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TOURISM TAX MODEL FOR DEVELOPMENT OF REGIONS

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Abstract
Tourism enables export, creates work places and additional income for regional development. In 2020, due to Covid-19 virus the global tourism industry shrank by 72% increasing unemployment, bankrupting small companies, which was most evident in regions. The Organisation for Economic Co-operation and Development (OECD) has mentioned the need for establishing the competitive advantage of Latvia in surrounding regions as one of the challenges of the Tourism Policy of Latvia. In order to succeed, there is a need for additional funding, which can be acquired through tourism tax which is a well worldwide known method, also in Latvia, with more than 100 years of history. Globally, there are different models of tourism tax. However, there is no clear indication towards the applicability of a single tourism tax model for development of regions which would be applicable to the case of Latvia. This research reveals that despite the identified problems, introduction of tourism tax is a well based decision which is rationalised through positive impact on the number of tourists. The deployed AHP method defined the model Fixed rate model for enterprise as the most appropriate option for the given situation.
Key words: regional development, analytic hierarchy process, tourism tax model.

Introduction

Tourism is one of the most important sectors of economy in the world. The tourism industry has positive impact on countries globally in following domains: (1) generated additional income (for development of infrastructure, regional development, e.g.) (Agaraj & Murati, 2009); (2) increased exports; and (3) creation of new workplaces (WTTC, 2019). The annual research on the economic impact of Travel & Tourism by the World Travel & Tourism Council (WTTC) indicates that in 2019 the tourism sector accounted for 10.3% of global GDP (WTTC, 2019) and for 330 million workplaces or 9.9% of the total employment (Grimaldi, 2019).

According to the data by World Tourism Organisation (UNWTO), there were almost 900 million (72%) less international tourists in travel destinations during the period from January to October 2020 compared to the corresponding period in 2019. This means that the overall decrease of tourism exports can be estimated at 772 billion euros. Reduction of international travel creates losses in terms of income at the amount of 1.07 trillion euros. Due to Covid-19, estimated 100 – 120 million direct jobs have been lost in small and medium business sector, which are located in the regions (UNWTO World Tourism Barometer, 2020). Meanwhile, tourism is also associated with negative impacts: (1) degradation of local, natural environment due to rapid development of tourism activities (Pazienza, 2011); (2) air pollution due to air transport (IATA, 2018); (3) pollution created by tourism (Valleab, Pintassilgoab, Matiasab & Andréc, 2012). In order to reduce the impact of tourism on the environment, to develop appropriate infrastructure, manage the pollution and waste management, as well as to promote tourism development, every state, region, local-government are in a need for financial resources. One of the solutions to acquire them is through introduction of tourism tax. The UNWTO has defined 45 different taxes that are collected from tourists. Over 30 of such taxes are collected directly from tourists themselves and 15 from tourism companies (Bratic, Predrag, & Devčič, 2012). The opposition for the implementation of tourism tax has been associated with the following negative aspects: (1) implementation of tourism tax can negatively impact the tourist flow; (2) non-optimised tourism tax system can impact functionality of the system. **Research problem:** the unclear implementation approach of tourism tax model for the regional development. **Research aim:** defining of the most appropriate tourism tax for regional development. **Research tasks:** (1) analyse scientific and literature sources; (2) compile information on the tourism tax worldwide; (3) refine and develop the methodology; (4) evaluate the appropriate tourism tax model for regional development; (5) collect information and provide conclusions.

Materials and Methods

Research place: Riga planning region in Latvia. *Research period*: January 2018 till December 2020. The theoretical part of research is based on scientific articles and literature, documents defining tourism development and key principles of tourism tax system. In order to evaluate the benefits arising from introducing tax system, the good practice and changes in number of tourists in regions with such system were assessed. The necessary statistical data on number of tourists abroad and in Latvia were acquired through publications of the World Bank, statistical outlooks, databases and annual overviews by the Central Bureau of Statistics of Latvia (CSB). Further analysis was aimed at selected 12 regions from countries covering all tourism regions (UNWTO, 2016) in which the tourism tax has been introduced. There are

considerably more regions selected for the study from Europe, since there is higher number of countries with introduced tourism tax system in this region. Also, it is evident by the statistics that Europe is attracting considerably more foreign tourists compared to other regions (Roser, 2018).

