Efficiency of Private Sector Credit on the Economy of Nepal

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Abstract

This paper attempts to analyze the impact of domestic credit to private sector on economic growth of Nepal. Based on the time series data covering the time period from 1975 to 2022, the study has employed the ratio of private credit to domestic credit as a main independent variable and real gross fixed capital formation, ratio of remittance to GDP, the ratio of export to GDP, real gross value added on transportation and communication and real exchange rate have been used as control variables, while real GDP has been used as a proxy of economic growth. Employing Engle Granger two step procedure, the result of the study revealed that domestic credit to private sector is found instrumental in both short run and long run in influencing the economic growth of Nepal. Hence, the study recommends that appropriate monetary policy measures are desirable for enhancing the productive capacity and thereby by economic growth.

Keywords: Private sector credit, remittance, real exchange

JEL Classification: O16, O40, G21, G22 and E44

Introduction

It is indeed that economic growth remains central of macroeconomic policy. Therefore, the developed financial system is key to establish monetary link as domestic credit indeed provided particularly to the private sector is pivotal in boosting sustainable economic growth by expanding new avenues of financial resources (Schumpeter, 1911). In this regard, financial intermediation supports economic growth through various dimensions such as by increasing real return to savers, reducing cost of borrowing to the investors and risk from the diversification in lending, increasing operational efficiency and decreasing the information costs to the savers and investors by means of specialization and division of labor (Shaw, 1973). Therefore, the banking sector as an important formal financial intermediation in the economy facilitates the easy access to credit for enhancing the productive capacity in the economy (Were, Nzmoi & Rutto, 2012). Bank credit under well-operated and regulated financial System serves as an important transmission mechanism of monetary policy as it finances production, consumption, and capital formation which in turn have significant influence on the economic growth (Timsina, 2014). However, the impact of private sector credit on economic growth varies depending upon macroeconomic situations of the countries across the globe.

As Nepal is not exceptional regarding the need of adequate capital in order to foster rapid economic growth. In order to achieve this end, Nepal Rastra Bank since its inception in 1956

initiated various policy measures to expand the credit availability of banks and financial institutions through various reform programs at different time periods. As evidenced from the facts that the domestic credit to private sector was 47. 83 percent in the fiscal year 1974/75 and it increased by 1.5 times and reached to 82.67 percent by the end of the fiscal year 2021/22 (Nepal Rastra Bank, 2023). On the other hand, Nepal's average annual economic growth rate remianed 5.2 percent in 1980s and there was a slight decline to 5.0 percent in 1990s and this figure further declined to 4.3 percent in the last decade (Ministry of Finance, 2075). Based on the comparison between the growth of domestic credit to private sector and economic growth rate, a question definitely can be raised that whether private sector credit promotes economic growth of Nepal or not?

In this context, the main objective of this study is analyze the impact of private sector credit on economic growth in Nepal by employing Engle Granger cointegration test and error correction model based on time series data for the period 1975-2022.

The results obtained from the study can be expected to bridge the gap in existing literature regarding the importance of the private sector credit in influencing economic growth both in short run and long run. It is also anticipated from the results of the study that the real, gross fixed capital, export, remittance, real exchange rate and transportation and communication to be instrumental in affecting the economic growth.

Literature Review

Although the literature regarding the role of bank credit or access to bank credit as an indicator financial development and its impact on economic growth have been growing in recent times ((Were, Nzmoi and Rutto, 2012). Most of the research studies examined the relationship between private sector credit and economic growth and derived various conclusions depending upon country specific, methods and time framework of the study. This section sheds light on the review of previous studies in terms of methods used and the results obtained.

Several studies found the positive influence of the private sector credit on the economic growth. In this regard, Beck, Levine, and Loayza (2000) using dynamic panel regression technique revealed that the private sector credit as one of the measures of financial development has positive impact on economic growth through the total factor productivity growth channel. Following this Islam et. al. (2004) and Ghirmay (2004) also showed long run relationship between private sector credit and economic growth. Likewise, Odili et.al (2015) based on Johansen conintegration test and ECM found the significant influence of private sector credit and economic growth in both short run and long run. The studies by Amoo et. al (2017) and Saiti and Trenovski (2021) reached to the same conclusion that the private sector credit is growth enhancing. But these findings contrast with the findings by Begam and Aziz (2019) that revealed the significant negative impact of private sector credit on economic growth in case of Bangladesh.

