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The Relationship between Tourism, Renewable Energy and Economic Growth in Western Balkan Countries

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Abstract: *The main aim of this study is to investigate the relationship between tourism, renewable energy and economic growth in Western Balkan countries. Tourism is one of the most significant sectors for growth across the Western Balkan countries. In this study, metadata has been used. A model in which economic growth is a function of renewable energy consumption and tourist arrivals has been explored. To test validity, the Granger causality has been used. The results showed that tourist arrivals had a positive impact on economic growth in Western Balkans. Renewable energy consumption had a significant positive impact on economic growth in all Western Balkan countries, too. Based on the research results, the recommendations for policy-makers are presented. The limitations and future research agenda are presented, too.*

1. INTRODUCTION

Sustainable tourism development has become an imperative and industry-standard practice (Trekksoft, 2019). Tourism is one of the most significant sectors for growth across Western Balkan countries (Balkan Forum, 2017).

The vast majority of studies have been conducted in developed countries (Adedoyin et al., 2021; Enilov & Wang, 2022; Leitão & Lorente, 2020; Manzoor et al., 2019). A few studies focused on developing countries (Ben Jebli et al., 2019; Salahodjaev et al., 2022). This study fills the research gap in the literature on sustainable tourism in the specific context of Western Balkan countries.

The main objective of this paper was to investigate the relationship between tourism, renewable energy and economic growth in Western Balkan countries. This study aimed to answer the following research questions:

- Does tourism, measured by tourist arrivals, and renewable energy consumption affect economic growth in a specific environment?
- Can similarities in the tourism sector lead to the creation and implementation of a Strategy for the sustainable development of Western Balkan countries?

This paper is structured as follows. The first part is devoted to the theoretical background of sustainable tourism development, a review of past research is incorporated, and the research context of Western Balkans is presented. The next part presents the methodology, followed by results and discussion. The final part gives the contributions to theory and practice, including the main recommendations, limitations and directions for future research.

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2. THEORETICAL BACKGROUND

The results of the study showed that the tourism industry is an engine of economic development and GDP growth in South Asian countries i.e. Pakistan (Manzoor et al., 2019). A regression analysis indicated a long-term relationship between tourism and economic growth as well as tourism and employment rate in Pakistan (Manzoor et al., 2019).

Another quantitative study conducted in 23 developed and developing countries has shown a causal relationship between international tourist arrivals and economic growth (Enilov & Wang, 2022). The same study indicated that in developing countries tourism would remain a key factor to future economic growth, contrary to developed countries. Also, the Granger causality model has been used to investigate the relationships between tourism development, renewable energy consumption, and economic growth in the United States, France, Spain, China, Italy, Turkey, and Germany (Isik et al., 2018). Tourism development induced economic growth in developing countries, but the relationship in developed countries has been interdependent (Arzoumanidis et al., 2021; Haller et al., 2021). Empirical data from Spain, China, Turkey, and Germany confirmed the theory that renewable energy led to economic growth (Isik et al., 2018).

In the line of an econometric strategy is a study that evaluated the linkages between economic growth, renewable energy, tourism arrivals, trade openness, and CO_2 emission in the European Union (Leitão & Lorente, 2020). The results showed positive impacts of trade openness and renewable energy on the environment and pointed to the importance of sustainable tourism development (Leitão & Lorente, 2020).

The same linkages with addition of the foreign direct investment have been investigated in 22 Central and South American countries (Ben Jebli et al., 2019). The results indicated a long-term relationship between renewable energy and tourism, and these two factors and foreign direct investments had a positive environmental impact. Although, trade openness, as well as economic growth, led to higher CO_2 emissions in observed developing countries (Ben Jebli et al., 2019). In the Central and South American region, policymakers have to attract foreign direct investments, stimulate the use of renewable energy, and promote sustainable tourism.

Adedoyin et al. (2021) stated that green economic growth is possible with adequate environmental protection policies that stop the negative impact of energy consumption. In the same manner, the authors explored the relationship between tourism, renewable energy, and CO_2 emission in European and Central Asian countries (Salahodjaev et al., 2022). The main results were two causal relationships:

- First, renewable energy reduced CO_2 emissions, and
- Second, tourism increased CO_2 emissions.

