The objective of the present paper is to demonstrate that despite several years of reform, the tax-GDP ratio in India is well below international standards and has been static over the last decade. Based on a cross-country analysis of tax-GDP ratios in 115 countries over the period 2005-2015, an estimate is made of the extent of under-taxation in India. Considering that children in the age group of 0-14 years constitute about 40 per cent of the population of 1.3 billion in India, in the paper, it is argued that the tax-GDP ratio must be raised to enhance allocation to education, health care and physical infrastructure to ensure demographic dividends by providing the increasing workforce with productive employment opportunities. The reforms needed to raise the revenue productivity of the tax system while taking into account the best practice approach to tax reform are identified in the paper.

**JEL classification:** H29, E62, O23, P35

**Keywords:** India, tax policy, taxable capacity
I. INTRODUCTION

To accelerate the development of a country, its government must take a proactive role in creating an enabling environment by providing competitive levels of physical and social infrastructure and ensuring inclusion through adequate social protection and a safety net for the weak and vulnerable members of society. An economy striving to industrialize requires a significant amount of public investment in physical infrastructure to create generalized externalities. In India, with the age group of 0-14 years constituting 40 per cent of the population, significant investment must be directed to education, health care and other social services. Because of limited borrowing space available as a result of high deficits and debt, the latter exceeding 70 per cent of gross domestic product (GDP), significant additional resource mobilization is the only way through which the required level of public investment can be made in physical and social infrastructure. For the present paper, the tax system and reforms are reviewed and the reform areas to improve the revenue productivity of the tax system in terms of a higher tax-GDP ratio are identified.

There are a number of reasons for undertaking a review of the tax policy in India. First, despite attempted reforms in the country over a number of years, the ratio of tax to GDP has remained stubbornly stagnant. Second, the motivation for reforming the tax system has arisen also from the desire to enhance public investment in physical infrastructure and to increase allocation to such sectors as education and health care, which is critical to realize the demographic potential. Third, the federal nature of the country has posed constraints in calibrating tax policies in a coordinated and harmonized manner to attain broad-based direct and indirect tax systems. Fourth, in recent years, there have been widespread conflicts between the taxpayers and collectors, underlining the need to not only reform the tax administration but also to gear up the system to global best practices to combat the menace of base erosion and profit shifting by multinational companies.

The principal objective of tax policy in a developing market economy is to raise revenue in an equitable manner and with minimal distortions. The tax system needs to be reformed as it is plagued by low revenue productivity (in terms of the tax-GDP ratio) and significant distortions. Keeping in view the principles of an efficient tax system based on developments in theory of tax reform and best practice approaches, reform areas to complement the vision of accelerating inclusive development in the country are identified. Section II contains a summary of the principles of tax policy as derived from theory and best practice approaches. In section III, estimates to the tax potential in India are given to demonstrate that the tax-GDP in the country is low by international standards. In section IV the problems and reform measures required to develop a productive, efficient and equitable tax system in India are discussed. In section V, recent reform initiatives are documented and critically evaluated and Section VI is comprised of a summary of the conclusions of the paper.
II. WHAT MAKES A SOUND TAX SYSTEM?

Tax policies stand on the tripod of three equally important and interdependent constituents, the architecture, engineering and management. Architecture provides the design of tax policy guided by the objectives. The engineering aspect relates to the mechanics of applying the design, which are influenced by the nature and quality of the systems and institutions involved in tax collection. The management aspect of tax policy determines the implementation strategy and action taken, which depends on the political support, competence of the administration, application of technology in the administration and the information system. A tax policy is only as good as it can be effectively administered. In the real world, tax policy is affected by a host of factors, including, among them, the role of the State, level of development, administrative capacity and interest group politics. As economic administrative and political conditions vary and the responses of relevant economic agents to tax changes are non-uniform, each country has to choose a tax system that fits with its specific conditions. However, the general principles are helpful to design and reform tax policies.

The thinking on tax policy and reforms has undergone significant changes over the years. The traditional view was that income tax was a major instrument to reduce inequalities in incomes and, therefore, it should be a preferred instrument for raising resources. Accordingly, an increase in the share of direct taxes in the total was considered desirable. The theory posits that the optimal tax rate schedule depends on the distribution of abilities and that it also declines at high incomes. In the absence of lump sum taxes, the search for the second best optimum shows that increasing marginal tax rates with income to tax people having high abilities could result in disincentives in their effort to earn more income. As shown by Mirrlees (1971), high marginal tax rates lead to large economic distortions relative to the revenue raised. Further research has shown that the distortions can be significant when the labour supply is relatively inelastic, which implies that the distortions from high marginal tax rates can affect wage rates, thereby defeating the very purpose of reducing inequality (Feldstein, 1995). Given the difficulties in getting the information on abilities and efforts, it is suggested that a flat tax may be close to being optimal.

In the case of commodity taxes, Ramsey (1927), in an early contribution, showed that distortions can be minimized by levying higher tax rates on commodities with low compensated price elasticity of demand. However, the information for designing such a tax system is simply unsurmountable and administering such a tax with several rates is well beyond the capacity of tax administrations. Rate differentiation can also provide scope for lobbying by special interest groups. In addition, that tax system is politically infeasible because of its regressive nature.
While there is a large body of research on optimal tax theory, the practical application of them for designing the tax system has not been commensurate. Indeed, the perfect and costless information assumed in those models does not simply exist. The models do not take into account the administrative and compliance costs. They focus on determining the tax bases and rates and fail to take into account issues of enforcement tools and capacity. Furthermore, they essentially analyse the behavioural responses in consumption and production decisions and not the responses in terms of avoidance and evasion of taxes. There is also an implicit assumption that people understand and rationally react to the tax system and therefore, the government has no reason to manipulate the perceptions of the people (Slemrod and Gillitzer, 2014).

