

Project Report

ASSESSING GROWTH DIVIDEND: ESTABLISHING A LINKAGE BETWEEN GDP GROWTH AND INDIRECT TAX TO GDP RATIO

Project Group I

Authors

Ramisetti V. Balaram

Pandurang K. Raut,

Mahaveer Prasad Meena

Prabhat Kamal Rameshwaram,

Abdur Rauf Naik

R. L. Ramesh Ram

MCTP Phase II Group II

NACEN, Faridabad

Mentor

Shri. V. S. Chauhan,

Advisor, Expenditure Management Commission,

New Delhi.

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I. Introduction:

What is tax to GDP ratio?

The ratio of total government tax collection to a country's Gross Domestic Product (GDP) is called the tax to GDP ratio. A tax to GDP ratio with an economic measurement that compares the amount of taxes collected by a government to the amount of income that country receives from its product. In other words, 'Tax to GDP ratio' over the years indicates how much tax collection as a percentage of GDP has gone up, for a given country. When tax collected grows slower than the GDP, the ratio drops. This income is measured in terms of Gross Domestic Product i.e. GDP which is the sum of all the products and the goods sold personal and government investment and net export.

Though there are several serious issues confronting the fiscal scenario, when viewed through the Tax/GDP ratio, a great deal of both quantitative and qualitative progress has been made over the years. It's key to growth dividend as it helps to raising resources for financing public investment, producing public goods of adequate quality and quantity, and supporting enhanced spending on social programmes in areas such as education and health.

In India during entire run up to 1990s, the public debt increased, as did the fiscal deficit causing a balance of payments crisis of 1991 that led to economic liberalisation. The reform of the tax system commenced. The fiscal deficit was brought under control. When the deficit and debt situation again threatened to go out of control in the early 2000s, fiscal discipline legalisations were instituted. The deficit was brought under control and by 2007-08 a benign macro-fiscal situation with high growth and moderate inflation prevailed. During the global financial crisis, fiscal policy responded with counter-cyclical measures including tax cuts.

This paper deals with the poor Tax to GDP ratio of India and the reasons for the fall especially after the economic down turn from 2007-08

II. Objectives of the paper:

This paper has twin objectives.

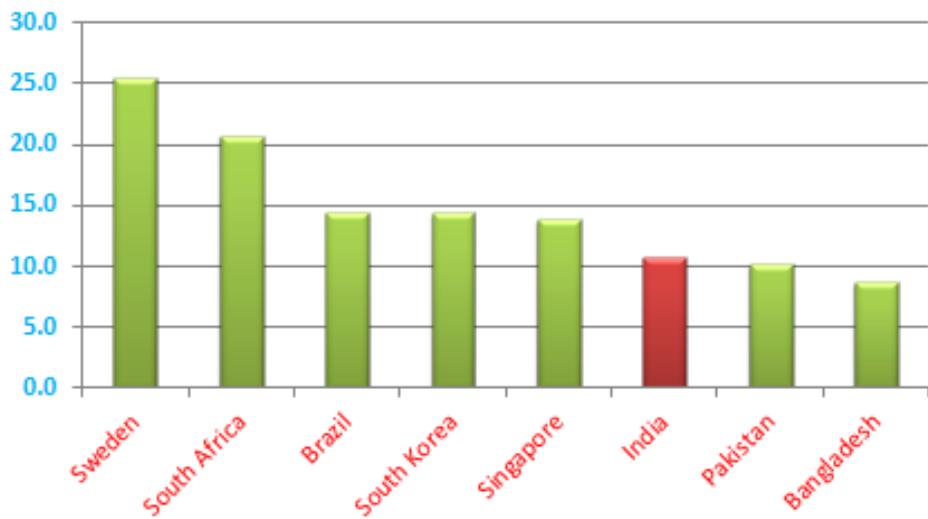
- I. Firstly, to account for poor tax to GDP ratio in India vis-à-vis several other global emerging markets even after launching economic reforms.
- II. Secondly, due to the economic crisis in 2007 there was a downtown in all macro parameters. After the fiscal stimulus, even though GDP growth picked up from 2008-09, there is a fall in the tax collection. This paper also intends to study the reasons for the fall in Tax to GDP ratio even though GDP growth picked up and the tax rates were restored slowly.

III. Global Trends

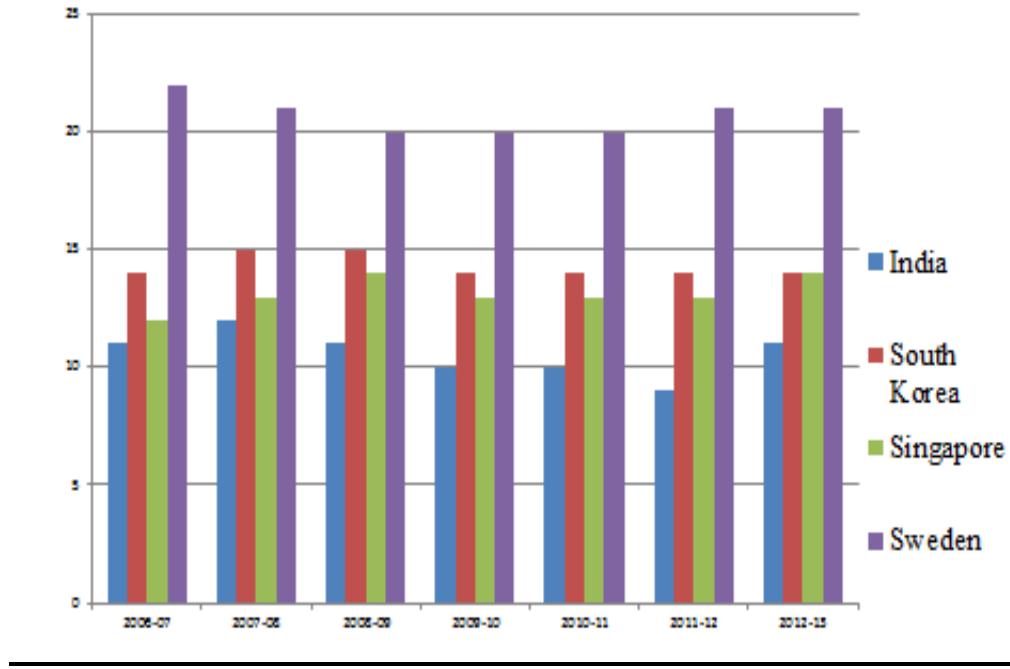
India's Tax to GDP ratio remained around 15% which is lower than similarly placed developing countries leave alone, the Tax to GDP ratio of developed countries. This poor Tax to GDP ratio has implications for high fiscal deficit and lower allocation of planned expenditure.

Total Tax Revenue as % of GDP

Year 2012-13



Tax Revenue % of GDP of Selected Countries



IV. Developing countries:

A study of 50 developing countries for a time horizon of 1995 to 2009 based on the results obtained from the regression analysis suggest that among the explanatory variables, share of agriculture in GDP, PPP adjusted per capita GDP, international trade as percentile of GDP and size of shadow economy as percentile of GDP have significant impact on revenue potential of the developing countries (Haque, 2015). Thus the sectoral distribution of income creates a direct effect on taxable capacity apart from that of the level of overall economic development and the size of external trade sector.

Chelliah (1971) also hypothesized that the average level of income, the degree of openness of the economy, and the sectoral composition of GDP would have significant effect on the taxable capacity of the country.

Cross country analysis

In a study using a cross-country panel regression analysis of 12 East European countries revealed PPP-adjusted GDP per capita, quality of institution, rate of consumer price inflation,

the share of agriculture in GDP, the ratio of exports plus imports to GDP, rate of the urban population in a country's total population, and measure of shadow economic activity as explanatory variables (Davoodi and Gregorian, 2007).