The practical part of the research is based on series of interviews. The first cycle of interviews took place from 30.04.2019. to 01.11.2019 with the aim of defining the problems related to implementation of tourism tax system and included six interviews with tourism industry experts. The professional activities of experts were directly related to the tourism tax or its introduction as well as interviews with members of the local municipality.

The second series of interviews took place over the period 01.11.2019. – 14.05.2020. while pursuing an analysis on the most appropriate model for introduction of the tourism tax system for region development based on the Riga planning region case with the use of Analytic Hierarchy Process (AHP) method. The expert choice was based on the premise that participants have to represent the tourism industry, hospitality sector which are in most contact with the introduction of tourism tax, as well as there was a need to include members of association and representatives of public and local institutions (also the RTAB) that are responsible for introduction of the tax system.

Research limitations: (1) the diversity of titles of tourism tax create obstacles for proper collection of information; (2) the limited access to the information from archives and databases from other countries to carry out proper historical analysis of introduction of the tax. (3) time and quality limitations of the sources of tourism development in Latvia, also limited by the language barrier in the form of historical written text in old Latvian orthography based on German phonetic principles; (4) limited access to undisclosed internal public governance data on the collected amount of funds collected as tourism tax. The Latvian tourism tax up to this moment has been a topic of research that has been investigated thoroughly while a negative attitude towards the tax system by the society and industry members has been observed (Geide, 2019). This has manifested also in the response rate by the invited expert interview and survey participants: of 11 invited experts only 5 responded and agreed participating in AHP sessions.

The AHP is a multi-criteria decision making method including quantitative and qualitative analysis, which was chosen, because it is well suited for complex multi-decision making in complicated problem situations (Frolova, 2007). Of the three types of AHP: (1) calculation of criteria weights; (2) calculation of point option matrix; (3) option ranging (Università degli Studi di Siena, 2019), authors based on the foreign research experience for evaluation of results chose calculation of criteria weights (Verly, Lidouh, & De Smet, 2011).

The invited experts compared problem pairs and evaluated the intensity level of their co-interaction in the hierarchy. Authors in this research use four level hierarchy scheme (Figure 1) (Saaty, 1987), where Level 1 (M) is the aim of the work – to find the most appropriate alternative (A), which can be done while evaluating and comparing the chained pair, Level 2 (criteria group KG), Level 3 (criteria in criteria groups KKGr) and Level 4 elements (A_n)

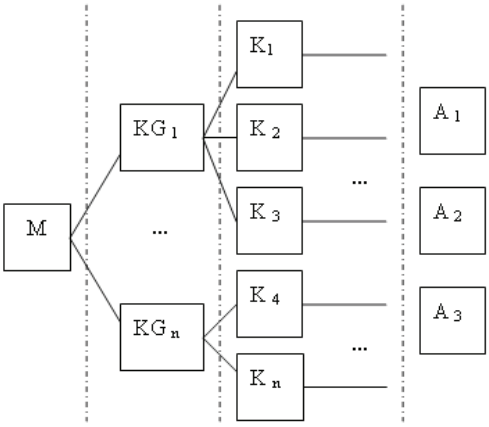

Figure 1. Four level criteria hierarchy of alternative assessment four levels based on principles of AHP method.

The assessment of relative importance of the criteria is carried out by the experts, whilst using criteria relationship importance classificatory, which is based on the basis of criteria relative importance nice point scale and includes description of each point of the scale (Bolevics, 2018).

