

---

## THE IMPACT OF PUBLIC DEBT ON ECONOMIC GROWTH IN NEPAL

**Krishna Kumar Regmi**  
**Assistant Professor**  
**Rammani Multiple Campus**  
**Corresponding Email: regmikrishna08@gmail.com**

---

### ABSTRACT

*Increasing debt levels in Nepal have led to concerns about the impact on the country's real GDP. This paper investigates the impact of both internal and external outstanding debt, along with gross fixed capital formation, broad money supply, total trade, and national consumer price index, on real GDP in Nepal from 1975 to 2021. The study used domestic data sets and ordinary least square series. Unit root and cointegration tests were conducted. The cointegration results confirmed a long-run relationship between the variables. The empirical results showed that both internal and external outstanding debt contributed to real GDP in Nepal. These results were supported by econometric diagnostic tests. Based on the results, the paper recommends that taking public debt and investing in the public sector can be beneficial for real sector output in Nepal. However, it is important to manage debt levels carefully to avoid negative consequences in the long run.*

**Key Words:** *Real GDP, Internal debt, External debt, Unit root test, Cointegration*

---

### INTRODUCTION

Public debt is a major issue in Nepal. The country's debt to GDP ratio has been rising steadily in recent years. This has raised concerns about the sustainability of the country's economy and its ability to achieve economic growth. Increasing demand for public goods and low government revenue has led to budget deficits for many governments. Governments can finance budget deficits by raising taxes, printing money, borrowing from domestic or external sources, or using previous budget surpluses. If budget deficits are financed by borrowing, rather than raising taxes, it creates public debt. Public debt is an obligation of the government to repay the borrowed money, plus interest (Lerner, 1943). Governments may choose to finance budget deficits with debt because it can reduce the political costs of raising taxes in the short term. Debt financing also transfers

the burden of paying for public goods to future generations. Debt financing can be a convenient way for governments to avoid the political costs of raising taxes in the short term. However, it is important to remember that debt financing creates an obligation for future generations to repay the debt, plus interest. This can have negative consequences for the economy in the long run (Singh, 2008).

Public debt is a worldwide growing phenomenon. In almost all economies, public outstanding debt is continuously increasing under the fiscal sector. Most developing countries are either under minor or high public debt positions.

Economists do not regard public debt as a major problem in itself. Rather, they stress that mismanagement and un-sustainability of public debt create the problem. For public debt to be at a sustainable level, the debt ratio should either decline or remain stable. Additionally, fiscal deficits do not necessarily need to be zero for a sustainable level of debt, but they should not cause the debt ratio to increase or grow faster than the GDP growth rate. Research results also support that foreign aid can be helpful in managing public debt, but only if appropriate debt management policies are established (Musgrave, 2004)

Some economists argue that high public debt can crowd out private investment and lead to slower economic growth. Others argue that public debt can be used to finance productive investments that can boost economic growth. In the case of Nepal, the impact of public debt on economic growth is likely to be mixed (Shrestha, 2023). On the one hand, the government has used debt to finance some important development projects, such as roads, bridges, and airports. These investments have helped to improve the country's infrastructure and make it easier for businesses to operate. On the other hand, the government has also used debt to finance unproductive spending, such as defense and subsidies. This spending has not contributed to economic growth and has only added to the country's debt burden (Alekhin B. I., 2007).

The Nepalese economy heavily relies on short-term domestic debt and concessional foreign loans, particularly from multi-lateral agencies such as The World Bank and Asian Development Bank, which offer long maturity periods (Sharma, 2098). To raise internal debt, the Government of Nepal employs various instruments, including Treasury Bills, Development Bonds, Citizens Saving Bonds, National Saving Bonds, and Foreign Employment Saving Bonds. External debt, initiated in 1950, is collected through bilateral and multilateral means, with longer maturity periods and more concessional terms compared to internal debt.

