The Influence of the Quality of Institutions on Tourism in the EU Countries

Fejzula Beha
Universum International College, Pristina, Republic of Kosovo

Received: 29 November 2022. Revision received: 17 January 2023. Accepted: 13 February 2023

Abstract
The present study aims to investigate the effect of the quality of institutions on tourism development in a panel of 27 countries from the European Union for the period of 2008-2021. The number of arrivals and employees in tourism measures tourism development. The control variables used, which also represent the determinants of tourism, are GDP growth rate per capita, inflation, higher education, quality of the environment, and trade. Quality of institutions indexes are constructed based on indicators of government effectiveness, political stability, regulatory quality, the rule of law, and voice and accountability. To estimate the impact of selected determinants in tourism development, we used the Generalized method of the moments-GMM model. According to the obtained results, it can be concluded that there is a positive connection between the quality of institutions and tourism. The results of this research should provide insight into the most important determinants of management and institutions and explain their influence on events in tourism. All of the above knowledge should be of interest to the management bodies in charge of creating national development strategies. The contribution of this research is reflected in the clarification of the importance of institutions' quality and monitoring. Previous research on this topic is generally limited to specific tourist regions or is based on smaller indicators. This paper covers the area of the European Union, with different stages of development and share in tourist traffic.

Key Words: EU countries, tourism, quality of institutions, panel analysis

JEL Classification: L83, L88, C33.


1. Introduction

Tourism is the largest and most dynamically developing service sector. Globalization trends influence its progress, the process of demographic aging, the economic parameters, the geographical conditions of the country, the consumers' behavior, and the global crises and risks (Gavurova et al.2021). In many countries, tourism plays an important role in forming gross domestic product, activating the foreign trade balance, and creating a lot of businesses and employment (Akbulav & Salihova, 2020). Tourism is a key economic sector in the EU. The COVID-19 disease pandemic dramatically and unprecedentedly affected the tourism sector by sharply reducing tourist flows and thus the income of tourism-related businesses. The COVID-19 pandemic caused a global reduction of nearly 75% in international tourist arrivals in 2020, leading to a sharp decrease in the income from tourism-related activities around the world estimated at US$ 1.3 trillion (Esquivias et al.2021). Apart from this immediate shock, the tourism sector faces other, longer-term challenges related to its green and digital transformation, competitiveness, sustainability, and resilience. In 2019, Tourism supported 333 million jobs around the world, representing 1 in 10 of all jobs globally. Despite government
retention schemes such as furloughs and others that supported employment, 62 million jobs were lost in 2020 — a decline of 18.6%. As the contribution of the sector to the global economy increased by 21.7% in 2021, it was accompanied by a rise in the number of Tourism jobs from 271.3 million in 2020 to 289.5 million in 2021, an increase of 18.2 million jobs (6.7% rise). Consequently, the sector supported 1 in 11 jobs across the entire economy in 2021. The change in Tourism's contribution to jobs is slower than the change in contribution to GDP because jobs are less elastic and hence, are less volatile. This is because the process of laying off existing staff and onboarding new personnel takes time (Economic Impact Global Trends, 2022).

As tourism is becoming a key determinant for the growth of cities and countries, understanding tourist behavior provides further information on increasing tourists' satisfaction and attracting local visitors (Stefko et al., 2020). A large number of older and newer works present different conditions that tourists consider and compare as rational consumers, and which we can observe from an economic and non-economic point of view (Šimundić, 2015; Shafiullah et al., 2019; Vugdelija, 2020 and many others). The literature also embraces another dimension that focuses on the quality of institutions. The institutions are of critical economic significance to the operations of all economic sectors (Davis & Trebilcock, 2001). Also, according to Kim & Kim (2012) the quality of institutions is one of the key elements for the improvement of the quality of life of a society. Regarding quality management in the area of tourism — in the context of traditional services (person-to-person), its importance ensues from the fact that for a unit, to achieve and to maintain the quality wanted by the client—in conditions of efficiency— represents a necessity for its existence (Cotîrlea, 2011). But although recent works believe that institutions and the quality of their components are an essential prerequisite for the development of tourism, there is only a limited amount of scientific literature regarding the impacts of institutional quality on tourism from a theoretical perspective; the literature from an empirical perspective remains in even shorter supply. Namely, some authors considered only a specific aspect of institutional quality (Das & Di Renzo, 2010; Poprawe, 2015 study corruption) or only a specific dimension of tourism has been examined (Lee, 2015 analyzes tourism competitiveness). Finally, Brau et al., (2011) and Altin et al., (2017) study the relationships between tourism and institutional quality indirectly. Faced with the problem of a global pandemic, now more than ever the very quality of institutions and the need for additional efforts to improve them come to the fore. Therefore, it is not surprising that the number of scientific papers investigating institutions' influence on tourism has increased.

The reason for choosing the countries of the European Union is that the beginning of travel and tourism occurs precisely on the territory of Europe. The first trips are made for health and educational purposes, and later motives such as rest and getting to know new cultures appear. Over the years, Europe has profiled itself on the global tourist market, full of cultural and historical heritage and natural attractions. Europe currently accounts for more than 50% of international tourist arrivals, thus placing it at the very top of the world's tourist destinations. The size of the market is confirmed by the fact that in 2019, Europe achieved a share of almost 40% of income from international tourism (UNWTO, 2021a). Some of the world's most popular tourist destinations are located within the territory of the European Union. France, Spain, Italy and Germany are ranked in the top 10 countries according to the number of tourist arrivals and generated income (UNWTO, 2021b).

