ROLE OF TOURISM IN ECONOMIC GROWTH IN CENTRAL ASIA AND SOUTH CAUCASUS

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Abstract. *Tourism has become a key player in economic development, particularly in transition economies trying to diversify. This article examines the long-run relationship between tourism revenue and economic growth in Central Asia and South Caucasus. The research utilizes Fully Modified Ordinary Least Squares (FMOLS) to investigate tourism revenue and GDP per capita. Results of this study indicate a statistically significant and positive relation. A 1% increase in tourism revenues lead to an approximate 7.18% increase in GDP per capita. An R-squared value of (R-squared = 0.947) indicated that tourism revenues explained a large portion of variation in the economy. Aside from the positive effects of tourism, the study warns that too much reliance on tourism may turn harmful due to external shocks, sectoral imbalances, price changes, etc. Thus, the paper suggests that tourism should be integrated with differential development and that additional supporting infrastructure should be enhanced to allow for long-term sustainability.*
Keywords: *Tourism, Economic growth, Central Asia, South Caucasus, FMOLS*

1. Introduction

Tourism is now one of the most prominent global industries and it touches economic systems in both developed and developing worlds in distinctive ways. For the past few decades, tourism's importance for job creation, foreign direct investment (FDI) and for overall national income has attracted increasing interest from policymakers and researchers alike (Brida & Risso, 2010; Sequeira & Campos, 2007). Many authorities and decision makers regard tourism as a pathway to 'sustainable growth' particularly for those nations rich in cultural and natural resources.

Tourism is particularly important for Central Asian and South Caucasus countries, which saw major political and economic transitions to independent nation-states after the dissolution of the former USSR. For instance, Kazakhstan, Kyrgyzstan, Azerbaijan, Armenia, Georgia and Uzbekistan are each looking for a way to diversify their economies away from historically sophisticated but resource-intensive and economically monotonous sectors such as oil, gas, or agriculture.

These nations are looking for an opportunity to modernize their economies and invest into their integration into the global economy - tourism is usually understood as a relatively easy sector to invest in as it is less likely to require that 'heavy lifting' of intensive sectors like manufacturing, extractive industries, or agriculture, but one that can build from more accessible resources like historical heritage, cultural heritage, and natural beauty (Sequeria & Campos, 2007; World Tourism Organisation, 2023).

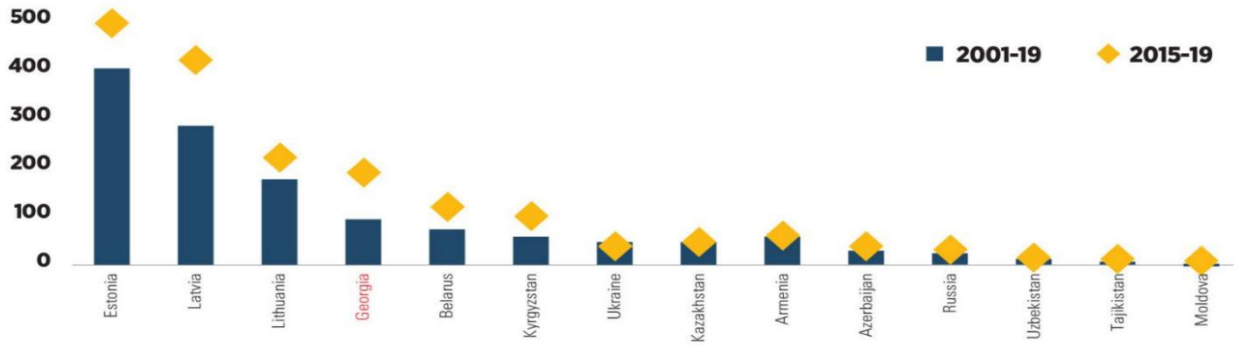
The transformation of the post-Soviet landscape had numerous challenges including economic and institutional challenges. However, some countries in the region, especially Georgia and Kazakhstan, have started to establish then tourism industry as a part of their growth agenda. The

tourism industry has significant job creation, indirect support for small / medium enterprises (SMEs), and can earn foreign exchange that makes it a viable opportunity for GDP growth (Brida & Risso, 2010).

Due to these factors, it is timely and necessary to investigate the relationship of tourism to economic growth in the region. The purpose of this research is to examine if tourism is promoting economic development, or whether tourism is merely stimulating economies through a short-term opportunity. The results of this research should inform national policies and contribute to the discourse on tourism led to economic growth at a global level.

