

WORKING PAPER 04

Fiscal Modernisation: Lessons for India from the World

Prakhar Misra and Sharmadha Srinivasan



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Abstract

This paper charts how western economies raised income tax over time in order to identify learnings for India. It draws on Piketty and Qian's paper where they argue that western countries fiscally modernised between 1914 and 1950 by raising their income tax contribution from less than 1% of gross domestic product (GDP) to 4-5% of GDP. We study how income tax in four major countries evolved from being a tax on elites to a more broad-based tax and analyse the lessons for India. India has a low income tax-to-GDP ratio with less than 3-4% of the population paying income tax. We conclude with three specific policy takeaways regarding taxation: a) India needs a simple income tax structure with moderate marginal tax rates; b) a hike in exemption levels should not be out of sync with per capita income growth; c) the tax system must shun ad-hoc incentives that introduce unnecessary complexities. Beyond these specific taxation measures, we argue that the political legitimacy to tax needs to be built through strengthening state capacity in the delivery of public goods. This will incentivise voluntary payment of income taxes. The capacity of the tax administration will also have to be built up.

Introduction

The Indian state needs fiscal capacity to undertake its key tasks of building public goods, dealing with externalities and reducing inequalities. The inability to collect enough tax means either funding constraints or fiscal stress, if not both.

Most of the recent work on this issue asks whether the Indian state collects enough tax as a percentage of its GDP compared to emerging market peers such as South Africa, Brazil and Nigeria. This paper approaches the issue of fiscal capacity by looking at how the developed economies of today built fiscal capacity over time — and then seeks to identify broad policy lessons for India.

Fiscal modernisation is the ability of a nation state to raise revenue through modern taxes¹ such as personal and corporate income taxes, value-added taxes, and payroll taxes. We specifically focus on personal income tax as it is central to a modern social contract between citizen and state. Many Western countries fiscally modernised between 1914 and 1950 by raising their income tax contribution from less than 1% of GDP to 4-5% of GDP (Piketty and Qian, 2009). This primarily happened as income tax evolved from being a tax on the elite to a more broad-based mass tax.

This paper is divided into four sections. The first section gives an overview of how four developed countries — US, UK, France and Japan — modernised their tax systems. The second section focuses on the importance of the World Wars and the specific factors which helped transform the role of income tax in these countries. The third section identifies areas that are still in need of reform in India. The last section concludes the paper by drawing on broad policy recommendations from both within and outside the tax policy ambit, which will aid India's fiscal modernisation process. While this paper provides tax policy proposals, the broader aim is to identify key policy areas and structural questions that hinder fiscal modernisation in India today.

1. Background: Setting the Inquiry²

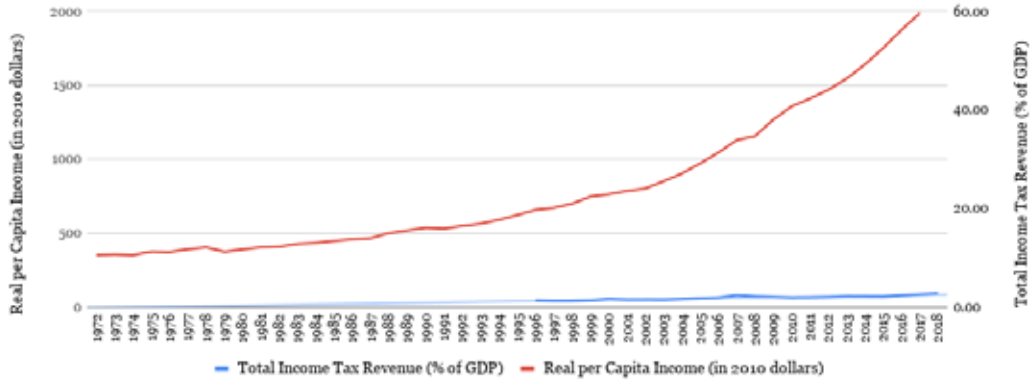
Income tax was introduced in India in 1860, and has been codified in the Income Tax Acts of 1886, 1918, 1922 and 1961.

Indian tax policy after 1947 initially focused on collecting as much tax as possible to fund the ambitious public sector investment plans. Several expert committees argued for a less onerous tax system to broaden the tax base, make the tax system more equitable and reduce incentives for tax evasion. Most of these committees also recommended lower tax rates (Kaldor, 1959; Direct Tax Enquiry Committee, 1971; Chelliah, 1992). It was only after the 1992 reforms that income tax rates were brought down meaningfully, as the private sector became the primary vehicle of industrial investment. In 1992-93, the personal income tax slabs were divided into three slabs of 20%, 30% and 40%. By 1997-98, these personal income tax rates were further reduced to 10%, 20% and 30% (Union Budget, 1997-98). The recent 2019-20 budget struck a different note and introduced a higher tax rate on the rich through an additional surcharge, with those earning more than Rs 5 crore effectively having to pay 42% of their income as tax.

