Structural Stability of the Relationship between Indirect Taxes and Government Expenditure in Nepal: *Implications for Fiscal Policy*

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Abstract

This study uses time series data of Nepal from fiscal years 1974/75 to 2017/18 to examine the dynamics of the relationship between indirect taxes and government spending. The study's main objective is to examine the effect size of Value Added Tax (VAT), excise, and customs duties in predicting Nepal's budget deficit. The data for the study purpose were obtained from the Government of Nepal, Ministry of Finance. The study used a retrospective methodology. The data were first checked for stationarity by employing the Augmented Dickey-Fuller Test, and then the link between the variables was determined using a multiple regression analysis based on ordinary least squares. The results showed that customs charges did not affect government spending in Nepal, while value-added and excise taxes had a statistically significant positive impact. The structural stability of the parameter was evaluated utilising the CUSUM and CUSUMSQ procedures. The results showed no evidence of misspecification or instability within the period predicted by the model. The residuals follow a normal distribution with no serial correlation, heteroscedasticity, or multicollinearity issues. The main implication of the study finding is that the government should exercise fiscal restraint and prioritise the collection of indirect taxes. Additionally, it recommends reducing customs taxes for new businesses and expanding the range of products subject to VAT.

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INTRODUCTION AND STUDY OBJECTIVES

Revenue is the government's primary source of funding. The government must spend a substantial amount of money to meet its responsibilities to the people. To cover government spending, the government taxes and borrows from various entities. Both internal and external factors contribute to generating government funding. External sources encompass grants and loans obtained from foreign countries, while internal sources pertain to finances generated within the country itself. Taxation serves as a vital means to generate funds for the government's general operations, enabling it to fulfil essential responsibilities such as ensuring security, providing social amenities, maintaining law and order, safeguarding citizens and national sovereignty against external threats, developing infrastructure, meeting regular state expenditures, regulating the economy, creating employment opportunities, and promoting overall infrastructure growth. So, it is crucial to recognise that the goal of taxes is consistent with the duties of the government (Akhor, 2014).

Taxes and other forms of income are the government's primary sources of funding, supporting the provision of essential services. Unlike loans or grants, taxes generate vital revenue directly for the government. Traditional definitions of fiscal policy have focused on how government spending and taxation affect GDP growth (Zagler & Durnecker, 2003). Fiscal policy can affect outcomes such

as low inflation, strong job creation, and sustainable economic growth (Easterly & Levine, 1997; Shihab, 2014). However, some argue that government involvement in the productive sector of the economy can be counterproductive since governments are naturally bureaucratic and less efficient than the private sector. As taxes and wasteful government spending are distorted by government fiscal policies, it is believed to slow economic growth (Ocran, 2009).

According to Atkinson (1977), indirect taxes are imposed on transactions independent of the situation of the buyer or the seller, whereas direct taxes can be tailored to the unique characteristics of the taxpayer. A person who purchases a good or service pays the government for the right to collect the tax from the person who produced, sold, or provided the good or service. Direct taxes are vulnerable to the subjective evaluation of the person paying the tax because they are based on the taxpayer's unique qualities. The practices, such as tax evasion and avoidance and two counter-tax principles, flourish in such an environment. In contrast, indirect taxes, by not considering individual specifics, result in significantly lower instances of evasion and avoidance.

The Value Added Tax (VAT) is a widely adopted sales tax implemented by over 130 countries. Nepal began actively debating implementing a value-added tax (VAT) in the first part of the 1990s, and the tax has been in effect ever since 1997. The VAT Act was established in 1995, replacing the Sales Tax Act, 1967

(2023 B.S.), the Contract Tax Act, 1967 (2023 B.S.), the Hotel Tax Act, 1962 (2018 B.S.), and the Entertainment Tax Act, 1960 (2016 B.S.). The goal of value-added tax is to replace these four taxes while generating the same amount of income. According to Ekeocha (2010), many citizens of VAT-implemented countries believe it is a measure to prevent the government from relying on loans from international organisations.