Salahodjaev et al. (2022) pointed to the importance of renewable energy sources, especially their implementation in the tourism sector. Renewable energy uses and tourism investments had a positive impact on the tourism sector i.e. tourism revenues and tourist arrivals (Lu et al., 2019). The key factors of tourism development in the G20 countries can be renewable energy sources and tourism investments through sustainable tourism development strategies by relevant policymakers.

The assessment of renewable energy potential at the local level is a precondition of sustainable tourism and local development. A case study conducted in Peru showed a positive correlation between tourism activities and local development (Riojas-Díaz et al., 2022).

A new development strategy for the local tourism industry can be the replacement of traditional sources of energy with renewable energy. One study showed that using renewable energy in tourism on the island of Crete had various social, economic, and environmental benefits (Vourdoubas, 2020).

The results of situational analysis have revealed that tourism may be a source of economic growth and development for three main reasons (UNWTO, 2019, 133):

- The main part of the national balance belongs to tourism;
- The tourism sector is one of the most labor-intensive sectors of the national economy. Therefore, the development of tourism can initiate a higher employment rate, especially among females, and youth;
- The development of sustainable tourism creates a demand for specific agriculture products as well as other products from construction, industry, or handicrafts. In some cases, such a demand can initiate the recovery of lost activities and skills.

The important issue of the tourism sector development composite index for selected European countries has been calculated based on indicators such as tourist arrivals, % of beds occupied, nights spent at the destination, and GDP per capita (Mitrovic & Beloglavec, 2021). Of the 29 selected countries, only Serbia and North Macedonia belong to Western Balkan countries. In these two countries, the tourism sector development composite indexes were significantly lower than the European average.

Sustainable tourism is defined by UN World Tourism Organization (UNWTO, 2019) as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities."

The comparative econometric study about EU-15 countries, new EU countries, and Western Balkans showed that sustainable tourism development had a significant and positive influence on relative tourism efficiency (Radovanov et al., 2020). The same study revealed that the average efficiency of tourism development in Western Balkan countries is relatively high in the period before the COVID-19 pandemic.

Tourism is an important sector of many national economies, especially in Western Balkan countries. The western Balkan region includes the following countries: Serbia, Montenegro, Bosnia and Herzegovina, Albania, and North Macedonia. In the aspect of energy, this region has the highest energy intensities, on one side. On the other side, the Region has high renewable energy potential. The complex situation in the regional energy sector has been initiated by the transition to a market economy at a national level, along with the process of the reduction of CO_2 emission. In the aspect of tourism, this is an extremely important sector for the development of all national economies in Western Balkan countries.

The main macroeconomic indicators of the Western Balkan region in 2018 are presented in Table 1. The competitiveness assessment in the same year (2018) is illustrated in Table 2.

Table 1. The main macroeconomic indicators in Western Balkan countries in 2018

	Country				
Indicator	Albania	Bosnia & Herzegovina	Montenegro	North Macedonia	Serbia
GDP growth	4.1	3.1	5.1	2.7	4.5
GDP per capita	13.546	14.900	21.547	16.672	17.736
National GDP (USD billion)	15.1	20.2	5.50	12.7	50.6
Inflation (consumer price index)	2.0	1.4	2.9	1.5	2.0
Net foreign direct investment (as % of GDP)	7.9	2.9	6.9	5.6	7.4
Unemployment (%)	12.8	18.4	15.5	20.7	29.4

Source: OECD, 2021

In 2018, the highest GDP growth has been in Montenegro, and the lowest was in North Macedonia. The highest national GDP had Serbia, and the lowest was in Montenegro. The average inflation rate in Western Balkan countries was 1.96%. The highest unemployment rate was in Serbia, followed by North Macedonia. The detailed analysis of the unemployment rate showed that at least 7 years of sustained high growth rates would be needed to decrease the average unemployment rate in the Western Balkans under 10% (Berthomieu et al., 2016).

