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ASSESSMENT OF TOURISM-LED GROWTH RISKS IN RESOURCE-RICH COUNTRIES: EVIDENCE FROM AZERBAIJAN

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ABSTRACT

The COVID-19 pandemic has provided important lessons in determining future development strategies for countries whose economies are largely dependent on natural resources. The following study was conducted to analyze the potential for tourism to contribute to economic growth and sustainability of economic development in countries rich in natural resources during the post-resource period. Using data from the Republic of Azerbaijan, a co-integrated regression model was used in the analyses. Findings showed that (1) tourism has a positive effect on economic growth and can play a role in ensuring its sustainability; (2) a decrease in revenues from tourism carries more risk for the economy than revenues from oil (coefficient of variation); (3) if an oil and gas country chooses a tourism-based development path in the post-oil and gas era, it may face very serious challenges (due to the fact that tourism sector is highly vulnerable to direct and indirect events); (4) dominance of the tourism sector in the economy carries more risk than dominance of the oil and gas sector.

However, combining two different approaches showed that choosing tourism as one of the priority sectors in the post-oil and gas era can reduce risks and will contribute more to the diversification of the economy.

Keywords: *Azerbaijan, economic growth, tourism income, regression model, coefficient of variation, non-oil sector*

1. INTRODUCTION

Azerbaijan is a resource-rich country, dependent primarily on oil and gas; in 2022, this sector accounted for 52% of gross domestic product (GDP), 50% of the state budget, and 92% of exports. In the early 2000s, the oil and gas sector accounted for one-quarter of GDP. Since 2005, with the beginning of a new mining boom, revenues from oil sales have become an important source of financing economic and social development in Azerbaijan (Khalilov et al., 2021). It is widely acknowledged that resource dependency confers numerous disadvantages. Heavy dependence on oil revenues exposes the country to risks, which emanate from volatility in oil prices, exhaustibility of resources, and exchange rate risks (World Bank, 2022). Since 2014, for example, as a result of the sharp drop in oil prices and the economic crisis in trading partner countries, the rate of economic growth in Azerbaijan slowed considerably and the country faced new challenges. As a result, in 2015, Azerbaijan was forced to devalue its currency twice. In parallel with this, in order to ensure a successful transition to a new model of economic growth and development in Azerbaijan, the country must focus on implementing economic reforms in

new "leading sectors" that will bring about sustainable development. Accordingly, the government has chosen to support a number of sectors of the economy, including agriculture, and to promote the production of competitive products (Shalbuzov et al., 2020).

Tourism was one of the eight priority sectors targeted for development in the strategic road maps adopted by the government of Azerbaijan in 2016. As a result of measures to develop tourism, rapid growth occurred in this sector between 2015 and 2019. In 2015, 1,922,000 tourists visited Azerbaijan; this figure increased in 2019 by 49% to 2,864,000 people (SSC, 2023a). The development of tourism has been significant for Azerbaijan. However, since the beginning of 2020, the coronavirus (COVID-19) pandemic and the restrictions on socio-economic activity in most countries have created new strategic policy challenges for the economy of Azerbaijan and especially for the non-oil sector (tourism sector).

The government of Azerbaijan is taking measures to strengthen strategic, institutional, and financing mechanisms to ensure the sustainable development of the non-oil sector, especially the tourism sector during post-pandemic period, and this issue is reflected in the country's socio-economic development strategy. The strategy aims to increase tourism receipts by 20% by 2026 compared to 2022 (Azerbaijan – 2026, 2022). Thus, tourism is important not only for the post-pandemic but also for the post-oil era. It should be noted that many international institutions, including the World Bank, have emphasized tourism as a priority sector for the development of Azerbaijan during the post-oil era. Azerbaijan's government also expects this sector to play an important role in realizing its goal of ensuring a two fold growth in the economy. This study examines the opportunities for the development of tourism in oil and gas-rich Azerbaijan, its positive impact on economic growth, and the opportunities and risks created by replacing the economy's dependence on oil and gas with dependence on the tourism sector.

The structure of the paper is as follows: The current section introduces the background of the topic. We discuss our literature review and development of hypotheses in Section 2. In Section 3 we explain our research methodology. In Sections 4 and 5 we provide the results of our analysis and discuss the findings. We summarize our research in section 6.

