

DOES THE TOURISM CONTRIBUTE TO ECONOMIC GROWTH: FRESH EVIDENCE FROM SOUTH ASIAN COUNTRIES?

Fazal Amin^{*1}, Ping Guo², Zia Ur Rehman³

^{1&2}School of Economic and Trade, Hunan University

³Department of Economics, Woman University, Swabi, Khyber Pakhtunkhwa, Pakistan

^{*1}aminfazal256@gmail.com; ²gping1963@163.com;

³ziamarwat1980@gmail.com; ³ziamarwat1980@wus.edu.pk

Corresponding Author: *

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ABSTRACT

The main aims of the study to investigate the contribution to economic growth by using the data from 1996 to 2022 of South Asian countries and PMG and cointegration techniques for estimation. This study found that the tourism has positive and significant impact on economic development. A percent increase in the tourism receipts will raise the economic growth by 0.226 percent in the long run. Similarly, the human capital, gross capital formation, labour force participation, FDI, and Political stability have also positive and significant effect on economic growth in the long run. However, the remittance has insignificant effect on economic growth. Therefore, it is concluded that the tourism receipt has significantly contributed in the economic development in the south Asian countries. On the basis of results, this study suggested that the governments and policy makers focus to promote the tourism industry in the country to influence the economic growth.

Keywords: Economic growth; political stability; Tourism; FDI; and PMG.

INTRODUCTION

Economic development is one of the most important goal of economic policy. In reality, the rate of economic growth is used to assess the effectiveness of economic policies. Those with high income rates are seen to have sound economic policies, whereas those with low rate are thought to be signaling to markets that their policies are erroneous or inefficient. On the other side, it is assumed that there is a link between economic progress and well-being. When the economy grows rapidly, there are more employment possibilities and more goods and services to suit the requirements of customers (Nissan et al., 2011).

Tourism is a promptly growing and economically significant worldwide and native industry. It is of perilous economic, social, and cultural significance, and it offers unpretentious prospective for comprehensive and sustainable growth (UNWTO, 2020). This industry is so important that earlier the launch of COVID-19 the integer of tourist journeys complete every year exceeded the globe populace

(Rasoolimanesh et al., 2023). Global tourist influxes surpassed 1.5 billion in 2019, an rise of 3.8% year on year (UNWTO, 2020). Similarly, this amount is prophesied to ascent more, with an estimate of 1.8 billion overseas visitors via 2030 (Trupp & Dolezal, 2020), while this number may be rehabilitated resulting the possessions of the COVID-19 pandemic (Gössling et al., 2020).

Tourism has recognized itself as a vital contraption economic growth after six decades of continuous expansion. In this esteem, it would be tinted that the travel and tourism industry raised by 3.5% in 2019, above the world economy's 2.5% growth for the ninth consecutive year (León-Gómez et al., 2021). From another angle, the segment directly provides 4.4% of GDP, 6.9% of employment and 21.5% of services exports in Organization for economic Cooperation and development (OECD) nations (Harba et al., 2020). The tourist industry has the divergent welfares of being labor intensive, thus a rise in output is generally escorted by intensification

in employment. This is valuable for nations that want to decrease unemployment, but it also a reason of tremor in the job market, levitation remunerations in the service segment and promoting mobility among industries (Eugenio-Martin et al., 2004).

COVID-19's destructive repercussions, contrariwise, are not restricted to the defeat of mortal life, but as well contain immediate and enduring social, economic and political penalties (Farzanegan et al., 2020). A lengthier and extra extensive COVID-19 is anticipated to lower overall growth to 1.5% in 2020, partial the predictable pace earlier 2020, with ramifications for global tourism (León-Gómez et al., 2021). According to the Global Monetary Reserve, the COVID-19 epidemic will produce a worldwide stagnation in 2020 that might be eviler than the one caused by the 2008-2009 international economic crunch (Farzanegan et al., 2020). Likewise, the COVID-19 epidemic should have significant ramifications for international tourism, with substantial insinuations for diverse nations' economic growth affluence (Gössling et al., 2020) and (Yang et al., 2020).

