IMPACT OF TAX REVENUE ON BUDGET DEFICIT: EVIDENCE FROM SRI LANKA

V. Anojan
Lecturer in Accounting,Department of Accounting,Faculty of Management Studies and Commerce, University of Jaffna, Sri Lanka.
Email Id: anojanv@univ.jfn.ac.lk / v.anoabt@gmail.com

Abstract
The budget deficit is a major economic problem in many countries in the world, Sri Lanka has budget deficit for a long period. The main aim of the study is to identify the impact of tax revenue on the budget deficit of Sri Lanka. Tax revenue and the budget deficit of Sri Lanka were collected from the central bank report from 1991 to 2020. Descriptive and regression analysis was performed in this study. Descriptive analysis reveals that the average budget deficit of Sri Lanka was around 61% of the tax revenue of Sri Lanka during the above period. Further, regression analysis confirms that there is a significant impact of direct and indirect tax revenue on the budget deficit of Sri Lanka, those revenues have 85 percent impact on the budget deficit of Sri Lanka. Especially, direct tax revenue has more impact on the budget deficit of Sri Lanka than indirect tax revenue. According to the findings of the study, tax policymakers and tax authorities of Sri Lanka has to focus on effective and efficient tax policy changes on direct taxes as well as on indirect taxes to increase the tax revenue, which may lead to control and reduce the budget deficit of Sri Lanka. Sri Lanka has a very low level of direct tax collections when compared to other countries, therefore Sri Lanka needs some effective tax policy changes to raise adequate direct tax revenue.

Keywords: Direct tax revenue, Budget deficit, Indirect tax revenue, Sri Lanka.

Introduction

Every nation needs adequate public revenue for their public expenditure in the world. Public revenue comprises two major revenues; direct tax revenue, and indirect revenue. Also, public expenditure comprises two major expenditures; capital and recurrent expenditures. A budget deficit is an adverse balance between the total public revenue and public expenditure of a country. It means that public expenditure is more than its public revenue. Therefore, it can be understood that the budget deficit mainly depends on the total public revenue and expenditure of the country. Therefore, health public policies and implementation on the public revenue and expenditure for the better positioning of the budget and economic conditions of the country. Even though, some countries are performing and managing their public revenue and expenditure very well therefore they are able to avoid the budget deficit in the world.

Sri Lanka has budget deficit for a long period, it is increased over the last few decades. Tax revenue is the major revenue of the total revenue of Sri Lanka for a very long period. Indirect tax revenue contributes more significantly to the total tax revenue than the direct tax revenue of Sri Lanka. According to the central bank report, the direct tax revenue only contributed about 22% of the total tax revenue of Sri Lanka in 2020. On the other hand, OECD countries' average direct tax revenue contribution was 38.8 percent in 2020. It can be seen that a lot of tax policy changes all most in the budget of Sri Lanka. Also, it can be seen that the budget deficit is in all the budgets of Sri Lanka. Generally, tax policy changes need to be done based on tax principles to improve the economic conditions of the country. It is a major economic tool for all countries. Therefore, there is question arises whether tax revenues have any significant impact on the budget deficit of Sri Lanka or not. The main objective of the study is to identify the impact of direct and indirect tax revenue on the budget deficit of Sri Lanka between 1991 and 2020.

Literature Review

Thanabalasingam and Jothiratne (2021) investigated the relationship among budget deficit, public debt, and economic growth. This study covers the period from 1990 to 2019 in Sri Lanka. Statistical analyses revealed that negative association between independent variables such as direct tax revenue, indirect tax revenue, real gross domestic production, consumer price, and dependent variable government debt to real gross domestic production in the long period. There was a significant impact of public expenditure, budget deficit, loan interest rates, and exchange rates on the public debt to real gross domestic production in Sri Lanka. Researchers strongly suggested tax policy reforms and public expenditure adjustments are needed to achieve fiscal consolidation.

Maganya (2020) found a significant impact of domestic goods and services (TGS) taxes on GDP growth in Tanzania. This study examined the impact of taxation on the economic growth of Tanzania during the period

1996 – 2019. The researcher found a negative significant correlation between income tax and gross domestic product growth.

