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The impact of tourism industry on the economic growth of Pakistan

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Abstract:

The fundamental plan of the study is to explore the impact of tourism receipt on Pakistan's gross domestic product growth and use the data set from 1995 to 2019. This study employed ARDL techniques for estimation. The study reveals that the economic growth (later on GGDP) has been favourably and significantly affected by the labour force, foreign direct investment, exchange rate, and gross national expenditure. However, gross capital formation and human capital showed an encouraging outcome on the economy in the long period but showed unfavourable and noteworthy effects in the short period. The tourism receipt and inflation rate have a favourable and noteworthy influence on the GGDP in the long run, but they have an inconsequential impact on the GGDP in the near run. This study concluded that tourism receipt has significantly influenced Pakistan's GGDP. This study recommended that the government should focus on the promotion of tourism in Pakistan to earn more revenue and enhance economic growth. The government also devised feasible and flexible policies and has provided facilities to attract foreign tourists for the country's economic development.

Keywords: Tourism expenditure, Gross domestic product growth, Gross national expenditure, Exchange rate, Inflation, Human capital, Foreign direct investment, Labour force.

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1. Introduction

Tourism is an essential economic activity and plays an important role in the GGDP of a country. Mainly the four goods and services in a location are demanded by the tourists that are food, accommodation, entertainment, and transport facilities. Tourism has a favorable outcome on the growth of an economy as it rises the level of employment in the country (Eugenio et al., 2004). Moving to and resting of an individuals in places external their usual environment for less than one continual year for vacations, business, or for some other objectives is regarded as tourism (Frechtling, 2010). Tourism is defined as the exercise of traveling aboard for short period by millions of people for relaxation, recreation, pleasure, sightseeing or learning to meet their socio-cultural and psychological needs. Even though the tourism is a phenomenon that includes cultural and social dimensions, it is actually is social activity which justifies attention due to its economic dimension on the whole (Kar et al., 2004).

The key objective of the government to embolden tourism all over the world is that it has an encouraging effect on the economic development. Tourism creates employment opportunities and increases the income which leads to a positive tourism balance of payment and it stimulates the tourism supply sectors thus increasing the level of GGDP in a country (Webster & Ivanov, 2009). Thus, the tourism considerably affects both the economic development and the employment level of an economy. Tourism basically is relevant to those regions where there is high rate of unemployment and low level of per capita GDP. According to the general opinion tourism not only rises foreign exchange but also rises the level of employment (Samimi et al., 2011). According to Oluwatuyi and Akinlo (2018) the role of tourism industry in the economic development (later on GDPpc) of a country could be observed from its exports. New earnings are required for the sustainability of every nation which will help in fight against inflation and also it will be effective to satisfy the increased demand (Kalaiya & Kumar, 2015). One of the important and successful industries is tourism. It is a source of employment generation, Reduction of poverty and human development in India, also tourism comprises of one third of foreign earnings of India. As compared to other sectors it employed maximum number of people (Padhi & Mishra, 2013).

The rapid growth of tourism increases the income of household, government revenue, improves balance of payment and growth of tourism industry (Kreishan, 2010). Activity of Tourism is benefitted for the tax revenue, employment (it leads to labor intensive) and some other sources of income (Seetanah, 2011). The tourism industry depends upon those people who are willing to leave their hometowns and became a customer. For achieving the success, the location must attract the customers from different places to visit its community (Correia & Kozak, 2010). When the tourists visit the rural areas it will allow the inflow of foreign currency in these areas causing business expansion and increase in the household income (AL-Najjar & Ishwara, 2018). Tourism also has important way to earn foreign capital and these capital goods can be further used for manufacturing more commodities which ultimately leads to the growth of an economy (McKinnon, 1964). Developing tourism is based on the security in the world. The lot of tourist resort has been closed due to terrorist attacks (AL-Najjar & Ishwara, 2018).

By the growth of tourism, the wealth of society increases, and it also helps in the provision of commodities. In the past, tourism was considered as a habit of rich but now it is believed that it a consumption habit of many people both in developing and advanced nations. In the 21st century tourism is considered an important sector because of its share in the economy

(Gökovali & Bahar, 2006). Tourism is viewed as an important instrument to boost GDP growth of the developing countries and social and cultural development of under developed countries, which faces the situation of unemployment, lack of capital inflow (Karki, 2012). It serves as a key source for the capital inflow of these countries and also provides a ground for the development of basic infrastructure (Aratuo et al., 2019). In the developing countries 83 percent of export is tourism and it is considered to be important source of foreign exchange after petroleum (Richardson, 2010).

Currently, tourism is reflected as a best economic sector which can tackle the problems of unemployment by creating the job opportunities and by raising the life standard of the poor people (Rout et al., 2016). The fast advancement of tourism sector since the early 1980s has made the scholars to take interest in finding the link between tourism and GGDP of several economies (Akkemik, 2012). Pakistan is much popular for tourism. Pakistan have very beautiful places and its sector of tourism is developing day by day (Chen & Chiou-Wei, 2009). In the developing world Pakistan has much attraction. The historical inheritance and culture is very perceptible in this prehistoric region. Pakistan have too many places like Kalam, Malam Jabba, Balakot, Swat, Murri, Shangla, Gilgit, Ayubia, Paras, Chitral, Shinu, Sharan, Lulusar, Naran, Dudupatsar, Kaghan Valleys, and Shogran, Malika Parbat, Lake Saif ul Muluk, Supat valley and too many others places and mountain ranges attract and receives too much tourist every year (Arshad et al., 2018). There are a lot of places in Pakistan's Northern areas which are encompassed of grandeur and majesty. Such areas have relics of diverse lands special to its tradition. These areas are also blessed as a highest destination with a shocking collection of many valleys, lakes, mountains, and rivers (Adnan & Ali, 2013). The Pamir, Himalaya, Hindukush, and Karakoram Mountain ranges produce impressive areas. They bring mountaineers, hikers, climbers, and trekkers. Only a few areas in the world can offer such a huge diversity of socio-economic structures, history, and a good quality combination of outstanding natural attraction as presented by Hindukush and Himalayan areas of Pakistan (Rasul & Manandhar, 2009).The direct contribution of tourism in the Pakistan's GDP 2.9 percent in 2017 and increase in by 5.9 percent in 2018, and is expected to be maintain increase by 5.8 percent in up to 2028 per year and reach to 3 percent of the total GDP in 2028 (Kumail et al., 2020).

Numerous studies have proved the direct association between tourism and the growth of an economy. The scholars examine the robust link between exports and GDP growth of an economy. Furthermore, tourism additions are linked to the GDPpc. Though, export leaning GDPpc instigated tourism receipts to drop (Manzoor et al., 2019). The policies of constant encouragement of tourism may not be effective as supposed by decision makers, if no direct association was establish between economic growth and tourism development, as it normally occurs when tourism receipts has an encouraging effect on the economic growth (Manwa, 2012). There are few analysis, which are conducted to study the link between the tourism industry and GDP growth of South Asian areas, specifically in Pakistan (Manzoor et al., 2019). The present literature's findings on the tourism-growth causal relationship are varied, therefore broad conclusions regarding their interaction cannot be derived (Enilov & Wang, 2021). The process by which tourism contributes to economic growth is poorly understood. These limitations may restrict the contributions of tourism-led economic growth research, and their results may mislead policymakers attempting to build destination development plans. They give fresh insights and research ideas for tourism-led economic growth research by critically evaluating prior tourism-led economic growth research from both theoretical and empirical

perspectives (Song & Wu, 2021). Similarly, The empirical validity of the tourism-led-growth theory warrants more investigation, and a more in-depth examination of this issue is required to make policy suggestions, particularly during crisis situations (Pérez-Rodríguez et al., 2021).