1. As defined by Kleven, Kreiner and Saez (2016), modern taxes are those that rely on third-party information as opposed to traditional taxes that are often self-reported (property taxes, inheritance taxes, excise and sales taxes, custom duties).

2. We compute the total income tax returns-to-GDP ratio, and the real per capita income for each of these four countries. We also collate tables on the tax base and marginal rates for the highest and lowest tax brackets for each country, for the years for which data is available. A more detailed discussion on data and its limitations is in the Appendix to this paper.

Figure 1: India — Real Per Capita Income and Total Income Tax as a Percentage of GDP



Source: Authors' Analysis. Data from: World Bank, Union Budgets

The average income tax-to-GDP ratio was 1-1.2% until 1998 (see figure 1). After 1998, it gradually increased to 2.7% in 2018-19 (Union Budgets). Yet, this is on the lower side compared to countries with similar per capita income levels such as Kenya, with an income tax revenue-to-GDP ratio of 3.9%, and Senegal with a ratio of 4.2% (OECD Revenue Statistics).

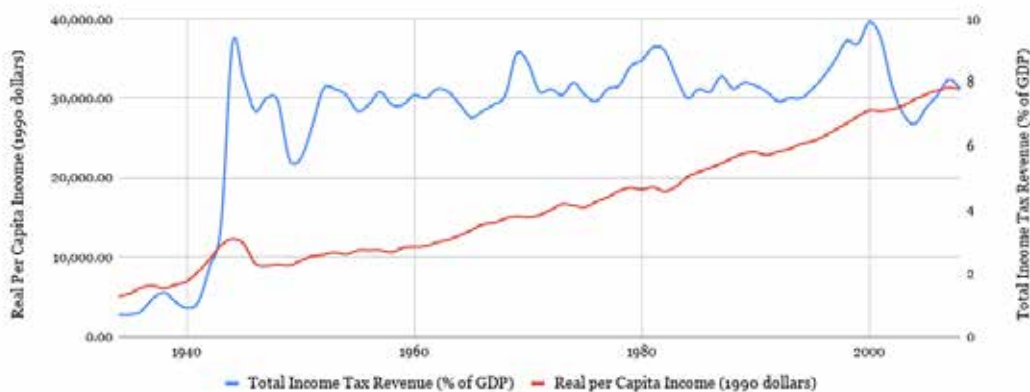
In the rest of this section, we attempt to understand the time period during which the US, UK, France and Japan reformed and modernised their taxation systems.

1.1 US completes modernisation by World War II

The US introduced income taxation in 1913, not to primarily finance war but to introduce an element of fairness in society³. Several attempts had been made to introduce an income tax since the Civil War in 1861, but most of them were ultimately repealed by Congress or struck down by the Supreme Court.

Income taxation began with a low tax rate and a low tax base. A 1% income tax rate was introduced on incomes over \$3,000 for individuals and \$4,000 for married couples. The highest income tax bracket rate (called the surtax) was kept at 7% for incomes over \$500,000. Less than 1% of the population eventually paid taxes (Tax History Project, 2019). The income tax-to-GDP ratio was less than 1% in the 1930s despite the rapidly expanding economy, as real per capita income doubled from \$5,114 in 1934 to \$12,333 by 1944. It was only during World War II that the 1942 War Revenue Act increased the tax base and the income tax collection (see Figure 2). The income tax-to-GDP ratio rose from 2.2% in 1942 to a massive 9.2% in 1944.

Figure 2: United States — Real Per Capita Income and Total Income Tax as a Percentage of GDP^{4,5}



Source: Authors' Analysis. Data from: Office of Budget and Management; Maddison project database

3. Ways and Means Committee report of 1932.

4. Note for Figure 2: Real per capita income is in purchasing power terms in 1990 dollars

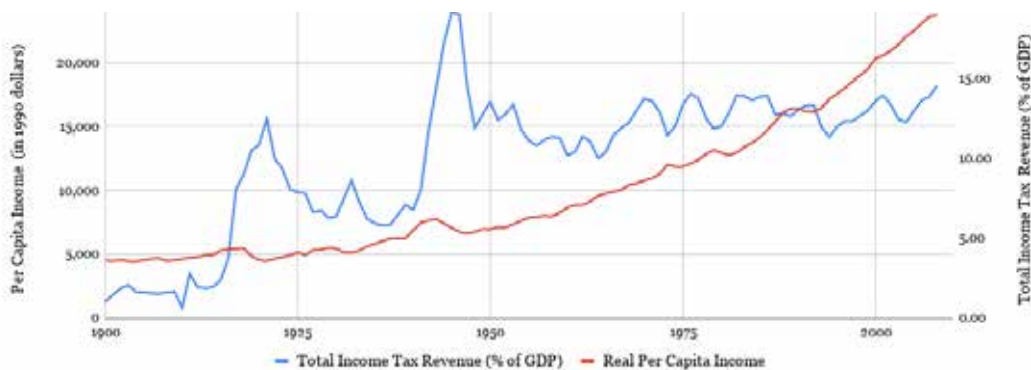
5. Real per capita income jumped during the war years due to the economy being revitalised by the war post the depression years.

