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Impact of Foreign Direct Investment on Gross Domestic Product in Nepal

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Abstract

Foreign direct investment is a critical component in the development of modern-era economies, and especially in developing nations. FDI can help create jobs, increase productivity, increase exports, and technology transfer, thus contributing to sustained economic growth. This research intends to assess the impact of FDI on GDP of Nepal using the ARDL model utilizing the annual time series data ranging from 1993/1994 through 2023/2024. In this research, unit root tests were performed to find the integration order of the variables. Cointegration between the variables were performed through the ARDL Bound Test. Later on, in accordance with the test, long-run coefficients and Error Correction Model (ECM) were estimated in order to interpret the findings in the context of equilibrium and adjustment in the system. Findings of this research have revealed that FDI's impact on GDP in the short run is positive but less significant and in the long run, FDI's impact on GDP is positive and significant.

Keywords: FDI, GDP, ARDL, ECM

Introduction

Foreign direct investment refers to investment where the investor from one economy makes an investment in and exerts control over a business entity operating in another economy. Foreign direct investment plays an integral part in building modern economic relationships. It has become much more crucial now than ever before, particularly for developing nations. With its immense potential for job creation, increasing efficiency, improving exports, and transfer technology, foreign investments play a critical role in the sustainable economic growth of both developed and developing nations.

FDI can serve as an important source of financing to complement domestic investment for the economic growth and development of the least developed countries (NRB, 2018/19). FDI is a category of cross-border investment associated with a resident in one economy having control or a considerable degree of influence in the management and enterprises located in another economy (IMF, 2009). These investments encompass not only the transfer of capital but also facilitate the diffusion of technology, management skills, and organizational skills, which can help in the development of the economy of the host country.

FDI has a long-standing role in the global economy, evolving alongside trade, industrialization, and financial integration. The history of FDI can be traced to the colonial era, where European countries invested abroad to ensure access to natural resources and trade. However, the current form of FDI began in the latter half of the nineteenth and early twentieth centuries with the emergence of multinational corporations, which increased their production and markets outside their national boundaries. After World War II, the inflow of FDI rose with the need for reconstruction, technological changes, and the creation of international finance institutions like the IMF and World Bank. The 1980s and 1990s witnessed a significant increase in FDI, as developing nations opened their economy, eased restrictions on FDI, and offered incentives to attract foreign capital. Today, FDI has become an engine of globalization, ensuring the transfer of capital and technology, and

the integration of economies into the international market.

The inflow of FDI in Nepal is less as compared to other countries in the region. Nepal welcomes FDI in the form of joint ventures with local investors or 100 percent foreign-owned enterprises. It began its efforts to attract FDI from the sixth five-year plan period, However, the strategy for the promotion of FDI in the country was only adopted in 1992.

Several international studies have analyzed the effects of FDI on economic growth in different ways. Sukar et al. (2007) tested the impact of FDI on the economic growth process within the nations found in the Sub-Saharan regions of Africa. The impact of FDI on economic growth has been found to yield a positive impact which, however, also turns out to have been marginally significant. Domestic factors, including macroeconomic policy, openness, and domestic investment, have a positive effect on the growth process.

Sokang (2018) in his study analyzed the effect of FDI on economic growth, and the main aim of the study was to examine the effect of FDI on the economic growth of Cambodia using the time series data from the year 2006-2016. The researcher applied the correlation matrix technique in the analysis. This research paper concluded that the economic growth of Cambodia is positively affected by FDI.

Chaudhury et al. (2020) examine the impact of FDI on economic growth in South Asia and also analyzed the impact regarding the nature of FDI. Research indicates that FDI plays a significant role in economic growth especially in emerging countries; however, its impact varies among nations. The presence of additional factors, such as domestic investment, infrastructure, inflation, and international trade, can either enhance or diminish the influence of FDI on economic growth. Furthermore, due to the heterogeneous nature of sectoral FDI, the composition of sectors can exert differing effects on economic growth. Thus, there is a need to adopt measures and calculation of differing impact value of sector-wise (Primary, Secondary, and Tertiary Sector) FDI flows. It was analyzed that the impact value of South Asian countries regarding FDI can indeed be affected based on sector composition of FDI. It analyzed the empirical model, and information was gathered for a period of 1990–2014.

