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Nexus between Taxation and Macro-Economic Variables: Study with reference to Direct Tax in Indian Economy

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Abstract-

Purpose: The purpose of this study is to study the relationship between taxation andmacro-economic variable and analyse the impact of these factors on GDPof Indiafor the period starting from financial year 2000-01 to 2018-19.

Design/Methodology/Approach: The study includes the descriptive analysis for determination of normality of data, correlation analysis for assessing the correlations between dependent variable and independent variables and linear regression for determining the direction and validity of outcomes to accept or reject the hypothesis.

Findings: The crux of this study is thattwo of the independent variables are posing considerable influence on the dependent variable. The fiscal deficit has inverse relationship and the personal tax has strong positive correlation with GDP. The null hypothesis got rejected in both the cases as they have significant effect on GDP. The measures have been suggested to policy makers and government to take into consideration for generating more revenueby broadening the tax base having very good scope of tax base expansion, to the government with regard to generation of more of personal tax revenue to reduce the fiscal deficit.

Research Limitations/Implications: The study is conducted on the (GOI)data of financial year 2000-01 to 2018-19 only. It does not include years after that due to unavailability of the official data for further years. The study has considered only direct tax in taxation and indirect tax is proposed to be taken into consideration for further study. It has also not included other factors than direct tax and fiscal deficit which are non-tax revenue generating factors which can affect GDP so that is also another limitation.

Originality/ Value: The study is totally original in nature and the authors have worked upon the same on their own, in order to study the relationship between taxation and macro-economic variables of Indian economy.

Keywords: Taxation, Direct tax, GDP, Fiscal deficit, Macro-economic, Personal tax, Corporate tax, other direct tax.
Paper type: Research paper

1. Introduction

1.1 Overview

In India, the Income tax is governed by Entry 82 of the Union List of the Seventh schedule to the Constitution of India, which empowers the Parliament to levy and collect the tax as per the law framed by the government. Income Tax is most significant direct tax governed by the Income-tax Act 1961, which came into

force on 1st April, 1962 and extends to the whole of India. It contains Sections 1 to 298 and Schedules I to XIV, which undergoes change every year by the annual Finance Act passed by Parliament and other legislations like the Taxation Laws (Amendment) Act. In addition to this, circulars and notifications are issued by the CBDT from time to time to deal with certain specific problems and to clarify doubts.
The Government imposes income tax on income generated by the individuals (non-corporate income) and businesses (corporate income) within their jurisdiction, where the income earned by various persons, as specified under section 2(31), during the previousyear is taxable in the assessment year, in accordance with and subject to the various provisions contained in the Act. The personal income tax is charged on individual’s salaries, wages and other kind of income whereas, the corporate tax is charged to partnerships, small businesses, corporations and people who are self-employed. These incomes can be charged in any of the five heads under Income Tax, viz, Salaries, House Property, Profession and Business, Capital Gains and Other Sources Income.

1.2 Purpose of the study:

The purpose of this study is to find out the relationship between taxation and various macro economic factors. Income tax has been a significant factor in generating tax revenue in India and tax revenue is one of the factors which affect GDP of India. So the purpose of this study is to consider all the factors of direct taxes like income tax viz, personal tax, corporate tax and other direct taxeson GDP. Apart from these factors, we are taking fiscal deficit as well, as another factor to find out the relationship withGDP.(Kumar Dey Asst, 2014) “Income Tax Department of India: A Summary Assessment” recommended that there is a need to take steps to increase income tax either by increasing tax base or by simplifying the tax filing procedure and awareness as there is lack of parity between income tax and corporate tax. He added further to continuously follow up the tax collection and reduces the delay in tax collection by employing scientific methods apart from monitoring TDS, TCS and advance taxes. In addition to this, for tax compliance it needs to take appropriate care to tackle tax evasion and corruption. (George & Reddy, 2015) “Corporate Tax in emerging countries: some aspects of India”opined that there is no dearth of tax reform measures in the country but the lack of will in the political party is the factor that is unable to enforce stringent measures for corporate taxes can become a potential source of income besides indirect taxes have become an important source of development funds.(Ghuge et al., 2016)in the article “A Comparative Study of Tax Structure of India with respect to other countries” summarised that there is strong requirement for reviewing the provisions seriously and taking actions accordingly and the government needs to simplify the tax structure because a country’s economic progress largely depends on its tax structure and provisions made thereon.(Amaresh Bagchi et al., 2016) in their article titled “Income Tax Reforms: A Progress Report depicts that the reforms have made a visible impact onIndia’s tax structure. The union budget for 1994-95 projects a growth of 13.5% in the centre’s Gross Revenue and acknowledging that income tax reforms have yielded tangible results.These studies are showing how the emergence and the corrective measures oftaxes were considered to be the important factor for the economy of India which serves the purpose of this study.
This study shows the relationship between the factors of macro-economic and taxationwith reference to Indian economy, which mainly focuses on impact of fiscal deficit and tax revenue generated in the country on GDP.This study will in turn give the insights to the policy makers regarding the measures to be incorporated in the provisions and mechanism as well as suggestthe corrective actions to be taken in the light of provisions of directtaxes, in addition to that it will throw light on the factors which are already making good return to the economy in order to keep focusing on the same accordingly.
With this backdrop, the objectives of this study are:

1. To study the relationship betweenfiscal deficit and GDP of India.
2. To study the impact of direct tax collection on GDP of India.
3. To understand the trend of fluctuation in the relationship between GDP and fiscal deficit and direct tax factors with number of taxpayers and return filers including number of

ITRs filed (including revised income tax returns).

Further, the study is organized as follows: Section 2 depicts the literature review of previous studies regarding the subject matter and hypothesis development as per the objectives and variables of this study.Section 3 shows the research methodology where the detail regarding data mining are given, variable of this study is defined, methods used and hypothesis statement is given.Section 4 shows the description of the data analysis and its thorough interpretation regarding what is found out of the study showing the relationship between variables through tables.Section 5 contains discussion regarding fiscal deficit and personal tax.Section 6 gives conclusion of this study.Section 7 jot downs the limitations of this study. Section 8 shows the future scope of research to proceed further in this area.
Section 9 gives a list of references.

2. <u>**Literature Review and Hypothesis Development**</u>

2.1 *Theoretical underpinning:*

GDP of a country is used to estimate the size of an economy and growth rate. It is the monetary value of all finished goods and services made within a country during a specific period. The factors posing impact on GDP, taken in this study, are fiscal deficit, personal tax, corporate tax and other direct taxes.The fiscal deficit has significant impact on the economic growth of our country. There is inverse yet significant relationship between fiscal policy and economic growth.The personal tax istaxes levied on an individual's salaries, wages and other types of income. The reduction in tax slabs, reduction in top marginal rate of personal income tax, simplification of tax structure, increase in taxpayers and increase in compliance through wider coverage of tax assesses and high GDP growth rate are the factors behind increasing the revenue responsiveness of personal tax.Theother factor taken in consideration for this study is corporate tax which is levied on net income or profit from the business of any corporate entity, be it foreign or domestic income and last variable is other direct taxes which includes all other taxes charged on direct income other than those mentioned above.

2.2 *Past studies:*

There have been various studies in the area of GDP and taxation which is relevant to mention here due to which the research gap has been traced which makes our study more relevant. We are discussing the relevant ones here, as follows:

(Chattopadhyay et al., 2002) in this study the author depicted the aspects relating to compliance cost of tax where it focuses on the usefulness of compliance cost for tax design and policy. It is mentioned that in some developed countries like UK and Australia the Compliance Cost Assessment is mandatory while introducing new tax proposals.

(Rao, 2005) this paper assesses and describes the introduction of the new forms of taxes, their revenue and implications and achievements after implementing the same. The author concluded that even after eight years of reforms, India is still struggling to improve the tax system which poses major challenge in India.

(Bernardi & Fraschini, 2005) the authors took into consideration the common laws and tax reforms introduced in India till that time. They thrown light on the taxation system of country like India which raises more than one problem which leads roads to update and improve the Indian taxation system.

(R.V. Deshpande, 2012) stated in his study that there is ample scope for augmenting revenue generation from certain direct taxes including agricultural income tax and land revenue as well. He pointed out that wider tax base, anti tax evasion measures, better tax administration and efficient tax compliance are the reason due to which the revenue generation from individual and corporate tax has increased substantially.

(George & Reddy, 2015) opined that despite all the criticism against corporation tax, it has evolved as a significant factor in generating revenue to the country on account of rising importance of corporate tax and being impersonal in nature on the other hand. This study shows that the total tax revenue is increasing continuously and gradually and major contribution to direct tax to the country is corporate tax. The article focused on the origin of the corporation tax in the country in order to examine the growth and trend of the same.