Table 2. The competitiveness assessment in Western Balkans

	Country score					WB average
Dimension	Albania	Bosnia & Herzegovina	Montenegro	North Macedonia	Serbia	
Investment policy and promotion	3.1	2.7	3.2	3.0	3.9	3.0
Trade policy	3.3	2.5	3.2	3.8	3.8	3.4
Access to finance	2.5	2.3	2.7	2.4	3.3	2.6
Tax policy	2.8	2.6	2.8	3.3	3.1	3.0
State-owned enterprises	2.3	2.0	2.7	2.3	3.1	2.6
Educational policy	3.3	2.1	3.2	2.9	3.2	3.0
Employment policy	2.8	2.0	3.0	3.3	2.8	2.6
Science, technology & innovation	1.8	1.3	2.4	2.4	3.1	2.1
Digital society	2.5	1.7	2.7	2.4	3.0	2.4
Transport policy	2.5	1.3	2.1	1.8	3.0	2.0
Energy policy	3.2	2.1	3.0	3.7	3.0	3.0
Environmental policy	1.9	1.7	2.4	2.3	2.2	2.1
Agriculture policy	2.8	2.0	3.4	2.8	3.1	2.7
Tourism policy	2.1	1.2	3.1	1.5	2.3	2.0
Anti-corruption policy	2.1	2.0	3.6	2.9	2.9	2.5

Source: OECD, 2021

Along with the key macroeconomic indicators and competitiveness index, the key tourism indicators for Western Balkan countries will be exposed (Table 3).

In the domain of the tourism sector, WTTC (2019) calculates Travel & Tourism competitive index. Selected data for Western Balkans are presented in Table 4.

Table 3. The main tourism indicators in Western Balkan countries in 2018

	Country				
Indicator	Albania	Bosnia & Herzegovina	Montenegro	North Macedonia	Serbia
International tourist arrivals	5,1 mill	1,1 mill	2,1 million	0,7 mill	1,7 mill
International tourism receipts (in USD)	2,2 mill	1 million	1,2 million	400 mill	1,5 mill
Total contribution of tourism to the growth (in %)	2.2	5.9	5.9	6.7	4.2
Inflation (consumer price index)	2.0	1.4	2.9	1.5	2.0
Net foreign direct investment (as % of GDP)	7.9	2.9	6.9	5.6	7.4
Unemployment (%)	12.8	18.4	15.5	20.7	29.4

Source: UNWTO, 2019; WTTC, 2019

Table 4. Travel & Tourism Competitiveness Index in Western Balkans

	Country score				
Index	Albania	Bosnia & Herzegovina	Montenegro	North Macedonia	Serbia
ENABLING ENVIRONMENT					
Business Environment	4.0	3.4	4.6	4.3	4.4
Safety & Security	5.8	5.4	5.6	5.2	5.5
Health & Hygiene	5.3	5.6	5.8	6.0	6.3
Human Resources & Labor Market	5.1	4.1	4.8	4.1	4.7
ICT Readiness	4.7	4.5	5.2	4.7	5.1
T&T POLICY & ENABLING CONDITIONS					
Prioritization of T&T	5.0	4.1	5.0	3.7	3.9
International Openness	2.4	2.4	2.4	2.3	3.2
Price Competitiveness	5.3	5.5	5.6	5.8	5.5
Environment Sustainability	4.3	4.3	4.7	3.6	4.5
INFRASTRUCTURE					
Air Transport Infrastructure	2.1	2.0	3.2	2.4	2.6
Ground & Port Infrastructure	3.1	2.4	3.3	2.6	3.0
Tourist Service Infrastructure	4.0	3.9	5.5	3.9	3.9
NATURAL & CULTURAL RESOURCES					
Natural Resources	2.9	1.9	2.7	2.2	2.1
Cultural Res. & Business Travel	1.2	1.5	1.1	1.4	1.7
Average score per country	3.6	3.3	3.9	3.4	3.6

Source: Calderwood & Soshkin, 2019

The strategic choice and implementation of the development strategy depend on European and national strategies for sustainable tourism. Detailed analysis of tourism policies in Western Balkan countries showed the categorization into two groups: advanced tourist destinations such as Montenegro and the rest countries that have basic tourism services (Porfido, 2020).

To promote sustainable tourism in Serbia the authors proposed the following projects connected to the National Strategy of Sustainable development: identification of tourism, create a database of these resources, renew tourism capacities and build new ones, mark key tourism objects and destinations, and develop urban plans to take advantage of tourism potential (Kontic et al., 2020). Considering the great similarities in Western Balkans, a regional tourism strategy for the Region will be an opportunity for all countries in tourism development (Kontic et al., 2021; Porfido, 2020).

