

Working Paper 448

**Tax Revenue in India:
Trends and Issues**

Pratap Singh

ISBN 978-81-940398-4-6

© 2019, Copyright Reserved

The Institute for Social and Economic Change,
Bangalore

Institute for Social and Economic Change (ISEC) is engaged in interdisciplinary research in analytical and applied areas of the social sciences, encompassing diverse aspects of development. ISEC works with central, state and local governments as well as international agencies by undertaking systematic studies of resource potential, identifying factors influencing growth and examining measures for reducing poverty. The thrust areas of research include state and local economic policies, issues relating to sociological and demographic transition, environmental issues and fiscal, administrative and political decentralization and governance. It pursues fruitful contacts with other institutions and scholars devoted to social science research through collaborative research programmes, seminars, etc.

The Working Paper Series provides an opportunity for ISEC faculty, visiting fellows and PhD scholars to discuss their ideas and research work before publication and to get feedback from their peer group. Papers selected for publication in the series present empirical analyses and generally deal with wider issues of public policy at a sectoral, regional or national level. These working papers undergo review but typically do not present final research results, and constitute works in progress.

Working Paper Series Editor: **A V Manjunatha**

Tax Revenue in India: Trends and Issues

Pratap Singh*

Abstract

India has a federal tax structure. Centre, states and local bodies collect taxes as per the scheme laid down under the Constitution, more particularly under the seventh schedule. Article 265, however, puts restrictions on this power and states that "No tax shall be levied or collected except by the authority of law". Many countries have undertaken tax reforms in recent years, and some of them with significant success, which may act as a good benchmark for India. Such reforms are motivated both by local factors as well as the global economic scenario. While tax reforms in India have been carried out since the early fifties, the fiscal crisis of 1991 provided the first big opportunity for a serious rethink and action. Accordingly, a committee was set up under the chairmanship of Raja Chelliah to draw a roadmap for tax reforms and to put the economy on track. This committee suggested tax amendments of far-reaching consequences and initiated the process of liberalisation. As Bird (2014) pointed out, countries' taxes affect investment, allocation and distribution of resources as also the rate of the economic growth and therefore the role of tax administration becomes quite important in developing countries. One particularly important aspect is benchmarking of the tax administration's performance vis-a-vis global best practices and align it with such practices (Bird, 2014). Two common approaches to benchmarking are the quantitative approach and the qualitative approach. Both these approaches consider each component or aspect of the tax administration separately. Studies carried out by OECD, IDB and ADB about tax administrations of various countries may act as a comparative guide for developing countries like India to improve their tax administration. Trends analysis of tax collections therefore provides a good opportunity to evaluate the performance of tax systems in comparative terms. This paper presents a brief history of tax reforms in India. In the next section, trend analysis of tax collections in India as also the tax GDP ratio have been analysed, which show relative stagnation or deceleration in tax revenue. How tax policy changes impacted collection of taxes in India positively or otherwise is examined in the next section. An analysis of the costs of tax collection and possible efficiency of the tax system has also been undertaken. Also, international comparison of various tax administrations has been attempted so as to examine where the Indian tax administration stands vis-a-vis its global peers. Lastly, based upon global best practices, further reform direction is explored.

Introduction

"It was only for the good of his subjects that he collected taxes from them, just as the Sun draws moisture from the Earth to give it back a thousand fold" ---(Kalidas in Raghuvansh)

Tax structure in India has been under continuous modification since independence. We had a record of number of Committees looking into the needed changes in the existing tax structure. Even today, one cannot say that everything is absolutely systematized and we have a flawless structure and operations in Indian tax structure. Taxation is a very old concept; as old as civilisation itself. There is detailed discussion on taxation in ancient Indian texts 'Manu Smriti' and 'Arthashastra'. According to Manu Smriti, the king should arrange the collection of taxes in such a manner that the taxpayer does not feel the pinch of paying taxes. Chanakya in Arthashastra discussed the concept of taxation as also the system of tax administration. The tax system being administered today is in many ways quite similar to what was described by Chanakya. The modern taxation system in India was introduced in the year 1860 by James Wilson during the British rule. Further codification was introduced in the year 1922. This system continued and in 1961 a new attempt was made towards this, when Income Tax Act 1961 was brought into effect, which is more or less continuing with some modifications. The authority of the government to levy taxes in India is legitimized in the Constitution of India, allocating the powers to

* PhD Scholar, CESP, ISEC, Bangalore - 560072.

levy taxes to the Union Government and State governments, as per the scheme laid down under VIIth schedule. Article 265 puts restriction on taxation powers of the state and says no taxes shall be collected otherwise than authority of law. Further all taxes levied within India need to be backed by an accompanying law popularly known as Finance Bill passed by the Parliament or the State Legislature every year.

Attempts towards setting up a fair tax system has always been a big challenge for developing countries like India. An ideal tax system is expected to raise necessary and timely revenue for the government without influencing heavily the investment decisions or the economic activity. However, it is not an easy task to establish an efficient tax system in a developing country like India where large number of people are still engaged in unorganized or informal sector where cash transactions dominate the economic activity. Therefore, it is difficult to calculate the tax base or decide about a rate with any objectivity. Further, the tax administrative structure also has its weaknesses in terms of wages or infrastructure and that is a part of the overall system of administration. This leads the State to limited options available distanced from establishing an efficient and ideal tax system. Therefore, after many attempts to reform, we are yet to arrive at a flawless ideal system of Tax administration, which plays a crucial role in determining a country's real or effective tax domain. Unfortunately, tax administrations in many countries cannot function optimally and as a result the intents of tax laws are not fulfilled. In order for taxation to have its intended effect on the allocation of resources, the distribution of income, and macroeconomic stability and growth, the tax administration must function effectively and efficiently. The principal objective of tax policy in a developing market economy is to raise revenues in an equitable manner and with minimum unintended changes in relative prices and allocation of resources as per the famous canons of taxation. Indian tax system suffers from both low productivity and significant distortions and is in need of reform (Rao, 2016).

Although raising tax revenues calls for the rich to be taxed more heavily than the poor, however in practice it rarely happens as rich tax payers command immense power and can manipulate process of tax reforms. This is the reason behind many developing countries, contribution of personal income tax is very small in the overall taxes. In developing countries therefore, tax policy is often an art of the possible rather than the pursuit of the optimal (Vito Tanzi, 2001). It is therefore not surprising that economic theory and especially optimal taxation literature have had relatively little impact on the design of tax systems in these countries. In the present study an attempt is being made to analyze Indian tax system specifically from the standpoint of administrative dimension, associated problem areas and policies to address these. A few suggestions are given for attaining better efficiency and effectiveness, following global best practices.

A Brief History of Tax Reforms

The history of tax reforms in India is quite old, but systematic and comprehensive tax reforms were started only after 1991, when the Tax Reforms Committee (TRC), also known as Raja Chelliah Committee, laid out a road map for reforming the tax structure in the wake of an economic crisis. Thereafter in 2002, the Kelkar Task force was constituted, which suggested further modifications in the tax structure. The Direct Taxes Code Bill 2008 and Tax Administration Reforms Commission (TARC)

headed by Shome (2013) were further steps in the same direction. The basic principles outlined in the recommendations of the above committees/task force were to broaden the tax base, reduce the tax rates and rate differentiation, simplify the tax structure and strengthen the tax administration. The TRC recommended reduction of all major taxes, namely individual and corporate income-tax, customs and excise duty. It also suggested minimising of exemptions and concessions, simplification of tax laws and procedures, computerisation and revamping of administration etc. It is relevant to mention here that the marginal tax rates of income-tax used to be as high as 85 per cent in the year 1973-74, and effective tax rate including surcharge of 15 per cent worked out to 97.5 per cent, which coupled with a wealth tax rate of 5 per cent used to be quite confiscatory, which led to widespread tax evasion. The tax rates were reduced to 77 per cent in 1974-75, to 66 per cent in 1976-77 and finally to 50 per cent in 1985-86, but still were quite high and regressive. On the recommendation of TRC, the tax rates were reduced to three brackets of 20 per cent, 30 per cent and 40 per cent and the rate of wealth-tax was reduced to 1 per cent. Further reductions in tax rates came in 1997-98, when personal income-tax rates were reduced to slabs of 10 per cent, 20 per cent and 30 per cent, which have continued till now, *albeit* with a little change in the first slab where the tax rate is reduced to 5 per cent as against 10 per cent. At present, the government is also levying surcharge at the rate of 10 per cent on income exceeding Rs.1 crore. Similarly, the tax rate on the companies was reduced from 65 per cent to 50 per cent, then to 40 per cent and later to 30 per cent from 1997-98 and it has been reduced to 25 per cent in respect of small companies from 2015-16. There are also provisions of MAT for zero tax companies. The tax exemption limit used to be Rs.22, 000 in 1990-91, which was gradually increased to Rs.1 lakh in 2007-08 and to Rs.2.5 lakh in 2014-15. The Direct Taxes Code Bill 2009 suggested large-scale changes regarding the removal of exemptions and deductions as also in the tax slabs, which were partly accepted by the government, but the idea of DTC was abandoned with the Finance Act 2015. The Securities Transaction Tax (STT) at the rate of 0.1 per cent on sale of the stocks/shares was launched from 2004-05 and has been continuing with slight modifications till now. Banking Cash Transaction Tax (BCCT) and Fringe Benefit Tax (FBT) were introduced in the year 2005-06, but were withdrawn two years later. Similarly, the provisions of Gift Tax were also withdrawn from 1998-99 and Wealth Tax was abolished from the Finance Act 2015. The computerisation of the Income-tax Department started in 1993-94 and gradually picked up pace with the establishment of a nationwide network and primary data centre. At present, about 94 per cent of returns are filed online, are processed online and refunds are issued online. Most of the functions of the Income Tax Department have been computerised, which includes allotment of PAN, tax payments, filing of returns, processing of returns, issue of refunds and handling of grievances etc, which has improved the efficiency of administration. Information from third parties like banks, sub registrar, car companies, mutual fund companies etc., is being collected, processed and put to use to ascertain the actual tax liability of a person. A lot of efforts have also been put in by the tax administration towards taxpayer education, facilitation and guidance including the setting up of Ayakar Seva Kendras (ASK) all over the country.

As regards indirect taxes, there used to be 24 different tax slabs for excise duty ranging from 2 per cent to 100 per cent, up to the year 1992-93, which were later reduced to 11 slabs and into three rates of 8 per cent, 16 per cent and 24 per cent in 1999-2000 which more or less continued till the

introduction of GST in July 2017 in which central excise, service tax and state taxes have been subsumed. As regards customs duties, it is seen that duty as high as 300 per cent used to be levied on imports and exports until 1990-91, but on TRC's recommendations, the tariffs were gradually reduced to 150 per cent in 1991-92, to 50 per cent in 1996-97, to 40 per cent in 1997-98, to 30 per cent in 2002-03, to 25 per cent in 2003-04 and to 15 per cent in 2005-06. In fact, the customs duties were rationalised in view of various agreements entered into by the Government of India under WTO guidelines. The Service Tax was introduced in 1994-95, initially to tax 3 services, namely, stock brokerage, telecommunication and non-life insurance and was increased to all services barring a negative list of a few services. Now service tax stands subsumed in the GST. As regards state level taxes, no comprehensive reforms were carried out by the state governments until the introduction of a comprehensive VAT (Value Added Tax) system from April 1, 2005. Now almost all state taxes are subsumed in GST.

