

## Economic impact of MICE tourism in Slovak Republic

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**Abstract.** The Meetings, Incentives, Conventions and Exhibitions (MICE) sector of tourism has been rapidly expanding until the world met COVID-19. Purpose of this research is to analyse and identify the economic impact of congress tourism as a part of MICE sector in Slovakia with regard on GDP and revenues of accommodation services. To achieve this, first, paper discusses the latest data in MICE tourism sector of Slovakia in comparison with other countries. To accomplish the main goal secondary data were collected and the variables were assessed. Correlation and regression analysis were used to analyse impact of MICE tourism towards on GDP in the country and revenues of accommodation services. The paper continues by discussing the results which revealed that there is a significant relationship between the number of events in MICE tourism and GDP of Slovakia. Apart from this, the results also show that there is no significant relationship between revenues of accommodation establishments in Slovak republic and average expenditure on trip for a business purpose. Lastly, this study presents an overview on the MICE tourism in Slovakia taking research results.

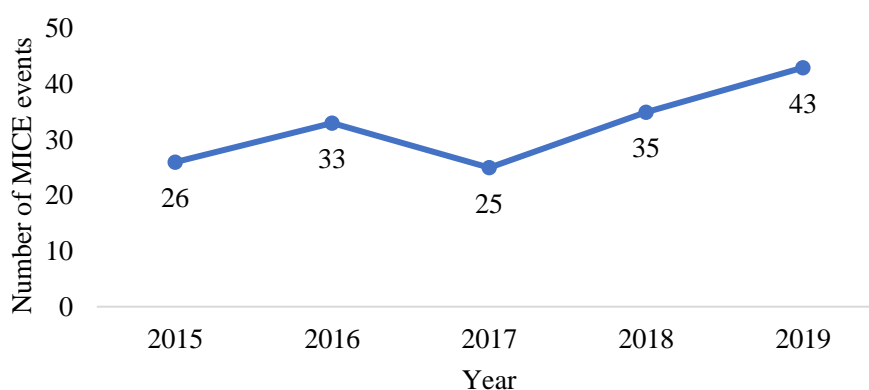
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**JEL classification:** Z32, C02, E44, A10

### 1 Introduction

MICE tourism as a shortterm for meetings, incentives, conferences, and exhibitions, faces due to a pandemic situation several significant challenges. The year 2019 represents a steppingstone after which the MICE industry will probably never be the same due to the COVID-19 pandemic situation. This fact gives us an opportunity to

reflect the previous years in Slovakia of meetings data which could be useful in terms of new thinking how to move forward in post – pandemic reality (ICCA, 2020).



**Fig. 1.** Total number of international association meetings 2015 – 2019 in Slovakia  
Source: ICCA, 2020

Figure 1 shows an increasing number of international events from 2017 in Slovak Republic. The statistics of events in MICE industry collects the global community and knowledge hub for the international association meetings industry ICCA – International Congress and Convention Association. To conclude, ICCA provides regular information from the field of MICE, compiles rankings and creates a database of international meetings. Data shown in Figure 1 consist only of those meetings that meet ICCA's stringent assessment criteria, which means rotating between at least 3 countries, have a proven attendance of at least 50 participants and are held on regular basis.

It is important point out that Slovakia is attractive for the needs of this type of tourism due to its location in Central Europe, membership the EU and Schengen, good transportation accessibility and political stability. The Slovak Tourist Board (Slovakia Travel) is aware of the MICE segment importance and that is the reason why the Department of Congress Tourism was created in September 2009 focused on presentation Slovakia as a destination of congress tourism (Danielová, 2017).

However, in comparison of destination performance in attracting international meetings, it is important to emphasise that Slovakia is not a leading country in MICE tourism, but its performance has increased throughout the years. According to the latest data Slovak republic occupied 59<sup>th</sup> place (with 43 events) in the ranking of the most popular congress destinations that the International Congress and Convention Association (ICCA) compiles every year. In comparison to V4 countries (Poland -19<sup>th</sup> place with 213 events, Czech Republic - 24<sup>th</sup> place with 171 events and Hungary -36<sup>th</sup> place with 111 events), Slovakia is ranked the worst (ICCA, 2019).

### **1.1 Introduction to MICE tourism in Slovakia**

MICE tourism belongs to an important part of Slovak tourism. This fact confirms the Slovak Development Strategy until 2020 where the congress tourism is defined as the one of the central forms of tourism for which has Slovakia the best conditions (Ministry of Transport, 2013).

The latest data show the situation of MICE tourism in the year 2019, which was the last year before this form of tourism was converted into online events because of global pandemic situation.