Tax effort raking for 49 developing countries (1995-2009)

Country	Tax Effort Index	Ave. Tax GDP Ratio	Tax Effort Ranking	Country	Tax Effort Index	Ave. Tax GDP Ratio	Tax Effort Ranking
Armenia	1.57	15.0	5	Mali	1.42	14.3	9
Bangladesh	0.62	7.9	44	Moldova	0.82	16.6	40
Benin	1.99	16.0	2	Mongolia	1.02	18.4	25
Bolivia	1.37	13.8	11	Morocco	1.74	22.6	4
Burkina Faso	1.34	11.8	12	Nepal	0.91	9.2	35
Cambodia	0.48	7.6	47	Nicaragua	1.01	15.1	26
Cameroon	0.89	10.3	36	Pakistan	1.13	11.0	18
China	0.56	7.5	45	Papua New Guinea	1.38	23.4	10
Congo, Rep.	0.37	8.6	49	Paraguay	0.79	11.4	42
Cote d'Ivoire	1.01	15.6	28	Philippines	0.84	14.2	39
Egypt	1.47	15.1	8	Senegal	0.96	15.3	31
El Salvador	1.23	12.4	15	Sri Lanka	1.01	14.6	29
Georgia	1.14	11.9	16	Sudan	0.95	6.3	32
Ghana	1.33	16.6	13	Swaziland	1.01	25.5	27
Guatemala	1.05	10.5	23	Syrian Arab Rep.	1.54	16.7	7
Honduras	0.80	15.0	41	Tajikistan	0.42	8.6	48
India	0.85	9.6	38	Thailand	0.99	15.3	30
Indonesia	0.92	13.2	33	Turkmenistan	1.13	20.4	17
Jamaica	1.84	24.5	3	Uganda	1.08	11.4	20
Jordan	0.87	19.8	37	Ukraine	1.06	15.0	22
Kenya	1.32	17.4	14	Uzbekistan	2.47	26.7	1
Kyrgyz Rep.	1.02	14.2	24	Vietnam	0.91	20.2	34
Lao PDR	1.08	9.7	21	Yemen, Rep.	0.56	10.5	46
Lesotho	1.55	46.3	6	Zambia	1.11	17.5	19
Madagascar	0.71	10.1	43				

(Source: Davoodi and Gregorian, 2007)

According to the ranking of the sample countries, Uzbekistan exhibits the highest revenue efforts, while Congo Republic displays the lowest performance in revenue performance. Uzbekistan is also achieved comparatively very high average tax to GDP ratio. Generally, a country with high tax to GDP ratio earns better tax effort ranking. However, there are many

exceptions. Jordan, with relatively high tax to GDP ratio is ranked 37nd in the tax effort ranking. Similarly, countries like Vietnam, Swaziland, Ghana with relatively high average tax to GDP ratio are underperformers in terms of tax effort measures. While, Lao PDR with comparatively a low tax to GDP ratio managed to score above average tax effort index 1.02. Congo Republic, Tajikistan, Cambodia, Yemen Republic, China, Bangladesh are poor performers both in terms of average tax to GDP ratio and tax effort index.

South Asia

South Asian countries even in the post reform period have managed only limited and sporadic success in mobilizing larger tax revenue. Tax-to-GDP ratios in most countries in the region remain below cross country averages and are considered inadequate to meet their financing needs. Underperformance in tax revenue generation does not seem be on account of tax policy reforms. South Asian countries have undertaken considerable reforms in the last decade, and their tax structures have converged with the rest of the world. But they have been less successful in widening their tax base, in strengthening tax administration, and in improving compliance (Poonam Gupta, 2015). Additionally, structural factors such as large share of agriculture, low literacy, and large informal sectors have hindered tax collection. Further efforts in the region to increase tax revenue ought to be wider in scope than before and should extend to the sub national and local governments. It is advocated that the focus should be on simplifying tax systems, strengthening tax administration, and broadening the tax base. It is suggested that these efforts should be situated within a wider reform program that aims to strengthen governance, improve business environment and help formalize their economies.

V. Indian Context:

The total tax revenue of the central government with respect to GDP shows that it was hovering around 10%.

Year	Centre			States			Total		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
1950-60	1.57	2.77	4.33	0.65	1.69	2.34	2.22	4.46	6.68
1961-70	1.93	4.49	6.42	0.44	2.48	2.92	2.37	6.97	9.34
1971-80	2.21	6.21	8.42	0.26	3.71	3.97	2.47	9.91	12.39
1981-90	1.96	7.77	9.74	0.20	4.79	4.99	2.17	12.56	14.73
1991-2000	2.64	6.21	8.85	0.16	4.97	5.13	2.80	11.18	13.98
2001-08	4.43	5.46	9.89	0.15	5.57	5.72	4.58	11.03	15.61
2007-08	6.26	5.63	11.89	0.13	5.43	5.56	6.39	11.06	17.45
2008-09	5.68	5.07	10.75	0.14	5.37	5.51	5.83	10.43	16.26
2009-10	5.67	3.97	9.64	0.15	5.66	5.81	5.82	9.63	15.45
2000-11	5.63	4.55	10.19	0.16	5.99	6.15	5.79	10.55	16.34
2011-12	5.42	4.45	9.87	0.15	6.28	6.43	5.57	10.73	16.29
2012-13	5.48	4.77	10.25	0.14	6.33	6.47	5.62	11.10	16.72
2013-14	5.54	4.42	9.96	0.14	6.44	6.59	5.69	10.87	16.55
2014-15	5.53	4.36	9.89	0.14	6.49	6.64	5.67	10.85	16.53
2008-2015	5.55	4.50	10.05	0.15	6.18	6.33	5.69	10.68	16.37

Note: The data for 2014-15 refer to revised estimate for the Union government and budget estimate for the States.

Source: Public Finance Statistics, Ministry of Finance, Government of India (Various Years. For 2013-14 and 2014-15, Budget documents of the Union government and article on State Finances: A Study of Budgets 2014-15, Reserve Bank of India.

The data on the parameters below and the analysis following them clearly reveals the significant trends in this regard:

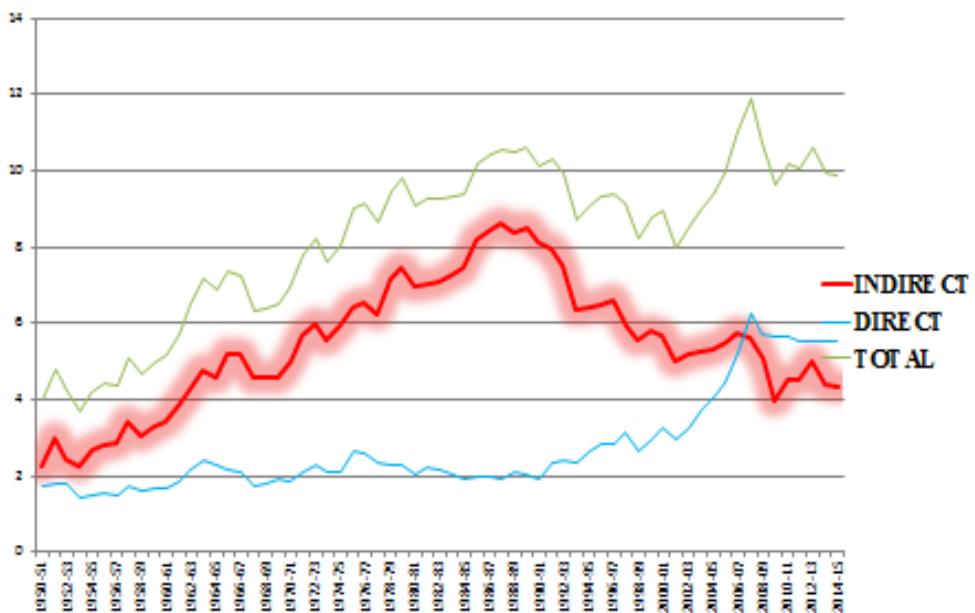
- Tax GDP trend
- Direct Tax GDP trend
- State Tax GDP trend
- Indirect Tax GDP trend

As seen from the data below, the direct Tax to GDP ratio has moved from 2-3% of GDP in 1980s and 1990s to 5-6% in 2000. This growth in direct tax to GDP ratio is in tune with any developing country moving towards developed economy. However, the analysis of indirect tax to GDP ratio shows a different picture. The indirect tax to GDP ratio has moved from highs of 8-9% in 90s to 4-5% in the late 2000. The initial fall during 90s is due to domestic rate cut in indirect tax after liberalization which was started in 1991. Improvements started showing indirect tax to GDP ratio from 2005-06 which was affected in 2008-09 due to tax cut to stimulate the economy.

