The Nexus between Government Expenditure and Economic Growth: Empirical Evidence from Nepal

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Abstract

The fundamental objective of every government and society in a welfare state is aimed at economic growth and development. Gross Domestic Product (GDP) growth is a consistent measure of economic growth that directly affects a nation's standard of living and overall well-being. This study examines the nexus between government spending and economic in Nepal using time series data using the ARDL model from 1991 to 2022. For the purpose, the study tests the relationship between GDP growth rate as a dependent variable and capital expenditures, recurrent expenditures, government expenditure on health, and inflation rate as four independent variables . The results of the study exhibits that, there exists a direct and consistent link between government expenditure on health and the increase of the Gross Domestic Product (GDP) in the long run. And in the Short-term capital spending has a dynamic effect that eventually influences the long-term growth of Nepal's GDP. The association between recurrent expenditure and inflation with GDP growth is negative, whereas the relationship between capital expenditure and GDP growth is positive. This study suggests that further investigation should explore additional variables and indicators in order to achieve a more comprehensive knowledge of the effect of government spending on economic growth.

Keywords: Government expenditure, economic growth, government expenditure on health, inflation

JEL Code: O40, H50, H51, E3

Introduction

Any democratic government and society in a welfare state has a primary objective of keeping its citizens better and happier. For this nation should attain economic expansion. GDP growth serves as a proxy for the economic growth, which has a direct connection to economic progress, the standard of living, and the overall well-being of a nation (Kula et al., 2010). Economic growth is a device of a nation's economic performance that is assumed to be as a goal because countries expect its influence on improving living standards, generating employment, and making general changes (Lahirushan & Gunasekara, 2015). There has historically been reason for concern over the relationship between the size of government and economic growth. Fiscal policies aim to regulate and stabilize the economy by implementing different tax and expenditure policies. Economic policies encompass government strategies aimed at increasing income, mainly through taxation, and subsequent allocation of the resultant resources to fulfil established economic objectives (Onifade et al., 2020).

Government expenditure includes all government spending on consumption, investment, and transfer payments. Government final consumption expenditure refers to the procurement of products and services by governments for immediate use to directly fulfil the individual or collective needs of the community (Barro & Grilli, 1994). Government expenditure is the financial resources allocated by a government to provide products and services, including education, healthcare, defense, infrastructure, and social welfare programs, to meet the needs of its citizens and fulfil its obligations (Musgrave, 1959)

Economists have been discussing whether government expenditure has either a positive or a negative effect on the economy. The classicists hold a laissez-faire perspective, while Keynesians advocate for robust government involvement. Classicists such as Smith (1776) and Ricardo (1817) contend that the active participation of government in the market economy will

cause unnecessary disruptions to its automatic mechanism(Hunt & Lautzenheiser, 2011). A balanced budget is a concept that is regarded favorably by classical scholars. Insufficient revenue growth combined with increased government spending at a period of full employment will result in inflation. Under such circumstances, the government is compelled to borrow funds in order to bridge the deficit, which should be allocated towards productive activities. Keynes (1936) has challenged the classical theory and proposed the active involvement of the government in spending. He contends that the state ought to implement an excess of funds during periods of economic prosperity. However, in times of economic depression, it is advisable for the government to augment its expenditure and allocate additional funds towards public infrastructure projects in order to stimulate economic growth (Blanchard, 2023).

Dan et al. (2018) conducted a study using quarterly data from 1995 to 2015 to analyze the influence of different categories of public expenditure on GDP growth in a few chosen nations of Central and Eastern Europe that became members of the European Union (EU). They used the ARDL method and found that investments in education and healthcare have a beneficial effect on the economy, whereas spending on defense, general public services economic affairs, and GDP is negatively impacted by social welfare. Government expenditure has a significant favorable impact on growth of economy in SAARC nations, supporting both Wagner's Law and Keynesian theory. The results demonstrate a sustained link and unidirectional causality between government expenditures and GDP, offering important new information on how these countries use their public expenditures (Rahman et al., 2023).