It must, however, be admitted that the results of optimal theories of direct and commodity taxes provide useful guidance in calibrating the real world tax systems. As stated by Hahn (1973, p. 106), “optimum formulas are either guides to action or nothing at all”. Despite this pessimism, it is obvious that the theoretical advances have helped to understand what constitutes a desirable tax system and to develop the best practice approaches to calibrating tax policies. One of the most important lessons from optimal tax theory is that distortion from a tax is equivalent to the square of the tax rate. This has led to recommending uniformity and simplicity in designing and reforming the taxes. While traditionally, the Haig-Simons income tax was considered the bedrock of the tax system, there is much less consensus on that today in the view of the undesirable economic effects of capital taxation. In fact, there has been a movement towards differentially taxing “dual” income taxation with capital income taxed at lower and less progressive rates (Auerbach, 2008). Notably, in many countries, the balance has shifted in favour of a broad-based value added tax on goods and services tax (GST). Even as income taxes continue, the step progressivity that existed in most countries in the 1950s and 1960s is no longer commonplace.

The most important objective of tax policy is to raise revenue by minimizing the three costs associated with taxation, the cost of collection, the compliance cost and the distortion costs, as people change their behaviour in response to tax policy. To minimize administrative and compliance costs, the tax system must be simple and transparent and the tax policy must not be loaded with multiple objectives but, instead, designed mainly to raise revenue in an equitable manner. To raise the same amount of revenue with lower tax rates, tax bases must be broadened with minimum exemptions and preferences and an effective administration and intelligence system needs to be in place to ensure compliance. While raising revenue is important (taxes exist primarily to meet this objective), the focus of tax policy and reforms should

1 The most recent attempt to distil balanced and well-grounded tax reform proposals in the United Kingdom of Great Britain and Northern Ireland was the Mirrlees Review. See Johnson and Myles (2011) and Gordon (2011).
be to enhance long-run revenue productivity and not to meet short-term exigencies through ad hoc changes.

Consequently, as Bird and Zolt (2008) argue, the best practice approach to tax policy and reforms requires that governments move towards a broad base, low rate approach, have in place a simple and transparent tax system and avoid arbitrary tax differentiation across people and economic activities. The distortions increase exponentially with the tax rates. As a result most countries desist from levying taxes at high rates. Thus, the preferred strategy for raising a given amount of revenue and putting in place a simple and transparent system is to broaden the base, reduce the rate and minimize rate differences. In the same vein, an important piece of advice given to most developing countries is to levy a broad based and simple goods and services tax (GST) at a single rate.

In most developing countries, including India, taxes are deployed to achieve many objectives, in addition to raising revenue in an equitable manner. Many countries complicate their tax system by providing exemptions and preferences for such objectives as increasing the levels of savings and investment, increasing investments in particular sectors, achieving balanced regional development, augmenting infrastructure, enhancing exports and encouraging the development of small and medium industries. Even when the assigned objectives are clear, such as promoting investment or exports, it is difficult to ascertain their effectiveness. Most often, they are redundant and ineffective and contribute towards making the tax system more complicated and open up avenues for avoidance and evasion of taxes. Often, they result in an uneven tax burden with domestic companies bearing a higher burden than foreign companies. Although experience suggests that sound macroeconomic factors, competitive infrastructure, effective governance and stable and predictable policies are the most important determinants of investment, most countries continue to extend a variety of incentives to attract investment, which not only causes significant revenue losses from tax-expenditure, but also tends to distort resource allocation.

The major challenge is to design a tax system that incorporates fairness in its impact. The most important lesson from optimal taxation is that the distortions in the tax increases exponentially with tax rates and therefore, even when the tax is seen to be progressive, the adverse effects on economic activity and employment may negate the progressivity. Furthermore, too much attention to the fairness of individual taxes is misplaced. When the tax system is designed to reduce distortions, it may contain some individual taxes that can be viewed as being regressive. What matters is the effect of the tax system as a whole and not the impact of individual taxes on the distribution of income (Johnson and Myles, 2011; Bird and Zolt, 2005; 2008).
The general presumption is that as indirect taxes are regressive, direct taxes should be designed to reduce inequalities. Accordingly, the traditional approach is to design highly progressive personal income tax systems and levy high rates on corporate income. 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. This is because only a small proportion of the population pay income tax in developing countries. In most of those countries, income tax is neither comprehensive nor progressive and much of the revenue comes from withholding taxes, with very little of it emanating from self-employed businesses, which can be attributed to a poor information system and the existence of a large unorganized sector. High rates of taxes on corporate income, given the high mobility of capital, can drive out businesses. Furthermore, progressive tax systems are not costless. They increase administrative, compliance and even more economic efficiency costs, and when the distortions are taken into account, the adverse impact on economic activity on the income of the poor may outweigh the gains from progressivity.

Empirical studies in developed and developing countries have shown that the tax system has not been effective in redistributing incomes. The study by Pechman and Okhner (1985) in which alternative assumptions about the distribution of burden of individual taxes for the period 1966-1985 are used shows that the tax system of the United States of America is not significantly progressive. Similarly, a careful study of the tax system of Chile by Engel, Galetovec and Raddatz (1999) indicates that the tax system is moderately regressive with the Gini coefficient higher at 0.4881 when the incidence of tax is taken into account as compared to 0.4861 without the tax. Accordingly, the focus of redistribution in fiscal policy needs to shift from reducing the income of the rich to increasing the income of the poor. This implies that the focus of the redistributive instrument should shift from the tax to the expenditure side of the budget.²