Trends in Tax Revenue in India

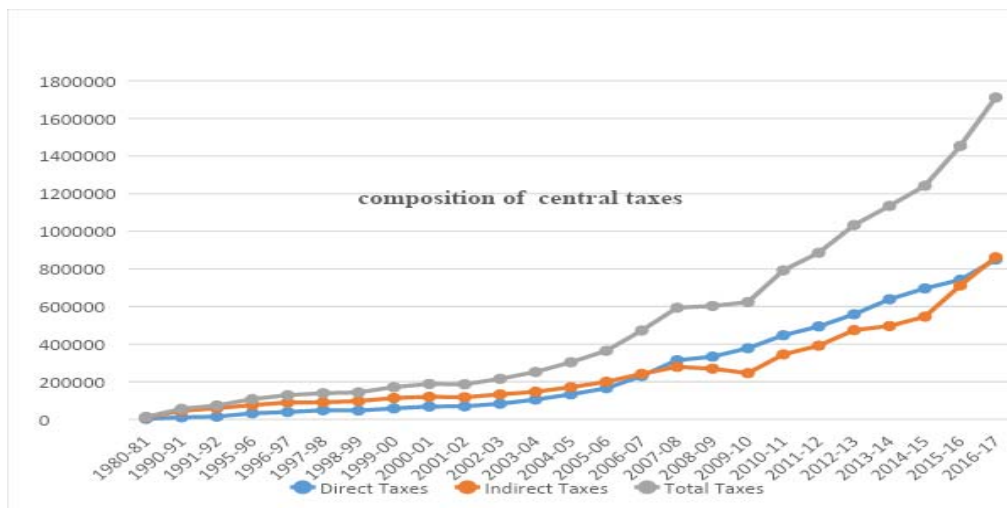
India is a federal country and therefore taxation powers are divided between the centre and states as per the scheme provided in the Constitution, more particularly in the seventh schedule. While more mobile taxes like income taxes, customs, central excise and service tax are collected by the centre, taxes on land, trading of goods, road, vehicles and liquor etc are collected by the states. Taxes can also be classified as direct or indirect taxes depending upon how they are collected. Now let us analyse the trends of collection of direct taxes and indirect taxes at the centre and their relative share in the overall central revenue. The figures of direct and indirect taxes of the centre are taken from CBDT statistics, ministry of finance publications and Principal Controller of Accounts and are presented in Table 1.

Table 1: Trends in Direct and Indirect Taxes (Rs. in Crores)

Financial Year	Direct Taxes	Indirect Taxes	Total Taxes	Direct Tax as per cent of total tax	Indirect tax per cent of total tax
1980-81	2,817	9,909	12,726	22.17	77.83
1990-91	10,606	45,158	55,764	19.02	80.98
1995-96	32,090	75,944	1,08,034	29.70	70.30
2000-01	68,305	1,19,814	1,88,119	36.31	63.69
2004-05	1,32,771	1,70,936	3,03,707	43.72	56.28
2008-09	3,33,318	2,69,433	6,03,251	55.34	44.68
2012-13	5,58,658	4,74,482	10,33,140	54.07	45.93
2014-15	6,96,000	5,46,000	12,42,000	56.03	43.97
2016-17	8,49,818	8,61,515	17,11,333	49.66	50.34

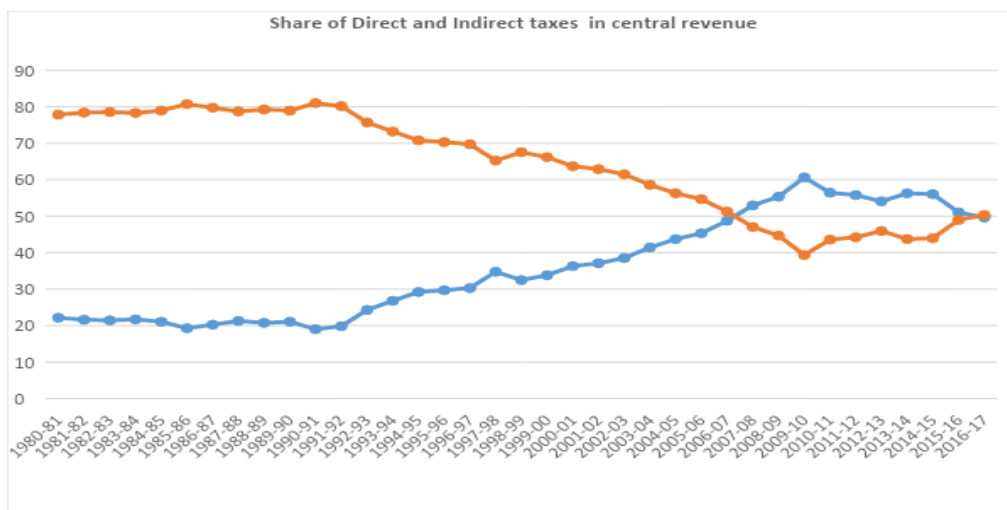
Source: Director Budget (CBDT)

Figure 1: Composition of Central Taxes



Source: Constructed from Table 1

Figure 2: Trends of Direct and Indirect Taxes



Source: Constructed from Table 1

From the comparison of direct tax collection *vis-a-vis* indirect tax collection as shown in table 1 and figure 1 & 2, it may be noticed that the direct taxes have increased from 1980-81 onwards, but their ratio remained stagnant at about 20 per cent till 1991-92. However, thereafter, it has grown significantly not only in absolute terms but more importantly as ratio of total taxes. It used to be about one-fifth of central taxes (about 20 per cent of total) up to 1991, but thereafter gradually and steadily increased to 40 per cent in 2003-04 and to 52.70 per cent in 2007-08 when it crossed the halfway mark. Subsequently, it improved further to a peak position of 60.64 per cent in 2009-10. However, thereafter, it came down slightly and has been in the range of 54 per cent to 56 per cent till 2015-16 but in 2016-17 once again indirect taxes beat direct taxes by a narrow margin of 50.34 per cent to

49.66 per cent. The year 2007-08 has been the watershed in the history of direct tax collection, when it surpassed indirect tax collection. It attained the peak in 2009-10, when it stood at little over 60 per cent of the central taxes. It can be said that the increase in direct tax revenue has more to do with the rapid growth of the organised sector, expansion in the interaction of the financial sector with the rest of the economy and administrative measures taken by tax administration in extending the coverage of TDS (tax deduction at source) than with improved compliance arising from the reduction in marginal rates of tax. The extension of permanent account numbers (PAN) to cover a larger number of potential taxpayers and the expansion of the tax information system (TIN) are expected to advance this cause further, by generating an extensive and reliable database. Third party information, AIR (Annual Information Returns) and 360 degree profiling of taxpayers has helped a lot in checking tax evasion. It is also seen that the number of personal income tax assesseees has increased significantly over the last decade. From 1999–2000 to 2003–04 alone, the number increased from 19.6 million to 28.8 million—a growth rate of more than 10 per cent a year. Interestingly, the highest growth was seen in the income range of Rs. 200,000–500,000 (38.4 per cent) followed by those above Rs. 1 million (16 per cent). However during 2014-2018, there has been tremendous increase in the number of taxpayers in which almost 25 million new taxpayers were added in a short span of about 4 years. As on 31st March 2018, the number of people who filed tax returns stands at 68.60 million and as percentage of population it works out at 5.3 per cent. Further, the number of effective taxpayers is still larger at about 80 million. The demonetisation 2016 and IDS-2016 have done a great deal in increasing the number of taxpayers but still a huge credit will go to the tax department for effective tax enforcement, awareness and education. However, the number of taxpayers in the higher income bracket of Rs 1 crore and above is a problem area and the figure is still small at 42,800. Although the number of taxpayers with income above Rs. 10 lakh is growing, it still constitutes a small number as well as a very small proportion of the total taxpayers. This happened because of improvement in tax compliance after rationalisation of tax rates to a reasonable level of 10 per cent, 20 per cent and 30 per cent from 1997-98 onwards, induction of technology and automation and better enforcement. E-payment of taxes, e-filing of returns and computerisation of departmental functions also facilitated this process. It may also be mentioned that 2003 to 2008 has been the best period for the Indian economy in terms of growth and investment, which is reflected in direct tax collection also, but in the same period there has been significant fall in the contribution of indirect taxes as growth largely came from the services sector and manufacturing did not show any improvement. However, it is important to mention that a fall in the collections under the head customs and central excise could not be compensated through increase in the collection of service tax, which is reflected in a fall in tax ratio of indirect taxes during the period 1997- 2012.

Trends in Direct Tax Collection

Direct taxes can broadly be classified into corporate tax and personal income tax, as security transaction tax is still small in coverage and collections (contributing about 1 per cent of the total revenue) and other direct taxes like wealth tax, BCCT, interest tax and fringe benefit tax etc. stand abolished. Though it is noticed that the direct taxes collection in India has been increasing at a steady pace in last 30 years, it is important to see how its components are faring over a period of time. From table 3.2 it can

be seen that up to 1991-92, the quantum of corporate income tax collection used to be equal or less than personal income tax collection, but thereafter, it gradually overtook personal income tax collection and from 2002-03, it outpaced personal income tax collections by a huge margin. In 2010-11, it was almost double that of personal income tax collection. Though the ratio has come down slightly thereafter, it has still been in the range of 1.80: 1, as is seen from the trends shown in table 3.2 and figure 3.3. However, the growth of both taxes on a year-on-year basis has been quite varied, as is reflected in fig 4.

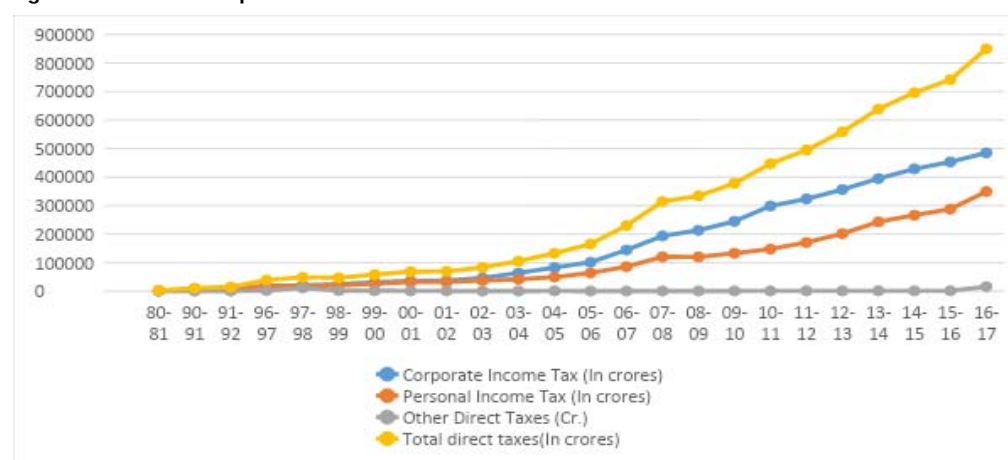
Table 2: Composition of Direct Taxes in India

Corporate Tax Personal Income Tax Other Direct Tax

F.Y.	Corporate Income Tax (In crores)	Personal Income Tax (In crores)	Other Direct Taxes (Cr.)	Total direct taxes (In crores)	Growth in corporate taxes	Growth in personal income tax	Growth in total direct tax collection percentage	Buoyancy Growth in taxes/ growth in GDP
80-81	1337	1440	-	2817	23.25	18.22	22.12	1.13
90-91	5335	5371	-	10606	9.60	8.35	8.9	1.08
96-97	18567	18234	2094	38895	19.25	17.23	18.20	1.05
00-01	35696	31764	845	68305	16.30	23.81	17.85	2.32
05-06	101277	63689	250	165216	22.50	29.64	24.44	1.76
10-11	298688	147560	687	446935	22.05	11.08	18.22	0.97
13-14	394677	242907	1007	638591	10.76	20.56	14.25	1.16
14-15	428600	266377	1023	696000	11.45	10.33	11.36	1.17
15-16	453228	287637	1079	741945	5.74	7.9	6.60	0.86
16-17	484924	349270	15624	849818	6.99	21.42	14.53	2.04