Pakistan is renowned as a unique area with significant neighbouring landmass and various physical features. It has various natural resources such as coastal areas mountains, rivers and various climatic, which makes it more striking. It also has plains, forests, marshland and deserts, despite such an enormous potential for tourism. Pakistan received a thousand of tourists each year in the past, but there are many obstacles in the way of tourism activities. First, the recent wave of terrorism and the COVID-19 harmfully disturbed the tourist activities. The foreign tourist become eager about the security and safety (Habibi et al., 2018). Secondly, the past government ignored the tourism industry. Thirdly, the weak political system and law and order situation discourage the tourist to visit Pakistan. The tourism industry requires a legal system, political stability and strong financial system (Ingram et al., 2013). This study is different with other due to many aspects also, like; initially, they utilized ARDL model to give the robust and authentic results. Secondly, this study used different combination of variables, which is never used in the past studies. Third, no updated study is available about Pakistan. Fourthly, there are many studies are available in these issues, but they give different results and magnitude of tourism receipt. Therefore, the scholars are still not agreed on the magnitude value and its impact on GDP growth. Pakistan's economic base from the tourism is still weak and the tourism industry can't significantly contribute to GDP growth and create employment opportunities. Therefore, this research was conducted to study the effect the tourism industry on the Pakistan's GDP growth.

This research would be accommodating for the policymaker in order to enhance tourism by promoting and organizing it. The enhancement of basic infrastructure and education of local people plays a vigorous role in progress of tourism industry and earn more revenue to influence economic growth. The promotion of the tourism industry will create more jobs, develop the areas and improve the level of comfort of the people live in these areas. Furthermore, safety is the first priority of every tourist. The tourists look for places where they can spend a pleasant stay. So, these mentioned factors should be improved to make tourism as a profitable industry.

2. Literature Review

Balaguer and Cantavella-Jordá (2002) initiate that tourism has favourable influence on the growth of economy of Greece using Granger causality (later GC) test, ECM from the year 1960 to 2000. Eugenio et al. (2004), concluded that tourism has an encouraging outcome on GDP growth of 21 (twenty-one) Latin American nations from 1985-1998 by applying GLS for estimation. Dritsakis (2004), concluded that economic growth has been favourably affected by tourism of Greece from 1960-2000 by using causality tests. Oh (2005) failed to find out any long-term link among tourism and GDP growth by using the Korea's data from 1975 to 2001 by using Bivariate Vector Autoregressive model. Kim et al. (2006), found a mutual link between tourism progress and GDP growth of Taiwan from 1956-2002 by using unit root and co-integration tests. Gökovali and Bahar (2006), concluded that the factors related to tourism boost GDP growth of Mediterranean countries from the year 1987-2002 by using a panel estimation technique. Samina and Kakar (2007), found a strong link between tourism and GDP growth of Pakistan from the year 1960-2005. The researchers applied Engle-Granger co-integration technique and ECM. Parrilla et al. (2007) showed an encouraging association

between tourism and GDP growth of Spain and tourism from the year 1965 to 2002 by applying accounting model. Sequeira and Nunes (2008), exhibited that the impression of tourism is encouraging on the GDP growth from 1980 to 2002 and they applied OLS technique. Fayissa et al. (2008), proved that the tourism has a favourable influence on growth of an economy of forty two African economies from the year 1995 to 2004 and applied general method of moment (GMM) estimator. Abbas and Foreman-Peck (2008), concluded that the economy of Pakistan has been favourably affected by human capital Pakistan from the year 1961-2005 by using Johansen co integration method. Carrera et al. (2008) supported tourism-led-growth (TLG) hypothesis in Mexico from 1980-2007 by using Johanson co-integration test.

Lee and Chang (2008), concluded that the impression of tourism on GGDP is greater in non-OECD countries as compared to OECD economies from 1990-2002 by using Panel unit root and panel Co-integration method. Brida and Risso (2009) concluded that GDP growth has been favourably affected by GDP growth of Chile from the year 1988 to 2008 by applying granger causality and Johansen co-integration techniques for estimation. Zortuk (2009), found a long-term link among GDP growth and tourism of Turkey by using data from 1990 Q1 and 2008 Q3. Katircioglu (2009) concluded that the improvement in tourism results in the economic growth for Turkey from the year 1960 to 2006 by using bounds test and Johanson Co-integration. Malik et al. (2010) indicated that the tourism has a favourable impression on GDP of Pakistan from 1969 to 2007 by applying Johnson co-integration technique and ECM. Cortes-Jimenez and Pulina (2010) found exports led GDP growth in the long- term of developing countries from 1950s to 1960s by using granger causality and Johansen co-integration techniques. Narayan et al. (2010), demonstrates that the tourism has a favourable impact on GDP of 4 Island countries that are Fiji, Papua New Guinea, Solomon and Tonga Island by using panel co-integration test of Padroni's from the year 1988-2004. Kreishan (2010), used the data of Jordan from the year 1970-2009 by using ADF test, Johanon and Juselius and Granger causality test and concluded that the GDP growth has been positively exaggerated by tourism. Tiwari and Mutascu (2011), used the ASIAN economies namely China, Pakistan, India and Russia data from the year 1995 to 2008. The researcher applied OLS technique for estimation. They concluded that tourism has an encouraging effect on the GGDP. Srinivasan et al. (2012) using the Sri Lanka from the data from 1969-2009 by applying ARDL technique. They concluded that economic growth has been favourably influenced by tourism. Jalil et al. (2013), using Pakistan data from 1979 to 2011 by applying ARDL. They concluded that tourism has an encouraging effect on GDP growth. Lean et al. (2014) applied Co-integration technique and used Malaysia and Singapore data from 1980 to 2009 and found positive association between tourism and GGDP both in Malaysia and Singapore.

Aleemi (2015), studied the influence of tourism receipts on the economy of Pakistan from the year 1981 to 2013 by using OLS estimation. The result showed that tourism receipt has a favourable influence on the GGDP. Ertugrul and Mangir (2015), studied the link among tourism and GGDP of Turkey by using Bound test, Granger causality test from 1998 to 2011 and concluded that the impact of tourism on the EG is favourable. Ahad (2016) studied the link between tourism and GGDP of Pakistan from 1988 to 2014. He applied NG-Parron unit root test, and VECM and depicted that tourism has an encouraging effect on GGDP and in reverse economic growth also encourages tourism. Khan and Rasheed (2016), applying Error Correction Model (ECM) from 1972 to 2013 and concluded that until terrorism is not eliminated, tourism will not be improved. Ohlan (2017), analysed the consequence of tourism on GGDP of India for the period of 1960 to 2014 and showed that tourism stimulates the GGDP

of India. Paramati et al. (2017) used the data of twenty-six (26) developed- and Eghteen (18) developing-economies and using the data from 1995-2012 and found an optimistic association among the considered variables. Matthew et al. (2018) used the data of Nigeria from 1980 to 2016 by using FMOLS, Johansen co-integration and found a positive association among the economic growth, tourism and its earning. Stauvermann et al. (2018), studied the link among tourism and GGDP of Sri Lanka from 1980-2014 by applying ARDL and concluded that the GGDP has been favourably and significantly affected by receipt of tourism. Puah et al. (2018) concluded that tourism and capital accumulation are the key factors which leads to economic development by using the data of Malaysia from the year 1995 to 2016 by applying ARDL technique. Ghalia and Fidrmuc (2018) analysed the influence of tourism on GGDP of 133 countries from the year 1995-2007 by using standard Solow model of growth and confirm that tourism has a no effect on the GGDP.