The expansion of public expenditure in Nepal has been driven by tax revenue, international aid, and the need for public utilities including power, roads, communication, healthcare, and education. Additionally, public expenditure is necessary to security for the

people. Hence, there has been a notable rise in government expenditures, encompassing both capital and recurring expenses. Specifically, From Rs 23549.8 million in 1990–1991 to Rs 1191622 million in total federal, provincial, and municipal spending in 2019–20, government spending rose (Economic survey, 2021).

According to the World Bank(2021) Nepal's economy has been growing at an average annual rate of 6.5% over the past decade. However, this growth has been uneven, and poverty remains high. Moreover, the government's spending as percentage of GDP in Nepal grew from 13.2% in 2010 to 26.1% in 2020 (World Bank, 2021), but its impact on economic growth remains unclear. Therefore, the purpose of this study is to explore the relationship between government spending and Nepal's growth in economy.

Literature Review

Asimakopoulos et al. (2017) evaluated the impact of government spending on the economic growth in the European Union (EU) member states. The study found that government for economic growth, expenditure on education, research and development, and infrastructure has a favorable effect, while government expenditure on defense has unfavorable effect Ghulam & Khan (2017) analyzed the government spending's effect on the growth of economy in Pakistan. The study found that government spending on infrastructure, education, and health has affected positively on growth of the economy, while government expenditure on defense has influenced negatively.

In their study, Boussalem et al. (2014) examined the link between the country's economic growth and public health spending from 1974 to 2014. The study incorporated the error correction model into the conventional Granger Causality test and identified a one-way causal relationship from GDP to public expenditure on healthcare. Nevertheless, there was no evidence

to suggest that public spending on health had a Granger-causal effect on per capita GDP growth, as indicated by a positive sign.

Aluthge et al. (2021) used time series data from 1970 to 2019 to look into the impact of Nigerian government capital and recurrent expenditure on economic development. The Autoregressive Distributed Lag (ARDL) model was employed by them. To guarantee the stability and dependability of the results, the study considers any significant changes in the underlying structure that may occur during the unit root test and co-integration analysis. According to the study, capital spending has a significant and favourable impact on economic growth over both the short and long term. On the other hand, both short- and long-term economic growth are not significantly impacted by recurrent expenditure.

Using annual time series data from the years 1970 to 2016 and the ARDL econometric technique, Poku et al.(2022) revealed that government expenditure, gross fixed capital formation, and foreign direct investment all had a significant and positive both short and long-term effects on GDP growth.

The study conducted by Bhandari & Dhakal (2016) revealed that government spending on infrastructure, education, and health has a noteworthy positive impact on the Nepal's economic growth. The study recommended that the government should focus on increasing investment in these sectors to accelerate economic growth.

Dhakal & Acharya (2018) examined the impact of government expenditure on the agricultural sector of Nepal. The study revealed that expenditure of government on agriculture has a significant positive effect on agricultural output and the overall economic growth of the country. It is recommended that the government should increase investment in the agricultural sector to promote economic growth.

Regmi & Adhikari (2017) investigated the effect of government expenditure on the manufacturing sector in Nepal and reported that spending on infrastructure, energy, and

technology had a significant positive impact on the sector, leading to a positive impact on the overall economic growth of the country. Bhusal & Aryal (2017) conducted a study on the impact of government expenditure on the tourism sector of Nepal and found that spending on tourism had a highly favourable impact on the sector, which subsequently promoted the overall country's economic growth. They suggestedthat the government should increase investment in the tourism industry to foster economic growth.

Thapa & Shrestha (2019) studied the government expenditure's impact on the education sector in Nepal and found that investing in education had a significant positive impact on human capital development, leading to a positive impact on the nation's economic growth. Government expenditure has an impact on the health sector of Nepal. The spending on health had a significant positive impact on the health outcomes of the population, which in turn led to a favorable effect on the country's economic growth (Aryal & Bhattarai, 2018).

Rasaily & Paudel (2019) found that there is a long-term association between government spending and Nepal's economic growth. Kunwar (2019) also establishes a noteworthy link between the factors. The author additionally showed short-term connection among the variables in Nepal. According to a study by Shrestha (2009)), it is recommended to use both current and capital expenditures together to promote economic growth in Nepal. The study concludes that government expenditure has the ability to achieve optimal growth in Nepal.