The KG and alternative was chosen based on the theory of the research, while defining the criteria groups, which are related and those institutions which are interested in introduction of tax. The KKGr are the interests of the related groups in the introduction of the tax. The alternatives (A_n) were chosen based on analysis of the tourism tax modules in countries abroad. The criteria alternatives were chosen based on the selected basis of theory and the views expressed by experts during the interviews on the needed framework of the tax system. After filling of the hierarchy matrix a criteria weight calculation for each of the hierarchy elements was carried out, which indicates of their importance compared to each criteria of higher level.

Based on Random Index value matrix created by the AHP author T.Saaty, where the table includes average random consistency (RI) for the different size of possible matrixes, based on which it is possible to calculate the average random consistency index (RI)

values in order to acquire the balance Consistency ratio (CI). CR has to be less than 10% or 0.10, in seldom cases it can be 0.20. If CR is not within these limits, then experts have to revaluate their assessments, or they have to redefine the task (Saaty, 1987). With respect to the General Data Protection Regulation (GDPR), which guarantees the private persons rights to privacy (Datu valsts inspekcija, 2019), expert opinions are anonymised and are described as Expert 1 (E1), Expert 2 (E2), etc.

Results and Discussion

Review of tourism tax in Europe and worldwide

Globally, the tourist tax has been named differently: pillow tax (Lithuania), eco tax (Balear islands), bed tax (New Zealand), accommodation tax (Germany and Austria), tourist tax (Belgium, Spain and Bulgaria) and others. In Latvia, the tourist tax was defined as the *public* or *local government tax*, which is collected from the tourists. These can be entry, exit, hotel, resort tax, etc.

Globally, the first instance of tourism tax can be traced back to France and Italy, where in 1910 tax was introduced in the seaside resorts (Gazzetta ufficiale, 1938). Meanwhile in 1946 in the US, New York city introduced a hotel tax despite the criticism by the New York hotel association. The tourism tax exists in multiple countries, for instance, Russia, Tunisia, Ukraine (Lebedeva, 2017), Japan, New Zealand, Turkey, Peru, multiple US states including Alaska (ETOA, 2019), Bhutan (Tourism Council of Bhutan, 2018), Zambia, Canada (City council of Brandon, 2019).

In the European Union, already 18 out of 27 Member States (Table 1) have introduced tourism tax, it has not yet been introduced in Finland, Cyprus, Denmark, meanwhile in Estonia and Latvia the introduction of a nationwide tourism tax is considered. The amount of the tourism tax (Table 1) is not an obstacle for the tourists to travel to Paris, Brussels or Amsterdam (Davidson, 2018).

Table 1

Tourism tax in Europe (1994. – 2018.)

Country	Place	Tax for night per person, EUR	Tax Introduction Year
Austria	All 9 provinces	0.15 – 2.18	2010.
Belgium	Antwerpen, Bruges, Ghent	2.00 – 2.50	2016.
	Brussels	2.50 – 7.50	2017.
Bulgary	All country according to law	0.10 – 1.53	2011.
Czech Republic	Prague	0.50	2014.
France	Paris Lion	0.20 – 4.00 0.22 – 2.47	1994. 2010.
Croatia	-	0.21 – 0.73	2008.
Italy	81 towns and resorts	1.00 – 7.00 based on the town	2011.
Lithuania	Nering (Nida)	5.00 – 45.00	2008.
	Druskininki	1.00	2011.
	Palanga	0.30	2012.
	Kaunas	0.50	2015.
Malta	All country	0.50 – 5.00	2016.
Netherlands	Tourism tax is introduced in 421 local municipalities	5% of the hotel room price	2006.
Poland	Tourism tax is introduced in 233 local municipalities	From 0.50 to 3.57 depending on the municipality	2018.
Portugal	Lisabon, Porto	1.01	2015.; 2018.
Romania	Bucharest	3% of the hotel room price	2012.
Slovakia	Bratislava	1.65	2017.
Slovenia	Vaneča, Fokovci, Vino, Toplice	1.01	2003.
Spain	Balearic Islands Cathalonia	0.50 – 2.00 0.45 – 2.25	2016. 2012.
Hungary	Budapest	4% of the hotel room price	-
Germany	Cologne, Berlin	5% of the hotel room price	2010.

