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Impact of Tourism on Economic Growth of Nepal: Is Tourism-Led Growth Hypothesis Valid for Nepal?

Kumar Bhattarai

Department of Economics, Patan Multiple Campus, TU

bhattarai1000@gmail.com

Roshan Karmacharya

Department of Management, Jana Bhawana Campus, TU

roshankarmacharya044@gmail.com

Abstract

A voluminous study is available on tourism-growth nexus as tourism industry received considerable attention as a potential source of economic growth. This paper empirically examines the impact of tourism on economic growth of Nepal by using time series data of 1976-2020 and applying autoregressive distributed lag (ARDL) approach. Real GDP was used as proxy measure of economic growth, which was the outcome variable whereas the variable of interest was tourism receipts. Foreign aid, total volume of trade and ratio of government consumption expenditure to GDP were taken as control variables. The result of ARDL model shows that tourism has no significant impact on economic growth of Nepal in both short-run and long-run. However, total volume of trade has positive and significant effect on economic growth in short-run whereas foreign aid, total volume of trade and ratio of government consumption expenditure to GDP have positive and significant effect on economic growth in the long-run. In such context of tourism and growth relationship, tourism-led growth hypothesis is rejected for Nepal.

Corresponding Editor
Ramesh Raj Kunwar
kunwar.dr@gmail.com

Introduction

Tourism is potential source of economic growth in many countries. It can be a tool for increasing export revenue, generating employment opportunities, enlarging consumer markets and diversifying economy (Barros et al., 2011; Belloumi, 2010; Fauzel et al., 2016; Mansfeld and Winckler, 2008; Saleh et al., 2015; Tan et al., 2002). Furthermore, it also contributes to government revenue. It has spin-off effect on all sectors of the economy (Saleh et al., 2015). Globally, tourism industry continuously grew over 2010-2019 and it was third largest export category, after chemicals and fuels, in 2017 (United Nations World Tourism Organization [UNWTO], 2020; UNWTO, 2021a). However, international tourist arrival decreased by 73.1% in 2020 compared to 2019 (UNWTO, 2021b) due to corona virus disease 2019 (COVID-19) pandemic. Neglecting the period of COVID-19 pandemic, as it is exceptional period, tourism is one of the fastest growing sectors of global economy. Increased income and air connectivity are contributing to expand global tourism. With the increase in role of tourism on global economy, empirical studies on the impact of tourism on growth, employment and foreign exchange earnings are also increasing. Studies have found that tourism contributes to economic growth (Balaguer & Cantavella-Jorda, 2002; Cannonier & Burke, 2018; Gunduz & Hatemi-J, 2006; Neuts, 2019). Brida et al. (2014), by reviewing approximately 100 published empirical papers, found that, with few exceptions, tourism-led growth hypothesis is confirmed in the studied countries. Due to this reason development of tourism industry is in priority of the countries. In developed countries, tourism is proved as vital component of their economy and wellbeing whereas developing countries also became successful to improve their economic profile through the expansion of their tourism industry (Khizindar, 2012). For many countries, which have lower competitiveness on export of other goods and services, tourism provides opportunity to reduce their trade deficit.

Nepal has big potential on tourism development as it contains many natural and historical sites. It contains Lumbini (birthplace of Lord Buddha), which is likely to be destination of Buddhist pilgrims from all over the world. Nepal is popular for mountaineering as it contains world renowned mountain peaks including Mount Everest (highest peak of the world), Kanchenjunga, Lhotse, Makalu, among others. There are 8 mountain peaks, having height higher than 8,000 meter, in Nepal. It should be noted that there are only 14 such mountain peaks in the world that have height higher than 8,000 meter. Furthermore, Nepal is rich in cultural and religious diversity and biodiversity as well. Nepal is rich in cultural heritage-both tangible and intangible. All these things make Nepal an attractive tourist destination.