Some goods are subject to excise duties (EXD), which are levied on their purchase and use. It's crucial to Nepal's economy and ranks among the country's top tax revenues. Taxes on products with low perceived value or high potential for negative externalities are a powerful tool for limiting their consumption. The customs office in Nepal is responsible for collecting excise duties, which are ad valorem tax on the value of domestically manufactured items (Ekeocha, 2010). Alcohol Excise Regulation, 1976 (2033 B. S.) and the Excise Duty Rules, 2002 (2059 B. S.) govern and regulate excise duty. The production and distribution of excise commodities are subject to strict legal regulation and government oversight. The production, distribution, and use of harmful or extravagant products are subject to excise tax. This indirect tax has a narrow base. The tax may be levied either on a per-unit or ad valorem basis.

A country on export and import of goods levies custom duties when the goods cross the boundaries of the country. It is imposed on goods traded between two nations, so it is also called a border tax.

In Nepal, the custom was administered under the Custom Act of 1964 (A. D.). Custom duty can be divided into two parts: import duty and export duty. Import duty refers to the custom duty imposed on imported goods, while export duty is applied to goods being exported. It is imposed either on an ad valorem basis or on a quantity basis. According to Akhor and Ekundayo (2016), customs charges are levied as a proportion of the value of imports and exports or as a flat rate based on quality.

Government expenditure refers to the funds allocated by a nation's government for various purposes such as social security, public works projects, and other essential services and luxuries. It encompasses the financial resources utilised by the government to ensure its functioning and safeguard the well-being of the general population. It's the money spent by the government to meet the needs of the general population that individuals can't afford to cover on their own. Human capital investment alone, as shown by Ketema (2006), yielded a good long-term effect. Nonetheless, government spending can be beneficial to the economy if resources are used wisely. Spending on investment projects by the government can increase productivity and spur sustainable development. Increased productivity and technological advancement are both possible outcomes of increased government funding for scientific research and development. Human capital is bolstered by government investments in schools and hospitals. The public's future security is bolstered

by the government's investment in social insurance. Understanding the dynamics of indirect taxes, such as Value Added Tax (VAT), excise duties, tariffs, and customs duties, can provide insights into the effectiveness and efficiency of the tax system in Nepal. This study aims to analyse the relationship between indirect taxes and government expenditure in Nepal.

The concepts of "government revenue" and "government spending" are fundamental in economics and hold particular significance in Nepal's context. In Nepal, both are growing, but spending has been more rapid. When government spending exceeds tax revenue, bad things might happen in the economy (Acharya, 2017). Nepal Government has reformed the tax system time and again with the aim of effective mobilisation of revenues to subsidy government expenditures. Driven by improved tax collection, revenue collection is consistently strong throughout the period. However, on the other hand, Government expenditure is also witnessing a massive jump during the period, driven by both recurrent and capital expenditures (World Bank, 2017).

The major sources of revenue in the Nepalese context are the indirect taxes that include VAT, excise duties, and customs duties, among others. VAT administration and legal provisions for VAT do not have a long history in Nepal, so it is quite impossible to get longer experiences and practices. Although the history of VAT in the world dates back 60 years (since 1954 A.D.), Nepal has two and a half decades of experience

of practice directly since 1997 A.D. It is still in the process of development, and a number of hurdles still have to be improved for its implementation. The clients of VAT are still hesitating to register in the VAT system due to its complexity and transparent practical procedures. It will take time for overall awareness about VAT. These reasons may affect the effective implementation of VAT and get its foremost result. Effective implementation will meet its objective and increase the volume of tax revenue of the government; since VAT is one of the important sources, it should be made very effective. Since it has been a decade of VAT enforcement in Nepal, the Government authority claims that the VAT system is a modern and scientific tax system. Of course, many developing countries of the world have been experiencing this tax system for more than four decades already. They are successful in collecting a substantial amount of revenue. A developing country like Nepal needs higher government expenditure to meet the proposed sustainable development of VAT.