Many Nepalese researchers also have examined the impact of FDI on economic growth. According to Parajuli (2021) FDI and economic growth in Nepal are correlated in the long run. The research aims to analyze the effects of foreign direct investment on the gross domestic product of Nepal. The data utilized in this analysis is for the period from 1990/91 to 2019/20. The researchers used the ordinary least squares estimation approach to analyze the effect of foreign direct investment on GDP.

Chhetri (2022) analyzed the relationship between the FDI, foreign trade and economic growth in Nepal with time-series data from 1995-2020. ARDL bound test, a method for testing cointegration, has been employed to test long- and short-term relations among examined variables. The study further concluded that there is a positive relation among foreign trade and FDI regarding their enhancing effects on economic growth, in short-term as well as long-term periods. These findings indicate that foreign trade and FDI could play an important role in augmenting the economic growth of Nepal.

Poudel (2022) analyzed the impacts of FDI on the Nepalese economy using data from 1995-2020. In his study, the results of the Johansen co-integration test indicated the presence of co-integration within the model. However, the coefficient of the Vector Error Correction Model (VECM) was positive and statistically insignificant, indicating the absence of a long-run relationship. However, one-way

causality from GDP to FDI was found. This result reveals the overall statistical significance of the model, and GDP was not significantly related to FDI. According to empirical research on Nepal utilizing time series data ranging from the 1995/96 fiscal year to the 2021/22 fiscal year, FDI positively encourages economic growth in the short and long run (Dhungel & Lamichhane, 2023). By utilizing cointegration techniques like the Engel-Granger method and error correction models, research recommends that the gap created by the disparity in GDP is corrected after a specific period, indicating that FDI helps stabilize the economy.

Balami et al. (2024) focused on the factors and sectoral allocation of FDI in Nepal, emphasizing the remarkable contribution by FDI towards economic performance. It has been found that a strong positive relationship between FDI and GDP exists, with a correlation coefficient value of 0.668. It indicates a significant trend between the increasing magnitude of FDI and economic growth. Further, the sectoral allocation shows that investment made in mineral, manufacturing, construction, energy, and service sectors positively contributes towards overall GDP growth. It reflects that FDI contributes remarkably towards overall GDP growth by creating opportunities for economic performance.

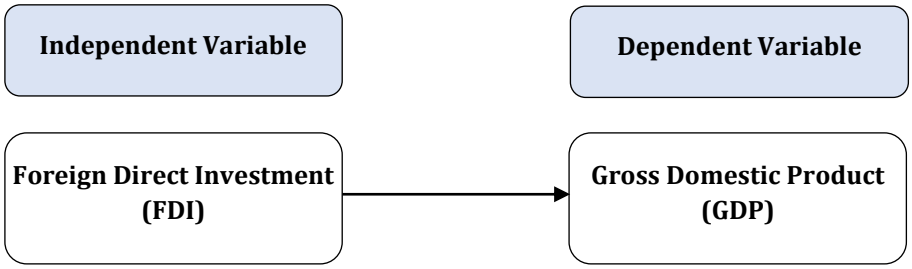
Gautam (2024) highlights Nepal's strategic geographic position between India and China as a key factor shaping its potential to attract foreign direct investment. Studies consistently note that Nepal's proximity to two large markets, along with preferential market access and relatively low tariff structures, creates a favorable investment environment. However, scholars also emphasize that despite these inherent advantages, Nepal continues to struggle with institutional and structural challenges including a fragile financial system, bureaucratic inefficiencies, and political instability which collectively limit the scale and effectiveness of FDI inflows. The literature further highlights a generally positive association between FDI and economic growth in Nepal, though the strength and consistency of this relationship often depend on broader macroeconomic stability and policy reforms.

