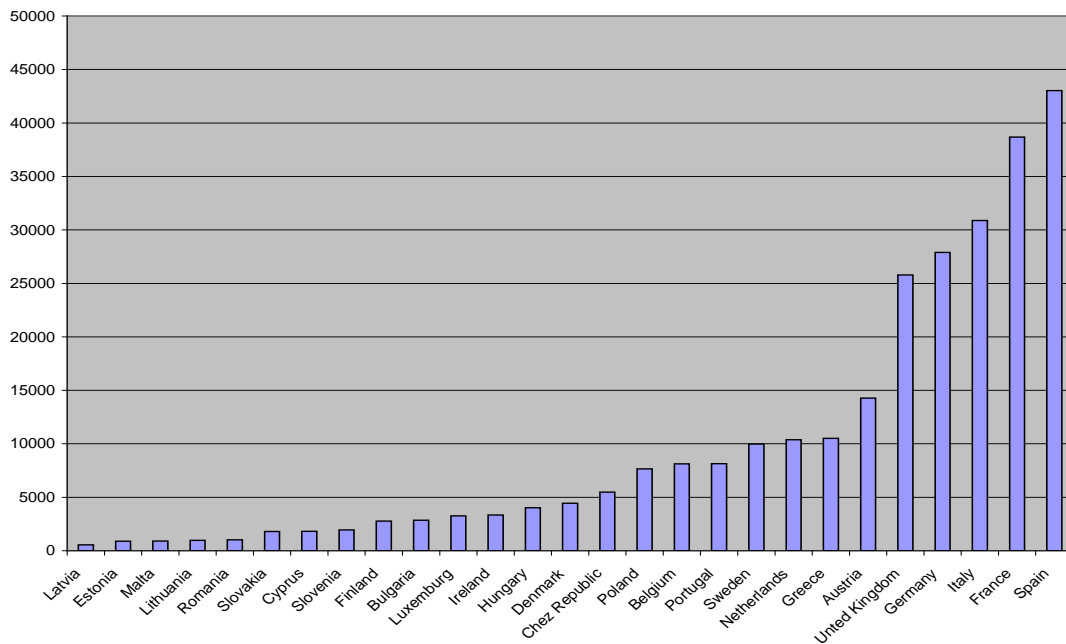


Fig. 2: International travel receipt in 2011, EUR million

A handful of companies such as Virgin Galactic offer suborbital flights for \$200,000. "Based on market studies, we expect to see this type of activity result in a billion-dollar industry within the next 10 years," says George Nield, associate administrator for the Federal Aviation Administration's Office of Commercial Space Transportation (AST). Rocket planes and spaceships are being built and tested and Virgin Galactic expects to begin flights in 2013. The company has already collected \$60 million in deposit for the rides [16].

Space tourism industry is predicted to grow significantly and become a great source of income for the government and private enterprises. The hospitality industry will be largely involved and will create new career opportunities [9].

Conclusion

Tourism and hospitality are billion dollar industries which have a positive impact on other industries. They are great sources of income and tax revenue. Both industries create job opportunities, stimulate investments and generate export. So it is essential to study and analyze tourism and hospitality industries and demand in these industries. Income elasticity of demand in tourism and hospitality indicates that they are luxury goods. However people have always loved and needed travelling, so tourism and hospitality industries keep developing with space tourism being the final frontier of adventure tourism. Price elasticity of demand varies for different segments of tourism market which explains price policies in tourism and hospitality industries. Understanding the theory behind demand and it's elasticity is very important for policymakers and companies.

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Эластичность спроса в туризме и гостеприимстве

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Аннотация. Эта статья дает представление об эластичности спроса в сфере туризма и гостиничного бизнеса. Первая часть представляет собой краткий обзор рынка, на котором объясняется роль туризма и гостеприимства в экономике. Следующие компоненты определяют спрос в сфере туризма и гостеприимства, его детерминанты и эластичность. Заключительная часть о последнем рубеже экстремального туризма – космическом туризме.

Ключевые слова: гостеприимство; космический туризм; спрос; туризм; эластичность.