Government of Nepal has established Nepal tourism board for the development, expansion and promotion of tourism in Nepal (Nepal Tourism Board Act, 1997). Tourism Act (1978) and Tourism Policy (2008) constitute legal foundation for the

arrangement of Nepalese tourism. Tourism Act (1978) aims to benefit general people through tourism development. This act explains the provisions related to issues of tourism industry, like travel and trekking agencies; tourist standard hotels, lodges, restaurant and bar; mountaineering; tour guide; among others. Government of Nepal has given top priority to tourism industry. Tourism policy (2008) aims to promote tourism so that it can act as a foundation for economic transformation of country. Similarly, government is implementing national tourism strategic plan (NTSP), 2016-2025 (Ministry of Culture, Tourism and Civil Aviation [MOCTCA], 2016). Despite such efforts of government of Nepal, the contribution of tourism on Nepalese economy is still low. There is no significant increase in contribution of tourism on foreign exchange earnings and employment in Nepal over the time (Bhattarai et al., 2021). Within the period of 2011-2019, the average ratio of foreign currency earned from tourism to GDP was 1.87% only (MOCTCA, 2021).

Nepal is facing huge deficit in international trade. This is due to low level of competitiveness of Nepalese goods and services in national as well as international market. Increasing export is a challenging issue for Nepal. In such situation, tourism might be a vehicle for reducing trade deficit. Government had announced 2020 as visit Nepal year which was later on canceled due the outbreak of COVID-19. In such situation, it is important to analyze the impact of tourism on Nepalese economy. A voluminous study is available on tourism-growth nexus in different countries as tourism industry received considerable attention as a potential source of economic growth. But, in case of Nepal, such studies are extremely scanty in spite of government's priority on tourism sector. This study attempts to bridge up this gap and contributes to the literature related to link between tourism and economic growth. More specifically, objective of this study is to analyze the impact of tourism on economic growth of Nepal. This study does not consider domestic tourism. Due to lack of time-series data related to domestic tourism, analysis was focused on international tourism only.

This paper consists of six sections. Section 1 introduces the study. It highlights the importance of study and defines the objective. Section 2 reviews the literature related to the relationship between tourism and economic growth. Section 3 describes the current scenario of Nepalese tourism. Section 4 explains the methodology employed in the study. Section 5 presents the results and discusses them. Section 6 concludes the study.

Literature review

Basically, there are two hypotheses explaining tourism-economic growth linkage. The first is tourism-led growth hypothesis (TLGH). Explained by Balaguer and Cantavella-Jorda (2002), this hypothesis argues that tourism leads to long-run

economic growth. It is because tourism brings foreign currency, which can be used to import capital goods. Capital goods is necessary to produce other goods and services, leading to economic growth in the country. This hypothesis suggests unidirectional relationship between tourism and economic growth. A number of studies have supported this hypothesis, including Arslanturk et al. (2011), Gunduz and Hatemi-J (2006), Hye and Khan (2012) and Salifou and Haq (2016). However, some studies have reported no long-run tourism-economic growth nexus but positive impact of tourism on growth in the short-run only (Oh, 2005; Singh et al., 2010). The second hypothesis is economic-driven tourism growth, which argues that economic growth, leads to tourism expansion. Some studies, like Oh (2005) found positive impact of economic growth on tourism expansion. Furthermore, there are some other evidences suggesting bidirectional relationship between tourism and economic growth, like Dogru and Bulut (2018) and Ridderstaat et al. (2014).

Pan and Dossou (2019), by using time-series data of 1995-2015 for Republic of Benin, found positive and significant relationship between tourism and economic growth in short-run (at 10%) as well as in long-run (at 5%). Cannonier and Burke (2018) studied impact of tourism on economic growth in 15 Caribbean countries by using panel data of 1980-2015. Study found positive and significant impact of tourism on economic growth. Fauzel et al. (2016), by using time-series data of 1984-2014 for Mauritius, found that tourism and non-tourism FDI and tourism receipts had positive and significant impact on economic growth. Salifou and Haq (2016) examined the validity of tourism-led growth hypothesis for 11 countries of Economic Community of West African States (ECOWAS). Authors concluded that tourism-led growth hypothesis was valid for this region. Furthermore, Bouzahzah and Menyari (2013) examined the impact of tourism on economic growth of Morocco and Tunisia using time-series data of 1980-2010. Study found positive impact of tourism receipts on GDP growth in short-run for both Morocco (at 5%) and Tunisia (at 1%). On the other hand, long-term results suggest that tourism had no significant impact on real GDP growth rate for Tunisia whereas there was significant impact (at 10%) for Morocco. Srinivasan et al. (2012) found that tourism had positive impact on economic growth in Sri Lanka in short-run as well as in long-run. Such positive impact of tourism was extremely low in short-run compared to long-run. Gautam (2011) found that there was short-term dynamic relationship as well as long-run cointegrating relationship between tourism income and GDP in Nepal. Dritsakis (2004) found that international tourism earnings had caused economic growth in Greece for the period 1960-2000. Durbarry (2004) found, by using time-series data of 1970-1999 in Mauritius, positive and significant effect of real tourism receipts per tourist on economic growth. Balaguer and Cantavella-Jorda (2002) examined role of tourism on long-run economic growth of Spain by using data of 1975-1997. Balaguer

and Cantavella-Jorda pioneered tourism-led growth hypothesis through this study. Authors found that tourism had positively affected Spanish economic growth over time. Authors concluded that tourism-led growth hypothesis was valid for Spain.