Most of the existing Nepalese studies are based on descriptive methodology or have focused on shorter time periods, very often with obsolete data, which limits an understanding of the long-run relationship between FDI and GDP. Besides, although various international studies provide general evidence, the evidence relevant to Nepal remains inconsistent, limited and fragmented. This study, therefore, tries to fill this gap by assessing the short run and long run impact of FDI on GDP utilizing the annually collected data over 31-year time period, starting from 1993/94 to 2023/24 and comprehensively gauge the relationship of FDI and Nepal's GDP.

Data and Methods

This study uses a causal comparative research design as it aims to assess the impact of FDI on GDP in Nepal. The study takes into consideration the data for a period of 1993/94 to 2023/24 and the data is gathered from secondary sources at the Nepal Rastra Bank and Department of Industry. In this study, GDP is considered as the dependent variable, while FDI is regarded as an independent variable.

Conceptual Framework



This research uses an ARDL model to assess the impact of FDI on GDP over the study period. Before estimating the ARDL model, the stationarity of the variables is assessed using the Augmented Dickey–Fuller (ADF) test. This ensures the order of integration of each variable. The ADF test is performed under intercept and intercept-with-trend specifications to confirm robustness.

Autoregressive Distributed Lag (ARDL) Model

The ARDL, or Autoregressive Distributed Lag, method represents an econometric technique applied in research concerning the relationships between integrated variables of mixed orders, particularly I(0) and I(1). This technique was introduced by Pesaran and Shin in 1999, and later was improved in collaboration by Pesaran, et al. in 2001. This method is more appropriate in regard to data size, which may be smaller, and each variable can have different integration order.

The first step involves estimation of the short-run relationship through the use of variables that have been differenced by lags and use the F-bound test for the cointegration. If cointegration exists in the variables, we estimate the long-run coefficient and Error correction Model are derived to know how system returns to the equilibrium after a short-term shock. In general, the ARDL test offers an effective method in which both short and long-run influences affecting the variables can be established.

The general ARDL model is expressed as:

$$Ln\_GDP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i \, Ln\_GDP_{t-i} + \sum_{j=0}^{q} \beta_j \, Ln\_FDI_{t-j} + \varepsilon_t$$

Where,

Ln_GDP = Natural logarithm of GDP at time t

Ln_FDI = Natural logarithm of FDI at time t

α_0 = is the constant.

$\sum_{i=1}^{p} \alpha_i \, Ln\_GDP_{t-i}$ = Autoregressive part, (meaning that past levels of GDP influence the current GDP)

$\sum_{j=0}^{q} \beta_j \, Ln\_FDI_{t-j}$ = represents the distributed-lag effect of FDI, (shows how current and lagged FDI contribute to GDP over time)

ARDL Bounds Test for Cointegration

The ARDL F-Bounds Test proposed by Pesaran et al. (2001) is used to examine whether a long-run equilibrium relationship exists between FDI and GDP. The estimated F-statistic is evaluated against the corresponding critical value bounds:

If F value > Upper Bound → Cointegration exists

If F value < Lower Bound → No cointegration

Between Bounds → Inconclusive

If cointegration is confirmed between the variables, next step is to determine the long-run coefficients and an Error Correction Model (ECM).

Error Correction Model (ECM)

Once cointegration is determined, the corresponding Error Correction Model (ECM) is estimated:

$$\Delta Ln\_GDP_t = \theta_0 + \sum_i \psi_i \Delta Ln\_GDP_{t-i} + \sum_j \lambda_j \Delta Ln\_FDI_{t-j} + \gamma ECM_{t-1} + u_t$$

The coefficient of ECM_{t-1}:

i. Should be negative and significant
ii. Shows the speed of adjustment toward long-run equilibrium

Pairwise Granger Causality Test

The study uses the Granger causality test to investigate the causality direction between GDP and FDI. This test helps identify whether FDI predicts GDP, GDP predicts FDI, or whether bidirectional causality exists.

