

Investigating the Relationship of Growth Rate of Taxes and Economic Growth Rate of India

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Article Info

Volume 83

Page Number: 5719 - 5724

Publication Issue:

March - April 2020

Article History

Article Received: 24 July 2019

Revised: 12 September 2019

Accepted: 15 February 2020

Publication: 28 March 2020

Abstract:

Taxes form essential source of revenue of any nation. It finances the various planned and non planned expenditure of the government. The Indian economy has grown tremendously post the economic reforms adopted in 1991. The country tax system was archaic for a very long period of time. It was only in the recent past that the country introduced the reforms in its indirect tax regime by introducing the Goods and Services Tax in 2017. The efforts are being made to reform the direct taxes and bring in the Direct Tax Code to replace the ages old Income Tax Act, 1961. The present paper aims to investigate the relationship of direct and indirect taxes with the economic growth rate of India. The results signified that the economic growth rate is significantly positively related to growth of direct taxes and total taxes in India. However it is found to have insignificant positive relationship with the growth of indirect taxes in India.

Keywords: Direct Taxes, Indirect Taxes, Economic Growth Rate, Gross Domestic Product, Investment

INTRODUCTION

The economy of India has developed in an astonishing way after adoption of economic reforms on 1990s. Gross Domestic Product (GDP) is most widely seen as a sign of development of a nation. Different countries adopt different methods to calculate GDP. Three most common approaches to valuation of GDP are expenditure, income and production. The expenditure approach to measure GDP is based upon the expenditure. The sum aggregate of expenditure done by customers, investors and Government is determined to reach the value of GDP. GDP is sum total of consumption, government spending, investment and net exports. In another way, income approach is used to determine the GDP. Here, the GDP is total expenditure of the country equals to the income generated in the country. According to the third approach, GDP is the money worth of all goods and services that are produced in a country over definite period of time.

There is huge significance associated with investment to pace up the economic growth. The amount invested multiplies the income. Therefore, it is considered to be very important for the economic progress of any nation. Increase in investment results in increase GDP. Investment stimulates the economic prosperity and welfare. Government investment plays a significant role especially in developing economies where continuous increase in investment is must to ensure the consistent economic progress. The government invests directly as well as indirectly to push the growth. The government depends highly on its tax revenue to fund its investments. In India, there are types of taxes include direct taxes and indirect taxes. Direct taxes are personal or individual income tax and corporate Tax. Indirect taxes were earlier categorized as sales tax, value added tax, custom duties, excise duty and service tax, etc. However, all the indirect taxes are brought under the ambit of Goods and Service Tax

(GST). Former are progressive whereas, later are regressive in nature, dependent upon economic activities of every person.

REVIEW OF LITERATURE

Myles (2000) reviewed the conceptual and empirical evidence to find out whether taxation affects economic growth rate. The paper found that theoretical frameworks isolate number of ways taxation could substantially affect the economic growth rate. However, empirical evidences found the taxation effect to be very weak. Anastassiou & Dritsaki (2005) evaluated the association of revenue from taxes and the growth rate of Greece's economy. The study used the data for the period 1965 to 2002. Study conducted causality analysis and found the existence of causal relationship between country's revenue from taxes and growth rate of its economy. McNabb (2018) investigated the association of tax structures and rate of growth of economy of 100 countries. The findings of the study revealed that revenue- neutral raises in income taxes related to long run GDP growth. The revenue- neutral declines in trade taxes off set through domestic consumption tax increase showed positive effects. Branimir, Vera & Nada (2018) empirically analysed the taxes and the growth rate of Serbia and Croatia. Authors used panel regression to find the effect of taxes on growth rate of economies. They applied random effect model. The paper found that of all taxes, only value added tax impacted economic growth of both countries significantly. Also, it was found that excise tax had negative effect whereas the corporate tax, social security contributions and value added tax were positively affected the GDP.

RESEARCH OBJECTIVES AND METHODOLOGY

The present study is conducted to find out the relationship of growth rate of taxes and its types with economic growth rate. The association between growth of direct taxes and indirect taxes with rate of economic growth rate is investigated through correlation analysis. The study uses the secondary

data for purpose of determining the relationship between variables.

RESEARCH HYPOTHESIS

H01: There is no significant relationship between the growth of direct taxes and rate of economic growth

H02: There is no significant positive relationship between growth of indirect taxes and rate of economic growth.

H03: There is no significant positive relationship between growth of total taxes and rate of economic growth.

DATA ANALYSIS AND DISCUSSION

Table 1 displays the economic growth rate of India from the year 2000-01 to 2017-18. The data pertaining to economic growth rate during the period from 2000-01 to 2017-18 shows that the Indian economy has grown highest in the year 2007-08 at the 10.2 % and lowest in the year 2000-01 at the rate of 3.6 %.