2. LITERATURE REVIEW

Tourism's contribution to the economy is seen primarily in revenues from transportation, tour operators, accommodations, recreation centers, retail sales establishments (such as restaurants and gift shops), etc. (Aktas, 2005:163; Chan et al., 2005). Tourist purchases of goods and services (such as direct spending on places like hotels and restaurants) also generate more spending and income growth in the economy through a multiplier effect. Tourism is recognized as one of the most important sources of economic growth and development in many developed and developing countries by many tourism scholars worldwide (Diamond, 1977; Britton, 1982; Copeland, 1991; Hao et al., 2002; Eugenio-Martin, 2004; Brida et al., 2008; Sana, 2021).

Services in the tourism sector provide additional foreign exchange flows and national income (Fayed and Fletcher, 2002). In fact, the theoretical basis for tourism's role in economic growth is grounded in the literature on exports and economic growth (Vanegas and Croes, 2003). Including tourism in the international services section of the balance of payments current account positions it at the forefront of traditional service activities in international trade. Therefore, tourism expenditures made by foreign tourists in another country have an export effect, given the foreign currency income they bring to that country, exactly like the export of goods. In other words, tourism is an invisible export product (Theobald, 2005).

A wide range of studies exist that aim to measure the economic impacts of the tourism sector.

Some selected examples follow:

According to results from the Granger Causality Test, tourism income has an effect on economic growth (Yıldırım & Ocal, 2004). There are also studies that claim the opposite, which reject the hypothesis of a relationship between tourism and economic growth (Oh, 2005; Yavuz, 2006). According to the hypotheses of other researchers, there is a relationship between international tourism revenues, the real effective exchange rate, and real growth (Dritsakis, 2004; Balaguer and Lorda, 2002). Meanwhile, Bal et al. (2016) examined the relationship between tourism receipts and long-term economic growth in Turkey. Thus, the the result of the research shows strong evidence of a link between tourism and economic growth (*1% increase in tourism receipts leads to economic growth by 0.314%*). Also, Işık Maden et al. (2019), Cuhadar (2020), Yenişehirlioğlu et al. (2020), and Ozer (2021) describe the tourism sector as a contributor to Turkey's economic growth.

Tang & Tan (2013) try to find an answer question of "How stable is the tourism-led growth hypothesis in Malaysia?" and Vanegas & Croes (2003) impact of tourism development in a small economy.

In Azerbaijan, research focused mainly on effects on the non-oil sector (especially agriculture sector) during a post-oil/gas era (Huseyn, 2011, Shalbuzov et al., 2020), and researchers have concentrated on the development of tourism. According to Azizov's analysis (2022), using an econometric model, the impact of tourism revenues on the non-oil sector will lead to an increase in non-oil GDP.

Since we lack sufficient studies for Azerbaijan, we include other studies that examine the impact of tourism on economic development. Diversifying their economies is the key objective for many resource-rich countries. In the case of Saudi Arabia, diversification has been a part of development plans since the 1970s. (Albassam, 2015). Alodadi and Benhin (2015) show that religious tourism has been recognized as a key non-tradable sector in oil-rich Saudi Arabia, and tourism is therefore potentially important for any future diversification of the economy. A recent study on Saudi Arabia by Naseem (2021) spanning from 2003 to 2019 also confirmed a positive relationship between economic growth and tourism. Karim et al. (2021) conducted a study on oil-producing countries like Algeria, revealing that tourism serves as a critical strategic sector for economic growth and development. Their results underscored the considerable potential of tourism programs in Algeria. Some other researchers have explored the potential for tourism to replace the oil economy in Saudi Arabia or as a more sustainable alternative to oil in Nigeria.

In summarizing the literature, it becomes evident that numerous researchers have examined the relationship between tourism and economic growth, with some focusing on the impact of war (terrorism) and economic crises on tourism. However, there has been insufficient research on the impact of epidemics or pandemics on tourism before 2020. In the realm of the limited examination that have taken place, Yang and Chen (2009) conducted a study on the consequences of the SARS epidemic on the tourism sector. Their findings unveiled detrimental effects on Taiwan's GDP and employment, primarily attributable to a reduction in spending by foreign tourists. Also, Zeng et al. (2008) researched impact of SARS in China's and Rittichainuwat & Chakraborty (2009) studied impact of terrorism, SARS and bird flu on Thailand's tourism sector. As well as Cahyanto et al. (2016) examined impact of Ebola on Americans' domestic travel.

According to Zenker and Kock (2020) it is claimed that the research studies have recently been recognized with the unique nature of the coronavirus pandemic in terms of academic perspective. Authors conclude that some imports of disaster/crises are worth researching. In addition, they noted that former studies related to disaster/crises similar patterns and academic literature are able to provide an explanation to the currently observed phenomena.