In the last decade, continuous growth of indicators of domestic and foreign tourism demand in the territory of the European Union has been recorded. The global financial crisis has caused a series of problems in the world tourist market, and therefore also in the European Union. The peak was reached in 2009, when a global drop of 4% in international tourist arrivals and 6% in income from international tourism was estimated (UNWTO, 2013, in Ghalia, 2016). After the crisis in 2008 and 2009, tourism is starting to recover and the number of tourist overnight stays and arrivals is increasing until 2019. In 2011, more than half of the international arrivals in the countries of the European Union were tourists from the remaining member states. The largest number of arrivals of this type was recorded in Belgium, Luxembourg, Spain, Portugal, Austria, Malta and Estonia. Sweden, Finland, Latvia and Lithuania were
less attractive destinations for tourists from the European Union (Simonescu, 2021). According to UNWTO (2018), in 2015, approximately 61% of European Union residents made one or more tourist trips.

After a successful 2019, the number of tourist overnight stays at the level of the European Union drops sharply in 2020, by as much as 52% compared to the previous year. The countries that made the biggest losses in this segment are Greece, Malta and Cyprus (a drop of around 70%), while the Netherlands and Denmark recorded a drop of less than 35%. The most affected segment of accommodation is hotels, and the mildest decline in the number of overnight stays occurred in campsites (EUROSTAT, 2021). The emergence of a global pandemic is one of the biggest challenges for tourism in modern history. In the first months of 2020, travel was suspended on a global scale. This scenario caused huge financial losses to small and medium-sized enterprises in the tourism sector, of which there are about 2.3 million according to the data of the European Parliament (2021). The tourism and travel sector in the European Union recorded a drop in reservations from 60% to 90%, which was later reflected in the drop in the number of people employed in tourism (European Commission, 2020).

The new restrictions certainly increase travel costs and make international travel more difficult, which leaves severe economic consequences for countries that depend on foreign tourists. Many institutions within the European Union encourage domestic tourism and domestic consumption precisely because of the possibility of minimizing the damage caused by the reduction of income from foreign tourists.

Europe has been at the global forefront in terms of having well-developed institutional frameworks for many decades. Consistent with economic theory and evidence on the connection between institutions and economic development, GDP per capita levels in much of the continent also rank among the highest in the world. Yet, following recent years of economic crisis and the imposition of painful fiscal austerity measures and economic reforms accompanied by increasing voter disenchantment with ruling parties, there are indications that institutional quality may have been weakened in the process. Notwithstanding Europe's recent deep economic crisis and its excruciatingly gradual recovery, large parts of the continent still rank among the world's most-developed regions in terms of institutional quality. The level of institutional quality nevertheless varies considerably across the continent, whereby EU and euro-area membership do not automatically correspond with higher levels of institutional strength. Meanwhile, once poor former communist economies in Central Europe have seen concurrent improvements in both institutional quality and income levels. The contribution of this research is reflected in the clarification of the importance of institutions' quality and monitoring. Furthermore, by expanding the basic set of quality indicators with data from the World Governance Indicators (WGI), an attempt will be made to prove the impact they can have on other segments of the economy - in this case specifically on tourism. Previous researches on the relationship between the quality of institutions and tourism are generally limited to specific tourist regions or are based on a smaller set of indicators. This paper covers the area of the European Union, i.e. 27 member states with different stages of development and share in tourist traffic. In the studies examining the institutional structures of the countries and the performance of the tourism sector, it is seen, that mostly the institutional structure was taken into consideration with only one dimension. In addition, in the literature, variables such as total international tourism receipts or the number of tourists, which are not very convenient for comparison, are used as a performance indicator of countries' tourism sectors that are different in terms of area, population or economy. However, this study uses comprehensive indicators measuring the quality of institutions from different perspectives and aims to observe whether the effects of different institutional variables differ or not. In the current literature, which generally includes studies based on panel data, for the performance of the tourism sector, total international tourism receipts and the number of tourists were used which can vary widely depending on the countries. But in this study, more standard variables such as number of arrivals and employees in
tourism were considered. The effect of institutional quality indicators on the employees in tourism is important in terms of determining the impact of the changes in institutional quality on the tourism sector performance as well as on the competitiveness of tourism firms.

The results of this research should provide an insight into the most important determinants of management and institutions and explain more deeply their influence on events in the sphere of tourism and the potential economic development that tourism can generate. According to the importance and strength of influence of individual indicators, corrections are possible in the policies formed by the institutions in order to avoid unwanted results. All of the above knowledge should be of interest to the management bodies in charge of creating national development strategies.

The paper is organized as follows. Section 2 briefly reviews the existing studies who have investigate the effect of the quality of institutions on tourism development. Section 3 introduces the empirical methodology and data. Section 4 shows the empirical results, while, Section 5 synthesizes the paper findings and Section 6 offers policy-relevant conclusion and recommendations.

2. Literature review

More recent works believe that institutions and the quality of their components are an essential prerequisite for the development of tourism. Faced with the problem of a global pandemic, now more than ever the very quality of institutions and the need for additional efforts to improve them come to the fore. Therefore, it is not surprising that the number of scientific papers that investigate the influence of institutions on tourism has increased. (Yap & Saha 2013; Balli et al., 2016; Khan et al., 2020; Akram et al. 2021 and others).

