

THE IMPACT OF TAXES ON TOURISM BUSINESS (IN THE EXAMPLE OF SAMARKAND, UZBEKISTAN)

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Abstract: This study aims to analyze the impact of taxes on tourism business entities in Samarkand region, Uzbekistan. Taxes play major role in the redistribution of income in all sectors of economy including tourism. Previous researches illustrated that tax rates significantly affected competitiveness of destination and thereby impacted long-term development of tourism destinations. We analyzed the performance of 30 tourism companies and found out that the volume of own capital and tax burden significantly affected the entities' profitability. Also, we investigated seasonal dynamics of prices and number of tourist visits in the example of a relatively competent hotel and found that taxes had no significant effect on profit loss.

Key words: tourism, investments, taxes, demand, market, tax burden, tourism destination

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INTRODUCTION

Taxes in tourism have been a subject of interest in the academic literature, as they play a crucial role in shaping the tourism industry and its various dimensions. The research carried out by Deloitte and Touche (1998) illustrated that higher tax burden significantly reduced hotel and other tourism infrastructure's revenues, also change in tax rate turned out to have an effect on tourists' decision to make a trip or not. In general, taxes play a significant role in the tourism industry, both from the perspective of tourists and businesses operating within the sector. Some key aspects of the role of taxes in tourism may include revenue generation, supporting competitiveness, environmental and cultural conservation.

Taxes on tourism-related activities, such as hotel stays, transportation, and attractions, generate revenue for governments. This revenue can be used to fund infrastructure development, public services, and promote tourism itself through marketing campaigns and initiatives. Also, taxes can affect a destination's competitiveness within the tourism market. High taxes on tourism-related services can make a destination less attractive to visitors, as it increases the overall cost of travel. Competitiveness is crucial for attracting tourists and maintaining a thriving tourism industry.

Moreover, taxes on tourism can have a direct impact on the economy. The tourism sector often generates employment opportunities and contributes to the local economy (Ilieş et al., 2022). Tax revenue from tourism can support economic growth, job creation, and investment in infrastructure, leading to increased prosperity in the destination. Governments may also allocate tax revenue to develop tourism-related infrastructure, such as airports, roads, ports, and public facilities. These investments can enhance a destination's appeal, improve visitor experiences, and attract more tourists in the long run. Some destinations impose taxes specifically aimed at environmental conservation and sustainability initiatives. These taxes can fund projects focused on protecting natural resources, preserving ecosystems, and promoting sustainable tourism practices. By discouraging unsustainable activities through taxation, governments can encourage responsible tourism.

Taxes can also support the preservation and promotion of cultural heritage. Governments may impose taxes on specific cultural activities or attractions and allocate the revenue to preserve historical sites, museums, traditional festivals, and other cultural assets. This ensures the sustainability of cultural tourism and helps protect a destination's unique identity.

It is also important to note that taxes can serve as a regulatory tool to manage tourism activities. Governments may impose taxes to control visitor numbers, manage overcrowding, or regulate certain types of tourism that may have negative impacts on local communities or the environment (Ilieş et al., 2022). Such taxes can help strike a balance between tourism growth and sustainable development. Forsyth and Dwyer (2002) divided taxes into two types, namely

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general tax and special differential taxes. In their opinion, general taxes are imposed on the offer of tourist services and goods. While the total taxes are imposed on tourism enterprises, tourists and tourism agents pay these taxes. At the same time, there are also special taxes in the tourism industry, which are usually imposed on a special tourism product or its components or tourism service providers. There are two important aspects of special tourism taxes, the first being that these taxes are imposed in conjunction with general taxes on the industry, and the second being that in many destinations the base of special tourism taxes exceeds the total tax base. In developed countries, taxes can be set at the national, and local levels. Therefore, the tax burden may also vary depending on the region.

Due to coronavirus pandemics, government of Uzbekistan provided tax exemptions for tourism companies in the forms of tax "vacation", tax deductions, and investment tax relief (including within the free tourism zone). The volume of tax benefits amounted to 35,482.5 million soums in that period (Statistical Committee's data, 2021).