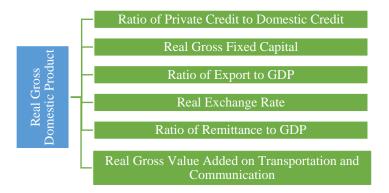
In the context of Nepal, most of the studies presented the positive relationship betweenprivate sector credit and economic growth in both short run and long run. It becomes clear from the findings of Poudel et. al (2018); (2014) Bist and Bista (2018) and Kharel et.al

(2024). However, the finding of Timsina (2014) showed that the impact of private sector credit on economic growth is found to be significant only in the long run.

So far the above mentioned literature in the international context is concerned, Beck, Levine, and Loayza (2000), Islam et. al. (2004) and Ghirmay (2004), Odili et.al (2015) and Amoo et. al (2017) and Saiti and Trenovski (2021) except Begam and Aziz (2019) revealed significant influence of private sector credit on economic growth particularly in the long run. Even in the context of Nepal, the studies of Poudel et.al (2018); (2014) Bist and Bista (2018) and Kharel et.al (2024) showed the significant relationship between private sector credit and economic growth in both short run and long run. But Timsina (2014) showed insignificant impact of private sector credit on economic growth in the short run. In this context, this study has attempted to establish significant association between private sector credit and economic growth both in short run and long run by incorporating additional variables such as real exchange rate, ratio of remittance to GDP and real gross value added on transportation and communication to GDP in the models.

Conceptual Framework

The conceptual framework of the study has been presented as follows:



Note. Author's Own Creation

From the conceptual framework, it becomes evident that the real gross domestic product (RGDP) has been used as dependent variable. The main variable employed in the study is the ratio of private credit to domestic, while real gross fixed capital formation, ratio of export to GDP, real exchange rate, ratio of gross value added on transportation and communication to GDP and ratio of remittance to GDP as the control variables. It is expected from the study that the expansion of private sector credit along with other control variables can be instrumental in stimulating the economic growth of Nepal.

Data and Methodology

Data and Sources

This study employs time series data covering the period from 1975 to 2022. The data on gross domestic product, gross fixed capital formation, export and gross value added on transportation and communication are obtained from various Economic Surveys published by Ministry of Finance and data related to remittance and private sector credit, domestic credit, exchange rate are obtained from Quarterly Economic Bulletins published by Nepal Rastra

Bank. Table 1 presents the variables with their types, expression used for their identification and

Table 1 *List of Variables*

Variables	Types of	Proxies	Expression Used
	Variables		
Real Gross Domestic Product	Real	Economic Growth	LNRGDP
Ratio of Private Sector Credit to Domestic	Real	Banking Sector	LNPcredit/Dcredit
Credit			
Real Gross Fixed Capital Formation	Real	Domestic Investment	LNRGFCF
Ratio of Export to GDP	Real	Trade	LNX/GDP
Real Exchange Rate	Real	International	LNRER
		Competitiveness	
Real Gross Value Added on	Real	Infrastructure	LNRTCOM
Transportation and Communication			
Ratio of Remittance to GDP	Real	Foreign Exchange	LNREM/GDP
		Reserve	

Methodology

Before conducting Engle Granger approach to cointegration and error correction model, unit root test of all the variables incorporated in the models are carried out. After performing unit root test, it becomes apparent that all the variables are stationary at first difference with the conintegration of order I (1) and their linear combinations are I (0). With the establishment of cointegrating relation, then error correction model is estimated using the lagged residual.