Current scenario of Nepalese tourism

Nepal was opened to foreign tourists after 1951 (MOCTCA, 2016). MOCTCA has published tourism statistics of 57 years, i.e. from 1964 to 2020 (MOCTCA, 2021). In 1964, the number of tourist arrival was 9,526; which increased to 1,197,191 in 2019. But, in 2020, it decreased to 230,085. Data suggest that, average annual growth rate of tourist arrival within this period was 10.29%. Over 1966-1980, there was continuous increase in tourist arrival in Nepal. After that, within 1981-1993, there was fluctuation in tourist arrival. Again, over the period of 1994-1999, there was continuous increase in tourist arrival. Over 2000-2015, there was again instability in tourist arrival. Since 2016 to 2019, there was continuous increase in tourist arrival. In 2020, it decreased. Over the period of 1964-2020, highest growth rate was 53.7% in 1989. Tourist arrival declined in 1965, 1981, 1984, 1993, 2000, 2001, 2002, 2005, 2008, 2013, 2014, 2015 and 2020. The major decline in tourist arrival seems to be occurred in Maoist insurgency period (i.e. 2000, 2001, 2002 and 2005) and during COVID-19 pandemic (i.e. 2020). The decline in tourist arrival in 2008 was due to global economic meltdown. However, decline in 2013 and 2014 were unexpected whereas decline in 2015, it was due to earthquake and economic blockade imposed by India. Clearly, Nepalese tourism industry is volatile. In the past, it fluctuated due to domestic as well international reasons.

Table 1: Tourist arrival, growth of tourist arrival and length of stay in last ten years (2011-2020)

Year	Tourist arrival	Growth rate (%)	Length of stay
2011	736,215	22.1	13.12
2012	803,092	9.1	12.16
2013	797,616	-0.7	12.60
2014	790,118	-0.9	12.44
2015	538,970	-32.0	13.16
2016	753,002	40.0	13.4
2017	940,218	25.0	12.6
2018	1,173,072	25.0	12.4
2019	1,197,191	2.1	12.7
2020	230,085	-80.7	15.1
Average		0.9	12.97

Source: MOCTCA (2021)

Table 1 shows tourist arrival, its growth rate and length of stay over 2011-2020. There was fluctuation in tourist arrival over this period. There was continuous improvement in tourist arrival over the period 2016-2019. In 2020, there was significant fall in tourist arrival due to COVID-19. Average annual growth rate of tourist arrival for the period of 2011-2020 is 0.9%. Similarly, there is minor fluctuation in length of stay. Data suggest that, within the period of 1964-2020, length of stay was highest in 2020. The reason behind this is that tourists could not return to their countries due to the restriction imposed in international air transportation caused by COVID-19.

Tourism is one of the worst affected sectors from novel corona virus disease 2019 (COVID-19). Nepal had launched visit Nepal 2020 campaign in January with the expectation of attracting 2 million tourists. But, due to the outbreak of COVID-19 government has cancelled the campaign. Nepal was on lockdown from March 24 – July 21, 2020, which brought the economy to a standstill. Meanwhile, thousands of workers working in tourism industry lost their job. These workers were working in hotels, travel agency, trekking agency, rafting agency, tourist transportation service, airlines and home stay, among others. Similarly, entrepreneurs involving in tourism business lost their income. With the halt in tourist inflow, foreign exchange earnings from tourism have negatively affected. It is still uncertain that when this pandemic will over.

Methodology

Model specification

This study analyzes relationship between tourism and economic growth in Nepal. Gross domestic product (GDP) was used as proxy measure of economic growth, which was the outcome variable whereas the variable of interest was tourism receipts (TR). Foreign aid (FA), total volume of trade (TRD) and ratio of government consumption expenditure to GDP were control variables. All variables were measured in constant 2010/11 rupees. Based on existing literature (Balagure & Cantavella-Jorda, 2002; Cannonier & Burke, 2018; Fauzel et al., 2016; Saleh et al., 2015) analytical model was developed as follows:

GDP = f (TR, FA, TRD, GC/GDP)   (1)

Study was based on secondary sources of information. Data were taken from MOF (2021) and MOCTCA (2021). Analysis was based on time-series data of 1976-2020.