While pursuing analysis of scientific literature and statistics globally and in Europe (Spain, Italy, Netherlands, Czech Republic, Lithuania, Butan, Malaysia, Zambia, New Zealand) (ETOA, 2019), where tourism tax has been introduced there has been no indication that the introduction of tax impacts the tourist flow negatively (UNWTO, 2018). Therefore, the argument that the introduction of the tourism tax could negatively impact the tourist flow cannot be approved.

Review of tourism and tourism tax in Latvia

In Latvia, the first occasion of tourism tax has been identified in 1891 when it was introduced in almost all of the resorts in Latvia: Baldone, Jurmala, Kemeri, Ogre, Sloka and Cesis. In Jurmala, the tax was existent for the longest period of time – 129 years. Due to the complicated administrative process, the tourism tax for hotels was cancelled, but from 1996 onwards entry cost for all non-local vehicles was introduced (Latvijas Vēstnesis, 2000), that in 2019 accounted to income of 2.81 million euros. These incomes were used to promote tourism, optimum environment; improvements for development of resorts, nature protection, heritage protection, as well as for upkeep of public safety and order (Valsts kase, 2019). Trials to introduce tourism tax in Latvia have encountered fiasco in Abava heritage valley (2010) and Carnikava (2011), because it was introduced without further discussion with the private sector, which were deemed to be the sole collectors of the tax; also, neither evaluation of the tourist flows, nor analysis of the tourist impact on the environment was carried out (Puriņš, 2011).

However, in order to reduce the negative impact that is caused by extra influx of tourists, i.e., littering of the territory, damage to the tourism infrastructure, illegal vehicle movement in the dune territory, discussions were held in the Rucava municipality Pape and Nida, as well as in Pavilosta (Baļčūte, 2017; Pāvilostas novada dome, 2018).

The tourism in Latvia as well as globally has been negatively impacted by the Covid-19 pandemics. The limited or fully stopped flow of tourists has left negative long-lasting impacts on the tourism industry. Already in May 2020 a major dive in the number of tourists was evident: the number of served local and international visitors dropped by 88.5% compared to similar period in 2019. Visitors in tourist hospitality locations stayed for 77.5 thousand nights, which is by 84.2% less than in May 2019 (CSB, 2020).

In the settings of more intense globalisation in the World and Europe, Latvia needs to utilize the comparative advantages in order to develop territories with the highest sustainable development potential. Organisation for Economic Co-operation and Development (OECD) has noted the need for establishing the competitive advantage of Latvia in surrounding regions as one of the challenges of the Tourism Policy of Latvia (OECD, 2018). In order to pursue these activities, additional financial resources are needed and one of the means for collecting this is through the tourism tax. In Latvia, there is a certain opposition against introduction of the tourism tax (Okdaldere, 1990).

This has been portrayed throughout the interviews carried out by authors: (1) it is believed that the implementation of tourism tax would cause significant jump in accommodation service prices, which could lead to reduced competitiveness of Latvia among the Baltic States; (2) there is a disbelief in proper and translucent management of collected resources; (3) it is unclear how the collected resources will be used; (4) there is a lack of trust in conduct of public institutions; (5) the financing for the tourism sector could be allocated while taking it away from other sectors and other needs of national budget. Nonetheless, authors have to agree with the respondents that due to mis-managed functionality of the tourism tax system, it could leave negative consequences on the regional development. For instance, over the course of past years the number of available hotels has increased and the impact of shared economy has also increased. These shared systems allow to share property, skills and other assets non-profit or for profit when these assets are not fully utilised by the owners themselves (Rūse, 2017).

Approximately 10% of tourists use hospitality services offered on Airbnb or similar platforms, thus creating the so called "grey area" for proper collection of taxes and thus impacting the regional development (Airbnb LLC, 2020).