In the course of our research, we tried to determine the impact of factors such as the average depreciation, cost, taxes on tourism services, equity of enterprises, and qualifications of employees on the effectiveness of income from tourism services, the fixed assets of 30 tourism enterprises operating in Samarkand region. Cost efficiency is important in the fair distribution of tax burden. High efficiency should provide the basis for an increase in the volume of special taxes as well.

The sufficient size of taxes directly affects the income of the state budget and makes it possible to allocate money to various social issues. The ideal tax system should increase revenues at the state level, but do so without affecting economic activity. In order for the tax range to work well, it is desirable to have a large number of large enterprises in the economy. Because employees who work in large enterprises are confident that they will remain in their work for a long time, they will eagerly pay income taxes. At the same time, in order to create an effective tax system, it will be necessary to work with qualified working personnel in the tax departments. For example, the implementation of the digitalization of tax bases will largely depend on qualified specialists. In addition, it is considered important to have accurate statistics for optimal tax rates to be established. But in practice, the collection of accurate statistics can be a challenge, especially in the service sector (Ilieş et al., 2021). Taking into account all the income of the population, increasing the burden of taxes as income increases, is difficult to carry out in practice. Entities that operate in the field of tourism seek to hide income from tax inspectors, however, an increase in the volume of taxes can be achieved if the mechanisms for determining "hidden" income are correctly established (Stoilova, 2017).

The traditional idea that income taxation is more efficient than consumption taxation is partly because income tax reduces the taxpayer's ability to save by including elements of both the labor tax and the capital tax. Another problem in the choice between income taxation and consumption taxation involves their impact on capital. Traditionally, taxation of consumption was considered more regressive (more difficult for the poor than for the rich) than taxation of income. Even this thought does not always justify itself (Brida et al., 2019).

As for import taxes, the tax reduction increases the competition of foreign enterprises. While reducing the protection of domestic industry from foreign competition will be the result or goal of the trade liberalization program, the reduction in budget revenues negatively affects the economy. In rare cases, the policy of raising income tax (due to its negative impact on investments) is considered a viable option (Forsyth and Dwyer, 2002).

Data from developed and developing countries show that the ratio of income and consumption taxes in developed countries has consistently been more than twice the ratio in developing countries (Stoilova, 2017) (in comparison to developing countries, developed countries generate twice as much income tax proportionally than a consumption tax). Also, the data shows a significant difference in the ratio of income tax from legal entities and income tax from individuals. Developed countries collect income taxes from individuals about four times more than corporate income taxes.

When distributing resources, it is necessary to ensure that the design of the tax system in the country is as transparent as possible, minimizing interference in the distribution process. The system will also be able to improve its efficiency, if it is managed through rules that are executed in a simple and transparent administrative sequence (Stoilova, 2017).

LITERATURE REVIEW

One of the approaches states that the taxation is determinant to the investment, thereby, is harmful to economic growth, as taxation prevents individuals or businesses from creativity and deprives them of rewards. So, supporters of this view, such as Judd, recommend lower tax in order to encourage people to be creative (Judd, 1985).

Furthermore, Engen and Skinner (1996), for instance, claim that taxation can affect negatively on economic growth through five channels. Moreover, Romer and Romer (2010) argue that taxation sustains the economic growth and strengthens the global competitiveness, provides stable and predictable fiscal circumstances, consequently, helps to accumulate funds to finance the social and physical infrastructural needs, and ensures good governance through strengthening the accountability of government. Studies have explored the relationship between taxation policies and tourism competitiveness. For example, Liu and Var (1986) found that higher taxes on accommodation services can negatively impact tourism demand and destination competitiveness. Similarly, Kim and Tse (2007) observed that high tax rates on tourist spending decrease destination competitiveness. These findings highlight the importance of tax policies in maintaining the attractiveness of tourism destinations. Numerous studies have emphasized the economic impact of taxes in tourism. Brida et al. (2016) found a positive relationship between tourism taxes and economic growth in European countries. Additionally, Brida et al. (2019) investigated the multiplier effects of tourism taxes, highlighting their potential to stimulate employment and income generation in local economies. This research has examined the role of taxes in promoting environmental sustainability and cultural preservation. Gössling et al. (2020) highlighted the potential of tourism taxes to fund conservation initiatives, while Bramwell and Lane (2000) discussed how taxes can support cultural heritage preservation.