Wu and Wu (2019), explored the link between tourism and GGDP of China's central provinces (Shanxi, Henan, Jilin, Heilong, Jiang, Anhui, Giangxi, Hubie, and Hunan) from the year 1995 to 2014 by using Granger causality method, the Lagrange multiplier (LM). They support the TLG-hypothesis in Hunan province. Liu and Wu (2019) analysed the mechanism for the transfer of tourism and GGDP in Spain from the year 1995 to 2016 by using a Bayesian DSGE approach. They concluded that the GGDP has been completely affected by tourism. Aratuo et al. (2019), studied the relationship between tourism and GGDP of USA for the period of 1996-2016 by using Bound test. The result showed that GGDP has been favourably affected by tourism. Zhang and Cheng (2019) studied the impact of tourism on GGDP of thirty-six Wenchaun earthquake-influenced countries from 2008-2016 by using a panel-threshold regression method. The result supported the tourism-led growth theory.

Uzuner et al. (2020) studied the means of causal link among fear related to migration, from the year 1985-I-2017-IV. They applied LA-VAR for the causality among these countries. The result showed that fear related to migration has a link with tourism arrivals and real income. Akadiri et al. (2020) explored the link among geo-political risk, tourism and GDP growth of Turkey from 1985Q1 to 2017Q4 by using Granger causality approach. The result revealed that a uni-directional causality running from geo-political risk to GGDP and tourism. Naseem (2021) used the data Saudi Arabia from 2003-2019 and employed the Johansen co-integration test for estimation and found that tourism promotes Saudi Arabia's GGDP. Morover, Enilov and Wang (2021) examine 23 emerging and developed nations between 1981-1 and 2017-12. For estimating, they employed the Granger causality technique. Their empirical findings reveal that causation varies across time. They developed a new global connection index (GCI), demonstrating that international tourist arrivals (ITA) continue to be a leading indication of future economic development. Similarly, the time following the GFC is marked by one of the greatest values of tourism-led economic development in developed nations, according to the GCI; however, this influence is transitory and fades soon. Overall, they discovered that the tourist industry in poor nations continues to be a major contributor to future economic growth, which is not the case in wealthy countries.

Pérez-Rodríguez et al. (2021) investigate whether tourism helps economic growth. Their research is based on quarterly GDP and visitor arrival data for 14 EU from 1995-2019. Their findings imply that the argument for a favorable link between tourism and GGDP is very poor, from 2007 to 2010. Using panel fractional cointegration methods, they discovered support in favor of TLGH across the whole sample, primarily for nations in North Europe. In the pre-

crisis time, however, they discovered evidence in favor of the TLGH for the important tourist locations of Spain and France. Similarly, De Siano and Canale (2022) assess tourism's contribution to GDPpc while accounting for congestion caused by an excess of presences. Spatial analysis finding interconnectedness across Italian data from 2005 to 2018 demonstrates, as expected, that tourism has a confident impact on GGDP. Wijesekara et al. (2022) examines 105 countries data from 2003-2020. They concluded that in most areas, tourism contributes meaningfully to GGDP. Razzaq et al. (2023) examined data from the top ten GDP nations between 1995-2018. Their first findings contradict the assumption of data normality, prompting us to employ a unique approach of moment's quantile regression. Their findings indicate that tourist development promotes GGDP. Explicitly, the positive GGDP benefits are substantially bigger for the comparably more developed nations, whereas the negative environmental consequences are significantly higher for the comparatively less-polluted nations; consequently, the TLG theory is supported. Similarly, Kumar and Stauvermann (2023), concluded that tourism has positive consequences on GGDP in all five economies.

3. Methodology, theoretical framework and model

The study utilized time series data from 1995-2019. The economic growth is endogenous variable in the study while capital, labour, human capital and tourism are the exogenous variables. The source of collecting the data was World Development Indicators (2020).

3.1. Theoretical framework

According to the hypothesis, since tourism-related expenditure creates foreign currency profits, a country's visitor count is a key factor in determining its economic growth. These earnings are used to import capital goods, which are used to produce goods and services and boost the host nation's economy. The demand from tourists for housing, food, transportation, and entertainment increases the production of goods and services, generates income, and expands job opportunities, all of which enhance the economy (Balaguer & Cantavella-Jordá, 2002). The economy as a whole is dynamically impacted by tourism due to externalities and spillovers to other sectors. This implies that growth in the tourism industry stimulates growth in other industries that provide, or purchase goods connected to tourism. In addition, tourism may promote the development of new competitive industries and infrastructure, offer economies of scale, and aid in the transfer of technical know-how (Brida et al., 2008). According to Mitchell and Ashley (2006) that tourism development also contributes considerably to poverty reduction. According to the authors, this may be accomplished by promoting unskilled occupations and providing positions, which may subsequently assist integrate individuals work. The tourism sector also helps to GGDP by enhancing efficiency via struggle between domestic enterprises and destinations for foreign tourists.

Other criteria that relate the tourist sector to economic growth are proposed by the UNWTO. For instance, local employment may be generated directly, indirectly, or through tourism. People who work in tourism-related establishments like hotels, restaurants, gift shops, and so forth create direct employment, while businesses that supply services and products to the travel industry, such fishing and agriculture, create indirect employment (Gwenhure & Odhiambo, 2017). Although the concept can be traced back to the initial work of tourist economists (Gerakis, 1965; Gray, 1966), the UNWTO has lately emphasized the multiplier-effects that tourism has on the economy as a result of the presence of a foreign-income source. Another

point raised by the NUWTO (2011) is that tourism boosts government revenue through hotel income taxes and other types of tourist levies. These consist of departure fees from airports, import taxes on goods used by the tourism sector, income taxes on travel agencies and professionals, and capital gains taxes on the assets owned by travel agencies (United Nations World Tourism Organization, 2014). When it comes to macroeconomic concerns, destination governments and industry practitioners have recognized the importance of tourism-led economic development (TLG) when making decisions about investment and policy. According to the TLG theory, a destination's economy grows as a result of increased tourism (Song & Wu, 2021).

3.2. Model specification

The present study applied the following modified model. The same were used by Fayissa et al. (2008), Khan et al. (2022), Eugenio et al. (2004), Rehman et al. (2018), and Manzoor et al. (2019).

$$GGDP_t = \beta_0 + \beta_1 LF_t + \beta_2 GCF_t + \beta_3 HK_t + \beta_4 TourRecp_t + \beta_5 GNE_t + \beta_6 CPI_t + \beta_7 FDI_t + \beta_8 OER_t + \mu_t \quad (1)$$

Where,

β's are parameters and $\boldsymbol{\mu_t}$ is random error term.

Table 1: Description of the variables

S. No.	Variable	Symbols
1	GDP growth (annual %)	$GGDP_t$
2	Labor force participation rate, total (% of total population ages 15+)	LF_t
3	Gross capital formation (% of GDP)	GCF_t
4	School enrollment, secondary (% gross)	SSE_t
5	Tourism, receipts (% of total exports)	$TourRecp_t$
6	Gross national expenditure (% of GDP)	GNE_t
7	Inflation, CPI (annual %)	Inf_t
8	FDI, net inflows (% of GDP)	FDI_t
9	Official exchange rate	OER_t

3.3. Econometrics techniques: Autoregressive Distributed Lag (ARDL) Model

There exist too many methods to investigate the long and near-run coefficient of the variables, Such as OLS techniques but the assumption of the OLS are too harsh and too complicated and Johansen Co-integration test established by Johansen and Juselius (1990) and Engle and Granger (EG) test for co-integration formed by Engle and Granger (1987). The above-mentioned methods are better for the large sample and identical order data. The present study applied the ARDL method built by Pesaran and Shin (1999) to estimate because the ARDL methods are more appropriate for mixed or same order data. The ARDL model automatically solves the problem endogeneity and homogeneity. Therefore, the results of ARDL model are more reliable and authentic then other techniques.

