# The Economy as Reflected in Income Tax Data

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Taxation of income in an economy is expected to be closely correlated to the incomes generated in that economy. Increases in wages and employment in the economy should manifest as higher salary incomes reported to the tax department and similarly, growth in business profits should be captured in the form of higher business incomes reported for taxation. The incentives and exemptions do drive a wedge between these two series, but unless there are major changes in the incentive regimes at short durations, the income streams should exhibit similar behaviours. After a long hiatus of over a decade, the income tax department has resumed publication of some disaggregated data on the incomes returned, and tax liability from the returns filed for AY 2012-13. These data sets – both the old series and the new series – have been used for understanding the dynamics of income distribution in India. (e.g. Banerjee and Piketty (2005) and Channel and Piketty (2017)).

Another aspect that can be explored from this data set is changes in the composition of incomes being reported and its implication for taxation in the economy. In this paper, we explore the trends exhibited in the incomes as compared to the incomes reported in National Account Statistics, the other source of information on the generation and distribution of incomes in the country. The analysis brings to light some evidence on increase in formalisation of the economy since 2012.

The paper is organised as follows: The first section presents a comparison of the trends in the major income heads in relation to the corresponding incomes as reported in the National Accounts Statistics. The following section presents trends in per capita collections to identify the source of growth in incomes and presents some potential implications for the economy. The third section presents a snapshot of the divergence between the tax liability reported and the taxes paid. While this data series ends with data for AY2018-19, there is an alternative series available on the e-filing website for the period 2017-18 onwards, which provides data on the number of returns filed and the distribution of returns by returned income. While limited in scope, this data throws light on the last three years during which substantial changes have been introduced. The implications from these observations for formalisation in the economy are explored in Section 4, and in Section 5, concluding remarks emerging from the analysis are presented.

#### Section 1: Factor Incomes in ITRs and NAS

Over the past decade, we have been celebrating an increase in the number of taxpayers in the system, defined both as taxpayers filing returns and those paying taxes. The aggregate statistics show that not only has the average gross income reported per return increased, the share of nil income filers and the nil tax filers too has declined (Table 1). All of these suggest an improvement in compliance. These improvements could be the result of growth in the economy or as a result of rising formalisation of the economy. To differentiate between these two causes, in this section, we juxtapose the trends in incomes reported in returns with those in National Accounts.

	Gross Income Per Return (Rs Lakhs)	Nil Income returns as percentage of total returns	Nil tax returns as a percentage of total returns	
2012-13	6.8	2.2	55.7	
2013-14	6.7	2.2	50.1	
2914-15	6.9	2.0	47.4	
2015-16	7.7	1.8	49.2	
2016-17	7.8	1.8	44.4	
2017-19	8.6	1.8	43.3	
2018-19	8.7	1.8	40.4	

# **Table 1: Aggregate Statistics**

Source: Income Tax Returns Statistics, various issues

In income tax returns, the major sources of income are salary income, business income and "other incomes". In 2018-19, salary income accounted for 39 percent of total gross income reported, business income for 47 percent and "other incomes" for almost 12 percent. While there is no ready comparable source of information on "other incomes", the National Account Statistics (NAS) does provide information on compensation to employees and operating surplus of enterprises, with a disaggregation into households and corporations.

There are two ways of mapping the information of tax returns on data from NAS. First, if one considers the source of income, salary income in returns would correspond to compensation of employees in NAS, and business income would correspond to operating surplus/mixed income. Second, if one considers the agents to whom the income would accrue and, therefore, the types of tax payers who would report the income in the tax returns, all compensation to employees as well as operating surplus reported by households in NAS can be considered as the base on which individuals would pay taxes, while the operating surplus reported by companies can be considered the base corresponding to the corporation tax. It should be mentioned that the income for any assessment year is income earned in the previous financial year, i.e., income reported in AY 2018-19 in income generated in FY 2017-18. Therefore, while comparing the information from these two data sources, the relevant financial year is taken into account.

Figure 1 presents the relation between returns and NAS using Source of Income as the basis. It shows the ratio of incomes reported in returns to corresponding incomes in NAS. The ratio of salary income to compensation of employees has increased consistently from around 23 percent to close to 38 percent. On the other hand, the ratio of business income to operating surplus has remained stable at around 28 percent, apart from a fall in AY 2013-14.