The issue of renewable energy in the region of Western Balkans has been analyzed in various studies (Dunjic et al., 2016; Kontic et al., 2021; Papapostolou et al., 2017; Pavicevic et al., 2020; Topalovic et al., 2022). But, the relationship between tourism, renewable energy, and economic growth in Western Balkan countries has not been explored yet.

3. METHODOLOGY

In this study, metadata from relevant institutions has been used i.e. Eurostat, UNWTO, and WTTC. From the latest Eurostat (2021) report, the data about energy balances for Western Balkans have been included. Metadata about international tourist arrivals was taken from UNWTO (2019). The tourism contributions to GDP growth have been extracted from WTTC (2019) report.

Previous studies conducted in different countries used an econometric model (Enilov & Wang, 2022; Isik et al., 2018; Leitão & Lorente, 2020; Salahodjaev et al., 2022). Since there was no relevant data for all Western Balkans, the authors decided to explore a simplified model in which economic growth is a function of renewable energy consumption and tourist arrivals. To control the robustness of the direction of causality between tourism and economic growth, we used tourist arrivals data.

The model can be written as follows:

$$EG_{it} = f(REC_{it}, TA_{it}) \quad (1)$$

where: EG is economic growth, REC is renewable energy consumption, and TA is tourist arrivals in country i at a time t.

To validate causality from various econometric tests the Granger causality has been used (Maziarz, 2020). Theoretical propositions for Granger causality are as follows (Chandler, 2022):

The null hypothesis of non-causality was firstly tested (H_0: $\beta_2,1 = \beta_2, 2 = \beta_2, 3 = 0$).

The Wald test statistic follows a χ^2 distribution.

Both directions $X \Rightarrow Y$ and $X \Leftarrow Y$ need to be tested.

4. RESULTS AND DISCUSSION

First, the data about energy mix, tourist arrivals as well as tourism sector contribution to GDP is presented in the following tables.

Table 5. Energy mix in Western Balkan countries in 2018

Country	Coal	Oil and oil products	Natural gas	Renewable energy	Other
Albania	2598,407	13419,953	404,93	11858,142	0
Bosnia and Herzegovina	49195,803	19668,886	2315,007	20399,295	0
Montenegro	4192,993	4533,523	0	4008,589	0
North Macedonia	9743,03	11555,9	2428,743	4262,807	0
Serbia	87794,086	44381,589	24793,795	23490,923	13,588

Source: Eurostat, 2021

The highest exploitation of renewable energy was in Serbia, followed by Bosnia and Herzegovina, and the lowest was in Montenegro. The same situation was in the aspects of other energy sources in Western Balkans. In the green agenda for sustainable development, the main recommendation for Serbia and other Western Balkans was to reduce coal, and oil exploration.

Since 2008 in the domain of renewable energy the Report has suggested the following (OECD/IEA, 2008):

- To adopt a comprehensive action plan for renewable energy;
- To identify market potential for renewable energy uses;
- To provide temporary, targeted support to industries that manufacture renewable energy equipment, particularly those manufacturing efficient solid fuel stoves;
- To reinforce actions against illegal logging;
- To develop a national reforestation programme, and
- To support efforts to improve statistics on fuel/wood consumption.

The results of the scenario analysis showed three scenarios for Serbia until 2030 regarding renewable energy consumption (Kontic et al., 2021). The proportion of renewable energy in the total balance will be from 36.8% to 39%.

Table 6. International tourist arrivals in million per year

Country	Year		
	2017	2018	2019
Albania	4,6	5,340	5,9
Bosnia and Herzegovina	0,9	1,053	1,2
Montenegro	1,9	2,007	2,5
North Macedonia	0,6	0,707	0,8
Serbia	1,5	1,711	1,8

Source: UNWTO, 2019

In 2018, the highest number of international tourist arrivals was in Albania, and the lowest was in North Macedonia. Montenegro had the largest contribution of the tourism sector to GDP (over 32%), followed by Albania, but Serbia had the smallest contribution of all Western Balkan countries.