Until the late 1990s, excise tax accounted for a sizable portion of Nepal's total tax collection. In 1990–1991, approximately a hundred different products were subject to excise tax; by 2000–2001, that number had dropped to just seven. The Nepalese government has maintained its strategy of raising revenue through excise taxes. Since the different commodities were subject to excise tax in 2004-05, this source of revenue has grown in significance for Nepal's government. Nepal has continued

the trade liberalisation process that began in the mid-1980s, as evidenced by its participation in the World Trade Organisation (WTO), agreement of a framework for a free trade area (FTA) in South Asia, and entry into an FTA with the BIMST-EC. Customs revenues may be affected by trade liberalisation, but they will still be a significant source of income for the government. In light of these developments, our investigation is motivated by a key question: how do value-added tax, excise duty, and customs duty affect government spending in Nepal?

LITERATURE REVIEW

Numerous empirical studies have been conducted to explore the relationship between government revenue, expenditure, and economic growth. The empirical research on the impact of indirect taxes on government spending is a primary focus of this study. There has been a lot of theoretical and practical interest in what causes economic growth over the past two decades, and the main factors are government revenue and expenditures (Acemoglu, 2009; Romer, 2011). Whether or not fiscal policy drives the mobilisation of revenues and expenditures and leads to economic growth has been the subject of theoretical and empirical discussion for some time (M'Amanja & Morrissey, 2005; Ocran, 2009). There are two primary theoretical schools of thought regarding fiscal policy's role in promoting economic growth. Some argue that governments may encourage growth in the short and long term by investing in areas such as education, science, technology, innovation, infrastructure, law enforcement, and public services. Effective taxation and spending are two ways fiscal policy can promote economic and social development, but only if backed up by complementing political and economic institutions (Goldsmith, 1998).

M'Amanja and Morrissey (2005) used an autoregressive distributed lag (ARDL) model to dissect the impact of fiscal policy on economic growth in Kenya. The study divided government spending into productive and unproductive categories and tax revenue into distortionary and non-distortionary groups. Researchers in Kenya discovered that while productive expenditure significantly impacted economic growth, non-distortionary taxes and unproductive expenditure had little effect. Mansouri (2008) examined Egypt, Morocco, and Tunisia to determine how the structure of public expenditures affected both short- and long-term economic growth. Government investments in Morocco reportedly favourably impacted short- and long-term economic growth, but only in the long-term in Tunisia and Egypt. Yet, in Egypt, Morocco, and Tunisia, the government's recurring expenditures had a detrimental impact on economic growth in the short term but not the long term. Ocran (2009) looked into how government spending affects GDP growth in South Africa. This study found that quarterly government consumption expenditure, gross fixed capital creation, and tax receipts all significantly contributed to economic growth in South Africa using data from

1990 to 2004 and a vector autoregressive modelling approach. Yet, the deficit's magnitude unaffected growth outcomes in South Africa's economy.

Demssie (2011) used a cointegration study to determine the connection between fiscal policy and economic growth in Ethiopia from 1960/61 to 1999/2000. This was done by breaking down government revenue and expenditure into several broad categories. Specifically, he discovered that domestic indirect taxes significantly boosted growth, whereas direct taxes significantly stifled it. The government's recurring spending was also significantly expansionary over the long run, despite being contractionary over the short term. The balance of taxes and government expenditure is important for economic growth, according to research by Abdon et al. (2014), who examined the relationship between fiscal policy and growth in developing Asian countries. The study also discovered that the mix of government expenditures was significant for economic development. Putting more money into education has shown to be a growth booster. Using a vector error correction model, Adnan (2014) analysed how government spending on final consumption and investment affected GDP expansion in Ethiopia. The research found that long-term government investments and final consumption both contributed to economic growth, albeit in opposite ways. Economic expansion was aided by increases in private investment, final private consumption, and primary school enrolment. Short-term economic

growth was unaffected by any of the model's inputs other than government consumption.