Results and Discussion

Descriptive Statistics of Real Data

Descriptive statistics involve the disclosure of key features of the variables utilized in the analysis, including the use of measures of central tendency and dispersion. This variance in the data series can be described by variance in the levels and volatility experienced by the variable throughout the period of analysis. This use of descriptive statistics is significant in assessing data distribution, size, and stability in the variables.

Table 1
Descriptive Statistics

Statistical Values	FDI	GDP
Mean	16736.02	1554624
Median	7138.310	1438357
Maximum	69833.58	2674390
Minimum	477.5900	778080.9
Std. Dev.	20718.78	585574.4
Skewness	1.389975	0.459763
Kurtosis	3.731079	1.952890
Jarque-Bera	10.67252	2.508377
Probability	0.004814	0.285307
Sum	518816.6	48193349

From the data in Table 1, it can be seen that the statistics summarize the distribution of FDI and GDP. In the case of FDI, it can be seen that the mean value is 16,736.02, which is greater than the median. This indicates that there is a positively skewed distribution of data. This is further reflected by the positive skewness of 1.38975 and

relatively high kurtosis of 3.73, thus indicating that there are extremely high values in the dataset. This can also be explained by the high standard deviation of 20,718.78, which indicates that high variability in FDI inflow. In addition, the Jarque-Bera test indicates that the data fails to pass normality, with a significance level of 0.0048.

In contrast, for GDP, there is much more stability with a mean of 1,554,624 and a median of 1,433,857, indicating a much more balanced distribution. The skewness is much lower at 0.46, with moderate kurtosis at 1.95, indicating that it is a distribution closer to being normal. GDP has a large standard deviation of 585,574.4, reflecting expected growth over time. The Jarque–Bera test for GDP is not significant (p = 0.2853), indicating that GDP data do not depart from normality significantly. Overall, FDI has greater volatility and non-normality, whereas GDP is more stable and normally distributed.

Unit Root Test Result

Unit root test is performed on the series of log FDI and GDP to identify stationarity. The unit root test is carried out in terms of level and first difference using an intercept and trend and intercept. The widely used unit root test technique is known as the Augmented Dickey Fuller (ADF) test. It helps in identifying stationarity in data. Unit root test findings are shown in Table 2.

Table 2
Unit Root Test Results

Variable	Level		First Difference		Order
	Intercept	Trend and Intercept	Intercept	Trend and Intercept	
Ln_GDP	-0.323814	-3.358535	-5.864956	-5.747193	I(1)
	[0.9098]	[0.0763]	[0.0000]	[0.0003]	
Ln_FDI	-1.034685	-5.176146	-6.353685	-6.210721	I(0)
	[0.7271]	[0.0012]*	[0.0000]	[0.0001]	

Note: Null Hypothesis: Variable has unit root (non-stationarity)

Alternative Hypothesis: Variable has not unit root (stationarity)

Table 2 shows the unit root test of the both variables. At the level form, both variables have high p-values (Ln_GDP: 0.9098; Ln_FDI: 0.7271) under the intercept, meaning the ADF test fails to reject the null hypothesis of a unit root. This indicates that both variables are non-stationary in their original form. However, Ln_FDI is stationary at the level if we include a trend, which means Ln_FDI is trend-stationary. When the Ln_GDP is transformed into its first differences, the test statistics become highly significant, with a p-value of 0.0000. This leads to rejection of the null hypothesis, confirming that the Ln_GDP become stationary after first differencing and Ln_FDI becomes stationary at the level if we include a trend. Therefore, variables are a mixture of I(0) and I(1). This test is a crucial prerequisite for further time-series analysis to ensure that meaningful long-run relationships can be examined. As dataset consists of 31 annual observations, which can be considered as small sample size, and the variables are stationary with mixture of I(0) and I(1), Auto Regressive Distributed Lags (ARDL) Model is suitable for the study because ARDL can handle a mixture of I(0) and I(1) variables and works well with small sample size. Thus, we proceeded to the ARDL Model.

ARDL Model Selection Criteria

The ARDL model section criteria, such as checking the order of integration of variables and selecting the appropriate lag length, are essential to ensure the validity of

the model. These steps confirm that the variables are suitable for cointegration analysis and help capture both short-run and long-run dynamics accurately. Table 3 shows the ARDL Model selection criteria using EViews.