Estimation issues

Unit root test

In order to test whether time series is stationary, Augmented Dickey Fuller unit root test was carried out, as explained by Asteriou and Hall (2007), as follows:

The general equations for the ADF test are:

$$\Delta Y_t = \alpha_0 + \alpha_1 t + \gamma Y_{t-1} + \sum_{i=1}^{p} \beta_i \Delta Y_{t-1} + \mu_t \tag{2}$$

Where, Y_t is a time series variable, α_0 is a constant, α_1 is the coefficient on a time trend (t), is coefficient of lagged variable, are the coefficients of difference of lagged variable, p is the lag order of the autoregressive process and μ_t is a pure white noise error term.

4.2.2 Cointegration: ARDL bounds test

Auto-regressive distributed lag model (ARDL) bounds test was employed as explained by Pesaran, Shin and Smith (2001) as the variables are stationary at level and 1st difference. The effect of explanatory variables on dependent variable may not be immediate or instant; it may take time to show the effect of the independent variables on the dependent variable. Autoregressive distributed lag (ARDL) approach of cointegration is the appropriate econometric approach to capture the lagged effect of the explanatory variables on the dependent variable. ARDL regression involves two stages: in the first stage the existence of a long-run relationship between the variables is tested and in the second stage the parameters of long-run and short-run is estimated. In this study, Akaike information criteria have been used to choose the optimal lag lengths.

All the variables are taken in natural logarithm. The basic model used for the estimation is specified as:

$$lnGDP_t = a + b_1 lnFA_t + b_2 lnTR_t + b_3 lnTRD_t + b_4 \ln(GC/GDP)_t + \mu_t \tag{3}$$

Where,

$lnGDP_t$	=	GDP of Nepal expressed in logarithm
$lnFA_t$	=	Foreign aid received expressed in logarithm
$lnTR_t$	=	Receipts from tourism expressed in logarithm
$lnTRD_t$	=	Trade volume expressed in logarithm
$\ln(GC/GDP)$	=	Ratio of government consumption expenditure to GDP expressed in logarithm
a	=	Intercept term
b_is	=	Respective coefficients
μ_t	=	Error term

Following Pesaran, Shin and Smith (2001), ARDL representation of unrestricted version is specified as:

$$\Delta lnGDP_t = u + \sum_{i=0}^{m} \eta_i \Delta GDP_{t-1} + \sum_{i=0}^{n} \omega_i \Delta lnFA_{t-i} + \sum_{i=0}^{p} \varphi_i \Delta lnT\,R_{t-i} + \sum_{i=0}^{q} \pi_i \Delta\,lnTR\,D_{t-i}$$

$$+ \sum_{i=0}^{r} \rho_i \Delta\,lnGC/GD\,P_{t-i} + \theta_1 lnGDP_{t-1} + \theta_2 lnFA_{t-1} + \theta_3 lnTR_{t-1} \quad (4)$$

$$+ \theta_4 lnTRD_{t-1} + \theta_5 ln(\frac{GC}{GDP})_{t-1} + \mu_t$$

Where Δ denotes first difference operator, u is the intercept term and is the usual white noise residual.

In the ARDL model, the coefficients (θ_1 to θ_5) represent the long-run relationship whereas the remaining expressions with summation sign (coefficients η_i, ω_i, φ_i, π_i, ρ_i) represent the short- run dynamics of the model.

Results and Discussion

The analysis proceeds by making unit root test of variables. Later part contains the ARDL model including short-run and long-run relationships. Different residuals and stability test have been shown in order to check the viability of the model.

Unit root test of variables

The result of the Augmented Dickey-Fuller test of the time series is given in table 4.

Table 4: Augmented Dickey-Fuller test

Variables	Stationary at	Includes	p-value
lnGDP	1st difference	intercept only	0.0000
lnFA	1st difference	intercept only	0.0000
lnTR	1st difference	intercept only	0.0000
lnTRD	1st difference	intercept only	0.0000
lnGC	level	trend and intercept	0.0351

Source: Authors' estimation in Eviews 10

From the Table 4, it can be seen that all the variables are stationary at 1st difference at 1% level of significance, which include only intercept term except for government consumption expenditure, which is stationary at level at 5% level of significance including both trend and intercept term.