As a crucial financial resource, public debt has become one of the primary sources for the Government of Nepal to achieve targeted economic growth and address the gap between expenditure and revenue, as well as the required level of saving and investment for reaching the desired growth rate. Due to institutional backwardness in Nepal, economic development poses significant challenges; however, public debt emerges as an indispensable tool to overcome such obstacles and foster economic progress (Acharya, 2015).

Nepal stands as one of the world's most impoverished nations, with nearly one-fifth of its population living below the poverty line. Its per capita income, estimated at approximately 1365.5 US dollars as of the World Bank's 2022 report, remains among the lowest on a global scale. Over recent years, the economic growth rate has predominantly hovered around 4.2 percent, according to the Ministry of Finance's 2022 data. The country's Human Development Index (HDI) ranks at 143rd out of 189 countries, with an HDI value of 0.602 (United Nations Development Program, 2022).

The Nepalese economy has been hindered by various factors, leading to a low level of economic growth. These challenges include deficiencies in physical infrastructure, a reliance on traditional and subsistence-level agriculture systems, inadequate foreign direct investment, shortcomings in tourism infrastructure and promotion, widespread unemployment and underemployment, slow industrialization, energy crises, a narrow financial base, corruption, impunity, and administrative delays. Moreover, the economy has also faced significant shocks from the devastating earthquake in April 2015 and the impact of the Covid-19 pandemic (MOF, 2022).

Nepal is facing problem of financing to contest the socio-economic problems. The economy is continuously facing financial resource gaps. Government expenditure is increasing rapidly because of adopting socio-economic inclusive policies basically after 1990s. Total expenditure was Rs. 1513.7 million in 1975 and it reached Rs. 1296339 million in 2022 by folding 856.40 times in 48 years. Government revenue is not satisfying increasing expenditures. The revenue deficit is also increasing. Foreign grants are falling and less stable in filling the resource gaps. Therefore, domestic as well as external debts are becoming key sources of financing in Nepal. That's why both domestic and external outstanding debts are rapidly increasing. The domestic and external outstanding debt were Rs. 476.4 million and Rs. 346.1 million in 1975 and both reached Rs. 986897 and Rs. 1030110 million in 2022 by folding 2071.57 and 2976.33 times over the 48 years respectively (MOF, 2022).

The role of public debt in the economy has been a subject of debate among economists throughout history. Early economists were proponents of public debt, viewing state intervention in the economy as essential. They considered money to be an absolute form of wealth, thus encouraging the flow of money into the national economy (Salsman, 2017). On the other hand, the early classical school criticized government debt, arguing that government expenditure is unproductive, and that public borrowing distorts private capital accumulation, negatively affecting overall economic growth (Tsoulfidis, 2007).

However, some classical economists, such as Thomas Malthus and his successor John Stuart Mill, presented a different perspective. They claimed that public debt does not necessarily hinder the accumulation of productive capital if it is directed towards balancing overproduction of goods or invested in more advantageous uses (Bilan, 2016). This divergence of opinions among economists has led to ongoing discussions and differing viewpoints on the implications of public debt on the economy.

According to Keynesians, government interventions are crucial for stabilizing the economy through countercyclical deficit spending (Alekhin, 2007). Conversely, classical economists argue that burdening future generations with debt, whether internal or external, has negative consequences for the economy (Buchanan, 1958). However, Keynesians differ in their perspective, asserting that public debt does not necessarily burden future generations, and they distinguish between internal and external debt (Alekhin, 2007). On the other hand, monetarist economists associate public debt with the crowding-out effect. They stress that public debt should not lead to crowding out private investments but rather stimulate the real sector of the economy (Abdullatif, 2006).

The empirical literature on public debt and its impact on economic growth have yielded mixed results. Some studies have found that both internal and external debt are positively associated with economic growth (Dauda, et. al. 2013); Bhatta, 2015; Khan et al., 2016; Sanchez Juarez & Garcia-Almada, 2016; Ogun Jimi, 2019; Liu & Lyu, 2020; (Saidatulakmal, 2021), 2021; (Upadhyaya, 2021). However, there are also a few other studies indicating a negative relationship between public debt and economic growth (Siddique et al., 2016; (Hilton, 2021); Kur et al., 2021; Makun, 2021).

