

A Study On Tax Collection In India And United States

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Abstract:

Tax is the major source of revenue to the government which plays a dominant role in the development of the country. Developing countries require higher revenues for the efficient functioning of national and sub-nationals. It is levied on income, services, commodities through direct and indirect taxes. In India, around 50% of the government revenue is collected through tax whereas around 25% of the revenue is collected through tax in the United States. This study is based on secondary data which examined the direct and indirect tax collection in India and the United States for the past 10 years.

Keywords: Direct Tax, Indirect Tax, Goods and Service Tax (GST), Gross Domestic Product (GDP), Inflation

INTRODUCTION

Taxation is a complex and multifaceted subject that plays a dominant role in the functioning of modern societies, which reflects individual financial well-being and the overall health of national economies. It acts in various phases which include revenue generation, promoting economic growth, reduction of income inequality, and addressing environmental issues. Globalization has paved the way for the implementation of Goods and Service taxes in many countries including India. India has a diverse tax system that has various types of taxes imposed by the state and central government. Tax in India comprises of two types: Direct

Tax – levies on the assessee and Indirect Tax – indirectly levies on the final consumer. Types of Direct Tax include Income tax which is imposed on the income earned by individuals and businesses. The United States tax system is a multifaceted system that has some principles. Higher-income individuals pay higher taxes and vice versa. The revenue generated from the tax is used for defense, healthcare, education, and infrastructure. Tax policies like tax incentives motivate individuals to promote investment, green energy adoption, etc. Global competitions play an effective role in framing United States tax policy. Taxes in the United States are of 11 types. Federal Income tax is collected on the income of individuals and businesses which is the largest source of revenue for the government collected by Internal Revenue Services. The progressive tax rate includes 10%,12%, 22%,24%, 32%, 35% and 37%. State income tax is imposed by the states or corporations in the U.S. on their own in which the rates vary from state to state. Social Security and Medicare Taxes are payroll taxes collected from employees and employers for funding social insurance programs. Sales taxes are collected at state and local levels on the sale of goods and services. Other taxes include property tax, corporate income tax, excise tax, estate and gift tax, customs duties and tariffs, local taxes, and other user fees.

REVIEW OF LITERATURE

Namrata Wagle and Manjiri Manerkar in their article (2022), have concluded that there has been a significant improvement in the overall tax collection and direct tax – GDP ratio of India over the last 19 years. because of the computerization of the Income Tax Department, formalization of the economy, and efficient administration, the contribution of direct taxes has improved over a period.

Chen Liuhong in his article (2022), has studied the tax system in China and concluded that standardizing tax collection and administration is of great significance to improve the tax collection and administration system and promote the formation of a fair and orderly market competition order. Under the background of urban-rural integration, it is urgent to

adjust the tax concept, reconstruct the scope of tax, scientifically design the tax rate, and simplify the tax collection and administration procedures to have a regulating effect on the unified market of urban and rural construction land in China. Kishor Prakash Bholane in his article (2020), has concluded that tax collection in India is dependent on indirect taxes. Corporate tax is the major contributor to the direct tax revenue collection. The government should try to increase the share of direct tax in total tax revenue collection and for that structural reforms should be brought by the government. There is a high need to consolidate and simplify the tax laws.

Yadawananda Neog and Achal Kumar Gaur in their article (2020), Income tax has a direct effect on individuals and their saving and investment behavior. On the other side, tax revenues should be placed in productive investments. With the spending, the government can promote inclusive growth, equality, and efficiency in the economy.

STATEMENT OF THE PROBLEM

The development of the country is dependent on revenue collection and its effective utilization. Tax is the major revenue that is utilized for the development of infrastructure, health care, education, etc that impacts the increase of GDP. This study analyses to find out the direct and indirect tax collected in India and the United States and its impact on the GDP and inflation.

OBJECTIVES OF THE STUDY

- To analyze the direct tax and indirect tax collected in India and the United States for the past 10 years.
- To study the relationship between Tax collection, GDP, and Inflation in India and the United States.

Hypothesis

1. There is no significant relationship between direct taxes, indirect taxes, inflation, and GDP in India.
2. There is no significant relationship between direct taxes, indirect taxes, inflation, and GDP in the United States.
3. There is no significant relationship between tax collection in India and the United States.