From the geographical point of view 34,7% of events are held in Bratislava region (SO SR, 2020). Bratislava belongs to the one of the most significant centres of MICE tourism thanks to its accessibility, innovation, excellence in execution and accompanying infrastructure or services, such as transportation system and accommodation which are key factors for successful events.

The latest data also show that most of the events in Slovakia (64,7%) are a one-day thing. Of course, there are also events which last 2 days (23,9%), 3 days (8,3%) and more than 3 days (3,2%) (Ministry of Transport, 2020).

Another quantification important to mention is diversification according to number of attendees and season. 91,8% of attendees of events which took place in Slovakia consisted of 50-249 people. The most events (29,7%) were held in the second quarter of the year.

This paperwork presents a brief overview of MICE tourism in Slovak Republic, evaluates its development and importance, and analyses its impact on the economy of the country.

### **1.2 Literature review**

It is important to highlight the fact that organisation of MICE tourism events is attractive and economical interesting for hosting countries, cities, agencies and business entities because this form of tourism brings more economic benefits than just the consumption of primary services. Consumption of specific services related to MICE tourism includes professional program of congress, accompanying program and wide range of intermediated personal services (Novacká et al., 2010).

There are many previous studies that researchers have done in this sector. Here is a short overview of the most relevant ones in relation with economic impact.

The first article is by Fan (2017) where he analyzed the development of MICE industry to promote regional economic growth. The results of empirical research show that the development of the exhibition industry can promote the regional economic growth through studying the relationship between comprehensive economic benefits of MICE industry development and the GDP increasing.

Bradley et al. (2002) deal with the economic impact of MICE tourism. According to them the tourists of meeting events are major users of the entertainment and accommodation facilities of the locations they visit, and they spend more money on an average in comparison to leisure tourists. They emphasise that the potential for direct and indirect job creation in relation with MICE industry is high. Following this fact,

they highlight the importance and growth of this form of tourism which is reflected by the construction of centres and buildings for conferences and conventions which are not only held in the major cities of the world but also increasing in secondary and tertiary tourist cities and locations.

Dwyer and Forsyth (1997) in their research paper discuss issues related to the economic significance of MICE tourism. They describe MICE sector as an important generator of tourism expenditure, investment, foreign exchange earnings and employment, however, the economic significance of MICE tourism remains under-researched because of lack of data available for the estimation of magnitude of these effects.

## **2 Methodology**

To understand better the problematics of MICE tourism is important to understand that this form of tourism is a multifaced industry. Its activities require, to a varying extent many different players such as transport, accommodation, provision of pre- and post-conference tourist opportunities, specific venues-purpose built centres and hotels, services of professional conference and exhibition organisers, catering services, social programs for delegates and attendees, specialized technical support (f. e. audio-visual services) etc.

Unfortunately, there are no detailed data available which would quantify each player in MICE tourism mentioned above. Another point is, that data obtained from the national statistics consists only of congress tourism, which is a part of MICE tourism. Therefore is important to understand that part of the conducted analyse in this paper relates to congress tourism which is a part of MICE tourism.

When it comes to processing these data for the purpose of analysis is important to emphasise that this study used secondary data to collect information and construct findings. The analysis process was based on the objective of this study which is to analyse and identify economic impact of congress tourism as a part of MICE sector in Slovakia with regard on GDP and revenues of accommodation services.

Important information necessary to mention is that we processed the most detailed available statistical database that reflects the present condition of MICE tourism in Slovakia. The Ministry of Transportation and Construction of the Slovak Republic as well as the Statistical Office of the Slovak Republic probably have more detailed information which are unfortunately not publicly available.

The required data for the purposes of this study were collected for a period of 5 years (depending on a variable). The variables used in this study include GDP per capita, average expenditure on trip for a business purpose and number of events in MICE tourism. These variables are assessed with the help of correlation and regression analysis to identify the impact of tourism towards the GDP in the country.

Assuming that combined economic benefits of the MICE tourism contribute to GDP growth, there is a correlation between these two parameters and the linear correlation function is as follows (Fan, 2017):

$$Y_t = \beta_0 + \beta_1 * X_t + \varepsilon_t$$

Where Y represents a GDP per capita in Slovak Republic in a year t and X is a economic benefit as a result of MICE tourism expressed through number of events generated in MICE tourism sector in a year t,  $\varepsilon$  is error term.

However, the process of obtaining all relevant data was really complicated because our national statistics cover only 5 years' time which can be a problem, especially in the cases of trying to do more in-depth study analysis.

