A Basic Analysis of Tax Revenue and GDP in Nepal: Exploring the Correlation Dynamics

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Abstract

This study investigated the correlation of tax revenue on the economic development of Nepal, focusing on its GDP. To achieve the objective, by utilize time-series macroeconomic data, specifically focusing on GDP and tax revenue from 2000 to 2001 fiscal year to 2020/2021. This descriptive study employs ordinary Least Square regression and correlation coefficient analysis. Data is collected from the Economic Survey Ministry of Finance. The study proposes a model where GDP is a function of tax revenue. The hypothesis suggests a positive relationship between tax revenue and GDP in Nepal. The regression model indicates significance, rejecting the null hypothesis. Tax revenue plays a crucial role in Nepal's GDP. The findings reveal that the P-value is extremely low ($p<0.001$), indicating that the direct tax revenue and indirect tax revenue are highly statistically significant. There is the existence of both a positive and robust relationship between tax revenue and GDP. Hence, the Government of Nepal should search for a way to boost the revenue from tax revenue by primarily supporting the configurations of networks among all the agencies of government and taxing authorities of the federal level, each province, and local bodies to meet the growth and to facilitate public services for the country.

Keywords: Gross domestic product, Tax revenue, Growth, direct tax, Indirect tax

1. Introduction

The main responsibilities of the government involve ensuring peace, safety, and economic stability while maintaining a balance, in finances and debt sustainability. It focuses on investing in infrastructure to support development objectives and cover expenses while also serving as a provider and facilitator. The government's ability to allocate funds for capital needs relies on its capabilities. Economic progress is an advancement that enhances the economy's productivity resulting in increased output and income levels. This in turn contributes to poverty reduction and enhances living standards. Factors such as taxation, investments, and consumption play roles, in influencing growth (Todaro & Smith 2006). Gross Domestic Product (GDP) represents the value of all goods and services produced within a country's borders during a timeframe (Adhikari et al., 2021).

The Government needs funds to facilitate public services for the country and its administrative activities. The government collects required funds through revenue and debt. Taxes are the most critical source of government revenue (Bhatia, 2009). The objective of taxes is to generate revenue to sustain government operations while minimizing adverse effects on the economy (Gentry & Hubbard, 2000). Taxation is a levy imposed by the Government on the income, goods, services, and property of individuals and communities to generate funds for public services and the functioning of administrative activities in the country (Kandel, 2010). Taxation is the primary source of income for the Government, enabling it to fulfill the needs of the citizens (Chinwe, 2013). Taxation is a powerful tool to control a country's economy. The primary objectives of taxation include raising revenues, regulating the economy, stimulating economic growth, ensuring equal distribution of national income, and eliminating inequalities between provinces (Dhakal et al., 2021).

Tax revenue plays a crucial role in the economic growth of a country (Myles, 2000). Taxes are compulsory contributions collected by the country, representing a mandatory and unpaid transfer of financial resources from the private to the public sector for the economic development of the country (Jakir, 2011; Alowosheable et al., 2017). Tax can be categorized into two distinct classifications: direct tax and indirect tax. Direct tax pertains to levies directly imposed on income, whereas indirect tax relates to impositions on the cost of consumption. It is noteworthy that indirect tax, despite being initially imposed on one individual, possesses the capability to transfer its burden onto another individual (Chapagai, 2021).

The role of tax revenue as a significant source of Government revenue in Nepal has been grown over the years particularly event in increased the government expenditure. To address this rise in expenditure, the focus has shifted towards emphasizing tax revenue. This sets the stage for the central question: Is there a connection between tax revenue and GDP in Nepal?

The motivation of this study is to contribute fresh insights into the intricate relationship between tax revenue and GDP, bridging the existing gap in the literature. This study aims to enhance understanding of the dynamics between tax revenue and GDP in the Nepalese economy and to inform future research and policy decisions in this specific context. The primary objective of is to assess the impact of tax revenue on GDP in Nepal and elucidate how tax revenue influence the overall economic growth of the country.