(Shrivastava et al., 2016) the authors in this study found out that despite several amendments in the provisions and improvement and development for compliance of the same whether in direct or indirect taxation, there has always been an increase in the India's GDP and tax revenue collection as well. They disclosed that even during the recession in Indian economy, both the direct as well as indirect tax revenue kept increasing andthe centre's tax GDP percent had increased 46%during financial year 2008-09 from a low percentage of 6.5 in the financial 2002-03.

(Sharma & Singh, 2018) the authors throw light on important implications to improve the responsiveness of income tax revenue performance in dynamic and fluctuating environment of Indian economy. The study investigated to the association of income tax revenue with various macro-economical and governance parameters with the aim to analyse the Indian income tax revenue performance in post liberalisation (1991) era.

(Neog & Gaur, 2020)concluded that thepolicy makers should lay emphasis on property taxes along with reducing the income tax for fostering the growth of economy. This study shows the U shaped relationship between tax structure and growth performance.

2.3 Research Gap:

The following are the research gap found by the authors which needs to be answered:

a) Fiscal policy has negative impact on GDP of the country; this aspect is not considered in mainstream.
b) The time series data of subsequent 19 years long was not taken into consideration which makes the study more significant, approachable and valid.
c) The factors affecting GDP was not taxation centric which has to be studied in this regard.
d) The introduction of various tax reforms in India is another factor which makes this study different than the previous ones as it will give insights from one of the major factor in generating revenue in India.

3. Research Methodology

3.1 Data:

The study is based on secondary data which is generatedover span of19 years period of time beginning from financial year 2000-01 to 2018-19 which contains various table sheets regarding the fiscal deficit, direct tax collection, contribution of direct tax collection to total tax revenue, direct tax GDP ratio, personal tax collection, corporate tax collection, other direct tax collection, number of income tax return filed (including revised return), number of persons filing income tax return (return filers) and number of taxpayers. We have compiled the data by various official websites and portals relating to Government of India as follows:

1. The official website of Income Tax Department (https://www.incometax.gov.in/iec/foportal)
2. The Central Board of Direct Taxes, Government of India (https://incometaxindia.gov.in/Pages/default.aspx)
3. Open Government Data (OGD) Platform (https://data.gov.in/)
4. National portal of India (https://www.india.gov.in/)

3.2 Variables

Sl. No.	**Name**	**Description**	**Source**
1.	Gross Domestic Product (GDP)	GDP is a dependent variable in this study, the impact on which we are focusing to study on.	(Agrawal & Khan, 2011)
2.	Fiscal Deficit	Fiscal Deficit is an independent variable.	(Agarwal et al., 2019)
3.	Personal Tax	Personal Tax is an independent variable.	(Gupta, 2009)

4.	Corporate Tax	Corporate Tax is an independent variable.	(Rajaraman et al., 2016)
5.	Other Direct Taxes	Other Direct Taxes is an independent variable.	(Aamresh Bagchi et al., 1995)

3.3 *Methodology*

We are using three types of analysis for this study.

i. Descriptive Statistics: Descriptive Statistics are numbers which are used to summarise and describe the data in a meaningful way. In general, there are two ways which are used to describe the data. First is measure of central tendency which describes the central position using number of statistics including mean, median and mode and second is measure of spread which helps us to summarise how spread out these scores are, which includes range, standard deviation, variance and so on.
ii. Correlation: It describes the association of two variables. It shows the degree to which two variables move in coordination with one another. If the two variables are moving in the same direction, they are said to have a positive correlation and if they are moving in opposite direction then they are said to have negative correlation.
iii. Ordinary Least Squares (OLS) Regression Analysis: Linear regression is the next step after correlation. It indicates the degree for forecasting, time series modelling and finding the cause and effect relationship between the variables. The linear regression equation is as follows:

Y = a +bx
Where,
Y = Dependent variable
a,b =Constant parameters
x= Independent variable

Ordinary Least Squares (OLS) Regression is a statistical method of analysing data to estimate the relationship between one or more independent variables, known as predictor and one dependent variable, known as target. This method estimates the relationship by minimising the sum of squares in the difference between observed and predicted values of the target configured as straight line. The explanation and interpretation of analysis is given in the next section of this article.