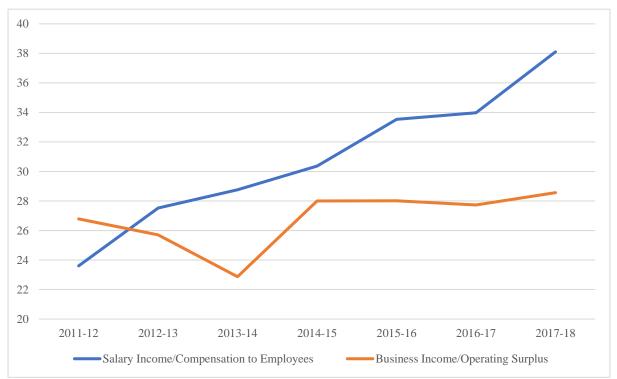


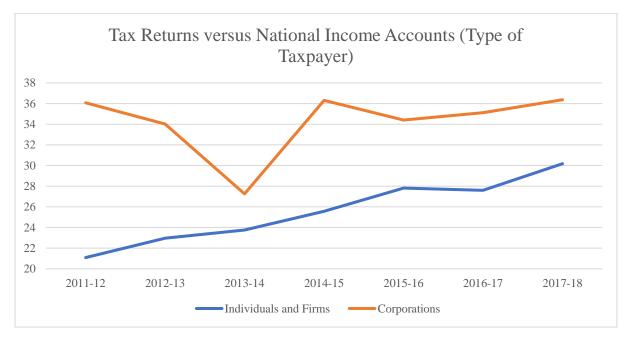
Figure 1: Tax returns versus National Income Accounts (Source of Income)

Source: Derived using Income Tax Return Statistics and National Income Accounts, 2020

Similarly, if one considers incomes by type of taxpayers, the ratio incomes reported by individuals and firms taken together as a percentage of compensation to employees and mixed income of households (labelled as Households and Firms in Figure 2) registered a clear upward trend from 21 percent to 30 percent while that for corporations remained stable around 36 percent. These observations would suggest that there is an improvement in the compliance in the incomes reported by individuals, especially in salary incomes, while for corporations, there was a sharp decline in AY 2013-14 followed by a recovered in 2014-15, this level being sustained thereafter.







Source: Derived using Income Tax Return Statistics and National Income Accounts, 2020

Within business incomes, the trends for Corporate and Non-Corporate (including individuals and firms) are somewhat different. As Figure 3 shows, the ratio of business income to operating surplus remained stable for corporates; the same is not true for non-corporates, with the ratio increasing almost systematically from 19.6 percent to 22.7 percent. These trends suggest that there is an increase in formalisation in the economy, formalisation being defined as an expansion in the share of tax paid activities.



Figure 3: Ratio of Business Incomes to Operating Profits: Returns versus NAS (percent)

Source: Derived using Income Tax Return Statistics and National Income Accounts, 2020

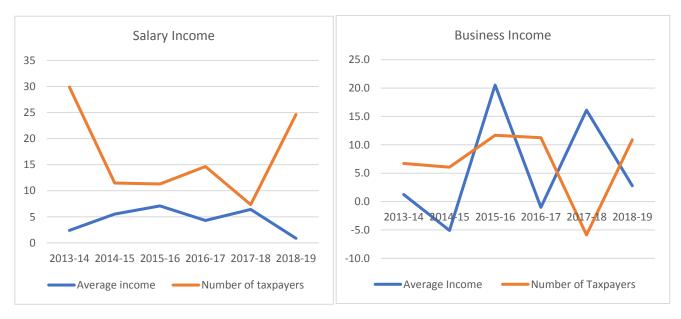


It maybe mentioned that there is some discussion about the size of informal sector being underestimated in India on account of the fact that it is benchmarked to the size of the corporate sector in the reference year 2011-12. Shocks to the economy in the form of demonetisation and GST are expected to have adversely affected this segment of the economy when compared to the corporates. The above ratios, viewed in this light, would be read as an even greater improvement in formalisation in the non-corporate segment of the economy.

#### Section 2: Taxes per tax payer

An alternative way of understanding the trends in incomes reported is to examine whether the growth in incomes is a result of increase in the number of taxpayers reporting certain incomes or due to growth in average income per taxpayer. Figures below show these trends for salary income as well as business income.

There are very different patterns visible in the trends for salary income and business income. For the former, there is a steady but modest increase in the average wage, which barely keeps pace with inflation in the economy. Substantial part of the growth in total salary income is explained by growth in the number of taxpayers which remains consistently higher than 10 percent, with AY 2014-15 and AY 2018-19 reporting growth of over 20 percent.



