

Income Tax data and Facets of transparency

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The Prime Minister, speaking on November 10, 2020 suggested that the country is moving from tax terrorism to tax transparency. “The change from tax terrorism to tax transparency has happened because we have propagated the concept of reform, perform and transform,” he emphasised. There is an increasing clamour for tax transparency variously defined in recent years, an integral part of which is sharing of information. “Tax transparency” has been used to mean information sharing across jurisdictions (OECD BEPS project), information sharing with the public¹, sharing of information on tax rulings (European Union, 2015).

The purpose driving transparency in sharing of information between tax administrations across jurisdictions is to reduce opportunities for avoidance of tax through tax planning. On the other hand, the purpose of sharing information with the public can be more focused on reducing evasion in the economy. The present paper focuses on the latter aspect, to build a case for increased transparency through dissemination of data from income tax returns. The paper is organised as follows: section 1 presents rationale for expanding the scope of information to be shared. This discussion draws on position papers written for or by tax departments. Section 2 presents an overview of the kinds of analysis based on information from tax returns found in the literature, compared with the literature found in for India. Section 3 presents a review of the information provided by the Indian Income Tax Department and some issues with the same. Section 4 provides some suggestions for alternative formats of data dissemination for Income Tax and GST in India.

Section 1: Rationale for Transparency

All governments publish revenue collections from different taxes levied by them as a part of the budget. These taxes are most often paid by the citizens of the country. Going beyond figures of aggregate revenue collections and cost of collection, there are multiple reasons for expanding the scope of information placed in public domain. Three broad sets of reasons can be summarised as follows:

1. To make governments accountable to people: HM Revenue & Customs in its Business Plan for 2011-15 argues that as an organisation, it “believes that greater transparency will deliver greater value for money and enable the public to better hold us to account.” (HMRC(2011).
2. To improve the perceptions about taxation and governments among the citizens. Tax compliance is argued to be influenced by perceptions regarding fairness and overall norms of compliance in the economy. As a part of its efforts to establish to the citizens that most businesses in Australia are compliant of their tax obligations, the Treasury has started a Voluntary Tax Transparency process, through the Tax Transparency Code. This is reiterated in a document on Behavioural Insights for Tax Compliance issued by the

¹ Such initiatives have been put in place by many countries such as Australia and New Zealand. “A Tax Transparency Code”, A report by the Board of Taxation, Government of Australia to the Treasury is the proposal of the former while the “The Future of Tax: Final Report” is a document presented to the latter.

World Bank as “Similarly, the decision not to comply may be further influenced by feelings of unfairness. As individuals will be less inclined to pay one’s taxes if they believe others are not paying their fair share, strategies can focus on demonstrating that others are, in fact, complying.”²

3. To create an environment of research on tax collections and tax compliance which can provide inputs for reforms in the future. Tax Working Group for New Zealand in its report “Future of Taxes” argues that “there is a need for good quality data for both the public and the government to understand the current functioning of the tax system, and to provide the basis for advice when further changes are contemplated in the future.”

Perceptions of fairness can be influenced by anecdotal evidence as well as by analysis of tax payer behaviour. In the absence of the latter, the former becomes the only source of information for the citizen, which tends to focus on negative information more than positive. Information dissemination and analysis of the same can be a powerful tool to create awareness about the changes in tax policy and administration and its impact on tax compliance in the economy.

Section 2: Research based on Tax Data

Literature on taxation and of the impact of taxation on the economy and on economic agents has evolved into many different directions. At the very basic level, all attempts to undertake setting up of a short term or medium term fiscal framework requires analysis of the buoyancies and elasticities of tax collections with changes in the corresponding base. Finance Commissions as well as Planning Bodies too use these tools to assess the levels of available resources. Cross-section analysis of revenue collections to identify factors contributing to better performance have also been undertaken with the objective of benchmarking performance with peers. (Fenochietto and Pessino (2013), Le et al (2012)) The Report of the 15th Finance Commission of India, for instance, uses such a framework to conclude that the tax to GDP ratio for India should be as high as 19.5 percent.