ARDL model for cointegration test

The results of first stage of the ARDL method of cointegration test for the determinants are given in Table 5. Here, the dependent variable is lnGDP with 45 observations used for the estimation from 1976 to 2020.

Table 5: Autoregressive distributed lag estimates

Model: lnGDP=f(lnFA, lnTR, lnTRD, lnGC/GDP)

ARDL (4, 1, 0, 2, 3) selected based on Akaike information criteria (AIC)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
lnGDP(-1)	-0.1935	0.1527	-1.2670	0.2164
lnGDP(-2)	0.3105	0.1238	2.5090	0.0187
lnGDP(-3)	0.3759	0.1069	3.5160	0.0016
lnGDP(-4)	0.3706	0.1171	3.1649	0.0039
lnFA	-0.0156	0.0230	-0.6793	0.5030
lnFA(-1)	0.0811	0.0258	3.1442	0.0041
lnTR	-0.0017	0.0101	-0.1669	0.8687
lnTRD	0.1389	0.0299	4.6440	0.0001
lnTRD(-1)	0.0002	0.0401	0.0054	0.9957
lnTRD(-2)	-0.0910	0.0314	-2.8928	0.0076
lnGC/GDP	0.0331	0.0278	1.1893	0.2451
lnGC/GDP(-1)	0.0350	0.0324	1.0811	0.2896
lnGC/GDP(-2)	0.0112	0.0343	0.3254	0.7475
lnGC/GDP(-3)	0.1060	0.0280	3.7827	0.0008
C	1.1833	0.3180	3.7211	0.0010
R-squared	0.9996	Akaike info criterion		-5.6792
Adjusted R-squared	0.9994	Durbin-Watson stat		2.0296
F-statistic	5004.9110	Prob(F-statistic)		0.0000

Source: Authors' estimation in Eviews 10

Table 5 shows the best autoregressive distributed lag model automatically selected by the Eviews 10 based on the Akaike information criteria. The coefficients of lnFA, lnTR, lnTRD and lnGC/GDP represent short-run coefficients. The coefficients of lnFA, lnTR and lnGC/GDP are not statistically significant while coefficient of lnTRD is positive and statistically significant. The coefficient is 0.1389, which means that in the short-run, 1% increase in trade volume leads to 0.1389% increase in GDP. The R^2 and adjusted R^2 is 0.99 which means that 99% of the variation in dependent variable is explained by the independent variables.

Table 6: Testing for existence of a level relationship among the variables in the ARDL model

Test Statistic	Value	Significance	I(0)	I(1)
F-statistic	16.1019	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.50%	2.88	3.87
		1%	3.29	4.37

Source: Authors' estimation in Eviews 10

Table 6 shows that the F-statistic is 16.1019, which is greater than the upper bound at all three level of significance which means that there exists long-run relationship among dependent variable and independent variables. Hence, it implies that the variables of the model have a tendency of moving together over time.

Table 7: Estimated long-run coefficients using ARDL approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
lnFA	0.4797	0.1824	2.6299	0.0142
lnTR	-0.0123	0.0735	-0.1679	0.8680
lnTRD	0.3527	0.0955	3.6927	0.0010
lnGC/GDP	1.3580	0.3545	3.8307	0.0007
C	8.6729	1.6867	5.1419	0.0000

Source: Authors' estimation in Eviews 10

The estimated long-run coefficients of lnFA, lnTRD and lnGC/GDP are positive and also statistically significant, which indicates that there is positive relationship between GDP and independent variables except lnTR. The coefficient of lnFA is 0.4797, which means that 1% increase in foreign aid leads to 0.4797% increase in GDP. The coefficient of lnTRD is 0.3527 which means that 1% increase in TRD leads to 0.3527% increase in GDP. Similarly, the coefficient of lnGC/GDP is 1.3580, which means that 1% increase in ratio of government consumption expenditure to GDP leads to 1.3580% increase in GDP. But, the coefficient of lnTR is statistically insignificant which means that there is no relationship between tourism receipts and GDP in case of Nepal.