Figure 1: *Number of annual tourists*

Source: World Bank



2. Literature review

Tourism can foster economic growth in ways that are more indirect. The most prominent of those indirect effects is the increase in aggregate demand from the spending of tourists and the consequent increase in domestic consumption stemmed from the hospitality, transport and retail sectors among others (Sequeira & Campos, 2007) As the demand increases, so does production and opportunity for employment across a range of different industries in the economy. Tourism also has the effect of bringing a valuable foreign currency to the host country, which can improve the balance of payments, making it easier to finance imports and service foreign debt(World Bank, 2023; UNWTO 2023). The growth of the tourism sector also creates investments in infrastructure such as roads, airports and public services which may help not only the tourism industry, but also the wider economy by increasing efficiency and accessibility (Brida & Risso, 2010; Sequeira & Campos, 2007). In addition, an uninterrupted inflow of foreign tourism expenditure may support macroeconomic stability by alleviating trade deficits and sustaining the current account (World Bank, 2023). Due to the effect of tourism development on demand to spend foreign currency as mentioned above, tourism has been identified as a strong driver of growth, especially in countries that contain substantial natural and cultural resources.

Tourism, while potentially very rewarding, also has economic risks, especially if it is either over or underdeveloped in some way. Possible economic risks include "Dutch Disease," in which inflows of foreign income create an appreciation of the real exchange rate (Katircioglu, 2009). The real exchange rate governs the prices of a country's exports; if the real exchange rate gains strength from tourism receipts, the country's exports become more expensive and therefore, less competitive, limiting future industrial or agricultural development (Katircioglu, 2009). Additionally, tourism may create sectoral imbalances, such as diverting available labor, capital, and government funding away from more productive or sustainable sectors. Moreover, over-

reliance on tourism will expose the country's economy to external shocks (e.g. geopolitics, pandemics, demand seasonality), under which regions of the country are very sensitive to income volatility, and possibly regional income divergence. Additionally, rapid growth in tourism can also generate local inflation in certain geographical areas, creating very large price volatility in housing, food, and transportation prices. As a result, while tourism provides opportunities for growth, it must be complemented with effective planning, regulation, and diversification initiatives to compensate for the potential economic impact, both positive and negative.

Empirical research examining the relationship between tourism and economic growth has produced mixed conclusions that vary due to the development of sectors, policies, and methodologies between different countries. Brida and Risso (2010) examined long-run relationships between tourism and economic growth in various countries, showing a positive link, though dependent on institutional settings. They concluded that while tourism does have a positive impact on overall economic performance, its contribution is modest without a strong institutional structure or other forms of infrastructure available. In the case of the South Caucasus, Gugushvili (2018) focused specifically on Georgia, and similarly noted that while tourism creates temporary jobs and resources into the service sector, it does not guarantee growth, inclusive growth or long-term growth (Schmid, L. G., Gugushvili, T., & Kohler, T., 2022). Subsequently, during testing of the tourism-led growth hypothesis, examined transition economies (Katircioglu, 2009). There is evidence of long-run cointegration with tourism receipts and GDP supporting the idea that tourism can be a sustainable engine of growth. In summary, the literature suggests that tourism is highly situational. Tourism impact varies based upon the respective national development's objectives, policy coherence, and how tourism can be integrated into the sustainable development from all sectors, and the various degrees of integrationminto economic development.

3. **Methodology**

In order to analyse the connection between tourism revenues and economic growth in Central Asia and the South Caucasus, we utilized the Fully Modified Ordinary Least Squares (FMOLS) estimation approach. The FMOLS estimation approach accounts for both serial correlation and endogeneity in the cointegrated regression model, where our dependent variable is GDP per capita and the independent variable is international tourism revenue as a share of GDP.