Going beyond this basic form of analysis based only on gross revenue collections, there is a range of issues examined using disaggregated tax data. The analysis can be classified into three categories: first, are studies which draw inferences about the economy using tax data, second, those which examine the impact of taxes on various economic variables and third, those which examine the impact of changes in policy/administration on revenue collection itself.³ These aspects are summarised separately below.

2.1. Use tax data to infer about the state of the economy:

Tax data can serve as a useful tool to understand changes in the economy. One aspect that has been explored in great detail over decades is the distribution of income as reflected in income tax returns. (Some studies for India include Bose and Roy (1956), Lydall (1960), Banerjee and Piketty (2005)). There is a considerable revival in interest in questions about distribution of

² <http://documents1.worldbank.org/curated/pt/472181576511865338/pdf/Behavioral-Insights-for-Tax-Compliance.pdf>

³ Slemrod (2018) provides an overview of different approaches with a focus on compliance and enforcement.

income since the publication of Piketty's seminal work on France. Atkinson et al (2011) provides an overview of the developments on this front.

2. 2. Impact of tax policy on the economy:

The literature under this category spans a wide range of aspects. An issue of interest both to economists and policy analysts is the impact of tax policy on behaviour of taxpayers. Based on disaggregate data, these studies explore the impact of policy changes on economic variables as well as on compliance. Changes in tax policy provide an opportunity to assess the impact of policy on behaviours of agents. For instance, the impact of tax policy changes like an increase in tax rate allows for analysis of the impact on levels of income as well as on choice of combination of debt and equity for tax payers. For corporate taxpayers, published annual accounts provide a ready source of information for such analysis. For non-corporate taxpayers, the information is available only in tax returns. In countries where such data is shared selectively or comprehensively with analysts, such analysis has thrown light on the likely impact of changes in policy. Some examples of such studies are:

- Tax reform of 1986 in the United States introduced a number of significant changes in the tax regime. A number of studies have studied the impact of this change on the economy, using both tax data and other surveys of incomes. (Auerbach and Slemrod (1997) provides an overview of these studies.)
- Magnitude of evasion from random audits. Taxpayer Compliance Measurement Programme of the IRS provides estimates of evasion in individual income tax. This data has been used to ask questions not only about evasion, but also about the impact of tax policy changes on evasion.
- Tax and Entrepreneurial Activity: Using disaggregated data for taxpayers for the period 1964 to 1993, Cullen and Gordon (2007) analyses the impact of changes in tax rates and concessions on the level of entrepreneurial activity.
- Impact of Earned Income Tax Credit on labour force participation (Eissa and Hoynes (2006)).

2.3. Strategies for augmenting revenue performance/compliance

There are two distinct approaches here, both of which work in collaboration with tax departments, the first line of enquiry uses tools of randomised field experiments in order to assess the impact of policies to promote tax compliance. A series of studies have used randomised deterrence messages to assess the impact of different forms of the message on compliance. Hollsworth (2014) and Slemrod (2018) provides an overview of the use of randomised field experiments for improving tax compliance. Pomeranz et al (2014) explores another dimension - by using these strategies for improving choice of cases for audit in Chile.

The second approach uses disaggregated information from tax returns to assess the impact of policy and administrative changes on compliance. Some of these studies rely on population data for income tax while others work with data from random audits performed by the tax department. Some examples of such studies are:

- Impact of audits on future performance of the audited taxpayer (Debacker et al (2018) and Advani et al (2017))
- Profile of compliance from tax records (Giles (2000)).

Taking the case of India, the data available in the public domain has placed limits on the range issues that can be explored. Yet, there are examples of all the different kinds of analysis discussed above. Apart from studies exploring the trends in aggregate tax collections, there are a few studies drawing on disaggregate data made available to select researchers. A study for India using audit data can be found in Kumar and Rao (2015). Dasgupta et al (2004) constructed a dataset to understand the impact of administrative reforms on taxpayer compliance and concluded that there are significant gains to compliance feasible from administrative reforms. Studies on corporate taxation and decision making have drawn on databases of company financial accounts. Mahajan and Mittal (2018) use transaction wise information on VAT data for Delhi to demonstrate that matching of information does produce significant increase in tax compliance – more for wholesalers than for retailers. Rao (2021) uses data from the Income Tax Return Statistics to highlight the possibility of an increase in formalisation of the economy since 2012.