Table 7. Tourism sector contribution to GDP

Country	Year		
	2017	2018	2019
Albania	20.5%	20.1%	21.2%
Bosnia and Herzegovina	8.5%	8.7%	9.2%
Montenegro	30.8%	31.05%	32.1%
North Macedonia	6.95%	7.2%	7.4%
Serbia	5.8%	5.8%	5.85%

Source: WTTC, 2019

The results of the Granger causality test for the relationship between economic growth and renewable energy are the following:

EG=f (REC), F=174.049, p=0.05

REC=f (EG), F=3.573, p=0.31.

The results of the Granger causality test for the relationship between economic growth and tourist arrivals are the following:

EG=f (TA), F=0.052, p=0.857
TA=f (EG), F=18.028, p=0.147.

The tourist arrivals had a positive impact on economic growth in Western Balkans. In this study, the short-term from a long-term perspective has not been distinguished. The results of the study conducted in developing countries showed that tourist arrivals had a positive impact on economic growth in the long term, but not in the short run (Khanal & Khanal, 2022).

Renewable energy consumption had a significant positive impact on economic growth in all Western Balkan countries. This goes in line with previous studies conducted in other developing countries (Ben Jebli et al., 2019; Isik et al., 2018).

The results of the econometric analysis showed a positive and statistically significant relationship between tourism and economic growth in the Western Balkans. The results of the Hausman test, the Hausman Taylor IV suggested that for every 1% increase in tourist arrivals, GDP per capita increased approximately by 0.08% over the same time (Selimi et al., 2017). To create a Regional development strategy, it is important to analyze national policy in the domain of tourism. Table 8 summarizes tourism national strategies and policies in all five Western Balkan countries.

Except for North Macedonia, other countries have relevant national strategies for sustainable tourism development. The same situation is with tourism policy in Western Balkan countries. Montenegro addressed the tourism policy of tourism destination, contrary to other Western Balkans which create basic tourism services. All five countries have relevant government bodies dealing with the issues of tourism and development. All five countries have national promotion slogans for tourism, as well. Along with the lack of legislation, North Macedonia has not defined tourism products as nationally recognizable markers.

The results of the comparative analysis of the Western Balkans showed significant similarities in the domain of cultural heritage, religions, and tradition. In September 2020, the European Union (EU), in cooperation with the German Federal Ministry for Economic Cooperation and Development, launched one million euros for the first 120 aid grants in the tourism sector in Serbia entitled "EU for cultural heritage and tourism" (Government of the Republic of Serbia & Delegation of the European Union, 2021). The largest number of grant beneficiaries, who received a grant of up to 10,000 euros per project, provide private accommodation for tourists (52 entrepreneurs), and camps, restaurants and providers of various catering services, boarding houses, hotels and hostels, tourist agencies, wineries and beekeepers (Maksimovic & Stamatovic, 2021).

Since October 2020, the European Commission has adopted 10 Flagship projects of the Economic and Investment Plan for the Western Balkans in the domain of the following (Barlett et al., 2022):

- Sustainable transport - flagship 1,2,3;
- Clean energy - flagship 4, 5, 6;
- Environment and Climate - flagship 7;
- Digital future - flagship 8;
- Private sector - flagship 9, and
- Human capital - flagship 10.

Table 8. The comparative analysis of Tourism strategies and policies in Western Balkans