2. Literature Review

The existing body of empirical studies on the relationship between tax revenue and GDP has primarily focused on derives on diverse global contexts, including Nepal. Gupta (2007) found that the countries that depend on taxation on goods and services have less successful income generation. Countries that prioritize taxation on income, profit, and capital gain tend to experience higher performance. Ghimire (2019) found that GDP and government revenue in Nepal were strongly related to direct tax and indirect tax. Shrestha & Kautish (2020) investigated the impact of Government revenue on the economic growth in Nepal. The results show a positive relationship between government revenue and economic development. Further, Dahal, (2020) and Kharel (2021) analyzed the economic impact of tax revenue on economic growth in Nepal. The findings show that tax revenue has a positive significance on GDP.

Korkmaz et al.(2019) investigated the effects of taxation on economic growth in Turkey by using the autoregressive distributed lag approach. The result shows a positive and significant impact of indirect taxes on economic growth and a negative impact on direct tax revenue. Turkey. In Nigerai, Nwamuo (2019) employed the rood test to analyze the effect of tax revenue on economic growth in Nigeria. The results indicate that profit tax, corporate income tax, custom duty, and excise duty have a positive yet insignificant impact on economic growth, while oil revenue exhibits a positive and significant effect on the economy. Omodero (2019) analysis yields empirical findings that demonstrate the detrimental effects of both the shadow economy and corruption on tax revenue performance in Nigeria. However, it is worth noting that the negative impact of corruption on tax revenue is more pronounced and considerable compared to the influence of the shadow economy.

The existing body of empirical studies on the relationship between tax revenue and GDP has primarily focused on derives on diverse global contexts , the results reveal that tax revenue has a positive significant impact on GDP (Okafor, 2012; Jalata, 2014; Ugwunta & Ugwuanyi, 2015; Njindan Iyke & Takumah, 2015; Takumah & Iyke, 2017; Ali et al., 2018; Odhiambo & Olushola, 2018; Oboh et al., 2018; Basheer et al., 2019; Oluwatobi et al., 2021; Zahra et al., 2021. Ssome research found that tax revenue and GDP have a negative (Marire & Sunde, 2012; Keho, 2013; Delessa, 2014 & Saibu, 2015).

However, the literature review indicates a dearth of specific studies analyzing the contribution of tax revenue to GDP of Nepal. This research aims to address this gap by providing a focused analysis of the intricate relationship between tax revenue and GDP in the Nepalese economy.

3. Methods and Procedures

This comprehensive investigation employs a descriptive approach to analyze the contribution of tax revenue to GDP in Nepal based on time series data covering the periods from 2000/2001 to 2020/2021. Such quantitative data were sourced mainly from the economy survey of the Ministry of Finance in Nepal. The study applies the Ordinary Least Square (OLS) regression and correlation coefficient to empirically estimate the relationships between GDP and indirect tax revenue. The data was analyzed using the SPSS statistical package version 23. Therefore, descriptive statistics was employed to present the data through percentages and ratios. Additionally, the independent t-test and F-test were employed to validate the research hypotheses and interpret the result obtained from the OLS analysis

Model Specification

This paper explores the correlations between GDP and tax revenue to ascertain contributions of tax revenue to Nepal's GDP from 2000/2001 to 2020/2021. In pursuit of this objective, it was imperative to construct a statistical model that delineates relationships among the variables under the study. The examination of various empirical literatures on the scope of tax revenue and GDP across different countries shows that the analysis of selected variables has a linear functional form. Thus, guided by the perceived functional relationship between the matrix of GDP and tax revenue, a connection is established between these two variables. From both sub-macro and micro-economic perspectives, the model proposed in this study posits that GDP is contingent on the revenue collected from tax revenue. Accordingly, the purposeful relationships and resulting models are specified as follows:

GDP = f (Tax revenue) …………………………… ………………(1)

From the above functional relationships, the working model of the paper is specified below

GDP = β_0 + β_1 (Tax revenue) + μ …………………………………..(2)

Where;

GDP= Gross domestic product, β_0= Autonomous (Intercept)

β_1= Coefficient of tax revenue, μ = error term

As the GDP is expected even when no revenue was collected from tax revenue, the 'priori' expectation is that the model parameter will be positively signed.