# Figure 4: Growth in Average Income and Number of Taxpayers with positive Income (Percent)

Source: Income Tax Returns Statistics, various issues

For business incomes, on the other hand, the trends are more volatile. Both the number of taxpayers reporting positive incomes as well as the average income per taxpayer fluctuate a lot. In fact, in the seven year period being examined, there are three instances where one of the series



reports a negative growth rate while the other registers a positive growth. This suggests that, in this period, there were instances where consolidation is observed with a decline in the number of taxpayers accompanied by an increase in the average income for the remaining taxpayers. AY 2017-18 is one such case. On the other hand, in AY 2016-17 it appears there was expansion in the market, i.e., a entry of new taxpayers reduced the average size of income reported. The volatility in the number of taxpayers is largely the contribution of the non-corporate tax payers since corporate taxpayers have been growing consistently year on year. Average incomes are volatile for both corporate and non-corporate groups.

From this analysis, it appears that there is consistent expansion in the number of taxpayers reporting salary incomes, but the same cannot be said for business incomes. If formalisation is defined as engaging factors of production with formal contracts, which in turn would lead to better tax compliance, increase in the number of taxpayers reporting salary income can be considered evidence of improved formalisation in the economy as well.

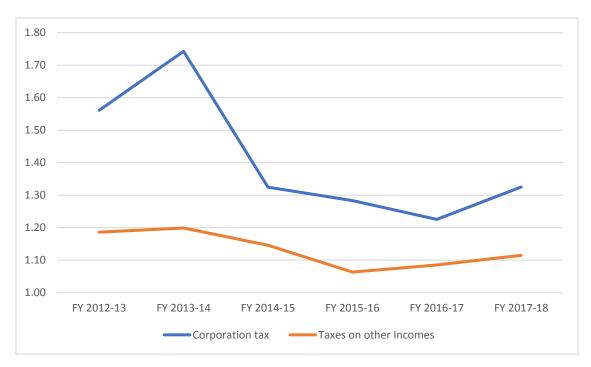
#### Section 3: Tax liability and tax paid

Analysis of data on income tax return is useful provided, the information underlying the summary statistics is comprehensive or at least covers a substantial part of the taxpaying public. This should get reflected in some similarities between the tax liability declared in the returns and the tax paid. There are a few reasons these figures may not match exactly. One, the tax liability declared in the return may be paid to the government as advance tax, tax deducted at source or as self-assessment tax. For any assessment year, say 2018-19, the first two would be paid during financial year 2017-18, while the last could be discharged at the time of computing the aggregate tax liability and preparing the return, i.e. in financial year 2018-19. Second, total revenue collected includes not just taxes paid as declared in the returns but also revenues raised through the audit process and through the resolution of litigation. Further, in disputed demands, part payment of the liability could be needed for issuing a stay on the demand until the dispute is settled. Further, in such cases, any dispute settled in favour of the taxpayer would result a refund from the department as well. Third, changes in regulations from AY 2017-18 have also meant that the department does not reject returns on which all liabilities have not been paid. Fourth, for corporation tax, the revenue collections reported for financial year include the collections on account of dividend distribution tax. In FY 2018-19, it amounted to around 10 percent of the corporate tax revenue. These raise considerable variations between the tax liability declared in the return and the actual tax realised in any financial year. However, unless there is substantial change in the compliance or administration systems, it is reasonable to assume that the two numbers should move in tandem with each other, i.e., the ratio of tax liability to tax paid should be stable. Figure 5 below shows that both for Corporation Tax and for Personal Income Tax, the ratio<sup>1</sup> has been declining over time. This is interesting because, it suggests that the factors contributing to the divergence are playing a less significant role in generating revenues in recent times. For instance, as reflected in the Compliance Audit of Department of Revenue – Direct Taxes, by the Comptroller and Auditor General of India, the share of tax collection from regular

<sup>&</sup>lt;sup>1</sup> This is the ratio of taxes paid in a financial year divided by the tax liability declared for the corresponding assessment year. In other words, taxes paid in 2015-16 would be divided by the tax liability reported in AY 2016-17.



assessment has gone down from about 10 percent in the initial three years of the sample period to about 8 percent in the latter three years. (CAG(2020), CAG(2017))<sup>2</sup>



#### Figure 5: Ratio of Taxes paid to tax liability

Source: Receipts Budget, Budget 2021-22 and Income Tax Return Statistics, various issues

From the above, it appears that Income Tax Returns Statistics are a consistent source of information for "taxes on other incomes", i.e., taxes on non-corporate incomes. For corporate tax, on the other hand, the considerable divergence between the actual taxes collected and tax liability reported in returns especially in the initial years suggests that information in the returns may not be a fair representation of the economic activity of corporates at least in the initial years.