	Strategies and policies
Albania	National Strategy for the Sustainable Tourism Development 2019- 2023
Bosnia & Herzegovina	Development Strategy in the Federation of Bosnia and Herzegovina 2021-2027
Montenegro	Montenegro Tourism Development Strategy 2022-2025 with the Action Plan
North Macedonia	National Strategy for Tourism Development should be updated
Serbia	Tourism Development Strategy of the Republic of Serbia 2016-2025
	Tourism policy and focus
Albania	The five Policy Goals are as follows: - Policy Goal 1: Promotion of Public and Private Investments; - Policy Goal 2: Consolidation and Development of Tourism Products; - Policy Goal 3: Improvement of Tourism Services; - Policy Goal 4: Reorientation of Promotion towards Potentials; - Policy Goal 5: Support for the Management of Destinations.
Bosnia & Herzegovina	"Investment attraction, spatial and urban development, standard quality improvement, and branding/marketing strategy definition."
Montenegro	• Operational goal 1 – Improved regulatory framework in tourism with formalization of tourism turnover; • Operational goal 2 – Improved tourism infrastructure and supporting infra and supra structure; • Operational goal 3 – Improved quality and quantity of accommodation capacities; • Operational goal 4 – Improved quality of diversified tourism product; • Operational goal 5 – Improved human resources, knowledge and skills in tourism; • Operational goal 6 – Development of digital, innovative solutions and new technologies in tourism; • Operational goal 7 – Montenegro – a globally recognized tourist destination"
North Macedonia	Should be updated
Serbia	1) Establish an efficient system of tourism development management coupled with a strengthening of the PPP; 2) Improve and align the methodologies and procedures for the collection and processing of statistical data with international standards and practices; 3) Establish the Register of tourism on legal grounds; 4) Reduce the "grey economy" in tourism.
	Government Body
Albania	Ministry of Tourism and Environment
Bosnia & Herzegovina	Federation of BiH – Ministry of Environment and Tourism / Republika Srpska – Ministry of Trade and Tourism
Montenegro	Ministry of Sustainable Development and Tourism
North Macedonia	Ministry of Economy – Department of Tourism and Hospitality
Serbia	Ministry of Trade, Tourism and Telecommunications
	Tourism national promotion
Albania	"Albania – Go your own way"
Bosnia & Herzegovina	"Bosnia and Herzegovina – The heart-shaped land"
Montenegro	"Montenegro – Wild beauty"
North Macedonia	"Macedonia Timeless"
Serbia	"Serbia – The place to be"
	Tourism products
Albania	Coastal tourism, maritime tourism, agrotourism, event and business tourism, cultural tourism (heritage, history, religion, etc.), enogastronomic tourism and health tourism (thermal, welfare and medical).
Bosnia & Herzegovina	Cultural tourism, spa tourism, mountain tourism, outdoor sports, and adventure tourism products, pilgrimage/religious tourism, hunting and fishing tourism, nature and adventure tourism.
Montenegro	Inclusive tourism, wild beauty, wellness, smart tourism, green tourism
North Macedonia	Should be updated
Serbia	Business events, mountain and lakes, urban, health, nautical, touring, and rural and transit tourism.

Source: Adapted from Porfido (2020)

In the turbulent business environment, managers have to revise the strategic plan and make a list of investments by priority. Selling non-core business along with assets is important to gain liquidity. Managers need to focus on cash flow daily and restructure long-term debts. The optimization of all business processes, along with investment in digitalization can be a win-win strategy.

"Private investment will be key in contributing to the development finance equation, in a time where capital and public investment will be heavily stretched" (Svrtinov et al., 2020).

Investing in the competitiveness of the private sector as a precondition of national development and regional integration is one of the priorities of EU funds for Western Balkans. The strategic aim is to invest in innovation and green development, to increase the employment rate of young people, and to initiate transformation and sustainable development of rural areas in Western Balkans (Barlett et al., 2022). New entrepreneurs and managers with adequate business plans can be funded by this EU fund.

Based on the fact that the vast majority of studies have been conducted in developed countries, and a few in developing countries, this study fills the research gap in the literature on sustainable tourism in the specific context of the Western Balkan countries.

From various factors, this study focused on tourist arrivals and renewable energy consumption which caused economic growth in the specific environmental context. This new theoretical approach is presented in Figure 1.

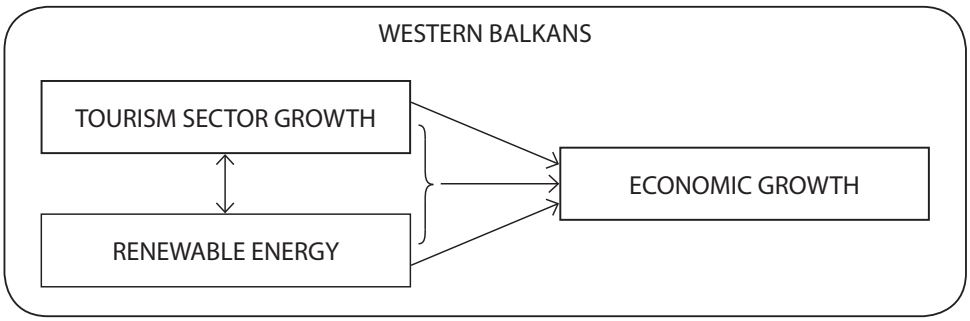

Figure 1. The new approach to sustainable tourism and economic growth in Western Balkans
Source: Authors' elaboration

First, overall recommendations for policy-makers for the future can be summarized as follows (Esch & Palm, 2020):

- Restructure public debt,
- State supported Loan Guarantee schemes,
- Strengthen partnerships with the business sector,
- Reduce taxes for tourism and travel industries,
- Enable schemes for domestic tourists,
- Prepare all state resources for implementation of Economic and Investment Plan for the Western Balkans, and
- Continue to provide additional resources to public health stakeholders.