3.4 *Hypothesis:*

For predicting the relationship between each independent and dependent variable individually, we are proposing the proposed outcomes as follows:

H0: Independent variable does not significantly affect the GDP.

H1: Fiscal deficit significantly affect the GDP.

H2: Personal Taxes significantly affect the GDP.

H3: Corporate Taxes significantly affect the GDP.

H4: Other Direct Taxes significantly affect the GDP.

4. <u>Analysis and interpretation</u>

Although taxation is the main source of income for the government, which forms major portion of total revenue collection. The government also earns various recurring income known as non-tax income.There are two main sources of government revenue in India:

i. Tax Revenue
ii. Non-tax Revenue

Tax revenue includes income tax, corporate tax, wealth tax, gift tax, capital gains tax, and hotel expenditure tax, tax on foreign travel, customs and union excise duty.
Non-tax revenue consists revenue in the form of interest, fine, dividends and profit of public sector undertakings, regulatory charges and user charges for goods and services provided to the publicand other non-tax revenue sources like departmental receipts of various ministries of the Central Government by way of penalties, fees, etc.

During the year 2016-17 direct taxes (personal income tax and corporate tax) accounted for 51.3% of total tax revenue and rest came from indirect taxes and the same for the year 2020-21 was increased to 54.4% out of which corporate tax was 28.1% and personal tax was 26.3% and the share of indirect tax collection was 45.2% out of which share of GST was 28.5%, Excise 11% and customs 5.7%.For the purpose of this study, we have taken fiscal deficit and tax revenue factors only.The analysis is done through SPSS. For which the secondary data collected by us was entered in SPSS and then we started analysing the same through the methods one after another. We have taken LOG value of the variables so as to make the revenue base equal.

4.1 *Descriptive statistics:*

The analysis started with descriptive statistics as it is used to focus on the management, presentation and classification which aim at describing the condition of the data. It makes the data more attractive, easier to understand and to provide more meaningful resultto data users in standard format. The mean, median and mode are used to describe central tendency of the data i.e. they provide the centre of distribution of values.The mean, median and mode of our data for GDP are 15.67092, 15.68073 and 16.76048. This data can be said to be perfectly symmetrical distribution as the value of mean and median are the same. The mean is less than median and they both (mean and median) are less than mode. So, the mean and median both seems to be skewed but mean reflects it more to be skewed. So, we can say that the distribution is skewed to the left as the mean is less than the median which is often less than the mode.Standard Deviation is a measure of how dispersed the data is in relation to the mean. A standard deviation close to zero indicates that data points are close to mean; whereas high or low standard deviation reflects that the data points are respectively above or below the mean. In this study, the standard deviation is 0.728578 which is considered to be high that means the data points in the study are above the mean.As the value of skewness is less than -1.0 that is -0.076789, the distribution is left skewed. The distribution is leptokurtic as the value of Kurtosis is 1.656493 i.e. above 1. It is inferred that this distribution is with positive kurtosis larger than that of a normal distribution.Then we have Jarque-Bera test which is a goodness of fit test. This test is used to measure if sample data has skewed and kurtosis that are similar to a normal distribution. Jarque-Bera testcannot be negative, it is always positive and if it is not close to zero it shows that sample data do not have a normal distribution. In this study, the value of this test is 1.447639 whichsuggests that the null hypothesis has been rejected at 5% significance level that means the data does not come from a normal distribution.

Figure 1: Descriptive Statistics

	FISCAL_D...	LOG_GDP	LOGCT	LOGODT	LOGPT
Mean	7.221053	15.67092	12.16201	6.579959	11.72071
Median	6.900000	15.68073	12.40789	6.712956	11.79685
Maximum	9.600000	16.76048	13.40539	9.634693	13.06711
Minimum	4.000000	14.55858	10.48279	3.912023	10.36609
Std. Dev.	1.514221	0.728578	0.955569	1.309214	0.890195
Skewness	-0.124957	-0.076789	-0.541537	0.568576	-0.170980
Kurtosis	2.499155	1.656493	1.951743	4.053739	1.773130
Jarque-Bera	0.248031	1.447639	1.798582	1.902753	1.284199
Probability	0.883366	0.484897	0.406858	0.386209	0.526186
Sum	137.2000	297.7475	231.0782	125.0192	222.6934
Sum Sq. Dev.	41.27158	9.554853	16.43601	30.85273	14.26405
Observations	19	19	19	19	19