In recent discourse on optimal tax systems, discussion on the issue of an appropriate tax base-income versus consumption has resurfaced. Most versions of consumption tax avoid taxing normal returns on savings or capital or both. Of course, applying an expenditure tax may not be an option; also, it is not possible to impose a zero effective tax rate on the normal returns to capital. Nevertheless, a consensus among

² As Harberger (2005, p. 13) argues, “Society is not going to bring about major changes in the income distribution by operating either on the tax side or on the expenditure side of the budget of the public sector…..it is more realistic to think of the struggle against poverty to be a major goal”. He recommends that that should be done by helping the poor to meet their basic needs and providing opportunities for advancement by ensuring access to education and health care to those who cannot afford it. For similar arguments see also Bird and Zolt (2008).
tax theorists is that labour and capital income should be taxed differently because of the different effects they have on taxation. In fact, Auerbach, Devereux and Simpson (2010), recommend the replacement of the present system of corporation tax with a destination-based value added tax (VAT) on goods and services with labour costs deductible in addition to the input costs.

While doing away with the corporation tax would be politically unacceptable in all countries, the discussion brings out that a comprehensive VAT on goods and services is an important instrument in any modern tax system. The tax has been found to be particularly important to overcome a decline in revenue when developing countries try to rationalize import duties. This is demonstrated in the study by Keen and Lingthart (2002), which shows that a revenue-neutral tariff reduction accompanied by a price-neutral GST enhanced revenue and efficiency. An increase in revenue arises from the self-enforcing nature of the tax. An increase in efficiency arises, as it avoids distorting the input prices and to that extent, reduces production inefficiency (Keen, 2007). Emran and Stiglitz (2005), however, contest that GST on recorded transactions, when combined with weak administrations in developing countries, can work as a tax on the formal sector. In contrast, Keen (2007) considers GST as one of the least costly ways of taxing the informal sector because of its self-enforcing nature. In effect, as long as the gains from participating in the formal market are greater than the tax loss, the taxpayer prefers to pay the tax; this explains why the simplicity of the tax is important. Consequently, as Bird and Gendron (2007) argue: “On the whole, while further theoretical and particularly empirical research on the effects of value added tax in developing and transitional countries is needed, the case for a value added tax in such countries remains solid.”

Accordingly, a good tax system is one that minimizes, administrative, compliance and distortion costs to the economy. It should have broad base, low marginal rates and less differentiated rates with a simple structure. Fairness in tax policy should be judged by totality and not individual taxes. Furthermore, the focus of fiscal policy should shift from reducing inequality to alleviating poverty, which is more effectively done through the expenditure side of the budget. An important component of a good tax system is a comprehensive goods and services tax. It is not enough to focus on the design of the tax structure; building capacity and orientation in tax administration is equally important. A good tax system is supported by a good information system not only to enforce the tax but also to calibrate changes with full information. A hallmark of good tax administration is the taxpayer service, which not only builds confidence among the taxpayers, but it also improves compliance. Use of information technology promotes transparency and provides information for the enforcement of taxes.
III. ANALYSIS OF TAX REVENUE IN INDIA