In the following section, we discuss the data available in the public domain on Income Tax compliance and some issues faced in the use of this dataset.

Section 3: Issues with the Income Tax Dataset

Going beyond revenue collected, data on compliance with income tax laws can be found in three sources: the Compliance Report of the Comptroller and Auditor General of India on Direct Taxes provides some information on distribution of returns by income returned, decomposition of revenue into that from TDS, advance tax, self-assessment and from audit by the tax department. It is also the only document which provides information on the arrears in tax collections over the years. The second source of information is the Income Tax Return Statistics, published by the Central Board of Direct Taxes, since Assessment Year 2012-13. This dataset provides information on the distribution of income returned into different classes such as salary income, business income, capital gains, and other incomes. Further, it also provides a distribution of returns by size class of income, for each of these subclasses, well as a distribution of returns by tax returned. This is the only source of data on the changes in the composition of income, where the information is cleaned for potential discrepancies. This data source is released with some lag, i.e., the data for AY 2018-19 was released in October 2019. However, there is no data release thereafter. The third source of information is the snapshot of returns filed provided in the e-filing website. This data source provides quick information on the number of returns as well as on the distribution of returns by income classes, but is not scrutinised for errors.

Some challenges in using the data from Income Tax Return Statistics are presented below.

3.1. Discrepancy between the data provided in various documents:

The number of returns filed for each assessment year is reported in two different places:

1. E-filing website of the income tax department provides information on the number of returns filed by AY as well as in a FY. This information is available from AY 2017-18

onwards. Here information is available within months of the returns being filed. As of March 2021, this website provides information of filing until January 2021.

2. "Income Tax Return Statistics" published at <https://www.incometaxindia.gov.in/Pages/Direct-Taxes-Data.aspx>

The number of returns filed as reported in the two data sources are presented in the table 1. The number of tax returns referenced in both these sources are considerably different. These differences raise questions about what can be interpreted from the data in the ITR Statistics. A description of the reasons for the difference would make the data consistent and coherent.

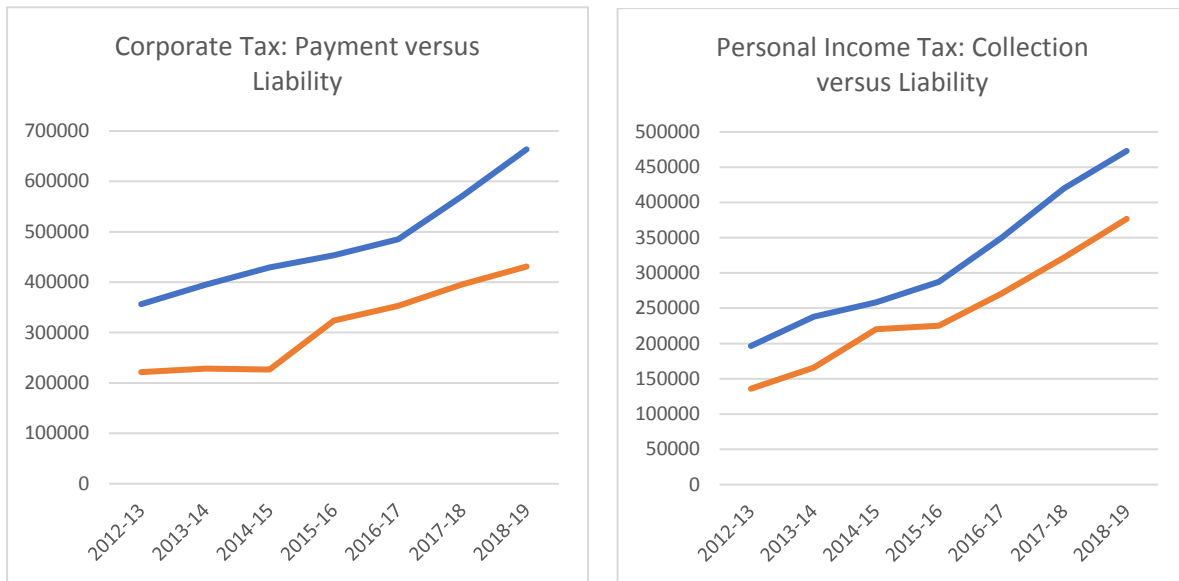
Table 1: Number of Income Tax Returns Filed