Up until 2020, researchers did not anticipate the significant damage that a pandemic could inflict on the global economy and tourism. However, since 2020, the COVID-19 pandemic has severely affected the tourism industry, prompting numerous studies. It is an undeniable notion that the impact of COVID-19 on major service sectors including tourism has been its own kind comparing with other events in the 21st century (Zenker & Kock, 2020). Wickramasinghe & Naranpanawa (2023), Wang et al. (2021), Nikolova & Pavlov (2021), Amin & Taghizadeh-Hesary (2023), Pavlov (2023) and others have analyzed the impact of the COVID-19 epidemic on tourism in Europe, Asia, or individual countries. Wickramasinghe & Naranpanawa (2023) examined the potential of domestic tourism in alleviating economic challenges caused by reduced international tourism following the COVID-19 pandemic, particularly in developing countries. Wang et al. (2021) simulated the impact of COVID-19 on the Chinese economy, revealing that the tourism sector suffered more severe consequences. Pham et al. (2021) studied the short-term economic impacts of the inbound tourism industry on the Australian economy during the pandemic, while Amin & Taghizadeh-Hesary (2023) emphasized the sudden and substantial negative shock to Bangladesh's tourism industry in the early months of 2020. Ljubotina and Raspor's (2022) findings indicated that the COVID-19 pandemic and the Ukraine crisis had a profound impact on the tourism sector, suggesting that Slovenian tourism might not fully recover until 2026. Overall, these studies underscore the sensitivity of tourism development to economic crises, pandemics, and conflicts. They also highlight the volatility of the relationship between tourism and economic growth, which is contingent on economic events like recessions and debt crises. In alignment with Wołowiec et al. (2002), it is essential to address economic crises and conflicts for the tourism services market to operate successfully.

According to the literature review, earlier studies examined the issues of tourism for economic development and the impact of the COVID-19 pandemic on this sector in Azerbaijan (Azizov, 2022; Huseyn & Sadigova, 2021; Demiroglu & Muller, 2021; Huseyn & Museyibov, 2022). This article focuses on the relationship between tourism and economic growth, to identify their causal relationship. By doing this, we take into account the risks of replacing the economy's dependence on oil and gas with dependence on tourism sector. Also, this paper reviews previous research papers while focusing on the importance of tourism for Azerbaijan's economy. At the same time, this study presents new approach and reveals that what will be happen with long-term economic growth if the tourism sector would be only the priority sector to be developed after the post-oil-gas era.

3. RESEARCH METHODS AND MATERIALS

3. 1. REGRESSION ANALYSIS

Analytical generalization, comparison, and quantitative analysis methods were used in the research process. Comparative analysis, regression analysis, and coefficient of variation were used to achieve the research goal.

The parameters in the econometric methodology, which we will use for the application of modeling the research object, were evaluated using the *Eviews 9* software package. A co-integrated regression model was used to analyze the relationship between tourism revenues and gross domestic product.

Between 2001 and 2021, the time series of variables consisting of tourism revenues and GDP and the effects of tourism revenues on GDP were examined. Regression coefficients were estimated using the appropriate econometric method by collecting statistical data on variables included in the model. The initial stage consisted of presenting the hypothesis in the form of a stochastic equation and determining the initial theoretical expectations about the sign of the

parameters included in it.

$$logGDP = \alpha + \beta * logTG \quad (1)$$

Here:

log Change in GDP volume

α - fixed (autonomous) limit;

β,γ- propensity ratios;

logTG- Change in tourism revenues

Here, as the main variable included in the regression model, the following hypothesis was established and tested with regard to the effect of the dependent variable of tourism income on GDP.

H_0 – Changes in tourism revenues determine changes in the GDP. It is possible to determine authenticity by the econometric method.

H_1 - Changes in tourism revenues cannot determine changes in GDP. It is impossible to determine authenticity by the econometric method.

Co-efficient of variation. The co-efficient of variation (CV) is a statistical measure of the dispersion of data points in a data series around the mean(Hayes, 2023). The concept of CV indicates the ratio of the standard deviation to the mean, and it is powerful information for comparing the degree of variation from one data series to another, even if the means are drastically varies from one another (Hayes, 2023). The co-efficient of variation shows the extent of variability of data in a sample in relation to the mean of the population. The co-efficient of variation can be useful when comparing data sets with different units or widely different means.