Tax revenue trends in India

The tax-GDP ratio in India increased from less than 10 per cent in the 1970s to 14 per cent in the 1990s and 16.5 per cent after 2008/09. As shown in table 1, the highest ratio was 17.5 per cent, achieved in 2007/08, which followed the reduction in the consumption tax rates in the wake of global financial crisis. The ratio declined to 15.5 per cent in 2009/10 and thereafter gradually recovered to 16.5 per cent in subsequent years. The important point is that the tax-GDP ratio has been stubbornly stagnant since 2008/09. The decline in the ratio after 2007/08 by two percentage points was mainly on the back of lower central tax collections. Revenue from state taxes has steadily increased, albeit at a slow rate, from 5.5 per cent in 2008/09 to 6.3 per cent in 2014/15. The decline in the tax-GDP ratio after 2008/09 can mainly be attributed to lower collections in central taxes, by slightly less than two percentage points. Meanwhile, revenue from state taxes gradually trended higher, increasing by one percentage point after the cascading type sales taxes were replaced by a VAT on goods in 2005/06.
Table 1. Trends in tax-GDP ratio at union and state levels (percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Centre</th>
<th>States</th>
<th>Total</th>
<th>Centre</th>
<th>States</th>
<th>Total</th>
<th>Centre</th>
<th>States</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct</td>
<td>Indirect</td>
<td></td>
<td>Direct</td>
<td>Indirect</td>
<td></td>
<td>Direct</td>
<td>Indirect</td>
<td></td>
</tr>
<tr>
<td>1950-1960</td>
<td>1.57</td>
<td>2.77</td>
<td>4.33</td>
<td>0.65</td>
<td>1.69</td>
<td>2.34</td>
<td>2.22</td>
<td>4.46</td>
<td>6.68</td>
</tr>
<tr>
<td>1961-1970</td>
<td>1.93</td>
<td>4.49</td>
<td>6.42</td>
<td>0.44</td>
<td>2.48</td>
<td>2.92</td>
<td>2.37</td>
<td>4.67</td>
<td>6.94</td>
</tr>
<tr>
<td>1971-1980</td>
<td>2.21</td>
<td>6.21</td>
<td>8.42</td>
<td>0.26</td>
<td>3.71</td>
<td>3.97</td>
<td>2.47</td>
<td>4.91</td>
<td>7.38</td>
</tr>
<tr>
<td>1981-1990</td>
<td>1.96</td>
<td>7.77</td>
<td>9.74</td>
<td>0.20</td>
<td>4.79</td>
<td>4.99</td>
<td>2.17</td>
<td>5.36</td>
<td>7.53</td>
</tr>
<tr>
<td>1991-2000</td>
<td>2.64</td>
<td>6.21</td>
<td>8.85</td>
<td>0.16</td>
<td>4.97</td>
<td>5.13</td>
<td>2.80</td>
<td>5.67</td>
<td>8.47</td>
</tr>
<tr>
<td>2001-2008</td>
<td>4.43</td>
<td>5.46</td>
<td>9.89</td>
<td>0.15</td>
<td>5.57</td>
<td>5.72</td>
<td>4.58</td>
<td>10.05</td>
<td>14.63</td>
</tr>
<tr>
<td>2007-2008</td>
<td>6.26</td>
<td>5.63</td>
<td>11.89</td>
<td>0.13</td>
<td>5.43</td>
<td>5.56</td>
<td>6.39</td>
<td>11.06</td>
<td>17.45</td>
</tr>
<tr>
<td>2008-2009</td>
<td>5.68</td>
<td>5.07</td>
<td>10.75</td>
<td>0.14</td>
<td>5.37</td>
<td>5.51</td>
<td>5.83</td>
<td>10.43</td>
<td>16.26</td>
</tr>
<tr>
<td>2009-2010</td>
<td>5.67</td>
<td>3.97</td>
<td>9.64</td>
<td>0.15</td>
<td>5.66</td>
<td>5.81</td>
<td>5.82</td>
<td>10.63</td>
<td>16.45</td>
</tr>
<tr>
<td>2000-2011</td>
<td>5.63</td>
<td>4.55</td>
<td>10.19</td>
<td>0.16</td>
<td>5.99</td>
<td>6.15</td>
<td>5.79</td>
<td>10.55</td>
<td>16.34</td>
</tr>
<tr>
<td>2011-2012</td>
<td>5.42</td>
<td>4.45</td>
<td>9.87</td>
<td>0.15</td>
<td>6.28</td>
<td>6.43</td>
<td>5.57</td>
<td>10.73</td>
<td>16.29</td>
</tr>
<tr>
<td>2012-2013</td>
<td>5.48</td>
<td>4.77</td>
<td>10.25</td>
<td>0.14</td>
<td>6.33</td>
<td>6.47</td>
<td>5.62</td>
<td>11.10</td>
<td>16.72</td>
</tr>
<tr>
<td>2013-2014</td>
<td>5.54</td>
<td>4.42</td>
<td>9.96</td>
<td>0.14</td>
<td>6.44</td>
<td>6.59</td>
<td>5.69</td>
<td>10.87</td>
<td>16.55</td>
</tr>
<tr>
<td>2014-2015</td>
<td>5.53</td>
<td>4.36</td>
<td>9.89</td>
<td>0.14</td>
<td>6.49</td>
<td>6.64</td>
<td>5.67</td>
<td>10.85</td>
<td>16.53</td>
</tr>
<tr>
<td>2008-2015</td>
<td>5.55</td>
<td>4.50</td>
<td>10.05</td>
<td>0.15</td>
<td>6.18</td>
<td>6.33</td>
<td>5.69</td>
<td>10.68</td>
<td>16.37</td>
</tr>
</tbody>
</table>


Note: The data for 2014-2015 refer to a revised estimate for the government and budget estimate for the states.
How does India compare itself with other countries with a similar level of development in mobilizing revenue? A number of studies have estimated the tax potential using cross-country regressions. Those studies estimate the tax potential by running a regression with tax-GDP ratios as the dependent variable and a vector of taxable capacity variables as independent variables. The predicted tax-GDP ratio obtained by substituting the actual values of the determinants in the estimated equation is taken as the tax potential and the ratio of actual tax-GDP ratio to the predicted value is taken as tax effort. The predicted value represents the potential tax-GDP ratio according to the average behavioural relationship between tax collection and its determinants across countries.

More recent advances in estimating tax potential extend beyond the simple regression approach mentioned above. Estimates can be made of the tax potential not on the basis of average behavioural relationships but also by using the stochastic frontier analysis (Cyan, Martinez-Vazquez and Vulovic, 2012; Langford and Oldenburg, 2016). Under this approach, the envelop for the tax-GDP ratio is estimated by employing tax frontier determinants representing taxable capacity and effort. The relevant frontier for the country represents the highest tax ratio that would result for a given set of determinants.

The empirical studies, by and large, show that the actual tax-GDP ratio in India is much lower than its potential. Bird and Zolt (2003) show that in 2000, the average tax ratio for the middle income countries (per capita income ranging from $1,000 to $17,000) was 22 per cent. A more recent study, conducted by the International Monetary Fund (IMF), covering 174 countries, shows that the average tax ratio for lower middle income countries (per capita gross national product (GNP) ranging from $995 to $3,945) for the period 1980-2009 was about 18 per cent (IMF, 2011). In comparison, the ratio in India was much lower. After reaching 17.5 per cent in 2007/08, the ratio declined to 15.5 per cent in 2009/10 and has been hovering between 16.2 and 16.5 per cent over the past years.

For this paper, an attempt was made to determine the extent of under-taxation in India by estimating the tax-GDP ratio that the country should raise based on the cross-country relationship between tax ratio and per capita income in a regression model. In the analysis, a panel of 115 countries for the years 2005 to 2015 is used. The selection of the sample is based on availability of continuous data for the variables used. The ICTD Government Revenue Dataset for tax-GDP ratio is used. The determinants of taxable capacity used in the equation are the ratio of urban population to total population, the consumer price index for inflation, per capita income in purchasing

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3 For a more recent study see Le, Moreno-Dodson and Bayratkar (2012).
power parity (PPP). Dollars and the share of revenue from natural resources variable is collected from WDI (World Development Indicator) database of the World Bank. The log of the per capita income in the estimation is used.