Yap & Saha (2013) investigated the impact of corruption, terrorism and political instability on tourism in a sample of 139 countries. In the analysis, they included natural and cultural heritage, which proved to be able to significantly change the influence of the mentioned variables on tourism indicators. Thus, for example, corruption proved to be a negative factor when it comes to tourist arrivals, while the same changes its sign with the presence of a critical mass of cultural and natural heritage.

The influence of the quality of institutions, political risk, distance and socio-economic conditions as decisive determinants of tourist demand was investigated by Ghalia et al., (2019). The research included 131 emitting countries and the top 34 tourist destinations from 2005 to 2014. Indicators of political risk from the ICRG database were used, which are grouped into three units representing the quality of institutions, conflicts and government stability. The results of empirical research indicate that lower political risk and higher quality of institutions can be linked to an increased number of tourist arrivals in the destination. In conclusion, the authors emphasize the necessity of improving bilateral relations and security in order to reduce the political risk that can have significant consequences for countries whose economy depends mainly on tourism.

The link between the quality of institutions and tourism in medium to low developed countries was studied by (Balli et al., 2016). In the research, they studied tourist flows from 34 OECD countries to 52 less developed countries, where the hypothesis that a higher quality institutional environment with a high degree of freedom contributes to their tourist expansion was once again confirmed.

In a recent study by a group of scientists, (Lee et al., 2020) chose the area of Malaysia to clarify the role of indicators of the quality of institutions in the relationship between tourism and the economic development of the country. The results of the analysis suggest that more efficient corruption control and government effectiveness have a statistically significant and positive effect on tourism, especially in the long term. The significance of political stability and the absence of violence proved to be important in the short term due to its strong influence on the choice of destination. Accordingly, it can be concluded that tourists are more inclined to visit a destination where the quality of institutions is at a high level.
The importance of the quality of institutions in the process of developing tourism on the example of 9 popular Asian destinations is confirmed by Khan et al., (2020). In their research, they highlight the quality threshold that institutions must maintain or cross if they want to achieve positive results. Also, the emphasis is placed on understanding the particularities of individual regions and their economy and creating specific policies that will benefit them.

Balli et al., (2016) and Detotto et al., (2021) proved the importance of the perception of political stability and quality management of institutions. Both surveys showed that tourists are more willing to travel to countries where political freedom is at a higher level. Likewise, a positive and statistically significant relationship is observed between the quality of institutions and tourism revenues. Although all indicators of the quality of institutions had a positive and significant impact on tourism, the variables of civil freedom and responsibility and the rule of law are certainly the most influential.

There are certainly differences when talking about foreign and domestic tourism. In their work, Canh & Thanh (2020) connect changes in tourism with changes in the economy, i.e. with the emergence of economic sensitivity. They present a thesis in which they argue that domestic tourism compared to foreign tourism makes the economy more resistant to economic shocks, but they also mention situations in which such a shock is inevitable. In the research, the quality of institutions is used as a control variable and indicates a kind of well-being and stability of the economy. Connecting the conclusions of this and previously conducted research, it can be noted that there is a cause-and-effect relationship between institutions, tourism and economic growth.

Furthermore, Mushtraq et al., (2020) examine the impact of the aggregate quality index of institutions and its separate components on tourism in India. The collective index proved to be statistically significant in the long and short term, which confirms the assumption that tourists prefer politically stable destinations. The obtained coefficients of the components nevertheless indicate that the quality of institutions is a more dominant determinant of tourist demand in the long term than in the short term.

Akram et al. (2021) on a data set from 1997 to 2018 observe the impact of good land management on tourism, and then the impact of tourism on the quality of the environment. The variables that represented tourism were tourist arrivals and income from international tourism, and the level of governance was represented through 6 indicators from the WGI database. The results of the analysis show a positive and significant influence of corruption control, political stability and the absence of violence, as well as the effectiveness of the government on tourism. Regulatory quality and civil liberties and accountability showed insignificant and inconsistent results, while the rule of law was significant only for international income from tourism. The final conclusion of the study is that the involvement of governing structures in the development of tourism and constant improvement of the work of institutions is desirable. By creating a better institutional environment, the image of a more orderly and stable country is promoted, which is ultimately a more desirable tourist destination.

Summarizing the conclusions of the listed researches, some deviations can be observed in the importance and influence of the variables of the institutional environment on tourism. The potential reason for this is the inclusion of additional determinants of tourist demand in the models and differences that may arise due to the development and popularity of the observed area. Despite the differences, the importance of the quality of institutions in the process of choosing a tourist destination cannot be disputed, and it can generally be concluded that states must set the goal of raising the quality of institutions in order to realize their full tourism potential. Also after reviewing the literature, we come to the conclusion that there is no significant amount of research on the relationship between the quality of institutions and tourism that specifically refers to the area of the European Union. The majority of scientific papers on this topic refer to Eastern countries, especially those that base their development strategy on tourism. Likewise, there are scientific works that deal with a single indicator of the quality of institutions (Santana-Gallego, et al., 2016; Alola et al. 2019; Erdinç & Aydinbaş 2020 and others), but there is a lack of works that would include all indicators and extended the analysis to the
previously defined area. This paper fills the lack of research related to the territory of the EU member states and provides an insight into the detailed analysis of several different institutional variables from two relevant databases.