Total Tax to GDP Ratio and the Indirect Tax to GDP Ratio



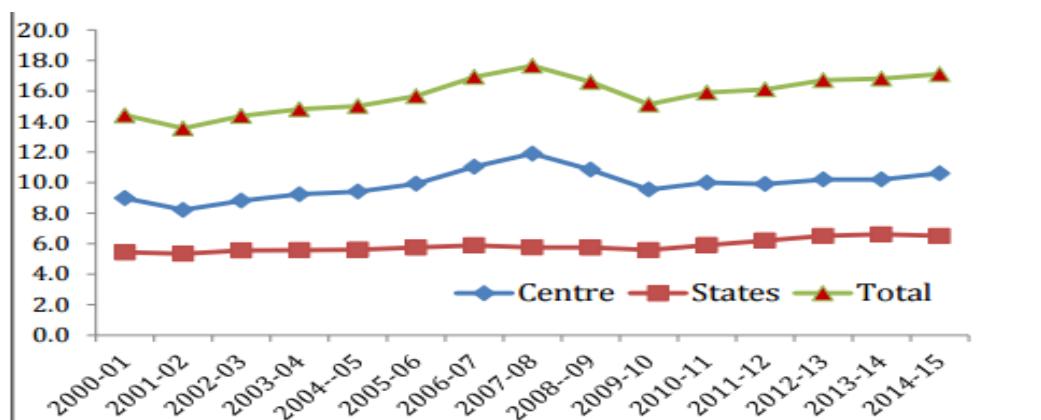
Total Central Tax to GDP Ratio of India



Tax to GDP Ratio of States



Percentage of Tax to GDP in India 2000-2015



The trends in the level and composition of Union taxes after 1991-92 presented in the above tables show three distinct phases. The first phase from 1991-92 to 2001-02 was marked by a sharp decline in revenues relative to GDP mainly due to the decline in the revenues from customs and excise duties. During the period, the Union government tax revenues relative to GDP declined by over two percentage points as mentioned above mainly on account of the decline in the indirect taxes by 2.6 percentage points from 7.6 per cent in 1991-92 to 5 per cent in 2001-02 and the average growth rate of tax revenues was just about 12.7 per cent. This was mainly due to the decline in the revenues from both customs and excise duties as part of restructuring effort encompassing the tariff regime and excise reforms.

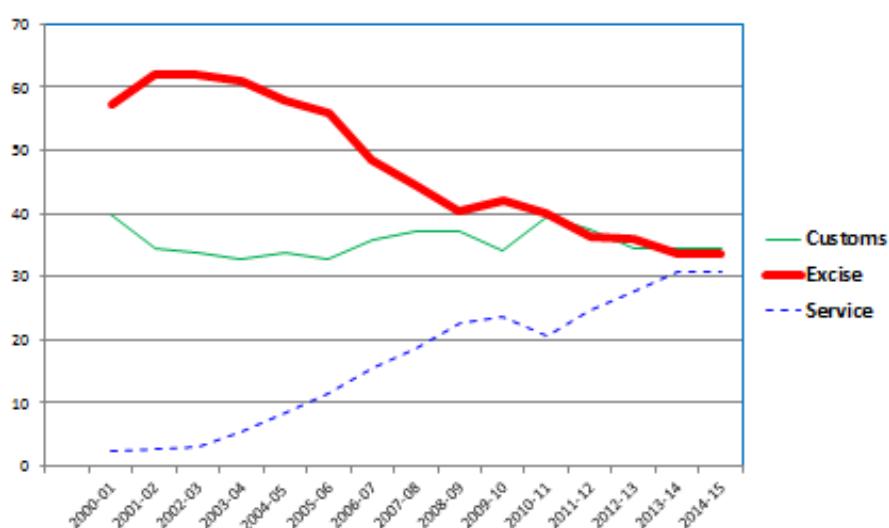
The indirect tax to GDP ratio from 2008-09 started falling and never recovered till now. This paper intends to especially analyze the reasons for the above non recovery of indirect tax to GDP ratio even though the indirect tax ratio was almost brought to pre 2008-09 levels.

VI. Trends in Indirect Taxes: Customs, Excise & Service Tax

Revenue Collections by Indirect Taxes in India (2000-2001 to 2014-2015)				
% Share in Total Indirect Taxes				
Year	Customs	Excise	Service	
2000-01	39.7	57.2	2.2	
2001-02	34.3	61.8	2.8	
2002-03	33.8	62.1	3.1	
2003-04	32.7	61.1	5.3	
2004-05	33.7	58	8.3	
2005-06	32.6	55.8	11.6	
2006-07	35.8	48.6	15.6	
2007-08	37.3	44.3	18.4	
2008-09	37.1	40.3	22.6	
2009-10	34	42.2	23.8	
2010-11	39.4	40.1	20.6	
2011-12	37.5	36.3	24.6	
2012-13	34.4	36.1	27.6	
2013-14	34.4	33.7	30.8	
2014-15	34.4	33.7	30.7	

Year	Customs	Excise	Service	Total
2014-15	201819	206356	215973	624148

**Revenue Collections by Indirect Taxes in India
% Share in Total Indirect Taxes**



The analysis of the data of the indirect tax to GDP ratio from 2000-01 to 2014-15 clearly shows that the excise duty contribution to tax GDP ratio has fallen from above 60% to less than 35%. On the other hand the Service Tax contribution has moved from nil to more than 30% by 2014-15. The custom duty part contribution in indirect tax to GDP ratio remained on the average around 35%. In the case of excise duty there is a fall in the contribution from 2005-06 to 2007-08 and a rise in 2007-08. However, there is continuous fall in excise duty contribution from 2008-09 onwards and a similar feature is seen in the case of the Customs duty contribution. As regards the service tax contribution to GDP ratio there is a consistent growth.

VII. Factors contributing to low Tax – GDP Ratio

The most important factor for the low tax GDP ratio is considered to be narrow tax base. There are a variety of reasons making the tax bases narrow: the fragmented Constitutional assignment, wide ranging exemptions, concessions and deductions, complications and ambiguities in the tax laws due to multiplicity of objectives assigned to tax policy resulting in large and increasing amounts held in disputes, mechanisms of the multinational resulting in base erosion and profit shifting, organizational shortcomings and the poor capacity of tax administration including the information system to effectively administer and enforce the taxes.

The following are the important factors that are adversely impacting Tax – GDP ratio:

1. Structural factors
 - a. Constitutional assignment of taxes
 - b. High contribution of primary sector: Agriculture
 - c. Large presence of informal sector
2. Low per capita income
3. Large quantum of exemptions: SMEs
4. Shadow economy
5. Non GST regime: Issues

The above issues have been dealt individually in the following discussion.

1. Structural Features

The fragmented Constitutional assignment of tax on agricultural and non-agricultural incomes to Union and State governments makes it difficult to levy a comprehensive income tax and opens up an easy avenue for avoidance and evasion (Govinda Rao, 2015). Multiple objectives imposed on the tax system result in a plethora of exemptions and preferences causing significant loss of revenue and creating unintended distortions. The government tends to tax those sectors where it can raise revenues easily in ad hoc manner and this causes additional distortions. In general, there is reluctance to carry out tax reforms. The ‘tyranny of status quo’ arises from the fact that those who gain from the reforms tend to be ungrateful and those who lose tend to be vengeful (Johnson and Myles, 2011). That explains why the reforms are slow and are often ineffective.