ANALYSIS AND INTERPRETATION

DIRECT TAX, INDIRECT TAX, GDP AND INFLATION IN INDIA

YEAR	Direct Taxes (Rs. In Cr)	Growth rate (%)	Indirect Taxes (Rs. In Cr)	Growth rate (%)	GDP	Growth rate (%)	Inflation	Growth rate (%)
2011-12	493987		392444		5.24		9.48	
2012-13	558989	13	474482	21	5.46	4.20	10.02	0.54
2013-14	638596	14	497060	5	6.39	17.03	6.67	-3.35
2014-15	695792	9	544772	10	7.41	15.96	4.91	-1.76
2015-16	741945	7	709825	30	8.00	7.96	4.95	0.04
2016-17	849713	15	861625	21	8.26	3.25	3.33	-1.62
2017-18	1002738	18	911653	6	6.80	-17.68	3.94	0.61
2018-19	1137718	13	937321	3	6.45	-5.15	3.73	-0.21
2019-20	1050681	-8	953513	2	3.74	-42.02	6.62	2.89
2020-21	947176	-10	1074810	13	-6.60	-276.47	5.13	-1.49
2021-22	1412422	49	1289662	20	8.68	231.52	6.7	1.57

The above table shows the revenue collected from direct and indirect taxes in India, GDP, inflation, and growth rates. Revenue from direct tax in India is increasing in India in a faster manner except in 2019-20 and 2020-21 as a result of COVID-19. Revenue from indirect tax was reduced during the year 2017-18 due to the implementation of Goods and Service Tax for which the tax filing relaxation has been enabled for the taxpayers in the years 2017-18 and 2018-19. Again, Indirect tax revenue has started increasing. The GDP growth rate in 2017-18 was reduced as GST was introduced and then it was continuously reduced followed by COVID. In the year 2021-22 after the recovery of the economy, the GDP has increased to around 231%. Inflation has been reduced since 2015-16 but after COVID-19 due to financial weakness and economic inability the price again rose which increased inflation. **T-Test: paired two samples for means in India**

Comparison	Result
Direct Tax and Indirect tax	0.949
GDP and Inflation	-0.06
Direct Tax and Inflation	-0.45

Indirect Tax and Inflation	-0.48
Direct Tax and GDP	.007
Indirect Tax and GDP	-0.2

The above table shows the results of the T-test: Paired two samples for means in India. The comparison of Direct Tax and Indirect Tax collection shows a result of 0.949 which indicates that there is a higher positive relationship between the collection of direct taxes and indirect taxes i.e., when the collection of direct tax increases the collection of indirect tax also increases and vice versa. The comparison of GDP and inflation in India shows the result of 0.06 which shows a slight inverse relationship between them which proves that an increase in GDP may decrease inflation. Direct tax and Indirect tax collection in India in comparison with inflation resulted in a negative relation of -0.45 and -0.48 that higher tax collection reduces the inflation rate. Direct tax and GDP comparison resulted in a minimum positive relation so we can conclude that direct tax collection may affect an increase in GDP in a smaller manner. Indirect tax and GDP show a negative relationship in a smaller value of -0.2 which indicates indirect tax collection cannot show a positive impact on GDP.

DIRECT TAX, INDIRECT TAX, GDP, AND INFLATION IN THE UNITED STATES

YEAR	Direct Taxes (USD)	Growth rate (%)	Indirect Taxes (USD)	Growth rate (%)	GDP	Growth rate (%)	Inflation	Growth rate (%)
2011-12	3030962		675727		2.28		2.07	
2012-13	3184258	5	702975	4	1.84	-19	1.46	-29
2013-14	3551300	12	740452	5	2.29	24	1.62	11
2014-15	3768560	6	774024	5	2.71	18	.12	-93
2015-16	3981519	6	792162	2	1.67	-38	1.26	950
2016-17	4029899	1	807734	2	2.24	34	2.13	69
2017-18	4384835	9	838627	4	2.95	32	2.44	15
2018-19	4199815	-4	916144	9	2.29	-22	1.81	-26
2019-20	4443338	6	941692	3	-2.77	-221	1.23	-32
2020-21	4453487	0.02	926730	-2	5.95	315	4.7	282
2021-22	5099029	14	1013226	9	2.06	-65	8	70

The above table shows the revenue collected from direct and indirect taxes in the United States, GDP, inflation, and growth rates. Revenue from direct tax in the United States is increasing at a gradual growth rate except in 2018-19 due to the tax cuts majorly the corporate tax from 35% to 21% which lowered the tax growth to -4%. Again, COVID-19 also had a massive impact on the direct and indirect tax revenue collection in the year 2020-21. GDP has fallen in the United States due to the tax rate cuts at a very high rate of -221%.

Inflation has increased in the United States in the years 2020-21 and 2021-22 as the impact of COVID-19 is in the recent recovery process.