Methods of Study

The study mainly used secondary data as it employed a macro method. The analysis utilized annual time series data that covered the period between 1991 and 2022. The data were obtained from various sources, including Nepal Rastra Bank, the Ministry of Finance, and the

World Development Bank Indicator. Gross Domestic Product (GDP) was the dependent variable, while Recurrent Expenditure (RE), Capital Expenditure (CE), and Government Expenditure on health (GEH) were independent variables. Inflation rate (INF) was treated as a controlled variable. Based on a post positivist perspective, this study examines the relationship between government spending and Nepal's economic growth.

Model Specification

Shah & Bhusal (2017) used a specified model to study the nexus between economic growth and government expenditure in Nepal .For this study, following mathematical model was used.

GDP = f (CE, RE, GEH, INF)

Where

GDP is Gross Domestic Product, the dependent variable; RE is Recurrent Expenditure, the first independent variable, CE is Capital Expenditure, the second independent variable, GEH is Government Expenditure on health, the third independent variable and INF is Inflation rate, the controlled variable.

Based on the theoretical and mathematical model of economic growth following econometric model was applied.

$GDP\_G_t = \beta_0 + \beta_1 RE_t + \beta_2 CE_t + \beta_3 GEH_t + \beta_4 INF_t + \varepsilon$

Where,GDP_G_t is gross domestic product growth at 't' time, CE_t is capital expenditure at 't' time, RE_t is recurrent expenditure at 't' time, GEH_t is government expenditure at 't' time and INF_t is inflation rate at 't' time.

β_0: Intercept, the constant term

The coefficients of the independent variables are β_1, β_2, β_3, and β_4.

ε : Error term or disturbance term

The model aims to investigate the relationship between GDP and its determinants, including recurrent expenditure, capital expenditure, Government expenditure on health and inflation The

Coefficients β_1, β_2, β_3 and β_4 represent the change in GDP associated with a change of one unit in each of the independent variables while keeping the other variables unchanged. The error term ε represents the unobserved factors that affect GDP but are not included in the model.

Techniques and Tools of Data Analysis

To verify the reliability of the estimated parameters from the given model, preliminary onthe variables has been crucial in the analysis of time series data. This study examines the stationary features of all variables to guarantee that the calculated outcomes are accurate. In thestudy, econometric and quantitative techniques were used to analyze the time series data. To findout whether the data are stationary, the unit root test of the series is the first step in the data gathering analysis. The unit root tests for the enhanced Dickey-Fuller (ADF) and Phillips-Peron (PP) were used. As result from the ADF and PP test, the connection between the employed variables was examined using the Autoregressive Distributed Lag (ARDL) estimate approach, asdescribed by Onifade et al. (2020). ARDL model was used to find the relationship of the variables under study in e-views-10 software. Table 1 presents the variables' descriptions.

Table 1

Description of variables

Variables	Explanation	Measurement	Sources of Data
GDPG	Gross Domestic Product growth at constant price, base year 2015	Change in GDP/ Previous GDP×100%	MoF, 2024
CE	Capital expenditure	Capital expenditure at constant price base year 2015	MoF 2024
RE	Recurrent Expenditure	Recurrent expenditure at constant price base year 2015	MoF 2024
GEH	Government Expenditure on Health	Government expenditure on health at constant price base year 2015	NRB, 2024
INF	Inflation rate	Change in GDP deflator/Previous GDP deflator x100%	WDI, 2024

Result and Discussion

This section includes a presentation and interpretation of the statistical results and discussion of the implications of the results. Table 2 presents the descriptive statistics, which give a summary of the central tendency, dispersion, and shape of the variable distribution.

Table 2

Descriptive Statistics

Variables	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	N
GDP_G	4.457752	4.601610	8.977279	-2.36962	2.236134	-0.77398	4.766215	32
LNCE	3.726606	3.637118	4.432510	3.217826	0.399902	0.564154	1.853436	32
LNRE	4.034533	3.924175	5.002494	2.995854	0.624532	0.054067	1.768981	32
LNGEH	5.156762	5.347701	7.298827	2.654649	1.077310	-0.4702	2.961289	32
LNINF	0.810368	0.878749	1.234252	0.355876	0.229099	-0.41625	2.362080	32

Note: Researcher's calculation from Eviews 10.