Research Hypothesis

The examination of various empirical studies in the field reveals consistent positive associations between tax revenue and GDP across diverse national economics. In light of this observation, the current research endeavors to assess this relationship quantitatively through the formulation of the following hypothesis:

H_o = There is no statistically significant correlation between tax revenue of Nepal's GDP.

H_1 = There is statistically significant correlation between tax revenue of Nepal's GDP.

4. Results and Discussion

The result reveals that GDP has gradually increased over the study periods, with a minimum of Rs. 44, 151.90 million in 2000/2001 and a maximum of Rs. 435,255 million in the year 2020/2021. The mean GDP over this period is Rs. 178,023.35 million, indicating overall economic growth during the study period (Table 1).

Direct tax revenue has also increased over the period, from Rs. 1,015.49 to Rs. 22,827.7 million. The mean value of direct tax revenue is Rs. 7883.67 million. The ratio of direct tax to GDP has varied over the study periods. This percentage increases from a low of 2.14 percent to a high of 5.65 over study periods. The mean value of the direct tax to GDP ratio is 3.6 percent, reflecting a positive trend in direct tax collection and indicating the proportionate contribution of direct tax revenue to the overall economy.

Indirect tax revenue has also increased from Rs. 2,870.6 to Rs. 64, 183 million the mean indirect tax is Rs. 20,515.07. The ratio of indirect tax to GDP has varied over the study periods. This percentage increased, from a low of 6.10

percent to a high of 14.75 percent. This means the indirect tax to GDP ratio is 9.66 percent, reflecting a positive trend in indirect tax collection and indicating the proportion of indirect tax revenue relative to the overall economic output.

Table 1: GDP, Direct Tax Revenue, Indirect Revenue and Total Tax Revenue

"In Ten Million"

Year	GDP (Expenditure method) at current price	Direct tax revenue	Indirect tax revenue	Total tax revenue	Direct tax revenue to GDP	Indirect tax revenue to GDP	Total tax revenue to GDP	Percentage increase in total tax revenue
2000/2001	44,151.90	1015.49	2870.6	3886.06	2.3	6.5	8.8	0
2001/2002	45,944.23	1060.63	2872.4	3933.06	2.31	6.25	8.56	1.21
2002/2003	49,223.13	1088.19	3001.4	4089.6	2.21	6.1	8.31	3.98
2003/2004	53,674.90	1191.26	3626	4817.3	2.22	6.76	8.97	17.79
2004/2005	58,941.20	1307.18	4103.3	5410.47	2.22	6.96	9.18	12.31
2005/2006	65,408.40	1396.81	4346.2	5743.04	2.14	6.64	8.78	6.15
2006/2007	72,782.70	1898.03	5214.6	7112.67	2.61	7.16	9.77	23.85
2007/2008	81,566.30	2308.77	6206.8	8515.55	2.83	7.61	10.44	19.72
2008/2009	98,827.20	3432.07	8273.1	11705.19	3.47	8.37	11.84	37.46
2009/2010	119,277.40	3584.19	12045	15629.49	3	10.1	13.1	33.53
2010/2011	136,695.40	4118.3	13159	17277.76	3.01	9.63	12.64	10.55
2011/2012	152,734.40	5644.64	15528	21172.18	3.7	10.17	13.86	22.54
2012/2013	169,501.10	7140.29	18781	25921.49	4.21	11.08	15.29	22.43
2013/2014	223,253.00	8473.47	22771	31244.13	3.8	10.2	13.99	20.53
2014/2015	242,364.00	9849.08	25746	35595.57	4.06	10.62	14.69	13.93
2015/2016	260,818.00	13155.7	28954	42109.66	5.04	11.1	16.15	18.3
2016/2017	307,714.00	16726.7	38659	55385.65	5.44	12.56	18	31.53
2017/2018	345,595.00	17922	48027	65949.15	5.19	13.9	19.08	19.07
2018/2019	385,893.00	19442	54418	73860.4	5.04	14.1	19.14	12
2019/2020	388,870.00	21974.6	48031	70005.55	5.65	12.35	18	-5.22
2020/2021	435,255.00	22827.7	64183	87010.66	5.24	14.75	19.99	24.29
Mean	178023.35	7883.67	20515.07	28398.79	3.60	9.66	13.27	17.3
Minimum	44151.90	1015.49	2870.60	3886.06	2.14	6.10	8.31	-5.22
Maximum	435255.00	22827.70	64183.00	87010.66	5.65	14.75	19.99	37.46