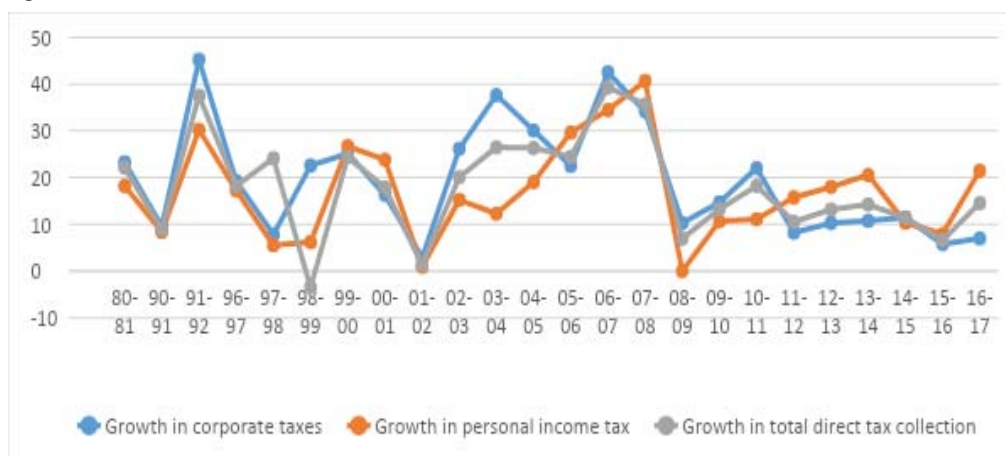
Source: CBDT Statistics, 2017

Figure 3: Trends in Corporate and Personal Income Tax



Source: Constructed from Table 2

Figure 4: Growth in Direct Taxes



Source: Constructed from Table 2

Some important trends can be noticed from the above table and graphs. The best growth of direct taxes revenue has come during F.Y. 2002-03 to F.Y. 2007-08, where growth was ranging from 20 per cent to almost 40 per cent, and F.Y. 2006-07 has been the best year in terms of revenue productivity, as also tax buoyancy, in as much as there has been growth in revenue of 39.23 per cent and tax buoyancy of 2.42. This has been largely because of improvement in compliance on account of reduction in tax rates and improved collection under TDS, on account of increase in its coverage and most of all, the economy itself grew over 8 per cent during this period, largely because of global factors. However, after 2007-08, the pace of growth lost steam because of a slowdown in the global economy and therefore growth in tax collection also came down substantially and was in the range of 10 per cent to 15 per cent, except in the year 2010-11, when it was slightly more at 18 per cent. Even the tax buoyancy from 2008-09 to 2014-15 has been close to one or below one, which is not a very healthy sign for a growing economy like India. Of course, the worst year in terms of revenue generation has been 1998-99, in which the tax collection had shown a negative growth of 3.50 per cent and negative tax buoyancy which was on account of one-time payment of about Rs. 10,000 crore under the VDIS 1997 scheme the year before. One important change which can be noticed from the table is increase in growth of corporate tax collection over income-tax collection in the last 15-18 years. Up to F.Y. 1996-97, corporate tax collection used to be equal to or below personal income-tax collection, but from this year onwards, it has surged ahead and in 2010-11, corporate tax collection was almost double of the income-tax collection. Thereafter, the ratio of corporate tax collection has been significantly higher than income-tax collection, and has been in the ratio of about 1.8: 1. It is seen that F.Y. 2003-04 to 2007-08 have been the best years for the Indian economy, in terms of GDP growth and overall economic well-being, which is reflected in tax collection figures as also in tax buoyancy, as is clear from the above table 3.2. Thereafter, because of the global economic crisis, the GDP growth started decelerating, which is again seen in the decline of growth and buoyancy of taxes. However, from the analysis of trends of growth in tax collection as reflected in figure 3.4, there appears to be no direct and immediate correlation with the GDP growth. It has been seen that in some of the years, though the GDP growth has

decelerated, the growth in tax collection has increased. This gives only one indication: That there may be significant tax evasion and a parallel economy and an indication that even in the years when GDP growth is small, the growth in tax collection could be higher if proper enforcement and supervision is done by the tax administration, as is reflected in Figure 5.

Figure 5: All-India GDP Growth vs Tax Collection



Analysis of Tax-GDP Ratios

The tax-GDP ratio is an important indicator and is used globally to see how effective a tax administration is or how much portion of GDP is being collected as taxes. Tax effort and tax gap are the other important metrics. It is widely accepted that as against the maximisation of tax revenue, reducing the tax gap is a better methodology. Tax gap is defined as the difference between potential tax collection and actual tax collection. The analysis of the tax-GDP ratio figures from 1980 onwards shows that despite systematic reforms, the revenue productivity of the tax system has not shown any appreciable increase. Following the economic crisis of 1991, the customs tariffs and excise duties were considerably reduced, resulting in stagnation in revenues and a reduction in the tax-GDP ratio. This was followed by a decline in the tax ratio, in the period 1985-86 to 1996-97. In fact, the tax-GDP ratio declined from 15.8 per cent in 1991-92 to its lowest level of 13.4 per cent in 1997-98 and fluctuated around 14 per cent until 2001-02, as is clear from table 3.3. It has been so because most of the growth during this period came from services (about 75 per cent), while the growth of industry and manufacturing has been stagnant, and therefore excise duties did not show improvements. However thereafter, the ratio improved to 16 per cent in 2005-06 and finally to 17.45 per cent in 2007-08, but again came down to 15.45 per cent in 2009-10 and later gradually increased to 17.87 per cent in 2013-14 as is clear from table 3.3. The improvement in tax-GDP ratio during the period 2005-06 onwards has been primarily on account of improvement in the tax-GDP ratio of the direct taxes and some improvement in the ratio of state taxes. It may be mentioned that the Indian economy had the best period of growth during 2003 to 2008, in which it grew at a rate close to 9 per cent, but major growth came from the services sector rather than from manufacturing. After the global slowdown and economic crisis of 2009, again growth decelerated, which is reflected in the above figures, indicating a decline in

tax ratios. It also appears that after the introduction of VAT by the state governments in 2005, their sales tax collection improved quite a bit, which is seen in their tax-GDP ratio, which improved to 6 per cent in 2005-06 and to 7 per cent in 2013-14.

Interestingly, the trends in tax ratios of direct and indirect taxes follow different paths, as is seen from Figure 3.6. The tax ratio for direct taxes remained virtually stagnant throughout the forty-year period from 1950 to 1990 at a little over 2 per cent of GDP. Thereafter, coinciding with the reforms marked by a significant reduction in the tax rates and simplification of the tax structure, direct taxes increased sharply to over 4 per cent of the GDP in 2003-04, to 4.5 per cent in 2004-05, to 5.39 per cent in 2006-07 and to 6.39 per cent in 2007-08. Thereafter, the tax-GDP ratio has come down slightly and has been in the range of 5.6 to 5.9 per cent of GDP, up to 2014-15. In contrast, much of the increase in the tax ratio during the first forty years of planned development in India came from indirect taxes, which more than tripled, from 4 per cent of the GDP in 1950-51 to 13.5 per cent in 1991-92 (figure 3.6). Since then, however, revenue from indirect taxes has fallen back to around 11 per cent of the GDP. The decline in the total tax ratio observed since 1987-88 has occurred mainly at the central level, especially in indirect taxes, which came down significantly in proportionate terms, because of the reduction in tariff rate, and since the centre accounts for about 60 per cent of the total revenue, it affected the overall tax-GDP ratio. Notably, tax ratios of both central and state governments increased sharply between 1950-51 and 1985-86. Thereafter, the tax ratio at the state level was virtually stagnant at about 5.5 per cent until 2001-02, when it increased modestly. In contrast, the central tax ratio increased to its peak in 1987-88, and remained at that level until the fiscal crisis of 1991-92, when it declined sharply to 13.80 until 2001-02; by 2004-05, it had nearly recovered its pre-1991 level. Within the central level, the share of direct taxes has shown a steady increase from less than 20 per cent in 1990-91 to 36 per cent in 2000-01, to 45 per cent in 2005-06 and to 60.26 per cent in the year 2008-09. Thereafter it has come down slightly and has been in the range of 56 per cent till 2014-15. The tax GDP Ratio of direct taxes was in the range of 2 per cent upto 1990-91, thereafter it gradually increased to 3 per cent in the year 1997-98, to 4 per cent in 2004-05, reached a high level of 6.26 per cent in the year 2007-08 and thereafter it has come down slightly and has been in the range of 5.8 per cent till 2014-15. The analysis of the trends in central tax revenue shows that the sharpest decline in the tax-GDP ratio was in indirect taxes—both customs duties and central excise duties. The former declined by about half, from 3.6 per cent in 1991-92 to 1.8 per cent in 2004-05. Revenues from excise duties fell by one percentage point, from 4.3 per cent to 3.3 per cent during the period. One explanation for the declining trend in excise duties throughout the 1980s is that the rate structure assumed was not revenue neutral when the input tax credit was allowed. Continued exemption of the small business sector, expansion of its definition to include businesses with annual turnover of Rs. 1 crore, and widespread use of area-based exemptions are other important reasons for the decline in excise duty revenues. Further, since 1997-98 more than 75 per cent of the increase in the GDP is attributable to the growth of the service sector and the manufacturing sector has been relatively stagnant, implying an automatic reduction in the ratio of taxes on the manufacturing base as a percentage of total GDP. However the tax ratios for both the taxes has been stable since 2001-02. Tax ratio for customs has continued to decline as tariff levels are further reduced, the tax ratio for internal

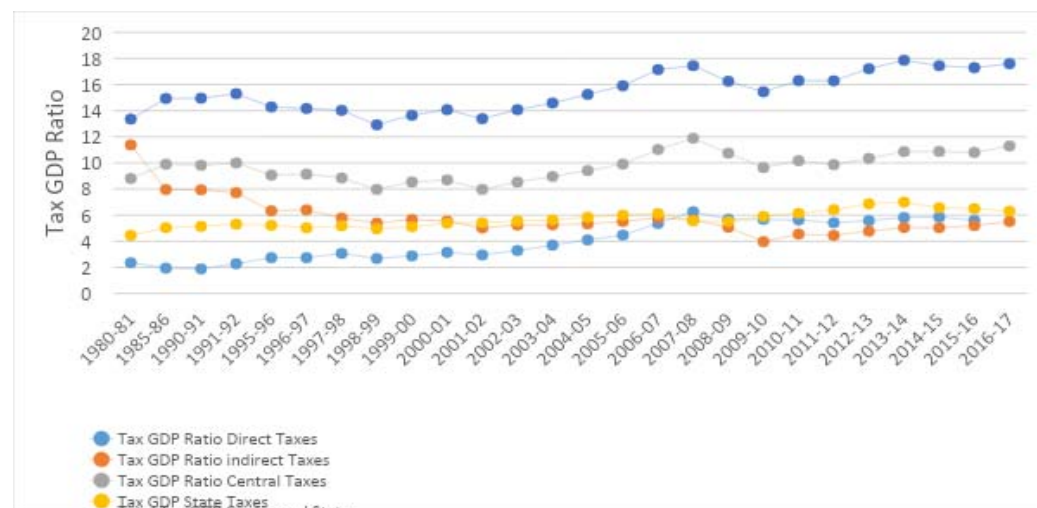
indirect taxes is likely to increase if reforms to expand the coverage of the services tax and integrate it with Cen-VAT are undertaken and significant improvement is achieved in tax administration. To sum up, the tax-GDP ratio of indirect taxes used to be about 8 per cent in 1990-91, gradually came down to 6 per cent in the mid-nineties and to 5 per cent in 2008-09 to 4.5 per cent in 2010-11 but slightly improved to 5 per cent in year 2014-15. The state taxes ratio in the same period has been about 5 per cent from 1985-86 till 1999-2000 and thereafter improved to 5.5 per cent in 2007-08, to 6.14 per cent in 2011-12 and finally to a peak of 7 per cent in 2013-14. The Tax-GDP ratio in a true sense is a barometer of the effectiveness and efficiency of tax administration. The figures of tax-GDP ratio are given in table 3.