Data. The data was collected from the statistical data of the State Statistics Committee of Azerbaijan, the Central Bank of Azerbaijan, and reports of the State Tourism Agency of Azerbaijan. Also, two focus group discussions (organized by the Faculty of the Management of the Azerbaijan Tourism and Management University in December 2022 and April 2023 and consisting of twelve tourism experts each) took place to focus on the problems in the development of tourism.

4. RESULTS

4. 1. ANALYSIS OF THE CURRENT SITUATION

The World Bank's (2022) Long-Term Growth Model (LTGM) forecasts that Azerbaijan's GDP growth will slow from 1.5% in 2024 to zero by 2050, with an average growth of only 0.5% over 2024-2050. This projection is even less encouraging in per capita terms. GDP per capita growth is projected to start just below one percent and approach zero in the mid-2030s. As a result, GDP per capita would increase from USD $5,900 in 2020 to USD $6,500 in 2050, a cumulative growth of only 11% over 30 years.

Furthermore, the tourism sector is a leading field of activity in many countries around the world, and its development enables the active use of the most popular and valuable natural resources and the creation of jobs. (Wołowiec et al., 2022). Tourism is a stimulating and sustainable industry, which includes activities such as marketing services, accommodation and transportation services, food and beverage activities, retail stores, and various amusement/entertainment attractions. Factors such as technological development, urbanization, population growth, increasing life expectancy, vacations, social security, and freedom to travel play a dynamic role in the development of the tourism industry. In addition, the tourism economy has direct or indirect spillover effects on the transport, trade, construction, accommodation, food and beverage sec-

tors, as well as other service sectors in many countries (Proença & Soukiazi, 2008).

Indeed, the tourism sector plays an important role in world development and it is positively and negatively correlated with global economic growth (Khan et al., 2020). According to the report WTTC, prepared by the World Tourism and Travel Council and Oxford Economics, and which covers the impact of the pandemic on tourism in 185 countries and 25 geographic or economic regions of the world, the tourism industry was responsible for 10.3% of world GDP in 2019 (USD $9.6 trillion); in 2020 this indicator decreased to 5.5% (USD $4.5 trillion) due to the COVID-19 pandemic (WTTC, 2021a).

According to this report, before the pandemic, international tourism accounted for one in four new jobs worldwide and 10.3% of all jobs (333 million). In 2020, there were approximately 62 million or 18.5% job cuts in the tourism sector. In 2021, the number of people in this field was 272 million (WTTC, 2021a).

In 2019, tourists spent USD $1.7 trillion during their travels, which accounted for approximately 7% of international exports and 27.4% of service exports (Earth-changers, 2022). According to WTTC, the summer of 2020 saw a 70% drop in tourist arrivals in Europe, despite a small and short-lived revival. This region suffered the largest decline in absolute terms, with more than 500 million fewer international tourists in 2020 (WTTC, 2021b). In 2019, 3.17 million people visited Azerbaijan. This number had been increasing by 9.16% on average annually, from 681,000 people in 2000 to 3.17 million people in 2019. The direct contribution of travel and tourism to Azerbaijan's GDP increased from USD $0.1 billion in 2000 to USD $1.8 billion in 2019, with an average increase of 19.88% (Knoema, 2019).

Table 1. Tourism and Travel Statistics for Azerbaijan

Years	Tourism service export (thousand USD)	Number of tourists (thousand people)	Expenditure ($)	Tourism as % of GDP	International Tourism, Receipts, % of Exports of Goods and Services*	Balance of International Tourism, % of GDP**
2010	620,652	1279.8	485	1.0	2.76	-0.12
2015	2,309,485	1921.9	1201	2.4	12.64	-0.39
2016	2,713,789	2044.7	1327	2.4	16.24	0.69
2017	3,011,781	2454.0	1227	2.4	16.20	1.01
2018	2,634,163	2605.3	1011	2.3	11.10	0.80
2019	1,791,514	2863.5	626	2.4	8.48	0.34
2020	304,185	519.4	586	1.1	2.24	-0.23
2021	312,746	461.7	677	1.3	1.44	-0.53
2022	823,264	1058.1	778	1.6	-	-

Source: (SESRIC, 2022; SSC, 2022; SSC, 2023a; CBAR, 2022)