Sources: Economy survey, Ministry of Finance, Government of Nepal 2003/2004, 2008/2009, 2013/ 2014, 2017/2018 and 2020/2021)

Total tax revenue has increased from Rs. 3,886.06 million to Rs. 87,010.66 million. The mean total tax revenue is Rs. 28,398.79 million. The ratio of total tax to GDP has varied over the study periods. This percentage increases from a low of 8.31 percent to 19.99 percent. The mean value of the total tax to GDP ratio is 13.27 percent, reflecting a positive trend in overall tax collection and indicating the overall tax burden on the economy. The percentage increase in tax revenue ranged from a decrease of 5.22 percent to a significant increase of 37.38 percent. The mean growth rate of indirect tax is 17.3 percent (Table 1). The results reflect a positive impact on economic growth. Direct tax and indirect tax revenue have increased, contributing to a rising GDP.

The correlation coefficient (R) is 0.994; this indicates a solid positive relationship between tax revenue and GDP in Nepal during the study periods. The coefficient of determination (R^2) is 0.989, and the adjusted R^2 is 0.988, indicating a high goodness of fit (*this paper does not consider other relevant variables, the reason which the R^2 is higher*). The standard error in the estimated value is Rs. 14370.20; a lower value indicates a better fit for the data. R^2 change is 0.989. The F change value is 810.792, its associated p-value is 0.000 (p<0.001) (Table 2). The low p-value for the F change test indicates that the tax revenue and GDP is the statistically significant table.

Table 2: Correlation coefficient Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.994ᵃ	.989	.988	14370.20	.989	810.792	2	18	.000

Predictors: (Constant), Direct tax revenue and indirect tax revenue; Dependent variable: GDP

The intercept is 42220.622, representing the estimated GDP when both tax revenues are zero. The direct tax revenue has positive coefficients (9.148), implying that one unit increase in the direct tax revenue is associated with an approximately 9.695 unit increase in GDP. The coefficients are statistically significant (p=0.001), and indirect tax revenue also has positive coefficients (3.104) implying that one unit increases the indirect tax revenue associated with an approximately 2.842 unit increase in GDP, the coefficients are statistically (p=0.009). Direct tax revenue has a higher standardized coefficient (Beta = 0.536) compared to indirect tax revenue (Beta = 0.462) (Table 3), indicating that, on a standardized scale, direct tax revenue has a relatively more potent impact on GDP in Nepal.

Table 3: Standard coefficient Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	42220.622	4637.156		9.105	.000
	Direct tax revenue	9.148	2.712	.536	3.374	.003
	Indirect tax revenue	3.104	1.068	.462	2.907	.009
Dependent Variable: GDP (Expenditure method) at current price						

The F-test statistic is 810.792 .and the p-value is shallow (p<0.001), indicating that the tax revenue is statistically significant. The null hypothesis, stating that all coefficients in the regression model are equal to zero, is rejected in favor of the alternative hypothesis, which is accepted that tax revenue plays a crucial role in Nepal's GDP.