Table 3
ARDL Model Selection Criteria

Model	LogL	AIC*	BIC	HQ	Adj.R-sq	Specifi
2	99.9751	-6.46501	-6.32489	-6.42018	0.99675	ARDL (1, 0)
1	100.213	-6.41418	-6.22735	-6.22735	0.99668	ARDL (1, 1)

Source: Writer's own calculation using E-Views

With reference to the above model selection criterion table 3, ARDL (1, 0) is selected using Akaike Information Criterion (AIC) with the lowest AIC (6.46501). Because the ARDL lag selection criteria indicate that the optimal model is the ARDL (1,0), as this specification produces the lowest AIC value. This means GDP responds to one lag of its own past values, while FDI enters the model without lag.

Estimation of ARDL Model

Estimation of the autoregressive distributed lag model is used to examine the short-run and long-run relationships between the dependent and independent variables, such as GDP and FDI. Table 4 shows the result of the ARDL Estimation using EViews.

Table 4
Estimation of ARDL Model

Variable	Coefficient	Std. Error	T-statistic [Probability]
Ln_GDP (-1)	0.946702	0.028808	32.86260 [0.0000]
Ln_FDI	0.013918	0.007501	1.855608 [0.0745]
C	0.291877	0.150600	1.938087 [0.0631]
R-squared: 0.996974		D-W Stat: 2.356203	
F-statistic: 4447.148		Prob(F-statistic): 0.000000	

With the ARDL estimation result regression equation is;

$$\text{Ln\_GDP}_t = 0.95\ \text{Ln\_GDP}_{t-1} + 0.014\ \text{Ln\_FDI}_t + 0.292 + e_t$$

Where;

0.946702 = effect of past GDP

0.013918 = short-run effect of FDI on GDP

0.292 = constant

e_t = error term

A coefficient of 0.95 and a p-value of less than 0.001 indicate that Ln_GDP is highly significant and that current GDP strongly depends on last year's GDP. With a 0.014 coefficient and p-value 0.0745, Ln_FDI has a positive but weakly significant effect on GDP. It indicates that 1% increase in FDI increases GDP by about 0.014% in the short run.

In table 4, the 0.99674 Adjusted R-squared is extremely high, which means the model fits well, and with an F-statistic of 4447.148 and a p-value of 0.0000, indicates the overall model is statistically significant. The 2.356203 Durbin-Watson suggests no serious autocorrelation in residuals.

ARDL Long-Run Bound Test Result (F-Bound Test)

The long-run bound test, also called the F-bounds test, is a test used in the ARDL approach to check for a long-run relationship between two or more variables. The test checks for a null hypothesis of no cointegration against an alternative hypothesis of a long-run relationship by comparing the calculated F-statistic with the upper and lower bounds. The F-statistic is said to have a significant long-run relationship when it is greater than the upper bound, whereas it is said to have no cointegration when it is less than the lower bound. When it is between the two bounds, it is inconclusive. The result of the ARDL long-run bound test is shown in Table 5.

Table 5
ARDL Long-Run Bound Test Result (F-Bound Test)

Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	39.70725	10%	3.02	3.51
k	1	5%	3.62	4.16
		2.5%	4.18	4.79
		1%	4.94	5.58
Actual Sample Size	30	Finite Sample: n=30		
		10%	3.303	3.797
		5%	4.09	4.663
		1%	6.027	6.76

Note: Null Hypothesis: No levels relationship
Source: Writer's own calculation using E-Views

In the table 5, the F-statistic (39.70725) is greater than the upper bound at the 5 percent level of significance, which rejects the null hypothesis. Hence, the results indicate the presence of long-run relationship between GDP and FDI, and cointegration exists. We should estimate the long-run coefficient and error correction.