**Level of international tourism receipts expressed as a percentage of exports of goods and services (SESRIC, 2022).*

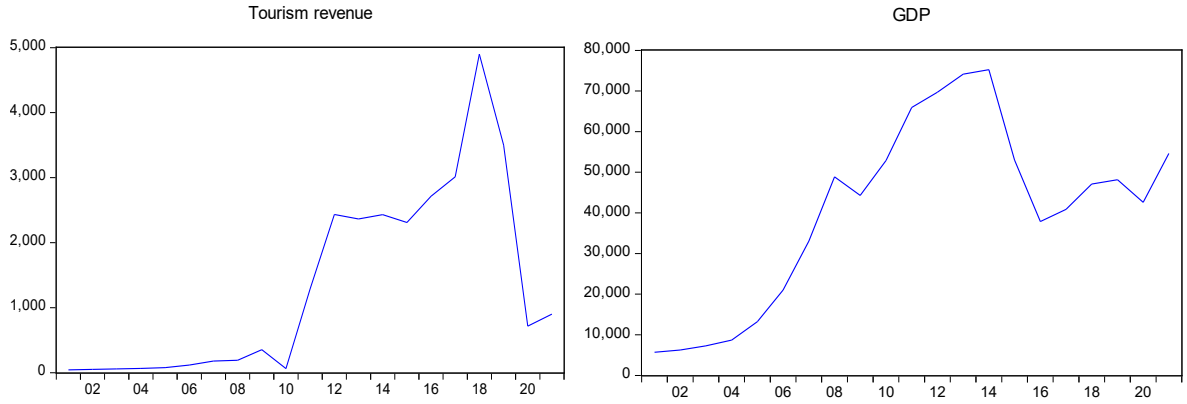
*** Level of international tourism balance expressed as a percentage of GDP (SESRIC, 2022).*The table shows an overall increase in the number of tourists, tourism income, and expenditures from 2010 to 2019, until the Covid-19 pandemic, which seriously affected the tourism sector, beginning in 2020. The coronavirus has also resulted in the closing of borders, restrictions on citizens' travel in Azerbaijan, and has seriously reduced the number of arrivals in the country. According to information from the State Border Service, in 2020, 795,700 foreigners from 155 countries visited Azerbaijan, which was four times less than in 2019. In 2019, 3,170,000 foreign

visitors came to Azerbaijan (SSC, 2022), and in 2020 five million foreigners were expected.

4. 2. CHECKING THE CORRECTNESS OF DATA DISTRIBUTION

Figure 1 shows the time dependence graphs in the specified time interval of the parameters in our model.

Figure 1. Change in variables over time, Azerbaijan, 2001-2021



Source: Prepared by the author based on the results of calculations made using the *Eviews 9* software package

The coefficients obtained from the regression model were assessed according to economic, statistical, and econometric criteria. The question was whether the initial theoretical expectations placed on the parameters of the model were confirmed or not. By testing whether the parameters of the model are statistically significant at an acceptable level of significance, it was possible to determine whether the important econometric assumptions of the regression equation were met. The study details whether the changes in the main variables satisfactorily explain the changes in the dependent variables.

Since each of the main and dependent variables is a time series, it is important to test their stationarity. If the indicators of the variables included in the model in the current period depend on the indicators in the previous period, this indicates a violation of their stationarity.

Table 2. Checking the Stationarity of the Tourism Income Parameter

Null Hypothesis: D(LOGTG) has a unit root				
Exogenous: None				
Lag Length: 0 (Automatic - based on SIC, maxlag=4)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-5.433403	0.0000
Test critical values:	1% level		-2.692358	
	5% level		-1.960171	
	10% level		-1.607051	
*MacKinnon (1996) one-sided p-values.				
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 19				

Source: Results of calculations made using the *Eviews 9* software package

In the table above, the stationarity of the logtg variable was tested using the ADF Unit Root test. The probability value of the logtg parameter is less than 5% and the t statistic value is modulo

1 difference greater than that parameter.

Table 3. Checking the Stationarity of the GDP Parameter

Null Hypothesis: D(LogGDP,2) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Automatic - based on SIC, maxlag=4)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-4.043356	0.0073
Test critical values:	1% level		-3.886751	
	5% level		-3.052169	
	10% level		-2.666593	
*MacKinnon one-sided p-values.				
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 17				

Source: Results of calculations made using the *Eviews 9* software package

As can be seen from Table 4, the p value is less than 10% at the 10% significance level in the logudm parameter, and the t statistic value is larger than the first difference modulo in that parameter. A significance level of 10% in the GDP parameter indicates that there is no single root problem in the variable. Thus the variable was stationary.