Fredman and Choong (2020) examined the effectiveness of bed taxes in reducing overcrowding, while Faulkner et al. (2003) explored the role of tourist levies in destination management. In general, taxes in tourism have significant implications for destination competitiveness (Herman et al., 2019), revenue generation, economic impact, environmental sustainability, and cultural preservation. Tax policies influence the attractiveness of tourism destinations, support economic growth, and can be used as a regulatory tool (Herman et al., 2023). Furthermore, taxes can contribute to environmental and cultural initiatives (Yu et al., 2023). Future research should further investigate the impacts of specific tax measures and evaluate the effectiveness of tax policy instruments in achieving sustainable tourism development.

METHODOLOGY

It is natural that taxes' impact on the economic activities of enterprises also vary by sector. By taxes we mean the accumulation of value added tax, hotel tax, profit tax, excise and other taxes. For example, in heavy industry, the tax burden of enterprises is sharply different from service industries such as tourism. In the industrial sector, seasonality practically does not matter, and enterprises in it have a stable income. In the tourism sector, however, enterprises are not able to bear a large tax burden due to seasonal problems, and changes in demand for tourist products in the world market.

During the study, we analysed the activities of 30 tourism companies located in the city of Samarkand. The data was taken from regional tax department for the period of 2021. We selected following independent variables, the factors that affect the profits of tourism services:

Y – profits of tourism services (thousand soums)

X_1 – average staff education, years

X_2 – fixed assets' average depreciation rate, percentage

X_3 – fixed assets' average value, mln soums

X_4 – taxes on services, soums

X_5 – the number of employees, people

X_6 – own capital value, thousand soums

Hence, we can formulate the research hypothesis as follows:

H_0 – $X_1, X_2, X_3, X_4, X_5, X_6$ none of the factors Y the effect on is not statistically significant.

H_1 – $X_1, X_2, X_3, X_4, X_5, X_6$ of at least one of the factors Y the effect on is statistically significant.

Table 1. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Profitability of tour.serv	30	2781.9	709.905	1633.9	4484.3
staff av education	30	15.657	1.641	11.7	18.6
fixed asset av dep~n	30	25.273	11.39	8.5	45.1
fixed asset averag~l	30	168.14	195.023	2.6	859.7
Taxes on services	30	38.047	8.955	22.3	61.2
staff number	30	10.5	6.653	2	25
Own capital value	30	93.33	99.144	2.8	324.7

Table 2. Matrix of correlation

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) staff_av_educa~n	1.000					
(2) fixed_asset_av~n	-0.146	1.000				
(3) fixed_asset_av~l	0.238	-0.660	1.000			
(4) taxes on services	-0.464	0.335	-0.497	1.000		
(5) staff_number	-0.181	-0.432	0.199	-0.116	1.000	
(6) Own_capital_va~e	0.313	-0.703	0.936	-0.438	0.240	1.000

Table 3. Regression results

Profits of tourism services	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Staff education years	-22.126	28.166	-0.79	.44	-80.392	36.14	
Fixed assets depreciation rate	2.609	5.241	0.50	.623	-8.233	13.451	
Taxes from tourism services	-71.752	9.673	-7.42	0	-91.762	-51.742	***
Staff average number	-5.582	8.528	-0.65	.519	-23.222	12.059	
Own capital value	1.474	.56	2.63	.015	.315	2.632	**
Constant	5711.009	560.171	10.20	0	4552.207	6869.811	***
Mean dependent var	2781.900		SD dependent var		709.905		
R-squared	0.930		Number of obs		30		
F-test	27.576		Prob > F		0.000		
Akaike crit. (AIC)	412.443		Bayesian crit. (BIC)		422.251		