Therefore, based on the literature review, this research purposes following hypotheses:

• **H1:** Quality of institutions have a significant impact on tourism
• **H2:** There is a positive impact of rule of law on tourism.
• **H3:** There is a positive relationship between control of corruption and tourism.
• **H4:** There is positive association between political stability and tourism.
• **H5:** There is a positive impact of government effectiveness on tourism.
• **H6:** There is a negative impact of tourism on environmental quality.

3. Methods

3.1. Model Specifications

In almost all the researches mentioned in this paper, panel analysis was used to prove research hypotheses, which speaks of its popularity and applicability in science. The popularity of this type of analysis can be attributed to the availability of data, greater capacity to model the complexity of human behavior, and simplification of calculations and statistical explanations (Hsiao, 2007). As with all available methods, numerous advantages as well as possible limitations are noticeable (Baltagi, 2021). The advantages of panel data are manifested in more variability, less collinearity between variables, more degrees of freedom and thus greater efficiency. Also, panel data are better in terms of identifying and measuring effects than spatial data or time series because they contain more data. Another important advantage is their reduced sensitivity to "outliers," i.e. to atypical values that can greatly affect the outcome of the results if they are not interpreted correctly. Estimates obtained with this type of analysis are often more precise due to the dependent variable changing over time and units of observation. In addition to precision, panel analysis reduces parameter bias in the case of unbalanced data and potential multicollinearity.

For the purposes of conducting panel analysis, and according to the dependence on the dependent variable, static and dynamic models are distinguished. Dynamic panel models contain a dependent variable with a backward shift (for one or more periods) and are often used due to the dynamic nature of the economic relations themselves (Škrabić, 2009). Based on the characteristics of the set economic relationship, a dynamic model with Blundell and Bond's estimator was chosen for the purposes of this paper. The results of each model will be subsequently verified with appropriate tests. The first of them is the Sargan test, which will test the validity of the instruments that have been selected to evaluate the model. Accepting the null hypothesis leads to the conclusion that the selected instrumental variables are not correlated with the residuals. This would mean that all the conditions are currently met and that the selected instruments are accepted. Then the autocorrelation tests between the first differences of the residual deviations will be applied. The null hypothesis of the test indicates the absence of first-order autocorrelation between the first differences of the residuals, while the null hypothesis of the test states that there is no second-order autocorrelation between the first differences of the residuals (Škrabić 2009; Blundell et al., 2001).

The model was estimated with the Blundell and Bond GMM estimator in two steps, with a minimum number of instruments for the dependent and independent variables. According to the recommendations from the studied literature (Škrabić 2012), a minimum number of instruments was used to eliminate the possibility of increasing the bias of the estimator and so that the number of instruments would not exceed the number of observation units. This estimator is an upgrade of the two estimators, and has proven to be better at solving situations where the latter show deficiencies. Arellano
and Bover added a level equation to Arellano and Bond's estimator, which allowed the estimation of the effects of time-independent variables. Furthermore, Blundell and Bond continue to upgrade Arellano and Bover's estimator and create a system of estimators where the equation in first differences and the equation in levels are evaluated simultaneously. The two-step estimator found to be the best for this study uses the value of the first differences of the residuals from the estimation of the systematic estimator instead of the relation errors. The Blundell and Bond estimator is generally suitable for research in which the number of periods is relatively small and in situations where the variables are highly persistent.

Initial model:

\[
y_{it} = \mu + \gamma_{i,t-1} + \beta_1 GDP_{it} + \beta_2 INF_{it} + \beta_3 EDU_{it} + \beta_4 CO_{it} + \beta_5 TR_{it} + \beta_6 QI_{it} + \alpha_i + \varepsilon_{it} \tag{1}
\]

\(i = 1, \ldots, N, t = 1, \ldots, T\)

Where is:

\(y – one of the selected indicators of the development of the country's tourism sector in period \(t\) (number of arrivals and employees in tourism)\)

\(y_{i,t-1} – one of the selected indicators of the development of the country's tourism sector in the period \(t-1\)\)

\(GDP – GDP growth rate per capita in the country \(i\) and in the period \(t\)\)

\(INF – inflation measured by the consumer price index in the country and \(i\) in period \(t\)\)

\(EDU – higher education in the country and in period \(t\) (number of persons enrolled in higher education programs) in the country and \(i\) in period \(t\)\)

\(CO – environmental quality with per capita CO2 emissions in the country and \(i\) in period \(t\)\)

\(TR – International trade in the country and \(i\) in period \(t\)\)

\(QI – one of the selected indicators of the quality of the country's institutions \(i\) in the period \(t\)\)

\(\mu – constant member\)

\(\gamma – two-step system estimator\)

\(\beta_1, \beta_2 – parameters to be estimated\)

\(\alpha_i – random effect\)

\(\varepsilon_{it} – standard error\)

3.2. Data and variables definition

The variables in this model were selected based on the studied relevant literature, previous research and in accordance with the availability of data. Each variable from the model, data sources as well as theoretically expected signs are explained below. For the purpose of researching the influence of the quality of institutions on tourism, the sample included 27 member countries of the European Union (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, France, Finland, Greece, Germany, Hungary, Ireland, Italy, Lithuania, Latvia, Luxembourg, Malta, Netherlands, Portugal, Poland, Romania, Sweden, Spain, Slovakia, Slovenia). Annual data were collected for 25 periods, i.e. for the period from 1996 to 2021.