Model I

Equation (1) is estimated for Cointegrating relation. All the variables have been transformed in log form.

$$LNRGDP = \alpha_0 + \alpha_1 LNPcredit/Dcredit + \alpha_2 LNRGFCF + \alpha_3 LNX/GDP + \alpha_{04} LNRTCOM + U_t.....(1)$$

Where LNRGDP is the log of real gross domestic product; LNPcredit/GDP is the Log of private credit as percentage of domestic credit; LNGFCF/GDP is the log of real gross fixed capital formation; LNREM/GDP is the log of export as a percentage of GDP; LNRTCOM is the log of real transportation and communication and U_t is the random error.

Once the equation (1) is estimated by using OLS method, then the study follows Engle and Granger procedure to establish the cointegrating relation through the stationary test of residual obtained from this equation. As cointegrating relation is established, the study estimates the following error correction model I for the short term dynamics:

$$DLNRGDP = \alpha_0 + \alpha_1 \ \textit{Ect(-1)} + \alpha_2 \ \textit{DLNPcredit/Dcredit} + \alpha_3 \ \textit{DLNRGFCF} + \alpha_4 \\ DLNX/GDP + \alpha_5 DLNRTCOM + U_t(2)$$

Where D = First difference; $Ect\ 1\ (1)$ is the one year lagged error correction term(1); LNRGDP is the log of real gross domestic product; LNPcredit/GDP is the log of private credit as percentage of domestic credit; LNGFCF/GDP is the log of real gross fixed capital formation

; LNREM/GDP is the log of real export as a percentage of GDP; LNRTCOM is the log of real transportation and communication and U_t is the random error.

Model II

The study puts forward another model as an alternative to establish better relationship between financial depth and economic growth. As a result, the following model for cointegrating relation is specified by including new variable real exchange rate and excluding the variable real export:

$$LNRGDP = \alpha_0 + \alpha_1 LNPcredit/Dcredit + \alpha_2 LNRGRCF + \alpha_3 LNREM/GDP + \alpha_4 LNRER + U_1.....(3)$$

Where LNRGDP is the log of real gross domestic product; LNDcredit/GDP is the log of private sector credit as a percentage of domestic credit; LNRGFC is the log of real gross fixed capital formation; LNREM/GDP is the log of remittance as a percentage of GDP; LNRER is the log of real exchange rate and U_t is the random error.

Again OLS method is applied for the estimation of equation (3). After this step, the stationary test of residual is performed in order to make confirmation regarding the existence of cointegration among all the incorporated variables of this model. With the establishment of stationary of residual, the study specifies the following error correction model in order to examine short run dynamics:

$$DLNRGDP = \alpha_0 + \alpha_1 \ Ect(-1) + \alpha_3 \ DLNPcredit/Dcredit + \alpha_4 DLNRGFCF + \alpha_5$$

 $DLNREM/GDP (-1) + \alpha_6 LNRER(1) + U_t$(4)

Where D = First difference; Ect2 (1) is the One year lagged error correction term; LN RGDP is the log of real gross domestic product; LNDcredit/GDP is the log of private sector credit as a percentage of domestic credit; LNRGFC is the log of real gross fixed capital formation; LNREM/GDP is the log of remittance as a percentage of GDP; LNRER is the log of real exchange rate and U_t is the random error.

Results and Analysis

In this section, the results and analysis of the study have been carried out by adopting Engle-Granger two-step procedure.

Descriptive Statistics

In order to analyze the characteristics of the pattern of the variables (private credit, gross fixed capital formation, real exchange rate, remittance, gross value added of transportation and communication, export and real GDP) included in the models, the study has employed descriptive statistics, Table 1 shows the summary statistics of the dependent (RGDP) and the independent variables (ratio of private credit to domestic credit, real gross fixed capital formation, ratio of export to GDP, real exchange rate, ratio of gross value added on transportation and communication to GDP and ratio of remittance to GDP). It also shows number of observations, measures of central tendency, standard deviation, minimum and minimum, skewness and kurtosis and Jarque-Bera test in order to ensure normality of the variables used in the study.