(A) Constitutional Dimension

The legal separation of tax powers in the Constitution was done to minimize overlapping with a view to avoid disharmony in the tax system. However, this legal separation cannot avoid economic inter-dependence of the tax bases. The separation of tax on incomes from agricultural and non-agricultural sources has provided an avenue evasion and avoidance of the tax on non-agricultural incomes. Similarly, excise duty on manufactured products leviable by the Union government is nothing but a sales tax at the first point of sale and this has created significant overlap in the consumption tax system in the country. In assigning the tax on sale or purchase of goods to the States, the Constitution has favoured revenue autonomy to the states over fiscal disharmony. However, the states do not have the power to levy the tax on services and therefore, it is not possible to evolve a comprehensive GST unless the Constitution is amended.

(B) Composition of Economy: Agriculture

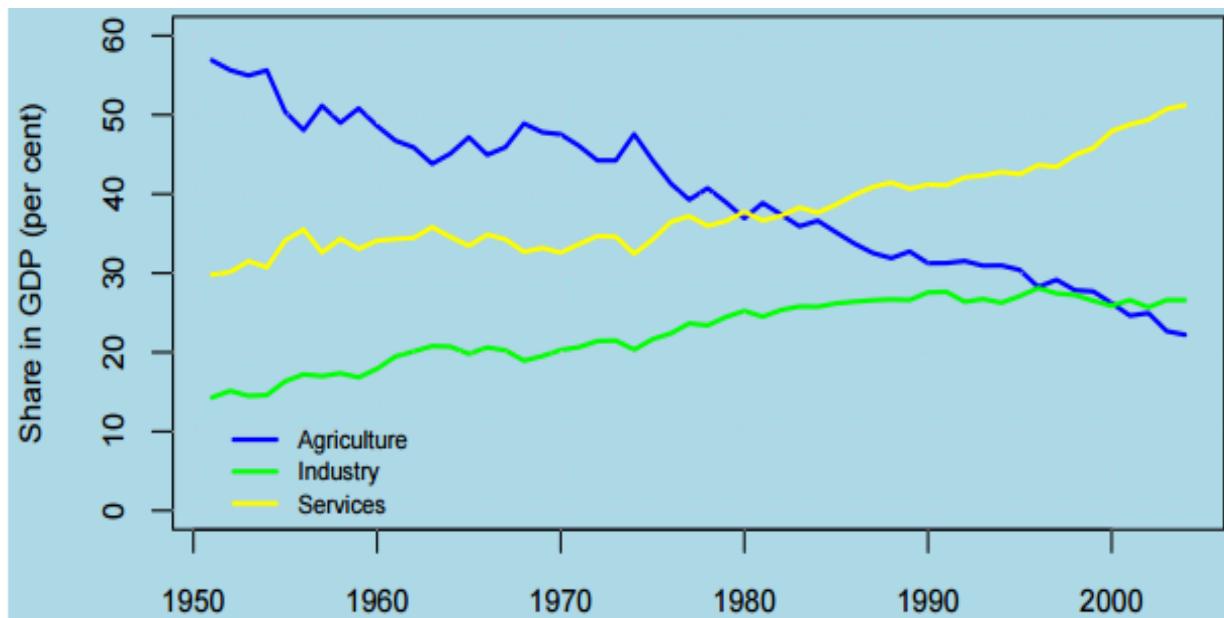
Almost all of those studies conclude that share of agriculture in GDP has statistically significant negative impact on tax effort. Agriculture sector is generally highly subsidized, taxed at a very low rate. In many developing countries this sector is exempt of central government taxation. In most of the developing countries, agriculture sector share about quarter of GDP, while contribute very negligible amount of tax revenue.

A lack of policy initiatives has also kept the tax take low." This includes certain tax exemptions on agriculture related activity and until the mid-nineties, on most services as well. The tax net has been progressively expanded to include a greater number of services

each year, and service tax revenue has grown the fastest of all revenue sources. Yet, service taxes constitute merely 5 percent of total general government revenues, although they comprise about 60 percent of GDP," said Moody's (2015).

Compositions of GDP and Agriculture

Evolving structure of GDP



The share of agriculture in GDP rose from 43.8% of GDP in 1963 to 47.6% of GDP in 1974. From that point onwards, agriculture has steadily become a smaller part of GDP. The share of industry rose till the mid 1990s. From the mid 1980s onwards, the largest component of GDP has been services.

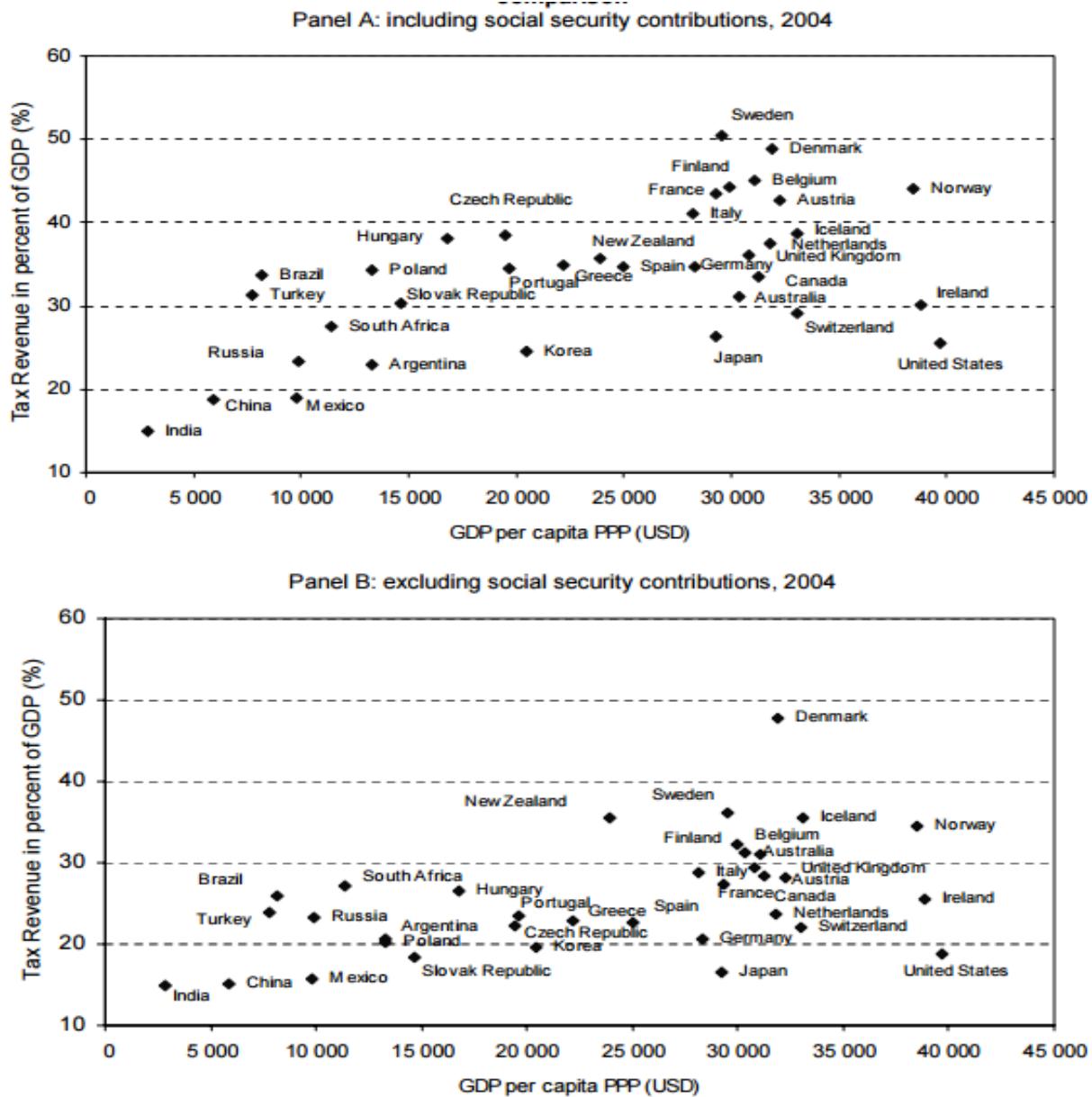
C. Informal Sector

The latest report of the National Commission on the study of Informal enterprises quantifies the presence of informal sector at about 50% of the economy and labour force deployment. Substantial part of this does not get captured by central indirect taxation. With weaker institutional quality tax administrations are unable to reach the informal sector and therefore, a huge number of potential taxpayers stay outside the reach of the tax administrations. Many developing countries widely use various methods of presumptive taxation mainly to reach small taxpayers.