Policymakers as well as economists view economic planning as a pivotal instrument for driving economic development. Economic planning serves various goals, necessitating the allocation of resources to fulfill these objectives. These resources are derived from both the government's tax revenues and non-tax sources. However, in the context of a developing nation like Nepal, the income generated through these channels often falls

short of meeting the escalating needs of the population. Consequently, the reliance on public debt emerges as a prevalent and dependable strategy for sourcing funds. This approach holds particular significance for underdeveloped countries such as Nepal, perpetually grappling with resource constraints while endeavoring to enhance the quality of life for their less privileged citizens through increased public expenditure.

Because of the increasing role and responsibility of central, state, and local level governments in fulfilling the mounting desires of people, public debt becomes an essential part of fiscal policy. This is driven by priorities such as breaking the vicious cycle of poverty, fostering inclusive economic growth, facilitating public infrastructure projects, and maintaining societal harmony. As a consequence, public debt becomes a vital avenue for financing these endeavors. However, the unchecked escalation of public debt remains a prevailing trend across economies. It's important to note that public debt itself is not a panacea for economic development if its application lacks prudence. When funds acquired through public debt are solely directed towards day-to-day recurrent expenditures or fail to fuel developmental initiatives, the consequences can be detrimental to the overall economy. Moreover, mismanagement of development projects and corruption can further squander these limited resources. Excessive debt levels can also erode domestic resources through debt servicing obligations. Hence, it is imperative to empirically scrutinize whether both domestic and external debt levels exert either positive or negative influences on the real GDP of the economy.

While public debt can effectively bridge the expanding resource gap within the economy, its influence includes both favorable and unfavorable consequences for the overall economic landscape. On one hand, it has the potential to ameliorate the resource deficit, fostering development initiatives and catalyzing economic growth that, in turn, uplifts the living standards of the less privileged. Conversely, misallocation of debt-acquired resources diverting them towards recurrent expenditures rather than development projects and the inability of debt-financed initiatives to generate returns for debt repayment can yield detrimental consequences. This scenario could lead to negative economic effects or entrap the country in a cycle of debt burden, primarily due to a sluggish growth trajectory. Such sluggish growth not only curtails the populace's tax-paying capacity but also exacerbates the burden of debt. Thus, it becomes imperative to comprehensively investigate the impact of public debt on Nepal's real GDP. This study, therefore, delves into the causal relationship between outstanding public debts (both domestic and external) and additional control variables (such as gross capital formation, broad money supply, total trade, and inflation rate) concerning Nepal's real GDP. The underlying assumption is

that both internal and external outstanding debt exerts a positive influence on Nepal's economic growth.

### RESEARCH METHODOLOGY

The paper aims to assess the influence of domestic and external outstanding debt on economic growth, with identified dependent and independent variables. Economic growth is quantified using real GDP (RGDP) as the dependent variable. The main independent variables are domestic outstanding debt (DOD) and external outstanding debt (EOD). Additionally, the study incorporates several control variables in the equation, including gross fixed capital formation (GFCF), broad money supply (M2), total trade (TT), and changes in the national consumer price index (NCPI). Consequently, the regression analysis involves the examination of how these two key independent variables and four control variables relate to real GDP in the context of Nepal. The general form of the growth public debt model is:

$$RGDP = f(DOD, EOD) \dots\dots\dots (1)$$

Where,

RGDP = Real Gross Domestic Product (Rs. millions)

DOD = Domestic Outstanding Debt (Rs. millions)

EOD = External Outstanding Debt (Rs. Millions)