1.2 UK, like US, achieved Modernisation by World War II

The UK was the first to introduce income tax in 1842 as a permanent measure. The tax was introduced on income upwards of £150 due to a growing budget deficit⁶. By 1874, income tax revenue accounted for about 10% of total government revenues. However, like the US before fiscal modernisation, the tax base in UK was very low – less than 1% of the population.

The data from the UK (Figure 3) shows a massive increase in income tax-to-GDP ratio during the two World Wars. The ratio increased from 1.93% at the beginning of World War I in 1914 to 9% by the end of the war in 1918. The World War II period showed a similar jump – from a modest 8.04% in 1941 to a massive 19.18% in 1945.

Figure 3: United Kingdom – Real Per Capita Income and Total Income Tax as a Percentage of GDP^{7,8}



Source: Authors' Analysis. Data from: UK Public Revenue; Maddison Project Database

1.3 France begins modernising post-World War II in 1949

France introduced income tax in 1913⁹. Its public debt that year was over 33 billion francs – the highest in the world. Until this point, the French had mainly relied on real estate, taxes on movable property, professional tax and taxes on doors and windows (Baubeau, 2014). When implemented in 1916, the tax base and the top marginal tax rate were kept low with only 5% of households paying taxes at a top marginal rate of just 2% (Osberg, 2009).

At the end of World War I, income tax accounted for 1.09% of French GDP (Figure 4). In 1945, after World War II, the ratio was scarcely better at 1.1%. This was poor compared to the US and UK. The 1949 tax reforms were an inflection point. Taxation rates and codes were simplified, improving income tax revenues from less than 1% of GDP to 5.5% of GDP by 1980.

6. For further details, refer to the website of the UK Parliament: <https://www.parliament.uk>

7. Note for Figure 3: Real per capita income is in purchasing power terms in 1990 dollars

8. The World War years witnessed a mobilisation of resources for the war effort, leading to the spike witnessed in per capita income in purchasing power terms (Broadberry and Howlett, 2002).

9. For further details, refer to the International Encyclopedia of the First World War on France: https://encyclopedia.1914-1918-online.net/article/war_finance_france

Figure 4: France — Real Per Capita Income and Total Income Tax as a Percentage of GDP^{10,11}



Source: Authors' Analysis. Data from: Maddison Historical Series; Piketty, 2018; OECD database; World Bank

1.4 Japan modernises post-World War II with reforms in 1950

Japan had traditionally been dependent on land and sales tax for 80% of its tax revenues (Ministry of Finance of Japan, 2006). It turned to income tax for the first time to finance its naval expansion in 1887, with only 1.5% of the population taxed at a low rate of 1-3%.

Although Japan too financed its participation in World War II through taxation (hence the spike in Figure 5), the real modernisation of the tax system happened after the war. Due to high exemption levels, only 1-5% of the population paid income tax before World War II (Moriguchi and Saez, 2008). From 1946 to 1949, there was a spike in the income tax-to-GDP ratio due to temporary measures such as a special tax on war indemnity and higher taxes on richer income brackets (Ministry of Finance of Japan, 2006). Japan's modern taxation system was built following the Shoup reforms of 1950 (Kaizuka, 1992). A highly progressive system was put in place with top tax rates that were at 75% up till 1983. As witnessed in Figure 5, the income tax-to-GDP ratio rises from 3.3% in 1955 to 5% by 1986.

Figure 5: Japan — Real Per Capita Income and Total Income Tax as a Percentage of GDP^{12,13}



Source: Authors' Analysis. Data from: Maddison Historical series; Japan Statistical Yearbook, National Tax Agency

10. Note for Figure 4: Real per capita income is in purchasing power terms in 1990 dollars

11. The French economy suffered devastating losses to its GDP during World War II due to being primarily occupied by Germany as well as due to its forced payments to Germany. This can be seen in the decline in per capita income during the war years, particularly World War II (Occhino et al, 2008)

12. Note for Figure 5: Real per capita income is in purchasing power terms in 1990 dollars

13. The fall in per capita income could be attributed to the Japanese economy being completely ruined during World War II, with 40% of its capital stock destroyed (The library of Economics and Liberty).