4.2 *Correlation:*

Correlation shows the association of variable and in which direction their movement is. In this study, there is negative correlation between fiscal deficit and GDP i.e. -0.4836677, which means the lower the fiscal deficit, the higher will be the GDP and vice versa. The GDP and Corporate tax have strong positive correlation i.e. 0.97958899, which means the corporate tax has very high impact on increasing the GDP. The GDP and personal tax also has strong positive correlation, which is even better than the correlation of GDP with corporate tax i.e. 0.99432548 that shows that the higher collection of personal tax has huge positive impact on GDP. Lastly, the GDP and other direct taxes also have positive correlation i.e. 0.69250637 which infers that other direct taxes are also one of the factors which positively affect the GDP.

Figure 2: Outcome of Correlation analysis in SPSS

	FISCAL_D...	LOG_GDP	LOGCT	LOGODT	LOGPT
FISCA...	1	-0.4836677...	-0.5435631...	-0.3391472...	-0.5315235...
LOG_...	-0.4836677...	1	0.97958899...	0.69250637...	0.99432548...
LOGCT	-0.5435631...	0.97958899...	1	0.61995811...	0.98676550...
LOGODT	-0.3391472...	0.69250637...	0.61995811...	1	0.67435594...
LOGPT	-0.5315235...	0.99432548...	0.98676550...	0.67435594...	1

4.3 *Regression Analysis (OLS):*

Regression analysis is a way of mathematically sorting out which of those variables does indeed have an impact on the dependent variable. In thiscase, the variable which we want to predict is called the dependent variable, which is GDP in this study and the variable which we use to predict other variable's value is called independent variable, which are fiscal deficit, personal tax, corporate tax and other direct taxes in this study. The regression equation is as follows:

GDP = a +b1FiscalDeficit + b2Personaltax +b3Corporatetax + b4Otherdirecttax + e

$$LogGDP = \alpha + \beta 1FP + \beta 2PT + \beta 3cT + \beta 4ODT + \varepsilon$$

Where,

GDP stands for Gross Domestic Product

FP stands for Fiscal Policy

PT stands for Personal Tax

CT stands for Corporate Tax

ODT stands for Other Direct Tax

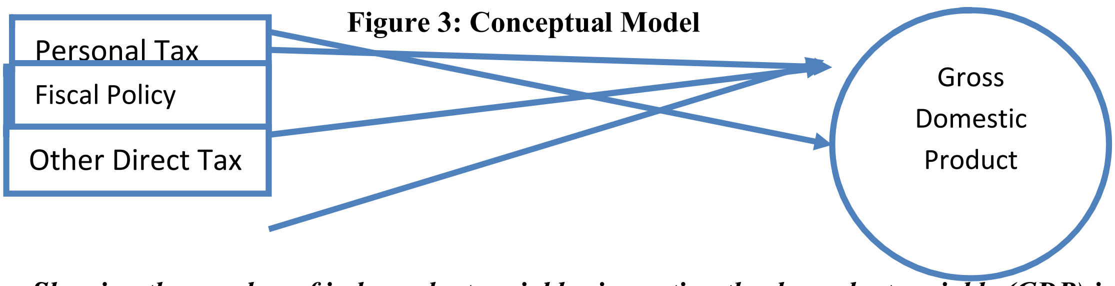
Log is used for making the base of dependent and independent variables equal.

α,β = Constant parameters

FP,PT,CT,ODT = Independent Variables

And e stands for the Error term. An error term is used to represent the margin of error in the statistical model. It provides the explanation regarding the difference between the theoretical value of the model and the actual observed results. In this study, the factors other than taken in this study, like customs, union excise dutyetc and non-tax revenue are the factors which pose impact on GDP, are to be considered in error term.