Table 2Descriptive Statistics for Variables

	LNRGDP	LNPCREDIT_	LNRGFCF	LNX_GDP	LNREM_GD	LNRER	LNRTCOM
		DCREDIT			P		
Mean	13.67594	4.061459	12.16224	1.857508	1.069745	4.387675	11.37792
Median	13.72312	4.193205	12.18845	1.769648	0.420971	4.363523	11.16978
Maximum	14.58514	4.523982	13.58147	4.025536	3.234535	4.76677	12.9268
Minimum	12.77302	3.459094	10.76422	0.987709	-2.150802	3.76603	9.594299
Std. Dev.	0.560198	0.351189	0.809186	0.546093	1.673681	0.244585	1.069978
Skewness	-0.02774	-0.320903	0.094572	1.130656	0.099634	-0.29372	0.037669
Kurtosis	1.719251	1.566585	1.982591	6.35782	1.418285	2.364229	1.460339
Jarque-Bera	3.286793	4.933188	2.141793	32.77696	5.08306	1.498578	4.752464
Probability	0.193322	0.084873	0.342701	0	0.078746	0.472703	0.0929
Observations	48	48	48	48	48	48	48

Note. Author's Own Calculation

Table 2 shows that all the variables have positive mean and median values. The mean values of all the variables are found within the range between 13.68 and 1.07 indicating wide variations in their central tendencies. In comparison to other variables included in the models, real GDP has larger mean. The main idea behind the estimation of descriptive statistics is to assure that whether the data series used in the study are the normally distribution or not. In order to confirm the normality, the study has applied widely used Jarque-Bera test. Based on the probability values of J.B., all the variables except LNX/GDP are found to be normally distributed.

Stationary Test

In order to examine the long run relationship between the ratio of private sector credit to domestic credit, real gross fixed capital formation, ratio of export to GDP, ratio of gross value added on transportation and communication to GDP, real exchange rate, ratio of remittance to GDP and economic growth, it is essential to confirm the stationary properties of these variables incorporated in the model.

Table 3 *Results of Stationary Test*

S.N.	Variables	AI	ADF at Lags		
		0	1	2	
1.	LNRGDP	-0.096	0.048	0.133	
2.	LNPcredit/Dcredit	-0.489	-1.072	-0.813	
3.	LNRGFCF	-0.476	-3.910	-0.165	
4.	LNX/GDP	-3.445*	-2.193	-1.851	
5.	LNREM/GDP	-0.821	-0.525	-0.505	
6.	LNRER	-2.890**	-1.653	-1.629	
7.	DLNRGDP	-8.862*	-6.572*	-4.119*	
8.	DLNPcredit/Dcredit	-5.303*	-4.458*	-4.906*	
9.	DLNRGFCF	-8.627*	-4.670*	-4.510*	
10.	DLNX/GDP	-10.531*	-7.058*	-5.589*	
11.	DLNREM/GDP	-9.109*	-5.042*	-3.748**	
12.	DLNRER	-6.510*	-4.320*	-2.873***	

Note. Author's Own calculation, * significant at 10%; ** significant at 5%; *** significant at 1%.

For this, the conventional estimation procedures of Augmented Dickey-Fuller (ADF) has been carried out order to deter the order to determine the order of integration of the variables. The results of unit root test are presented in the following table.

Table 3 reveals that the findings of the study reveal the existence of cointegration of order I (1). The results of the ADF test of stationary test show that all the variables are non-stationary at levels but are found to be stationary at first difference. Hence, this confirms the cointegration of Order I (1).

After performing stationary test, the study then has estimated co-integrating equation using OLS method as a first step of Engle Granger residual based test using. The following table presents the results of Engle- Granger cointegration test.

Model I

As the results of unit root test in the table 2 reveal that that all the variables included in the model are stationarry at first difference, so the study has estimated the following cointegrating relations:

LNRGDP = 5.659 + 0.154 LNP credit/Dcredit + 0.513 LNRGFCF + 0.044 LNX/GDP + 0.094 LNRTCOM

St. Error	0.126 0.045	0.026	0.012	0.023
P Value	(0.00) (0.00)	(0.00)	(0.00)	(0.00)
$R^2 = 0.99$	F = 2345.51 (0.00) and D	W = 1.20		

The estimated results show that all the variables incorporated in this model are found to be statitistically significant in influencing the economic growth of Nepal in the long run. The unit root test of residual obtained from the estimation of the above model has been carried out for the confirmation of stationary.