Table 1: India's Economic Growth Rate

Year	Economic Growth Rate
2000-01	3.6
2001-02	5
2002-03	3.9
2003-04	7.9
2004-05	7.9
2005-06	9.3
2006-07	9.2
2007-08	10.2
2008-09	3.7
2009-10	8.5
2010-11	9.8
2011-12	6.9
2012-13	5.1
2013-14	6.3
2014-15	7.5
2015-16	8
2016-17	8.2
2017-18	7.2

Source: www.data.gov.in

Table 2 exhibits India's revenue collection through taxes both direct and indirect. It also shows the annual growth rate of total tax collection and direct and indirect tax collection. The data pertains to the period from 2001-02 to 2017-18. During this period, the direct tax and total tax collection have shown the maximum growth in the year 2006-07 and indirect tax collection has shown maximum growth in the year 2017-18.

Table 2: Revenue Collection through Direct, Indirect, Total Taxes and its Annual Growth Rate

Year	Revenue (₹ Crores)			Growth Rate (%)		
	Direct Taxes	Indirect Taxes	Total Taxes	Direct Taxes	Indirect Taxes	Total Taxes
1	2	3	4	5	6	7
2000-01 ¹	68305	119814	188119	-	-	-
2001-02 ¹	69198	117318	186516	1.3	-2.1	-0.9
2002-03 ¹	83088	132608	215696	20.1	13	15.6
2003-04 ¹	105088	148608	253696	26.5	12.1	17.6
2004-05 ¹	132771	170396	303167	26.3	14.7	19.5

2005-06 ¹	165216	199348	364564	24.4	17	20.3
2006-07 ¹	230181	242066	472247	39.3	21.4	29.5
2007-08 ¹	314330	279031	593361	36.6	15.3	25.6
2008-09 ¹	333818	269433	603251	6.2	-3.4	1.7
2009-10 ¹	378063	245367	623430	13.3	-8.9	3.3
2010-11 ¹	446935	345127	792062	18.2	40.7	27
2011-12 ¹	493959	391738	885697	10.5	13.5	11.8
2012-13 ¹	558658	474482	1033140	13.1	21.1	16.6
2013-14 ¹	638543	496238	1134781	14.3	4.6	9.8
2014-15 ¹	695792	543215	1239007	9	9.7	9.3
2015-16 ²	741945	709825	1454180	6.7	31.1	17.4
2016-17 ²	849713	861625	1711338	14.5	21.4	17.7
2017-18 ²	1002037	1209742	2211779	17.9	40.40	29.24

Source : ¹<http://mospi.nic.in/statistical-year-book-india/2018/175>

²<https://pib.gov.in/newsite/PrintRelease.aspx?relid=188255>

Fig. 1 Annual Growth Rate of Direct and Indirect Taxes

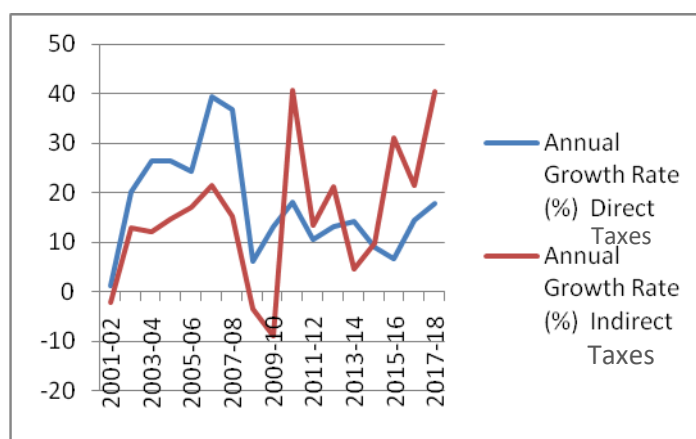
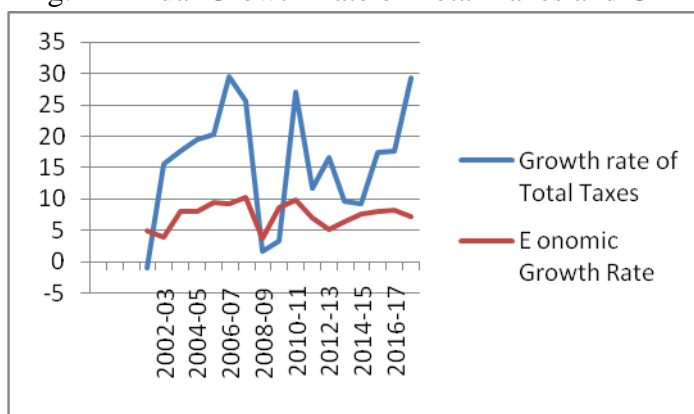


Fig. 2 Annual Growth Rate of Total Taxes and GDP



a. Descriptive Statistics

Table 3 Descriptive Statistics of Growth Rate of Taxes, its types and Economic Growth Rate of India

Variables	Mean	Standard Deviation
Growth rate of direct taxes	17.5412	10.42156
Growth rate of indirect taxes	15.3882	13.78110
Growth rate of total taxes	15.9435	9.22525
Economic growth rate	7.3294	1.96175

The mean value for the growth rate of direct taxes over the period 2001-02 was found to be 17.5412.