2. Per Capita Income

Structural factors such as low per capita income have a tendency to keep tax collections low. Low average incomes and a high poverty rate result in a lower proportion of general government's revenue.

The relationship between the ratio of tax to GDP and per capita incomes: an international Comparison (Herd and Leibfritz, 2008).



Source: OECD Revenue Statistics

An additional important factor in India's case is that the per capita Income in year 2000 which was at 578 in USD constant terms has by 2010 grown to USD 1034 at a growth rate of 5.99%. However the Tax GDP rate in the corresponding period moved from 14.2% to 15.1% growth 0.09.

However writers in the vein of **Tanzi** in his study used a sample of 83 developing countries over the period 1978-88, demonstrated that relationship between tax share to GDP and per capita income is weak. He also finds that import share and debt share are important determinant of tax share. Despite impressive gains in per capita income in the region, tax-to-GDP ratios have not seen a strong momentum. Even as per capita income (in constant USD) grew at an average annual rate of 4.4 percent in South Asian countries in the last decade, the average annual increase in tax-to-GDP ratio has been a meagre 0.14 percentage points. Expectedly, these regional averages mask important heterogeneity within the region.

3. Small and Medium Enterprises

A large proportion of economic activity is generated by small and medium enterprises (SMEs). Although these enterprises have enjoyed strong profitability growth over the past decade, the government has not captured their earnings in tax revenues due to a variety of exemptions and compliance issues. It is estimated that, overall, these exemptions lower the excise tax yield by one-quarter (1% of GDP).

4. Shadow Economy

In various studies size of shadow economy is considered as a major determinant of low tax effort. The explanatory variable shadow economy is also proxy for low tax moral, tax evasion, and poor institutional quality. Large size of shadow economy is a reality for almost every developing country. It seems that taxation authorities of developing countries would be benefitted with improved revenue performance if they effectively put some more attention on taxing the shadow economy.

5. Non-GST Regime: Issues

- a. **Multiplicity and dispersion of rates:** Indirect taxation in India is typified by a maze of different rates, which are the result of numerous ad hoc modifications to tax legislation.
- b. **Fragmented and overlapping bases:** The base of both taxes is also fragmented on account of the large number of exemptions and concessions in union excise and state sales tax laws. The result is a loss of revenue (forcing the government to impose very high rates on non-exempt goods), transparency and equity. This fragmentation, together with the complex rate structure, also leads to an increase in the scope and incentive for evasion as well as for classification disputes and litigation, both of which represent a substantial drain on administrative resources in the case of both the union excise and state sales tax systems.
- c. **Taxation of inputs:** The evolution of the tax structure in India has led to the taxation, under both the sales tax and the central excise, not just of final goods but of inputs into the production process. This has led to cascading. Both central and state authorities provide some tax relief on inputs. However there is no seamless credit flow in all indirect taxes.
- d. **Distortions in domestic taxation of trade:** Trade across state borders is often subject to both the centrally regulated central sales tax (CST) and the local sales tax of the importing state. This gives a bias against interstate trade and prevents India from being a single market. In addition, it has given firms an incentive to integrate vertically across state boundaries as intra firm transactions across state boundaries (as opposed to interstate sales) are not taxed.

VIII. The Paradox:

After the fiscal stimulus following the global crisis in 2007, though GDP growth picked up from 2008-09, there is a fall in the tax collection which lead to severe fiscal deficit. This paper intends to explain this paradox of fall in the Tax to GDP ratio even though GDP growth picked up from 2010-11 and the tax rates were restored slowly.

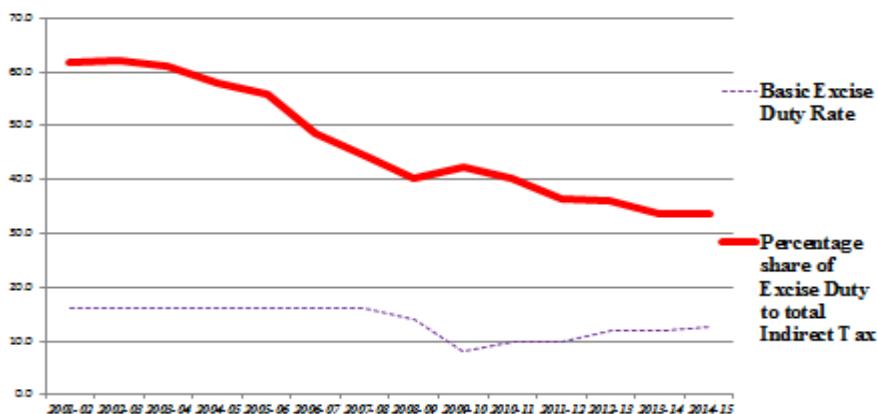
The following factors came up as significant in this analysis

- Rationalization and plateau in the excise duty rate acting as a limitation on the contribution of the total Excise duties
- Stickiness of the tax regime and low compliance level
- Lowering contribution of customs
- Non re-imposition of the duty on petroleum imports which was scrapped in 2011, when oil prices were high
- Service tax contribution still keeping up the overall trend in spite of lower excise and customs collection
- Dip in the Industry growth rate matching the tax GDP variation trends
- Overall performance of the economy as indicated by the decreasing export performance
- Lower domestic Savings and Investments
- Steep climb of the revenue foregone on account incentives from fiscal stimulus
- Mounting arrears of revenue
- MNCs – BEPS (Base Erosion and Profit Shifting)

In the following pages an attempt has been made to explain the above stated paradox with the help of data.

Excise

COMPARISON OF THE BASIC EXCISE DUTY RATE VIS-I-VIS PERCENTAGE SHARE OF THE EXCISE DUTY TO THE TOTAL INDIRECT TAX



The analysis of Union taxes shows that the revenue from Union excise duties has been declining over the years. The revenue from the tax relative to GDP has declined steadily from 4.2 per cent in 1990-91 to 1.5 per cent in 2014-15. Main reason for falling revenue in the last seven years has been Excise. In the seven years by more than one per cent of GDP, from 2.56 per cent of GDP to 1.47 per cent. An important reason for this is that the main excise rate in 2007-08 was 16 per cent, whereas this past year it has been 12 per cent (plus surcharges).

The rate was dropped in the 2008 Budget from 16 per cent to 14 per cent, and then to 10 per cent when the financial crisis hit later that year. These steps have been retraced only a part of the way to 12 per cent, and to 12.5 per cent for next year (with no surcharge). Since the economy is on the path to recovery, sooner rather than later the rate should be taken back to the 16 per cent that used to exist. There is a notion of stickiness of the tax regime that comes into play, it is proposed by some economists that if the taxes are lowered even after resorting them the buoyancy will not be in tune with the enhancement.