Table 3: Tax-GDP Ratio of Different Taxes In India

Financial Year	Net Collection of Direct Taxes (lakhs)	GDP Current Market Price (lakhs)	GDP Growth	Tax GDP Ratio Direct taxes	Tax GDP Ratio Indirect taxes	Tax GDP Ratio central taxes	Tax GDP Ratio State taxes	Total tax GDP Centre and states
1980-81	2,817	4,01,128	5.90	2.35	11.38	8.81	4.45	13.36
1985-86	5,423	52,115	5.80	1.94	7.96	9.90	5.04	14.94
1990-91	10,606	6,92,871	5.60	1.88	7.94	9.82	5.14	14.96
1995-96	32,090	8,99,563	9.30	2.74	6.33	9.07	5.22	14.29
2000-01	68,305	21,02,376	7.70	3.15	5.55	8.70	5.38	14.08
2004-05	1,32,771	32,42,209	17.70	4.10	5.33	9.41	5.84	15.25
2008-09	3,33,318	56,30,063	12.89	5.68	5.07	10.75	5.51	16.26
2012-13	5,58,658	1,01,13,281	12.25	5.58	4.77	10.35	6.87	17.22
2014-15	6,96,200	1,27,56,000	12.52	5.85	5.03	10.88	6.97	17.85
2016-17	8,49,818	15,25,10,281	11.50	5.79	5.51	11.30	6.30	17.60

Source: CBDT Statistics, 2017, Public finance statistics 2017

Figure 3.6: Tax –GDP Ratio of Different Taxes in India



Source: constructed from Table: 3

As per a study carried out by Rao (2017), the tax-GDP ratio of India now should have been about 19 per cent and 22.84 per cent in the year 2030-31, considering nominal growth of 7 per cent and inflation at 5 per cent and dollar exchange rate of 67. He further observed that the revenue productivity of the Indian tax system has not only been low but has not shown any perceptible increase over the years, despite increases in the per capita income. In fact, it has shown a decline in the 1990s from 15.3 per cent in 1991-92 to 14 per cent in 2001-02. Thereafter, it steadily increased to 17.5 per cent in 2007-08, but declined to 15.5 per cent in 2009-10 and hovered around 16.5 per cent thereafter.

Further analysis of the tax data indicates four distinct phases of tax collection: First from 1950 to 1990, second from 1991-2002, third from 2003 to 2008 and fourth from 2008 till date, denoting different growth periods and tax policy interventions. In the first phase (1950-90) direct tax-GDP ratio has been stagnant at about 2 per cent and major contribution during this phase came from indirect taxes like customs and central excise. The phase also shows high tax rates, rampant evasion, low manufacturing activity and very low corporate income tax. Interestingly, the ratio of state taxes also has been static during this period at about 5 per cent. The second phase (1991-2002) denotes significant tax reforms undertaken after the Chelliah Committee report which includes reduction in tax rates, consolidation of tax slabs and better coverage under the TDS mechanism. During this phase, the ratio of direct taxes steadily increased from 2 per cent to 4 per cent. However, during this phase, the ratio of indirect taxes significantly declined because of reduction in tariffs while the state taxes ratio remained stagnant at about 5 per cent. The third phase (2002-2008) has been the best phase, the most bullish phase in tax collection where within a span of 6 years, the tax-GDP ratio increased to 6.26 per cent, because of phenomenal increase in corporate taxes signifying robust manufacturing activity. The last phase from 2008 onwards denotes once again how the contribution of direct taxes in overall taxes started declining, indicating a deceleration in economic growth as also industrial activity. Now the ratio is hovering around 5.4 per cent to 5.8 per cent, indicating that further reforms are required.

Table 4: Phases of Tax Collection in India

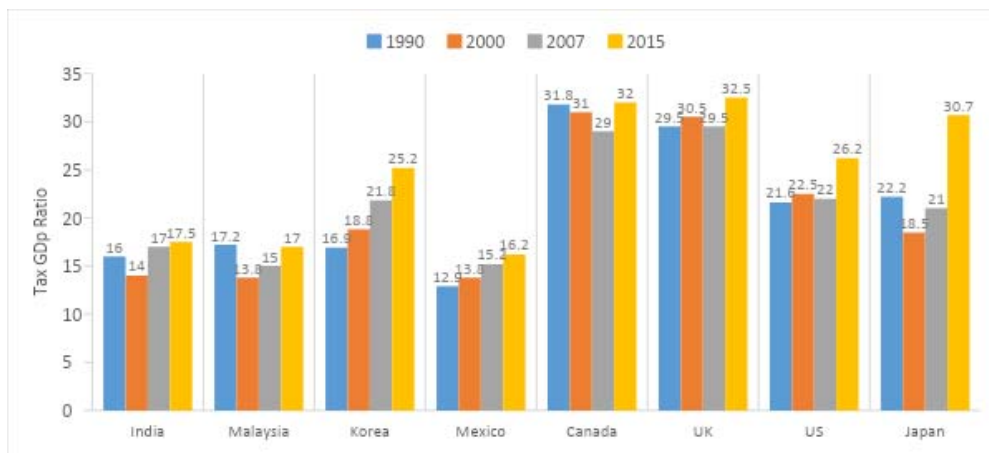
Phases	Period	Tax-GDP ratio of direct taxes	Remarks
Phase 1	1950-1990	Less than 2 per cent	The 1950 to 1990 phase shows that the direct taxes-GDP ratio has been stagnant at about 2 per cent and major contribution during this phase came from indirect taxes like customs and central excise. The phase also shows high tax rates, rampant evasion, low manufacturing activity and very low corporate income tax. Interestingly, the ratio of state taxes also has been static during this period at about 5 per cent.
Phase 2	1991-2002	2 per cent to 4 per cent	Because of tax reforms undertaken in this phase after the Chelliah Committee report, more importantly reduction of tax rates and slabs and better coverage under TDS mechanism; the ratio of direct taxes steadily increased to 4 per cent. However during this phase, the ratio of indirect taxes declined because of reduction in tariffs while state taxes remained stagnant.
Phase 3	2003-2008	4 per cent to 6.26 per cent	This has been the most bullish phase in tax collection where within a span of 6 years, the tax-GDP ratio increased to 6.26 per cent because of phenomenal increase in corporate taxes, signifying robust manufacturing activity.
Phase 4	2008-till date	6.26 per cent to 5.8 per cent	After 2008, once again the contribution of direct taxes in overall taxes started declining, indicating deceleration in economic growth as also industrial activity. Now the ratio is hovering around 5.4 per cent to 5.8 per cent, indicating that further reforms are required in tax structure as also in tax administration to improve the ratios.

From the foregoing analysis, it may be concluded that much of the increase in the tax ratio during the first forty years of planned development in India came from indirect taxes, which more than tripled, from 4 per cent of GDP in 1950–51 to 13.5 per cent in 1991–92, including the state taxes ratio which has been static at about 5 per cent. Since then, however, revenue from indirect taxes has fallen back to around 11 per cent of the GDP. The tax GDP ratio of central indirect taxes used to be about 8 per cent in 1990-91, and gradually came down to 6 per cent in the mid-nineties and to 5 per cent in 2008-09 to 4.5 per cent in 2010-11. Such a sudden fall happened because of reductions in customs tariffs and excise duties on account of WTO guidelines and Chelliah Committee reports advising reduction in duties and tariffs. Therefore during this period, a major impetus was given by the direct taxes whose ratio improved to close to 6 per cent. The state taxes ratio in the same period has been about 5 per cent from 1985-86 till 1999-2000 and thereafter improved to 5.5 per cent in 2007-08, to 6.14 per cent in 2011-12 and to 7 per cent in 2013-14. This happened because of the introduction of VAT as also computerisation of state VAT departments.

International Comparison

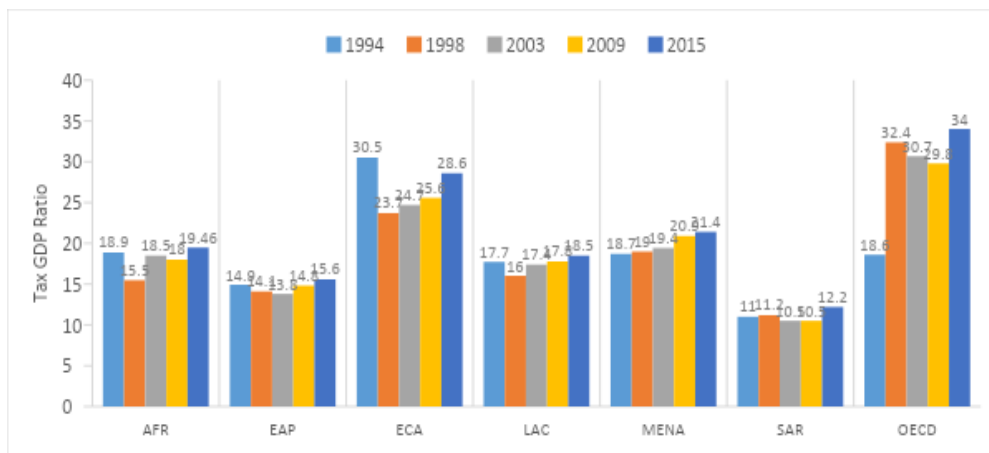
International comparison of tax-GDP ratios indicates that India does not fare so well, compared to ratios of OECD countries or BRICS countries or even similarly placed economies. If we compare Indian figures with similarly placed global economies, we find that Canada and the UK have a tax-GDP ratio of about 37 per cent, while USA and Japan have a ratio of about 29 per cent, while Malaysia and Korea have a tax-GDP ratio of about 18 per cent, which is similar to that of India. Region-wise also, it can be seen that the OECD countries have a much higher tax-GDP ratio of about 31 per cent, while Europe and Central Asia have a ratio of about 27 per cent. At the same time, the ratio of the South Asian region, which includes India, and the African countries have a much lower ratio of about 17 per cent, indicating poor tax systems and insufficient penetration and that it requires a lot of catching up. The comparison of the tax- GDP ratio of seven important economies of the world in the form of a bar chart is shown in Figure 7. The tax-GDP ratio of different regions of the world is also depicted below in Figure 8. It is clear from figure 7 that ratios of UK and Canada have been about 37 per cent, while that of the USA, Japan and Korea have been at about 28 per cent. Even the other BRICS countries (Russia, China, Brazil and South Africa) have a much higher ratio ranging from 20 per cent to 33.4 per cent (table 5). India, however, has one of the lowest ratios at about 17 per cent and therefore it may be said that it is low and that there is enough scope for improvement.

Figure 7: Tax-GDP Ratio of Different Countries



Source: OECD Revenue Statistics, 2017; CBDT statistics 2016.

Figure 8: Tax-GDP Ratio - Region wise

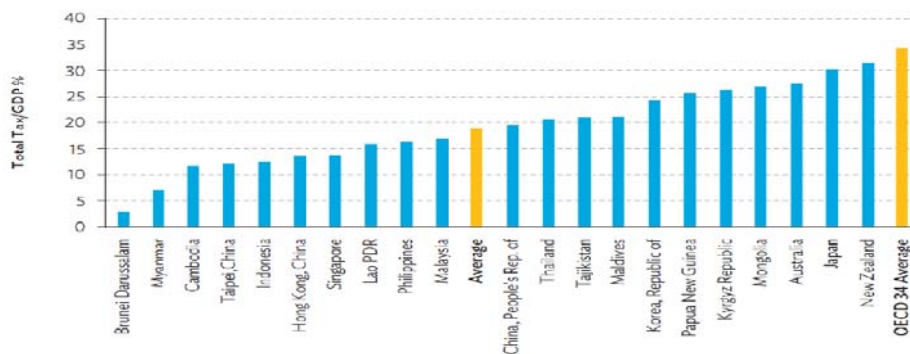


Source: The World Bank classification and WDI report 2015, OECD report 2017.

SAR- South Asia Region, MENA- middle east and north Africa, LAC- Latin American countries, ECA- Europe and central Asia, EAP- East Asia and Pacific, AFR- Africa

The tax-GDP ratios in respect of OECD countries and major economies for 2014 is depicted in figure 9, which shows that the OECD average is 34.4 per cent while the global average is about 18 per cent. Even China's ratio at about 19 per cent is slightly better than India's.

Figure 9: Tax-GDP Ratio of OECD and Non-OECD Countries for 2014



Source: OECD Statistics 2016

Therefore it may be concluded that India is still a long way to go in reaching close to OECD and developed countries' tax ratios, indicating a lot of scope for improvement. Therefore, further tax reforms in policy as also in tax administration are required and to do that, global best practices need to be emulated and benchmarking of the Indian tax administration needs to be done. The comparison with the BRICS countries is shown in Table 5, which conveys that India has the lowest tax-GDP ratios among the BRICS nations.