Table 8: ARDL error correction regression

ARDL (4, 1, 0, 2, 3) selected based on Akaike information criteria (AIC)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(lnGDP(-1))	-1.0571	0.1259	-8.3943	0.0000
D(lnGDP(-2))	-0.7465	0.0974	-7.6614	0.0000
D(lnGDP(-3))	-0.3706	0.0966	-3.8350	0.0007
D(lnFA)	-0.0156	0.0185	-0.8461	0.4052
D(lnTRD)	0.1389	0.0226	6.1516	0.0000
DlnLTRD(-1))	0.0910	0.0265	3.4292	0.0020
D(lnGC/ GDP)	0.0331	0.0218	1.5169	0.1414
D(lnGC/GDP(-1))	-0.1171	0.0267	-4.3931	0.0002
D(lnGC/GDP(-2))	-0.1060	0.0235	-4.5159	0.0001
CointEq(-1)	-0.1364	0.0127	-10.7324	0.0000

Source: Authors' estimation in Eviews 10

Table 8 shows that the coefficient of CointEq(-1) is negative (-0.1364) and statistically significant at 1% level of significance. It means that there is existence of a cointegrating relationship of the dependent variable lnGDP with the set of its regressors.

Residual tests

The results of residual test of the ARDL model is given below:

Table 9: Normality test

Jarque-Bera	0.0897
Probability	0.9562

Source: Authors' estimation in Eviews 10

Table 9 shows that p-value of Jarque-Bera test is 0.9562, which means null hypothesis of normality cannot be rejected. Hence, the residual of the OLS estimate is normal.

Table 10: Breusch-Godfrey serial correlation LM test

F-statistic	0.0504	Prob. F(2,24)	0.9510
Obs*R-squared	0.1714	Prob. Chi-Square(2)	0.9179

Source: Authors' estimation in Eviews 10

In Table 10 the probability value of Chi-square is 0.9179, so the null hypothesis cannot be rejected. Therefore, the null hypothesis, that is, there is no serial correlation, cannot be rejected meaning that there is no serial correlation.

Table 11: Breusch-Pagan-Godfrey heteroskedasticity test

F-statistic	1.9117	Prob. F(14,26)	0.0742
Obs*R-squared	20.797	Prob. Chi-Square(14)	0.107
Scaled explained SS	8.1089	Prob. Chi-Square(14)	0.8836

Source: Authors' estimation in Eviews 10

In Table 11, the probability value of F-Statistic is 0.4329, which indicates that the null hypothesis, the model is homoscedastic, cannot be rejected. Hence, it can be concluded that model is homoscedastic.

Stability Test

The results of stability test of the ARDL model is given in table 12:

Table 12: Ramsey RESET test

	Value	**df**	**Probability**
t-statistic	0.4636	25	0.6470
F-statistic	0.2149	(1, 25)	0.6470

Source: Authors' estimation in Eviews 10

It can be seen that the t-statistic is clearly lower than the critical value 1.96 (at 5% level of significance). Also, the p-value is 0.6470, which indicates that null hypothesis cannot be rejected. Hence, model has no any omitted variables.
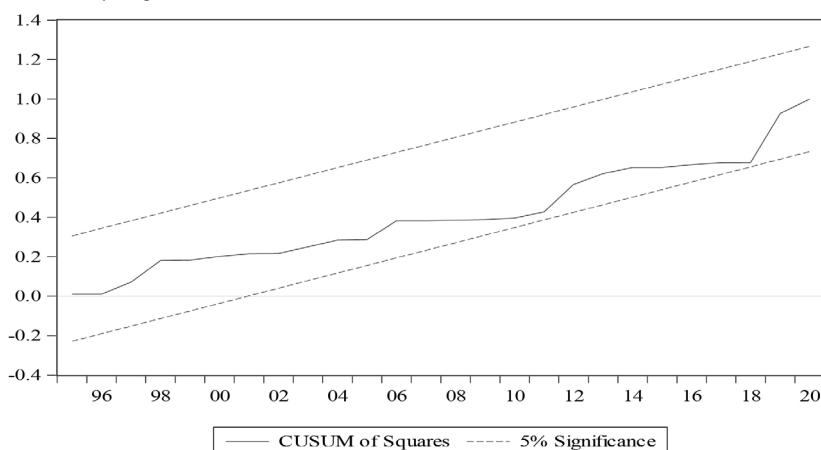
The stability of the ARDL model is further checked by plotting the cumulative sum of recursive residuals (CUSUM) and the CUSUM of squares (CUSUMSQ). CUSUM involves the calculation of a cumulative sum.