Commodity-composition of the revenues from the tax shows that overwhelming proportion of the tax is derived from petroleum products and basic metals. In 1990-91, the revenue from petroleum products constituted just about 13.9 per cent of the total and it increased steadily to 41 per cent in 2003-04, but showed a decline thereafter to 26 per cent in 2009-10. The decline in the ratio in 2009-10 after reaching 41 per cent in 2003-04 was mainly due to changing over to specific rates of tax in the wake of high international prices after 2008-09. Similarly, the

revenue from basic metals which was just about 9.6 per cent in 1991-92 constituted 19 per cent in 2009-10. In contrast, the shares of revenue from textiles, minerals, chemicals and electrical goods showed a decline by varying percentage points, in part, reflecting the changing pattern of industrialization in the economy. The important point is that as the Union Excise duty is levied on manufactured products and the revenue productivity will depend on the pattern of industrialization. In order to improve the revenue productivity, it is important to embark on the reform to broaden the base of excise duty and this can be accomplished if the GST is properly designed.

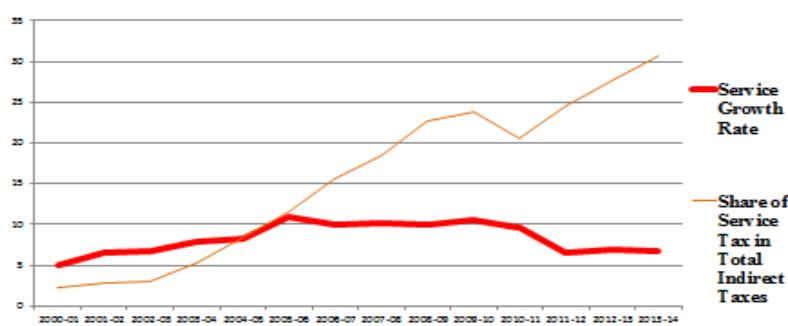
Customs

An important reason for the drop in the tax-GDP ratio is the drop in customs revenue, from 2.02 per cent of GDP to 1.50 per cent, although the “peak” tariff rate has been unchanged since it was dropped to 10 per cent in the 2007 Budget. Some other rates may have gone up and down, but not by enough to reduce customs revenue from 10 per cent of imports to seven per cent. Here it is pertinent to note that the duty on petroleum imports was scrapped in 2011, when oil prices were high, but has not yet been re-imposed. In other words, revenue has been given up.

Service Tax Growth Rate

Service tax has been the only bright spot that's making up the revenue. The potential also in terms of the share in GDP and ominous presence is huge.

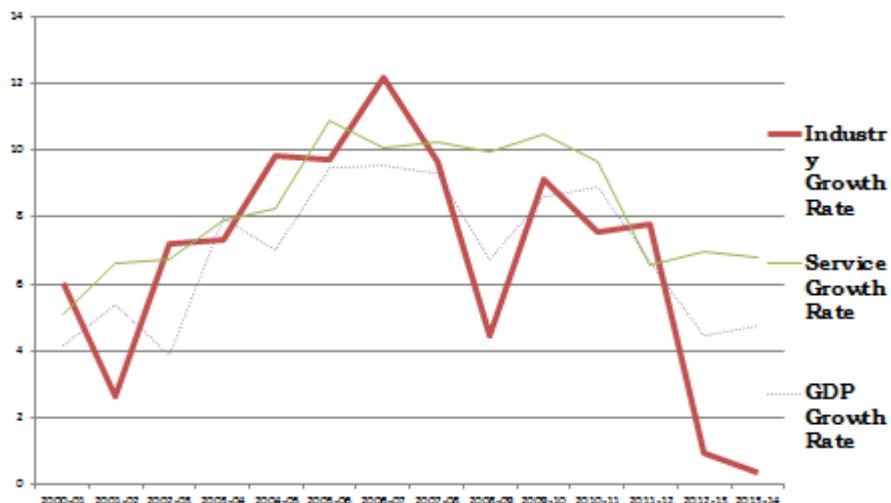
**COMPARISON OF THE SERVICE GROWTH RATE
AND THE SHARE OF SERVICE TAX IN THE TOTAL
INDIRECT TAX**



Industry Growth:

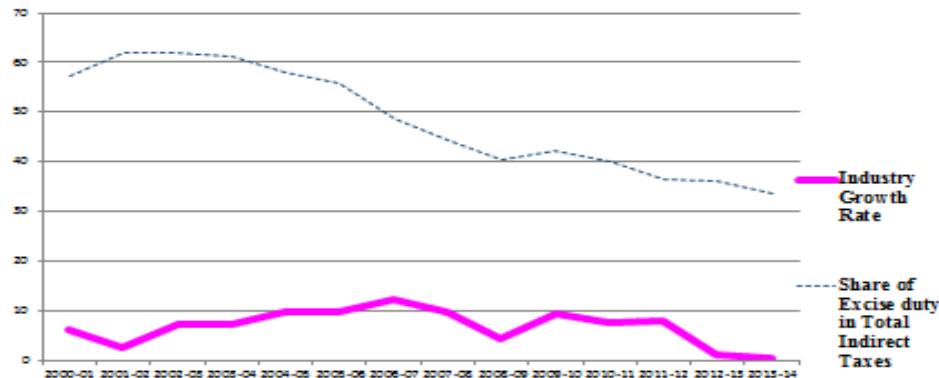
India Macro-economic summary as on first Dec 2014			
YEAR	Industry Growth Rate	Service Growth Rate	GDP Growth Rate
2000-01	6.03	5.07	4.15
2001-02	2.61	6.61	5.39
2002-03	7.21	6.74	3.88
2003-04	7.32	7.89	7.97
2004-05	9.81	8.28	7.05
2005-06	9.72	10.91	9.48
2006-07	12.17	10.06	9.57
2007-08	9.67	10.27	9.32
2008-09	4.44	9.98	6.72
2009-10	9.16	10.5	8.59
2010-11	7.55	9.67	8.91
2011-12	7.81	6.57	6.69
2012-13	0.96	6.96	4.47
2013-14	0.35	6.78	4.74

INDIA MACRO-ECONOMIC SUMMARY FOR THE GROWTH RATE IN INDUSTRY, SERVICE SECTOR AND GDP AS ON FIRST DEC 2014



Industry Growth Rate, Excise Duty and sharing indirect tax

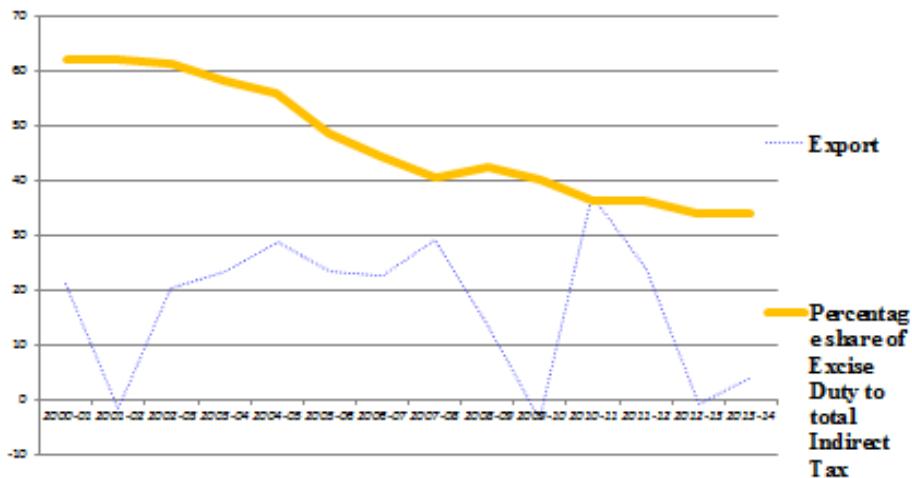
COMPARISON OF THE INDUSTRY GROWTH RATE AND THE SHARE OF EXCISE DUTY IN THE TOTAL INDIRECT TAX



The industry growth rate has been falling consistently and this is contrary growth in services. For the period from 2007-08 to 2013-14 the Excise duty contribution to GDP has followed the same trend as the industrial growth rate. The fall in the excise has a strong reason to fall in industrial growth rate and this shows that any improvement in the excise duty contribution has to be in accordance with. The effort to improve the indirect growth in India, Service tax contribution continues to increase as it was in the later part of sunrise tax in India as new services and tax base was growing continuously.