Model of the study in the ARDL Techniques Form

$$GGDP_t = \beta_0 + \sum_{i=1}^{n} \beta_{1i} GGDP_{t-i} + \sum_{i=0}^{n} \beta_{2i} GCF_{t-i} + \sum_{i=0}^{n} \beta_{3i} LF_{t-i} + \sum_{i=0}^{n} \beta_{4i} HK_{t-i} + \sum_{i=0}^{n} \beta_{5i} TourRecp_{t-i} + \sum_{i=0}^{n} \beta_{6i} GNE_{t-i} + \sum_{i=0}^{n} \beta_{7i} CPI_{t-i} + \sum_{i=0}^{n} \beta_{8i} FDI_{t-i} + \sum_{i=0}^{n} \beta_{9i} OER_{t-i} + \mu_t \quad \ldots\ldots (2)$$

Model of the study in the in ARDL Bound Techniques Form

$$\Delta GGDP_t = \beta_0 + \sum_{i=1}^{n} \beta_{1i} \Delta GGDP_{t-i} + \sum_{i=0}^{n} \beta_{2i} \Delta GCF_{t-i} + \sum_{i=0}^{n} \beta_{3i} \Delta LF_{t-i} + \sum_{i=0}^{n} \beta_{4i} \Delta HK_{t-i} + \sum_{i=0}^{n} \beta_{5i} \Delta TourRecp_{t-i} + \sum_{i=0}^{n} \beta_{6i} \Delta GNE_{t-i} + \sum_{i=0}^{n} \beta_{7i} \Delta CPI_{t-i} + \sum_{i=0}^{n} \beta_{8i} \Delta FDI_{t-i} + \sum_{i=0}^{n} \beta_{9i} \Delta OER_{t-i} + \gamma_1 GCF_t + \gamma_2 LF_t + \gamma_3 HK_t + \gamma_4 TourRecp_t + \gamma_5 GNE_t + \gamma_6 CPI_t + \gamma_7 FDI_t + \gamma_8 OER_t + \omega_t \quad \ldots\ldots\ldots\ldots\ldots\ldots (3)$$

This study used dual test to analyse the order of integration of the each series, the ADF Test established by Dickey and Fuller (1979) and the Philips Perron test established by Perron (1990).

4. Results and discussion

4.1. Descriptive statistics

The table 2 indicates that the lowest fluctuation exists in the series FDI and the highest fluctuation exists in the series of exchange rate. All the variables are normally distributed except FDI.

Table No. 2: Descriptive Statistics Synopsis

	EG_t	FDI_t	HK_t	GNE_t	GCF_t	LF_t	OER_t	$TOURRECP_t$	CPI_t
Mean	4.17	1.21	25.68	106.45	18.20	51.46	70.42	5.39	8.09
Median	4.40	0.89	24.90	106.01	17.76	51.00	60.74	5.70	7.60
Std. Dev.	1.72	0.88	4.90	3.69	2.05	2.25	26.17	1.54	4.41
Skewness	0.09	1.71	0.71	0.32	0.48	0.24	0.25	-0.37	0.79
Kurtosis	2.48	4.87	3.02	2.35	2.87	2.62	1.93	2.34	3.34
Jarque-Bera	0.31	15.80	2.08	0.86	0.96	0.39	1.45	1.03	2.75
p-value	0.86	0.00	0.35	0.65	0.62	0.82	0.48	0.60	0.25

4.2. Correlation matrix

Table 3 shows that the dependent variable i.e. economic growth is correlated to labour force, foreign direct investment, Human capital, Government expenditure, capital formation, labour force, Official exchange rate, tourism receipt and inflation. The result indicates that foreign direct investment, human capital, government expenditure, labour force, official exchange rate, tourism receipt is positively correlated to economic growth while inflation is unfavourably correlated to economic growth.

Table 3: Correlation matrix results

	EG_t	FDI_t	HK_t	GNE_t	GCF_t	LF_t	OER_t	$TOURRECP_t$	CPI_t
EG_t	1	0.13	0.63	0.56	0.65	0.77	0.14	0.71	-0.38
FDI_t		1	0.21	-0.07	-0.29	-0.16	-0.21	-0.34	0.41
HK_t			1	0.88	0.74	0.76	0.57	0.51	-0.18
GNE_t				1	0.75	0.76	0.79	0.41	-0.18
K_t					1	0.87	0.51	0.83	-0.60
LF_t						1	0.61	0.74	-0.59
OER_t							1	0.06	-0.21
$TOURRECP_t$								1	-0.64
CPI_t									1

4.3. Unit root test

Table 4 shows the results of ADF and PP techniques to identify the degree of order of integration. Both techniques indicated that all the variables have first degree order of integration and the ARDL model is more suitable in this case.

Table No. 4: Unit Root Tests Results

Variables	ADF Test (P-value)		PP Test (P-value)		Order of Integration
	At level	At 1st Difference	At level	At 1st Difference	
EG_t	-2.2355 (0.1997)	-4.5791* (0.0015)	-2.3763 (0.1584)	-4.5791* (0.0015)	I(1)
FDI_t	-2.4972 (0.1290)	-3.1856** (0.0341)	-1.9851 (0.2909)	-3.2168** (0.0319)	I(1)
HK_t	-0.6955 (0.8296)	-4.6910* (0.0012)	-0.6955 (0.8296)	-4.6920* (0.0012)	I(1)
GNE_t	-0.4398 (0.8868)	-4.8351* (0.0008)	-0.1565 (0.9318)	-4.8744* (0.0008)	I(1)
GCF_t	-1.2720 (0.6252)	-5.5584* (0.0002)	-1.2720 (0.6252)	-5.6283* (0.0001)	I(1)
LF_t	-1.4827 (0.5249)	-6.0253* (0.0001)	-1.3738 (0.5778)	-6.0253* (0.0001)	I(1)
OER_t	0.6031 (0.9867)	-3.1631** (0.0357)	0.6070 (0.9868)	-2.9448*** (0.0556)	I(1)
$TOURRECP_t$	-1.4821 (0.5252)	-4.6041* (0.0014)	-1.4821 (0.5252)	-4.6052* (0.0014)	I(1)
CPI_t	-2.1653 (0.2230)	-5.9798* (0.0001)	-2.1041 (0.2448)	-5.9798* (0.0001)	I(1)
Critical Values	At 1%	-3.7529	At 1%	-3.7379	
	At 5%	-2.9981	At 5%	-2.9919	
	At 10%	-2.6387	At 10%	-2.6355	

Note: I(1) indicated the first order of integration and *, **, and *** represent the significance level at 1%, 5% and 10% respectively.

4.4. Regression Results

Table 5 shows the ARDL and ARDL Bound test result; In the long-term, the ARDL test result

showed that the FDI has statistically significant and positive influence on GDP growth. The same result was verified by Malik (2015) and Aziz et al. (2023). Similarly, in the case of Pakistan from 2008-2013 and concluded that economic growth has been favourably affected by FDI. The result was contrary to the results of Saqib et al. (2013) that the impact of FDI in the economic growth of Pakistan from 1981-2010. They used OLS and ADF test for the estimation and concluded that the economy of Pakistan has been unfavourably affected by FDI. Similarly, the impact of human capital is useful and remarkable on GDP growth in the long-term. The same result was verified by Abbas and Foreman-Peck (2008) analyse the outcome of HK on GDP growth of Pakistan from the year 1961-2005 by using Johansen cointegration method and concluded that the economy of Pakistan has been favourably affected by human capital. Similarly, GDP growth is positively and significantly influenced by Government expenditure in the short run, as its coefficient is 0.9090 and its p-value is 0.0300, which is statistically significant at 5% level of significance. The result of this study is contrary to the result showed by Akpokerere and Ighoroje (2013) used data of Nigeria from 1977-2009 by applying a disaggregated technique and concluded that increasing GNE has no noteworthy effect on the economy's growth.