4. **Data presentation**

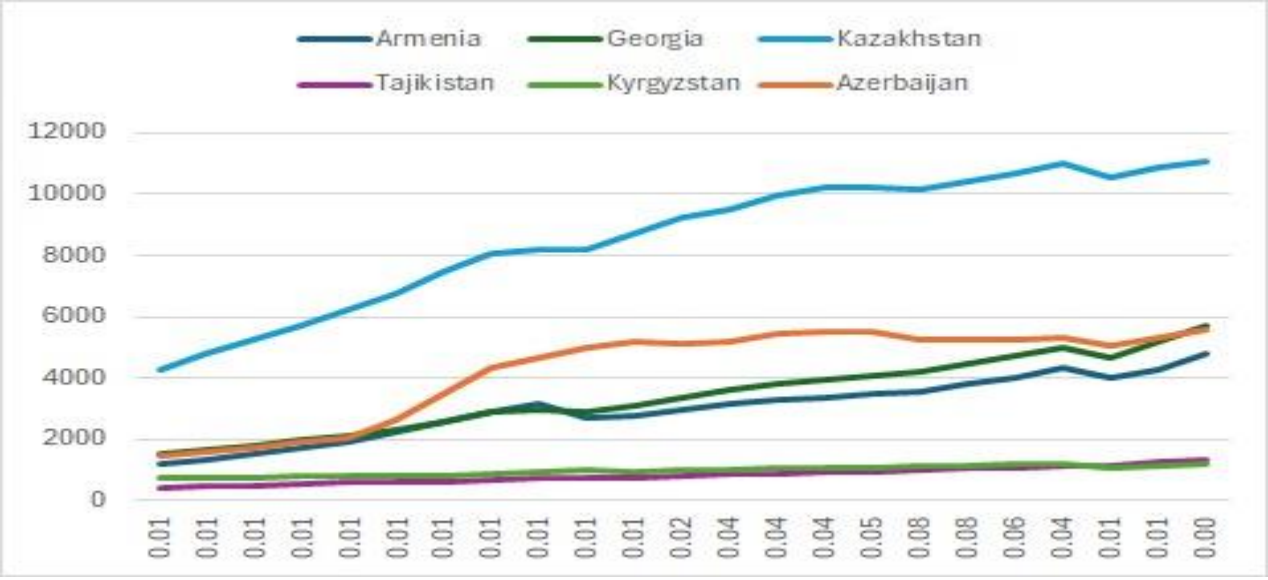


Figure 2: The relationship between tourism revenue and GDP per capita

The panel dataset covers six countries – Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan and Tajikistan – from 2000 to 2023 and contains the following key variables:

•GDP per capita (Y-axis): constant USD value - economic development level across countries

•Tourism revenue (X-axis): International receipts representing international tourism shares of gross domestic product.

This dataset, which relies in large part on the World Bank (2023) data, displays varied patterns of tourism dependency and economic outcomes; for example:

-Georgia and Armenia experienced steady increases in tourism revenue, as a share of GDP, from 2010-2019.

-Azerbaijan and Kazakhstan exhibited lower shares of tourism, while remaining above average GDP per capita.

-Kyrgyzstan and Tajikistan experienced increased volatility in tourism inflows, while maintaining moderate levels of GDP.

The combination of transition and resource-based economies brings varying context to explore the tourism-growth nexus.

5. **Estimation results and discussion**

Table 1: *Results of FMOLS*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TOURISM	7.183451	1.398791	5.135471	0.0000
R-squared	0.947395			

Interpretation: The coefficient for tourism revenue is 7.18; thus, a 1% increase in tourism revenue results in a 7.18% increase in GDP per capita when all other factors are held constant. In addition, this result demonstrates a statistically significant outcome at the 1% level ($p < 0.01$) suggesting strong empirical support for a positive effect of tourism on growth of an economy. The R-squared = 0.947 suggests that approximately 95% of the variation in GDP per capita is explained by model predictors reflecting a strong fit.

Interpretation aside, while results illustrate a statistically and economically significant positive relationship between tourism revenues and economic growth in the represented countries, an over-dependence upon tourism can expose an economy to economic vulnerability including:

- Exposure to shocks from external factors including pandemics, wars, or recessions.
- Potential to fall prey to Dutch Disease (which is especially risky in developing economies that have resource-use limitations).
- Regional inflation and pressure on local resources/infrastructure

6. **Conclusion**

This study investigated whether tourism contributes to economic growth in the Central Asia and South Caucasus regions. Using FMOLS and Toda-Yamamoto causality models, the results

demonstrate a statistically significant positive impact of tourism revenues on GDP per capita. Nonetheless, the tourism sector should not be seen as a permanent engine of growth without complementary investments in infrastructure, quality assurance, policy support, and economic diversification.

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