*** $p < .01$, ** $p < .05$, * $p < .1$

ANALYSIS AND RESULTS

In order to verify the above hypotheses, it is advisable to consider, first of all, the descriptive statistics of the Data (Table 1). From this table, it can be seen that on the scale of enterprises, values of the fixed assets' average value and the

own capital value are relatively densely distributed over the values for the remaining factors with a relatively large variation range (maximum–minimum). In our opinion, the above-given factors have a linear effect on the dependent variable, since they all directly and continuously participate in the creation of income. From this, we initially researched the correlation matrix between factors (Table 2). From Table 2, it can be seen that the correlation among certain factors is high (the correlation is called strong if the correlation coefficient is greater than 0.7 according to the Cheddock scale). Strong correlation leads to inconsistent parameters of regression, because it blocks the influence of the correlated factor. Therefore, we removed the average value of fixed assets from the model. Then we performed multi-factor linear regression in STATA 15.0. The result of multi-factor linear regression based on the ordinary least squares method is given in Table 3 below.

From Table 3 we can see that of the five factors that we have chosen, only taxes on tourism services and the own capital value, significantly affect the volume of profits of tourism companies. Removing factors whose effects are not statistically significant, we get the following (Table 4).

Table 4. Results of simplified regression

Efficiency of tourism services	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Taxes on services	-69.88	7.662	-9.12	0	-85.6	-54.159	***
Own capital value	1.136	.475	2.39	.024	.161	2.11	**
Constant	5334.574	289.591	18.42	0	4740.383	5928.765	***
Mean dependent var	2781.900		SD dependent var		709.905		
R-squared	0.925		Number of obs		30		
F-test	49.960		Prob > F		0.000		
Akaike crit. (AIC)	406.437		Bayesian crit. (BIC)		410.641		
*** $p < .01$, ** $p < .05$, * $p < .1$							

According to Table 4, taxes on tourist companies and the volume of own capital in tourism enterprises significantly affected profits of tourist companies at 98% confidence interval (p-value is equal to 0.024). At the same time, we can say that the factors are chosen correctly in the model, since the probability that the Fisher value is less than the critical value is 0 (Wooldridge, 1960). The final model can be described mathematically as follows:

$$Y = 5334.57 + 1.14X_2 - 69.88X_4$$

That is, if the value of own capital of a tourism enterprise increases by one thousand soums, then the volume of profits of tourism business on average increases by 1140 soums, and the increase in the volume of taxes by 1 uzds is observed by a decrease in revenues by about 70 thousand soums. As coefficient of determination shows, these two factors explain 92.5% of the change in income from tourism services. Thus, it was empirically proven that income from tourism services is significantly influenced by the equity and tax burden of the enterprise, and on this basis H_0 we can reject the hypothesis and accept the alternative hypothesis.

In order to explore the seasonal changes in a particular enterprises, we also analyzed the data on the economic activity of the Malika Prime Hotel, which is considered one of well-established hotels in Samarkand, in 2021 during the study (table 5). The Malika Prime hotel is located on the boulevard of the city of Samarkand, which is, very close to the most important tourist attractions of the city. Therefore, the analysis of the activities of this hotel will help to determine the impact of the burden of taxes on the activities of one of the most competitive hotels in the city.

Table 5. Economic activity data of the Malika Prime Hotel

Months	Average price, thousand soums	Number of tourists	Total expenditure, thousand soums	Taxes, thousand soums	Net profit, thousand soums	Potential profit (without taxes), thousand soums
Jan.21	492,17	1544	55261	22970	681679,48	704649,5
Feb.21	442,815	1537	55000	22231	603375,66	625606,7
Mar.21	442,815	2558	91579	28561	1012580,8	1041142
Apr.21	668,6507	2523	90297	23333	1573375,6	1596709
May.21	670,128	2561	91655	24543	1599999,8	1624543
Jun.21	708,504	2743	98175	25609	1819642,5	1845251
Jul.21	531,378	2935	105067	23416	1431111,4	1454527
Aug.21	797,067	3390	121328	26356	2554373,1	2580729
Sep.21	783,2	2919	104485	26201	2155474,8	2181676
Oct.21	774,5	2925	104711	26032	2134669,5	2160702
Nov.21	652,3	2761	98844	25984	1676172,3	1702156
Dec.21	530,263	2611	93465	24523	1266528,7	1291052