Table 4: ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	334861500555.382	2	167430750277.691	810.792	.000ᵇ
	Residual	3717050623.368	19	206502812.409		
	Total	338578551178.750	21			
a. Dependent Variable: GDP (Expenditure method) at current price						
b. Predictors: (Constant), Indirect tax revenue, Direct tax revenue						

Trend Analysis of Tax Revenue and GDP

The time series nature of the variables examined illustrates the trend of tax revenue and GDP in Nepal. A diagrammatic representation of the dataset is shown in Figure 1. The trend analysis reveals that all variables used in the study exhibit a gradual upward trend, indicating tax revenue helps to grow the Nepalese economy.
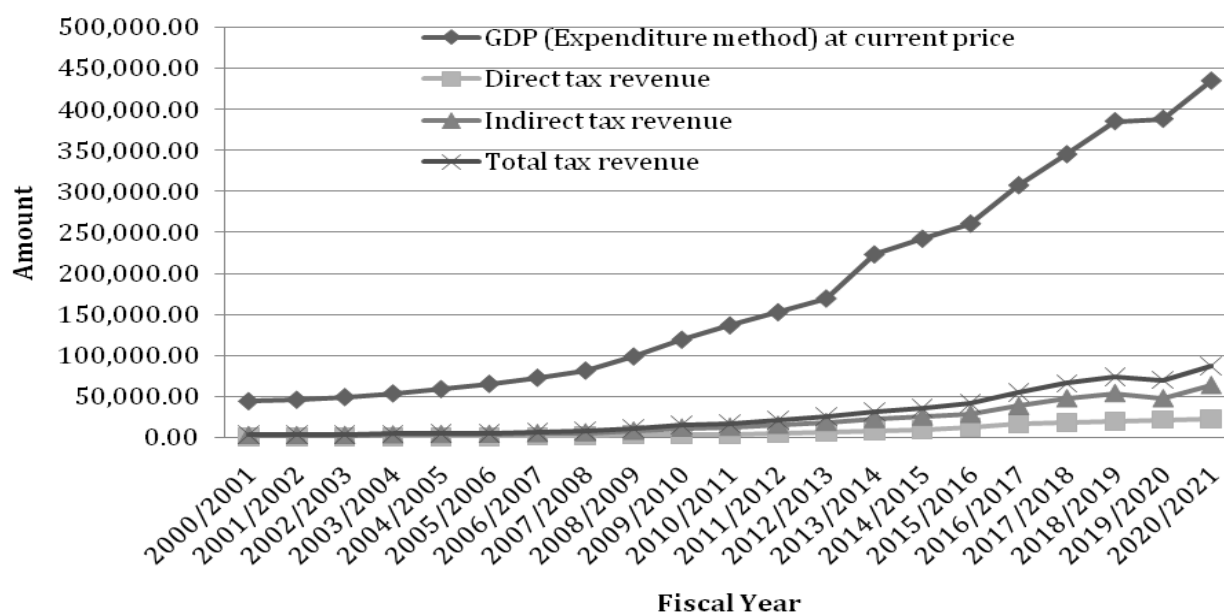

Figure 1: Trend Analysis

The findings of this study are in contrast with the studies carried out by Okafar (2012), Jalata (2014), Ugwunta & Ugwuanyi (2015) Njindan Iyke & Takumah (2015) Takumah & Iyke (2017) Ali et al. (2018) Odhiambo & Olushola (2018) Oboh et al. (2018) Basheer et al. (2019) Korkmaz et al. (2019) Myles (2000) Oluwatobi et al. (2021) Kautish (2020) Dahal, (2020) and Kharel (2021) but Ilabora & Mgbame, (2012), Gbata (2017), Adhikari (2019), Zahra et al. (2021) and Abd Hakim et al.(2022) does not consist with the finding of the study. Finally, the result indicates a positive significant correlation of tax revenue on Nepal's GDP.