TABLE 1: Countries and their Real Per Capita Income at Inflection Point

Country	Real per Capita Income at Inflection point of modernisation	Year
United States	\$7,100	1940
United Kingdom	\$6,850	1940
France	\$4,950	1949
Japan	\$3,550	1959

We summarise the real per capita income levels and the years in which these four countries begin to modernise (see Table 1). The next section details these inflection points in the taxation history of the world: the role of the World Wars and the major factors that contributed to increasing income tax collection in the US and UK. We also dwell on why the war years did not transform income taxation for France and Japan.

2. Impact of the World Wars

The introduction of income tax in the years prior to World War I made it mainstream without much opposition, but real political legitimacy sprang from the need for revenues to fight the war. The US and UK built state capacity and put systems in place to collect more income tax. For France and Japan, the wars proved to be detrimental to their taxation capacities and administration system. It was only in the post-war years that these two countries built their tax systems.

2.1 World War I: Political Legitimacy to Tax in US and UK

The US garnered the necessary political legitimacy to tax income during World War I by placing the burden of the tax on the rich. The Woodrow Wilson government marketed taxation as an explicit ‘soak-the-rich’ instrument and put in place a highly progressive system¹⁴. This worked well enough for income tax to fund nearly a third of the war’s costs. Income tax contributed around 16% of total revenue at the beginning of the war which increased to 58% by 1918, while the tax base increased from 1% to approximately 5% by 1918.

The hiking of tax rates on the highest brackets for the rich worked politically as the Democratic Party was re-elected to power. Woodrow Wilson held the presidency during and after World War I – from 1913 to 1921. The 1916 Revenue Act increased the income tax rate from 1% to 2% for the lowest tax bracket and from 7% to 15% for the highest tax bracket. In 1917, the marginal tax rate on the highest income bracket was increased multifold to 63%, finally reaching 77% by 1918. Additionally, the highest tax bracket started at \$2 million from the previous level of \$500,000 (Tax History Project, 2019). Clearly, the country wasn’t relying on a wide tax base to fund the war.

The political apparatus was ultimately successful in selling the unpopular idea of taxation to the people of the US with war funding being a legitimate goal. During these years the highest marginal tax rate increased from 7% to 77% and the lowest from 1% to 6%¹⁵. By 1918, the richest 22% of US taxpayers contributed 96% of all individual tax receipts.

A similar trend can be seen during the World War II years when the Democratic era witnessed enormous traction for a number of measures, including increasing the highest marginal tax rate from 25% to 94%

14. For further information, refer to the link: <https://www.encyclopedia.com/defense/energy-government-and-defense-magazines/financing-world-war-i>

15. For married people filing jointly

and the lowest from 1% to 23%. Fuelled by the war and the sacrifices it demanded, political consent for taxing the rich and the middle class rose without diminishing the electoral prospects of the incumbent (See Table 2). This time, the people in lower tax brackets contributed substantially higher amounts than they did during World War I.

TABLE 2: The Democratic Presidential Era from 1932-1952 Ushered in a Period of Dramatic Progressive Tax Reforms

Year	President	Party	Tax Base (% of the population)	Highest Bracket Marginal Tax Rates (%)	Lowest Bracket Marginal Tax Rate(%)
1928	Herbert Hoover	Republic Party	3.44	25	1.13
1932	Franklin D. Roosevelt	Democratic Party	3.27	63	4.00
1936	Franklin D. Roosevelt	Democratic Party	4.28	79.00	4.00
1940	Franklin D. Roosevelt	Democratic Party	4.28	79.00	4.00
1944	Franklin D. Roosevelt	Democratic Party	34.04	94.00	23.00

Source: Library of Congress

In the UK, the tax policies of the liberal governments under Herbert Asquith and David Lloyd George mirrored the US, though they were instituted almost a decade earlier in 1909. George, then chancellor of the exchequer, imposed a higher tax on unearned income on land owned by the rich in the 1909 budget, which came to be known as the people’s budget. When this policy was opposed by the Conservatives who did not allow this legislation to be passed, the sitting government called for elections to get a mandate for its tax proposals. The Liberal government regained its majority, signalling political acceptance by the public for income taxation.

World War I further increased the legitimacy of tax, especially on the rich¹⁶. The standard tax rate on the rich increased from 6% at the start of the war, to 30% by the end of the war. According to the UK HM Revenue & Customs, “At the start of the war the standard rate of income tax was 6%, which produced an income to the Exchequer of £44 million with a further £3 million in super-tax”. By 1918, the standard rate had risen to 30% realising £257 million with £36 million more due to higher marginal tax rates on the rich. The tax base had increased as well, with 10 million Britons out of 45.8 million paying income tax by 1930.

At the end of World War I, George’s government won the 1918 elections and passed the Income Tax Revenue Act for the purpose of building a welfare state. From 1919 to 1922, the government set about expanding health, education and pensions for its citizens. The tax base was still considered narrow right up until World War II, with only 8-10% of the population taxed in the 1930s (HM Revenue and Customs).