Figure 1
Results of Stationary Test of Error Correction Term

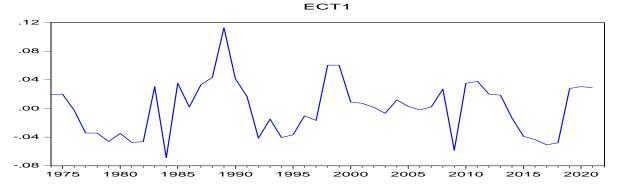


Table 4Results of Stationary Test of Error Correction Term

S.N.	Variable	ADF at Lags	
	Resid001	0	1
		-4.397***	-3.009

Note. Author's Own Calculation, ***significant at 10%; ** significant at 5%; * significant at 1%.

The estimation of unit root test of residual has been presented in Table. The result presents that the ADF statistic of the residual at lag zero is statistically significant at 10 percent level as its critical value at 10 percent is 4.34. Therefore, the statistical significance of the residual confirms the existence of long run relationship among the variables used in the model. After the confirmation of cointegrating relation, following model has been specified for error correction:

```
DLNRGDP = 0.025 - 0.218 Ect1(1) + 0.151DLNPcredit/Dcredit + 0.123DLNRGFCF
                    0.099
St. Error
            0.005
                                  0.043
                                                            0.049
P Value
                                                            (0.02)
            (0.00)
                     (0.03)
                                  (0.00)
+ 0.010DLNX/GDP + 0.060DLNRTCOM
 0.007
                     0.020
 (0.15)
                    (0.01)
R^2 = 0.34, F = 4.27(0.00), and D.W. = 2.14
```

While performing the error correction model, the findings of the study reveal that all the variables except the ratio of export to GDP are statistically significant in affecting the real GDP in the short run. The estimated results of the error correction model make sure that all the variables except the ratio of remittance to GDP are statistically significant in affecting the economy of Nepal in short run. The error correction term is -0.218 and is statistically significant at less than 5 percent indicating that around 22 percent deviation in short run is corrected every year in order to retain equilibrium in the long run. The coefficient of the ratio of private credit to domestic credit is statistically significant even at 4 percent and its impact on economic growth is 15 percent in the short run. Similarly, the coefficient of real gross fixed capital formation is also statistically significant at 5 percent and its impact in short run economic growth is 12 percent. In addition to this, the coefficient of the ratio of export to GDP is also significant at 1 percent and its impact on growth in short run is 1 percent. Likewise, the coefficient of real gross value added on transportation and communication is found to be statistically significant in the run and its impact on real GDP in short run is 6 percent. Since the coefficient of determination is 0.34 implying that 34 percent variation in the model is explained by the ratio of private credit to domestic credit, real gross fixed capital formation, ratio of export to GDP and real gross value added on transportation and communication. Moreover, the F value is also significant at less than 1 percent level assuring that the model is best fitted. Lastly, this model is free from autocorrelation as indicated by D.W. Value equals to 2.14.

Diagnostic Test

The study has performed the residual diagnostic test of model I for the assurance of well specified model. Table 5 presents the results of diagnostic tests of residual error.

Table 5Results of Breusch-Godfrey Serial Correlation LM Test and Heteroscedasticity Test: Breusch-Pagan-Godfrey

Breusch-Godfrey Serial Correlation LM Test

F-statistic	0.42	Prob. F (2,39)	0.65
Obs*R ²	1.011	Prob. χ 2 (2)	0.60

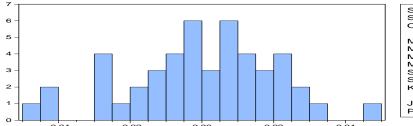
Heteroscedasticity Test: Breusch-Pagan-Godfrey