Our dataset consists of two dependent variables, six institutional variables, and five control variables. The variables that depict tourism development in our model are presented via number of tourism arrivals and tourism employment. According to (Liu & Song 2017; Webber, 2001) the most common indicator for tourism demand is the number of tourism arrivals, followed by international tourism receipts and the number of overnights. Bearing this in mind we use number of tourism arrivals as the representative of the level of tourism development in our model. The improvement in tourism
development means that the destination is more competitive on the global tourism market. In addition, we analyze employment in the tourism sector tourism employment, which presents the ability of a destination to deliver quality and competitive tourism services (Dupeyras & MacCallum, 2013) consequently improves tourism development.

As in other dynamic models, the value of the time-dependent variables was included in the models as an explanatory variables (NTA, t-1 and EMP, t-1).

The first variable (NTA, t-1) represents the arrivals in the previous period. Garín-Muñoz (2006; 2007) explains the reasons justifying the inclusion of past spending as a regressor. The first reason is that less uncertainty is associated with staying in a destination already known to visitors, compared to traveling to an unknown foreign destination. Another reason relates to the fact that knowledge and word about the destination spreads as tourists recount events and impressions about their trip to friends and acquaintances, thus reducing uncertainty and uncertainty for potential new visitors to the same destination. Garín-Muñoz (2006; 2007) also emphasizes that it is possible that, if the impact of past demand is ignored, the impact of the relevant variables under consideration will be overestimated. According to the results of previous research, a positive sign of this variable is expected.

According to (Hijman, 2009) labour market tends to react with a year’s delay, both in terms of contraction and recovery. On the one hand, in times of economic crisis, entities try to protect their human capital as much as possible, avoiding firing employees. (Hijman, 2009). On the other hand, restoring confidence among entrepreneurs, even in times of recovery, also takes time. Therefore, perhaps the changes observed in the labour market are only visible when the market shows greater growth stability. Bearing this in mind the value of employment in the tourism sector (EMP, t-1) was included in the models as an explanatory variable.

The first independent variable is the growth of the gross domestic product per capita, and its expected impact on the dependent variables is positive (Ghalia, 2016). The reason for this is the increased purchasing power of individuals, which, among other things, encourages the growth of the tourism sector and investments in it. The growth of the tourism sector then requires a constant influx of labor, i.e. an increase in the number of employees in tourism.

The variable higher education also positively affects the movement of dependent variables (Škrabić et al., 2021). The existence of highly educated staff implies the creation of a higher quality and more competitive tourist offer in the destination (Smeral, 1998), which can influence the increase in tourist arrivals and overnight stays. Individuals involved in higher education programs also generally earn higher incomes. In their research, (Eugenio-Martin & Campos-Soria 2011) point out the level of income as a decisive factor in the decision to travel.

Inflation, which in this case was measured by the consumer price index, represents an increase in prices in the destination. The rise in prices causes an increase in the cost of travel and stay in the chosen destination, so the expected sign of this variable is negative. In addition to the obvious increase in costs, the increase in inflation also affects the decrease in interest in other attractive factors in the destination, which can be avoided by developing innovative products (Yong, 2014). In that case, the innovations would represent an additional value that tourists would realize in exchange for newly created high expenditures.

According to (Turner and Witt, 2001) international trade stimulates business travel and contributes to networking at the individual, business, and national levels. Besides this, international trade bolsters a network effect, which reduces international transaction costs as well as promoting travel and exchanges among countries (White, 2007). Furthermore, international trade boosts product advertisements that attract consumers’ attention and create awareness of both a product and its country of origin. Accordingly, consumers’ attention and recognition stimulate the desire to travel to the home country of that product (Kulendran & Wilson, 2000). To facilitate related activities, international trade encourages a country to develop essential infrastructure, for example, transportation and communication systems. Improvement of infrastructure in turn helps attract more tourists (Santana et
al., 2011). A review of the relevant principles leads to the conclusion that international trade is positively associated with international tourism demand thanks to the fact that it helps reduce the transaction costs of international travel (Leitao, 2010) and the search cost of the destination country.

The quality of the environment, both natural and man-made, is essential to tourism. However, the relationship of tourism with the environment is complex. It involves many activities that can have adverse environmental effects. Many of these impacts are linked with the construction of general infrastructure such as roads and airports, and of tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas. The negative impacts of tourism development can gradually destroy environmental resources on which it depends. Paramati et al., (2017) examined the relationship between tourism and environmental quality in the context of European Nation and found a negative link between these variables. Danish and Wang (2018) also explored the dynamic impact of tourism and economic growth on environmental quality of South Africa and found that the environmental quality of the selected country is significantly influenced by tourism and economic growth. Gupta and Dutta (2018) also revealed the similar findings for the case of Asian economies. Present study measures the environmental quality with per capita CO2 emissions.

In order to monitor the quality of institutions, it was necessary to quantify data that would indicate the level of satisfaction with the elected government and at the same time show the stability of the governing structures. According to Popescu (2012), there are several basic criteria that institutions must meet. The first of them is universality, a criterion that denotes general social rules applicable to all possible situations and an unlimited number of people, and essentially denotes the idea that "no one is above the law". The next item implies credibility, stability and transparency that will maintain a high level of stability in economic and social relations. The last criterion is adaptability. Institutions should be able to anticipate potential changes and offer incentives and solutions to agents in order to adapt to new conditions. In scientific research, it is possible to choose between several indicators of the quality of institutions.