	2017-18		2018-19	
	ITR Statistics	E-filing	ITR Statistics	E-filing
Individuals	4,77,45,802	5,23,72,332	5,63,90,773	6,23,04,184
Companies	7,92,268	8,19,063	8,41,942	8,92,103
Others	13,30,310	15,38,909	14,80,743	17,43,299
Total cleaned	4,98,68,380		5,87,13,458	
Total	4,98,76,738	5,47,30,304	5,87,21,477	6,49,39,586

Note: ITR Statistics is data source 2 above and E-filing is the first data source. ITR Statistics examine returns for inconsistencies. Total reports the number of returns examined while total cleaned reports the number that cleared the consistency checks. E-filing

3.2. Difference between tax liability declared and tax paid

Graphs below show the tax liability captured in the Income Tax Return Statistics as compared to the tax collected in the financial year. The difference between liability and collection is higher for corporate tax. The tax liability declared in tax returns can be different from the tax paid in any given year for a couple of reasons. First, the liability refers to a financial year, but the tax could be discharged in two years, since the advance tax and TDS are paid in the financial year concerned but self-assessment tax would be payable in the next financial year. Second, the assessment process can generate demand for revenue which would be realised in a different year. Third, the tax collected in any given year could include realisation of arrears from earlier years. Finally, the law now allows for a return to be filed without all due taxes being paid. In addition to the above, since the returns summarised in the Income Tax Return Statistics do not include all the returns filed, it is possible, that the missing returns account for some of the difference. It is important to distinguish between the impact of legitimate reasons and the last factor listed above, to draw meaningful inferences from the data.



A reconciliation statement could be of use in this regard.

3.3. Incomparable tables:

As discussed above, the Income Tax Return Statistics presents not just the distribution of returns in size classes of income, but also by size classes of different components of income such as salary income, business income, capital gains and other income. The rationale for providing information on distribution of components of income can be to provide more insights in the income profile of taxpayers. The information provided however does not allow consolidation of information across different sources of income. The classification of returns in each table is undertaken as per the variable being reported about. For instance, if the table is about the distribution of business income, the returns are classified by the business income reported, while if the table is about salary income, the returns are classified by the amount of salary income reported. This results in a set of tables which cannot be compared across types of income. For instance, in the data on returns of companies, there is a systematic increase in the share of other incomes in gross income. But it is not possible to disentangle from the data what income range these taxpayers belong to.