T-Test: paired two samples for means in the United States

Comparison	Result
Direct Tax and Indirect tax	0.95
GDP and Inflation	0.30
Direct Tax and Inflation	-0.02
Indirect Tax and Inflation	0.63
Direct Tax and GDP	-0.02
Indirect Tax and GDP	-0.08

The above table shows the results of the T-test: Paired two samples for means in the United States. The comparison of Direct Tax and Indirect Tax collection shows a result of 0.95 which indicates that there is a higher positive relationship between the collection of direct taxes and indirect taxes in India. The comparison of GDP and inflation in the United States shows the result of -0.30 which shows a positive relationship between them which proves that an increase in GDP may increase inflation. Direct tax and Indirect tax collection in the United States in comparison with inflation resulted in a negative relation of -0.02 and a positive relation of 0.63 that proves higher direct tax collection will reduce inflation and higher indirect tax will increase inflation. Direct tax and Indirect tax in comparison with GDP show negative values of -0.02 and -0.08 which indicates an increase in tax collection results in a decrease in GDP.

TAX-TO-GDP RATIO IN INDIA AND UNITED STATES

X	INDIA			UNITED STATES		
Year	Tax Collected (Rs. In crore)	GDP (Rs. In crore)	Tax to GDP ratio	Tax Collected (in US Dollars)	GDP	Tax to GDP ratio
2011-12	886431	9009722	0.09	3706689	16254000	0.22
2012-13	1033471	10113281	0.10	3887233	16843200	0.23
2013-14	1135656	11355073	0.10	4291752	17550700	0.24
2014-15	1240564	12541208	0.09	4542584	18206000	0.24
2015-16	1451770	13567192	0.10	4773681	18695100	0.25
2016-17	1711338	15362386	0.11	4837633	19477300	0.24
2017-18	1914391	17098304	0.11	5223462	20533100	0.25
2018-19	2075039	18886957	0.10	5115959	21381000	0.23
2019-20	2004194	20074856	0.09	5385030	21060500	0.25
2020-21	2021986	19800914	0.10	5380217	23315100	0.23
2021-22	2702084	23664637	0.11	6112255	25461300	0.24

The above table indicates the tax-to-GDP ratio in India and the United States. In India, the tax-to-GDP ratio stood between 9% to 11% for the past 10 years. In the United States, the Tax to GDP ratio stood between 22% to 25% for the past 10 years. India's major source of revenue i.e. direct and indirect taxes contribute to around 50% of total revenue whereas in the United States, the revenue from taxes was around 25% of total revenue. Though tax collection is more in India compared to the United States the Tax to GDP ratio is less than that.

TAX IN INDIA AND UNITED STATES

Multiple R – Regression Statistics	P Value
0.94	0.001

The above table shows that there has been a direct relationship between the tax collection in India and the United States for the last 10 years. The growth rate for tax collection in India and the United States stood positive.

CONCLUSION

The widespread nature of indirect taxes ensures a stable revenue stream. The overall tax revenues allow government spending on public finance, infrastructure facilities, social welfare programs, etc., In this paper we conclude that the US government collects less tax compared to the Indian government but the US government spends more on public welfare, and infrastructure improvement, this is the main reason for to hike in the GDP rate. On the other side developing countries like India face the major problem of fulfilling the basic need for public, basic amenities and also considering Indian population size, high poverty rate, infrastructure challenges, education literacy rate, health and sanitation, agricultural dominance, global economic factors, industrialization, urbanization are the major reasons for lower tax to GDP in India. This challenging factor may be filled in the future it gives a dramatic change in the GDP rate.

REFERENCE

1. William G.Gale, Andrew A. Samwick (2017) Effects of Income Tax Changes on Economic growth- Economic Studies, April 2017. In the book: The Economics of Tax Policy (pp.13-39) DOI: 10.1093/acprof:oso /9780190619725.003.0002
2. Yadawananda Neog and Achal Kumar Gaur(2020) Tax Structure and Economic Growth: A Study of Selected Indian States, Journal of Economic Structures <https://doi.org/10.1186/s40008-020-00215-3>
3. Dr. Kishor P. Bholane (2020) Analytical Study of Tax Revenue Collection in India, February 2020 Our Heritage ISSN(online): 0414-9030 Vol-68 Special Issue-7
4. Chen Linhong (2022) Research on Tax Collection and Administration Application and Legal Issues based on Big Data Analysis, Hindawi, Journal of Sensors, Volume 2022, Article ID 6578964, 11 pages <https://doi.org/10.1155/2022/6578964>
5. Namrata wagle, Manjiri Manerkar (2022). Assessment of Direct Tax Collection in India - Research Square, December 2022. DOI: <https://doi.org/10.21203/rs.3.rs-2148335/v1>
6. Vinod Surenderkumar Chandwani and Sharddha M. Bhome .A study on Tax Revenue: A Comparative study Direct and Indirect Taxes levied in India. IJRCMEAS ISSN 2454-6593