The indicators that we used in this research are the indicators from the World Governance Indicators (WGI), whose concept was developed by Kaufmann et al., (2010) starting from their own definition of institutions and governance. The dimensions of the quality of institutions are based on the concept of:

- Procedures for electing, monitoring and changing governments,
- The government's ability to enact and implement quality policies,
- Levels of respect of citizens and the state towards socio-economic institutions.

According to the above-mentioned authors, two indicators are assigned to each of the dimensions, and in this case a total of 6 indicators form the World Management Indicators:

- Rule of Law – perception of the level of trust and adherence to social rules, especially the quality of contract execution, property rights, police, courts and the occurrence of violence and criminal activity-RL,
- Regulatory Quality – perception of the quality of regulations and policies that the government formulates and implements, which encourage the development of the private sector-RQ,
- Control of corruption - public perception of the use of political power to achieve private interests, as well as the interests of elite groups of society-COR,
- Government Effectiveness – perception of the quality of public services and civil service and their resistance to political pressure-GE,
- Civil liberties and accountability- means the extent to which citizens can choose the government, express themselves freely and have social and media freedoms-CLA,
- Political Stability and Absence of Violence/Terrorism – perception of the potential destabilization and overthrow of the government by violent and unconstitutional means, the likelihood of terrorism and political violence-PS.
The values of each of the listed 6 indicators range between -2.5 and 2.5, where a lower value indicates a lower, or worse, level of quality. It is also visible that a positive influence on the dependent variables is expected for all variables of the institutional environment. According to most research, the assumption is that the high quality of institutions and the stability of the government will favor the development of tourism in the countries of the European Union. Equal and fair conditions for doing business, investing and appropriate legal protection and guarantees of property rights of participants in economic activity form confidence in the state's economic system, including all its institutions (Shapak, et al. 2022). A low level of crime and political threats can certainly increase the attractiveness of a destination, and a stable business climate influences the increase of investments in tourism.

In Table 1 we present the descriptive statistics for the determinants used in our study. The lowest number of arrivals was 525000, while the highest number of arrivals was 217877000. The average number of people employed in tourism is 462470.5. The range of the number of employees in tourism varies from a minimum of 5,700 to a maximum of 2,850,000 people. Descriptive analysis also includes independent variables, and explanations of their values can be found in the following text. GDP growth per capita has an average value of 1.17%. GDP growth rate per capita ranges from -14.2% to 23.99%. Average inflation rate is 1.782953%. The inflation rate ranges from -4.478% to 15.40%. The average indicator of educational attainment, at least Bachelor's or equivalent, population 25+, total (%) is 22.85, which is attainment, at least Bachelor's or equivalent, population 25+, total (%). The Environmental degradation ranges from 2.96 to 22.55 emission of carbon dioxide (CO2) from fossil fuels (metric ton per capita), while trade ranges from min 45.42 to 388.8 as a percentage of GDP. And with the indicators that show the quality of the institutions, we have big differences between the minimum and maximum values. This was to be expected given that we were including old and new members of the European Union, which differ considerably in terms of the level of development.

Table 1. Descriptive statistics

<table>
<thead>
<tr>
<th>Source: Authors' calculations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: NTA-Number of tourist arrivals; EMP- employees in tourism; INF – inflation; EDU – higher education</td>
</tr>
<tr>
<td>CO-environmental quality</td>
</tr>
<tr>
<td>Before evaluating the proposed model of determinants of tourism demand, it is necessary to check the correlation between potential independent variables to identify possible problems of multicollinearity between them. Pearson's correlation coefficients in pairs were calculated for all pairs of variables and are shown in Table 2</td>
</tr>
</tbody>
</table>

Table 2. Correlation matrix
We will have a multicollinearity problem if the correlation between selected determinants is above 0.80 (Gujarati and Porter, 2009). In our sample all correlation coefficients were found to be below this threshold Table 2. As we can see from Table 2, according to the correlation on NTA, on the side of the independent variables, GE (0.51) has the greatest positive influence, followed by COR (0.48) and RL (0.46). What we can state is that almost all the selected determinants that show the quality of institutions have a greater correlation and impact on NTA than other macroeconomic determinants. As for the other dependent determinant EMP, we can say that its correlation with the rest of the selected independent determinants is much lower. The exception is the determinant TR where we have a negative correlation (-0.43).

### 4. Results

Before interpreting the results, it is necessary to first perform the necessary diagnostic tests to verify the validity of the model. The results of the Arellano-Bond and Sargan tests can be seen in Table 3.

The results of the Sargan test show a p-value greater than 0.05 and the validity of the instruments used is confirmed. Likewise, the results of tests indicating the absence of first and second order autocorrelation problems. Since the model satisfied both diagnostic tests - Arellano-Bond and Sargan test, it can be further analyzed and interpreted in accordance with the obtained results.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.224 (0.165)</td>
<td>0.050 (0.75)</td>
</tr>
<tr>
<td>NTA (-1)</td>
<td>0.889*** (0.009)</td>
<td></td>
</tr>
<tr>
<td>EMP(-1)</td>
<td></td>
<td>0.731*** (0.006)</td>
</tr>
</tbody>
</table>
Since the model satisfied both diagnostic tests - Arellano-Bond and Sargan test, it can be further analyzed and interpreted in accordance with the obtained results.

The coefficient of past demand of (NTA, t-1) is 0.889 indicates the presence of consistency in the habits of tourists who gladly return to selected countries, as well as the possible effect of "word of mouth". This result is high loyalty of tourists in the selected countries and which also recognized the recommendations of relatives and friends and previous stay as the most important sources of destination information. Similar results on the positive impact of previous demand on future tourism demand can be found in Gozgor et al.2019 and Škrabić Perić (2021), who also emphasizes the importance of providing high quality service in order to gain a good reputation among tourists and attract both old and new visitors.