Figure1: CUSUM test
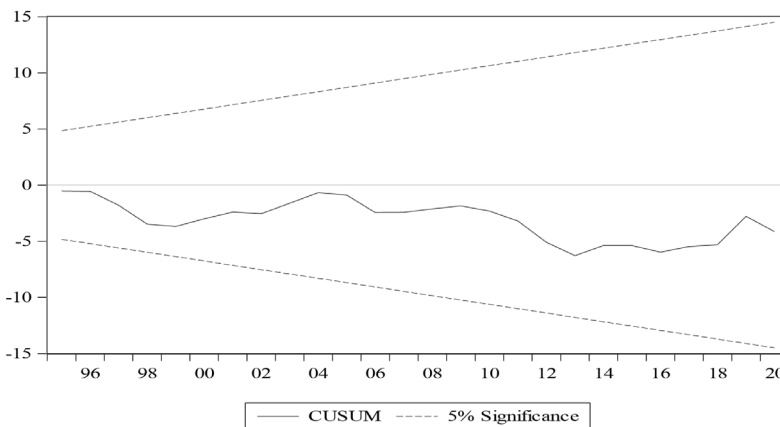
Source: Authors' estimation in Eviews 10

Similarly, figure 2 shows CUSUMSQ test.

Source: Authors' estimation in Eviews 10

Figure 1 and 2 show the cumulative sum of recursive residuals and cumulative sum of square of recursive residuals respectively, which clearly demonstrate that the CUSUM curve and CUSUMSQ curve lie within the 5% critical bound lines. So, it can be inferred that the space of the parameters of the OLS model is stable and the model is not mis-specified.

The estimation of ARDL model shows that there is positive and significant relationship between foreign aid, total trade volume and ratio of government consumption expenditure to GDP, and economic growth in the long-run. Asteriou (2009), Gounder (2010), Moreira (2005) and Tarp et al. (2015) also found positive and significant relationship between foreign aid and economic growth. Dollar and Burnside (2016) argue that foreign aid positively influences economic growth of developing countries in the presence of good fiscal, monetary and trade policies. Such evidence on aid and growth relationship is in line with the prediction of neo-classical growth theory. If foreign aid is used in infrastructure development, human resource development and in other productive sectors of economy, it contributes to growth. Furthermore, positive and significant relationship, in the long-run, is found in between total volume of trade and economic growth. Were (2015) also found positive relationship between trade and economic growth. Regarding total volume of trade, import has dominating share. When a country imports capital goods, it increases productive capacity of country. Similarly, import of capital goods promotes development of infrastructure of the country. In this way, trade influences growth positively. Similarly, Moreno et al. (2019) also found positive relationship between government consumption expenditure and economic growth in Colombia. But, there is no long-run relationship between tourism receipts and economic growth. Oh

(2005) and Ramjee Singh et al. (2010) also found no relationship between tourism receipts and economic growth in the long-run.

Conclusion

This study analyzed the impact of tourism on economic growth of Nepal. Real GDP was used as proxy measure of economic growth, which was the outcome variable whereas the variable of interest was tourism receipts. Foreign aid, total volume of trade and ratio of government consumption expenditure to GDP were taken as control variables. Autoregressive distributed lag model was employed. Study was based on time series data of 1976-2020. Necessary diagnostic tests were also conducted. Study found that there was no significant relationship between tourism and economic growth in short-run as well as long-run. The reason behind this is that tourism has very low contribution to GDP of Nepal. Over the period of 2011-2019, the average ratio of foreign currency earned from tourism to GDP was 1.87% only. Similarly, daily spending per tourist in 2020 was $65 only, which is very low. However, study found that total volume of trade has positive and significant effect on economic growth in short-run whereas foreign aid, total volume of trade and ratio of government consumption expenditure to GDP have positive and significant effect on economic growth in the long-run. In such context of tourism and growth relationship, tourism-led growth hypothesis is rejected for Nepal.

Major problems of Nepalese tourism are low level of tourist arrival and low daily spending per tourist. These are caused by low level of tourism competitiveness of Nepal. In the absence of breakthrough in terms of no. of tourist arrival and their spending, there will be insignificant role of tourism on economic growth of Nepal. Using resources on tourism sector to maintain existing situation only will not create significantly productive result in the country. It will have opportunity cost to the country. In such situation, serious question arises on whether tourism can be a foundation for economic transformation of the country.

Acknowledgement

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