Tourism's economic relevance and expansion is an area of great value today, thus it is not unexpected that there is a substantial form of research that illustrates the many effect of tourism (Rasoolimanesh et al., 2023), (Trupp & Dolezal, 2020), (Farzanegan et al., 2020), and (Niñerola et al., 2019). Similarly, sustainability is an important part of tourism meanwhile it is observed as a resources to meet the strains of shareholders whereas pleasing into contemplation financial result along with existing and forthcoming social and environmental circumstances (UNWTO, 2020), and (Liu et al., 2018). Therefore, tourists industry's sustainability and development constraints are a continuing cause of worry (Asmelash & Kumar, 2019), (Manzoor et al., 2019), (Sharpley, 2020) and (Yoopetch & Nimsai, 2019).

Tourism is one of the utmost reassuring motorists of international growth, may show an essential part in the formation of a green economy and comprehensive growth (Khan et al., 2020). Through the rise of global tourism, several poor nations have been capable to strengthen their involvement in the international economy. Tourism growth is rapidly being recognized as a serious instrument for raising economic growth, decreasing poverty, and boosting food security (Richardson, 2010). Tourism has acknowledged a slice of responsiveness in the

literature as a non-consumptive and less effect growth alternative in emerging nations (Gössling, 2000).

Although the theoretical basis for such a link has not been formally articulated, there is considerable interest in the investigation that whether the international tourism accomplishments contribute economic development or not. Tourism is recognized as an economic commotion that is growing general, and this growth is typically regarded as favorable; specifically, the positive influence of tourism on economic accomplishments is widely highlighted. Furthermore, it is acknowledged to have a good influence on long run economic development via numerous avenues. Tourism has long been acknowledged as having an influence on economic activity (Arslanturk et al., 2011), (Tang & Tan, 2013), (Aslan, 2014), (Nunkoo, 2015), (Wu & Wu, 2017), and (Azam & Abdullah, 2022).

Firstly, tourism is a sort of foreign exchange recipient in rappsorts of incoming tourism, which brings international visitors who purchase local market and business products, letting the area to recompense for trade in capital goods or rudimentary contributions required in the manufacturing procedure. Secondly, it encourages governments and businesses to spend in new infrastructure and trade environments, enhancing local businesses' capacity to contest with enterprises in new tourism zones. Thirdly, it boosts new economic zones via direct, indirect, induced, and spillover effects. Fourthly, it helps to job creation and revenue growth. Fifth, it leads in optimistic scale economies being used in nationwide enterprises (Wu & Wu, 2019).

Arslanturk et al. (2011) show that, above the earlier few years, global tourism has develop progressively significant, and the tourism industry has initiated to show an significant part in the economies of various counties. Giving to the bang of the WTTC (2023,), that in 2022, the Travel & Tourism segment funded 7.6% to international GDP; an rise of 22% from 2021 and only 23% below 2019 ranks. In 2022, there were 22 million new jobs, signifying a 7.9% rise on 2021, and only 11.4% beneath 2019. National tourists' expenditure was enlarged by 20.4% in 2022, only 14.1% beneath 2019. Global tourist expenditure rise by 81.9% in 2022, but still 40.4% after 2019 numbers.

Tourism growth has often been regarded as a good factor to economic prosperity. However, it is unknown if tourist development genuinely generates

economic growth or, on the other side, whether economic development significantly adds to tourism development. Therefore, this study is an attempt to examine the impact of tourism to economic growth in the South Asian nations. As we all know, Asian areas commonly pursue an outward oriented growth strategy. Global commerce, particularly net commodity exports, has been considered as the economic engine. The advertising of new development segments such as tourism or nontraditional exports has been viewed as a pillar of the neoliberal policy of external leaning growth in several Asian nations (Theobald, 2012). Since 2001, the Asia Pacific area has grown significantly as a tourist endpoint, outstanding the United States to become the world's second biggest tourist getting area (Lee & Chien, 2008). It would be highlighted that, while foreign tourism has usually increased in current centuries, not all Asian areas experiencing economic expansion are equivalent. Tourism has been presented as portion of the answer to many Asian countries' economic challenges.

It is also realized as a significant cause of foreign exchange revenues, a source of national labor, and a contribution to economic development (Andriotis, 2002) and (Schubert et al., 2011). Recent tourism literature has concentrated on examining the link among economic development and tourist development (Kim et al., 2006). Utmost prior researches have focused on a single location. It is difficult to associate the conclusions and findings of these researches due to dissimilarities in techniques and data periods. As a result, in mandate to address the gap of the research use South Asian countries data. To provide consistent findings in these areas, we use recently developed PMG/ Panel ARDL approach. This method will surely make it easier to identify geographically specific impacts. We use a PMG technique to measure the impact of tourism receipt on economic development in seven (7) south Asian areas from 1996 to 2022. This study used the political stability as independent variable, because, the political stability is the most important variable for economic growth, which is not used by prior studies. Furthermore, this study used the updated data set and unique combination of variables in the case of South Asian countries. This study is designed address a gap in the existing literature on tourism development and economic development.