Using the bootstrap Granger non-causality test for 1961-2014, Ahmad and Loganathan (2016) looked into the relationship between government spending and economic growth in Nigeria. In most of the subsamples, the study discovered that government spending was not a good predictor. Using ARDL modelling, Gebreegziabher (2018) analysed how changes in fiscal policy, specifically government spending and taxation, affect GDP growth in Ethiopia. It concluded that improved human capital formation and greater availability of the economy's capital stock and labour force significantly boosted economic growth over the short and long term. From a fiscal perspective, good results in collecting indirect tax revenue and increasing productive government consumption have a major beneficial effect on economic growth in the short and long term. Adanma et al. (2019) analysed how indirect taxes affected Nigeria's economy from 1994 to 2017. The correlation between the variables was calculated using a multiple regression method based on ordinary least squares and applied to the yearly data. The value-added tax was found to have a positive but negligible effect on Nigeria's real GDP throughout the study period, while customs and excise duties had a positive and statistically significant effect. The authors suggested implementing the measures necessary to collect all indirect tax revenue properly and efficiently to boost economic

development and growth in the country immediately.

Even though there is a substantial amount of empirical research on the connection between indirect taxes and government spending in industrialised and developing countries, nothing has been done to examine the situation in Nepal. The limited studies on Nepal that are now available tend to focus on general aspects of economic growth rather than particular areas of the economy, like revenue and spending. Also, depending on the empirical technique employed, the type of data used, the time period covered, and the variables analysed, these studies report various effects of fiscal policy on economic growth. Sutihar (2014), for instance, examined the pattern and sources of deficit funding in Nepal. According to the study, deficit financing has become a crucial method for funding government spending in Nepal. The fiscal deficit to expenditure ratio showed a declining trend across the study period, reaching a maximum of 30.3% in F.Y. 2000/01 and a minimum of 16.8% in F.Y. 2010/11. Regression analysis was utilised in the study to calculate the annual dropping rate of the fiscal deficit to spending ratio. Estimates of the deficit/expenditure ratio's yearly average and falling rate were found to be 26.64% and 0.846%, respectively. The study advised making a balanced budget announcement soon.

Prasad (2015) studied Nepal's legal framework and excise system, intending to recommend reform agendas that would lessen the administrative burden on taxpayers and the government. According to the survey, Nepal's main tax revenue source is the excise tax. The Government of Nepal has followed a policy of mobilising excise taxes to make up for revenue losses brought on by the decrease and removal of customs tariff rates as well as other requirements of WTO membership since Nepal's accession to the World Trade Organisation (WTO) in 2003. Regression analysis was used by Acharya (2017) to conduct an economic analysis of government revenue and expenditures
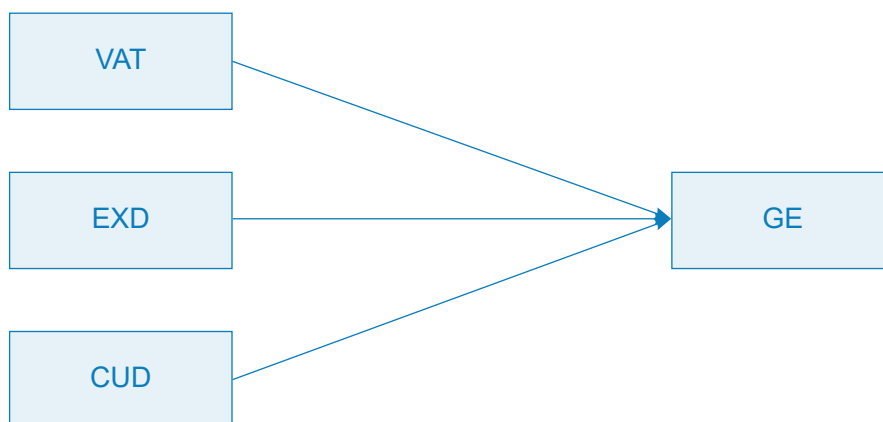

Figure 1. *Conceptual Framework of the Study*

in Nepal. According to the study's findings, there is a discrepancy between government revenue and expenditure. The fiscal imbalance has been expanding annually. The study advised that this imbalance be properly corrected over time. Government income is growing more slowly. So, the country's ability to collect taxes needs to be improved.

Though many studies have been found, most of them are focused on economic growth, and their findings are not unanimous. However, a small number of empirical research suffer from flaws like the inability to aggregate the government spending variable and the absence of an organised theoretical framework. The conceptual framework of our investigation, which was based on literature reviews, is represented in Figure 1.