Tax potential is analysed by estimating the equation of the form:

\[
\left( \frac{T}{Y} \right) = c + \left( \frac{Rn}{R} \right) + Ln \left( \frac{Y}{P} \right) + U + ln f + \varepsilon \quad (1)
\]

Where, \(T/Y\) denotes tax-GDP ratio, \(Y/P\) represents per capita GDP, \(Rn/R\) represents the share of revenue from natural resources in total revenues, \(U\) denotes the urbanization share in total population, \(lnf\) denotes consumer price index inflation. Tax revenue data are the sum total of the tax revenue being generated at different levels of government(s) in a country. While \(Y/P\) represents the ability of the people to pay taxes, \(Rn/R\) takes into account the need to raise tax revenue is lower in countries that derive substantial revenue from natural resources.

The predicted value of tax-GDP ratio (year 2015) for India based on the above estimates using pooled data, fixed effect and random effect model are 20.16, 19.27, and 19.008, respectively. The Hausman test suggests use of fixed effect model estimates according to which, India should have generated a tax-GDP ratio of 19.27 per cent in 2015. as compared to its actual ratio of 16.5 per cent.

### Table 2. Tax-GDP ratio estimate using panel data

<table>
<thead>
<tr>
<th></th>
<th>Pooled estimate (Robust SE)</th>
<th>Fixed effect estimate</th>
<th>Random effect estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-29.876 (2.039) ***</td>
<td>5.869 (3.015) **</td>
<td>-0.529 (2.831) ***</td>
</tr>
<tr>
<td>Share of revenue from natural</td>
<td>-2.009 (0.174) ***</td>
<td>-0.229 (0.111) **</td>
<td>-0.400 (0.108) ***</td>
</tr>
<tr>
<td>resources in total revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urbanization</td>
<td>0.047 (0.014) ***</td>
<td>0.151 (0.041) ***</td>
<td>0.141 (0.029) ***</td>
</tr>
<tr>
<td>Log (per capita income in PPP $</td>
<td>5.564 (0.276) ***</td>
<td>0.995 (0.411) ***</td>
<td>1.73 (0.375) ***</td>
</tr>
<tr>
<td>terms)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>0.036 (0.037)</td>
<td>-0.039 (0.012) ***</td>
<td>-0.035 (0.012) ***</td>
</tr>
<tr>
<td>Number of observations</td>
<td>1 178</td>
<td>1 178</td>
<td>1 178</td>
</tr>
<tr>
<td>Predicted value of Tax-GDP ratio</td>
<td>20.16 (0.30)</td>
<td>19.27 (0.92)</td>
<td>19.008 (0.90)</td>
</tr>
<tr>
<td>for India (year 2015)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**: Hausman test indicates use of fixed effect model over the random effect model Standard. errors are in parenthesis. *** , ** denotes significance at 1% and 5% level of significance.
This estimate, as mentioned above, is based on the average cross-country behavioural relationship between the tax-GDP ratio and its determinants. In contrast, the study of Langford and Oldenburg (2016), based on the stochastic frontier analysis, estimate the potential at 28.4 per cent. While this is the highest that can be raised, from the policy perspective, the government should at least try to enhance the tax ratio to the average level of 19.3 per cent. Surely, a country that aspires to accelerate its development has to substantially augment its public spending on physical infrastructure and human development. With about 40 per cent of its 1.3 billion people in the age group of 0-14 years, the expenditure on education and health care relative to GDP must be much higher than 3 per cent and 1.2 per cent, respectively. The country has to increase significantly money spent on physical infrastructure and a large proportion of it must come from the budget. It is estimated that for financing the Sustainable Development Goals set in the 2030 Agenda for Sustainable Development, the tax-GDP ratio should be increased to about 20 per cent of GDP, which is close to the estimate of the tax potential in this paper. It is, therefore, important that efforts are made to increase the fiscal space by increasing the tax-GDP ratio at least to the average levels.

IV. WHAT AILS THE TAX SYSTEM OF INDIA?

Despite several attempts at reforms, the revenue productivity of the tax system of India has remained low, constraining the government’s ability to spend adequately on social services and physical infrastructure. This is because the reforms to date have failed to address the fundamental causes of low revenue productivity, which can be associated with the narrow tax bases. Several factors are keeping the taxes bases narrow. Among them are (a) the fragmented constitutional assignment; (b) wide ranging tax preferences; (c) multiplicity of objectives incorporated into tax policy, resulting in complications in the tax laws, wide avenues for evasion and avoidance, and large and increasing amounts held in disputes; (d) tax abuse by multinational companies, resulting in base erosion and profit shifting; and (e) poor capacity of the tax administration, including the information system, to effectively administer and enforce the taxes.

Inability to levy a comprehensive income tax in India, in part, lies in the constitutional assignment itself. The assignment of the tax on income from agriculture to the states has resulted in the national Government levying tax only on non-agricultural income. The states do not levy the agricultural income tax, except on the income from plantation crops. Even corporations investing in the agricultural sector do not have to pay the tax (Rao, 2015; Rao and Rao, 2010). Many studies have focused on estimating the potential from taxing agriculture, In a more recent study, by Rao and Sengupta (2012), for 2008-2009, the potential is estimated to be 0.6 per cent of GDP.
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The exemption to the agricultural sector prevents the levy of comprehensive income taxation and provides an easy avenue for evasion and avoidance.

The second important reason for the narrow base of taxes is the plethora of exemptions, concessions and deductions given for direct and indirect taxes. A close look at the number of objectives pursued by the tax system is enough to understand the complications and its ineffectiveness in achieving the multiple objectives. In addition to raising revenue, the tax system is required to fulfil a number of objectives, such as incentivizing savings, promoting exports, achieving balanced regional development, promoting investments in infrastructure, expanding employment, promoting scientific research and development, and encouraging cooperatives and charitable activities. Similarly, the excise duty is expected to provide preferential treatment to small-scale industries by keeping the threshold high, promoting backward area development. Incorporation of those objectives in tax laws creates enormous avenues for evasion and avoidance and it is not possible to determine how much of those objectives are achieved if at all (Rao, 2015).