The estimated coefficient with the time-dependent variable (EMP, t-1) is 0.731 and is statistically significant at a significance level of 1% which mean that the labour market in tourism industry in the selected countries is moderate competitive. The results was also found in the paper of Škrabić Perić (2021) which presents the ability of a destination to deliver quality and competitive tourism services, and consequently improves tourism development.

GDPPC has a positive and statistically significant influence on two indicators of tourism model specifications. In other words in a given year for 1% unit leads to an increase in emitting tourist consumption of 0.008 %, in the first model and 0.002 % in the second model. Income elasticities are less than one, indicated that tourism travel is not a luxury good.
The value for the consumer price coefficient is -0.004% and is statistically significant at a significance level of 1% only in model 2. Specifically, this coefficient shows that a 1% increase in relative prices in the EU causes a -0.004% decrease in employment in tourism. And model one has the expected sign, but it is statistically insignificant. Given that the absolute value of the consumer price coefficient is less than 1, the conclusion is reached that tourism in the EU is not sensitive to price changes, that is, the demand for tourist products is price inelastic.

Also as we expected we have a positive sign from trade, which mean that an increase in trade openness implies the easiness to travel and encourages tourists to come. We found that a one-percent increase in trade openness tended to increase the number of international tourist arrivals to EU by 0.001 percent and 0.004 percent in the employment in tourism.

Higher education proved to be statistically significant at a significance level of 1% and affects the growth of all dependent variables, which is in line with the initial assumptions about the relationship between quality tourist content and an increase in the number of tourists and number of employers.

The environmental degradation captured by CO2 emission negatively affects the tourism development in two models. According to the results 1% of increase of CO2 emission per capitta will decline 0.003% of tourist arrivals, and 0.002% on share of tourism in employment.

The results of the analysis for the area of quality of institutions are varied in terms of influence on dependent variables, while statistical significance was confirmed for almost all indicators. The results shows that there is a positive and significant impact of government effectiveness on tourism measured by tourism arrivals. If the government effectiveness increases by 1% the tourism industry improves by 0.046%. Control of corruption shows significant negative impact on the number of arrivals. The negative coefficient of control of corruption implies that increase in the value of control of corruption for 1% causes an decrease in the number of tourists arrivals by 0.014%. Also there is an significant relationship between regulatory quality and tourism measured by number of arrivals. If the regulatory quality increase for 1% the number of tourist arrival will increace for 0.070%. When as a dependent variable we used employment in the tourism sector almoust all institucional variables have negative sign except political stability and is statisticly significant. Namelly 1% increace of political stability will increace employment in the tourism sector for 0.029%. From the other determinants which measure institucional quality, only government effectiveness is statistically significant with negative sign when we used employment in the tourism sector as a measure of tourism development.

5. Discussion

In this section,we focused on comparing the above-mentioned results of the presented paper to other scientific papers.

The first control variable, GDP growth per inhabitant, was shown to be statistically significant in two models with a positive impact on the number of tourist arrivals and the number of people employed in tourism. The obtained results are in accordance with the assumptions based on the research described in the introductory part of the paper. GDP growth affects the quality of life and encourages investments in the economy. The appearance of new products and infrastructure attracts tourists, but also encourages the creation of new jobs, but also for fostering an economic environment that proflrates tourism growth, embedded in the economic-driven tourism growth hypothesis (EDTG hypothesis).

The next control variable is inflation, which in different models showed inconsistencies in the form of statistical significance. According to Škrabić Perić et al. (2021), these results can be explained by low inflation levels and the minimal differences between the countries of the European Union. Inflation proved to be statistically significant for the number of employees in tourism, where it has a negative impact. With the growth of the inflation rate, there is an increase in production costs. In an
effort to minimize total costs, companies choose the option of reducing the number of employees. Similar results were obtained by research by (Garín-Muñoz, 2006) and (Rodríguez Martínez-Roget & Pawlowska, 2012).

Additionally, higher education is also significant for our two indicators of tourism. The significant and positive influence of education in our models reflects human capital's robust and important role in tourism development. Thus, they confirm, firstly, that higher levels of education enslave innovative potential, work effectiveness, and efficiency, leading to increased customer value and tourism growth (Assaf & Josiassen, 2011; Milovanovic, 2017). According to Smeral (1998), the competitiveness of a tourist destination largely depends on its diversity, degree of specialization, quality of suppliers and operational networks. Such long-term development can only be achieved by constant investment and inclusion of the population in higher education programs, especially in the field of tourism.

In two models, the environmental degradation captured by CO2 emission negatively influences tourism development. It is based on the fact that CO2 emissions pollute the environment and tourists avoid traveling in environmentally polluted areas. Turan et al. (2014) also found that CO2 emission has negative effect on climate change and a negative effect on tourism. The environmental degradation has also negative effect on share of tourism in employment. The reason is that environmental degradation squeezes the tourism sector which decreases employment contribution of tourism.

The trade openness has been found positively influencing tourism development in two models. The results are in line with the findings of Poprawe (2015) and Demir and Gozgor (2019). The higher level of trade openness means a higher level of economic ties with the rest of the world, which promotes tourism development. The trade openness is particularly attached with business tourism, so by trade openness the economies can have the benefits of tourism.