According to the data in Table 2, the variable GDP_G has a mean of 4.46 and a median of 4.60, which are quite similar in value. The maximum and minimum values for GDP_G are 8.98 and -2.37, respectively. The standard deviation of GDP_G is 2.24. Additionally, GDP_G has a negative skewness of -0.77 and a low kurtosis of 4.77. This indicates that the GDP_G has a small left skewness, with the distribution bearing a few heavy tails. LNCE has a mean of 3.73, a median of 3.64, a maximum value of 4.43, a minimum value of 3.22, a standard deviation of 0.40, a positive skewness of 0.56, and a low kurtosis of 1.85. It indicates that LNCE has a slight skewness with rather long tails in the distribution. The LNRE dataset reveals a mean of 4.03 and a median of 3.92, with values spanning from 3.00 to 5.00. The standard deviation is 0.62, suggesting a moderate level of variability. The skewness value of 0.05 indicates a distribution that is close to being symmetrical, while a kurtosis of 1.77 denotes a flatter distribution compared to the normal distribution. LNGEH has a mean of 5.16 and a median of 5.35. The value ranges from 2.65 to 7.30. The standard deviation is 1.08, showing increased variability. The presence of a negative skewness value of -0.47 shows that the distribution is skewed to the left. Additionally, a kurtosis value of 2.96 suggests that the distribution is closer to a normal distribution, but with significantly heavier tails. The LNINF has a mean of 0.81 and a median of 0.88. The value ranges from 0.36 to 1.23. The standard deviation is 0.23, indicating a minimal level of variability. The presence of a negative skewness value of -0.42 shows that the distribution is skewed to the left. Additionally, a kurtosis value of 2.36 suggests that the distribution is almost normal, but with slightly heavier tails.

Unit root test

The Utilization of time series data in this study is crucial. Generally, non-stationary data is found in time series data, which is impulsive and impractical to forecast. When non-stationarydata are used, the outcome could be inaccurate. Therefore, the data should be converted into stationary data if they are non-stationary. This study used the Phillips-Peron (PP) unit root test and the Augmented Dickey-Fuller (ADF) unit root test to confirm the stationary.

Table 3

Phillips-Peron (PP) Test

PP Test	At Level		At First Difference			
Variables	With Constant	With Constant and Trends	Without Trends and constant	With Constant	With Constant and Trends	Without Trends and constant
GDP_G	11.0039***	-10.4954***	-1.9301**	-17.3908***	-17.469***	-17.8536***
	(0.0000)	(0.0000)	(*0.0524)*	*(0.0001)*	(*0.0000)*	(*0.0000)*
LNCE	-0.405	-2.0947	1.9650	-4.3025***	-4.2274**	-4.0123***
	(0.8963)	(0.5284)	(*0.9861)*	*(0.0021)*	(*0.0117)*	(*0.0002)*
LNRE	-0.6863	-2.2151	7.3022	-5.2703***	-5.218***	-2.2283
	(0.8358)	(*0.4651)*	(*1.0000)*	*(0.0002)*	(*0.0011)*	**(*0.0271)*
LNGEH	-2.3083	-3.2024*	1.1587	-4.1203***	-3.6597**	-4.2381***
	(0.1758)	(*0.1025)*	(*0.9328)*	*(0.0033)*	(*0.0413)*	(*0.0001)*
LNINF	-3.8971***	-3.7713**	-0.98	-7.9847***	-8.2327***	-8.0873 ***
	(0.0056)	(*0.0321)*	(*0.2857)*	*(0.0000)*	(*0.0000)*	(*0.0000)*

Note: Researcher's calculation from Eviews 10.