The model (1) introduces control variables to investigate the influence of domestic outstanding debt and external outstanding debt on real GDP in Nepal. The econometric models specify the inclusion of Gross Fixed Capital Formation (GFCF), Broad Money Supply (M2), and the growth in the National Consumer Price Index ( $\Delta$ NCPI) alongside the two main independent variables. This comprehensive approach allows for a thorough examination of the factors impacting the country's economic growth. The model is:

$$RGDP_t = \beta + \beta_1 DOD_t + \beta_2 EOD_t + \beta_3 GFCF_t + \beta_4 M2_t + \beta_5 TT_t + \beta_6 \Delta NCPI_t + \varepsilon_t \dots\dots\dots (2)$$

RGDP = Real Gross Domestic Product (Rs. millions)

DOD = Domestic Outstanding Debt (Rs. millions)

EOD = External Outstanding Debt (Rs. millions)

GFCF = Gross Fixed Capital Formation (Rs. millions)

M2 = Broad Money Supply (Rs. millions)

TT = Total Trade (Imports plus exports) (Rs. millions)

$\Delta$ NCPI = Annual change in National Consumer Price Index (In percent)

$\varepsilon$ , t = is white noise error terms for above equations and t is time subscript.

The paper uses annual data of different variables from fiscal year (FY) 1974/75 to FY 2021/2022, with 48 observations for each variable. All secondary data related to domestic debt, external debt, real GDP, gross fixed capital formation, and broad money supply will be directly downloaded from the macroeconomic dashboard of the Ministry of Finance, Government of Nepal. National consumer price index data will be imported from the Quarterly Economic Bulletin, mid-July (2022), Nepal Rastra Bank.

To facilitate the calculation of elasticity and to make it possible to transform non-linear models into log-linear ones, all variables in each model are converted into natural logarithms. Summary statistics of the individual variables, such as mean and standard deviation, are calculated to understand their central location and spread. A correlation matrix of the estimating variables is estimated to determine how the dependent variable is related to all explanatory variables for each model.

The unit root is tested using the ADF test. To detect the problem and order of serial correlation in the error terms, the paper applies the Durbin-Watson (DW) test and the Breusch-Godfrey serial correlation test. The Cochrane-Orcutt method is used to correct for autocorrelation. If the serial correlation problem is not solved by the Cochrane-Orcutt procedure, its iterative procedures are used. The Breusch-Pagan test of the error term is conducted to detect the problem of heteroscedasticity, and the weighted least squares technique is used to minimize it. The Variance Inflation Factor (VIF) test is conducted, and one of the variables in the highly collinear pair is deleted. The normality of the error terms is tested using the Jarque-Bera (J-B) test. The R-squared and adjusted R-squared tests are used to measure the overall explanatory power of all explanatory variables. The significance of individual coefficients of the explanatory variables is determined using the t-test.

### **Data Analysis and Presentation**

Under the data analysis and presentation, we conduct an array of tasks, including generating descriptive statistics for individual variables, assessing partial correlations, performing unit root and cointegration tests, analyzing regression outcomes, and scrutinizing the results of econometric diagnostic tests, all of which are subsequently subjected to interpretation.

### **Descriptive Statistics**

The descriptive statistics comprises of the mean, standard deviation, and coefficient of variation and observations at level form of data. The descriptive statistics of each variable are presented in Table 1 below.

**TABLE 1.** Descriptive Statistics of Variables

	RGDP	DOD	EOD	GFCF	M2	TT	NCPI
Mean	73057.73	12766.62	20812.74	26193.62	79791.21	34662.60	45.44484
Median	37397.00	3714.880	16533.70	6532.200	13963.14	11985.86	33.34108
Std. Dev.	77354.05	20788.60	24005.60	40629.34	138574.1	50929.78	42.12341
Sum	3506771.	612798.0	999011.7	1257294.	3829978.	1663805.	2181.352
Sum Sq.							
Dev.	2.81E+11	2.03E+10	2.71E+10	7.76E+10	9.03E+11	1.22E+11	83395.92
Observations	48	48	48	48	48	48	48

The above table 1 shows that RGDP has a mean of 73,057.73, a median of 37,397.00, and a standard deviation of 77,354.05. This means that the average real gross domestic product is 73,057.73, the middle value of real gross domestic product is 37,397.00, and the values of real gross domestic product are spread out over a wide range, with some values much higher than the average and some values much lower than the average.