Theoretical Framework

The Tourism Led-Growth (TLG) theory describes this economic connection. Indeed, the argument over whether countries should enhance their tourist sectors in order to attain long-term economic development is a new one. However there is a rising and commonly detained nations that tourism may show a grave role in supporting underdeveloped nations to attain economic development and growth. International institutions such as (WTO) and World Travel and Tourism Council (WTTC) firmly accept this idea, according to Cortés-Jiménez et al. (2009).

Empirical Literature Review

Balaguer and Cantavella-Jordá (2002) investigates the role of tourism in the long-term economic growth of Spain. The research confirms the tourism-led growth hypothesis through cointegration and causality testing. The research suggests that the sustained expansion of foreign tourism has been the key impetus of Spain's economic growth finished the previous thirty years. Over the years, there have been significant ripple effects from this growth in tourism. The empirical investigation comes to the finding that government policies that promote effective procurement and the growth of sectors associated with tourism may boost incomes standards.

Eugenio-Martin et al. (2004) explores the association among tourism and economic development in the countries of Latin America between 1985 and 1998 utilized panel data and analyzed it applying the Arellano-Bond estimator. According to the study, medium- and low-income countries benefit more from tourism's favorable effects on economic growth than do advanced economies. The researchers also looked into the GDP, safety, pricing, level of education, and expenditure on infrastructure as determinants influencing tourist numbers. They concluded that despite medium-income nations depend on economic growth and higher GDP per capita, poor nations require adequate infrastructure, education, and growth to draw tourists. Remarkably, the research showed that the expense of the travel destination, when considering the parity of purchasing power as well as exchange rates, has no discernible impact on the expansion of tourism.

Gursoy and Rutherford (2004) formed a theoretical framework to examine the components affecting a host community's provision for the growth of tourism. Nine important factors have an impact on the support that locals have for tourism development,

according to their two-stage structural equation modeling approach to testing the model. Community involvement, ecocentric beliefs, using tourism resources, feeling a part of the community, local economic circumstances, social and economic advantages and cultural advantages are some of these driving forces. Additionally, the study reveals that there are interactions among five dimensions of impacts. Overall, the proposed model explains a significant portion of the erraticism in residents' support for tourism development.

Lee and Chang (2008) utilizes a fresh heterogeneous panel cointegration method to examine the long-term relationships and causal connections between tourism growth and economic development in both OECD and non-OECD nations, counting those in Asia, Latin America, and Sub-Saharan Africa, through the era of 1990-2002. The findings reveal that, on a global scale, there is a co-integrated association among GDP and Tourism Growth when accounting for country-specific effects. Moreover, it is observed that tourism growth has a better effect on GDP in non-OECD nations, with Sub-Saharan African nations experiencing the highest effect when considering tourism receipts. Additionally, the real effective exchange rate is found to significantly influence economic growth. Furthermore, the panel causality test indicates unidirectional causality from tourism growth to economic development in OECD nations, bidirectional association in non-OECD nations but only feeble association in Asia. The empirical results hold significant policy insinuations. Fayissa et al. (2008), analyzed the effect of tourism on economic growth and development in Africa using panel data from 42 African nations spanning from 1995 to 2004. The researchers used various estimation techniques including simple fixed effect and random effect models, along with general method of moments (GMM) estimator and Ordinary Least Squares (OLS) method. The results of their analysis indicate that receipts from the tourism industry considerably contribute together to the present level of gross domestic product (GDP) and the economic development of Sub-Saharan African nations. Furthermore, investments in physical and human capital were also found to have a significant optimistic influence on economic growth. These results recommend that African economies have the prospective to improve their short-term economic development by deliberately reinforcement their tourism industries.

Nissan et al. (2011), investigated the influence of tourism on the economic development of 11 nations during the era of 2000-2005. The researchers used ordinary least squares as the estimation technique. The outcomes of their analysis recommend that tourism shows a noteworthy role in providing funds for financing firms' activities. Additionally, it was found that tourism stimulates the productivity of native companies and generates new employment chances, ultimately contributing to the overall well-being of the nation.