Table 5: Comparison with BRICS Countries

S No.	Country	Tax GDP ratio (year 2015) %age	GDP Size in USD trillion	GDP Growth %age
1	India	17.7	2.8	7.2%
2	China	20.1	11.80	6.5%
3	Brazil	34.4	2.14	0.2%
4	Russia	19.5	1.56	1.1%
5	South Africa	26.9	0.32	1%

Source: OECD comparative tax administration, 2017 and IMF data

It is also seen that in the developed countries and OECD, a major component of overall taxes is income tax which is above 50 per cent, while developing countries like India still depend upon indirect taxes or consumption taxes. Reasons are not far to seek, because as the per capita income increases and the country becomes richer, more and more taxes come from direct taxes or more particularly the income taxes. In this regard, it will be relevant to see the contribution of different taxes in different countries in percentage terms which is shown in table 8.

Table 6: Composition of Tax Revenues of Different Countries

	Individual Income Tax	Corporate Tax	Property Tax	Social Security contributions	Taxes on goods and services	Payroll Tax	Total
Taxes as Percentage of Total Tax Revenue							
India	12.4	20.9	0	0	65.9	0	99.2
Canada	37.4	11.0	9.9	14.4	23.6	1.9	98.2
USA	38.1	10.9	11	23.3	16.6	0	99.9
UK	30.1	9.4	12.6	18.4	29.2	0	99.7
Japan	19.5	16.8	8.9	36.4	17.9	0	99.5
Mexico	27.7		1.7	15.3	52	1.4	98.1
Korea	16.7	15.1	12.8	20.8	31.3	0	96.7
Malaysia	12.2	33.8	NA	0	27.1	0	96

Source: OECD Revenue Statistics (1965-2008), Indian Public Finance Statistics (2008-09), govt. of India; and Ministry of Finance, Govt. of Malaysia.

From table 6, it may be concluded that India is still largely dependent on indirect taxes for its tax revenue as compared to the developed countries where a major share comes from direct taxes, especially from personal income tax. It is so because as a country grows richer and the per capita income increases, the contribution from personal income tax goes up. In India, the number of taxpayers in the higher income bracket is still very low, forcing it to rely more on indirect taxes. Tax evasion is another reason for the lower contribution of direct taxes in India.

Factors Influencing Growth in Tax Revenue

The increase in direct tax revenue has more to do with the rapid growth of the organised sector, expansion in the interaction of the financial sector with the rest of the economy, and administrative measures like extending the TDS and improved compliance arising from the reduction in marginal rates of tax. The extension of permanent account numbers to cover a larger number of potential taxpayers and the expansion of the tax information system (TIN) are expected to advance this cause further, by generating an extensive and reliable database. The number of personal income tax assesseees has increased significantly over last two decades, from 19.6 million in 1999-2000 to 28.8 million in 2003-04 to 64.50 million in 2017-18. The important thing to note is that the number of taxpayers is still small, considering the growing middle class. Further, the number of taxpayers with income above Rs.1 million is growing; it still constitutes a small number as well as a small proportion of the total. This happened because of improvement in tax compliance after the rationalisation of tax rates to a reasonable level of 10 per cent, 20 per cent and 30 per cent from 1997-98 onwards and better enforcement. E-payment of taxes, e-filing of returns and computerisation of departmental functions also facilitated this process.

Changes in Tax Structure and its Impact in India

In this connection, it will be relevant to examine various changes in tax policy over a period of time and its impact on different taxes:

Table 7: Change in tax structure and its Impact

Year	Changes in tax structure or policy	Impact on tax revenue
1973-74	Maximum marginal tax rate was enhanced to 85 per cent and alongwith a surcharge of 15 per cent on income above 2 lakh, thus effective rate was enhanced to 97.50 per cent, which was confiscatory, on top of it wealth tax rate was enhanced to 5 per cent	The tax revenue as also tax - GDP Ratio was increased in the following years
1974-75	Marginal tax rate reduced to 77 per cent and in 1976-77 further reduced to 66 per cent	
1985-86	Marginal tax rate was reduced to 50 per cent and wealth tax rate reduced to 2.5 per cent.	Tax-GDP ratio increased to 16 per cent
1990-91	Corporate tax reduced to 50 per cent and for closely held companies to 55 per cent.	
1991-92	Systematic economic reforms started. TRC under Dr. Raja Chelliah constituted.	
1992-93	Tax slabs consolidated into 3; of 20 per cent, 30 per cent and 40 per cent. Wealth tax reduced to 1 per cent on TRC recommendation.	Emphasis was laid on direct taxes, whose share steadily increased in the following years
1993-94	All domestic companies to be taxed @ 40 per cent. Foreign companies at 45 per cent.	
1994-95	Service tax came into existence initially for 3 services and later extended to 80 services and finally to all services except a negative list of few services	
1996-97	MAT provisions introduced for zero tax companies, 30 per cent of book profit to be taxed, tax credit to be allowed. Later MAT to be charged @10 per cent, subsequently @ 15 per cent and finally @18 per cent	
1997-98	Tax rates consolidated in 3 slabs of 10 per cent, 20 per cent and 30 per cent and has been stable thereafter. The corporate tax rate reduced to 35 per cent. Dividend distribution tax on companies @10 per cent. 1/6 scheme launched	Tax GDP ratio reduced to 13.50 per cent, largely because of indirect taxes decline
1998-99	Tax exemption limit increased from 40,000 to 50,000 and remained so until 2006-07. Gift tax act was abolished	Tax GDP ratio reduced to 12.92 per cent
2002-03	Kelkar task force report submitted recommending further rationalisation of taxes	
2004-05	Security transaction tax STT @0.1 per cent introduced. Surcharge @10 per cent on income exceeding 8,50,000, which was increased to 10,00,000 in 2005-06 and subsequently to 1,00,00,000. State VAT introduced	The ratio of direct taxes in central taxes improved to 45 per cent
2005-06	BCCT Banking Cash Transaction tax introduced on withdrawals above Rs. 25,000. This was withdrawn in the next year because of severe criticism. Corporate tax reduced to 30 per cent. Surcharge @10 per cent and tweaking in depreciation provisions. FBT- Fringe Benefit Tax was introduced, which was withdrawn 2 years later. Gifts exceeding 25,000 other than close relatives to be treated as income.	No significant collection from BCCT or FBT
2006-07	Exemption limit increased to 1,00,000, for women 13,500, for senior citizens 1,85,000. Deduction u/s 80C was given at 1,00,000 Standard deduction for salaried people abolished	Good growth in direct taxes of about 40 per cent, indirect taxes however has been slower Corporate tax became the biggest contributor to tax kitty
2007-08	Compulsory e-filing of company returns, which was extended to firms in 2008-09 and later to all auditable cases having turnover over Rs.40 lakh	The direct taxes surpassed indirect tax collection and became 52.50 per cent of central taxes Tax-GDP ratio improved to 17.45 per cent
2008-09	DTC drafted and put up in public domain FBT abolished Exemption limit increased to Rs.1,50,000	
2009-10	CPC Bangalore in collaboration with Infosys established with allocation of Rs 300 crore, to take care of e-returns	Tax-GDP ratio of direct taxes reached all-time high of 6.26 per cent of GDP and share of direct taxes to total central taxes to 60.64 per cent

2012-13	CPC-TDS was established at Ghaziabad to take care of TDS functions Exemption limit increased to Rs.2,00,000 Service tax raised from 10 per cent to 12 per cent Slab of 20 per cent tax raised from 8 lakh to 10 lakh Excise duty raised from 10 per cent to 12 per cent	Share of direct taxes came down to 54 per cent, because of modest growth
2013-14	All returns above Rs.5 lakh income to be filed electronically. Surcharge @ 10 per cent on income above Rs.1 crore, for companies above Rs.10 crore income TDS @ 1 per cent on land/real estate transactions Modified GAAR norms to be applied from 1/04/16 TARC Constituted under chairmanship of Parthasarathi Shome to suggest changes for strengthening tax administration	Economy showed recovery but taxes did not grow at desired pace. Direct taxes grew at 13.60 per cent to Rs.6,38,591 while indirect taxes were a little slower at 7 per cent to Rs.4,96,238
2014-15	1. Income tax Exemption limit raised from 2,00,000 to 250,000, for senior citizen Rs.3,00,000 2. Deduction u/s 80C enhanced from 1,00,000 to 1,50,000. 3. Housing loan rebate enhanced from 1,50,000 to 2,00,000 4. Some tweaking in excise duty rates	Direct Taxes grew at modest pace of 11.36 per cent to Rs.6,96,000 cr, indirect taxes at about 7 per cent to Rs.5,46,000. Even revised targets of revenue could not be met
2015-16	1. Wealth tax abolished 2. The corporate tax was lowered from 30 per cent to 25 per cent in a phased manner beginning 2016-17. 3. Recommendation of finance commission allocating 40 per cent of central taxes to states accepted. 4. DTC abandoned. 5. New law on black money introduced 6. Rate of service tax increased from 12.36 per cent to 14 per cent. 7. Tweaking in import duties on some items	Taxes grew over 14 per cent and even tax base expanded.
2017-18	1. Levy of long term capital gains @ 10 per cent on sale of shares. 2. Reintroduction of standard deduction of Rs.40,000 to salaried persons. 3. Concessions to senior citizens u/s 80L and for medical expenses. 4. Corporate tax reduced to 25 per cent for companies having turnover up to 500 cr.	Taxes grew at decent pace of over 18 per cent during this period. Even tax base broadened in as much as over 2 crore new taxpayers were added during 2016-17 and 2017-18.

Sub-National Tax Performance

In Indian context, it is relevant to see the contribution made by different states in total tax kitty of the country. The contribution made by different states is tabulated in table 5. It is seen that most industrialised states, like Maharashtra, Delhi and Karnataka, contributed most to the tax collection. Thereafter, states like Tamil Nadu, Andhra Pradesh and Gujarat which are also fairly industrialised, contributed significantly. The contribution by poor states like Orissa, MP, Bihar, Himachal, Rajasthan etc is small. Surprisingly, the contribution by UP is also significant though it is a poor state. The contribution by north eastern states and smaller states like Goa is also small.

Table 8: State and UT-wise Break-up of Tax Collection

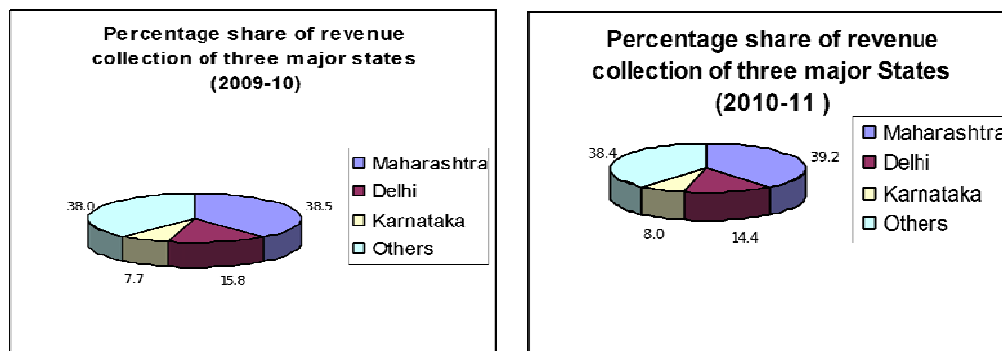
(Rs.in crore)