It has to be noted that administration of taxes through Airbnb and Booking.com is a collective problem of Europe. However, foreign researchers indicate that tourism sector in regions subsidised through tourism tax could ensure proper functioning and development (Rey-Maquieira, Lozano, & Gomez, 2009; Forsyth & Dwyer, 2010; Sheng, 2017).

Analysis of AHP method

In order to define the most proper type of tourism tax for regions of Latvia, i.e., first hierarchy level (Figure 1), further expert interview data of the second hierarchy level in criteria group (KG) was analysed: (1) System functionality; (2) Tourist interests; (3) Entrepreneur interests; (4) Regional (municipal) interests and (5) National interests.

In summarised assessment over all criteria groups (Table 2), the highest evaluation was given to criteria Regional (municipal) interests – 0.265, thus according to the assessment of experts, this is the most significant criteria for facilitation of introduction of tourism tax.

Table 2

Comparison of criteria groups (KG)

Criteria groups	Criteria weight (W)				
	E1	E2	E3	E4	E5
System functionality	0.16	0.19	0.125	0.19	0.24
Tourist interest	0.19	0.16	0.194	0.19	0.24
Entrepreneur interests	0.19	0.25	0.187	0.19	0.19
Regional (municipal) interests	0.25	0.19	0.265	0.25	0.13
National interests	0.19	0.19	0.177	0.16	0.19

Table 3

Criteria in Critery Groups (KKgr) comparison from the regional (municipal) perspective

Criteria in Critery Groups	Criteria weight (W)				
	E1	E2	E3	E4	E5
Financial resources savings	0.213	0.159	0.195	0.159	0.195
Investments in infrastructure	0.186	0.190	0.195	0.190	0.195
Increase of budget income	0.165	0.216	0.164	0.216	0.164
Development of tourism sector	0.250	0.247	0.252	0.247	0.252
Communication and improvement of the brand	0.186	0.190	0.195	0.190	0.195

This criterion is important because the local municipalities carry out the implementation and administration functions.

A significant dispersion in assessment values can be observed 0.125 – 0.265 (Table 2), which indicates of diversity in expert opinions. The second highest level of assessment was acquired by criteria Entrepreneur interests¸ which is important to take into account that entrepreneurs in regions would be directly involved in collection of such a tax from tourists. While assessing each criterion separately, authors concluded that when evaluating Tourist interests, dispersion is moderate, 0.16 – 0.24. When comparing with the criteria Regional (municipal) interests, the Tourist interests have moderate weight. Similarly, experts estimate Entrepreneur interests, where assessments are similar – criteria weight amplitude is 0.137 – 0.193. Taken into account the fact that tourists and entrepreneurs are the key factors in tourism tax system, the fairly similar assessment by the experts is understandable. Criteria Regional (municipal) interests is valued equally similarly by experts, the dispersion is from 0.187 to 0.19. It should be noted that interests of municipalities have been valued higher than interests of tourists.

In the third level of hierarchy when evaluating criteria groups (KKgr), they were evaluated based on the perspectives of selected groups: (1) *Tourist interest group – New tourism products;* (2) *Entrepreneur interest group – Investments in infrastructure*; (3) *Municipal interest group – Development of tourism industry in regions*; (4) *National interest criteria group – Possible financial resources savings and increased budget income.* Within KKgr five specific criteria for each group were selected, based on the theory of the research. Taken into account that each group has its own interests, KKgr was split into two parts:

Tourist interest criteria: (1) *Investments in infrastructure*; (2) *Improvements to the nature and environment*; (3) *Sustainability of nature and environmental resources;* (4) *Cultural heritage;* (5) *New tourist products.*

Entrepreneur and municipal interest criteria: (1) *Financial resources savings;* (2) *Investments in infrastructure;* (3) *Increase of budget income;* (4) *Development of tourism sector;* (5) *Communication and improvement of the brand.* These KKgr criteria were evaluated from the perspective of criteria groups. For instance, investments in infrastructure was evaluated from the perspectives of tourists, entrepreneurs, regional (municipal) and national level.