The impact of Gross capital formation is optimistic and noteworthy on GDP growth as its value of coefficient is 1.9007 and its p-value is 0.0194 which is significant at 5%. The result is same as the result showed by Zaman and Arslan (2014) and revealed that GCF has an encouraging impact on growth of the economy. Similarly, the result shows that the GGDP is positively and significantly affected by labour force in the long-term, as the coefficient is 0.4275 and its p-value is 0.0835 which is momentous at 10%. The same result was presented by Paudel and Perera (2009) that there is an optimistic connection between labour force and GGDP. The effect of Official exchange rate (OER) on GGDP is negative and momentous, as its coefficient is -0.1150 and its p-value are 0.0248 which is statistically significant. The opposite result was given by (Adeniran et al., 2014). The researchers concluded that the growth of an economy is positively but insignificantly affected by exchange rate.

The effect of tourism receipt is encouraging and noteworthy on GGDP in the long-term, as it coefficient is 2.7757 and its p-value is 0.0164. The same result was verified by different researchers like Ahad (2016) and Aratuo et al. (2019). The inverse relationship was given by Ghalia and Fidrmuc (2018), analysed the influence of tourism on GGDP of 133 countries from the year 1995-2007 by using standard Solow model of growth. They concluded that the GDP growth has not been significantly affected by tourism. Furthermore, they proved that those countries which are more dependent on tourism have shown less growth. However, the effect of consumer price index is negative and noteworthy on the GDP growth as its coefficient is -0.0923 and its p-value is 0.0877. The same result was given by Ayyoub et al. (2011) and analysed the link between inflation and GGDP of Pakistan from the year 1972-73 to 2009-10 by using OLS technique. They showed an adverse effect of inflation on GGDP. The opposite result was confirmed by (Shahid, 2014).

In the short-term, the FDI has noteworthy and encouraging influence on GGDP because its coefficient value is 0.7267 and its p-value is 0.0094. The same result was verified by Malik (2015), analysed the influence of FDI on GGDP of Pakistan from 2008-2013 and concluded that economic growth has been favourably affected by FDI. The result was contrary to the results of Saqib et al. (2013), investigate the impression of FDI in the GDP growth of Pakistan from the year 1981-2010. They used OLS and ADF test for the estimation and concluded that

the economy of Pakistan has been unfavourably affected by FDI. The impact of human capital is negative and noteworthy on GDP growth. The result was contrary to the result of Abbas and Foreman-Peck (2008), analysed the effect of human-capital on GDP growth of Pakistan from the year 1961-2005 by using Johansen (1991) method .They concluded that the economy of Pakistan has been favourably affected by human capital.

GDP growth is positively and significantly influenced by Government expenditure in the short run, as its coefficient is 0.4569and its p-value is 0.0025. The impact of GCF is undesirable and noteworthy on GDP growth as its value of coefficient is -0.0697and its p-value is 0.6301. However, the GGDP is positively and significantly affected by labour force in the short run, as the coefficient is 0.6033 and its p-value is 0.0029. The effect of Official exchange rate (OER) on GGDP is undesirable and significant, as its coefficient is -0.0411and its p-value is 0.0990. However, the effect of Tourism receipt is optimistic and noteworthy on GGDP. However, the effect of consumer price index is undesirable and statistically noteworthy on the GGDP. Furthermore, the ECM value depicted that there are 67% level of adjustment and exist the cointegration among the variables.

Table No. 5: ARDL tests results

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Coefficient				
FDI_t	0.9469***	0.3957	2.3933	0.0965
HK_t	0.5167*	0.0809	6.3907	0.0078
GNE_t	0.9090**	0.2334	3.8942	0.0300
GCF_t	1.9007**	0.4140	4.5916	0.0194
LF_t	0.4275***	0.1673	2.5554	0.0835
OER_t	-0.1150**	0.0274	-4.1913	0.0248
$TOURRECP_t$	2.7757**	0.5681	4.8859	0.0164
CPI_t	-0.0923***	0.0369	-2.5006	0.0877
Short Run Coefficient				
ECM_t	-0.6729*	0.1304	-5.1601	0.0002
$D(FDI_t)$	0.7267*	0.2385	3.0466	0.0094
$D(HK_t)$	-0.1808**	0.0647	-2.7954	0.0152
$D(GNE_t)$	0.4569*	0.1223	3.7352	0.0025
$D(GCF_t)$	-0.0697	0.1412	-0.4932	0.6301
$D(LF_t)$	0.6033*	0.1648	3.6613	0.0029
$D(OER_t)$	-0.0411***	0.0231	-1.7768	0.0990
$D(TOURRECP_t)$	0.3222	0.2475	1.3020	0.2155
$D(CPI_t)$	0.0086	0.0271	0.3182	0.7554
C	-0.0223	0.1276	-0.1744	0.8643
ARDL Bounds Test Value			4.1334*	
		Significance level	I0 Bound	I1 Bound
		10%	1.95	3.06
Critical Value Bounds		5%	2.22	3.39
		2.5%	2.48	3.7
		1%	2.79	4.1

Note:*,**, *and* *** *represent the significance level at* 1%, 5% *and* 10% *respectively*.

5. Conclusion

Pakistan has a unique area with significant neighbouring landmass and various physical features. It has huge variety of natural resources such as coastal areas mountains, rivers and various climatic conditions, which makes it more attractive. It also has plains, forests, marshland and deserts, despite of such an enormous potential for tourism. Pakistan received a thousand of tourists each year in the past, but there are many obstacles in the way of tourism activities like political instability, terrorism, bed law and order situation, lack of proper maintenance of tourism spots, investment in tourism, and lack of skills about tourism etc. The main objective of the study is to investigate the impact of Tourism receipt on economic growth of Pakistan and used data set from 1995 to 2019. This study employed ARDL techniques for estimation. The study reveals that labour force, foreign direct investment, and gross national expenditure have inspiring and noteworthy effect on economic growth while GCF and human capital (HK) have positive in the long-period but has negative in the near-run and noteworthy effect economic growth. The tourism receipt has encouraging and statistically noteworthy effect on GGDP. However, inflation-rate has undesirable and noteworthy effect on GGDP. The exchange rate has negative and significant effect on the GGDP. This study concluded that the tourism receipt has significantly influence the economic growth of Pakistan. This recommended that the government itself and motivate to private sector to invest in the tourism industry because it's more beneficial in term of earning foreign exchange, creation of Jobs, improve environmental quality, and enhance the economic growth and also makes easy policies and provides facilities to attract foreign tourists to increase revenue. Furthermore, Pakistan is among the under-developed countries of the world which have less capital accumulation. Therefore, the tourism industry of Pakistan should be developed to earn foreign exchange.