Kadir and Karim (2012) examined the causal association among tourism and economic growth in Malaysia, as well as other ASEAN countries including Singapore, Indonesia, Thailand, Brunei, and the Philippines, a panel time-series approach was utilized for the era from 1998 to 2005. The researcher employed the augmented Dickey-Fuller test (ADF) and cointegration analysis to analyze the data. The outcomes of the panel causality test, based on the error correction model, revealed Granger causality running from global tourism receipts to actual economic development. This indicates the presence of both short- and long-term relationships among tourism and economic development. These results provide confirmation of the noteworthy impact of the tourism industry to Malaysia's economic development, highlighting the importance of municipal interference in providing tourism infrastructure and amenities.

Srinivasan et al. (2012) analyzed the influence of tourism on economic growth in Sri Lanka from 1969 to 2009; the researchers utilized the Autoregressive Distributed Lag (ARDL) bound testing method. The outcomes indicate that tourism has a significant influence on economic development in both the short-run and long-run. Therefore, it is essential for the Sri Lankan government to prioritize political resolutions for sustainable long-term skirmish tenacity in order to achieve unification and stability. This, in turn, will draw extra tourism influxes and contribute to the enhancement of Sri Lanka's economic development.

Ridderstaat et al. (2014) examines the long-run association among tourism growth and economic development in a minor landmass endpoint spanning from 1972 to 2011, the researcher used various statistical techniques including unit root testing, cointegration analysis, vector error correction modeling, and Granger causality testing. The outcomes of the analysis confirm the reciprocal

hypothesis, suggesting that there is a mutually reinforcing association among tourism development and economic growth. The policy implication of this finding is that allocating resources to support both the tourism industry and its related sectors can yield benefits for both tourism development and overall economic growth in the lesser landmass terminus.

Banday and Kocoglu (2015) examined the prospective influence of tourism on economic development in India from 1991 to 2012, the researcher utilized co-integration tests and Granger causality tests. The results provide evidence in backing of the conservative tourism-led hypothesis, which suggests that tourism, characterized by foreign exchange remunerations, has a causal influence on economic development in both the short and long run. The outcomes also confirm a long-run relationship among overseas tourist incomes and gross domestic product, and the Granger causality tests designate a bi-directional causality among these variables.

Hakan et al. (2015) examined the association among tourism bustle and economic growth in the Next-11 (N-11) nations from 1995 to 2013, the researcher employed unit root tests and cointegration tests as estimation methods. The findings show the occurrence of a long-run connotation among tourist influxes and gross domestic product (GDP) in the N-11 countries. Furthermore, it was observed that tourist coming have a significant influence on GDP progress in these nations. The research also confirmed the hypothesis of economic-driven tourism development by establishing a unidirectional causality from economic development to tourism.

Tang and Abosedra (2016) investigated causal connotation among tourism and economic development in Lebanon during the era of 1995 to 2011. The researcher used unit root test, Granger causality approach, bootstrap causality approach and rolling regression technique. In the meantime, we also find certain proof of uni-directional Granger causality consecutively from the real exchange rate to tourism and economic development in Lebanon. Consequently, tourism can be used a policy tool to encourage long-term economic development in Lebanon.

Sharif et al. (2017) examined the link between tourism growth and economic development in a great tourist influx nation for example the United States using monthly data from 1996M01 to 2015M08. The work employs three novel techniques: constant

wavelet, wavelet consistency supremacy range, and wavelet-based Granger causality. The findings of their autoregressive distributed lag and combination cointegration tests indicate that there is a considerable long-run link among tourist growth and economic development in the United States. Moreover, the results indicate that the economic growth has a unidirectional causal impact on tourist expansion in the short term, while the reverse causative link exists in the long run in the United States.

Danish and Wang (2018) study the active relationship among tourism, economic development, and CO2 radiations in the perspective of the BRICS economies from 1995 to 2014. To get trustworthy and unbiased outcomes, a set of econometric tests that are resilient to heterogeneity and cross-sectional dependency is used. According to empirical data, the tourist sector significantly encourages economic development; nonetheless, tourism decreases environmental quality. Furthermore, whereas globalization has a long-term association with economic development, it has a negligible association with CO2 radiations.