From Table 5 it can be seen that there are elements of seasonality in tourist demand and average price change. That is, when demand is low in the winter months, prices are also relatively low, and when demand is high in May and August, prices can be seen to be relatively high. At the same time, the total costs in service are also subject to seasonality. This can be explained by the fact that the main costs in the provision of tourism services are associated with monthly salary of employees. Additional employees are hired when demand is high, and tourism entities are forced to reduce the number of employees when demand is low. Because of the strong influence of such seasonality the recruitment of qualified specialists

in the field presents great difficulties. One way to reduce the negative effects of seasonality could be to organize festivals in the winter months and further promote domestic tourism. In this way, there is an opportunity to turn the tourism industry into an attractive industry for qualified professionals. Below it can be seen the dynamics of average prices and the number of served tourists in the Malika Prime hotel during the year of 2021 (Figure 1).

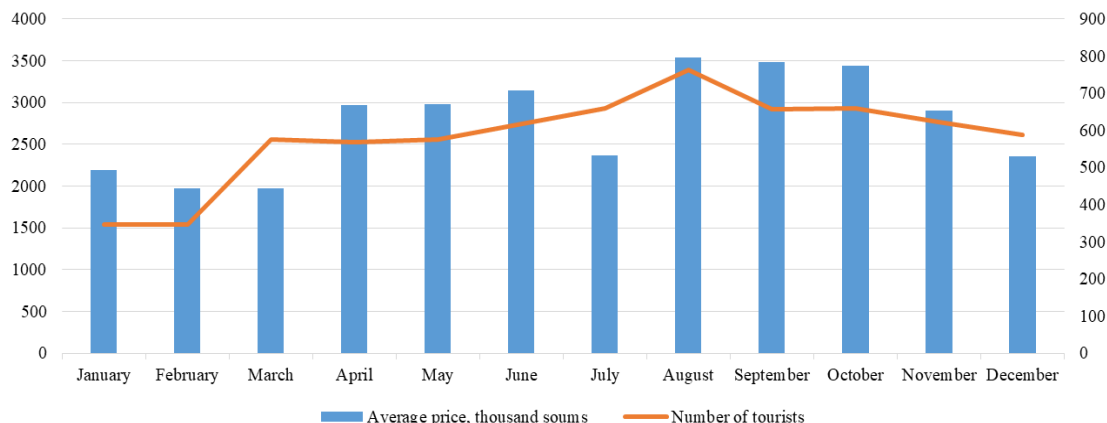


Figure 1. The dynamics of the price and the number of tourists that visited Malika Prime Hotel

The tourism season usually starts in March of each year and lasts until November (Safarov and Janzakov, 2021). There are relatively few tourist visits during the winter months. When the number of tourists is low, hotels often cut down prices in order to cover constant costs. Even in March, the hotel, although the number of visits increases, does not raise prices at once, since at the beginning of the season it tries to collect as many customers as possible. But after a steady increase in the number of visitors in the following months, hotels start increasing prices. As can be seen in Figure 2, in 2021, the maximum price was observed in August, as well as the maximum number of tourist visits. From September to December, these rates were declining.

We have determined the profit function of the Malika Prime hotel based on the data presented in Table 5. In this case, we calculated the net profit by subtracting the costs and taxes from the income. Below in the figure the potential profit indicates the profit that might have been in the absence of taxes (Figure 2). As can be seen from Figure 2, the difference between potential and net profit is not large in most cases. That is, it can be seen that this is wrong with the idea that taxes sharply reduce the profits of tourism enterprises.