Waleed (2020) examined the effect of tax revenues on the budget deficit of Jordan during the period 2008 – 2018. Statistical analyses revealed that direct and indirect taxes had no significant impact on the budget deficit of Jordan. The researcher emphasized that increment of current expenditure and tax evasion were the key reasons for poor budget balance.

Kasun, Ruchira, Chaturika, and Tilak (2019) found that all revenue-based measures and foreign financing have an expansionary effect on economic growth.

Oscar and Antonio (2015) investigated numerous alternative measures to mitigate the budget deficit in Spain. Researchers found that simulated public policies play a key role in the reduction of output, employment, and the high level of the unemployment rate. Further, researchers revealed that an increase in direct tax has a serious effect on cutoff expenditure rather than an increase in indirect tax.

Musa and Joseph (2014) examined the association between selected economic variables and budget deficits. Researchers found a causal relationship between budget deficit and some selected macroeconomic variables such as current account balance, inflation, and loan interest rates. However, there was no causal relationship between the budget deficit and gross domestic production in Uganda. Based on the depth of the literature review the following hypotheses were developed and tested in this study.

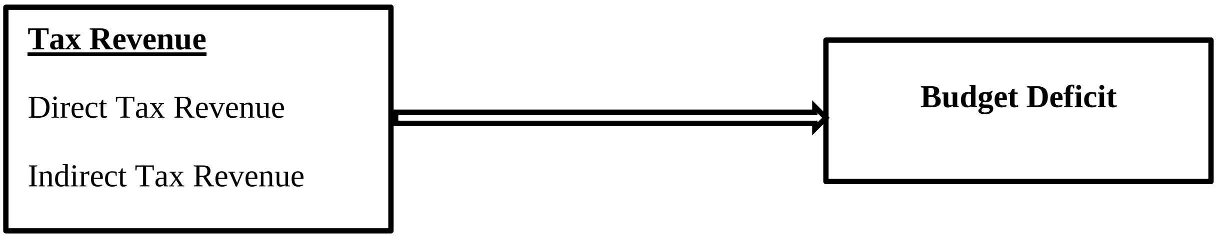
H1: There is a significant impact of direct tax revenue on the budget deficit of Sri Lanka.

H2: There is a significant impact of indirect tax revenue on the budget deficit of Sri Lanka.

Research Design

3.1 Conceptual Framework

The following conceptual model clearly shows the relationship between tax revenue and the budget deficit of Sri Lanka.



3.2 Period of the study

The researcher considered the last 30 years for this study, which is from 1991 to 2020. Sri Lanka had the highest amount of budget deficit in 2020 during the above study period.

3.3 Data collection

It is secondary data research; tax revenue and the budget deficit of Sri Lanka were collected from the central bank publications.

3.4 Mode of analysis

Descriptive analysis was performed to reveal the mean value of tested variables in this study, and regression analysis was used to test hypotheses in this study. Descriptive and regression analysis was performed with the help of SPSS latest version – 20.

Results and Discussion

4.1 Descriptive analysis

Table 1: Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Direct Tax Revenue	9,722	427,700	117,136.50	113,130.163
Indirect Tax Revenue	58,435	1,401,868	493,711.63	441,922.163
Budget Deficit	25,763	1,667,688	372,051.93	404,847.023

According to table 1, the average direct tax revenue, indirect tax revenue, and budget deficit of Sri Lanka were LKR 117,136.50, 493,711.63, and 372,051.93 million respectively over the period from 1991 to 2020. Further, the average budget deficit of Sri Lanka was around 61% of the total tax revenue of the country during the period 1991-2020.

4.2 Regression analysis

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928[a]	.860	.850	156,730.434

a. Predictors: (Constant), Indirect Tax Revenue, Direct Tax Revenue

Adjusted R square indicates that direct tax revenue and indirect tax revenue have 85 percent impact on the budget deficit of Sri Lanka, other remaining 15% impact variables did not discuss in this study. According to the adjusted R square, it can be understood the significance of the direct and indirect tax revenue for the management of the budget deficit of Sri Lanka.