ARDL Long-Run Coefficient Estimation

The long-run coefficient estimation in the ARDL model measures the equilibrium relationship between the dependent and independent variables over time. coefficients are derived from the ARDL model after confirming cointegration using the F-bounds test, ensuring that the relationship is stable and meaningful. Interpreting the long-run coefficients provides insights into the magnitude and direction of the impact. Table 6 shows the estimation of the ARDL long run coefficient using EViews.

Table 6
ARDL Long-Run Coefficient Estimation

Regressor	Coefficient	Std. Error	t-Statistic	Prob.
Ln_FDI	0.261146	0.052629	4.962034	0.0000
C	5.476346	0.247057	22.16634	0.0000

EC = Ln_GDP – (0.2611 Ln_FDI + 5.4763)

The p-value of all the coefficients is less than 1%, so both have a long-run effect on Ln_GDP. The long-run effect on GDP is calculated by;

$$Ln\_GDP = 0.2611\ Ln\_FDI + 5.4763$$

At long-run equilibrium, the error correction term equals zero. (The EC computes the difference between the actual value of the dependent variable and the long-run (cointegrating) value. When the economic system is in equilibrium, the

actual value and the long-run value are strictly equal to each other).

The findings from the long-run ARDL model prove that FDI positively influences GDP in the long-run period, which is statistically significant. The value of the long-run coefficient of 0.26 means that when FDI increases by 1%, GDP will increase by 0.26%.

Error Correction Model

The Error Correction Model explains how rapidly the deviation from the long-run equilibrium is corrected, and this is done by using the value of the error correction coefficient (EC). A negative and statistically significant EC coefficient confirms that any short-term disequilibrium between variables. Table 7 shows the ARDL error correction model using EViews.

Table 7
ARDL Error Correction Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CointEq(-1)*	-0.053298	0.004712	-11.31130	0.0000

Table 7 shows the error correction term, which is represented by CointEq(-1) is found negative and statistically significant at the 1% level, which confirms the existence of a valid long-run equilibrium relationship between GDP and FDI in the ARDL (1,0) model. The coefficient of –0.0533 indicates that approximately 5.3 percent of the deviation from the long-run equilibrium is corrected each year. Which means if any disturbance occurs in the short run in the model, it will be corrected approximately in 18 years and 9 months (1/0.053298). The negative sign shows that the model adjusts in the correct direction, i.e. whenever GDP deviates from its long-run path due to short-run shocks, it gradually returns toward equilibrium.

Model Diagnostic Test

Here we, conduct the diagnostic test to validate the robustness of the estimated ARDL model.

Table 8
Model Diagnostic Test Results

Serial correlation: Breusch–Godfrey LM Test			
F-statistic	2.213550	Prob. F(2, 25_	0.1303
Obs*R-squared	4.513288	Prob. Chi-Square (2)	0.1047
Note: Null Hypothesis: No serial correlation			
Source: Writer's own calculation using E-Views			
Heteroskedasticity Test (Breusch-Pagan-Godfrey)			
F-statistic	2.348469	Prob. F(2, 25_	0.1147
Obs*R-squared	4.44548	Prob. Chi-Square (2)	0.1083
Note: Null Hypothesis: Homoskedasticity			
Source: Writer's own calculation using E-Views			
Functional form: Ramsey RESET Test			
	Value	**df**	**Probability**
t-statistic	0.615215	26	0.5438
F-statistic	0.378489	(1, 26)	0.5438
Note: Null Hypothesis: Model is correctly specified			
Source: Writer's own calculation using E-Views			

The test result shows in table 8 that the null hypothesis cannot be rejected as the p-values exceed the 5% significance level. This indicates that the ARDL model does not suffer from serial correlation, heteroskedasticity and model is correctly specified.

Model Stability Test

After estimating an ARDL (Autoregressive Distributed Lag) model, stability test is required to determine whether the model is statistically valid or not. Thus, we proceed to the CUSUM test and the CUSUM square test.