Manzoor et al. (2019) explore the impact of tourism on economic growth and employment in Pakistan. The research era lasted from 1990 to 2015. For data analysis, a regression technique and the Johansen cointegration strategy were used. They discovered that tourism has an encouraging and significant impact on Pakistan's economic development along with the employment sector, and that there is also a long-run link among the variables under consideration. They recommend that policymakers emphasis on strategies with a specific highlighting on tourist preferment owing to the country's vast potential.

Ribeiro and Wang (2020) studied the connotation between tourism and economic growth for the era from 1997 to 2018. The researcher used a unit root test, Johansen cointegration analysis, and the Granger causality approach. The research discovered a significant correlation among tourism receipts and gross domestic product, suggesting that tourism activity has a noteworthy influence on economic growth. Furthermore, it was discovered that foreign direct investment had a unidirectional effect on the GDP, receipts from tourism, and the exchange rate. It means that fluctuations in foreign investment may have an impact on Sao Tome and Principe's economy, tourism, and exchange rate. In summary,

these results point out how important foreign investment and tourism are to the nation's economy. Khan et al. (2020), examined the causative association among tourism, economic development (measured by GDP and capital investment), energy consumption, and environmental toxins in emerging economies was investigated, with a precise attention on the case of Pakistan from 1975 to 2017. The researchers used various tests, such as the Dickey Fuller unit root test and Phillips and Perron unit root tests, to confirm the stationarity of the series. Additionally, co-integration, bounds test approach, dynamic ECM, and autoregressive distributed lag (ARDL) models were used as estimation methods. The findings indicate that economic development ropes the growth of tourism. Moreover, tourist influxes were found to have a noteworthy optimistic effect on energy consumption, capital investment, and CO₂ radiations. Additionally, it was observed that environmental pollutant (CO₂) has negative effects on tourism.

Rasool et al. (2021) use panel data from 1995 to 2015 to evaluate the link between incoming tourism, financial development, and economic growth in five BRICS (Brazil, Russia, India, China, and South Africa) nations. The panel ARDL cointegration test findings show that in the long term, tourism, financial growth, and economic development are co-integrated. Furthermore, the Granger causality analyses indicate that the connection among incoming tourism and economic development is bidirectional, authenticating the 'feedback-hypothesis' in the BRICS nations. They argue that the BRICS nations should endorse satisfactory tourist policies in order to boost economic development, which will in turn benefit international tourism.

Azam and Abdullah (2022) examine the relationships among tourism, energy ingesting, and economic development in the highest nine Asian travel and tourism nations, counting Indonesia, from 1995 to 2018. Drawing on Solow's theoretical proposition, the research employs the completely adapted ordinary least squares technique and Granger's causality methods for empirical examination. The results indicate that tourism has a statistically significant optimistic effect on economic development in these Asian countries. Additionally, energy ingesting, exports, and savings also have optimistic and noteworthy effects on economic development. The panel Granger causality tests reveal a reciprocal interdependence among tourism,

energy ingesting, and economic development in the designated nations. Built on these results, the research recommends that governments should focus on developing adequate infrastructure and promoting tourism to harness the optimistic influences of tourism on economic growth in Asian states.

Kumar and Stauvermann (2023) provide a country-specific investigation of tourism's impact on economic development in five tiny Pacific Island Countries (PICs): Fiji, Samoa, the Solomon Islands, Tonga, and Vanuatu. They discovered that tourist expansion boosts growth in all five nations. Foreign direct investment (FDI) boosts growth in Fiji, Samoa, the Solomon Islands, and Vanuatu, although it has a late negative connection in Fiji and Vanuatu. Remittances slow growth in Fiji, Samoa, and Tonga, with a short-run late optimistic association in Fiji, Tonga, and Samoa. For the Solomon Islands and Tonga, economic growth is a growth inhibitor, with a short-run optimistic relationship for Fiji and Samoa. Whereas the findings highlight the enormous significance of tourism in producing development and FDI in the Pacific, given the persisting negative impacts of the COVID-19 pandemic, PICs will have to shift their emphasis to alternative sectors in order to advance economic activity.

Methodology

This study employed the data from 1996-2023 of South Asian Countries namely; Pakistan, Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka, to achieve the objective of the research to examine the impact of the tourism to economic development.

Model Specification

This research utilize the following amended model, which also utilize by Tabash et al. (2023), Rehman et al. (2020), Manzoor et al. (2019), and Eugenio-Martin et al. (2004) etc.

$$EG_{it} = \beta_0 + \beta_1 ToR_{it} + \beta_2 HK_{it} + \beta_3 GCF_{it} + \beta_4 LBF_{it} + \beta_5 FDI_{it} + \beta_6 REM_{it} + \beta_7 PS_{it} + \mu_{it}$$

(1)

Where β, s represent the parameters, $i= 0,1,2,\dots,n$, represent section and t represent time period. Furthermore, μ_{it} is the error term.