	States	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	
1.	Andhra Pradesh	10173	13835	17494	18716	23133	2518.0	29947.7	32296.1	
2.	Arunachal Pradesh	6.3	8.56	27.98	57.24	70.12	87.6	84.0	111.8	
3.	Assam	1462.62	1623.38	1447.05	2565.64	2937.79	3742.8	4564.0	4486.6	
4.	Bihar	553.87	791.42	1719.32	1997.82	2581.09	3058.4	3806.7	4491.6	
5.	Jharkhand	1462.62	1958.57	1060.04	1388.58	1691.43	1977.7	2497.9	3482.7	
6.	Goa	1642.32	2156.26	3029.76	3624.06	4886.25	4583.9	2600.4	2100.3	
7.	Gujarat	9108.45	11909.14	12577.29	15001.16	17016.98	20961.7	25196.1	28783.9	
8.	Haryana	3196.15	5246.26	5360.03	6365.59	9212.60	11168.0	13788.0	16778.6	
9.	Himachal Pradesh	416.46	465.54	796.69	795.28	894.06	942.5	1267.6	1622.4	
10.	Jammu & Kashmir	379.46	533.34	573.99	671.38	711.63	869.9	1160.7	1459.1	
11.	Karnataka	19014.83	30806.94	27311.15	29220.86	35824.80	40956.0	49047.8	59769.8	
12.	Kerala	2153.14	2775.79	3719.82	4618.69	5493.24	6810.0	8524.4	10155.6	
13.	Madhya Pradesh	2572.31	3556.22	4589.89	5380.21	6756.40	8729.9	11226.3	13486.6	
14.	Chhattisgarh	1527.63	1891.67	1286.67	1608.40	1882.29	1987.1	2281.9	3067.9	
15.	Maharashtra	86709.33	129353.9	131168.50	145507.62	174968.59	177363.3	202128.9	229494.9	
16.	Manipur	8.89	11.06	21.22	27.74	44.12	38.4	55.4	79.2	
17.	Meghalaya	186.35	206.66	219.42	281.25	367.00	406.3	474.0	577.3	
18.	Mizoram	0.08	0.18	6.54	9.03	6.89	9.2	12.6	17.8	
19.	Nagaland	11.09	11.21	9.85	15.84	19.29	20.7	30.4	35.1	
20.	Delhi	38399.62	46961.39	54705.03	59621.71	64208.09	68410.5	79137.1	88140.4	
21.	Orissa	3309.35	4279.15	4639.94	5126.87	6172.67	7014.4	8630.5	9394.2	
22.	Punjab	2200.69	2584.48	3350.07	3760.03	5019.23	6181.6	6977.0	7783.6	
23.	Rajasthan	4401.47	5240.71	4666.16	5516.16	5813.29	7689.2	9951.9	11246.5	
24.	Sikkim	19.39	15.91	29.17	50.72	48.17	64.4	199.5	205.4	
25.	Tamil Nadu	14747.54	18010.29	20651.09	24265.07	28409.46	28327.5	33051.3	42681.3	
26.	Tripura	118.57	64.25	58.46	87.18	100.48	142.2	166.3	218.7	
27.	Uttar Pradesh	6262.2	7044.62	14452.95	15905.02	19850.87	20130.3	25745.6	25886.5	
28.	Uttarakhand	746.67	689.13	731.13	1086.60	1079.99	1255.7	1591.9	1941.9	
29.	West Bengal	9793.21	12028.57	13557.45	15862.32	19457.97	20592.0	24462.9	26900.7	
30.	Total	227583.6	311071.1	329261.59	369134.75	438658.16	468701.1	548608.8	626696.6	
	States	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	
	Union Territories									
31.	Andaman & Nicobar	11.23	21.26	24.88	32.31	36.75	44.2	50.1	52.8	
32.	Chandigarh	911.41	1053.92	812.11	948.42	1201.23	1373.1	1776.2	1874.8	
33.	Daman & Diu	9.46	2.07	97.80	92.28	97.19	120.0	146.7	158.2	
34.	Dadar N.aveli	0	0	71.55	79.49	84.69	91.6	110.5	245.6	
35.	Puducherry	136.25	143.95	158.30	215.77	222.12	260.4	356.8	425.0	
36.	Lakshadweep	0.13	0.15	0.85	0.92	1.77	5.8	6.9	10.3	
	Total	1075.58	1222.58	1165.49	1369.19	1643.75	1895.1	2447.3	2766.6	
	C.T.D.S.	1522.19	2036.87	3390.93	7350.19	6632.02	4832.0	7929.3	9125.7	
	Grand Total	230181.4	314330.5	333818.01	377854.13	446933.93	475428.2	558985.4	638588.9	

Source: Director Budget (CBDT)

From the Table 8, it may be concluded that Maharashtra has been the best performing state in terms of tax collection and contributes about 38 per cent of the direct taxes revenue. However, in last four years, its contribution has slightly come down from 38.92 per cent in F.Y. 2010-11 to 37.26 per cent in F.Y. 2011-12, to 36.16 per cent in F.Y. 2012-13, to 35.89 per cent in 2013-14. The other better performing states have been Delhi and Karnataka, which contribute about 14 per cent and 9 per cent respectively. These three states put together contribute about 61 per cent of total direct taxes revenue. The reason being that Mumbai (which falls in the state of Maharashtra) is the financial capital of the country and most of the fortune 500 companies have registered office there so they pay taxes there. Delhi being the capital city, commands lot of business and investments, and a significant number of large companies who do business in NCR Region have got their registered offices there. Bangalore in Karnataka is the fastest growing city in the country and probably attracts the highest amount of foreign direct investment as of now and is also called as the innovation capital of the country. In fact, Karnataka has been the fastest growing state in terms of tax revenue and has outperformed the national growth rate in taxes in the last 10 years. The contribution from the above three states in the form of a pie chart is shown in Fig 10.

Figure 10: Relative share of states in tax collection



Cost of Tax Collection and Efficiency of Tax Administration

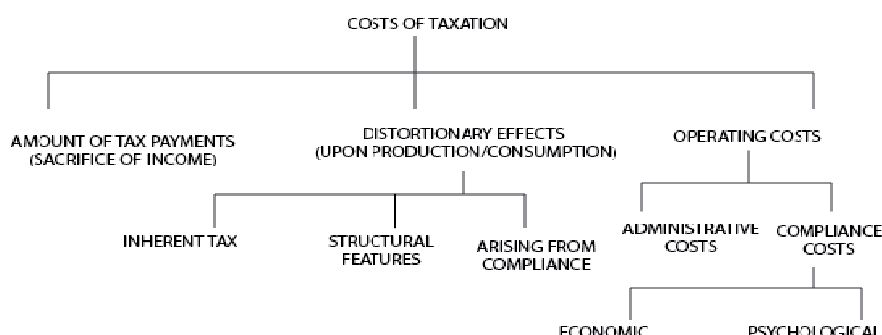
Efficiency of tax collection directly connects to the costs of tax collection and indicates efficiency if the cost per unit of tax collected declines over time. Normally costs are measured for 100 units of taxes collected and thus that forms the tool of measurement. It is a cardinal principle of taxation that a person should incur bare minimum costs over and above taxes paid by him. However, in reality costs of compliance to a tax payer are quite significant and at times so prohibitive that it interferes with the regular compliance process; higher are the costs more likelihood of a person avoiding compliance. Another important factor is probability of detection of such non-compliance by tax administration and taking punitive action; higher is the probability higher is the compliance. However it is widely believed that such costs are significant and is an area of growing concern for all the countries including India. It is gathered that it has become a political issue in many countries like Australia and the United Kingdom. It is also seen that compliance costs are explicitly addressed in the policies of countries like the USA, UK, Australia and Netherlands. In fact in UK, compliance cost assessments (CCAs) are now mandatory

while introducing new tax proposals and similar process is followed in Australia in the form of Taxation Impact Statements (TIS).

Classification of Tax Transaction Costs

The levy, collection and administration of taxes involves several kind of costs namely; costs borne by the taxpayer in complying with the tax laws, costs incurred by third parties in making TDS etc., costs borne by the government as administrative costs of tax administration as also amount paid to the banks for collection of taxes and costs borne by the economy itself in terms of distortion created in investment decisions etc. Taxes affect the economy in the sense that they distort price relations developed in the market and deform market economic rationality. As a result of tax, consumers lose part of consumption as a portion of their income going to the government and indirectly it reduces sales and employment and therefore they affect the efficiency of economic activities. This excess burden of taxation is also called as dead weight loss, as it does not result into benefit. Needless to say that taxes reduce the revenues at the disposal of taxpayers and thus their consumption, investment and savings as also welfare of the people. The costs related to loss of welfare are difficult to quantify. Economists first began to estimate the cost of welfare loss in the 1960s. A. Harberger, estimated welfare loss from imposition of taxes amounted to about 2.5% of tax revenues in USA. As per Grądalski (2006), the loss of welfare on account of taxation in Poland in 2002 was 2.4% of total tax revenue. The compliance costs comprise both economic and noneconomic costs. The economic costs consist of the monetary and time costs, in filing and dealing with the tax authorities. Non-economic costs include the psychological costs, like stress and anxiety generated from complying to a specific tax or a taxation related activity, such as a tax audit etc. Various kind of costs of tax collection are shown in Figure 11, as under.

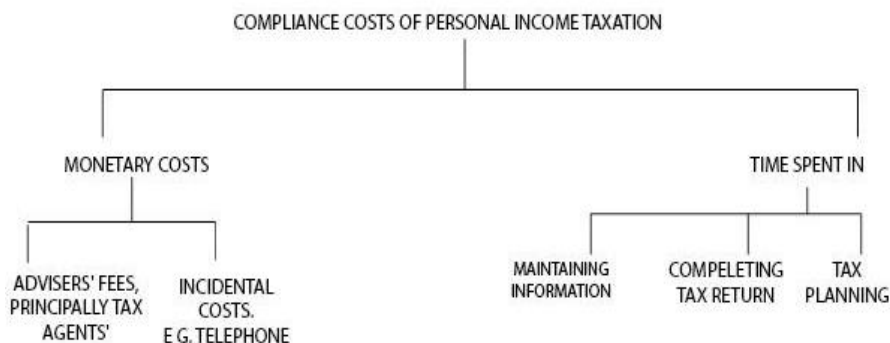
Figure 11



Source: constructed by the author

For individual tax payers, the cost may include the cost relating to record-keeping and account books and filing tax return or for preparing information for chartered accountant or tax professional; the fees paid to a tax professional and other associated costs such as; travel, computer software, phone, visit to tax office and TDS compliance cost etc., which is reflected in figure 12 as below.

Figure 12



Source: constructed by the author

For businesses, self-employed and corporates, the costs may be divided into external and internal costs, depending upon nature of expenditure. Internal costs comprise of the monetary costs like staff salary costs and own time costs. External costs, comprise largely of auditing, accounting and legal fees payable to professionals. Another important issue is the deductibility of expenditure incurred in compliance work, especially by individual taxpayers, which is legitimate and most of the tax administrations allow it. However in India, Individual tax payers particularly the persons not having business income like salary earners do not have such provision.

The other major costs are administrative costs of tax department and compliance costs to the taxpayer. Administrative costs are the costs borne by the government in connection with the functioning of tax administration and would not be incurred but for tax collection machinery. It will also include the costs incurred by the government on Tribunals(ITAT) and Settlement Commission as also partly the costs of revenue department, C&AG and police department etc. Besides government incurs costs of Rs. 11.80 per Rs. 1000 cr collected by banks which works out to 1.18%. However the actual costs borne by the banks are even higher. Similarly, the costs to the taxpayers are the costs incurred by taxpayers in connection with meeting their tax obligations and may include salary of accountant to maintain books of accounts, fees of ta audit and tax representation of a chartered accountant or a lawyer, costs for filing tax return and making other compliances etc. Evans (2001) refers to the costs related to tax collection as operational costs, and defines them as the sum of costs related to tax collection administration and the costs related to compliance with the taxes incurred by taxpayers. He also draws attention to the indirect costs incurred by taxpayers in connection with their imposition, which include, for example, conscious actions leading to a reduction in sales.

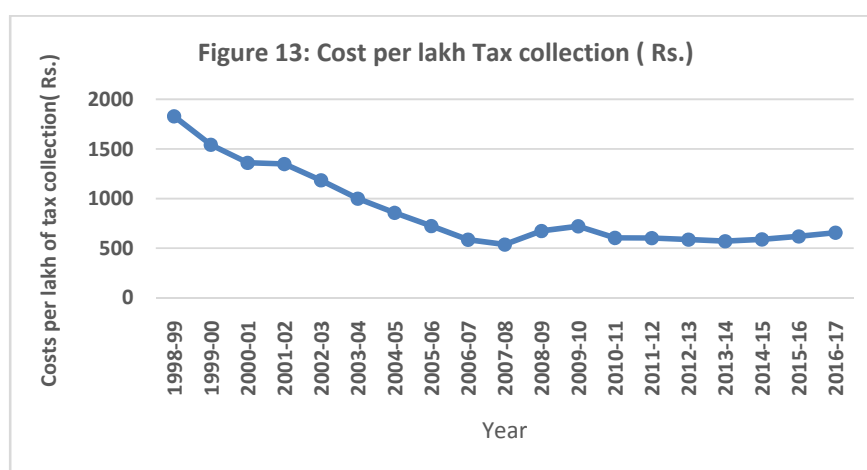
In the reference literature, primarily due to the availability of data, most often administrative costs include direct expenses related to the maintenance of the tax administration (e.g. employee salaries, building maintenance costs, costs related to the purchase of fixed assets, IT systems, etc.). It is seen that tax compliance costs are typically high, 2 to 6 times higher than tax administrative costs. International comparisons show that they can amount to as much as 2.5% of GDP and are differentiated by the type of tax. At the same time, research has shown that the less complicated the

tax system is and the more transparent is the tax administration, the lower are the costs of fulfilment of tax obligations incurred by taxpayers (Torgler & Schneider, 2007).