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References

Abbas, Q., & Foreman-Peck, J. S. (2008). Human capital and economic growth: Pakistan 1960-2003. *Lahore Journal of Economics, 13*(1), 1-27. https://orca.cardiff.ac.uk/id/eprint/40496/2/Human%20K%20%26%20Econ%20Growth%2016th%20june%202008.pdf

Adeniran, J., Yusuf, S., & Adeyemi, O. A. (2014). The impact of exchange rate fluctuation on the Nigerian economic growth: an empirical investigation. *International Journal of Academic Research in Business and Social Sciences, 4*(8), 224-233. http://dx.doi.org/10.6007/IJARBSS/v4-i8/1091

Adnan, H. Q. M., & Ali, K. R. E. (2013). Tourism-led growth hypothesis: a case study of Pakistan. *Asia Pacific Journal of Tourism Research, 18*(4), 303-313. https://doi.org/10.1080/10941665.2012.658412

Ahad, M. (2016). Does tourism-led growth hypothesis exist in Pakistan? a fresh look from combine cointegration and causality approach with structural breaks. *International Journal of Economics and Empirical Research, 4*(2), 94-111. https://mpra.ub.uni-muenchen.de/72430/1/MPRA_paper_72430.pdf

Akadiri, S. S., Eluwole, K. K., Akadiri, A. C., & Avci, T. (2020). Does causality between geopolitical risk, tourism and economic growth matter? evidence from Turkey. *Journal of Hospitality and Tourism Management, 43*, 273-277. https://doi.org/10.1016/j.jhtm.2019.09.002

Akkemik, K. A. (2012). Assessing the importance of international tourism for the Turkish economy: a social accounting matrix analysis. *Tourism Management, 33*(4), 790-801. https://doi.org/10.1016/j.tourman.2011.09.002

Akpokerere, O., & Ighoroje, E. (2013). The effect of government expenditure on economic growth in Nigeria: a disaggregated analysis from 1977 to 2009. *International Journal of Economic Development Research and Investment, 4*(1), 60-70. https://www.icidr.org/ijedri_vol4no1%20April2013/The%20Effect%20of%20Government%20Expenditure%20on%20Economic%20Growth%20in%20Nigeria-A%20Disaggregated%20Analysis%20from%201977%20to%202009.pdf

AL-Najjar, M. A. M., & Ishwara, P. (2018). A study on the global economic impact on the tourism industry in Yemen. *African Journal of Hospitality, Tourism and Leisure, 7*(4), 1-10. https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_60_vol_7_4__2018.pdf

Aleemi, A. R. (2015). Tourism receipts and economic growth: empirical evidence from Pakistan. *International Journal of Research, 2*(2), 1401-1412. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2861776

Aratuo, D. N., Etienne, X. L., Gebremedhin, T., & Fryson, D. M. (2019). Revisiting the tourism-economic growth nexus: evidence from the United States. *International*

Journal of Contemporary Hospitality Management, 31(9), 3779-3798. https://doi.org/10.1108/IJCHM-08-2018-0627

Arshad, M. I., Iqbal, M. A., & Shahbaz, M. (2018). Pakistan tourism industry and challenges: a review. *Asia Pacific Journal of Tourism Research, 23*(2), 121-132. https://doi.org/10.1080/10941665.2017.1410192

Ayyoub, M., Chaudhry, I. S., & Farooq, F. (2011). Does inflation affect economic growth? the case of Pakistan. *Pakistan Journal of Social Sciences (PJSS), 31*(1), 51-64. https://pjss.bzu.edu.pk/index.php/pjss/article/view/93

Aziz, T., Raza, A., Tarakai, M., & Hassan. (2023). Impact of the greenfield-foreign direct investment on the economic growth of Afghanistan. *Liberal Arts and Social Sciences International Journal (LASSIJ), 7*(1), 187–201. https://doi.org/10.47264/idea.lassij/7.1.11

Balaguer, J., & Cantavella-Jordá, M. (2002). Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics, 34*(7), 877-884. https://doi.org/10.1080/00036840110058923

Brida, J. G., Pereyra, J. S., Risso, W. A., Devesa, M. J. S., & Aguirre, S. Z. (2008). The tourism-led growth hypothesis: empirical evidence from Colombia tourism. *An International Multidisciplinary Journal of Tourism 4*(2), 13-27. https://mpra.ub.uni-muenchen.de/25286/1/MPRA_paper_25286.pdf

Brida, J. G., & Risso, W. (2009). Tourism as a factor of long-run economic growth: an empirical analysis for Chile. *European Journal of Tourism Research, 2*(2), 178-185. https://doi.org/10.54055/ejtr.v2i2.36

Carrera, S. E. J., Brida, J. G., & Risso, W. A. (2008). Tourism's impact on long-run Mexican economic growth. *Economics Bulletin, 23*(21), 1-8. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1076225

Chen, C. F., & Chiou-Wei, S. Z. (2009). Tourism expansion, tourism uncertainty and economic growth: new evidence from Taiwan and Korea. *Tourism Management, 30*(6), 812-818. https://doi.org/10.1016/j.tourman.2008.12.013

Correia, A., & Kozak, M. (2010). 4th world conference for graduate research in tourism, hospitality and leisure, Antalya, Turkey, 22-27 April 2008. *Journal of Hospitality Marketing and Management, 19*(3), 199-293. https://www.cabdirect.org/cabdirect/abstract/20103152090

Cortes-Jimenez, I., & Pulina, M. (2010). Inbound tourism and long-run economic growth. *Current Issues in Tourism, 13*(1), 61-74. https://doi.org/10.1080/13683500802684411

De Siano, R., & Canale, R. R. (2022). Controversial effects of tourism on economic growth: a spatial analysis on Italian provincial data. *Land Use Policy, 117*, 106081. https://doi.org/10.1016/j.landusepol.2022.106081

Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association, 74*(366a), 427-431. https://doi.org/10.1080/01621459.1979.10482531

Dritsakis, N. (2004). Tourism as a long-run economic growth factor: an empirical investigation for Greece using causality analysis. *Tourism Economics, 10*(3), 305-316. https://doi.org/10.5367/0000000041895094

Engle, R. F., & Granger, C. W. J. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica, 55*(2), 251-276. https://doi.org/10.2307/1913236

Enilov, M., & Wang, Y. (2021). Tourism and economic growth: multi-country evidence from mixed-frequency Granger causality tests. *Tourism Economics, 28*(5), 1216-1239. https://doi.org/10.1177/1354816621990155

Ertugrul, H. M., & Mangir, F. (2015). The tourism-led growth hypothesis: empirical evidence from Turkey. *Current Issues in Tourism, 18*(7), 633-646. https://doi.org/10.1080/13683500.2013.868409

Eugenio, M. J. L., Martín, M. N., & Scarpa, R. (2004). Tourism and economic growth in Latin American countries: a panel data approach. *Fondazione Eni Enrico Mattei (FEEM), Milano, Nota di Lavoro, No. 26.2004*, 1-29. https://www.econstor.eu/bitstream/10419/117908/1/NDL2004-026.pdf

Fayissa, B., Nsiah, C., & Tadasse, B. (2008). Impact of tourism on economic growth and development in Africa. *Tourism Economics, 14*(4), 807-818. https://doi.org/10.5367/000000008786440229

Frechtling, D. C. (2010). The tourism satellite account: a primer. *Annals of Tourism Research, 37*(1), 136-153. https://doi.org/10.1016/j.annals.2009.08.003

Gerakis, A. S. (1965). Effects of exchange-rate devaluations and revaluations on receipts from tourism. *Staff Papers (International Monetary Fund), 12*(3), 365-384. https://doi.org/10.2307/3866335

Ghalia, T., & Fidrmuc, J. (2018). The curse of tourism? *Journal of Hospitality and Tourism Research, 42*(6), 979-996. https://doi.org/10.1177/1096348015619414

Gökovali, U., & Bahar, O. (2006). Contribution of tourism to economic growth: a panel data approach. *Anatolia, 17*(2), 155-167. https://doi.org/10.1080/13032917.2006.9687184

Gray, H. P. (1966). The demand for international travel by the United States and Canada. *International Economic Review, 7*(1), 83-92. https://doi.org/10.2307/2525372

Gwenhure, Y., & Odhiambo, N. M. (2017). Tourism and economic growth: a review of international literature. *Tourism: An International Interdisciplinary Journal, 65*(1), 33-44. https://hrcak.srce.hr/178621