5. Conclusion and Implications

This study examines the relationship (correlational) between tax revenue and GDP in the Nepalese economy. The study shows that both direct tax revenue and indirect revenue have increased, contributing to the overall growth in GDP. GDP has a consistent upward trend, indicating overall economic growth. The ratio of direct tax to GDP and indirect tax to GDP has a positive trend. The correlation coefficient indicates a solid positive relationship between tax revenue and GDP. The regression analysis shows that tax revenue significantly impacts the GDP in Nepal. Policymakers, businesses, and academic institutions can benefit from these insights to formulate effective strategies for economic development in Nepal. The study contributes to the existing knowledge on the relationship between tax revenue and GDP, providing a more micro understanding. The study demonstrated that both direct tax and indirect tax revenue have increased, contributing to the overall growth in GDP.

6. Implications for Future Research

Additional studies have yielded numerous implications basing to this research. This paper has exclusively examined the correlation, rather than causation, to evaluate the dynamics of correlation. Specifically, it analyzes the direction of movement of tax revenue and GDP in Nepal. Future researchers may explore novel dynamics by employing impact evaluation techniques to investigate causation.

References

Adikari, R.P,, Acharya K.R., Lamichhane B,. & Gyawali S. (2021). *Macroeconomics of Business. Kathmandu:* Asmita Books Publisher & Distributors (P.) Ltd.

Ali, A. A., Ali, A. Y. S., & Dalmar, M. S. (2018). The impact of tax revenues on economic growth: A time series evidence from Kenya. *Academic Research International*, *9*(3), 163-170.

Arowoshegbe, A. O., Uniamikogbo, E., & Aigienohuwa, O. O. (2017). Tax revenue and economic growth of Nigeria. *Scholars journal of economics, business and management*, *4*(10), 696-702.

Basheer, M., Ahmad, A., & Hassan, S. (2019). Impact of economic and financial factors on tax revenue: Evidence from the Middle East countries. *Accounting*, *5*(2), 53-60.http://dx.doi.org/10.5267/j.ac.2018.8.001

Bhatia, H. (2009). *Public Finance (14th Edn)*. New Delhi: Vikas Publishing House Pvt. Ltd.

Chapagai, S. D. (2021). Contribution of value added tax to gross domestic product of Nepal. *Scholars' Journal*, *4*(1), 216–227. https://doi.org/10.3126/scholars.v4i1.42481

Delessa, D. (2014). Tax reforms and tax revenues performance in Ethiopia. *Journal of Economics and Sustainable Development*, *13*(5), 11-19.

Dahal, A. K. (2020). Tax-to-GDP ratio and the relation of tax revenue with GDP: Nepalese Perspective. *Researcher: A Research Journal of Culture and Society*, *4*(1), 80–96. https://doi.org/10.3126/researcher.v4i1.33813

Dhakal, K.D., Bhattarai, I. B., Koirala, G.P., & Bhittarai, R.K. (2021). *Taxation in Nepal*. Kathmandu: Asmita Book Publisher & Distributors (P) Ltd.

Gentry, W. M., & Hubbard, R. G. (2000). Tax policy and entry into entrepreneurship. *American Economic Review*, *90*(2), 283-287.

Ghimire, P. (2019). Role of tax towards government revenue of Nepal. *International Journal of Business and Economics Research*, *8*(3), 85-96. https://doi.org/10.11648/j.ijber.20190803.12

Gupta, S. A. (2007). Determinants of tax revenue efforts in developing countries. *IMF Working Paper.* https://doi.org/10.5089/9781451867480.001

Jalata, D. M. (2014). Value added tax as a tool for national development in Ethiopia. *Research Journal of Finance and Accounting*, *15*(5), 184-190.