The administrative cost of Indian tax administration from F.Y. 1998-99 onwards is depicted in Table 9.

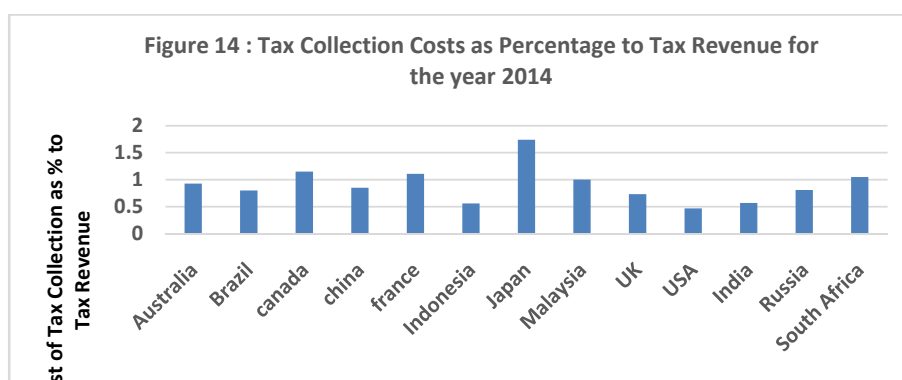
Table 9: Administrative Cost of Tax Collection in India

Financial Year	Total tax Collection (in crores)	Total Cost (in crores)	Cost per lakh collection (Rs.)	Percentage Cost of Tax Collection
1998-99	46600	852	1828	1.83
1999-00	57959	894	1542	1.54
2000-01	68305	929	1360	1.36
2001-02	69198	933	1348	1.35
2002-03	83088	984	1184	1.18
2003-04	105088	1050	999	1.00
2004-05	132771	1138	857	0.86
2005-06	165216	1194	723	0.72
2006-07	230181	1349	586	0.59
2007-08	314330	1687	537	0.54
2008-09	333818	2248	673	0.67
2009-10	378063	2726	721	0.72
2010-11	446935	2698	604	0.60
2011-12	493959	2976	602	0.60
2012-13	558965	3283	587	0.59
2013-14	638591	3641	570	0.57
2014-15	695792	4101	589	0.59
2015-16	741945	4593	619	0.61
2016-17	849818	5578	656	0.66



Source: Constructed from Table 11

From the Table-8, and Figure-13 it is quite clear that the administrative cost of tax collection has been consistently falling from Rs. 1828 in the year 1998-99, it gradually came down to Rs.999 in 2003-04 and to Rs. 537 in the year 2007-08. There after there has been marginal increase in costs to Rs. 721 in 2009-10, which is on account of capital expenditure incurred by the Income Tax Department on setting up new CPC at Bangalore and CPC-TDS at Gaziabad. There after the costs have been stabilised to about Rs. 600 per lakh of collections and is among the lowest. In percentage terms also it has come down from 1.83% to about 0.60 %. However, these costs do not include the cost of compliance to the tax payers and cost of compliance to the third parties, which is significant as discussed earlier. It also does not include the cost of collection charged by the banks from the Government for collection of revenue, which is Rs.11.80 for every Rs.1000 collected. The global comparison of administrative costs is presented in Figure 14.



Source: compiled from OECD tax statistics, 2014

From the Figure 14, it can be further concluded that the administrative cost of tax collection in India has been the least among similarly placed economies. Only USA is a bit lower in terms of unit costs. However, experts believe that the cost of compliance to the tax payers is still quite high. As per a study carried out by Das Gupta (2002), such costs could be as high as 6% to 16% of the tax paid by the individual tax payers and 14% to 49% of the tax paid to the companies. Therefore, the tax administration needs to take initiative in terms of simplification of the tax laws and procedure to comply, as also launch tax education and taxpayer assistance programmes in a big way. The study suggests that compliance costs are typically anywhere between two percent and ten percent of the revenue collected or up to 2.5% of GDP and that it may be two to six times of administrative costs. The studies also suggests that administrative costs are less and that they seldom exceed 1% and are usually well below 1%. The reasons for high compliance costs are: frequent changes in tax laws and complexity of such laws. It is well documented (KPMG Report, 2006) that change creates both cost and uncertainty. Frequent changes in existing tax laws, or bringing of new legislation, can significantly impact the compliance burden. This complexity is on account of the policy considerations behind the particular provision. There is also structural complexity or transactional complexity, which relates to the way in which laws are interpreted and applied, and which can affect the certainty and manipulability of provisions.

Table 10: Administrative Cost per Hundred Units of Tax Revenue

	Administrative Costs/net revenue collections (per cent)							
	2000	2001	2002	2003	2004	2005	2006	2007
India	0.69	0.70	0.66	0.62	0.56	0.50	0.44	0.45
South Korea	0.80	0.85	0.85	0.82	0.86	0.81	0.79	0.71
Malaysia	-	-	-	-	-	1.5	1.14	1.29
Mexico	-	-	1.44	1.41	1.29	1.18	1.06	0.95
UK	1.10	1.06	1.11	1.04	0.97	1.10	1.12	1.10
Canada	1.07	1.08	1.2	1.33	1.17	1.31	1.35	1.22
USA	0.43	0.46	0.52	0.57	0.56	0.52	0.47	0.45
Japan	1.42	1.54	1.66	1.67	1.58	1.69	1.56	1.53

Source: IMF Tax Statistics & Indian Public Finance Statistics, 2008-09

From the above table, it can be concluded that the cost of collection in India has been the least vis-à-vis other countries. Only USA comes close to India in terms of unit costs. However, as stated above and as believed by the experts, the cost of compliance to the taxpayers is still quite high. As per a study carried out by Das Gupta (2002), such costs could be as high as 6 per cent to 16 per cent of the tax paid by the individual taxpayers and 14 per cent to 49 per cent of the tax paid to the companies. Therefore, the tax administration needs to take the initiative in terms of simplification of the tax laws and procedures to comply, as also launch tax education and taxpayer assistance programmes in a big way.

Growth in Taxpayers

It is believed that the success of a tax administration depends upon broadening and deepening of the tax base, so that the incidence of tax is spread over a large population. However, in developing countries like India, it is always a challenge to broaden and deepen the tax base, especially because about 60 per cent of our population lives in villages who firstly depend on agriculture, income from which is not taxable and secondly have a very small income and therefore do not pay taxes. Also, even people living in urban areas have a large chunk of below taxable limit income. Besides, a very large population is below 18 years of age and therefore is not eligible to file tax returns. There is also a section of the populace who should be filing but do not file as they feel that they may not be caught. Any tax administration needs to identify the potential taxpayers, persuade them to register and bring them under the tax net. Of course, it will require a lot of efforts in terms of gathering data from various agencies and third parties, regarding transactions and income and identify potential taxpayers, educate and help them to meet their tax obligations. At the same time, habitual tax evaders will have to be dealt with strictly and suitable penalty and prosecution mechanisms will have to be evolved. The statistics of taxpayers on the rolls of the Income-Tax Department and different categories of taxpayers is shown in table 11.

Table 11: Number of Effective Taxpayers

Financial Year	Company	Individual	HUF	Firm	Trust	Others	Total
2000-01	334261	20662926	553194	1336861	63999	51035	23002276
2001-02	349185	23734413	607519	1378706	97272	58784	26225879
2002-03	365124	25935556	644489	1345232	117304	57224	28464929
2003-04	372483	26624224	654848	1338613	154276	57952	29202396
2004-05	373165	24792990	620468	1235373	71375	65190	27158561
2005-06	382021	27370659	642759	1234424	74543	58077	29762483
2006-07	398014	29355248	761439	1241642	75610	71184	31903137
2007-08	498066	30868243	780853	1368373	74077	73189	33662801
2008-09	327674	30101260	768845	1310849	71145	70854	32650627
2009-10	367884	31384084	806236	1354330	76898	95994	34085426
2010-11	496872	31035394	761911	1229722	119378	95847	33739124
2011-12	584966	33189567	766207	1559895	143648	101711	36345994
2012-13	590288	34604064	790381	1183522	126392	82571	37377281
2013-14	707771	49752118	964512	1044646	206219	160710	52835976
2014-15	748237	53958653	1002644	1094509	217660	184614	57206317
2015-16	768268	57837733	1054642	1160540	231144	414153	61258480
2016-17**	764410	59273878	1028580	1183586	228392	213115	62691961**

From Table 11, it can be concluded that the number of taxpayers has gone up almost three times from 2000-01 till 2016-17, which is a tremendous growth by any standards. It may also be seen that a major growth in taxpayers has come in the last three years i.e. from 2013-14 to 2016-17. In fact, in the last two financial years 2016-17 and 2017-18 alone, over two crore new taxpayers have been added. This growth in taxpayers has come on account of a better tax administration and 360-degree profiling of taxpayers, their incomes, investments and other activities. Also, a major push has come on account of demonetisation 2016, where people were forced to deposit their cash in the bank accounts and targeting of cash depositors by the Income Tax Department. Introduction of Goods and Services Tax (GST) which subsumed 17 existing central and state taxes from July 2017 onwards has helped it further, as now it will not be possible for anybody to escape from the tax net and to hide their real transactions. However, still, major taxpayers remain individuals and most of them are salaried taxpayers. It is also seen that only about 50 per cent of registered companies file tax returns and some of them do not file on the grounds that they had no profits or no activities. However, these loopholes are being plugged and the non-filing companies may now be prosecuted by the CBDT, apart from levying penalty for non-filing. This will further compel the taxpayers to meet their tax obligations and file their tax returns.

Conclusions

From the analysis of tax data over last 30 years, it can be concluded that though there has been significant improvement in the overall tax collections as also in the tax-GDP ratio of direct taxes and there has also been significant expansion in the tax base, still India largely remains a tax noncompliance

society as mentioned by Finance Minister Jaitley in his budget speech of 2017. The tax-GDP ratio at about 17 per cent remains the lowest among all major economies of the world. It can also be seen from the analysis of the tax-GDP ratio that over a period of time, the contribution of direct taxes in overall taxes improved, while that of indirect taxes went down and that of the state taxes remained static. It happened because the customs tariffs and excise duties were considerably reduced by the government, to make them compliant with the WTO norms and therefore their contribution went down. At the same time, because of the computerisation of the Income Tax Department, formalisation of economy and better TDS coverage and efficient administration, the contribution of direct taxes improved over a period of time. However, the number of people declaring higher income say above Rs.50 lakh is small and that above Rs.1 crore even smaller and in fact over 50 per cent of the registered companies do not file tax returns. Most of the people who are filing tax returns are the salaried class, which does not fare well in global comparison. When we see the number of people buying cars and properties, we find that only a very small section of such people is paying taxes and filing tax returns. Coming to the efficiency of tax collection, we find that the administrative cost of tax collection in India is very small and is among the lowest in the world but if we consider the costs borne by the taxpayers, we find it quite substantial. Though after computerisation, most of the processes have been streamlined, yet some of the compliance requirements of the department are complicated and involve a lot of time and cost. It indicates the necessity of next level of reforms in tax structure including reforms in tax administration. To do that, we may adopt global best practices and the reform process successfully implemented by countries like South Africa and Malaysia. The Income Tax Department has to develop non-intrusive methods of evasion detection and to launch a big drive against tax evaders and black marketers. It is hoped that in due course, the tax-GDP ratio of the country will significantly improve, so as to enable the government to expand its social welfare agenda and help in removal of poverty and backwardness in the country.