Since 2006, the Government of India has been publishing estimates of revenue foregone from various tax concessions in the budget. For 2014/15, the budget estimates of the revenue foregone was a staggering 5.89 trillion Indian rupee (RS) ($843.4 billion), which equates to 4.7 per cent of GDP. This alone exposes the enormity of tax preferences in constraining the revenue productivity of the tax system in India. The revenue foregone on account of customs duty concessions amounted to 2.4 per cent of GDP and the revenue lost because of excise duty concessions amounted to 1.4 per cent of GDP. The revenue cost of special economic zones for 2014/15 was estimated at Rs 203.76 billion, area based incentives cost another Rs. 172.84 billion from union excise duties and another Rs. 80 billion from corporate income tax.

The fourth important factor eroding the base is the way in which multinationals 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 in low tax jurisdictions and taking advantage of tax treaties is a common method employed. Manipulating prices in related party transactions, or what is usually referred to as transfer pricing, to reduce the tax liability is another method used. Although there are “arm’s length pricing rules” to deal with the transfer pricing issue, it is difficult to apply them in practice when intangible assets, such as trade names, goodwill, brand recognition or intellectual property, such as patents, copyrights, brands and trademarks and business methodologies, are involved. Multinational companies also act as intermediaries in product sales and distribution, make loans and interest payments and charge fees to one another for activities, such as management services, treasury services and investment services, to reduce the tax liability.
Tax avoidance by multinational companies is a global phenomenon. There is overwhelming evidence of this tax abuse even in developed countries, such as the United Kingdom, the United States, and member States of the European Union. This prompted the Group of 20 (G20) countries to request the Organisation for Economic Co-operation and Development (OECD) to develop a base erosion and profit shifting system action plans in September 2013. OECD has come up with 15 action plans for countries to follow in its various reports. However, those proposals do not go far enough. In fact, there is considerable unease among the developing countries about the OECD proposals because of the discussion on this in OECD is dominated by developed countries and the representatives of multinational enterprises and the interests of developed and developing countries do not always converge.

The Independent Commission for the Reform of International Corporate Taxation, a group of leaders from government, academia and civil society created to promote reforms, in its review of the action plans states that they are a patchwork of existing approaches. Multinational enterprises are essentially unified firms organized to maximize profits across jurisdictions and treat them as independent entities, making the application of the arm’s length principle for transfer pricing meaningless. Large multinational enterprises are oligopolies; there are no comparable local firms that can serve as benchmarks. In addition, the OECD action plans fail to deal with the problem of shifting profits through the exploitation of intangible assets mentioned above. The Independent Commission for the Reform of International Corporate Taxation (2018) declaration calls for a paradigm shift. In the declaration, it is stated that to seriously attempt to stop base erosion and profit shifting, there must be a change in the mindset that a multinational enterprise is comprised of separate independent entities. The Independent Commission for the Reform of International Corporate Taxation has recommended that that a multinational enterprise and its subsidiaries be considered as a single firm and that it allocate worldwide profits to individual countries according to an agreed formula that includes such factors as employment, sales and resources used and fixed costs. Almost all multinational enterprises are listed on the stock market and would not understate their worldwide profits. It should, however, be noted that formulary allocation can result in tax competition by individual countries to attract investment in their jurisdictions. To avoid such a race to the bottom, a consensus on a minimum tax rate be reached.

However, the challenges of arriving at a consensus formula at the international level are formidable, as the interest of countries are not single peaked. When there are differences, multinational enterprises tend to play one country against another. Accordingly, even though taking the unitary approach and applying a formulary apportionment remains the goal, the Commission recommends interim approaches with a single entity as the centrepiece of reform. The important point is that forcing the multinational enterprises to pay legitimate taxes, particularly to developing countries,
is a formidable task. While this is work in progress, the way forward is not to treat the affiliates of multinational enterprises as different entities but to consolidate their profits and allocate them based on a formula. This also requires a change in the global system of tax governance to ensure universal membership and an open and democratic structure. There is a strong basis behind bringing international taxation matters under the United Nations aegis, as this institution alone can provide the sanctity for rules based on the principle of sovereignty of all countries.

In the Indian context, there is considerable evidence to show that multinational companies have been indulging in abusive tax practices. Patnaik and Shah (2011) show that the effective corporation tax rate on multinational companies is significantly lower than domestic companies. Rao and Sengupta (2014), in their more detailed study, indicate that during the period 2006-2011, the effective interest rate paid by multinational companies was higher than the market rate and the amount of tax paid per unit of borrowing was lower. A more recent study, conducted by Petr and Prats (2013), is based on sample data of multinationals in India. It shows that those entities report 1.5 per cent less profits, pay 17.4 per cent less in taxes per unit of asset, pay 30.3 per cent less taxes per unit of profit and have 11.4 per cent higher debt ratios than companies with no connection to tax havens. The Government of India has passed the General Anti Avoidance Rule and has been applying it. Nevertheless, building administrative capacity to enforce tax payments by the multinational enterprises remains a major challenge.

Another important factor constraining the revenue productivity of the tax system is poor administrative capacity. Tax administration is a critical element not only in collecting revenue, but also in reducing the compliance burden and overall management of the tax system. According to Bird (2004), “the best tax policy is worth little if it cannot be implemented effectively”. However, the issue of tax administration is not just its operations. It has to do with the ability to enforce the tax on the complex dealings of taxpayers, the attitude of the tax administration towards taxpayers, the taxpayers’ confidence and trust with the tax administration, and clarity in laws to avoid discretion to tax administrators.