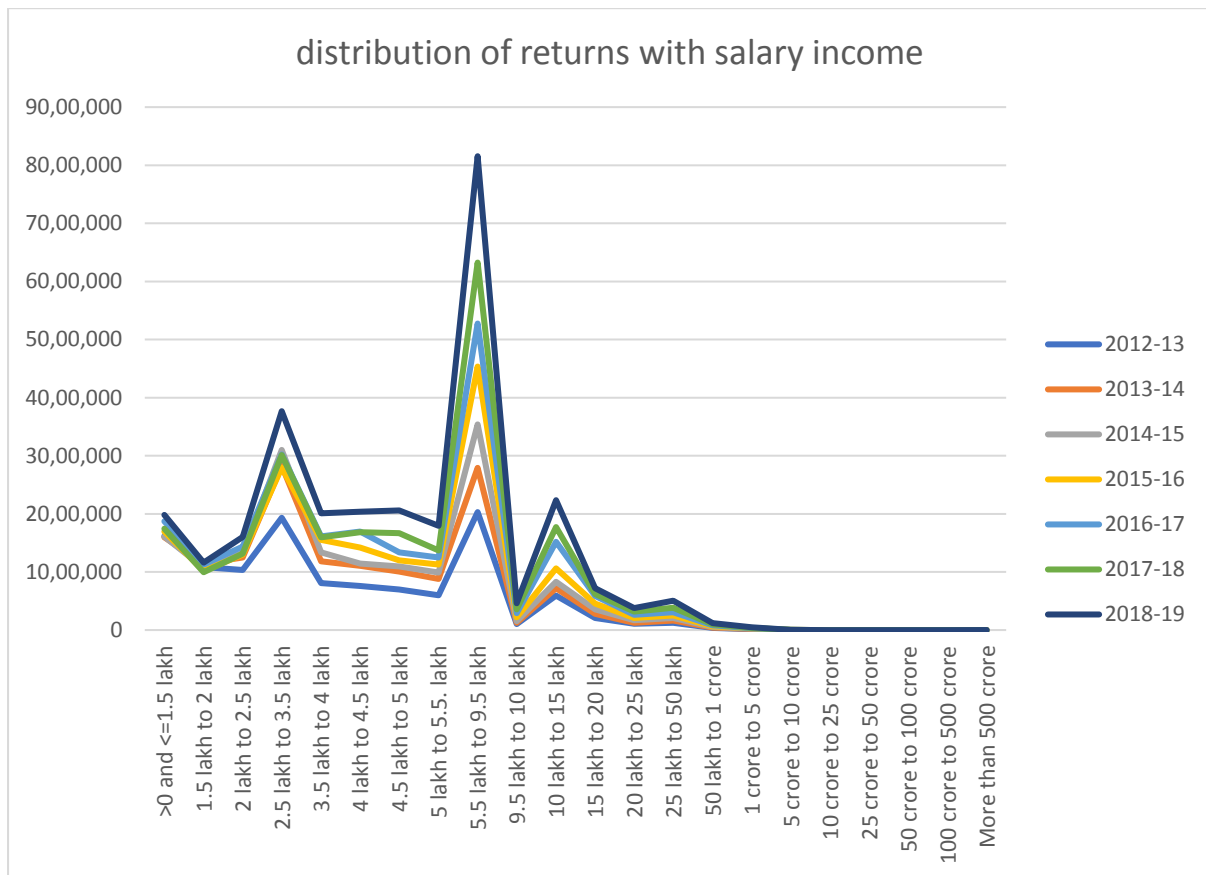
Constructing the tables using a single variable for classification, say either gross income, or returned income or tax liability would allow for better use of the information being placed in the public domain. It would place any given taxpayer in a single class for all the tables and thereby allow for the information to be collated across the tables.

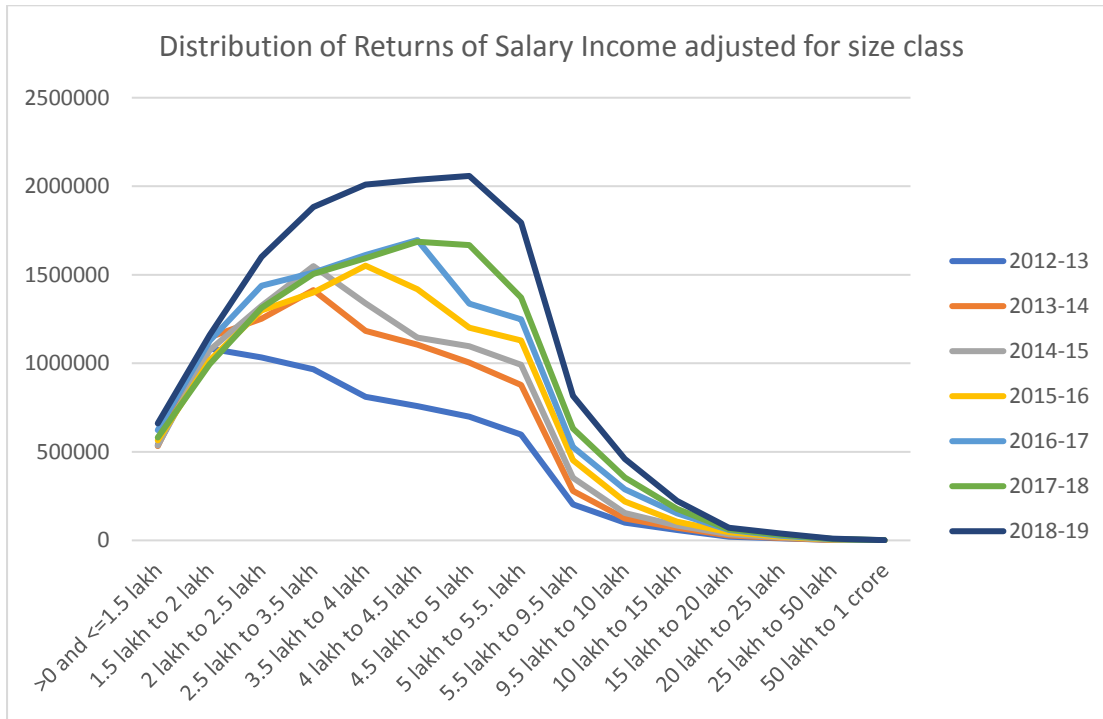
3.4. Uneven size classes and potential misinterpretation:

The distribution of returns by size class uses uneven size classes. The rationale for the uneven size classes can perhaps be to limit the number of size classes while at the same time capturing information on transition from one rate slab to another. However, the uneven size classes present a puzzle as shown in the distribution of returns by salary income. The figure

suggests that year after year, there is a disproportionate increase in the number of taxpayers reporting income in the income range Rs 5 lakh to 9.5 lakh. A smaller bunching is observed in the categories Rs 2.5 lakh to Rs 3.5 lakh and Rs 10 lakh to 15 Lakh. This observation leads one to ponder about the reasons for such bunching like non-filing in low income groups since there is no tax liability on account of tax deduction at source. Alternatively, it is possible that the incentive regime and the mandatory contributions to provident funds by salaried taxpayers would raise the bar for those who would be liable to tax. While all these conditions could be contributing to the observed income distribution, it is to be noted that the non-uniform classes too could be contributing this observation. For instance, if one standardises the observations by the size of classes, the sharp bunching disappears as shown in the second figure.

In order to reduce the possibility of such unintended bunching of data, the classification can be altered to consider uniform classes followed by consistent increases, rather than a random pattern.





3.5. Expanding the scope of data:

While the data format selected for dissemination provides a considerable interesting information, adding two more categories to the list could add value.

Data for all years provides a table on the distribution of returns reporting brought forward losses. However, there are no returns reported with negative incomes in any type of income. In other words, without a return reporting negative income or carry forward losses in an earlier year, it is not clear how there appear returns with brought forward losses. Trends in carried forward losses can provide useful information on the dynamics of the income generation process for taxpayers. A buoyant economy, for instance, should be witnessing declining trends of carried forward losses and vice versa. For completeness it would be useful to add the information provided in Part b-TI item 17 as another variable.

Taking forward dissemination of impact of tax exemptions through the revenue foregone statement, details of broad categories of revenue foregone claimed by different classes of taxpayers would provide very useful information on the profile of taxpayers – both as agents contributing to taxes and as agents responding to incentive regimes initiated by the government through the tax regime.

In this light, it is useful to recall the introduction of a lower tax rate regime, for taxpayers who choose to give up the incentives and exemptions offered in the tax regime. Going forward, information on the profile of taxpayers who choose this option over the alternative too could provide interesting information on responses to tax policy changes in the economy.

Section 4: Suggested format for Data Dissemination

In the interest of better dissemination and to aid in the improvement of perceptions about tax policy in the country, a few changes and additions to the data dissemination exercise are proposed in this section. The suggestions can be classified into two groups – first, consist of changes to the format of the data already being disseminated and second, suggestions for additional content.

4.1. Revisions to the format of income tax return statistics:

Following from the discussion in Section 3, the following changes in format may be considered.

1. The summary statistics presented on the first page of the document can be supplemented by a reconciliation statement on the number of returns reported across different data sources. This can provide support to the notion that the summary statistics are a fair representation of the total number of returns received by the systems. The latter is essential to establish that the statistics are comparable across the years.
2. Taking the format that is currently being used, the classification of returns into size classes may be consistently done using a single variable. For this purpose, the most suitable variable would be either gross income or returned income. Using this classification, the number of returns reporting each category of income along with the total income returned can be reported, just like it is reported in the current format.
3. The size classes can be unbundled for the size classes Rs 2.5 to 3.5 lakh, Rs 10 to 15 lakh to intervals of Rs 50000. If this makes the table too long, the intervals can be increased to size of Rs 1 lakh.
4. The variables for which the distribution is presented, can be expanded to include major heads of revenue foregone to capture the impact of exemptions and concessions, and the extent of carry forward losses. In other words, the variables would include Salary Income, House Property, Business Income, Long Term Capital Gains, Short Term Capital Gains, Other Income, Interest Income, Total, Carry Forward Losses, Losses Setoff, Gross Income, Returned Income, Tax Liability, Major Exemptions Availed
5. The tables should be presented separately for taxpayers who opted for the no-exemptions scheme and for those that chose to remain in the earlier regime.
6. A final table can be added on the number of cases by size class where the due tax has been paid or not been paid at the time of filing of the return.