Where,
VAT = Value Added Tax, EXD = Excise Duties, CUD = Custom Duties, and G.E. = Government Expenditure. Based on the prior studies and reviews, the a-priori expected sign of the relationship for each independent variable with the dependent variable is positive.

RESEARCH METHODS

This study tried to look into how indirect taxes and government spending relate to one another. The literature review has given a theoretical idea for this. Government spending has been chosen as the dependent variable, while VAT, Excise, and Customs taxes have been chosen as the influencing factor. The study used an ex-post facto research design because the authors had no influence or control over the data used in the study.

This study utilises annual data from the Ministry of Finance, Government of Nepal (MOF), spanning the period from 1974/75 to 2017/18. The MOF is the authorised and authentic source of macroeconomic data specific to Nepal, with comprehensive annual data available on its official website dating back to the fiscal year 1974/75. Additionally, quarterly economic bulletins from the Nepal Rastra Bank (NRB) were referenced to augment the analysis and understanding of the economic context in Nepal.

The selection of the study period from 1974-75 to 2017-18 to investigate the relationship between indirect taxes and government expenditure in Nepal is motivated by the aim of maintaining data consistency and comparability. Starting from 2017-18, the VAT Act (2002) underwent significant revisions, particularly regarding e-commerce transactions and mandatory registration thresholds under the VAT system. By excluding data from after 2019, potential inconsistencies or discrepancies arising from these changes in the dataset can be avoided, ensuring the reliability and internal coherence of the study. Further, the chosen period adequately retains a long-term perspective, encompassing over four decades of data.

Specification of the Model

Now, the functional association between Government expenditure, VAT, Excise, and Customs Duties are as follows:

GE= ƒ(VAT,EXD,CUD)................ (1)

Where,
G.E. = Government expenditure
VAT = Value-Added Tax
CUD = Custom Duty
EXD = Excise Duty

Based on reviews, indirect taxes (VAT, EXD, and CUD) have a positive relationship with government expenditure. As a significant source of revenue, an increase in the collection of indirect taxes would provide the government with more funds for spending on various sectors such as social welfare, infrastructure development, education, healthcare, and public services.

Now, the regression equation was derived from equation (1)

$$GE = \beta_0 + \beta_1 VAT + \beta_2 EXD + \beta_3 CUD + \varepsilon ....(2)$$

$\beta_0, \beta_1, \beta_2, \beta_3$ = the coefficients of the parameter estimates

ε = error terms

Taking natural log

$$LnGE = \beta_0 + \beta_1 LnVAT + \beta_2 LnEXD + \beta_3 LnCUD + \varepsilon ....(3)$$

The priori expectation is $\beta_1, \beta_2, \beta_3 > 0$.

Now, equation (3) is the model estimated by this study whose residual diagnostics were also tested and presented below.

ANALYSIS AND DISCUSSION

The descriptive statistics show greater variations in the data with a higher value for standard deviation (s.d.) and coefficient of variations (C.V.). As p-value > 0.05, the J-B test indicates that data

Table 1
Descriptive Statistics of Indirect Taxes and Government Expenditure

(Rs. in ten million)

Statistics	GE	VAT	EXD	CUD
Mean	14453.30	2816.72	1281.15	1999.58
Median	4863.31	772.49	212.12	781.83
Minimum	151.37	18.19	11.97	32.85
Maximum	108728.00	20679.40	10257.90	13778.50
Skewness	2.41	2.19	2.37	2.23
Kurtosis	5.72	4.32	5.02	4.55
S.D.	23428.60	4700.64	2358.92	3121.91
C.V.	1.62	1.67	1.84	1.56
JB test (ln)	1.76	2.17	2.16	2.22
p-value	0.41	0.34	0.34	0.33