Jakir, K. (2011). Role of tax revenue in economic development. *Journal of Accounting and Tax revenue*, *3*(5), 91-104.

Kandel, P. R. (2010). *Tax laws and tax planning.* Kathmandu: Buddha Academic Publishers & Distributors.

Keho, Y. (2013). The structure of taxes and economic growth in Cote d' Ivoire: An econometric investigation. *Journal of Research in Economics and International Finance*, *2*(3), 39-48.

Kharel, K. R. (2021). Tax revenue of Nepal: Assessing the Impact on GDP. *Interdisciplinary Journal of Management and Social Sciences*, *2*(1), 80–89. https://doi.org/10.3126/ijmss.v2i1.36745

Korkmaz, S., Yilgor, M., & Aksoy, F. (2019). The impact of direct and indirect taxes on the growth of the Turkish economy. *Public Sector Economics*, *43*(3), 311-323. https://doi.org/10.3326/pse.43.3.5

Marire, J., & Sunde, T. (2012). Economic growth and tax structure in Zimbabwe: 1984–2009. *International Journal of Economic Policy in Emerging Economies*, *5*(2), 105-121.

Njindan Iyke, B., & Takumah, W. (2015). *The Links between Economic Growth and Tax Revenue in* Ghana: An Empirical Investigation. https://mpra.ub.uni-muenchen.de/67281/

Nwamuo, C. (2019). Impact of tax revenue on economic growth in Nigeria. *European Journal of Business and Management*, *11*(24), 18-27.

Oboh, J. O., Chinonyelum, O. J., & Edeme, R. K. (2018). Tax revenue and economic growth in selected ECOWAS countries, evidence from a sure model. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *8*(3), 310-324. http://dx.doi.org/10.6007/IJARAFMS/v8-i3/4917

Odhiambo, O., & Olushola, O. (2018). Taxation and economic growth in a resource-rich country: The case of Nigeria. *Taxes and Taxation Trends.* https://doi.org/10.5772/intechopen.74381

Okafor, R. G. (2012). Tax revenue generation and Nigerian economic development. *European journal of business and management*, *4*(19), 49-56.

Oluwatobi, A. A., Festus, F. A., & Grace, O. O. (2021). Tax revenue, capital formation, and economic growth in Nigeria. *Research in World Economy*, *1*(12), 101-112.

Omodero, C. O. (2019). The consequences of shadow economy and corruption on tax revenue performance in Nigeria. *Studia Universitatis "Vasile Goldis" Arad.Seria Stiinte Economice.*, *29*(3), 64-79. https://doi.org/10.2478/sues-2019-0012

Saibu, O. M. (2015). Optimal tax rate and economic growth. evidence from Nigeria and South Africa. *EuroEconomica.* Vol. 34(1): 41-50.

Shrestha, R., & Kautish, S. (2020). Impact of government revenue on the economic growth of Nepal: a case study of last five years. *LBEF Research Journal of Science, Technology and Management*, *2*(3).https://www.lbef.org/journal/2-3/download/2-3-45-59.pdf

Takumah, W., & Iyke, B. N. (2017). The links between economic growth and tax revenue in Ghana: an empirical investigation. *International Journal of Sustainable Economy*, *9*(1), 34-55. https://doi.org/10.1504/IJSE.2017.080856

Todaro, M.P., & Smith, S.C. (2006). *Economic Development*. New Jersey: Pearson Addison Wesley.

Ugwunta, O. D., & Ugwuanyi, U. B. (2015). Effect of distortionary and non-distortionary taxes on economic growth: Evidence from Sub-Saharan African countries. *Journal of Accounting and Taxation*, 7(6), 106-112.

Zahra, K. A., Abbas, M. S., & Aurmaghan, M. (2021). Tax revenue, development spending and economic growth: a case study of Pakistan. *Journal of Contemporary Macroeconomic Issues*, 2(1), 38-46.