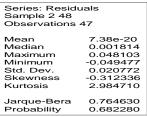
F-statistic	0.82	Prob. F (5,41)	0.54	
Obs*R2	4.274	Prob. χ 2 (5)	0.51	
Scaled explain	ned SS 3.227	Prob. χ 2 (5)	0.67	

Note. Author's Own Calculation

The results of Breusch-Godfrey serial correlation LM test reveal that the probability value is 0.60 > 0.05 indicating the absence of autocorrelation in the model. Similarly the result of Breusch-Pagan-Godfrey of heteroscedasticity test presents that the probability value is 0.51 > 0.05 I ensuring no evidence of heteroscedasticity in the model. Thus, it becomes quite evident from the residual diagnostic tests, the model is free from misspecification.

Figure 2
Plot of Residual Terms (Normality Test)





The Figure 2 shows that the residuals are normally distributed. In addition to this, the probability value of Jarque-Bera is 0.68 > 0.05 conforming the evidence that residuals being normally distributed. Therefore, it can be concluded that the Model I doesnot violate usual assumptions of OLS.

Model II

Once the stationary test is performed, then the co-integrating equation has been estimated using OLS method. The following table presents the results of Engle- Granger cointegration test. comprises such variables as real GDP, ratio of private credit to domestic credit, real gross fixed capital formation, ratio of remittance to GDP and real exchange rate and these variables are found to be cointegrated in line with Granger. The estimated results of the cointegrating relation is presented in the following equation form:

LNRGDP = 5.783 + 0.200LNPcredit/Dcredit + 0.525LNRGFCF + 0.038LNREM/GDP

St. Error	0.177	0.044	0.018	0.009
P Value	(0.00)	(0.00)	(0.00)	(0.00)
+ 0.148LN	RER			
0.029				
(0.00)			$R^2 = 0.99.F = 22$	281.53 (0.00) and D.W. = 1.53

The findings of the study show that all the explanatory variables included in this model are found to be statistically significant in affecting real GDP of Nepal in the long run. The unit root test is performed for residual obtained from the estimation of the Model III in order to ensure stationarity.

Figure 3
Results of Stationary Test of Error Correction Term

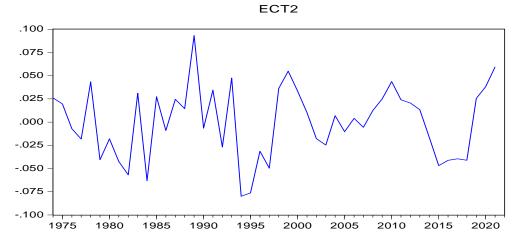


Table 6Results of Stationary Test of Error Correction Term

S.N.	Variable	ADF at Lags	
	Resid002	0	1
		-5.262**	-2.919

Note. Author's Own Calculation; ***significant at 10%; ** significant at 5%; * significant at 1%.

The estimated results show that the ADF test statistic of residual at zero lag is -5.262 that is greater than the response surface estimates of critical values at less than 10 percent. Hence, the study concludes the existence of cointegrating relation among the variables incorporated in the model. The following table presents the estimated results of error correction model:

D LNRGDP =-0.028 - 0.270
$$Ect2(1)$$
 + 0.1401 $DLNDcredit/GDP$ + 0.117 $LNDGFCF/GDP$
St. Error 0.069 0.099 0.045 0.050
P Value (0.69) (0.01) (0.00) (0.00)
- 0.010 $DLNREM/GDP$ + 0.013 $LNRER(1)$
0.007 0.016
(0.17) (0.40)
 $R^2 = 0.36$, $F = 4.53$ (0.00), and D.W. = 2.42

The results of error correction model reveal that the coefficient of the lagged residual is negative but statistically significant at 1 percent level. It indicates that 27 percent disequilibrium in short run is corrected every year in order to restore equilibrium in the long run. The coefficient if private sector credit to domestic credit is found to be statistically significant at nearly 0 percent and its impact on economic growth in short run is 14 percent. Likewise, the coefficient of real gross fixed capital formation is also statistically significant at

nearly 0 percent showing its impact ion real GP in short run is almost 12 percent. However, the coefficients of remittance and real exchange rate are found to be insignificant in influencing the economic growth in the short run. Since R² is 0.36, then it implies that 36 percent in the variation in model is explained by the explanatory variables included in the model. In addition to this, the F value is also significant at less than 1 percent level. It ensures that the model is best fitted. Finally, D.W. Value is 2.42 presenting the evidence of no autocorrelation.