Table 2
Augmented Dickey-Fuller Test for Unit Roots of the Variables

| Variables | With Constant and no Trend | | With Constant and Trend | |
	Level (τ)	First Difference	Level (τ)	First Difference
ln_GE	0.341 (0.980)	-3.291*** (0.015)	-1.486 (0.835)	-3.157*** (0.093)
ln_VAT	-0.572 (0.874)	-3.550*** (0.007)	-2.672 (0.249)	-3.472*** (0.042)
ln_EXD	1.633 (0.999)	-4.984*** (0.000)	-0.522 (0.983)	-5.642*** (0.000)
ln_CUD	0.291 (0.978)	-4.808*** (0.000)	-2.037 (0.580)	-4.763*** (0.000)

*Note. The unit root tests of the variables used are shown in Table 2. As the data plot suggests, a model with no constant and no trend is avoided. Probabilities are indicated by parentheses. The symbols ***, **, and * denote 1%, 5%, and 10% rejection of the unit root hypothesis, respectively. Gretl software was used to perform unit root tests.*

are normal, and errors are normally distributed.

Table 1 shows the descriptive statistics of indirect taxes and Government expenditure over the study period from 1974/75 to 2017/18. The variables are Government expenditure (G.E.), value-added tax (VAT), excise duty (EXD), and customs duty (CUD), all presented in ten million Nepalese rupees.

Method of Data Analysis

Regressions with non-stationary variables may produce erroneous findings (Karki, 2018). Unit root tests were run for each variable to make sure that such an unfavourable result wouldn't occur. In order to determine the stationarity and cointegration of the data used, the Augmented Dickey-Fuller (ADF) test was used for both the levels and the first differences of the variables.

Multiple regression based on ordinary least squares (OLS) was used to analyse the data.

Unit Root Test

The dependent variable (G.E.) and independent variables (VAT, EXD, and CUD) were all stationary at the first difference, as shown in Table 2. The computed value for each of the variables evaluated is smaller than the critical value, which supports their stationarity at the first difference, I(1), as shown in Table 2.

Trend Analysis of Variables

The time series nature of variables is examined to illustrate the trend of indirect taxes, namely VAT, excise, customs duties, and Government expenditure (G.E.). A diagrammatic representation of the dataset is shown in Figure 1. The trend analysis reveals that all variables
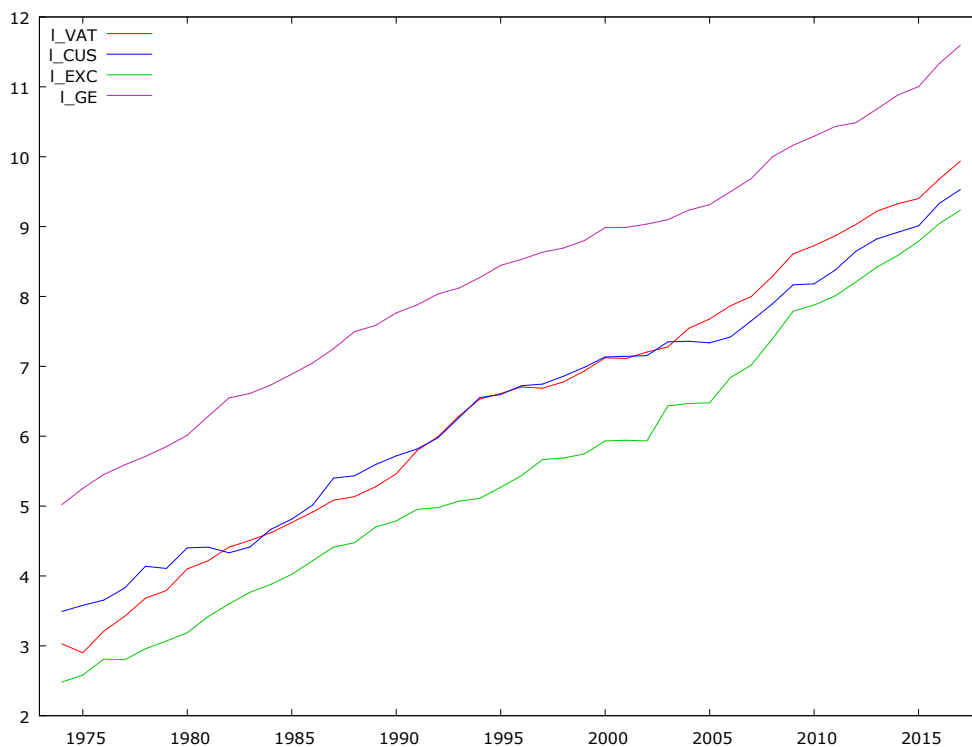
Figure 2. *Time Series Plot of the Variables Used (Trend Analysis)*

used in the study exhibit a gradual upward trend with occasional fall and rise behaviour during the period 1974/75 to 2017/18.