Based on the result of our stationarity test, there is no single root problem in the first difference between the two variables. The presence of a cointegration relationship between the two variables was tested by Eager-Granger approach. The residuals of the model were found to be stationary at the (ETGUDM) level. This means that the two variables are in equilibrium over time. That is, there is a cointegration relationship between the logtg and logudm variables.

Table 4. Checking the Stationarity of the Residuals of the Model

Null Hypothesis: ETGGDP has a unit root				
Exogenous: None				
Lag Length: 0 (Automatic - based on SIC, maxlag=4)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-2.986243	0.0050
Test critical values:	1% level		-2.692358	
	5% level		-1.960171	
	10% level		-1.607051	
*MacKinnon (1996) one-sided p-values.				
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 19				

Source: Results of calculations made using the *Eviews 9* software package

4. 3. RESULTS OF REGRESSION ANALYSIS

A co-integrated regression model was used to analyze the relationship between tourism revenues and GDP.

Table 5. Results of Regression Analysis (DOLS)

Dependent Variable: LOGGDP				
Method: Dynamic Least Squares (DOLS)				
Date: 01/26/23 Time: 18:48				
Sample (adjusted): 2005 2018				
Included observations: 14 after adjustments				
Cointegrating equation deterministics: C				
Automatic leads and lags specification (lead=3 and lag=3 based on AIC criterion, max=3)				
Long-run variance estimate (Bartlett kernel, Newey-West fixed bandwidth =3.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGTG	0.285222	0.108676	2.624522	0.0468
C	8.424091	0.755492	11.15048	0.0001
R-squared	0.756935	Mean dependent var		10.69347
Adjusted R-squared	0.368030	S.D. dependent var		0.489937
S.E. of regression	0.389483	Sum squared resid		0.758486
Long-run variance	0.193725			

Source: Results of calculations made using the *Eviews 9* software package

Based on the results of the preliminary analysis, the T-statistic value (2.624522) of the main variable tourism income (logtg) is greater than the Tcritical value and, accordingly, the P value (0.0468) is less than 5%, which indicates the significance of the coefficient of the variable and makes our model acceptable. Also, the fact that the adjusted R^2 coefficient (0.756935) is close enough to 1 indicates that the forecast numbers we received will sufficiently reflect reality.

Now let's analyze the results obtained from our equation Log(GDP) = α + β* log(TG). In models with log-nan, the percentage change of parameters is checked. According to the result obtained from the model, a 1% increase in tourism revenues increases the GDP by 0.285%. The general equation is as follows:

$$LOGGDP = 0.285222272158*LOGTG + 8.42409122964 \quad (2)$$

Therefore, we can conclude that it is important to increase the effectiveness of the measures utilized to stimulate the development of the tourism sector, taking into account the impact of tourism income on GDP over the long term.

4. 4. RESULTS OF THE CO-EFFICIENT OF VARIATION

The co-efficient of variation calculated for oil and tourism revenues yield the following results.

Table 6. Calculation Coefficient of Variation for Tourism and Oil Revenues

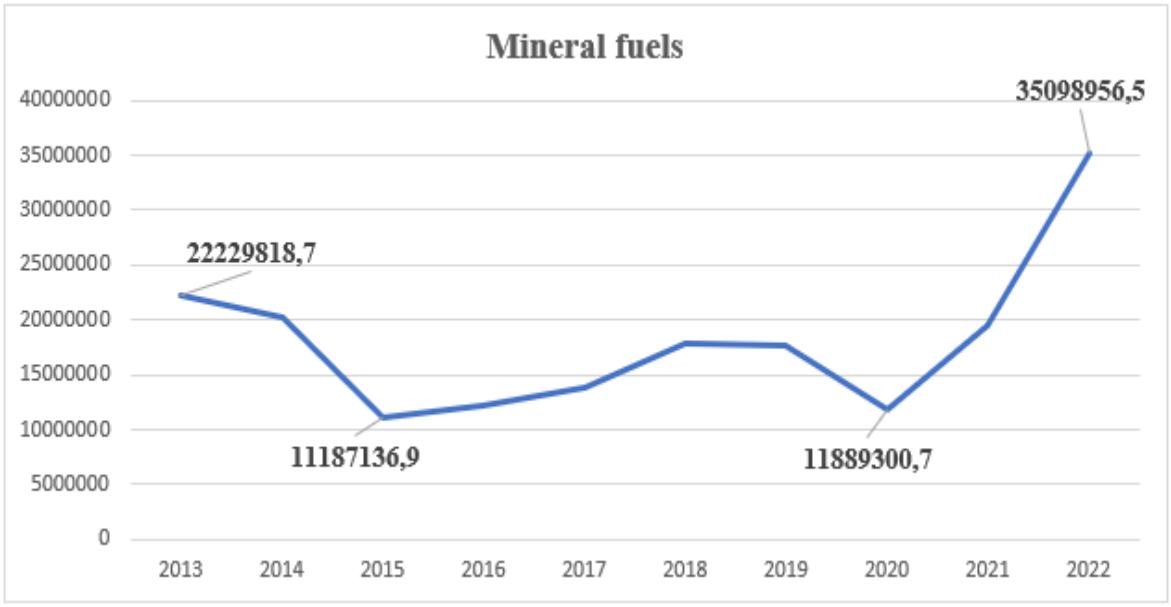
	Standard deviation	Mean	Coefficient of variation, %	Skewness	Kurtosis
Tourism revenues	910769,8999	2030757,6	44,85	-1,34368948	0,52918215
Oil revenues	4056491,537	16928192,38	23,96	-0,149131587	-1,722689686