The indirect taxes have growth at the rate of 15.3882 % on an average over 2001-02. The total tax collection in India has grown at 15.9435 % on an average over this period. The mean of economic growth of India over the same period was found to be 7.3294 %.

b. RELATIONSHIP BETWEEN GROWTH RATE OF DIRECT TAXES AND ECONOMIC GROWTH RATE

Correlation analysis has been used to find the relationship of rate of growth of direct taxes, indirect taxes and total taxes with the economic growth rate of India. The results of the analysis have been shown in the given tables:

TABLE 4: RESULTS OF CORRELATION ANALYSIS ON GROWTH RATE OF DIRECT TAXES AND ECONOMIC GROWTH RATE

		Growth Rate of Direct Taxes	Economic Growth Rate
Growth Rate of Direct Taxes	Pearson Correlation	1	.583*
	Sig. (2-tailed)		.014
	N	17	17
Economic Growth Rate	Pearson Correlation	.583*	1
	Sig. (2-tailed)	.014	
	N	17	17

*, Correlation is significant at the 0.05 level (2-tailed).

The results of the correlation analysis between growth rate of direct taxes and economic growth rate of India shows the existence of positive correlation between the two variables ($r=.583$). This relationship is found to be significant ($p<0.05$). Therefore, the null hypothesis, H_0 : There is no significant relationship between the growth of direct taxes and rate of economic growth, is rejected.

c. RELATIONSHIP BETWEEN GROWTH RATE OF INDIRECT TAXES AND ECONOMIC GROWTH RATE

TABLE 5: RESULTS OF CORRELATION ANALYSIS ON GROWTH RATE OF INDIRECT TAXES AND ECONOMIC GROWTH RATE

		Growth Rate of Indirect Taxes	Economic Growth Rate
Growth Rate of Indirect Taxes	Pearson Correlation	1	.402
	Sig. (2-tailed)		.110
	N	17	17
Economic Growth Rate	Pearson Correlation	.402	1
	Sig. (2-tailed)	.110	
	N	17	17

With the objective of determining the relationship of indirect taxes with economic growth rate of India, correlation analysis was applied. The results as shown in Table 5, show that a positive relationship exists between the two variables ($r=.402$). But this relationship is not found to be significant ($p>0.05$). Therefore, the null hypothesis, H02: There is no significant relationship between the growth of indirect taxes and rate of economic growth, is accepted.

d. RELATIONSHIP BETWEEN GROWTH RATE OF TOTAL TAXES AND ECONOMIC GROWTH RATE

TABLE 6: RESULTS OF CORRELATION ANALYSIS ON GROWTH RATE OF INDIRECT TAXES AND ECONOMIC GROWTH RATE

		Growth Rate of Total Taxes	Economic Growth Rate
Growth Rate of Total Taxes	Pearson Correlation	1	.606**
	Sig. (2-tailed)		.010
	N	17	17
Economic Growth Rate	Pearson Correlation	.606**	1
	Sig. (2-tailed)	.010	
	N	17	17

** . Correlation is significant at the 0.01 level (2-tailed).

Table 6 shows results of correlation analysis applied to determine the relationship of growth rate of total taxes and economic growth rate of India. It can be

seen from the results that a significant positive relationship exists between growth rate of total taxes and economic growth rate of India. Therefore, the null hypothesis, H03: There is no significant relationship between the growth of total taxes and rate of economic growth, is rejected.

CONCLUSION

Taxation system of any country is a backbone of its growth and development. The government depends largely upon the taxes for the generation of revenue to meet its expenditure requirements. The reforms of 1991 put the Indian economy on the higher growth trajectory. A need is felt to reforms the country's archaic direct and indirect tax laws. The reforms were introduced in the indirect tax segment through introduction of Goods and Services Tax in 2017. The reforms of direct taxes are still under the process of development. The current study attempted to investigate the relationship of growth of direct, indirect and total taxes with the economic growth rate of India over the period 2001-02 to 2017-18. The study employed the correlation analysis to appraise the association between the variables. The results indicated that the growth of direct taxes and total taxes in India have significant positively relationship with economic growth of country. However, the relationship between growth rate of indirect taxes and economic growth rate was not found to be significant.

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