Main projects in sustainable tourism should be conducted by Government investment and supervision. It is important to invest in the restoration of cultural and historical monuments, recreational and entertainment objects for children and adults, and to mark the key tourism spots. The vital segment for sustainable tourism development is education.

The TSDI Index can serve as a tool that will allow the classification of goals and priorities when designing tourism development policies of the Western Balkan countries. Figure 2 summarizes a review of tourism development recommendations from policy-makers in the Western Balkans.

VITAL	*DESIRABLE*
• Reduce the long waits at border crossing, • Stop unexpected closings, • Increase skills of tourism workforce through training, • Standardize skills, • Promote partnerships between local community, business, and universities	• Welcome tourists at destination, • Promote regional mobility of the workforce, • Form the regional data center for tourist arrivals

ADDITIONAL
• Promote a word of mouth, • Examine the cause of negative reports of international operators, • Promote regional employment rights, • Data sharing with forming the regional protocols based on convergence

Figure 2. Tourism development recommendations from policy-makers in Western Balkans
Source: Adopted from Kennell et al., 2021

The establishment of the macro-regional strategy EUSAIR – the "EU Strategy for the Adriatic and Ionian Region" – and the Transnational Cooperation Programme "Interreg ADRION (Adriatic Ionian)," will be the first step to Regional Sustainable Tourism Strategy in Western Balkan countries.

4. LIMITATIONS AND FUTURE RESEARCH

This study focused on Western Balkan countries, and the findings had limited generalizability to other emerging economies. There were some difficulties in data collection for some countries that have not updated the relevant data. The study has been based on metadata.

Future studies could expand to other important factors of sustainable development and economic growth in Western Balkans countries. This region has similar ethic and cultural values, and traditions; therefore, it is possible to create Regional Development Strategy.

Finally, the future study could address the following aspects:
- Besides international tourist arrivals and renewable energy, it is important to include CO_2 emission in the econometric model.
- Monitoring the implementation of proposed projects by the European Union and regional institutions to foster regional sustainable development of the Western Balkan region.

5. CONCLUSION

Tourism is one of the most significant sectors for growth across the Western Balkan countries, and sustainability has become standard in this sector. This study filled the research gap in the literature on sustainable tourism in the specific context of Western Balkan countries. The main aim of this study was to test the relationship between tourism, renewable energy and economic growth. The starting proposition was that there is a significant impact of international tourist arrivals as well as renewable energy on the economic growth in Western Balkan countries.

To analyze a specific environment, the study explored the following indicators:
- The main macroeconomic indicators of the Western Balkan region i.e. GDP growth, inflation, unemployment rate and foreign direct investments in 2018,
- OECD (2021) competitiveness assessment by country and average Western Balkans score,
- The key tourism indicators in each country in 2018,
- Travel & Tourism competitiveness index by each country.

Based on the metadata about energy mix, tourist arrivals as well as tourism sector contribution to GDP from relevant international institutions, the Granger causality was tested. The results revealed the positive relationship between international tourist arrivals and economic growth, as well as renewable energy consumption and economic growth of the Western Balkans countries.

To answer the second research question about common regional strategy, the study analyzed existing strategies and policies of each Western Balkan country. The results of the comparative analysis of the Western Balkans showed significant similarities in the domain of cultural heritage, religions, and tradition. The same fact motivated the European Commission to approve 10 Flagship projects of the Economic and Investment Plan for the Western Balkans.

In the line of aforementioned issues, the authors proposed a theoretical framework for the formulation and implementation of the Regional strategy for sustainable tourism development.

A summary of policymakers' recommendations is presented, too. The findings of the study were limited to the Western Balkan countries; therefore, some issues could be implemented in other emerging economies.

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