Export Growth

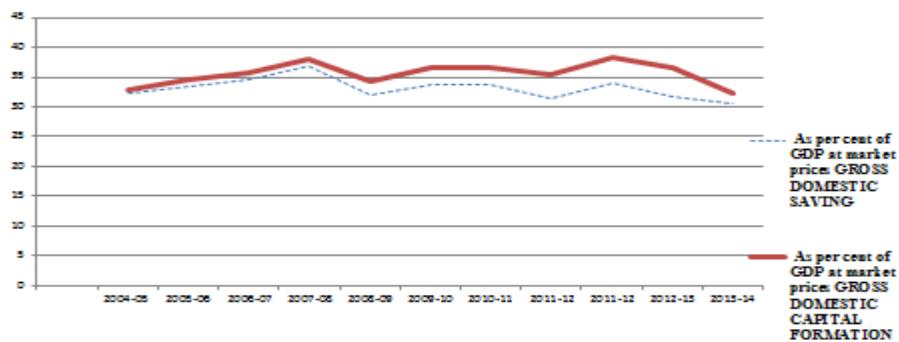
COMPARISON OF THE EXPORT GROWTH VIS-I-VIS PERCENTAGE SHARE OF THE EXCISE DUTY TO THE TOTAL INDIRECT TAX



In spite of wide fluctuations the parallels in the downward movement are significant and tell us a story of linkage between these two parameters.

Domestic Savings and Investments

DOMESTIC SAVINGS AND INVESTMENT

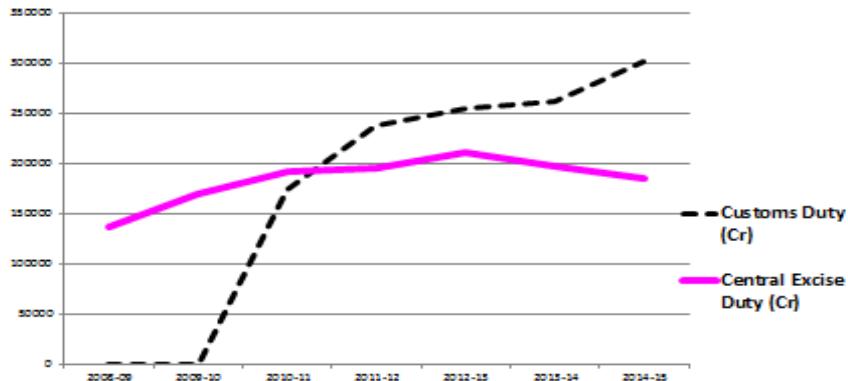


National Accounts with base year 2004-05 FROM 2004-05 TO 2011-12 National Accounts with base year 2011-12 FOR 2011-12 TO 2013-14

Consistent downward movement of domestic savings and Investment tells us the story of lower overall economic performance that has a telling impact on tax to GDP ratio.

Revenue Foregone and Exemptions

Revenue foregone Customs Duty and Central Excise



In 2014-15 as per the budget estimates the revenue foregone at a staggering Rs. 5,89,285 crore. Of this, Rs. 3,01,688 crore is on account of customs and Rs. 1,84,764 crore is on account of excise duties. These are clearly overestimates due to the shortcomings in the methodology employed. The difference between the rates specified in the tariff schedule and the actual rate applied on the value of imports is taken as the revenue forgone in the case of customs duty. There are serious issues with methodology of revenue foregone. Nevertheless, the tax – expenditure estimates bring out a glaring shortcoming in the tax system constraining the revenue productivity. The revenue lost on account of special economic zones for 2014-15 is estimated at Rs. 20376 crore from corporate tax alone. The rationale tax concessions for special economic zones were that they needed to be compensated for infrastructure deficit to ensure their competitiveness. The revenue cost of SEZs for 2014-15 is estimated at Rs. 17,284 crore from excise duty and almost Rs. 8000 crore in the case of corporation tax. The revenue forgone on account of tax concession to infrastructure industries works out to Rs. 22,230 crore. There are also customs duty reductions in the case of items like fertilizers which cross the subsidy regime and mask some subsidies that adversely impact the tax to GDP ratio as well as efficient operation markets.

Tax Arrears:

Mounting tax arrears given below show that 18.46% of total indirect tax revenue in 2013-14 is unrealized.

Tax Arrears in 2013-14

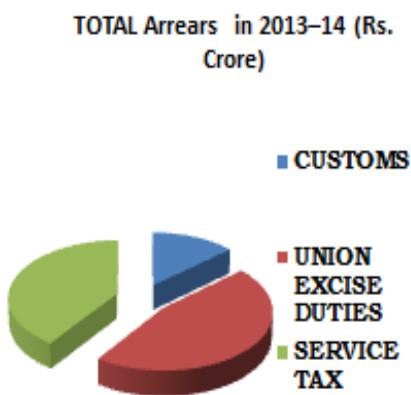
	Held in Disputes Rs. Crore	Not Under Dispute Rs. Crore	Total Rs. Crore	Per cent of Total
Corporation Tax	150,802	41,211	192,013	32.92
Non-Corporate Income Tax	259,721	23,985	283,706	48.63
Taxes on Income and Expenditure	410,523	65,196	475,719	81.55
Customs	9,758	4,686	14,444	2.48
Union Excise Duties	41,817	7,978	49,795	8.54
Service Tax	41,245	2,143	43,388	7.44
Total – Taxes on Commodities and	97,821	14,807	112,628	19.31
Total	503,344	80,003	583,347	100.00

Source: Report of the Comptroller and Auditor General – Revenue 2013-14.

Tax Arrears

Tax Arrears in 2013-14		
INDIRECT TAXES	TOTAL Arrears in 2013-14 (Rs. Crore)	PERCENTAGE OF TOTAL
CUSTOMS	14,444	2.48
UNION EXCISE DUTIES	49,795	8.54
SERVICE TAX	43,388	7.44
Total	107,627	18.46

Source: Report of the Comptroller and Auditor General – Revenue 2013-14.



Multinationals and Taxation Tactics:

Base Erosion and Profit Shifting

An important area eroding the base is the way in which multinational operate in the country. “Base erosion and profit shifting” by multinational companies is a worldwide phenomenon. Multinational companies indulge in a variety of ways to avoid taxes. Creating a web of complex subsidiaries and shifting the profits to subsidiaries located in low tax jurisdictions and taking advantage of the tax treaties is one of the common methods employed. Manipulating prices in related party transactions or what is usually called transfer pricing to reduce the tax liability is another.

Taxation Becoming: Regressive with MNCs Tax Planning

The present tax system is becoming regressive, with the richest individuals and firms being able to harness the energies of tax consultants and lawyers, which are devoted on exploiting the complex tax system. Millions of man hours of high-skill individuals are presently devoted to this quest. The move towards a simple tax system will give a more fair distribution of the tax burden in the economy.

IX. Question of Approach to Taxation and implications for Tax to GDP Ratio:

The following table presents the highlights of neo classical model of economics as well as the current realistic situation.

The following table presents the highlights of neo classical model of economics as well as the current realistic situation.	
Economics – Pure Approach	Current Situation
Pure Efficiency	Structural Factors & Constitutional Assignment of Taxation
No differently rated	State / Centre
No exemptions	Exemptions
Broad Base & Lower Rate	Agriculture
Large base	Informal sector
No information asymmetries	Exemptions

Nicholas Kaldor a celebrated economist and tax expert way back in 1956 stated that “it is far better to have a fool-proof system of taxation with a moderate tax schedule, than a system which has the appearance of high progressivity but which cannot be effectively or impartially administered”.