It may be mentioned that since the data of tax returns since AY 2012-13 is available in soft copy, if the department seeks to make changes in the format as suggested, the revised series for earlier years too can be published to allow for comparability over time. The structure of the tables can be as follows:

Table 2: Distribution of Tax Returns for all Taxpayers (can be replicated for individual categories of taxpayers)

Size Class of Returned Income	Salary Income		House Property		Business Income		Long term Capital Gains	
	Number of returns	Income returned	Number of returns	Income returned	Number of returns	Income returned	Number of returns	Income returned
0-1.5 lakh								
1.5 lakh to 2 lakh								
2 lakh to 2.5 lakh								
2.5 lakh to 3 lakh								
3 Lakh to 3.5 lakh								
3.5 Lakh to 4 lakh								
4 Lakh to 4.5 Lakh								
4.5 lakh to 5 lakh								
4 lakh to 5.5 lakh								
5.5. lakh to 6 lakh								
6 lakh to 6.5 lakh								
6.5 lakh to 7 lakh								
7 lakh to 7.5 lakh								
7.5 lakh to 8 lakh								
8 lakh to 8.5 lakh								
8.5 lakh to 9 lakh								
9.5 lakh to 10 lakh								
10 lakh to 11 lakh								
11 lakh to 12 lakh								
12 lakh to 13 lakh								
13 lakh to 14 lakh								
14 lakh to 15 lakh								
15 lakh to 16 lakh								
16 lakh to 17 lakh								
17 lakh to 18 lakh								

Size Class of Returned Income	Salary Income		House Property		Business Income		Long term Capital Gains	
	Number of returns	Income returned	Number of returns	Income returned	Number of returns	Income returned	Number of returns	Income returned
18 lakh to 19 lakh								
19 lakh to 20 lakh								
20 lakh to 25 lakh								
25 lakh to 50 lakh								
50 lakh to 1 crore								
1 crore to 5 crore								
5 crore to 10 crore								
10 crore to 50 crore								
50 crore to 100 crore								
Greater than 100 crore								

4.2. Additional components for consideration:

Beneficiaries of incentive provisions

An extension of the process of creating greater transparency would be to create dissemination modules on the utilisation of various incentives provided by the government within the tax code. For instance, it would be useful to provide summary statistics of the users of incentives on home loan and savings provisions on one hand, and reported charitable activities on the other for individual taxpayers and major incentives for businesses such as accelerated depreciation, special economic zones, 80IA, 80IB and 80IC. The module for each of these can be structured to include the following details:

Example: Incentives on Home Loans

	Number of Taxpayers	Total Amount of Deduction Claimed
Interest Payment		
Repayment of Loan		

This can be followed by a table giving distribution by returned income of returns claiming this incentive: using the format suggested above, the columns can provide information on size class wise distribution of number of taxpayers and benefit claimed.

The dissemination of such information can provide grounds for asking discerning questions regarding the utility of certain provisions in terms of the number of beneficiaries as well as on the profile of beneficiaries.

Changes in compliance over time:

Going beyond the basic information of number of taxpayers filing returns or paying taxes, it might be interesting to present a decomposition of the taxpayers into entrants into the system, and drop outs. The table can be presented in terms of the different sources of income. Such a table can give valuable insights into the nature of new tax payers the system is able to attract.

A suggested format can be:

	First Time Filers	Veteran Filers	Drop Outs
Number of filers			
Number reporting Salary Income			
Number Reporting Business Income			
Number Reporting Capital Gains			
Number Reporting Other Income			

Note: The first row for this table can be constructed in comparison to the previous year.

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