We can also see that the sum of all the values of RGDP is 3,506,771, and the sum of the squared deviations between each value of RGDP and the mean is 2.81E+11. This means that the total value of all the real gross domestic products in the dataset is 3,506,771, and the total squared difference between each real gross domestic product and the average real gross domestic product is 2.81.

### Correlation Matrix

The partial correlation between dependent and independent variables correlation between the variables is presented in Table 2 below.

**TABLE 2.** Correlation Matrix of the Variables

	RGDP	DOD	EOD	GFCF	M2	TT	NCPI
RGDP	1						
DOD	0.8750	1					
EOD	0.8958	0.9720	1				



GFCF	0.9636	0.9362	0.9359	1			
M2	0.9257	0.9787	0.9592	0.9823	1		
TT	0.9512	0.9627	0.9581	0.9898	0.9857	1	
NCPI	0.9691	0.8892	0.9443	0.9540	0.9238	0.9548	1

According to table 2, the correlation coefficient between RGDP and DOD is approximately 0.8750. This indicates a relatively strong positive correlation between these two variables, meaning that they tend to increase together. Similarly, the coefficient between RGDP and NCPI is approximately 0.9691. This indicates a strong positive correlation between RGDP and NCPI, suggesting that they tend to increase together as well. On the other hand, the coefficient between DOD and NCPI is approximately 0.8892. This indicates a strong positive correlation between DOD and NCPI, but slightly weaker than the correlation between RGDP and NCPI.

### Unit Root

The Augmented Dickey Fuller (ADF) test serves this objective in both the original level and the first difference (with both constant and constant plus trend) settings. The examination for a unit root employs data in logarithmic level forms. The outcomes of the unit root test in the logarithmic level form are showcased in the following table 3. The outcomes of the Augmented Dickey Fuller unit root test affirm the presence of a unit root in the studied variables, both with intercept and intercept plus trend specifications at the level. The test statistics clearly demonstrate that series in log level forms diverge from having a unit root.

**TABLE 3.** ADF Unit Root Results

		<u>At Level</u>					
		LNRGDP	LNDOD	LNEOD	LNGFCF	LNLM2	LNNCPI
With Constant	t- Statistic	0.2932	-1.0714	-2.6316	-0.4726	-1.1304	-1.9221
	<b>Prob.</b>	<b>0.9755</b>	<b>0.7192</b>	<b>0.0943</b>	<b>0.8873</b>	<b>0.6959</b>	<b>0.3196</b>
		n0	n0	*	n0	n0	n0
With Constant & Trend	t- Statistic	-1.9626	-2.1133	-2.4950	-3.2559	-2.1742	-1.1903
	<b>Prob.</b>	<b>0.6060</b>	<b>0.5249</b>	<b>0.3290</b>	<b>0.0885</b>	<b>0.4921</b>	<b>0.9007</b>
		n0	n0	n0	*	n0	n0
Without Constant & Trend	t- Statistic	3.0206	2.7762	0.5549	2.5814	1.8467	0.8360
	<b>Prob.</b>	<b>0.9991</b>	<b>0.9983</b>	<b>0.8321</b>	<b>0.9971</b>	<b>0.9831</b>	<b>0.8881</b>