Table 3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25,513.466	43,699.840		.584	.564
	Direct Tax Revenue	5.884	1.060	1.644	5.551	.000
	Indirect Tax Revenue	-.694	.271	-.758	-2.558	.016

a. Dependent Variable: Budget Deficit

According to table 3, it can be seen that there is a significant impact of direct tax revenue on the budget deficit of Sri Lanka, therefore H1 is accepted in this study. Also, there is a significant impact of indirect tax revenue on the budget deficit of Sri Lanka, therefore H2 is accepted in this study. Significant value highlights that direct tax revenue has more impact on the budget deficit of Sri Lanka than indirect tax revenue of Sri Lanka. As per the central bank reports, it can be seen that there is a very low level of direct tax contribution to the tax revenue of Sri Lanka for a long period. Also, when comparing the contribution of direct tax revenue to the total tax revenue is very low level in Sri Lanka than other developed countries and similar geographical and economic conditions nations in the world. The findings of the study are great evidence to make some outcome-based tax policy reforms to improve the level of direct tax contributions to the public revenue of Sri Lanka. Such effort definitely can expect some favorable impact on the budget deficit in the near future.

Conclusion

The budget deficit is a major problem and it is increased highly in the last few years in Sri Lanka. Sri Lanka has to take the necessary steps to reduce the budget deficit. The findings of the study concluded that direct and indirect tax revenues have a significant impact on the budget deficit of Sri Lanka. Therefore, significant public policies are needed to improve the budget deficit of the country through the favorable and significant impact on the direct and indirect tax revenue of Sri Lanka.

Limitations and Future Direction

Public revenue and expenditure play a major role in the budget deficit of the country; however, this research only addresses tax revenue. And also, the researcher considered only 30 years for this study. Therefore, the future researcher may consider non-tax revenue, public expenditures, long periods, and some comparative study with similar nations to bring some more significant contributions to this field of study.

Implications

The budget deficit is a major economic problem in many countries as well as in Sri Lanka. Especially, Sri Lanka faced many economic challenges during COVID – 19 period and economic crises period due to the instability of economic conditions. A long period of budget deficit highlights the instability of the national economy. The findings of the study highlight that tax revenue has a significant effect on the budget deficit of Sri Lanka, especially direct tax revenue has more impact than indirect tax revenue. Therefore, tax policymakers ought to consider tax policy reforms, which will be able to cut down the budget deficit through increment of tax revenue. Also, they have to well manage national expenditures to support the real purpose of the tax policy reforms.

References

[1]. Maganya, M.H. (2020) ‘Tax revenue and economic growth in a developing country: an autoregressive distribution lags approach’. *Central European Economic Journal*, 7(54), p205-217 [online]. Available at: http://ceej.wne.uw.edu.pl (Accessed: 10 September 2022).

[2]. Kasun, K., Ruchira, L. W., Chaturika, R. and Tilak, L. (2019) ‘Revenue Based Fiscal Consolidation and Economic Growth in Sri Lanka’. *Discussion Paper Series of Griffith University*, 2019-04, p1-11[online]. Available at: http://hdl.handle.net/10072/390499 (Accessed: 12 September 2022).

[3]. Central Bank of Sri Lanka (2022), *Central Bank of Sri Lanka Annual Report 2021*. Available at: Annual Report 2021 | Central Bank of Sri Lanka (cbsl.gov.lk) (Accessed: 10 September 2022).

[4]. Daniel, B. (2022) ‘Sources of Government Revenue in the OECD’. Tax Foundation. Available at: Sources of Government Revenue in the OECD | Tax Foundation (Accessed: 09 October 2022).

[5]. Lwanga, M. M., and Mawejje, J. (2014). Macroeconomic effects of budget deficits in Uganda: a VAR-VECM approach. *Advances in Management and Applied Economics*, *4*(6), 1–7. https://doi.org/10.22004/ag.econ.184172

[6]. Vinayagathasan, T., and Ranjith, J. G. S. (2021). Public debt, budget deficit and tax policy reforms for fiscal consolidation in Sri Lanka: rationale and feasibility. *Sri Lanka Journal of Social Sciences*, *44*(1), 97. https://doi.org/10.4038/sljss.v44i1.7953

[7]. Bajo-Rubio, O., and Gómez-Plana, A. G. (2015). Alternative Strategies to Reduce Public Deficits: Taxes vs. Spending. *Journal of Applied Economics*, *18*(1), 45–70. https://doi.org/10.1016/s1514-0326(15)30003-9

[8]. Alzoubi, K., W. (2020). Direct and Indirect Taxes Effects on Public Budget Deficit in Jordan from 2008 to 2018. *Social Science Research Network*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3713669