Figure 1
CUSUM Test

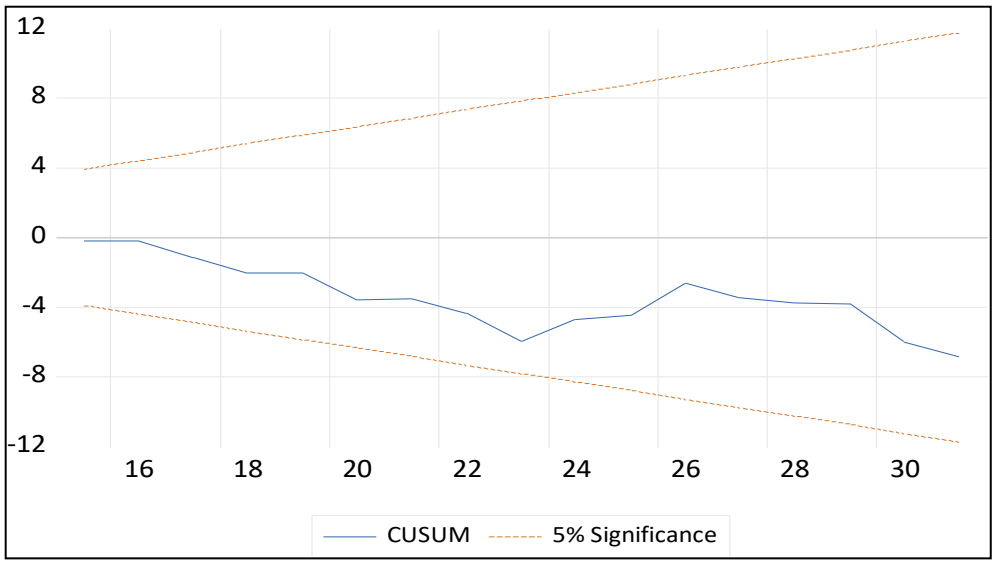


Figure 2
CUSUM Square Test

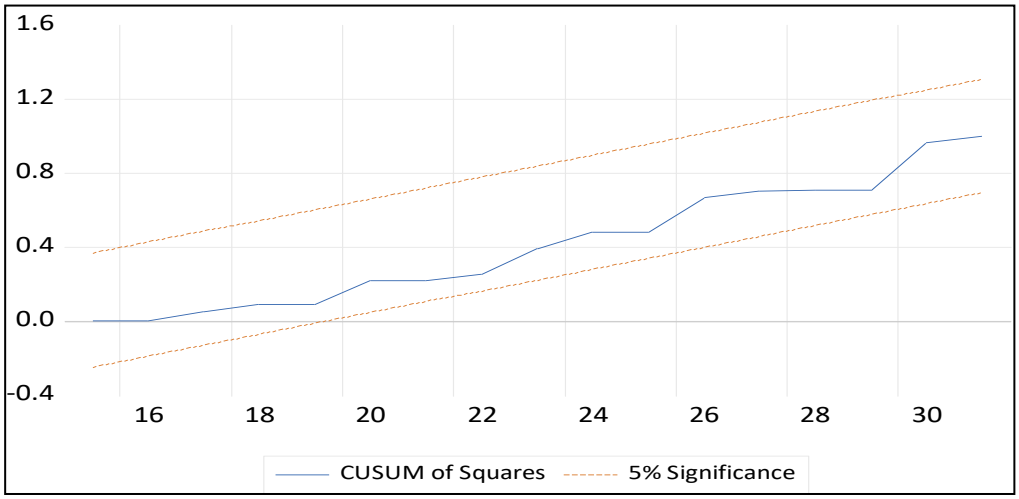


Figure 1 and 2 shows the result of the CUSUM and CUSUM square test using E-Views, where the blue line is within the red dotted line in the both figure, which indicate the absence of instability. Hence, that means the model is completely stable.

Pairwise Granger Causality Test

A pairwise Granger causality test can also help in identifying the direction of the causal relationship between two variable series, for example, FDI and the GDP series. It can help in the identification of whether the past series contains the ability to forecast the future series.