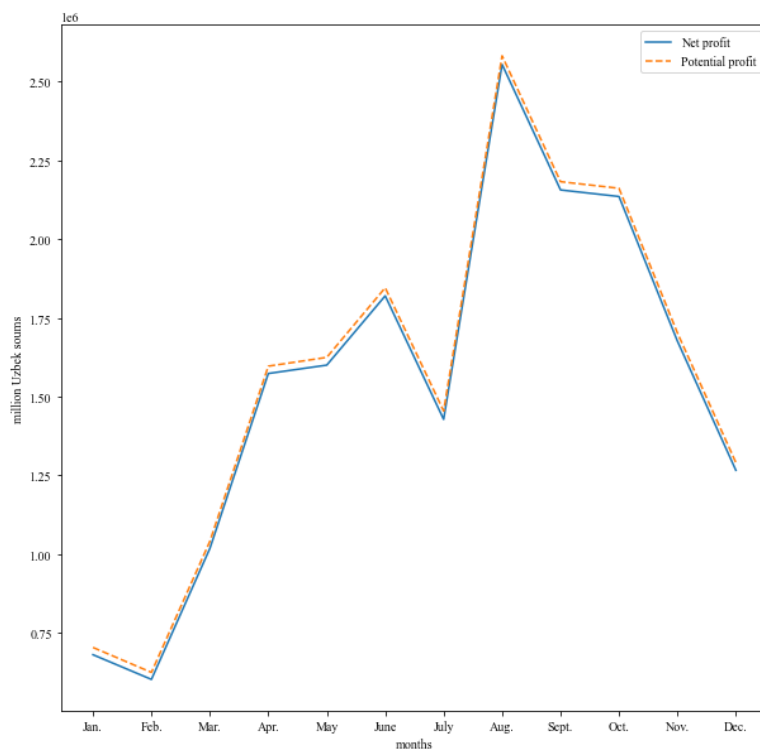


Figure 2. The dynamics of net and potential profit at Malika Prime Hotel

The amount of net profit grew from March to June and reached its maximum value in August. In the following months, however, the amounts of net profit and potential profits were declining due to falling demand. However, if the more hotels were included in the analysis, then the overall difference between potential and actual income might have been significant.

CONCLUSION

In conclusion, taxation plays a significant role in the tourism industry. Governments around the world utilize various taxes to generate revenue, promote sustainable tourism development, and support infrastructure and marketing efforts. Common taxes imposed on the tourism industry include value-added tax (VAT)/goods and services tax (GST), hotel taxes, tourism development taxes/levies, airport taxes, excise taxes, corporate taxes, payroll taxes, and import/export duties.

These taxes help fund public services, infrastructure projects, and destination promotion, contributing to the growth and maintenance of the tourism sector. They also serve as a means for governments to regulate tourism activities, promote environmental sustainability, and manage tourist flows.

However, tax regulations can be complex and vary between countries and regions. Tourism businesses need to stay informed and comply with the latest tax laws to avoid penalties and legal issues. Seeking professional advice from tax experts and legal advisors specialized in the tourism industry is crucial for navigating the intricacies of tax compliance.

Overall, understanding and managing tax obligations in the tourism industry are essential for both governments and businesses alike. By striking a balance between revenue generation, sustainable development, and providing quality visitor experiences, taxation can contribute to the growth and success of the tourism sector while ensuring a fair and equitable economic environment for all stakeholders involved. The results of the research showed significant impact of taxes on the economic activities of the tourism entities. In particular, it turned out that the volume of own capital and taxes had significant impact on profits of tourism companies in Samarkand, Uzbekistan. The investigation of a relatively competent hotel's price and tourist visit dynamics showed seasonal patterns, and insignificant impact of taxes on total net profit dynamics. However, if more hotels were included in the analysis the impact of taxes could be more significant.