TABLE 3: Liberal Governments from 1908-1922 Usher in Progressive Income Taxes

Year	President	Party Elected	Highest Bracket Marginal Tax Rates (%)
1908	Herbert Asquith	Liberal	0.00
1910	Herbert Asquith	Liberal	8.33
1916	David Loyd George	Liberal	42.5
1918	David Loyd George	Liberal	52.5

Source: BBC on Prime Ministers and Political Timelines

16. For further notes, refer to the UK parliament website on Taxation: <https://www.parliament.uk/about/living-heritage/transformingsociety/private-lives/taxation/overview/newtaxes>

Thus, the liberal government of 1909 set the UK on a path to generating revenues through income taxation, with World War I enhancing the legitimacy to do so (see Table 3).

After four consecutive terms of the Liberal party in the World War I and post-war years, the conservative governments - Stanley Baldwin (1935-37), Neville Chamberlain (1937-1940) and Winston Churchill (1940-45) - maintained the high marginal tax rates on the richest tax bracket. World War II was used to further this legitimacy and increase the tax base from less than 8% to almost 30% by 1950. In addition, the UK also built its administrative capacity through the decades of the two wars.

2.2 World War II: State Capacity Building in the US and UK

After World War I, both the UK and US focused on increasing the tax base, understanding its importance in the fiscal modernisation process. In the UK, the marginal tax rate on the highest bracket reached 97.5% by 1941 and the tax base increased from 10% in the 1930s to 29% of the population by the end of World War II and to 35% by 1955 (see Figure 6).

Figure 6: UK — Marginal Tax Rates on the Highest Tax Bracket and Tax Base (% of population taxed), 1900-1997¹⁷



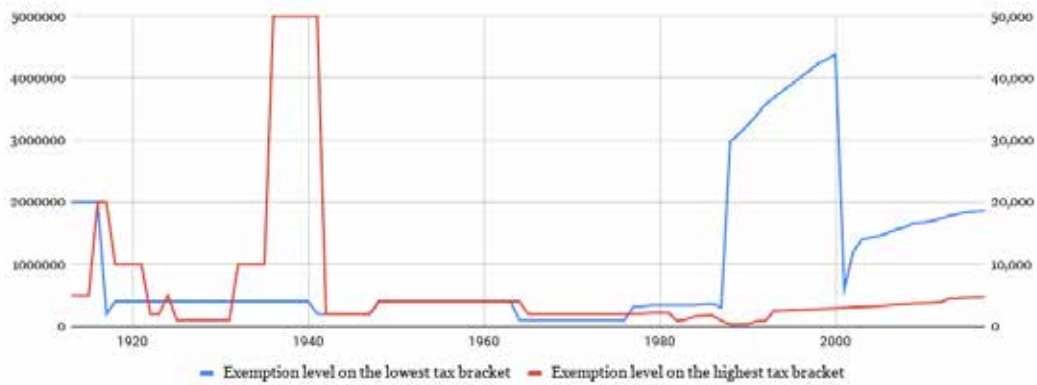
Source: Authors' Analysis. Data from: Piketty, 2014; Our World in Data; HM Revenue & Customs

The US was severely affected by the Great Depression and that led to making significant changes in tax policies between the war years. By 1924, the top marginal rates were rationalised to 25% from a high of 77% and to counteract the losses in revenue, the exemption level of the highest bracket was lowered from \$500,000 to \$100,000. The fall in the real per capita income during the Depression led to a massive drop in income tax revenue — from over \$1 billion in 1930 to \$370 million in 1932. This made the problem of a narrow tax base salient, and in 1932, in order to bridge the deficit on the current account of the budget, the top marginal rate was raised again to 63%. The exemption level was raised from \$1 million to \$5 million. However, no concrete steps were taken to expand the income tax revenue base till the war effort of the 1940s.

It was the 1942 War Revenue Act, expanding the scope and rate of income tax, that was crucial to the modernisation process. The top marginal tax rate now applied to incomes over \$200,000, down from the previous level of \$5 million, effectively ensuring that the income tax moved from being an elitist tax to a much more broad-based tax. Figure 7 charts this progression.