Figure 3: Conceptual Model



<u>Figure: Showing the number of independent variables impacting the dependent variable (GDP) in this study.</u>

The outcome of OLS from SPSS is given below. R-squared or coefficient of determination is a statistical measure which determines the proportion of variance in the dependent variable that can be explained by the independent variable. R-square shows how well the data fits into regression model. In this study R-square is 0.992358 which is

considered very high and falls under acceptable range. So, we can accept this model as the model is valid.
Then we come to interpretation of coefficient and p-value.
In regression with multiple independent variables, the coefficient tells us how much the dependent variable is expected to increase when the independent variable increases by one, holding all other independent variables constant.
As there is negative correlation between fiscal deficit and GDP, the coefficient value is 0.030283 which mean that if the fiscal deficit increases by one then the GDP will decrease by 3%.
The other three independent variables have positive & strong correlation with GDP. So, if the said independent variable increases by one then it will result in increase in GDP by 76, 4 and 2 % respectively in the case of personal tax, corporate tax and other direct taxes.
Whereas when we talk about p-value, it is said that when the p-value is below the threshold significance level (typically < 0.05), it indicates strong evidence against the null hypothesis, as there is less than a 5% probability that the null hypothesis is correct. Therefore, we reject the null hypothesis and accept the alternative hypothesis. But that does not mean that there is a 95% probability that the alternative hypothesis is true.
Whereas, when the p-value is above 0.05, it shows that it is not statistically significantand indicates strong evidence for the null hypothesis. So, we retain the null hypothesis.
This is important to note here that we can never accept the null hypothesis. Either we say we reject the null hypothesis or we failed to reject the null hypothesis.
We have taken H0 as common null hypothesis for all the alternative hypothesis i.e. H1, H2, H3 and H4 respectively for fiscal deficit, personal tax, corporate tax and other direct taxes.
P-value of fiscal deficit is 0.0404 i.e. less than 0.05, which means the null hypothesis (H0) is rejected here and there is enough evidence to support the alternate hypothesis (H1) which meansthere is a significant relationship between fiscal deficit and GDP.
P-value of personal tax is 0.0001 which shows that we are rejecting null hypothesis (H0),there is enough evidence to support the alternate hypothesis (H2) which means there is significant relationship between personal tax and GDP.
P-value of corporate tax is 0.7075 which shows that we could not reject the null hypothesis (H0) in this case and there is not enough evidence to supportthe alternate hypothesis (H3) which means there is no significant relationship between corporate tax and GDP.
P-value of other direct tax is 0.2283 which shows that we are rejecting the null hypothesis (H0), there is enough evidence to support the alternate hypothesis (H4) which meansand there is significant relationship between other direct tax and GDP.

Figure 4 :Outcome of Regression analysis in SPSS

Dependent Variable: LOG_GDP
Method: Least Squares
Date: 01/12/22 Time: 22:10
Sample: 2000 2018
Included observations: 19

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.725603	0.341800	16.75134	0.0000
FISCAL_DEFICIT	0.030283	0.013406	2.258985	0.0404
LOGCT	0.045915	0.119897	0.382952	0.7075
LOGODT	0.023987	0.019040	1.259799	0.2283
LOGPT	0.768759	0.135584	5.670002	0.0001

R-squared	0.992358	Mean dependent var	15.67092
Adjusted R-squared	0.990174	S.D. dependent var	0.728578
S.E. of regression	0.072221	Akaike info criterion	-2.197237
Sum squared resid	0.073022	Schwarz criterion	-1.948700
Log likelihood	25.87375	Hannan-Quinn criter.	-2.155174
F-statistic	454.4695	Durbin-Watson stat	0.630314
Prob(F-statistic)	0.000000		