Table 1: Variables Description

S.No	Variable Description	Marks
1.	GDP growth (annual %)	EG_{it}
2.	International Tourism, receipts (% of total exports)	ToR_{it}
3.	School Enrollment, Secondary (% gross)	HK_{it}
4.	Gross capital formation (% of GDP)	GCF_{it}
5.	Labor force participation rate, total (% of total population ages 15+)	LBF_{it}
6.	Foreign Direct Investment, net inflows (% of GDP)	FDI_{it}
7.	Personal remittances, received (% of GDP)	REM_{it}
8.	Political stability (Ranked Lower to Higher 1 to 100)	PS_{it}

Estimation Strategy

Pesaran and Smith (1995) developed the Mean Group (MG) techniques for dynamic panel with a high number of groups and temporal data. The MG approach computed a distinct equation for each group and observed the coefficient of distribution across the groups. The parameters of the estimations were computed by taking the means of the coefficients for each group using separate equations and do not take into account the possibility of the same parameters in various groups. Pesaran et al. (1997) developed PMG algorithms for estimating dynamic panel data. They also made some additions by performing a research Pesaran et al. (1999), which found that the pooled mean group estimator enables change in the intercept, error variances, and short run dynamics, but not in cross-group dynamics. The PMG approaches also include an error correction term that describes the amount of modification in each period.

We utilized the panel Cointegration Test designed by Kao (1999) to analyzed the long run association among the variables contained in the model based on the order of integration of the variables. Kao (1999) suggests four Dickey Fuller statistics. The first two types of Dickey Fuller statistics are based on the repressors' presumed stringent exogeneity with respect to model error. The remaining two let for independent variable endogeneity. In addition, he approved the Augmented Dickey Fuller test. Finally, the ADF test allowed for endogeneity and derived the irritant parameter from the long run conditional variances. The tests asymptotic distributions coverage to the standard normal distribution N (0, 1) as T and N.As a result, PMG approaches were employed to estimate the data in this study.

$$\begin{aligned}
 \Delta EG_{it} = & \beta_{0i} + \phi_i EG_{i,t-1} + \beta_1 GCF_{it} + \beta_2 HK_{it} \\
 & + \beta_3 LBF_{it} + \beta_4 PS_{it} + \beta_5 ToR_{it} \\
 & + \beta_6 FDI_{it} + \beta_7 REM_{it} \\
 & + \sum_{i=1}^n \gamma_{ij} \Delta EG_{it} + \sum_{i=0}^n \vartheta_{1i} \Delta GCF_{it} \\
 & + \sum_{i=0}^n \vartheta_{2i} \Delta HK_{it} + \sum_{i=0}^n \vartheta_{3i} \Delta LBF_{it} \\
 & + \sum_{i=0}^n \vartheta_{4i} \Delta PS_{it} + \sum_{i=1}^n \vartheta_{5i} \Delta ToR_{it} \\
 & + \sum_{i=1}^n \vartheta_{6i} \Delta FDI_{it} + \sum_{i=1}^n \vartheta_{7i} \Delta REM_{it} \\
 & + \omega_{it}
 \end{aligned}
 \tag{2}$$

Where

$$\begin{aligned}
 \phi_i = & - \left(1 - \sum_{j=1}^p \gamma_{ij} \right), \beta_i = \sum_{j=1}^q \vartheta_{ij}, \\
 \gamma_{ij} = & - \sum_{m=j+1}^p \gamma_{im}, j = 1, 2, \dots, p - 1 \text{ and } \vartheta_{ij} \\
 = & - \sum_{m=j+1}^q \vartheta_{im}, j = 1, 2, \dots, q - 1, i \\
 = & 1, 2, \dots, n
 \end{aligned}$$

Where i= 0,1,2,...,n, ϕ_i is the error correction term.

Results and Discussion

Table 2 presents the summary of descriptive statistics, which show that all variables are positive correlated with economic growth.