Source: Calculation by authors

As we know the co-efficient of determination is considered a general measure of variability of statistical data. If we calculate this co-efficient for tourism and oil revenues, we will see that the revenues from tourism show more volatility. The table shows that the co-efficient of variation of tourism is 44.85%; for the oil sector it is 23.96%. Thus the risk in the tourism sector is higher

than in the oil sector.

Figure 2. Export of mineral fuels, minerals oils and bituminous substance products, thousand US dollars



Source: (SSC, 2023b)

The analysis of the data presented in Figures 2 and 3 confirms the validity of our hypothesis, and the results of the coefficient of variation once again demonstrate the uniqueness of this study. We agree that the most visible economic impact of tourism is the significant cash flow it generates, and in some economies, tourism is an important source of income. For example, in the Maldives, the share of tourism in the GDP was almost 60%, and in Palau, it was about 40% (in 2018). Considering the examination of Figure 3, we can envision the scenario that might unfold if Azerbaijan's economy was to rely on tourism, as tourism industry is among the sectors experiencing the most significant impact.

Figure. 3. Tourism - service export, thousand US dollars



Source: (CBAR, 2023; SSC, 2022; SSC, 2023a)

Summing up, the impact of the contribution of tourism on long-term economic growth still needs to be fully understood. As an emerging economy, the tourism sector in the Republic of Azerbaijan has been substantially improving, especially in an international perspective. As an essential instance, the year 2011 was declared the "Year of Tourism", and it shows that not only the economic interests of the government but also political commitment to the development of the tourism sector has taken a new pace as the supply and demand in the sector illustrated upward trend until COVID-19 (Demiroglu & Muller, 2021). The reality is that when formulating Azerbaijan's tourism development strategy in the 2000s, and later in 2016 in the Strategic Roadmap of Tourism the possibility of such a situation arising with significant risks to the tourism industry was not anticipated. The points mentioned in this paper can be useful for countries that consider tourism as the only alternative to the oil sector in their future development strategies.

5. DISCUSSIONS

Taking into account all aforementioned facts and points, it is more likely that the oil reserves in Azerbaijan have been reducing over the past years, and the strategy of the government is more inclined toward the diversification of the energy resources in which it cannot continue relying on this source anymore. It is important to look at some of the alternative economic activities (including tourism) that the country is promoting currently. Therefore Azerbaijan is moving ahead with efforts to diversify its economy and invest in non-oil sectors. However, it will need to offer better quality services in order to turn the tourism sector into a major source of employment (World Bank, 2009). The resurgence seen in Azerbaijan's tourism sector has been based mainly on local tourism in 2022.

A priority is to invest in education and training to meet future labour demand and the higher skill needs expected in agriculture, agro-processing, oil production, oil-related industries, tourism, communication, and financial services (World Bank, 2009).

Tourism, which is a service sector, is developing very rapidly all over the world. In 2019, tourism accounted for 10.3% of global GDP ($9.6 trillion) and 10.3% of global jobs (333 million). Tourists spent $1.7 trillion on travel in 2019, accounting for nearly 7% of international exports and 27.4% of service exports (WTTC, 2023).