By all accounts, the Indian tax administration does not evoke the confidence and trust required of a modern tax administration. There have been a number of reports on the reform of the tax administration beginning with the Report of the Tax Reforms Commission (1991). Careful studies conducted by Das-Gupta and Mookherjee (1998) and Bagchi, Bird and Das-Gupta (1995), and more recently the Reports of the Tax Administration Reforms Commission (India, 2014; 2015) have dealt with various aspects of the reform of the tax administration in detail. The issue is the implementation of the reforms, which requires political will rather than identification of reforms areas.
The important problems of tax administration in India deals with the following: (a) lack of autonomy; (b) low morale of tax administrators arising from low prospects of progression in the careers of administrators; (c) organizational problems of separation of direct and indirect tax administration and lack of coordination, effective communication and information exchange among them; (d) area-wise rather than functional divisions and lack of functional specialization, including developing an intelligence system; (e) a poor information system and limited use of technology for tax administration; (f) perverse incentive from setting targets to tax administrators and judging their performances based on the fulfilment of the targets; (g) poor capacity to forecast revenue; (h) lack of clarity in tax laws, wide discretion to tax officials and build-up of a vast amount of arrears; and (i) an adversarial attitude of the tax administration towards taxpayers in which they are essentially considered to be tax evaders. While the problems with the organizational set up and the functioning of the tax administration are well known, there have been few attempts to address them.

One of the consequences of ambiguity in tax laws and arbitrary administration is the build-up of a large amount of tax arrears. At the end of 2013/14, the amount of tax arrears from various taxes amounted to more than Rs 5.83 trillion or 5.1 per cent of GDP. Almost 86 per cent of the tax in arrears is held up in disputes. In fact, about 47 per cent of the arrears have been accumulated in disputes up to two years and the arrears held in disputes up to five years total 76 per cent of the arrears. In most cases, the tax authorities routinely make unfair assessments to meet their revenue targets and the taxpayers have no option but to take recourse to legal remedy. According to the recent report of the Comptroller and Auditor General (India, 2017), in 2015/16, 65 per cent of the cases in the Income Tax Appellate Tribunals were decided in favour of assessees, and the corresponding figures in High Courts and the Supreme Court were 9 per cent and 71 per cent, respectively.

An important innovation, however, has been the creation of large taxpayers units, which have helped to coordinate the functioning of the Central Board of Direct Taxes and the Central Board of Excise and Customs and reduce the compliance cost for large taxpayers. However, with the introduction of GST in July 2017, which replaced a plethora of taxes, the large taxpayers’ units have been disbanded. Another important reform has been the requirement to file electronically directly to the accounts of the taxpayers for returns and payment of refunds. Those are only small initiatives, and by and large, the tax administration does not invoke much confidence among the taxpayers to improve voluntary tax compliance. The recent decision of the Ministry of Finance of not to proceed with the prosecution of cases involving less than Rs 2 million to reduce the piling up of cases is also an important step in the right direction.

As mentioned earlier, professionalizing the administration is important for building the confidence of the taxpayers with the tax department. Some of the initiatives
required for that purpose include, among them, organization of the department on functional lines to achieve functional specialization, improvement in the information system and the capacity to undertake data mining, and enhancing the intelligence networks. This analysis shows that in 2012/13, non-corporate taxpayers totalled about 3.7 million, which was less than 3.4 per cent of the population. More than 75 per cent of them had taxable income of less than Rs 200,000.4 Assessees with an income that exceeded Rs 1 million totalled about 660,000, which implied a very poor coverage of the tax. The number of tax payers with more than Rs 10 million reported income of about Rs 42,800.

V. RECENT REFORMS AND THE WAY FORWARD

Direct and indirect taxes must be reformed at the national level and the state level in India in order to boost the revenue productivity of the tax system to raise the tax ratio required for development. Some of those reforms can be implemented immediately whereas others can be carried out only in the medium and long term. Some of the reforms can be set easily, while for others, the challenges associated with carrying them out are formidable, as emphasized by Johnson and Myles (2011, p. 323).

In the real world, proposals for tax reform are constrained by politics; those that lose from tax reforms tend to be vengeful while those who gain from them tend to be ungrateful. This can lead in tax policy, perhaps more than in any other areas of public policy, to a “tyranny of the status quo”. There is always a tension between what is economically desirable and what is politically practical.

The most formidable task in developing a comprehensive income tax in India, as pointed out earlier, is the fractured assignment system. While it may not be easy to integrate income from agricultural and non-agricultural sectors, the practical solution may be to enter into an agreement with the states. Under such an agreement, tax would be levied according to applicable rates on the income declared as agricultural income after allowing deductions for crop insurance premiums while computing the agricultural income and distributing the proceeds to the states from which the income originates. This, however, is not going to be easy, as it would face a wild political storm. Nevertheless, this type of agreement should be in the reform agenda for the medium term. Ways and means must be found to tax the income from corporations involved in farm activities and a mechanism is needed to provide a check against misdeclaring non-farm income as agricultural income to evade the tax.

4 Report No. 10 of 2014 (Direct Taxes), India (2017).
The first discussion paper on a direct taxes code was a well thought out document. Many of the suggestions contained in it, particularly those relating to grandfathering the tax exemptions and concessions merit consideration to broaden the base, increase revenue productivity and reduce unintended distortions in resource allocation. It is also important to work on a time-bound plan to effectively apply the general anti-avoidance rules applied to multinational companies. To develop the capacity to administer it, a special unit may be created and a time-bound plan for building capacity should be followed. Indeed, there is need to overhaul the administrative framework to enable functional specialization and coordination among various tax departments, including sharing of information. However, the transition is not likely to be easy. In the short term, it would be advisable to create specialized agencies, such as the one for administering the general anti-avoidance rule and, effect proper administrative divisions into various functionally specialized groups from the prevailing region-based divisions. The reform process needs to be initiated with the intention to simplify and rationalize the tax system with a view to broaden the base, simplify the tax by weeding out various tax preferences and strengthen the information system technology assisted enforcement.