Table 4

Augmented Dickey-Fuller(ADF) Test

ADF Test	At Level		At First Difference		
Variables	With Constant	With Constant and Trends	Without Trends and constant	With Constant	With Constant and Trends	Without Trends and constant
GDP_G	-4.7558***	-4.6733***	-0.9257	-7.6362***	-7.4474	-7.7333 ***
	(0.0007)	(0.0043)	(*0.3069)*	*(0.0000)*	(*0.0000)*	(*0.0000)*
LNCE	-0.2811	2.5437	2.1136	-4.3828***	-4.3478	-4.0183***
	(0.9168)	(0.3066)	(*0.9900)*	*(0.0017)*	(*0.0089)*	(*0.0002)*
LNRE	-0.6863	-2.1127	7.5039	-5.2704***	-5.218	-2.4137 **
	(0.8358)	(*0.5189)*	(*1.0000)*	*(0.0002)*	(*0.0011)*	(*0.0176)*
LNGEH	-2.3083	-3.1785	0.2273	-4.7813***	-4.5638	-4.8327 ***
	(0.1758)	(*0.1072)*	(*0.7456)*	*(0.0006)*	(*0.0053)*	(*0.0000)*
LNINF	-3.9278***	-3.8019 **	-0.8455	-6.6354***	-6.5974	-6.7377 ***
	(0.0052)	(*0.0300)*	(*0.3410)*	*(0.0000)*	(*0.0000)*	(*0.0000)*

Note: Researcher's calculation from Eviews 10.

For the table 3 and 4 it can be seen that the variables such as GDP_G and INF under study are stationary at level and LNCE, LNRE and LNGEH are stationary at first difference So GDP_G and INF are 1(0) variables and LNCE, LNRE and LNGEH are 1(1) variables. Thus, the ARDL model becomes as the study's econometric model and is based on the findings of the ADF and PP tests.

Table 5

VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-101.515	NA	0.000835	7.101027	7.334560	7.175736
1	5.496523	171.2191*	3.62e-06*	1.633565*	3.034763*	2.081820*
2	22.49884	21.53627	7.18e-06	2.166744	4.735606	2.988545

Note: Researcher's calculation from Eviews 10.

According to the test findings shown above, the variables' appropriate response to each other was observed with a lag of 1. The lag length used for each VAR equation is a lag of 1. Following the completion of the optimal lag length test, the subsequent step is to examine coefficient diagnostic.

Bound Test

The bound test, which is used to determine the presence of cointegration between the variables under examination, indicating whether a long-term relationship exists or not. The outcome of the bounded test can be seen in Table 1.4.

Table 6

Bound Test for Cointegration

Test Statistics	Value	Signif.	*1(0)*	1(1)
F-statistic	9.554517	10%	2.46	3.46
K	4	5%	2.947	4.088
		1%	4.093	5.532

Note: Researcher's calculation from Eviews 10.

Table 6 reveals the bound test for co-integration analysis, determining whether there is a long-term relationship among the variables in the provided ARDL model of the study. The F-statistics value is 9.554517. At the 1 percent, 5 percent, and 10 percent levels of significance, all linked lower bound critical values and upper limit critical values are smaller than the F-statistics

value. Consequently, the null hypothesis is rejected and it is concluded that there is a presence of long-term cointegration among the variables.

Long Run Equilibrium Model

The model's estimated long run coefficients are shown in Table 5, while the equation representing the long run equilibrium relationship can be expressed as

GDP_G = 1.7524 + 2.3431*LNCE – 2.4689*LNRE + 0.9313*LNGEH – 0.8923*LNINF ……. ( )

Table 7

Estimated Long Run Coefficients of the Model

Dependent Variable: GDP_G

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNCE	2.343128	2.347984	0.997932	0.3283
LNRE	-2.46893	1.416987	-1.74238	0.0942
LNGEH	0.931313	0.351293	2.651099	0.014
LNINF	-0.89235	1.267114	-0.70423	0.4881
C	1.752423	3.575491	0.490121	0.6285

Note: Researcher’s calculation from Eviews 10.

The analysis of Table 7 indicates that the coefficient for LNCE is 2.343128, along with a t-statistic of 0.997932 and a p-value of 0.3283. These results indicate that the coefficient is not statistically significant. The coefficient for LNRE is -2.46893, with a t-statistic of -1.74238 and a p-value of 0.0942. The p-value indicates that the coefficient is marginally significant at the 10% level. An increase of one unit in LNRE results in a drop of 2.46 units in GDP_G. The variable LNGEH has a coefficient of 0.931313, a t-statistic of 2.651099, and a p-value of 0.014. These results indicate that LNGEH is statistically significant at the 5% level in the long run. An increase of one unit in LNGEH resulted in a corresponding increase of 0.9313 units in GDP_G.

The variable LNINF exhibits a coefficient of -0.89235, a t-statistic of -0.70423, and a p-value of 0.4881, suggesting that it lacks statistical significance.