Tourism occupies an important place in the non-oil sector of Azerbaijan's economy, which is why the most important element of the analysis is the impact of tourism on the development of the non-oil sector. The impact of tourism activity on other sectors of the economy (agriculture, transport, information technology) was also analyzed using several econometric models. The logarithmic regression in the model shows that a one percent increase in tourism income leads to a 0.76% increase in GDP from the non-oil sector (Azizov, 2022).

In 2019, the added value created in the non-oil sector of the country's economy increased by 3.5% compared to the same period the previous year. The specific weight of the added value created in the non-oil sector of the GDP was 61.7%. According to the State Statistics Committee of Azerbaijan, in 2019, the added value created in the field of tourist accommodation and public catering increased by 6.4% compared to the corresponding period the previous year and reached 1976.7 million manats; its share in the non-oil GDP was 3.9% (SSC, 2023a).

The COVID-19 pandemic caused a serious decline in the tourism sector. In 2020, 5.5 times fewer tourists came to Azerbaijan compared with 2019, and the export of tourism services decreased by 5.9 times(SSC, 2023a). Due to the drop in oil prices, in 2015 oil exports of Azerbaijan decreased by 2.1 times compared to 2014, which caused a problem in the country's economy; this problem would have been considerably more severe if the economy had depended on tourism revenues. The co-efficient of variation calculation confirms this, and it is also the final

result of two focus group discussions, which were organized in 2022. The analysis conducted during the focus group discussions and the results of the established model were presented. The participants agreed that there is a long-term causal relationship between the development of the tourism sector and economic growth. According to the result obtained from our model, a one percent increase in tourism revenues raises the GDP by 0.29%. According to the model established by Azizov (2020) in 2020, a one percent increase in tourism revenues leads to a 0.76% increase in non-oil GDP. Based on results from the focus group discussions, it will be necessary to support the development of several sectors (green energy, ICT, agriculture, etc.) in addition to the tourism sector in countries whose economies depend on oil and gas revenues.

Rapid growth in the economy of Azerbaijan took place mainly in the period of 2005-2010: during this period, the country's economy grew twice. In the following years, the growth rates decreased sharply and an economic growth of only 20% was recorded in the period 2011-2022. Government of Azerbaijan is predicting that total GDP and non-oil GDP will grow on average by 3 and 5%, respectively, in each year from 2022 to 2027, and the tourism sector will grow by an average of 28%. Moreover, Azerbaijan expects to increase the share of tourism in non-oil/gas GDP to 20% by 2027 (Azerbaijan – 2026, 2022).

Note that foreign tourists can play a greater role in the development of the tourism sector in Azerbaijan compared to that of domestic tourists. The country has a population of ten million, but 46% of income is spent on food consumption. Other expenses include education, healthcare, etc.; thus the level of tourism generated by the local population is not high. Despite this, it is necessary to fully realize the existing potential for both domestic and foreign tourism. A main challenge is that two countries (Russia and Georgia) account for more than half of the tourists coming to Azerbaijan. Attracting tourists from high-income countries must be part of the marketing strategy.

6. CONCLUSIONS

Azerbaijan has great potential as a tourist destination, but the country still faces many challenges in the development of its tourism industry. Empirical results show that tourism has a positive effect on economic growth and can play a role in ensuring the sustainability of economic growth. According to the results of causality test made, availability of unilateral causality relation between the tourism revenues and GDP has been confirmed. This outcome indicates that tourism is affected positively by the economic growth. Due to findings, it was defined that 1 % increase in GDP results with 0.285% increase in tourism revenues during the period studied. Thus, this study conducted for Azerbaijan defines that economic growth and development in long period affect tourism sector. Also, our analysis shows that increasing tourism in the economy will have a positive effect in reducing dependence on oil and gas. However, as an oil/gas country, Azerbaijan may face serious challenges if it chooses a development path based solely on tourism in the post-oil/gas era. The COVID-19 pandemic, as in other countries, has not left the tourism sector of Azerbaijan unaffected and has been a negative but important experience for determining the country's future post-oil development strategies. The co-efficient of variation also shows that the risks are higher in dependence on the tourism sector; thus dominance of the tourism sector in the economy carries more risk than dominance of the oil/gas industry (due to the fact that tourism sector is highly vulnerable to direct and indirect unexpected events, crises, incidents). In addition to tourism, Azerbaijan has chosen several other sectors (green energy, ICT, agriculture, etc.) as priority sectors in the post-oil/gas era, a strategy which reduces these risks and contributes more to diversification of the economy.

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