Regarding indirect taxes, following more than 14 years of discussion, the Government has implemented a major tax reform by consolidating a number of national and state indirect taxes to introduce GST at both the national and state level. The reform was unveiled with much fanfare at midnight on 1 July 2017, and has been touted as a “good and simple tax” and the “one nation, one market, one tax”. The tax has three components, a general GST, a state GST and an interstate GST. The tax is administered by a seamless input tax credit mechanism throughout the country with interstate transactions subject to the interstate GST and a clearing house mechanism ensuring that the tax accrues to the state of destination. A separate body, the GST Council, was constituted with representation by the centre and state finance ministers and chaired by the national finance minister. It makes all decisions relating to the structure and operational decisions.

In India, the power to levy consumption taxes is vested with the central government in the form of excise duty on manufactured products which in effect is a sales tax at the first point of sale. The tax on services is exclusively levied by the centre. The states also have had a plethora of consumption taxes, including taxes on sale and purchase of goods, passengers and goods tax, motor vehicles tax, entertainment tax, taxes on the entry of goods into a local area for consumption, use or sale (called entry tax or octroy), and luxury taxes. As a result, harmonizing the consumption tax system between different levels of government presents a major challenge. Replacing those taxes with GST is, therefore, an important reform. However, as the entire reform process involved reaching a consensus among the Central Government, the 29 states and two union territories, compromises were inevitable. Consequently,
it is not surprising that the structure of GST finally implemented is far from being perfect. The threshold for registration is low at Rs 2 million and the tax is levied at four different rates – 5 per cent, 12 per cent, 18 per cent and 28 per cent – in addition to the exemption and low rate on precious metals. To compensate states for any loss of revenue on account of the reform, cesses are levied on different items of consumption at three different rates in addition to the regular rates. Taxpayers with turnover up to Rs 7.5 million are given the option to compound the tax and with less compliance requirements. Petroleum products, real estate transactions and alcohol are not included in the GST base.

Much disruption in economic activity, particularly for small and medium enterprises and traders, has occurred following the complicated nature of the tax. Multiplicity of rates has led to ambiguity and classification disputes. The GST Council has been receptive and has made changes to ease the pain associated with the transition. Revenue collections have fallen short of the expectations though they are likely to stabilize over the medium term. The technology platform was not able to handle the magnitude of matching every return for input tax credit. Consequently, the Government has reduced the compliance requirements of submitting a monthly return as against three returns mandated earlier. In other words, the GST tax reform is a work in progress. It is hoped that over the medium term, the number of tax rates will be reduced to two, the threshold will be increased to Rs 5 million and the compliance burden will be reduced to filing only a quarterly return for small businesses. As mentioned earlier, the GST Council has been receptive to the concerns of taxpayers. GST is likely to stabilize in the medium term and significantly improve the revenue productivity of not only consumption taxes but also of income taxes because of the linkage of the GST number with the permanent account number of the income tax.

VI. CONCLUDING REMARKS

Taxes matter for government, businesses and citizens alike. Governments have to collect them to provide public services. Taxes affect the profitability of businesses. People are concerned about parting with their hard earned money for the services they cannot clearly see and perceive. From the perspective of the economy, tax policy is an important factor in determining the business climate.

In the present paper, it is argued that the best practice approach to tax policy and reform is to broaden the base, reduce rates and their differentiation and develop a simple and transparent system. Loading the tax policy with too many objectives complicates the tax system. The objective of reform should be to reduce administrative, compliance and distortion costs. Accordingly, the major reform agenda for the government should be to phase out tax preferences to develop a simple tax system.
The tax system is characterized by low revenue productivity and stagnancy in the tax-GDP ratio. In this paper, the reasons for the low revenue productivity of the tax system are outlined. The fractured assignment of taxes on agricultural and non-agricultural income has prevented the levy of a comprehensive income tax. Although, it is possible to coordinate the levy between the national Government and the States, political differences have constrained this. Narrow tax bases of direct and indirect taxes are consequences of wide-ranging exemptions, concessions and deductions extended to pursue a variety of objectives though tax policy. Pursuit of several objectives, while their effectiveness in achieving the desired objectives are doubtful, have narrowed the bases, reduced revenue productivity and complicated the tax system, resulting in high compliance costs and distortions in resource allocation. Lack of clarity in tax laws and extensive building of tax arrears, an overwhelming proportion of which is stuck in tax disputes, is another problem. In this paper, the following topics are highlighted: the problem of base erosion and profit shifting by multinationals; the organizational and functional problems with tax administration; and the need to build capacity and professionalism in administering the tax, including the building and the application of information system and technology.

The need to reform direct and indirect tax systems not only to increase the revenue productivity but also to improve the business climate in the country is underlined in the paper. The replacement of a plethora of indirect taxes with GST is an important reform which holds much promise of simplifying the consumption tax system and improving revenue productivity. However, major reform involving the Central and state governments in the largest democratic polity seeking to build consensus has resulted in complicated structure and operational problems. The reform must be considered a work in progress and if the exercise in simplification of the structure and operations are accomplished over the next couple of years, it is likely to yield the promised benefits. With regard to the reform of direct taxes, a committee appointed to simplify and rationalize the structure and rewrite the tax code is expected to submit a report within the next few months. It is important to rationalize the tax preferences and reduce corporate income tax rates to 25 per cent as was promised by the finance minister in the 2015/16 budget. The report of the committee should help encourage this.
REFERENCES


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