Regression Analysis

The study has diligently examined the properties of the data to ensure that the Ordinary Least Squares (OLS) model is appropriate for further analysis. The OLS model is a standard and reliable approach for estimating the relationship between variables in regression analysis, and it provides valuable insights into the impact of indirect taxes on government expenditure. In Table 3, the results of the multiple regression analysis provide a comprehensive summary of the findings, highlighting the statistical significance

and direction of the relationships between the investigated variables.

Table 3 shows that all the coefficients of indirect taxes have positive relations with Government expenditure. Further, coefficients of VAT and excise duty (E.D.) are statistically significant at 5 percent and 1 percent levels, whereas the coefficient of custom duty (CUD) doesn't have a statistically significant relation with G.E. This result rejects our above null hypotheses H_{01} and H_{02}. This means VAT and excise duty (E.D.) have a statistically significant positive relationship with Government expenditure. The result shows that a one percent change in value-added tax (VAT), holding other variables constant, will increase Government

Table 3
OLS, Using Observations 1974/75-2017/18 (T = 43)

Dependent variable: d_ln_GE

Independent Variables	Coefficient	Std. Error	t-ratio	p-value
d_ln_VAT	0.436	0.173	2.513	0.016**
d_ln_EXD	0.378	0.138	2.750	0.009***
d_ln_CUD	0.031	0.154	0.203	0.840
Mean dependent var	0.153	S.D. dependent var		0.072
Sum squared resid	0.270	S.E. of regression		0.082
R-squared	0.780	Adj. R-squared		0.769
F(3, 40)	71.840	P-value(F)		3.70e-16
Log-likelihood	48.017	Akaike criterion		-90.033
Schwarz criterion	-84.750	Hannan-Quinn		-88.085
rho	-0.143	Durbin-Watson		2.031

expenditure by 0.44 percent. Additionally, the percentage change in excise duty (EXD), with all other factors held constant, will result in a 0.38 percent increase in government expenditures.

It can be deduced from the coefficient of determination (R^2) value of 0.780, which is statistically significant, that 78% of changes in the dependent variable, i.e., government expenditure, can be explained by changes in the independent variables, i.e., value added tax, excise, and customs duties, while 22% can be described by the error terms in the model. Moreover, the Durbin-Watson statistic of 2.031, which is quite near to 2, suggests that there is no proof of first-order autocorrelation. The F statistic test was used to establish the overall significance of the model, and it was statistically significant at the 1% level because the p-value was 0.00 or less than 0.01. As a result, we reject the null hypothesis and come to the conclusion that Nepal's government expenditure is significantly impacted by value-added tax (VAT), excise taxes, and customs charges.

Diagnostic Checking of the Model

Ramsey's RESET test for model specification possessed test statistics: F = 5.710 with p-value = 0.218. At a 1% level of significance, it is significant. Thus, it indicates no misspecification of the model. Breusch-Godfrey test for first-order autocorrelation against H_0: Error variances are all equal. Test statistics: LMF = 0.935 with p-value = 0.339, couldn't reject the null hypothesis. Hence, it shows the existence of homoscedasticity. Similarly, H0: Unrestricted heteroscedasticity is also rejected in White's test as its test statistics: χ^2 = 23.165 possessed p-value 0.00316. It further reports that the model does not contain any heteroscedasticity. The Durbin-Watson stat is 2.031 and is close to 2, and this implies that there is no evidence of first-order autocorrelation. Variance inflation factors (VIF) test

documents the values for all independent variables (d_ln_VAT = 1.268, d_ln_EXD = 1.087, & d_ln_CUD = 1.329) below 10 suggesting no problem of multicollinearity in the model. In the same way, the P-value of the Jarque-Bera test, as shown in Table 4.1, is greater than 0.05. A normal distribution was found for the residuals.