Short Run Equilibrium of the Models

An error correction model, which measures how quickly the variables adjust to the long-term equilibrium, describes the dynamics of the variables in the short run. Table 8 shows the error correction regression.

Table 8

Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNCE)	-4.40005	3.346827	-1.31469	0.201
CointEq(-1)*	-1.404	0.168691	-8.32288	0.0000
R-squared	0.705783	Mean dependent var		-0.02435
Adjusted R-squared	0.695638	S.D. dependent var		3.402806
S.E. of regression	1.877296	Akaike info criterion		4.159883
Sum squared resid	102.2029	Schwarz criterion		4.252398
Log likelihood	-62.4782	Hannan-Quinn criter.		4.19004
Durbin-Watson stat	2.091892			

Note: Researcher's calculation from Eviews 10.

According to Table 8, the result given is the specification that includes a limited constant and no trend. 0.70 and 0.69 are the R-squared value and adjusted R-squared value respectively. The findings indicate that the model accounts for approximately 70 percent of the variation in the dependent variable, D(GDP_G). In the short term, the variable D(LNCE) revealed statistical insignificant results. According to the coefficient on the lag in the error correction term (cointEq(-1)*), the long-run equilibrium is being adjusted at a speed of -1.404. This result is highly statistically significant, with a probability of 0.0000. An increase of one unit in the D(LNCE) results in a drop of 4.40 units in D(GDP_G).

Diagnostic Test

Multiple diagnostic tests were employed to evaluate the trustworthiness of the estimated ARDL technique in the research. Using the Jarque-Bera normality test, the Breusch-Pagan-Godfrey heteroscedasticity test, and the Breusch-Godfrey serial correlation LM tests, the study evaluated the normality, heteroscedasticity, and serial correlation of the data. Table 9 displays the test outcomes.

Table 9

Diagnostic Test for the ARDL Approach

	F-Version		BP Godfrey LM-version	
	Statistics	P-value	Statistics	P-value
Normality	Jarque-Bera	0.221221	3.017185	
Heterosscedasticity	F(6,24) = 1.453945	0.236	Chi-Square(6) = 8.264165	0.2194
Serial Correlation	F(1,23) = 0.182052	0.6736	Chi-Square(1) = 0.243447	0.6217

Note: Researcher's calculation from Eviews 10.

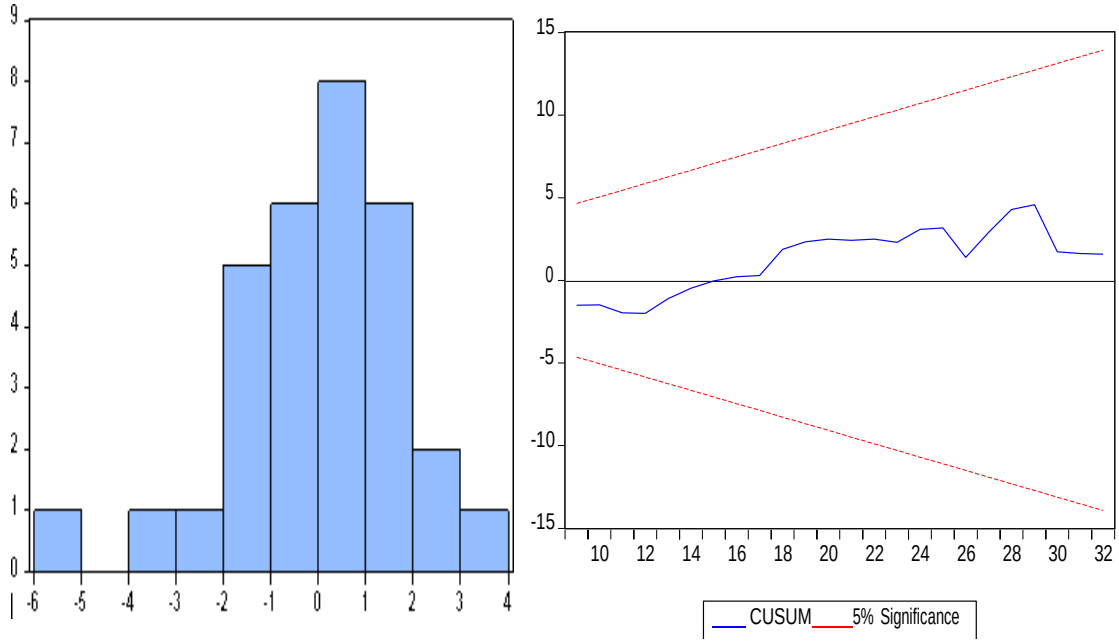
Table 9 shows that the JB test's p-value is 0.2212, which is greater than 0.05. This suggests that the null hypothesis of normality is not significantly rejected by the available data. The B-P Godfrey Test's F-statistic is F (6, 24) = 1.4539, and its p-value is 0.2360, meaning it is more than 0.05. It suggests that there is not enough data to disprove the heteroscedasticity null hypothesis. The Breusch-Godfrey test's LM variant yields a p-value of 0.6736, which is more than 0.05, and F statistic of 0.1820 with degrees of freedom (1, 23). It indicates that there is insufficient evidence to reject the null hypothesis of serial correlation. As a result, there is no indication of serial correlation and the ARDL model's residuals show homoscedasticity and normality. The illustration describing the normality test is shown in Figure 1.