Diagnostic Test

Residual diagnostic test of model II has been carried out in order to confirm that this model is well specified. Table 7 presents the results of diagnostic tests of residual error.

Table 7Results of Breusch-Godfrey Serial Correlation LM Test and Heteroscedasticity Test: Breusch-Pagan-Godfrey

Breusch-Godfrey Serial Correlation LM Test

F-statistic	2.50	Prob. F (2,38)	0.10	
Obs*R2	5.351	Prob. χ 2 (2)	0.07	

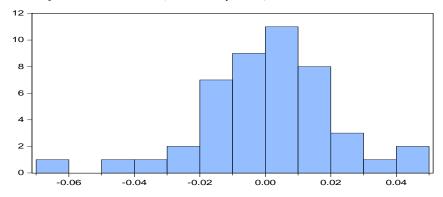
Heteroscedasticity Test: Breusch-Pagan-Godfrey

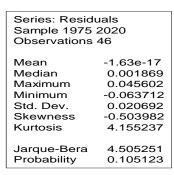
Ī	F-statistic	1.88	Prob. F (5,40)	0.12	
	Obs*R2	5.767	Prob. χ 2 (5)	0.12	
	Scaled explained S	SS 10.458	Prob. χ 2 (5)	0.06	

Note. Author's Own Calculation

While performing Breusch-Godfrey serial correlation LM test, the results shows that probability value is 0.07 > 0.05 reflecting the evidence of no autocorrelation in the model. Likewise, the result of Breusch-Pagan-Godfrey of heteroscedasticity test reveals the probability value is 0.12 > 0.05 implying the absence of heteroscedasticity in the model. Hence, the results of residual diagnostic tests make sure that the model is well specified.

Figure 4
Plot of Residual Terms (Normality Test)





From the shape of histogram, the residuals seem to be normally distributed. Moreover, the performance of Jarque-Bera test reveals that the probability value of Jarque-Bera is 0.11 > 0.05 presenting the evidence that the residuals are normally distributed. Hence, it can be made concluding remark that it can be concluded that the Model II also fulfills all usual assumptions of OLS.

Discussion and Conclusion

This section highlights on comparison of the results with previous studies and makes concluding remark based on the following main findings of the study obtained from empirical analysis:

- It is quite evident from the findings of the study showed that the private credit in both the models is instrumental in influencing economic growth in long run. This result is consistent with the findings of Beck, Levine, and Loayza (2000), Ghirmay (2004), Timsina (2014), Odili et.al (2015), Amoo et. al (2017), Bist and Bista (2018), Poudel et. al (2018) and Saiti and Trenovski (2021) and Kharel et. al (2024). But, this result contradicts with the finding of Begam and Aziz (2019) that presented the negative association between private sector credit and economic growth in long run.
- Likewise, the control variables are found to have long term relationship with economic growth.
- While performing error correction models, the results presented that the private sector credit even in short run is found to be pivotal in enhancing the economic growth n both the models. The result of the study is consistent with the findings of Bist and Bista (2018), Poudelet. al (2018) and Kharel et. al (2024). However, this result contrasts with findings made by Timsina (2014). Odili et.al (2015).
- Similarly, other control variables except the ratio of export to GDP, ratio of remittance to GDP and real exchange rate in both the models are found statistically significant in affecting the real GDP of Nepal in short run.
- So far the short term dynamics in this study are concerned, the results are found incompatible with the theoretical foundation that monetary policy has time lag effect.

Based on the above findings, the study concludes that private credit It can be an instrumental in lubricating the economic growth of Nepal. Hence, Nepal must encourage the private sector credit in enhancing the productive capacity and thereby economic growth through appropriate monetary policy measures.

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