17. Note for Figure 6: Data on tax base is from HM Revenue & Customs and available only for certain years

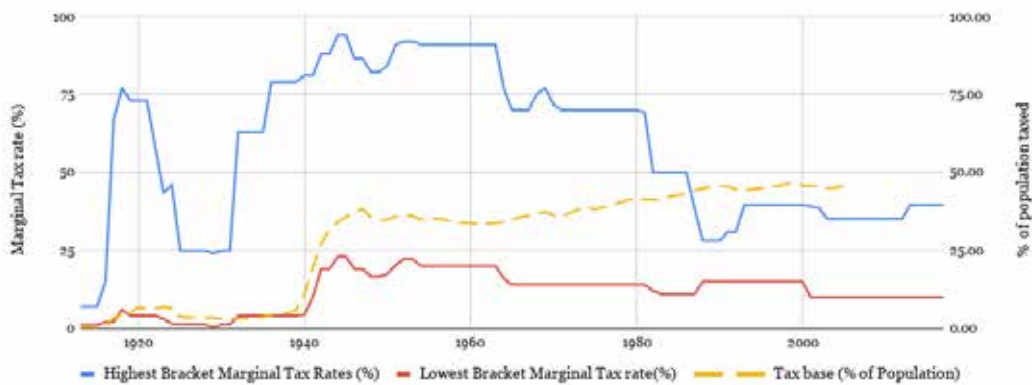
Figure 7: US - The Exemption Levels on the Highest and Lowest Tax Bracket from 1913-2017



Source: Authors' Analysis, Data from: Tax policy centre

Data from the Internal Revenue Service (IRS) shows that the US income tax base grew from 11% of the total population in 1940 to 34% by 1944. Other sources indicate it increased from 7% to 64% over the same period (Scranton, 2018)¹⁸. Irrespective of the exact numbers, the larger point remains that the US tax base grew substantially because of the 1942 War Revenue Act. By 1944, this was reflected in the income tax collection which touched 9.2% of GDP. As seen in Figure 8, tax rates on the highest and lowest income tax brackets also reached a record high by 1942 of 94% and 23% respectively. By 1944, income tax became the dominant force of revenue tax collection. With this, the US tax system completed the modernisation process to a degree.

Figure 8: US – Marginal Tax Rates on the Highest and Lowest Tax Brackets and Tax Base (% of population taxed), 1913-2015



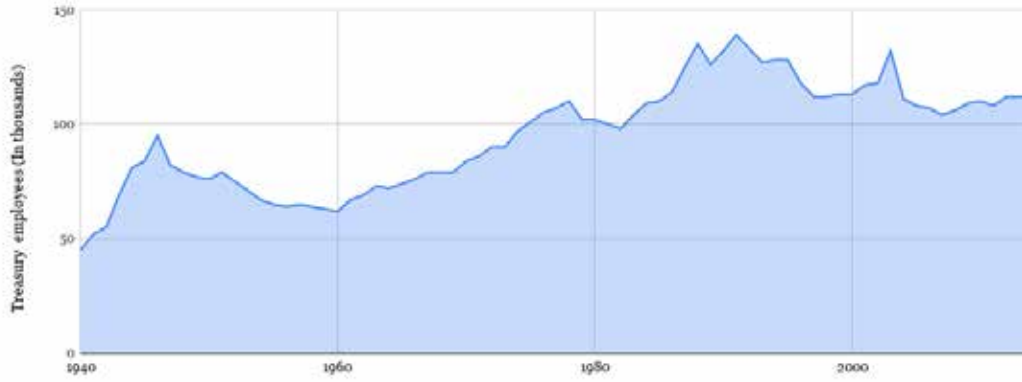
Source: Authors' Analysis, Data from: Tax policy centre, Internal Revenue Service

Improving the tax base requires monitoring and enforcement apart from tweaking tax rates and exemption levels. This requires a commensurate increase in state capacity. In the US, the total number of employees of civilian federal agencies increased from 443,000 in 1940 to 795,000 in 1946 (see Figure 10). The percentage of the labour force as a part of US civil federal employment touched 5% in 1946 from less than 1% in the 1930s. Employees in the Treasury Department increased from 45,000 in 1940 to 95,000 in 1946 (see Figure 9). Without these changes, an increase in income tax collection wouldn't have been possible.

The UK too saw a massive increase in public sector employment during the two World Wars. The number of employees working in public administration increased from 1.6 million in 1914 to 4.7 million by 1918, and from 1.8 million in 1939 to 4.8 million by 1945. There is a steady increase in employees after World War II, with the manpower now retained to build the welfare state (see Figure 11).

18. The disparity in the numbers are reflective of the different data sources we have looked at. We prefer to use the official estimates provided by the Internal Revenue Service.

Figure 9: US Employment in the Treasury, 1940-2014



Source: Authors' analysis. Data from: United States Office of Personnel Management

Figure 10: US Employment Numbers in Civil Federal Agencies, 1940-2014



Source: Authors' analysis. Data from: United States Office of Personnel Management

Figure 11: Public Sector Employment in the UK, 1855- 2011



Source: Authors' analysis; Data from: Office for National Statistics

The other crucial reform that the US tax administration undertook in 1943 was the withholding tax where the tax on wages, salaries, interest and dividends began to be deducted at source (Ventry and Thorndike, 2002). The introduction of the withholding requirement “revolutionized the income tax” (Ventry and Thorndike, 2002) and became the “the cornerstone of the administration of our (US) individual income tax” (Twight, 1995). The withholding measure ultimately raised the cost of evading taxes leading to greater compliance from taxpayers. The same reform was undertaken in Britain in 1944 under the Pay-as-you-go system¹⁹.