		n0	n0	n0	n0	n0	n0
<b><u>At First Difference</u></b>							
		d(LNRGDP)	d(LNDOD)	d(LNEOD)	d(LNGFCF)	d(LNM2)	d(LNNCPI)
	t-						
	Statistic	-6.7707	-4.3692	-1.7430	-3.8557	-4.7011	-5.0060
With	<b>Prob.</b>	<b>0.0000</b>	<b>0.0011</b>	<b>0.4033</b>	<b>0.0048</b>	<b>0.0004</b>	<b>0.0002</b>
Constant		***	***	n0	***	***	***
	t-						
With	Statistic	-6.8089	-4.3918	-2.2242	-3.8675	-4.8008	-4.0418
Constant &	<b>Prob.</b>	<b>0.0000</b>	<b>0.0055</b>	<b>0.4651</b>	<b>0.0218</b>	<b>0.0018</b>	<b>0.0157</b>
Trend		***	***	n0	**	***	**
	t-						
Without	Statistic	-5.7877	-1.4609	-1.5649	-0.7601	-1.1863	-0.6520
Constant &	<b>Prob.</b>	<b>0.0000</b>	<b>0.1328</b>	<b>0.1094</b>	<b>0.3812</b>	<b>0.2118</b>	<b>0.4289</b>
Trend		***	n0	n0	n0	n0	n0
<b>Notes:</b>							
a: (*)Significant at the 10%; (**)Significant at the 5%; (***) Significant at the 1% and (no) Not Significant							
b: Lag Length based on AIC							
c: Probability based on MacKinnon (1996) one-sided p-values.							

The results in table 3 of the ADF test can be summarized as follows:

At level, all of the variables have a unit root, except for LNEOD. This means that all of the variables are non-stationary at level.

At first difference, all of the variables do not have a unit root. This means that all of the variables are stationary at first difference except LNEOD.

### Co-integration Test

The results of the cointegration test will provide insights into the number of cointegrating relationships present among the variables and the corresponding cointegration vectors. This can help to understand the long-term relationships and dynamics between the variables, even if they have different integration orders.

The paper applies Johanssen cointegration test with log level form of data to find the cointegration among the variables. The test results are presented in table 4.

**TABLE 4.** Co-integration Test Results

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.746834	176.7138	150.5585	0.0007
At most 1	0.584569	114.8969	117.7082	0.0743
At most 2	0.440122	75.36710	88.80380	0.3119
At most 3	0.320073	49.26543	63.87610	0.4469
At most 4	0.247592	31.90581	42.91525	0.3935
At most 5	0.234308	19.10434	25.87211	0.2747
At most 6	0.145779	7.090441	12.51798	0.3352
Trace test indicates 1 co-integrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Based on the results from cointegration equation, the max Eigen value and their respected corresponding p-value and having at least one cointegration equation, there is long run relationship between the dependent and independent variables.

### Regression Results

The empirical results on nexus between public debt and real GDP along with other control variables are presented in Table 5 below.

**TABLE 5.** Regression Results

Dependent Variable: DLNRGDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DLNDOD	0.328478	0.195812	-1.677516	0.0216
DLNEOD	1.744685	0.251084	-6.948621	0.0000
DLNGFCF	0.865836	0.223712	3.870319	0.0026
DLNM2	2.349367	0.470913	-4.988965	0.0004
DLNTT	1.011911	0.211852	-4.776506	0.0006
DLNNCPI	2.757051	0.780871	3.530739	0.0047
C	0.035483	0.090928	0.390227	0.7038
R-squared	0.954191	Durbin-Watson stat		1.995195
Adjusted R-squared	0.825094	Included observations:		43 after adjustments
F-statistic	7.391248			
Prob (F-statistic)	0.000617			

The explanatory variables DLNEOD, DLNGFCF, DLNM2, DLNTT and DLNNCPI are statistically significant at 1 percent level whereas DLNDOD is statistically significant below at 5 percent level. The coefficient of determination and adjusted coefficient of determination are 0.954 and 0.825 respectively. It indicates that model is best fit and explanatory variables explain the dependent variable by 76.0 percent. The F-statistics is statistically significant 1 percent level. It indicates that the model is best fit.

The value of DW statistics is 1.99 and the value is approximately to 2. The value near to 2 points out that the error terms from the estimated equation may be free from first order autocorrelation. To test autocorrelation of the error terms of first and other orders, the paper conducted Breusch Pagan-Godfrey serial autocorrelation LM Test.