References

- A Handbook for Tax Simplification*. World Bank (2008).
- Acharya, Shankar (2005). Thirty Years of Tax Reform in India. *Economic and Political Weekly*, (May 14): 2061-69.
- Bagchi, Aamresh (1994). India's Tax Reform: A Progress Report. *Economic and Political Weekly*, (October 22): 2809-16.
- Bagchi, Aamresh (1995). Strengthening Direct Taxes: Some Suggestions. *Economic and Political Weekly*, (February 18-25): 380-84.
- Bagchi, Amaresh and Nicholas Stern (1994). *Tax Policy and Planning in Developing Countries*. New Delhi: Oxford University Press.
- Bird, R M (1989). Administrative Dimension of Tax Reform in Developing Countries. In Malcolm Gillis (ed), *Tax Reform in Developing Countries*. London: Duke University Press.
- Center for Tax Policy and Administration (2006). *Tax Administration in OECD and Selected Non-OECD Countries – Comparative Information Series*. OECD Paris.
- Direct Taxes Code Bill of India (2008).

- Jhaveri, N J (2002). Direct Tax Reform: A Critical Evaluation of the Task Force Paper. *Economic and Political Weekly*, (November 30): 4765-70.
- Kaldor, Nicholas (1959). Tax Reform in India. *Economic and Political Weekly*, (January): 195-98.
- Karnik, Ajit (2002). Direct Tax Reform: Merit in Gradualist Approach. *Economic and Political Weekly*, XXXVII (50): 4981-82, December 14.
- Sengupta, D P and R Kavita Rao (2012). Direct Taxes Code and Taxation of Agricultural Income: A Missed Opportunity. *Economic and Political Weekly*, xlvii (15): 51-60.
- Shome (ed) (2013). *Indian Tax Administration – A Dialogue*. Published by Orient Black Swan.
- Tax Administration (2013). Comparative Information on OECD and other Emerging Economies - OECD Publishing.
- Tuan Minh Le, Blanca Moreno-Dodson & Nihal Bayraktar (2012). *Tax Capacity and Tax Effort: Extended Cross-Country Analysis from 1994 to 2009*.
- Ten Quick Steps of Unlocking Tax Revenue in Rapidly Emerging Economies – Mckinsey & Company Report (2013)
- USAID Leadership in Public Financial Management (2013). Detailed Guidelines for "Improved Tax Administration in Latin America and the Caribbean". Deloitte Consulting LLP.
- Website of Ministry of Finance, Govt. of India, www.finmin.nic.in
- Website of Income-Tax Department, Govt. of India, www.incometaxindia.gov.in.
- Website of CBDT, www.irsofficersonline.org.in.
- (2014). Report of Tax Administration Reform Commission of India (TARC) chaired by Parthasarathi Shome.
- (2002). Report of Second Administrative Reforms Commission of India headed by Sri V Moily.
- (2015). Report 2 of 2016 – Revenue Direct Taxes - C & AG (Comptroller & Auditor General) of India – for the year ended March 2015.
- Reports of the Tax Reform Committee (January 1993), Ministry of Finance, Government of India, New Delhi.
- (2001). Report of the Advisory Group on Tax Policy and Tax Administration for the Tenth Plan, Planning Commission, Government of India, New Delhi.
- (2002). Report of the Task Force on Direct Taxes, Ministry of Finance, Government of India, New Delhi.

Recent Working Papers

- 384 **Usage of Land and Labour under Shifting Cultivation in Manipur**
Marchang Reimeingam
- 385 **State Intervention: A Gift or Threat to India's Sugarcane Sector?**
Abnave Vikas B and M Devendra Babu
- 386 **Structural Change and Labour Productivity Growth in India: Role of Informal Workers**
Rosa Abraham
- 387 **Electricity Consumption and Economic Growth in Karnataka**
Laxmi Rajkumari and K Gayithri
- 388 **Augmenting Small Farmers' Income through Rural Non-farm Sector: Role of Information and Institutions**
Meenakshi Rajeev and Manojit Bhattacharjee
- 389 **Livelihoods, Conservation and Forest Rights Act in a National Park: An Oxymoron?**
Subhashree Banerjee and Syed Ajmal Pasha
- 390 **Womanhood Beyond Motherhood: Exploring Experiences of Voluntary Childless Women**
Chandni Bhambhani and Anand Inbanathan
- 391 **Economic Globalization and Income Inequality: Cross-country Empirical Evidence**
Sovna Mohanty
- 392 **Cultural Dimension of Women's Health across Social Groups in Chennai**
Annapuranam K and Anand Inbanathan
- 393 **Earnings and Investment Differentials between Migrants and Natives: A Study of Street Vendors in Bengaluru City**
Channamma Kambara and Indrajit Bairagya
- 394 **'Caste' Among Muslims: Ethnographic Account from a Karnataka Village**
Sobin George and Shrinidhi Adiga
- 395 **Is Decentralisation Promoting or Hindering the Effective Implementation of MGNREGS? The Evidence from Karnataka**
D Rajasekhar, Salim Lakha and R Manjula
- 396 **Efficiency of Indian Fertilizer Firms: A Stochastic Frontier Approach**
Soumita Khan
- 397 **Politics in the State of Telangana: Identity, Representation and Democracy**
Anil Kumar Vaddiraju
- 398 **India's Plantation Labour Act - A Critique**
Malini L Tantri
- 399 **Federalism and the Formation of States in India: Some Evidence from Hyderabad-Karnataka Region and Telangana State**
Susant Kumar Naik
- 400 **Locating Armed Forces (Special Powers) Act, 1958 in the Federal Structure: An Analysis of Its Application in Manipur and Tripura**
Rajiv Tewari
- 401 **Performance of Power Sector in Karnataka in the Context of Power Sector Reforms**
Laxmi Rajkumari and K Gayithri
- 402 **Are Elections to Grama Panchayats Party-less? The Evidence from Karnataka**
D Rajasekhar, M Devendra Babu and R Manjula
- 403 **Hannah Arendt and Modernity: Revisiting the Work *The Human Condition***
Anil Kumar Vaddiraju
- 404 **From E-Governance to Digitisation: Some Reflections and Concerns**
Anil Kumar Vaddiraju and S Manasi
- 405 **Understanding the Disparity in Financial Inclusion across Indian States: A Comprehensive Index for the Period 1984 – 2016**
Shika Saravanabhavan
- 406 **Gender Relations in the Context of Women's Health in Chennai**
Annapuranam K and Anand Inbanathan
- 407 **Value of Statistical Life in India: A Hedonic Wage Approach**
Agamoni Majumder and S Madheswaran
- 408 **World Bank's Reformed Model of Development in Karnataka**
Amitabha Sarkar
- 409 **Environmental Fiscal Instruments: A Few International Experiences**
Rajat Verma and K Gayithri
- 410 **An Evaluation of Input-specific Technical Efficiency of Indian Fertilizer Firms**
Soumita Khan
- 411 **Mapping Institutions for Assessing Groundwater Scenario in West Bengal, India**
Madhavi Marwah
- 412 **Participation of Rural Households in Farm, Non-Farm and Pluri-Activity: Evidence from India**
S Subramanian
- 413 **Inequalities in Health Outcomes: Evidence from NSS Data**
Anushree K N and S Madheswaran
- 414 **Urban Household Enterprises and Lack of Access to Production Loans**
Shika Saravanabhavan and Meenakshi Rajeev
- 415 **Economic and Social Benefits of SHG-Bank Linkage Programme in Karnataka**
Meenakshi Rajeev, B P Vani and Veerashekharappa
- 416 **Two Decades of Fiscal Decentralization Reforms In Karnataka: Opportunities, Issues and Challenges**
M Devendra Babu, Farah Zahir, Rajesh Khanna and Prakash M Philip
- 417 **Karnataka State Budgets - How Far Have They Promoted Inclusiveness?**
K Gayithri and Vijeth Acharya
- 418 **Caste Discrimination Practices in Rural Karnataka**
I Maruthi and Pesala Peter
- 419 **Food Security in Brics - Current Status and Issues**
Malini L Tantri and Kumar Shaurav
- 420 **Impact of Age Structure Transition on Current Account Balance for India: An Empirical Analysis**
Aneesha Chitgupi

- 421 **Market Value and Capital Structure: A Study of Indian Manufacturing Firms**
Dhananjaya K and Krishna Raj
- 422 **Inequity in Outpatient Healthcare Use and Utilization of Public Healthcare Facilities: Empirical Evidence from NSS Data**
Anushree K N and S Madheswaran
- 423 **Role of Worker's Compensation Benefit in Estimating Value of Statistical Life**
Agamoni Majumder and S Madheswaran
- 424 **Making Every Drop Count – Micro-Level Water Demand Accounting Challenges and Way Forward**
Chaya Ravishankar, Sunil Nautiyal and S Manasi
- 425 **Conceptualizing Peri-Urban-Rural Landscape Change for Sustainable Management**
Mrinalini Goswami
- 426 **Social Entrepreneurship: A Business Model for Sustainable Development**
Neeti Singh and Anand Inbanathan
- 427 **Revenue-Based Business Model to Growth-Based Business Model: A Critical Review of Indian Pharmaceutical Industry**
P Omkar Nadh
- 428 **Role of Social Entrepreneurship in the Quality of Life of Its Beneficiaries**
Neeti Singh and Anand Inbanathan
- 429 **Land Alienation in Tripura: A Socio-Historical Analysis**
Rajiv Tewari
- 430 **The Indian Mining Industry: Present Status, Challenges and the Way Forward**
Meenakshi Parida and S Madheswaran
- 431 **Impact of Irrigating with Arsenic Contaminated Water on Farmers' Incomes in West Bengal**
Madhavi Marwah Malhotra
- 432 **Macroeconomic Determinants of Software Services Exports and Impact on External Stabilisation for India: An Empirical Analysis**
Aneesha Chitgupi
- 433 **Fiscal Dependency of States in India**
Darshini J S and K Gayithri
- 434 **Determinants of Farm-Level Adoption of System of Rice and Wheat Intensification in Gaya, Bihar**
Shikha Pandey and Parmod Kumar
- 435 **Monsoon Diseases in Lower Kuttanad (Kerala): An Environmental Perspective**
Bejo Jacob Raju and S Manasi
- 436 **Risk Sources and Management Strategies of Farmers: Evidence from Mahanadi River Basin of Odisha in India**
Jayanti Mala Nayak and A V Manjunatha
- 437 **Determinants of Intra Urban Mobility: A Study of Bengaluru**
Shivakumar Nayka and Kala Seetharam Sridhar
- 438 **Structure and Strategy of Supermarkets of Fruits and Vegetables Retailing in Karnataka: Gains for Whom?**
Kedar Vishnu and Parmod Kumar
- 439 **Income and Vehicular Growth in India: A Time Series Econometric Analysis**
Vijayalakshmi S and Krishna Raj
- 440 **A Critical Review of Apprenticeship Policy of India**
K Gayithri, Malini L Tantri and D Rajasekhar
- 441 **Sustainability Concerns on Sugarcane Production in Maharashtra, India: A Decomposition and Instability Analysis**
Abnave Vikas B
- 442 **Economic, Occupational and Livelihood Changes of Scheduled Tribes of North East India**
Reimeingam Marchang
- 443 **Need for a Study of State Policies towards the Development of Religious Minorities in Karnataka**
Azhar Khan C A
- 444 **An Analysis of Bilateral Trade Between Canada and India**
Malini L Tantri and Preet S Aulakh
- 445 **Should they Avoid the Middleman? An Analysis of Fish Processing Firms in India**
Meenakshmi Rajeev and Pranav Nagendran
- 446 **Growth and Consolidation of Kerala Non-Gazetted Officers' Union: From Its Formative Years to Union Militancy Phase**
Jithin G
- 447 **The Relationship Between Economic Growth and Carbon Emissions in India**
Kaumudi Misra

Price: ₹ 30.00

ISBN 978-81-940398-4-6



INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE

(ISEC is an ICSSR Research Institute, Government of India
and the Grant-in-Aid Institute, Government of Karnataka)

Dr V K R V Rao Road, Nagarabhavi P.O., Bangalore - 560 072, India

Phone: 0091-80-23215468, 23215519, 23215592; Fax: 0091-80-23217008

E-mail: manjunath@isec.ac.in; Web: www.isec.ac.in