The analysis of quality of institutions confirmed that the quality components of institutions have a significant impact on the number of tourist arrivals. According to the WGI base variable, government effectiveness and regulatory quality have a positive impact on the dependent variable. Improving the level of corruption control in this case reduces the number of tourist arrivals, and a possible explanation for this was given by Yap and Saha (2013). Namely, in their research, corruption has a positive effect on the number of tourist arrivals. They explain this disparity by the presence of cultural and natural heritage and by bribing civil servants to obtain visas and various permits. Furthermore, corruption can sometimes stimulate growth in the economy and tourism because it serves to achieve higher goals, for example it can stimulate investments in tourism and the development of infrastructure needed for the tourism sector.

It was observed that the institutional environment has a predominantly negative influence on the number of employees in tourism, apart from political stability. A potential reason for such an outcome is that countries with a lower level of institutional quality tend to rely too much on tourism as a source of income and accordingly require more labor in that area. Countries with a pronounced high degree of quality of institutions generally have a smaller share of tourism in their economy compared to other sectors. As emphasized, the workforce in tourism often comes from different parts of the world and from different cultural environments. That is why it is important that the chosen country of work encourages multiculturalism and that there are no significant religious and ethnic tensions. It is also extremely important that the country is politically stable, without certain political threats that can shake the economy.

In summary, it can be concluded that the positive influence of the variables of the quality of institutions is more pronounced in the case of tourist arrivals than in the number of employed persons. Regarding the number of people employed in tourism, their predominantly negative influence is obvious. Taking into account all the presented results, the influence of the quality of institutions on tourism can be confirmed. The knowledge gained from this research is important for the European Union as one of the world's leading receptive and outgoing tourist markets. A better understanding of
the determinants of tourist demand and ways of improving them opens up the possibility of further developing the tourist offer and maintaining a competitive position on the market. The improvement of state institutions leads to tourism and social and economic improvement, which all member countries should strive for.

6. Conclusion

This paper analyzes the link between tourism development and the quality of institutions in the European Union. Globally, tourism has become one of the most important segments of the economy, especially for small and underdeveloped economies that base their socio-economic development on tourism. For many years, the determinants of tourist demand have been studied, and in the recent period, the issue of the quality of institutions has been emphasized as one of the crucial factors when choosing a tourist destination. Tourism is particularly important for the European Union, where it accounts for more than half of total tourist overnight stays and arrivals; therefore, its continuous monitoring and improvement is very important. At the beginning of the COVID-19 pandemic, many countries lost a significant part of their income from tourism due to movement restrictions, which caused further economic problems. In the European Union, the Mediterranean countries experienced a sharp economic decline due to their economic dependence on foreign tourists.

Using Blundell and Bond estimators and appropriate tests, dynamic panel analysis successfully demonstrated the importance of quality state institutions and their significance for domestic and foreign tourism. 27 member states of the European Union were included in the analysis from 2008 to 2021, and data on the quality of institutions were taken from two relevant databases. The control variables used, which also represent the determinants of tourism, are GDPPCG, inflation, higher education, quality of the environment, and trade. The growth of the mentioned variables represents the growth of the standard of living and economic development, so a larger number of inhabitants have enough funds to travel. More differences are noticeable in inflation. In the case where tourist arrivals are observed at the overall level, inflation is statistically insignificant, while inflation has a statistically significant and negative effect on the number of people employed in tourism. A potential reason for this may be an increase in production costs. Also, in the two models, the environmental degradation captured by CO2 emission negatively influences tourism development.

According to the obtained results, it can be concluded that there is a connection between the quality of institutions and tourism. It is interesting to note that improving quality in certain segments of institutions can negatively affect, for example, the number of employees or tourist arrivals. Such changes are most often the cause of changing the economy's structure and the progress of other sectors outside of service activities, which are the most important part of tourism.

This study has faced several limitations. First, there are no data for the selected determinants over a longer period, and we have some missing data observations in the selected period. Secondly, we used only data on the quality of institutions from the World Bank and not other relevant institutions.

Future research on tourist demand should investigate the impact of other potentially relevant determinants, which are nonstrictly economic (population, construction, infrastructure, and some other institutional determinants from the International Country Risk Guide (ICRG) by The PRS Group database). Also, further researchers can use different econometric methods. Finally, another extension of interest is to analyze if there are significant differences in the results when data are disaggregated at a regional or local level.

References


58. Škrabić, B. (2009). Determinante razvoja financijskog sustava zemalja središnje i istočne Europ’, magistarski rad, Ekonomski fakultet, Zagreb

59. Škrabić, B. (2012). Utjecaj stranog vlasništva banke na njezin kreditni rizik u zemljama srednje i istočne Europe: dinamički panel modeli, Sveučilište u Splitu, Ekonomski fakultet Split


70. Yap, G. & Saha, S. (2013). Do political instability, terrorism, and corruption have deterring effects on tourism development even in the presence of UNESCO heritage? A cross-country panel estimate. Tourism Analysis, 18(5), 587-599.

Brief description of the Author:

Fejzulla Beha, Ph.D
ORCID ID: https://orcid.org/0000-0002-4293-0316
Affiliation: Univerzum Pristina, Republic of Kosovo
Email: fejiza@gmail.com
Assistant professor of tourism at Universum International College, Pristina, Republic of Kosovo. The main field of interest is tourism, marketing, and hospitality.