The paper utilized the Breusch-Pagan-Godfrey serial autocorrelation LM Test to assess autocorrelation among the error terms and their respective orders. The outcome, derived from an observed R-squared statistic of 1.25 with a probability of 53.47 percent, indicates the absence of autocorrelation in the error terms of the estimated equation. Similarly, the Breusch-Pagan-Godfrey test was employed to examine heteroscedasticity within the error terms of the estimated equation. The test outcome, based on an observed R-squared statistic of 27.093 and a probability of 66.75 percent, substantiates that the residuals exhibit homoscedasticity, characterized by a constant variance. To evaluate the normality of the error terms, the Jarque-Bera (J-B) test was employed, yielding a J-B statistic of 0.0376 with a probability value of 98.13 percent. This result confirms the normal distribution of the error terms. Additionally, the presence of multicollinearity among explanatory variables was investigated using centered Variance Inflation Factor (VIF) values, all of which were found to be less than 5. Consequently, no substantial correlation among explanatory variables is evident.

## DISCUSSION

The observed outcomes of the empirical result suggest that both internal and external outstanding debts exert a favorable and noteworthy influence on the real GDP. With a coefficient of 0.328, the DLNDOD showcases that a one percent rise in the growth rate of internal outstanding debt corresponds to a 0.32 percent increase in real GDP. The positive and meaningful coefficient of DLNDOD indicates that augmenting the growth rate of internal outstanding debt uplifts the real GDP in Nepal.

The DLNEOD coefficient stands at 1.744, illustrating that a one percent growth increase in external outstanding debt leads to a 1.74 percent reduction in real GDP. This negative

and substantial DLNEOD coefficient highlights that an elevated growth rate in external outstanding debt amplifies real GDP in Nepal. The findings validate the role of public debt in influencing real sector output, with both internal and external debt showing similar contributions to growth in the Nepalese economy. Moreover, these results endorse the notion that public debt isn't universally detrimental to economic well-being.

Likewise, the coefficients of DLNGFCF, DLNTT, and DLNM2 demonstrate positivity and significance, signifying that increases in gross fixed capital formation, total trade, and broad money supply contribute to the stimulation of real GDP in Nepal. Conversely, the notable negative coefficient associated with the national consumer price index indicates that inflation has a detrimental effect on real GDP in Nepal.

Nepal's external debt load has experienced a marked and rapid increase, particularly gaining momentum after the 1990s. This substantial growth in debt burden is primarily attributed to heightened governmental requirements for infrastructure development, macroeconomic adjustments, and structural reforms. However, empirical findings indicate that both internal and external debt have not hindered economic growth within Nepal. Instead, these debts have been found to contribute to economic growth, as assessed by real GDP measurements.

## CONCLUSION

Public debt can be a good way to finance public investment and boost economic growth, but only if it is used effectively. This paper examines the impact of internal and external outstanding debt on real GDP in Nepal. The results show that both types of debt have a positive impact on economic growth in the short and long run. However, the impact of broad money supply, total trade, and inflation are not significant.

The findings of this study suggest that the government of Nepal should increase both internal and external debt, along with gross investments, in order to maintain positive economic growth. This is because debt can be used to finance important public projects, such as infrastructure and education, which can lead to long-term economic benefits.

However, it is important to use debt carefully and to make sure that it is repaid in a timely manner. If the government is unable to repay its debt, it could lead to a financial crisis.