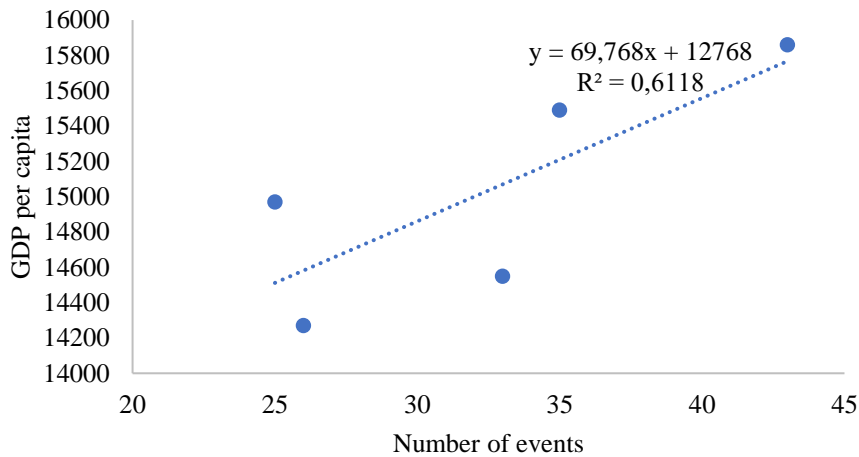
We set up 2 hypothesis which can help us to reach our objective:

- Hypothesis 1: There is no relationship between the GDP and number of events in MICE tourism.
- Hypothesis 2: There is no relationship between revenues of accommodation establishments in Slovak republic and average expenditure on trip for a business purpose.

### 3 Main findings

The analysis of MICE tourism in Slovak Republic consists of all accessible data through variables such as, average expenditure on trip for a business purpose and personal purpose and number of events generated in MICE tourism and GDP per capita.

First, we analyse if there is a relationship between GDP per capita and number of events which are considered as international in Slovak Republic.



**Fig.2.** Scatter chart of GDP per capita and number of events in Slovak Republic (2015-2019) Source: ICCA, Eurostat

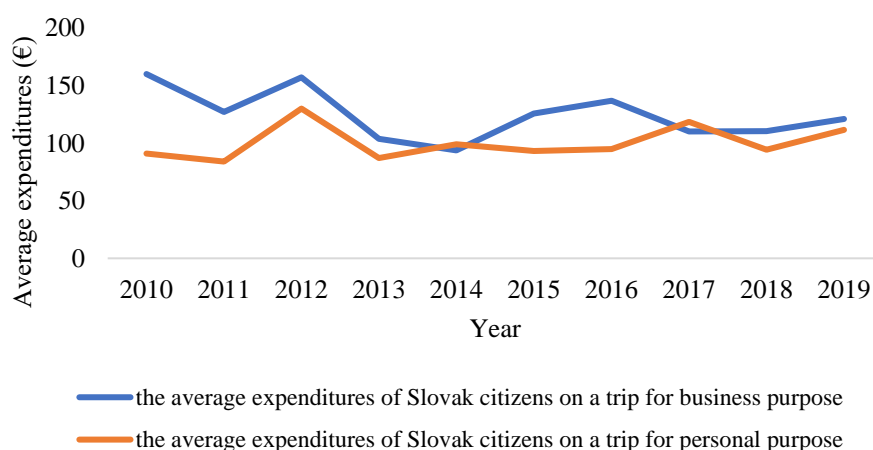
From the scatter graph above we can see that there is a clear positive correlation between GDP and number of events in MICE (F-statistics = 7,93; t-statistics = 2,82; p-

value = 0,067). To be more specific, more events realized in MICE tourism bring together more participants who have the potential to generate further expenditures. Organisation of these kind of events brings benefits not only to organisers and hosting countries, but also to all secondary business entities which are not in directly part of the whole process. Events related to MICE tourism are also a way to promote the cities or countries that host them.

Thanks to conducted correlation and regression analysis, we can sum up that our first hypothesis is rejected. Therefore, we can say, that events of MICE tourism have highly positive impact on gross domestic product per capita in Slovakia.

Relationship between the GDP per capita and number of MICE events		
	Number of MICE events	GDP
Number of MICE events	1	
GDP	0,78	1

To accomplish the next objective and analyse the second hypothesis we have decided firstly to compare the average expenditures of Slovak citizens on a trip for personal and business purpose in Slovak Republic. Our goal is to verify that expenditures for a business purposes are higher in comparison to expenditures for a personal purpose (Novacká, 2010). Graph 2 reflects the mentioned expenditures. These data were collected for a period of 10 years (2010-2019). Before analysing the following data it is important to mention the fact that expenditures on a trip for business purpose are not explicitly the part of MICE tourism, however, they can be partially a part of congress tourism as a part of MICE in the case, the attendees travel for congresses, conferences or seminars. Moreover, these data are the only available data which we can take into consideration while analysing the MICE activities from the economic point of view.