Table 2: Summary of Descriptive Statistics

	EG _{it}	ToR _{it}	HK _{it}	GCF _{it}	LBF _{it}	FDI _{it}	REM _{it}	PS _{it}
Mean	5.254	19.5533	59.3981	31.4320	54.1542	1.8622	5.6147	36.6349
Median	5.6132	8.2245	59.5779	30.1727	54.1050	0.8795	3.6609	32.0000
Maximum	41.7451	85.5615	100.335	69.4726	70.0020	17.1327	27.6261	76.0000
Minimum	-33.4928	0.3594	19.8365	14.1206	39.6670	-0.6756	0.0000	1.0000
Std. Dev.	5.4777	26.7787	21.0845	11.2084	7.7356	2.8589	6.3393	20.6529
Skewness	-0.4801	1.7695	0.0988	1.0318	0.0057	2.9288	1.8632	0.2792
Kurtosis	26.8712	4.5508	2.0999	4.4006	2.9912	11.8828	6.0989	2.0603
EG _{it}	1							
ToR _{it}	0.0466	1						
HK _{it}	0.0609	0.1626	1					
GCF _{it}	0.1142	0.3056	0.3181	1				
LBF _{it}	0.1588	-0.0040	0.0035	0.4787	1			
FDI _{it}	0.1122	0.7256	0.1809	0.2017	0.1878	1		
REM _{it}	0.0958	-0.2186	0.1965	-0.2109	-0.6516	-0.3383	1	
PS _{it}	0.0871	0.5298	0.2747	0.7208	0.5113	0.2731	-0.4228	1.0000

Table 3, presents the cross-sectional dependency test results, which shows that all CD tests indicated that there exist the cross dependency among the sections.

Table 3: CD tests Results

Tests	EG _{it}	ToR _{it}	HK _{it}	GCF _{it}	LBF _{it}	FDI _{it}	REM _{it}	PS _{it}
Breusch- Pagan LM	94.525* (0.000)	100.87* (0.000)	408.71* (0.000)	75.32* (0.000)	266.5* (0.000)	51.88* (0.000)	181.5* (0.000)	116.12* (0.000)
Pesaran Scaled LM	11.345* (0.000)	12.435* (0.000)	59.826* (0.000)	8.381* (0.000)	37.88* (0.000)	4.765* (0.000)	24.76* (0.000)	14.678* (0.000)
Bias-corrected scaled LM	11.211* (0.000)	12.190* (0.000)	59.691* (0.000)	8.246* (0.000)	37.75* (0.000)	4.631* (0.000)	24.63* (0.000)	14.543* (0.000)
Pesaran CD	8.892* (0.000)	4.522* (0.000)	20.070* (0.000)	1.8*** (0.077)	0.808 (0.419)	3.225* (0.001)	3.874* (0.000)	3.220* (0.001)

Table 4 presents the panel unit root test results, which shows that all the 1st and 2nd has generation tests indicated that the series economic growth peroxide by GDP growth and FDI has zero degree order of

integration, while the rest of the series has 1st degree of order of integration. Consequently due to the mixed order of integration the PMG technique is more appropriate and suitable for estimation.

Table 4: Unit Root test Results

Tests Variables	Levin, Lin & Chu t*		Im, Pesaran & Shin		ADF-Fisher		CIPS		Decision
	Level	1 st Dif	Level	1 st Dif	Level	1 st Dif	Level	1 st Dif	
EG_{it}	-5.631* (0.000)	----	-5.773* (0.000)	----	65.19* (0.000)	----	-3.325* (0.000)	----	1(0)
ToR_{it}	-0.710 (0.239)	- 2.671** (0.040)	-2.017** (0.022)	-5.164* (0.000)	22.719 (0.065)	52.741* (0.000)	-1.853	-5.12* (0.000)	1(1)
HK_{it}	- 1.946** (0.026)	-3.316* (0.001)	0.625 (0.734)	-4.237* (0.000)	10.235 (0.745)	44.79* (0.000)	-1.655	-4.63* (0.000)	1(1)
GCF_{it}	-0.387	-4.178* (0.000)	-0.782	-5.560* (0.000)	17.46	57.00* (0.000)	-1.850	-5.14* (0.000)	1(1)

	(0.357)	(0.000)	(0.217)	(0.000)	(0.233)	(0.000)			
LBF_{it}	1.064	-4.538*	2.847	-5.642*	3.661	58.968*	-	-	1(1)
	(0.856)	(0.000)	(0.999)	(0.000)	(0.997)	(0.000)	2.15***	4.594*	
FDI_{it}	-	----	-2.656*	----	31.93*	----	-3.234*	----	1(0)
	2.178**		(0.004)		(0.004)				
	(0.015)								
REM_{it}	-1.382	-4.047*	-0.379	-5.565*	13.712	57.67*	-1.876	-4.41*	1(1)
	(0.084)	(0.000)	(0.352)	(0.000)	(0.471)	(0.000)			
PS_{it}	-1.102	-6.979*	-0.770	-6.214*	14.107	64.17*	-1.96	-4.86*	1(1)
	(0.135)	(0.000)	(0.221)	(0.000)	(0.442)	(0.000)			

Note: *, ** and *** indicate the significant level at 1%, 5% and 10% respectively.