---

**REFERENCES**

- Abdullatif, A. E. (2006). Crowding-out and Crowding-in Effects of Government Bonds Market on Private sector Investment (Jananese Case Study). *Institute of Developing Economics*, 74.
- Acharya, B. P. (2015). *Trend nd structure of Public Debt in Nepal*. Kirtipur: elibrary.tucl.edu.np.
- Alekhin, B. I. (2007). *Public Debt: educational book for students of the academy of budget and treasury*. Moscow.
- Bhatta, G. (2015). An assessment of the impact of external debt on economic growth of Nepal. *Economic Review*, 15(2), 243-262.
- Bilan, I. (2016). Overview of the Main Theories on the Economic Effects of Public Indebtedness. *European Integration-Realities and Perspectives, Proceedings*, 3(2), 356-362.
- Buchanan, J. M. (1958). *Public principles of public debt: a defense and restatement*. Homewood III R. D. Irwin.
- Dauda, S. N., Ahmad, A. H., & Azman-Saini, W. (2013). Does External Debt Contribute to Malaysia Economic Growth. *Economic Research-Ekonomska Istrazivanja*, 26(2), 51-68. doi:10.1080/1331677X.2013.11517606
- Hilton, S. K. (2021). Public Debt and Economic Growth: Contemporary evidence from a developing economy. *Asian Journal of Economics and Banking*, 5(2), 173-193.
- Khan, A. A., Rauf, A., Mirajul, H., & Anwar, N. (2016). The impact of public debt on economic growth of Pakistan. *International Journal of Academic Research in Economics and Management Sciences*, 5(2), 46-56.
- Kur, K. K., Abugwu, C. O. B., Abbah, C. S., & Anyanwu, O. (2021). Public debt and economic growth: What we know today about the Nigerian economy tomorrow. *African Social Science and Humanities Journal (ASSHJ)*. 2 (4), 192-206.
- Lerner, A. P. (1943). Functional Finance and The Federal Debt. *Social Research*, 10(1), 38-51. Retrieved from <http://www.jstor.org/stable/40981939>
- Liu, Z., & Lyu, J. (2020). Public debt and economic growth: Threshold effect and its influence factors. *Applied Economics Letters*, 1-5.

- Makun, K. (2021). External debt and economic growth in Pacific Island countries: A linear and nonlinear analysis of Fiji Islands. *The Journal of Economic Asymmetries*, 23, 1-13. 36
- Ministry of Finance (MOF) (2022). Macroeconomic dashboard. Ministry of Finance, Government of Nepal [www.mof.gov.np](http://www.mof.gov.np).
- Musgrave, R. A. (2004). *Public Finance in Theory and Practice*. Kogakona: McGraw Hill Books Company Ltd.
- Ogunjimi, J. A. (2019). The impact of public debt on investment: Evidence from Nigeria. *DBN Journal of Economics & Sustainable Growth*, 1-28.
- Program, U. N. (2022). *Human Development Report, 2021*. Manila: UNDP.
- Saidatulakmal, A. Y. (2021, Jun). The Impact of government debt on economic growth in Naigeria. 9: . doi:[doi.org/10.80/23322039.1946](https://doi.org/10.80/23322039.1946)
- Salsman, R. M. (2017). *The Political Economy of Public Debt: Three Centuries of Theory and Evidence*. Cheltenham, UK: Edward Elgar Publishing . doi:[10.4337/9781785363382](https://doi.org/10.4337/9781785363382)
- Sharma, G. N. (2008). The Growing Fiscal Imbalance in Nepal: Are We Really Falling into Debt Trap. *Debt Trap and it's Management*. 10-20.
- Shrestha, P. (2023). Public Debt and Economic Growth in Nepal. *Khwopa Journal*, 5(multidisciplinary), 25-36.
- Singh, S. K. (2008). *Public Finanac in Theory and Practice*. New Delhi; India: Sultan Chand and Company.
- Tsoufidis, L. (2007). Classical Economics and Public Debt. *International Review of Economics*, 54(1), 1-21. doi:<https://doi.org/10.1007/s12232-007-0003-8>
- United Nations Development Program (UNDP) (2019). Human development report, 2019. Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century. UNDP.
- Upadhyaya, Y. M. (2021). Public debt of Nepal: It's effect on economic growth. *Review of Socio Economic Prespective* , 6(4), 11-21.