This, at least in part, helped bring in efficiency in the administrative capacity of the state²⁰ enabling the fiscal modernisation process.

Besley and Persson (2014) have shown that state capacity is easier to build where there is greater buy in from the public. There is, however, a circularity as revenue collection helps build administrative capacity for collecting tax and greater tax collection enables a stronger administration. The UK and US, as shown, had seized the opportunity to strengthen the administration once it achieved a degree of political legitimacy among the people. This legitimacy enabled the government to break the circle and improve the administrative capacity to collect more income taxes, a crucial factor in the modernisation process.

After the wars, the US ensured stabilisation of income tax revenues. For over three decades after World War II, until the Reagan era, the top tax rate was kept at 70% (but an effective tax rate of 50%). The lower bound of the topmost income bracket never went back to its pre-war level of \$5 million. The lowest tax bracket was also taxed at 15%. The exemption levels dramatically broadened the base and ensured that the progressive system put in place was not scaled back (Morgan and Prasad, 2009).

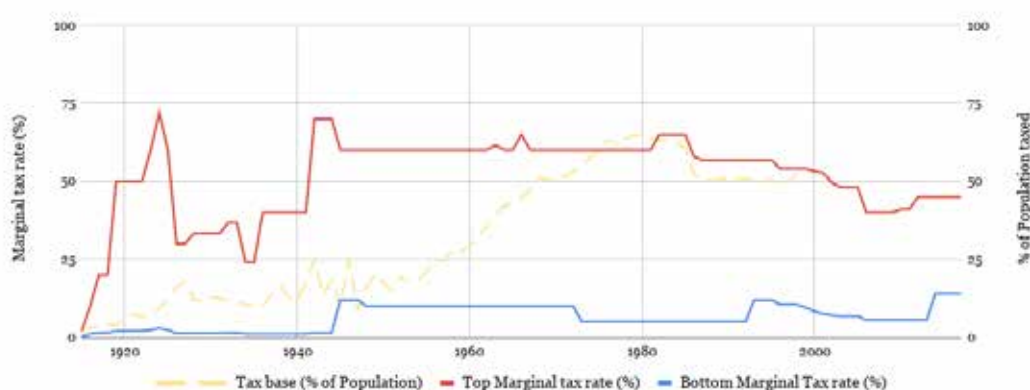
The UK too charted a similar course by maintaining an excessively high marginal tax rate of 97.5% on the topmost income bracket for almost three decades after World War II in order to fund the country's ambitious welfare state that was established in 1945 (based on the Beveridge report). Income tax as a percentage of GDP after the World Wars has since consistently contributed 10-15% of GDP.

2.3 Postwar years: Reform in France and Japan

France and Japan did not build their administrative capacity to take advantage of the legitimacy to tax more than that was generated by the wars. This is especially true of France. After World War II, income tax revenues as a percentage of total revenue were still low at 28% compared to 65% for the UK and 85% for the US²¹.

France undertook major tax administrative reforms after World War II where it combined all the different agencies relating to internal revenues under one bureau²². Further, in 1949, the number of schedules (tax brackets) were reduced and streamlined from 24 to eight. The rates were kept progressive, with the highest bracket taxed at 65%, and remained frozen until 1987 (see figure 12). The income tax-to-GDP ratio greatly

Figure 12: France — Marginal Tax Rates on the Highest and Lowest Tax Bracket and Tax Base (% of population taxed), 1915-2017²³



Source: Authors' analysis, Data from: French tax office; Piketty, 2003; Institut des Politiques Publiques, 2014

20. We're aware that scholarly literature has varied definitions of state capacity, but for our purposes we interpret this as the number of personnel capable to perform the task at hand.

21. For further notes, refer to the paper on 'Funding the Modern State: The Introduction of the Value Added Tax in France.' The paper can be accessed at: <https://ideas.repec.org/p/fth/eurohi/97-2.htm>

22. For further details, refer to the paper on 'Taxation in France'. The paper can be accessed at: <https://www.jstor.org/stable/pdf/41790191.pdf?refreqid=excelsior%3A29f360568811f6872f20b76c6ff31eb5>

23. Note for Figure 12: Data on tax base is calculated as the percentage of households paying income tax out of the total number of households. Household is the tax unit defined as a married couple with dependents (such as children or old parents) or a single head of household with dependents.

increased from around 1% to 5% by 1985. This was supplemented by the expansion of the tax base after the reforms of 1949, which increased from 20% in 1949 to 65% by 1980 (Piketty, 2003). For France, the reform and actual modernisation of its tax system took place after World War II.