Best Possible Realistic Approach

Best Possible Realistic Approach is guided by the **Optimal theory of taxation, takes into account Public Policy & Public Choice perspective and aims to lower the Information Asymmetries.**

The optimal tax theories emphasise efficiency. The presumption is that in the absence of taxes, the economy operates at perfectly efficient frontier. However, another branch of literature which analyzes market imperfections argues that it is possible to design the tax systems to correct the market distortions. Stiglitz (2010) for example states, “....another important strand of research in the past quarter century has analyzed a large number of market imperfections, including those from imperfect and asymmetric information. Tax distortions may interact with market distortions in various ways. In particular, taxes may be used to correct market distortions. One distortion may at least partly, undo the effects of the other”. That, however, would require perfect knowledge and information about the nature of imperfection in the markets and a clear understanding of the response of the economic agents to tax changes.

Direct and Indirect Taxes Debate:

The general presumption is that since indirect taxes are regressive, the direct taxes should be designed to reduce inequalities and therefore, the traditional approach is to design highly progressive personal income tax systems and levy high rates on corporate incomes. This has, however, come into serious questioning. First, it is possible to design non-regressive consumption taxes by exempting essential unprocessed food items. Second, the effectiveness of personal income tax in reducing inequality itself is doubtful because only a small proportion of the people pay income tax in developing countries because in most of these countries income tax is neither comprehensive nor progressive and much of the revenue comes from withholding taxes and very little from the self-employed businesses due to poor information system and the existence of a large unorganized sector. The experience in most countries has shown that personal income tax has not been an effective instrument of

reducing inequalities and therefore, inferences about progressivity in the distribution of tax burden merely based on the ratio of direct and indirect taxes is misplaced Bird and Zolt (2005). Empirical studies in both developed and developing countries have shown that the tax system has not been effective in redistributing incomes. The study by Pechman and Okhner (1985) using alternative assumptions about the distribution of burden of individual taxes for the period 1966-1985 has shown that the US tax system is not significantly progressive. Similarly, a careful study of the Chilean tax system by Engel, Galetovic and Raddatz (1999) has shown that the tax system is in fact, moderately regressive with the Gini coefficient increasing to 0.4861 after the tax from 0.4883 before. Therefore, focus of redistribution in fiscal policy needs to shift from reducing the incomes of the rich to increasing the incomes of the poor and this implies that the focus of redistributive instrument should shift from the tax to the expenditure side of the budget.

Reverse impact of Tax Growth on GDP

In public discussions, the main focus of diagnosing problems of the tax system has been on their impact on the tax-GDP ratio. However, an equally important dimension has been the impact on GDP growth. The pervasive structure of exemptions and special clauses in the tax code has distorted resource allocation and adversely affected GDP growth. Firms and individuals should make decisions based on efficiency considerations and not tax considerations. Every decision influenced by tax considerations is a suboptimal decision from the viewpoint of maximising India's economic development.

X. Methodology for Assessment: Metrics

Tax Base & Tax Revenue

In order to understand the factors responsible for the low and sluggish tax revenue, total tax revenue in each country is expressed as the sum of tax revenue collected on different activities, i.e. the sum of tax rate multiplied by tax base, for each activity k.

$$Tax\ Revenue = \sum(Tax\ Revenue_k) \quad (1)$$

Tax revenue on each activity is a function of the tax rate on the activity, tax rates on other relevant activities (to account for tax arbitrage), and its tax base. In Equation 2, g_k is a non linear function of

tax rate. A decrease (increase) in tax rate may increase or decrease the tax revenue depending on whether it increases (decreases) the tax base more than or less than proportionately.

$$\begin{aligned} \text{Tax Revenue}_k &= \text{tax rate}_k * \text{tax base}_k \\ &= g_k (\text{tax rate, other factors}) \quad (2) \end{aligned}$$

Tax base could depend on a multitude of factors besides tax rate, such as exemptions, tax coverage, and compliance. Tax base of activity k may thus be written as below:

$$\text{Tax base}_k = (\text{tax rate}_k, \text{exemptions}_k, \text{tax coverage}, \text{compliance}) \quad (3)$$

Based on this taxonomy, the main reason behind low tax revenue in SAR countries is believed to be their small tax base, which has not increased proportionately more than the decline in tax rates, and which continues to be eroded by extensive tax exemptions, weak compliance, as well as by structural factors (Poonam Gupta, 2015).

Tax Efforts & Measures

Tax effort is a measure which gives a general indication that how a country is raising tax revenue relative to its given economic and structural potentials. Following tax effort approach this study uses panel regression analysis to identify determinants of low tax efforts of developing countries.

Bahl (1971) conducted an extensive survey of earlier studies and produced solid theoretical grounding for tax effort approach of cross country comparative analysis. He stated that

“While the tax ratio is simply the tax yield as a function of income, tax effort may be defined as the extent to which a country makes use of its taxable capacity, i.e. tax effort is the ratio of actual tax collections to taxable capacity.”

XI. Strategies Adopted to augment Tax to GDP Ratio and the Indian Way:

There are three major strategies that countries follow (Sampawende & Tapsoba, 2013).

The **benchmark scenario** achieves the target by reforming subsidies and strengthening the consumption tax, analogous to the Indian Government's plans to bring down subsidy spending and implement the national goods and services tax. The benchmark scenario

involves the following measures: government consumption is cut by 2 percent of GDP; general transfers are scaled down by 2 percent of GDP; and consumption tax revenue is improved by 1 percent of GDP.

The **growth-friendly scenario** centres on improving the growth impact of fiscal adjustment by channelling part of the savings from consolidation toward investment. In GIMF, public investment permanently increases the productivity of private capital. Compared to the benchmark scenario, this package cuts government consumption by an additional 1 percent of GDP; raises consumption tax revenue by an additional 1 percent of GDP; and reorients the extra savings toward public investment.

The **social-friendly scenario** focuses on raising social spending while also supporting stronger growth, analogous to achieving consolidation while implementing the development goals of the Twelfth Plan. Besides the growth impact, the distribution effect of fiscal adjustment is a source of concern. Cuts in public wages, a reduction of social transfers, or tax hikes would adversely impact poor households making stronger social safety nets necessary. The same pattern of consolidation as the growth-friendly scenario is assumed. However, the 2 percent of GDP in additional savings from the consolidation measures are applied equally to public investment and through transfers to liquidity-constrained agents, to social safety nets.

However, in the Indian context, keeping the bench mark scenario as an ideal, we actually have a mix of all the above three scenarios.

Strategy is to reduce the three costs.

Costs of

- i. collection
- ii. compliance
- iii. distortion

The most important objective of tax policy is to raise revenue. But revenues must be raised by minimising the three costs associated with taxation namely, the cost of collection, the compliance cost and the distortion costs as people change their behaviour in response to tax policy.

Thus, as Bird and Zolt (2008) argue, the best practice approach to tax policy and reforms would require the governments to move towards the broad base, low rate (**BBLR**) approach and having a simple and transparent tax system and avoiding arbitrary tax differentiation across people and economic activities.

XII. Conclusion:

Despite the recommendations and reforms at work since independence, Indian indirect taxes remain highly complex. There are two sources of this: first, the complexity of each of the excise and the sales tax regimes; and second, the multiplicity of regimes (both across states and between the states and the centre). The goods and services tax gives an opportunity to address this issue. However, the structure of GST will determine the impact on the economy. The introduction of GST will certainly remove inefficiencies (such as the problem of double taxation) and simplify the existing indirect tax structure; its impact on economic growth is ambiguous. However, though not backed by scientific studies still, it is opined by several economists at a GST of 25%, India's tax: GDP ratio (which at 11% is significantly lower than other emerging Asian economies' >20%) will increase by as much by 1-2% points. If the Government spends these increased revenues of around \$20-40bn on capex, then GDP growth will be positively impacted, especially as the fiscal multiplier (around 2.45x for India) comes into play. Economists from another quarter feel that, at 25% there could be reverse impact of tax on GDP.

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