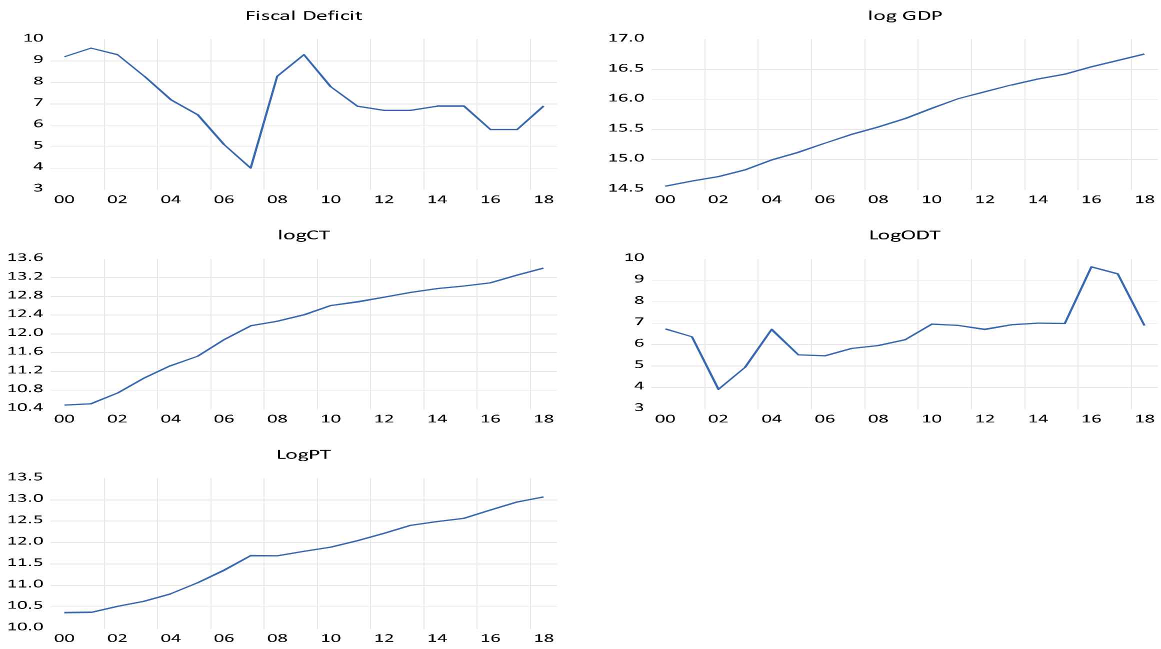


Figure: Graphic Presentation

5. Discussion :

As discussed in the analysis and interpretation part, it is clear that in order to improve and increase GDP, the fiscal deficit needs to be reducedcause it is negatively correlated and other three independent variables needs to be taken care of so that more revenue can be generated through these measure as these are strongly correlated. As the fiscal deficit and personal tax are the two factors which are significantly affecting the GDP as one have negative correlation and other has the strong positive correlation, so we are taking these two variables for further discussion.

When we talk about fiscal deficit, it is the excess of government's total expenditure over its total revenue from taxes and other sources excluding debts. This gap between revenue and spending of governments is managed by the governmentthrough borrowings. Fiscal deficit is an indicator of the government ability to manage its finance. An ongoing continued high fiscal deficit indicates that government is spending beyond its means.

It is often considered that high fiscal deficit is good, if the government is utilising its means to create or on upgradation of infrastructural facilities like construction of roads, rails, airports, bridges etc which will generate revenue for the nation in future for long duration. Fiscal deficit is usually expressed as percentage of GDP.Fiscal deficit is financed by internal borrowing from commercial banks, from RBI against securities, by printing of new currency by RBI or by external financing from IMF or other governments.

Fiscal deficit are generally regarded as inflationary but it is not true for all time. The reason of high fiscal deficit is lower revenue realisation because of disruption in normal business activity due to lockdown and corona pandemic and the higher expenditure during the period.

Theoretically, increased fiscal deficit can help to boost the sluggish economy by providing more money to people to buy and invest. However, long term fiscal deficit can be harmful for economic growth and stability.

Deficit financing on one hand helps for economic development of the nation but on the other hand it is inflationary which in turn is bad for the health of RBI (Central Bank). It may also push the interest rate high which in turn makes difficult to government in servicing the loan. Deficit financing also creates a threat to the financial stability of economy. The major implication of fiscal deficit is that the economy may lead to debt trap. A controlled deficit situation leads economy to grow smoothly.

The untrammelled deficit can lead to runaway inflation which in turn disturbs the quality life. Currency printing by RBI to meet out the deficit can devalue the money and high deficit could also derail the macro stability which leads to delay in investment decisions by business houses which in turn effects the employment.

Measures to combat fiscal deficit:There are two ways of combating fiscal deficit

a) Increasing revenue through high taxes and/or more economic activities:

1-Increase the tax revenue by enhancing the tax rates and adoption of appropriate measures to reduce tax evasion.

2-Government should give more emphasize to broaden the tax base which in turn will enhance the tax revenue without increasing the tax rate.

3- Government should enhance the scope of TDS and TCS in untouched grey areas, introduction of fee / penalty on late filing of returns etc to generate tax revenue.

4-Government should speedup the disinvestment process of underperforming enterprise where assets are used inefficiently.

5-Government should speed up economic activities to generate the revenue like automation of toll plaza, automation of revenue collection of government departments, organisation of national and international exhibition, national and international games, competition etc.