Habibi, F., Rahmati, M., & Karimi, A. (2018). Contribution of tourism to economic growth in Iran's provinces: GDM approach. *Future Business Journal*, *4*(2), 261-271. https://doi.org/10.1016/j.fbj.2018.09.001

Ingram, H., Tabari, S., & Watthanakhomprathip, W. (2013). The impact of political instability on tourism: case of Thailand. *Worldwide Hospitality and Tourism Themes*, *5*(1), 92-103. https://doi.org/10.1108/17554211311292475

Jalil, A., Mahmood, T., & Idrees, M. (2013). Tourism–growth nexus in Pakistan: evidence from ARDL bounds tests. *Economic Modelling*, *35*, 185-191. https://doi.org/10.1016/j.econmod.2013.06.034

Johansen, S., & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with applications to the demand for money. *Oxford Bulletin of Economics and Statistics*, *52*(2), 169-210. https://digilander.libero.it/rocco.mosconi/JohansenJuselius1990.pdf

Kalaiya, A. B., & Kumar, A. (2015). Tourism as a development tool: a study on role of tourism in economic development, employment generation and poverty reduction: special focus on Kachchh. *International Journal of Advance Research in Computer Science and Management Studies*, *3*(7), 189-197. http://www.oas.org/dsd/publications/unit/oea78e/ch10.htm

Kar, M., Zorkirişçi, E., & Yildirim, M. (2004). An empirical evaluation of the contribution of tourism to the economy. *Akdeniz University Faculty of Economics and Administrative Sciences Faculty Journal/Akdeniz Universitesi Iktisadi ve Idari Bilimler Fakultesi Dergisi*, *4*(8), 87-112. https://www.acarindex.com/dosyalar/makale/acarindex-1423868879.pdf

Karki, D. (2012). *Economic impact of tourism on Nepal's economy using cointegration and error correction model*. Thesis Report, Tribhuvan University, Kathmandu, Nepal. https://doi.org/10.13140/RG.2.1.4839.5684

Katircioglu, S. T. (2009). Revisiting the tourism-led-growth hypothesis for Turkey using the bounds test and Johansen approach for cointegration. *Tourism Management*, *30*(1), 17-20. https://doi.org/10.1016/j.tourman.2008.04.004

Khan, F., Noor, S., & Rahman, G. (2022). Does schooling contribute to economic growth? a comparative study in Pakistan and Afghanistan. *Pakistan Journal of Social Sciences*, *42*(3), 535-545. https://pjss.bzu.edu.pk/index.php/pjss/article/view/1135

Khan, R. E. A., & Rasheed, M. K. (2016). Political economy of tourism in Pakistan: the role of terrorism and infrastructure development. *Asian Development Policy Review*, *4*(2), 42-50. https://doi.org/10.18488/journal.107/2016.4.2/107.2.42.50

Kim, H. J., Chen, M.-H., & Jang, S. S. (2006). Tourism expansion and economic development: the case of Taiwan. *Tourism Management*, *27*(5), 925-933. https://doi.org/10.1016/j.tourman.2005.05.011

Kreishan, F. M. (2010). Tourism and economic growth: the case of Jordan. *European Journal of Social Sciences, 15*(2), 63-68. https://www.academia.edu/31598645/Tourism_and_Economic_Growth_The_Case_of_Jordan

Kumail, T., Ali, W., Sadiq, F., Wu, D., & Aburumman, A. (2020). Dynamic linkages between tourism, technology and CO2 emissions in Pakistan. *Anatolia, 31*(3), 436-448. https://doi.org/10.1080/13032917.2020.1742169

Kumar, R. R., & Stauvermann, P. J. (2023). Tourism and economic growth in the Pacific region: evidence from five small island economies. *Journal of the Asia Pacific Economy, 28*(3), 894-921. https://doi.org/10.1080/13547860.2021.1944796

Lean, H. H., Chong, S. H., & Hooy, C. W. (2014). Tourism and economic growth: comparing Malaysia and Singapore. *International Journal of Economics and Management, 8*(1), 139-157. http://www.ijem.upm.edu.my/vol8no1/bab08.pdf

Lee, C. C., & Chang, C. P. (2008). Tourism development and economic growth: a closer look at panels. *Tourism Management, 29*(1), 180-192. https://doi.org/10.1016/j.tourman.2007.02.013

Liu, A., & Wu, D. C. (2019). Tourism productivity and economic growth. *Annals of Tourism Research, 76*, 253-265. https://doi.org/10.1016/j.annals.2019.04.005

Malik, K. (2015). Impact of foreign direct investment on economic growth of Pakistan. *American Journal of Business and Management, 4*(4), 190-202. https://doi.org/10.11634/216796061706624

Malik, S., Chaudhry, I. S., Sheikh, M. R., & Farooqi, F. S. (2010). Tourism, economic growth and current account deficit in Pakistan: evidence from co-integration and causal analysis. *European Journal of Economics, Finance and Administrative Sciences, 22*(2), 21-31. https://www.econ-jobs.com/research/52589-Tourism-Economic-Growth-and-Current-Account-Deficit-in-Pakistan-Evidence-from-Co-integration-and-Causal-Analysis.pdf

Manwa, H. (2012). Communities understanding of tourists and the tourism industry: the lesotho highlands water project. *African Journal of Business Management, 6*(22), 6667-6674. https://academicjournals.org/journal/AJBM/article-full-text-pdf/D0933AB31228

Manzoor, F., Wei, L., & Asif, M. (2019). The contribution of sustainable tourism to economic growth and employment in Pakistan. *International Journal of Environmental Research and Public Health, 16*(3785), 2-14. https://doi.org/10.3390/ijerph16193785

Matthew, O. A., Ede, C., Osabohien, R., Ejemeyovwi, J., Ayanda, T., & Okunbor, J. (2018). Interaction effect of tourism and foreign exchange earnings on economic growth in Nigeria. *Global Business Review, 22*(1), 7-22. https://ideas.repec.org/a/sae/globus/v22y2021i1p7-22.html

McKinnon, R. I. (1964). Foreign exchange constraints in economic development and efficient aid allocation. *The Economic Journal, 74*(294), 388-409. https://doi.org/10.2307/2228486

Mitchell, J., & Ashley, C. (2006). Tourism business and the local economy: increasing impact through a linkages approach. *ODI Briefing Paper*, 1-5. http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/4569/tourism%20business.pdf?sequence=1

Narayan, P. K., Narayan, S., Prasad, A., & Prasad, B. C. (2010). Tourism and economic growth: a panel data analysis for Pacific Island countries. *Tourism Economics, 16*(1), 169-183. https://doi.org/10.5367/000000010790872006

Naseem, S. (2021). The role of tourism in economic growth: empirical evidence from Saudi Arabia. *Economies, 9*(3), 1-12. http://doi.org/10.3390/economies9030117

NUWTO. (2011). United Nations World Tourism Organization tourism highlights. https://www.unwto.org/

Oh, C. O. (2005). The contribution of tourism development to economic growth in the Korean economy. *Tourism Management, 26*(1), 39-44. https://doi.org/10.1016/j.tourman.2003.09.014

Ohlan, R. (2017). The relationship between tourism, financial development and economic growth in India. *Future Business Journal, 3*(1), 9-22. https://doi.org/10.1016/j.fbj.2017.01.003

Oluwatuyi, A. D., & Akinlo, A. E. (2018). Modelling and evaluation of the potential for cable car system in Idanre Hill: a road map to tourism revival in Ondo State, South-Western, Nigeria *Journal of Tourism, Hospitality and Sports, 34*, 32-39. https://core.ac.uk/download/pdf/234696967.pdf