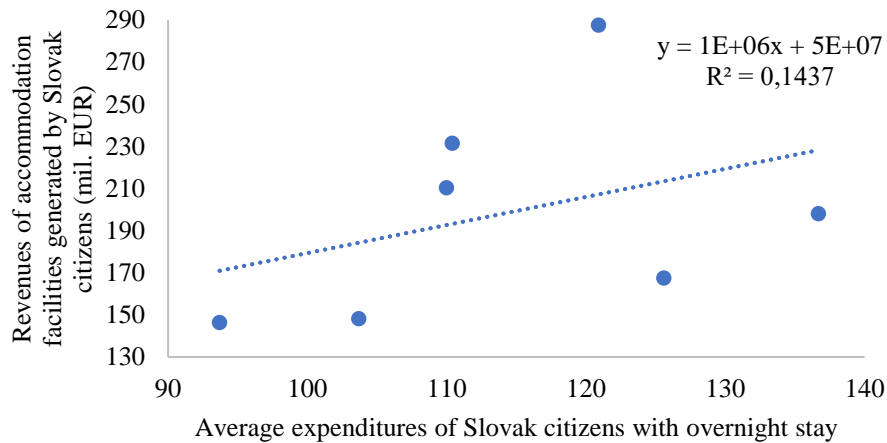


**Fig. 3.** Average expenditures for a business and personal purposes of Slovak citizens in Slovak Republic Source: Datacube, 2020

Thanks to graphical representation of expenditures, we can confirm the fact, that expenditures on a trip for a business purpose has been higher than expenditures for a trip for a personal purpose with exception of 2 years (2014, 2017). The reason why people spend more money on their business trips is caused simply by the very fact that while making a business trip, an employer is responsible for these expenditures. We verified this hypothesis by paired t-test (t-statistics = 3,25; p-value = 0,01), which showed statistically significant difference in means of variables.

Following this fact, our further objective was to study the relationship of average expenditures for a business purpose of Slovak citizens and revenues of the accommodation facilities generated by the residents of the country. Figure 4 reflects the relationship between these two variables. The results indicate a slightly positive relationship between the average expenditures of Slovak citizens and the revenues of accommodation facilities generated by Slovak citizens, however this relationship is not statistically significant (F-statistics = 1,78; t-statistics = 1,33; p-value = 0,24).

A significant benefit of MICE tourism in relation to accommodation sector lies in its time and organisation of events, because the season does not play an important role here. It's popular among accommodation service providers as it successfully fills hotel capacities during off-season which brings positive economic benefits to hotels through the expenditures of business guests.



**Fig. 4.** Scatter chart of revenues from accommodation services and average expenditures for a business purpose with overnight stay in Slovak Republic (2015-2019) Source: Datacube, 2020

Relationship between the revenues of accommodation facilities and average expenditures for a business purpose with overnight stay

	Avg. expenditure	Revenues
Avg. exp. for a business purpose with overnight stay	1	

Revenues of accommodation facilities generated by Slovaks	0,38	1
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Last of all, we can reject the first  $H_0$  hypothesis. Our results show that there is a significant relationship between the number of events and GDP of the country. However, we cannot reject the second  $H_0$  hypothesis of non-existing relationship between average expenditures of Slovak citizens with overnight stay and revenues of accommodation facilities generated by Slovak citizens. since p-value of regression is greater than significance level.

#### 4 Conclusion

Thanks to the results of conducted analysis, we can sum up that the role of MICE tourism in Slovak Republic is very important in the context of economic benefits resulting from this form of tourism. This fact confirms the future in the MICE tourism in Slovak Republic. The plan of National Congress Center of Slovak Republic is being prepared. The realization of this type of institution has the potential to increase economic benefits of MICE tourism of our country and raise the international awareness in MICE tourism world.

The results of conducted correlation analysis in this study show that there exists a strong relationship between the economic growth of our country expressed through the GDP per capita and the number of events in MICE sector.

Stemming from the second correlation analysis which studies the revenues from accommodation services and average expenditures for a business purpose with overnight stay in Slovak Republic we can sum up that there is no significant relationship between these variables.

MICE tourism belongs to economic oriented type of tourism (Novacká, 2010). This fact we can confirm by obtained data where we compared the average expenditures of Slovaks for a personal purpose trip and business purpose trip. The results show that in most of our time the expenditures of businesspeople have been higher which is a typical feature of this form of tourism because attendees of congresses are demanding guests with high purchasing power. They need a provision of all necessary conditions for quality work, but also for quality leisure time.

In the context of MICE tourism development in Slovakia we can summarize several challenges which faces this form of tourism. The most important one is that for the purposes of further analyses and further formation of strategic goals is important to improve the statistics regarding MICE tourism in Slovakia. We have been struggling a lot to obtain access to any kind of data specialized on MICE tourism. <sup>1</sup>

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