## Section 4: Gazing into AY 2020-21

While the dataset of Income Tax Return Statistics provides information only till 2018-19, there is some additional information available on the e-filing website. This data source provides a quick bird's eye view of the returns being filed, i.e., on the number of returns filed, and a distribution of the taxpayers by the returned income. This information set is available for returns filed till the end of January 2020. Table 2 presents this information from AY 2017-18 onwards. This table throws up some disturbing trends – in AY 2019-20, the returns filed by both firms and companies declined, albeit marginally. In 2020-21, by the last date for submission of returns, there is a substantial decline in the number of returns filed for all categories, the sharpest

<sup>&</sup>lt;sup>2</sup> This however does not mean that there are fewer disputes between the taxpayer and the tax department – the ratio of arrears to total collection has increased sharply.



declining being reported by companies. While there are two more months before the close of the filling period, the trends do appear worrying.

	2017-18	2018-19	2019-20	2020-21 (Jan)	Growth over 2019-20	
Individuals (ITRs 1-4)	5,23,72,332	6,23,04,184	6,45,94,868	5,91,96,471	-8.4	
Firms (ITR 5)	13,15,360	15,03,185	14,87,804	12,23,532	-17.8	
Companies (ITR 6)	8,19,063	8,92,103	8,87,203	5,89,661	-33.5	
Source: https://www.incometaxindiaefiling.gov.in/moreStatistics						

# Table 2: Number of Returns filed by Assessment Year

A comparison of the distribution of returns by five sub-classes shows that the rate of decline is the largest for the highest income category reported – above Rs 1 crore. The fact that the lowest income group with incomes upto Rs 5 lakh has increased by 3 percent while the returns in the highest income group have declined by 39 percent suggests the possibility of an across-the-board reduction in incomes shifting the income downwards. Noting that AY 2020-21 relates to incomes earned in FY 2019-20 – a year in which India reported a low growth but not a decline in GDP like in the year of the COVID-19 pandemic 2020-21 – raises more serious concerns for the incomes to be reported in AY 2021-22.

In the earlier sections an increase in the number of returns along with an increase in the average income per return was presented as evidence of formalisation of the economy. The reverse seems to be in play for FY 2019-20, with positive growth in GDP and a decline in number of returns which would correspond to a decline in the overall incomes reported. In other words, it appears that formalisation recorded in the earlier years is getting reversed in FY 2019-20. With actual decline in incomes in FY 2020-21, this process may be further accentuated.

## Section 5: Concluding remarks

The analysis in this note throws light on a few interesting trends in the Indian economy

- 1. Formalisation in the economy can be viewed either as a process that expands the scope of tax paid economic activities in the economy or as one where the factors of production are being procured more through formal contracts. The analysis shows evidence of some formalisation in both categories of income.
  - a. For non-corporates, the ratio of business income to operating profits reported in NAS has increased somewhat from 19 percent to 22 percent. On the other hand, the ratio of salary income to compensation to employees as reported in NAS has increased consistently, led by an increase in the number of salary earners. This pre-dates the initiatives by the government such as Pradhan Mantri Rozgar Protsahan Yojana of 2018.



- b. The trends for FY 2020-21 seem to indicate a reversal in these trends. This initial observation needs to be revisited after March 31, 2021, when most expected returns should have been filed.
- 2. The divergence between the tax liability and the tax paid has been reducing over time. This could be a cause for celebration or a cause for worry, depending on whether it is a result of higher disputes or quick settlements.
- 3. The evidence on tax returns for FY 2019-20 suggests a significant drop in returns and a corresponding drop in incomes declared. The revenues collected in FY 2019-20 reflect this decline with a 16 percent drop in corporate tax collection and a meagre 4 percent growth in "taxes on other incomes". This decline could have translated into lower self-assessment tax in 2020-21 for taxes liable in AY 2020-21, further contributing to a decline in the revenues collected in FY 2020-21.



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