Stability Test

The long-term stability of the model is verified by conducting the CUSUM test, as shown in Figure 1. The results indicate that the plots of the CUSUM test match with the critical

boundary line at a significance level of 5%. Therefore, the study period has confirmed the stability of the model, letting it to be used for examining causality and long-term relationships.

Figure 1: Normality Test and CUSUM Test



Note: Researcher's calculation from Eviews 10.

Conclusion

The study focused to examine the association between expenditure of the government and Nepal's economic growth by using time series data spanning from 1991 to 2022. This study examined the relationship between GDP growth and several independent variables, including Capital Expenditure, Recurrent Expenditure, government expenditure on health, and inflation rate. The ARDL model was applied to estimate the relationship between the selected variables. According to Aryal & Bhattarai (2018) Government expenditure has positive impact on growth of the economy in Nepal. The findings of this study depicted a statistically significant and favourable association between the GDP and government expenditure on health. Aluthge et al. (2021) examined and found capital expenditure has a positive and substantial influence on

economic growth, both in the short and long terms, recurrent spending has little effect on the expansion of the economy.

In this study, there is no statistically significant relationship between capital expenditure, recurrent expenditure, and inflation with GDP growth. In fact, recurrent expenditure and inflation have a negative relationship with GDP growth, while capital expenditure has a positive relationship. In long run, there is a positive and strong relationship between government spending on healthcare and GDP growth. Capital expenditure in the short run has a dynamic impact that ultimately affects the long-term growth of Nepal's GDP. Recurrent expenditure, comprising operating costs, results in inefficiency and increased inflation, which have a negative impact on economic growth. Conversely, capital expenditure directed towards infrastructure, education, and technology improves productive capacity and fosters long-term economic growth. The ARDL model provides a clear explanation of around 71 percent of the variables, supported by evidence of normal distribution, homoscedasticity, and absence of serial correlation. The stability of the model was confirmed by the results of the CUSUM test. This study's findings imply that further research should be conducted to explore alternative indicators that can provide additional support for the crucial role of government expenditure in the overall economy.

Policy Implication

The results of this study indicate various significant policy implications for Nepal. Considering the strong significant correlation between government expenditure on healthcare and the growth of Gross Domestic Product (GDP) over a long period. In Nepal Aryal & Bhattarai (2018) also showed strong significant positive impact of government expenditure on GDP so policymakers need to give priority to enhancing investment in the health care sector. This has the potential to increase economic growth by enhancing people's general health, productivity, and well-being. Moreover, although capital expenditure has a positive impact on

GDP growth, particularly in the short-term, it is crucial to allocate and manage capital projects wisely in order to maintain long-term economic advantages. The negative correlation between recurrent expenditure, inflation, and GDP growth highlights the necessity for fiscal restraint and efficient strategies to manage inflation. The findings emphasize the importance of optimizing government expenditure, targeting sectors that directly boost growth, and formulating fiscal policies that promote the overall economic stability and prosperity of Nepal. Additional research should look into supplementary variables and indicators to attain a greater understanding of the influence of government expenditure on economic growth.

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