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REFERENCES

- Bramwell, B., & Lane, B. (2000). Tourism collaboration and partnerships: Politics, practice, and sustainability. *Channel View Publications*.
- Brida, J.G., Cortiñas, M., & Pulina, M. (2016). The effect of tourism taxes on the economic performance of tourist destinations. *Tourism Management*, 55, 1-12.
- Brida, J.G., Cortiñas, M., & Pulina, M. (2019). Tourism taxes and local economic growth: Evidence from a panel of European countries. *Economic Modelling*, 78, 273-285.
- Deloitte & Touche (1998). The economic effects of changing VAT rates on the British tourism and leisure industry, *British Tourist Authority*, London.
- Engen, E., & Skinner, J. (1996). Taxation and economic growth. *National Tax Journal*, 49: 617-642.
- Faulkner, B., Tideswell, C., & Cooper, C. (2003). Tourism tax: A preliminary review of issues and options. *Journal of Sustainable Tourism*, 11(2-3), 133-141.
- Forsyth, P., & Dwyer, L. (2002). Market Power and the Taxation of Domestic and International Tourism. *Tourism Economics*, 8(4), 377-399.
- Fredman, P., & Choong, C.K. (2020). Bed taxes as a tool for reducing overtourism in Penang, Malaysia. *Journal of Sustainable Tourism*, 28(1), 1-19.
- Gössling, S., Scott, D., & Hall, C.M. (2020). Tourism and water: Interactions and impacts. *Channel View Publications*.
- Herman, G.V., Grama, V., Ilieș, A., Safarov, B., Ilieș, D.C., Josan, I., Buzrukova, M., Janzakov, B., Privitera, D., & Dehoorne, O. (2023). The Relationship between Motivation and the Role of the Night of the Museums Event: Case Study in Oradea Municipality, Romania. *Sustainability*, 15(2), 1738. <https://doi.org/10.3390/su15021738>
- Herman, G.V., Wendt, J.A., Dumbravă, R., & Gozner, M. (2019). The Role and Importance of Promotion Centers in Creating the Image of Tourist Destination: Romania. *Geographia Polonica*, 92, 443-454. <https://doi.org/10.7163/GPol.0158>
- Ilieș, A., Caciora, T., Marcu, F., Berdenov, Z., Ilieș, G., Safarov, B., Hodor, N., Grama, V., Shomali, M.A.A., & Ilies, D.C. (2022). Analysis of the Interior Microclimate in Art Nouveau Heritage Buildings for the Protection of Exhibits and Human Health. *International Journal of Environmental Research and Public Health*, 19, 16599. <https://doi.org/10.3390/ijerph192416599>
- Ilieș, D.C., Marcu, F., Caciora, T., Indrie, L., Ilieș, A., Albu, A., Costea, M., Burtă, L., Baias, Ș., & Ilieș, M. (2021). Investigations of Museum Indoor Microclimate and Air Quality. Case Study from Romania. *Atmosphere*, 12, 286. <https://doi.org/10.3390/atmos12020286>
- Ilieș, D.C., Safarov, B., Caciora, T., Ilieș, A., Grama, V., Ilies, G., Huniadi, A., Zharas, B., Hodor, N., & Sandor, M. (2022). Museal Indoor Air Quality and Public Health: An Integrated Approach for Exhibits Preservation and Ensuring Human Health. *Sustainability Science & Practical Policy*, 14, 2462. <https://doi.org/10.3390/su14042462>
- Judd, K.L. (1985). Redistributive taxation in a simple perfect foresight model. *Journal of Public Economics*, 28, 59-83.
- Kim, S.S., & Tse, T.S. (2007). Tax policy and destination competitiveness: A survey of tourism-related taxation in Asia-Pacific. *Journal of Travel & Tourism Marketing*, 22(3-4), 135-150.
- Liu, Z., & Var, T. (1986). The impact of tourism taxes on tourism demand. *Journal of Travel Research*, 24(2), 2-5.
- Romer, C.D., & Romer, D.H. (2010). The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks. *American Economic Review*, 100, 763-801.
- Safarov, B., & Janzakov, B. (2021). Measuring Competitiveness in Tourism Enterprises using Integral Index. *GeoJournal of Tourism and Geosites*, 37(3), 768-774. <https://doi.org/10.30892/gtg.37305-707>
- Stoilova, D. (2017). Tax structure and economic growth: Evidence from the European Union. *Contaduria y Administracion*, 62, 1041-1057.
- Wooldridge, J.M. (1960). *Introductory Econometrics: a Modern Approach*. Mason, Ohio: South-Western Cengage Learning, 2012.
- Yu, J., Safarov, B., Yi, L., Buzrukova, M., & Janzakov, B. (2023). The Adaptive Evolution of Cultural Ecosystems along the Silk Road and Cultural Tourism Heritage: A Case Study of 22 Cultural Sites on the Chinese Section of the Silk Road World Heritage. *Sustainability*, 15(3):2465. <https://doi.org/10.3390/su15032465>
- Statistical Committee of the Republic of Uzbekistan, data accessed on 20th May 2022. <http://stata.uz>