After compiling the total assessment results from the regional (municipal) perspective, authors conclude that expert opinion is unanimous, whilst evaluating the criteria *Development of tourism sector* with minimal criteria weight disparity at 0.247 – 0.252 (Table 3). Expert assessment coherence indicator KKgr in comparison from regional (municipal) perspective < 0.10, it means a good expert coherence level. Authors believe that the results correspond with the goals of

the tourism tax introduction, thus, it also functions as a means for attracting additional financial resources to the tourism sector. The increase of income is not defined as a priority because, at the perspective of municipal administration, financial resources are only used as an instrument for development of tourism industry, not as an end in itself to collect more resources.

While carrying out the analysis of the Highland Council tax introduction strategy documentation, authors selected different types of tourism tax introduction models: (1) *Directly charged to tourists* – depending on the type of how the tax is charged from the tourist – on the border crossing, in the airport, as a charge on entry, as an exit charge, etc. (2) *Progressive tourist tax model* – tax and its amount is dependent on the size of the company. For instance, the visitors of Rome have to pay 3.00 euros per person per night, whilst staying in a two-star hotel, but 7.00 euros when staying in five-star hotel; (3) *Flat or fixed rate model*, standard costs are applied similarly for all categories of accommodation services, independent of the star rate; (4) *Tax liability model* – this model has been utilized in Brussels where the tax is dependent on the space and type of accommodation unit as well specific additional services that are included in the room suite (for instance, minibar). The tax payment can be applied evenly throughout the year or it can be season dependant allowing to cash in higher tariff tax during the high season (The Financial Scrutiny Unit of Scottish Government, 2018).

To sum up the assessment of all alternatives within the 4th level of hierarchy, the highest criteria weight was -0.359, attributed to the criteria *Fixed rate model for enterprise*. Therefore, the fixed rate – is an undefined sum of money, which is decided on by the local government and is applied to each and every visitor staying at local hotels of a given municipality.

Conclusions

Tourism tax exists worldwide for more than 100 years. The UNWTO has identified 45 specific tourism taxes. Over the period 1994–2018. the tourism tax has been introduced in 18 out of 27 EU Member states and the costs have varied from 0,15 to 45,00 euros. Analysis of the scientific literature has indicated that introduction of tourism tax has no negative impact on the tourist flow. In Latvia, the first tourism tax was introduced already in 1891 for visitors of the resorts and had been in place in health resorts until 1942. Since 1996 an entry tax is in effect in Jurmala town, where in 2019 it brought in 2.81 mil. euro revenue, money that was further used for tourism facilitation purposes, development of resorts, improving of the public outdoor facilities, environment protection, protection of cultural heritage, as well as for upkeep costs, public order and security service costs. Challenges in introduction of tourism tax in Abava valley (2010) and Carnikava (2011) were caused by shortcomings of public communication with the stakeholder groups, tourist flows, and neglect of the impact on environment. The increase in tourist flows and their impact on environment brings up the question of introducing a tourism tax in several regions, incl. Pape and Nida in Rucava county as well as in Pavilosta county. Meanwhile, the negative impact of Covid-19 pandemic causes serious financial hardship to the tourism industry and thus creates need for more financial resources, which could be attracted in the form of tourism tax. The conducted expert interviews revealed that: (1) there is a common belief that introduction of tourism tax could drive up prices of accommodation service thus hampering the competitiveness of tourism industry of Latvia in the Baltic region; (2) there is a disbelief in proper and translucent management of collected resources; (3) it is unclear how the collected resources will be used; (4) there is lack of trust in conduct of public institutions; (5) the financing for the tourism sector will be allocated from other sectors and other needs of national budget; (6) the tax could negatively impact the market through increased rates of transactions in the "grey area". According to experts' opinion voiced through AHP methodology approach, the introduction of the *Fixed rate model for enterprise* was chosen as the most appropriate model for Latvia.

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