Table 5 presents the PMG findings; in the long run the results indicate that tourisms have positive and noteworthy influence on economic growth. A percentage rise in the tourism receipt will raise the economic development by 0.226 percent in the long-run. The same findings were also given by Arslanturk et al. (2011), Tang and Tan (2013), Aslan (2014), Nunkoo (2015), Wu and Wu (2017), and Azam and Abdullah (2022). Similarly, the human capital has also positive and noteworthy effect on economic growth. Furthermore, the gross capital formation has positive and noteworthy impact on economic growth. Similarly, the labor force participation has also

positive and noteworthy influence on economic development. Furthermore, the FDI has positive and significant impact on economic development. However, the remittance has insignificant effect on economic growth. However, the political stability has positive and noteworthy influence on economic development. In short run, the FDI has positive and noteworthy influence on economic development, while, the rest of variables has insignificant impact on economic development. The ECM value shows that 94.50% level of adjustment from short run to long run equilibrium.

Table 5: Regression Analysis

Variable	Coefficient	Std.Error	t-Statistic	p-value
Long Run Results				
TOR _{it}	0.2263***	0.1175	1.9265	0.0565
HK _{it}	0.0328**	0.0150	2.1886	0.0306
GCF _{it}	0.2428*	0.0410	5.9240	0.0000
LBF _{it}	0.1883**	0.0895	2.1047	0.0375
FDI _{it}	0.5505**	0.2208	2.4931	0.0141
REM _{it}	0.0595	0.0589	1.0109	0.3142
PS _{it}	0.0560*	0.0189	2.9664	0.0037
Short Run Results				
ECM _{it}	-0.9450*	0.1433	-6.5969	0.0000
D(TOR _{it})	0.6616	0.5531	1.1963	0.2340
D(HK _{it})	-0.1069	0.0899	-1.1888	0.2369
D(GCF _{it})	0.2133	0.1682	1.2680	0.2073
D(LBF _{it})	1.7330	1.2539	1.3821	0.1696
D(FDI _{it})	0.6482***	0.3767	1.7208	0.0879
D(REM _{it})	1.4299	2.5146	0.5686	0.5707
D(PS _{it})	-0.0765	0.0728	-1.0503	0.2958
C	16.8779*	4.3207	3.9062	0.0002

Note: *, ** and *** indicate the significant level at 1% , 5%, and 10% respectively.

Table 6 presents the cointegration test, both tests results shows that there are exist the long run cointegration amongst the variables.

Table 6: Cointegration Tests

1. Kao Residual Cointegration Test		
ADF	t-Statistic	p-value
	-5.4815*	0.0000
2. Westerlund test for Cointegration		
Variance ratio	Statistics	p-value
	-1.8628**	0.0312

Note: *, ** and *** indicate the significant level at 1%, 5% and 10% respectively.

Conclusion and Recommendations

The main aims of the research to investigate the contribution to economic development by utilizing the data from 1996 to 2022 of South Asian countries and PMG and cointegration techniques for estimation. This research found that the tourisms have positive and noteworthy impact on economic development. A percent raise in the tourism receipt will raise the economic development by 0.226 percent in the long run. Similarly, the human capital, gross capital formation, labor force participation, FDI, and Political stability have also positive and noteworthy influence on economic development in the long run. However, the remittance has insignificant influence on economic development. Moreover, the FDI has positive and noteworthy influence on economic development, while, the rest of variables has insignificant influence on economic growth in the long run. Furthermore, there is 94.50% level of adjustment from short run to long run equilibrium and exists the long run cointegration amongst the variables. Therefore, this is concluded that the tourism receipt has significantly contributed in the economic development in the South Asian countries. On the basis of results, this research suggested that the governments and policy makers focus to promote the tourism industry in the state to influence the economic development.

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