Stability Tests

To evaluate the structural stability of a parameter, the cumulative sum (CUSUM) of recursive residuals and the cumulative sum of squares (CUSUMSQ) tests are used (Pesaran & Pesaran, 2009). Its application relies on the type of structural alterations occurring. The CUSUM test has greater strength if the break is in the intercept of the regression equation. It highlights regular adjustments to the regression coefficients. The CUSUMSQ test has a larger power, nonetheless, if the structural change affects a slope coefficient or the variance of the error term. It recognises abrupt deviations from the regression coefficients' consistency. This may assist to explain why the

results of the two tests frequently conflict (Turner, 2010).

The CUSUM and CUSUMSQ test results are presented in Figure 3. While the plots of the CUSUM and CUSUMSQ statistics lie within the crucial bands of the 95% confidence intervals of parameter stability, the results show that there is no evidence of coefficient instability. As a result, for Nepal, the coefficients have been stable across the sample period.

CONCLUSION AND IMPLICATIONS

This study aimed to examine the relationship between Nepal's indirect taxes and spending by the government. The findings showed that during the study period, Nepal's value-added tax (VAT) and excise duty (EXD) had a favourable and statistically significant association with government expenditure (G.E.). These results align with the findings of Adanma et al. (2019) and other related studies. The implication of these findings
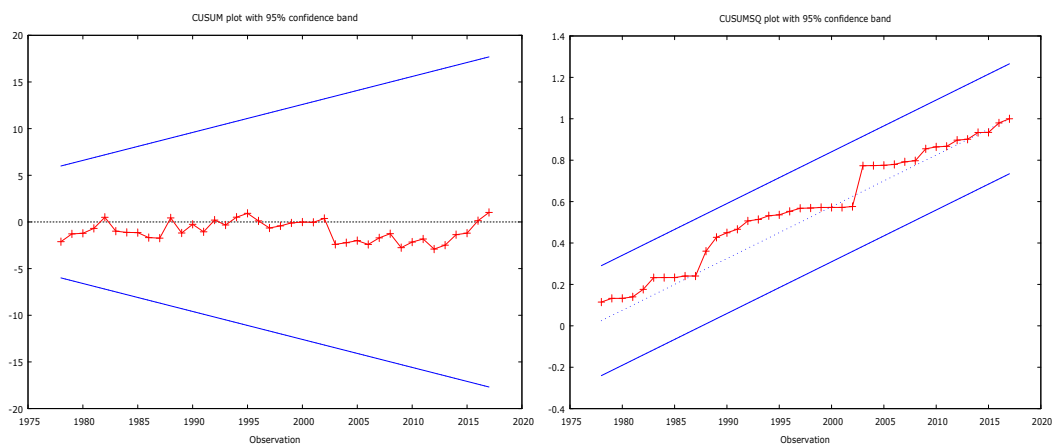

Figure 3. *CUSUM and CUSUMSQ Parameter Stability Tests*

is that by increasing tax revenues through VAT and excise duty, the government can deploy more resources to address essential societal needs, encourage inclusive growth, and enhance the general welfare of its citizens. Also, the results stated that custom duty (CUD) has a small but favourable effect on government spending. This suggests that agents involved in determining a person's tax profile and custom clearance lack clear accountability. No evidence of instability was observed during the period, according to the CUSUM and CUSUMSQ stability tests, and residuals were discovered to be normally distributed and free from serial correlation, heteroscedasticity, and multicollinearity. We consequently draw the conclusion that VAT, excise charges, and customs duties are the main sources of Government expenditure in Nepal based on the overall significance of the model. The conclusion of this analysis is that the government should effectively and efficiently collect all indirect taxes while exercising fiscal restraint. Also, more items should be added to the VAT list, and customs taxes should be reduced for the nation's emerging sectors.

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