6-Libralisation of policies for civic amenities by providing single window solution to facilities like online registration of land and building and vehicles, map approval function of development authorities, freehold of leasehold and state lands on which public has constructed their houses since long etc.

7-Government should consider performing the official work of public with full transparency, in auto mode and introducingsome scheme of requesting for voluntary contribution from public after satisfactory completion of their work without hindrance and in corruption free environment.

b) Cutting government expenditure by cutting back on government-run program:

1-Government should give special attention to reduce subsidy burden.

2-Authrities should give special attention on reduction of unplanned and unproductive expenses.

3- Authorities should try to borrow from domestic sources to reduce the interest burden.

4-Authorities should try to borrow from external sources on bargained interest rates.

Then coming to other independent variable i.e. personal tax which under taxation system of government is to impose the tax on individuals and corporate to meet out the government expenses based on residential status of the individual in the relevant previous year on which tax will be assessed during relevant assessment year, has significant effect on the revenue generation and GDP as well. In order to improve GDP, following measures should be takenwrt personal tax:

a) The base of taxation system should be broadened in such manner that puts minimum burden on the tax payers, increase the tax collection and maximise the wealth of the nation.
b) The taxation system and procedure shall be easy to understand and smooth enough to work with flexibility with minimal manual intervention.
c) There should be arrangement of proper education and awareness campaign to make the existing as well as potential taxpayers to be aware about the benefits available to them regarding filing of returns, deductions & exemptions they can avail and rationale of paying taxes as well.
d) The citizen should be made aware about their role as a responsible national to participate accordingly for overall progress of the nation.

6. Conclusion:

The study concludes that out of four independent variables taken in this study namely, fiscal deficit, personal tax, corporate tax and other direct taxes, two variables i.e. fiscal deficit and personal tax are strongly impacting the GDP of India. The fiscal deficit needs to be lessen as this will improve the GDP and measures for the same have been provided in the discussion. On the other hand, the contribution of personal tax is quite a significant one in generation of revenue to government in Indian economy and that needs to be taken care of as tax evasion and avoidance has become a bad habit of taxpayers in India.During Times now summit 2020, Prime Minister of India has expressed his concern on the topic of taxation, by providing the complete data about tax payers in the country of 130 crore people only 1.50 crore individuals are filing the income tax return, out of which only 3lakh individuals have filed their income above rupees fifty lakh and only 2200 individuals has declared their income over one crore rupees. This shows that there is ample scope of expansion in tax base but due to lack of being a responsible citizen, either the taxpayers or the concerned officials have not taken enough care due to which the tax revenue generation is low. In my opinion, the proper education and awakening thought that what a responsible nationalist being a man of ordinary prudence is ought to do, will do favour in inculcating the habit of being honest taxpayer. The other aspect to encourage the people to treat the nation like their home, in order to come forward to pay the taxes voluntarily and the government as well is requiredto provide a trustworthy environment in which government and its official, should give the guarantee to the people of India that "the genuine work will be done and taken into consideration without any delay".

7. Limitations:

There are many factors which affect GDP but as income tax relates to my area of interest and it has huge portion of making overall revenue generation of our country so I conducted my study on the basis of this only. So, my study has certain limitations which are as follows:

i. The other factors which affect GDP like indirect taxes, imports, exports, financial inclusion, other non-tax revenue generating factors like tolls, octroi, etc are not taken into consideration for this study.

ii. The time frame for which study has been done includes financial year 2000-01 to 2018-19 only, as the official data is available for this period only.

iii. The further analysis of data is not taking place in this study as these tests comply with the requirements this study was done with the aim of.

8. Future scope of research:

This article was mainly focused on the impact which is posed by Income Tax on GDP. As we all know that Indirect taxes also plays vital role in the economy and Goods and Service Tax (GST) is a game changer and it is creating huge amount of revenue having better and efficient procedure as well as the outcome in the form of transparency, accountability, tax revenues and other relevant factors relating to it. So, the authors are planning to go for further study in the area, taking Goods and Service Tax (GST) as a factor which affects GDP to find out the relationship between these two factors, how GST is affecting GDP, if the changes are positive or negative and how much it is impacting. The future scope of study will be focused to be done from the date when GST came into effect in India. The study will also show the qualitative changes in the system apart from quantitative so it will be a mixed method analysis study.

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