Padhi, P. K., & Mishra, M. (2013). Foreign investment in India in post globalization era: issues and challenges. *Himalaya Publishing House*. https://www.proquest.com/docview/1463130695?sourcetype=Scholarly%20Journals#

Paramati, S. R., Alam, M. S., & Chen, C. F. (2017). The effects of tourism on economic growth and CO2 emissions: a comparison between developed and developing economies. *Journal of Travel Research, 56*(6), 712-724. https://doi.org/10.1177/0047287516667848

Parrilla, J. C., Font, A. R., & Nadal, J. R. (2007). Tourism and long-term growth a Spanish perspective. *Annals of Tourism Research, 34*(3), 709-726. https://doi.org/10.1016/j.annals.2007.02.003

Paudel, R. C., & Perera, N. (2009). Foreign debt, trade openness, labor force and economic growth: evidence from Sri Lanka. *The ICFAI Journal of Applied Economics, 8*(1), 57-64. https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1019&context=gsbpapers

Pérez-Rodríguez, J. V., Rachinger, H., & Santana-Gallego, M. (2021). Does tourism promote economic growth? a fractionally integrated heterogeneous panel data analysis. *Tourism Economics, 28*(5), 1355-1376. https://doi.org/10.1177/1354816620980665

Perron, P. (1990). Testing for a unit root in a time series with a changing mean. *Journal of Business and Economic Statistics, 8*(2), 153-162. https://doi.org/10.1080/07350015.1990.10509786

Pesaran, M. H., & Shin, Y. (1999). An autoregressive distributed-lag modelling approach to cointegration analysis. *econometrics and economic theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, 371-413. https://doi.org/10.1017/CCOL521633230.011

Puah, C. H., Jong, M. C., Ayob, N., & Ismail, S. (2018). The impact of tourism on the local economy in Malaysia. *International Journal of Business and Management, 13*(12), 151-157. https://doi.org/10.5539/ijbm.v13n12p151

Rasul, G., & Manandhar, P. (2009). Prospects and problems in promoting tourism in South Asia: a regional perspective. *South Asia Economic Journal, 10*(1), 187-207. https://doi.org/10.1177/139156140901000108

Razzaq, A., Fatima, T., & Murshed, M. (2023). Asymmetric effects of tourism development and green innovation on economic growth and carbon emissions in top 10 GDP countries. *Journal of Environmental Planning and Management, 66*(3), 471-500. https://doi.org/10.1080/09640568.2021.1990029

Rehman, Z. U., Tariq, M., & Khan, M. A. (2018). The role of human capital in economic development in the selected Central Asian Countries. *Dialogue (Pakistan), 13*(3), 235-244. https://www.qurtuba.edu.pk/thedialogue/The%20Dialogue/13_3/01-235-244,ZiaMarwat.pdf

Richardson, R. B. (2010). The contribution of tourism to economic growth and food security. *Agricultural and Applied Economics*. Mali: USAID Mali, Office of Economic Growth. https://ageconsearch.umn.edu/record/97140

Rout, H. B., Mishra, P., & Pradhan, B. (2016). Nexus between tourism and economic growth: empirical evidence from Odisha, India. *International Journal of Applied Business and Economic Research*, *14*(11), 7491-7513. http://210.212.34.21/handle/32116/470

Samimi, A. J., Sadeghi, S., & Sadeghi, S. (2011). Tourism and economic growth in developing countries: P-VAR approach. *Middle-East Journal of Scientific Research, 10*(1), 28-32. http://www.idosi.org/mejsr/mejsr10(1)11/5.pdf

Samina, K., & Kakar, M. K. (2007). Role of tourism in economic growth: empirical evidence from Pakistan economy. *Pakistan Development Review, 46*(4), 985-995. https://www.cabdirect.org/cabdirect/abstract/20103091975

Saqib, N., Masnoon, M., & Rafique, N. (2013). Impact of foreign direct investment on economic growth of Pakistan. *Advances in Management and Applied Economics, 3*(1), 35-45. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2207626

Seetanah, B. (2011). Assessing the dynamic economic impact of tourism for island economies. *Annals of Tourism Research, 38*(1), 291-308. https://doi.org/10.1016/j.annals.2010.08.009

Sequeira, T. N., & Nunes, M. P. (2008). Does tourism influence economic growth? a dynamic panel data approach. *Applied Economics, 40*(18), 2431-2441. https://doi.org/10.1080/00036840600949520

Shahid, M. (2014). Effect of inflation and unemployment on economic growth in Pakistan. *Journal of Economics and Sustainable Development, 5*(15), 103-106. https://core.ac.uk/download/pdf/234646504.pdf

Song, H., & Wu, D. C. (2021). A critique of tourism-led economic growth studies. *Journal of Travel Research, 61*(4), 719-729. https://doi.org/10.1177/00472875211018514

Srinivasan, P., Kumar, P. K. S., & Ganesh, L. (2012). Tourism and economic growth in Sri Lanka: an ARDL bounds testing approach. *Environment and Urbanization ASIA, 3*(2), 397-405. https://doi.org/10.1177/0975425312473234

Stauvermann, P. J., Kumar, R. R., Shahzad, S. J. H., & Kumar, N. N. (2018). Effect of tourism on economic growth of Sri Lanka: accounting for capital per worker, exchange rate and structural breaks. *Economic Change and Restructuring, 51*(1), 49-68. https://doi.org/10.1007/s10644-016-9198-6

Tiwari, A. K., & Mutascu, M. (2011). Economic growth and FDI in Asia: a panel-data approach. *Economic Analysis and Policy, 41*(2), 173-187. https://doi.org/10.1016/S0313-5926(11)50018-9

United Nations World Tourism Organization. (2014). United Nations World Tourism Organization tourism highlights. https://www.unwto.org/

Uzuner, G., Akadiri, S. S., & Alola, A. A. (2020). Tourist arrivals in four major economies: another side of economic policy uncertainty and fear. *Environmental Science and Pollution Research, 27*(23), 29659-29665. https://doi.org/1007/s11356-020-09219-9

Webster, C., & Ivanov, S. H. (2009). *Measuring the impact of promotion: the effects of Croatian, Czech, and Slovak State promotion of tourism abroad.* Paper presented at the Proceedings of GEOTOUR 2006 Conference. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1331015

Wijesekara, C., Tittagalla, C., Jayathilaka, A., Ilukpotha, U., Jayathilaka, R., & Jayasinghe, P. (2022). Tourism and economic growth: a global study on Granger causality and wavelet coherence. *PLOS One, 17*(9), e027438. https://doi.org/10.1371/journal.pone.0274386

World Development Indicators. (2020). *World Development Indicators (WDI)*. The World Bank. https://databank.worldbank.org/source/world-development-indicators

Wu, T.-P., & Wu, H.-C. (2019). The link between tourism activities and economic growth: evidence from China's provinces. *Tourism and Hospitality Research, 19*(1), 3-14. https://doi.org/10.1177/1467358416683769

Zaman, R., & Arslan, M. (2014). The role of external debt on economic growth: evidence from Pakistan economy. *Journal of Economics and Sustainable Development, 5*(24), 140-147. https://core.ac.uk/download/pdf/234646693.pdf

Zhang, J., & Cheng, L. (2019). Threshold effect of tourism development on economic growth following a disaster shock: evidence from the Wenchuan Earthquake, P. R. China. *Sustainability, 11*(2). https://doi.org/10.3390/su11020371

Zortuk, M. (2009). Economic impact of tourism on Turkey's economy: evidence from cointegration tests. *International Research Journal of Finance and Economics, 25*(3), 231-239. https://www.researchgate.net/publication/285833323_Economic_impact_of_tourism_on_turkey's_economy_Evidence_from_cointegration_tests#fullTextFileContent