Table 9
Pairwise Granger Causality Test

Lag	Null Hypothesis	Obs.	F-stat.	Prob.
2	Ln_GDP does not Granger cause Ln_FDI	29	4.46495	0.0225
2	Ln_FDI does not Granger cause Ln_GDP		0.07221	0.9305

Source: Writer's own calculation using E-Views

Table 9 shows the pairwise granger causality test which is optioned by the E-Views. There are two variables: GDP and FDI, with a lag length of two. The results show a unidirectional causal relationship between the variables. The null hypothesis of Ln_GDP is does not Granger-cause Ln_FDI is rejected at the 5% significance level with F-statistic = 4.47 and p value = 0.023. This shows the changes in GDP significantly contribute to predicting future changes in FDI inflows. In contrast, the null hypothesis, Ln_FDI does not Granger cause Ln_GDP, and cannot be rejected (F-statistic = 0.07; p = 0.93), suggesting that FDI does not have predictive power for economic growth in the study period. Overall, the finding shows the one-way causality running from GDP to FDI, implying that economic growth plays a leading role in attracting foreign direct investment.

Conclusion

This research intends to assess the impact of FDI on GDP of Nepal using the Autoregressive Distributed Lag model utilizing the annual time series data ranging from 1993/1994 through 2023/2024. Based on the findings of this research revealed that FDI's impact on GDP in the short run is positive but less significant, and in the long run, FDI's impact on GDP is positive and significant. Further, the Bound Test of the ARDL reveals that there is a long-run relationship between FDI and GDP. Moreover, granger causality results show a unidirectional causal relationship between the FDI and GDP. The Error Correction Model shows a negative, significant error correction term, which validates the model's stability and reveal that any short-term deviation is corrected at an appropriate rate toward the long-run equilibrium.

In conclusion, FDI contribute significantly to the economic growth. Both the short-run adjustments and long-run equilibrium behavior reveal that the increase in FDI inflows leads to economic growth in the country. These findings indicate that policies that attract stable and productive foreign direct investment can support sustainable economic development in the country.

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Appendix

Variables used in this research, Real Gross Domestic Product (GDP) at Producers' Price, Foreign Direct Investment (Inflow) and Natural log transformed data.

Year	Real GDP	FDI	Ln_GDP	Ln_FDI
1993/94	778080.85	1378.76	5.89	3.14
1994/95	805068.18	477.59	5.91	2.68
1995/96	848039.60	2219.86	5.93	3.35
1996/97	892654.69	2395.54	5.95	3.38
1997/98	918917.31	2000.28	5.96	3.30
1998/99	960118.99	1666.42	5.98	3.22
1999/00	1018835.16	1417.61	6.01	3.15
2000/01	1076179.60	3002.56	6.03	3.48
2001/02	1077472.67	1209.65	6.03	3.08
2002/03	1119980.17	1793.77	6.05	3.25
2003/04	1172424.37	2764.80	6.07	3.44
2004/05	1213214.23	1635.77	6.08	3.21
2005/06	1254033.43	2606.31	6.10	3.42
2006/07	1296816.84	3185.98	6.11	3.50
2007/08	1375982.18	9812.60	6.14	3.99
2008/09	1438357.28	6255.09	6.16	3.80
2009/10	1507634.38	9100.00	6.18	3.96
2010/11	1559222.86	10053.21	6.19	4.00
2011/12	1632040.48	7138.31	6.21	3.85
2012/13	1689572.40	19818.73	6.23	4.30
2013/14	1791140.76	20132.42	6.25	4.30
2014/15	1862357.47	67455.04	6.27	4.83
2015/16	1870423.59	15254.33	6.27	4.18
2016/17	2038336.75	15206.46	6.31	4.18
2017/18	2193706.44	55760.48	6.34	4.75
2018/19	2339742.69	25484.44	6.37	4.41
2019/20	2284299.67	37805.83	6.36	4.58
2020/21	2394800.00	37072.82	6.38	4.57
2021/22	2529677.21	54158.94	6.40	4.73
2022/23	2579829.28	30719.45	6.41	4.49
2023/24	*2674389.68*	*69833.58*	*6.43*	*4.84*