For Japan, it was only after World War I, in 1920, that a highly progressive taxation system was put in place. The top marginal rate of 50% on the richest individuals yielded incomes of 8 million yen (or 400,000 pounds). Corporate dividends received by individuals began to be taxed and heftier fines were imposed on individuals deflecting assessment of their true income by tax officials (Nakaoka, 2016). In 1940, Japan turned to the rich to fund the war by increasing the top marginal rate on the highest bracket to 85% (Figure 13).

Figure 13: Japan — Marginal Tax Rates on the Highest Tax Bracket and Tax Base (% of population taxed), 1887-1950²⁴



Source: Authors' analysis, Data from: Census data; Ohkawa et al., 1967

After the war, in 1949, on the basis of the 'Shoup reforms', Japan modernised its taxation system by shifting the burden to direct taxes (Wasilewski, 2005). In the 1950s, despite a decrease in overall income tax rates, exemption levels were raised — so the tax burden on the lower brackets was much less than a decade earlier. The effective income tax rate for families in the lower brackets decreased from 6.6% in 1953 to 3.4% in 1960. The tax burden continued to fall in the 1960s for all brackets except the richest where the top marginal rate increased from 50% to 75% in the 1960s. Some suggest that this post-war increase was due to tax administration being severely constrained in Japan because of the massive destruction from the war (Morgan and Prasad, 2009). With the Shoup reforms, Japan attempted to address these constraints. Alongside the introduction of a self-assessment system which dramatically increased the number of taxpayers — and consequently multiplied the burden on Japan's tax agency²⁵— Japan substantially increased the capacity of its tax administration: from approximately 15,000 personnel in 1945 to 60,495 personnel in 1949²⁶.

The fiscal modernisation process of these countries hold important lessons for us which we shall highlight in the next sections after providing a background on tax policies in India and the reform challenges.

3.0 Tax Reforms in India: Past, Present and Future

3.1 Tax Rates, Tax Base and Exemption Levels

While a lot has been done with regards to tax reforms in India, the three features core to tax policy merit an overview:

First, simplifying tax rates and tax slabs was key to modernisation. Consider France, where in 1949 the number of tax brackets was reduced from 24 to eight. The modernisation of the system started after this

24. Note for Figure 13: The data on tax base is only available from 1887-1950

25. National Tax Agency — Introduction of self-assessment system. Retrieved from <https://www.nta.go.jp/about/organisation/ntc/sozei/tokubetsu/h24shiryokan/04.html>

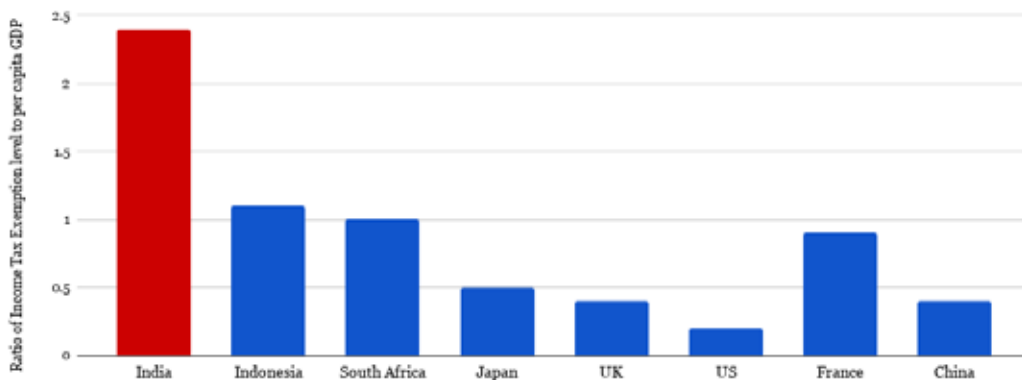
26. Hidenori Sakota. [Current situation and issues of tax administrative]. Tokyo. Retrieved from <http://www.pp.u-tokyo.ac.jp/wp-content/uploads/2017/05/The-85th-Public-Policy-Semina-Presentation-File-for-Upload.pdf>

reform and the income tax-to-GDP ratio increased from just 1% in 1945 to 5.5% by 1980. The reform also catalysed the growth of the tax base from 25% in 1946 to almost 65% by 1980. India undertook similar reforms in the 1980s, when the number of tax slabs were slashed from 11 to eight. This came down to three tax slabs by the end of the 1990s.

Second, exemption levels were key in turning income tax from an elite to a broad-based tax and were kept reasonably in line with the country's per capita income growth. The US broadened its tax base by keeping the lowest exemption level in 1942 at \$2000, below the real per capita income of the country in that year at \$10,200²⁷. Similarly, when China introduced income tax in the 1980s the exemption threshold was seven times the average income. By 2008, the exemption threshold was below the average income, ensuring that its income tax base had increased. In contrast, India has one of the highest exemption levels in the world, where the average exemption threshold is 2.5 times the average per capita income (Chakravarty, 2018) as shown in Figure 14.

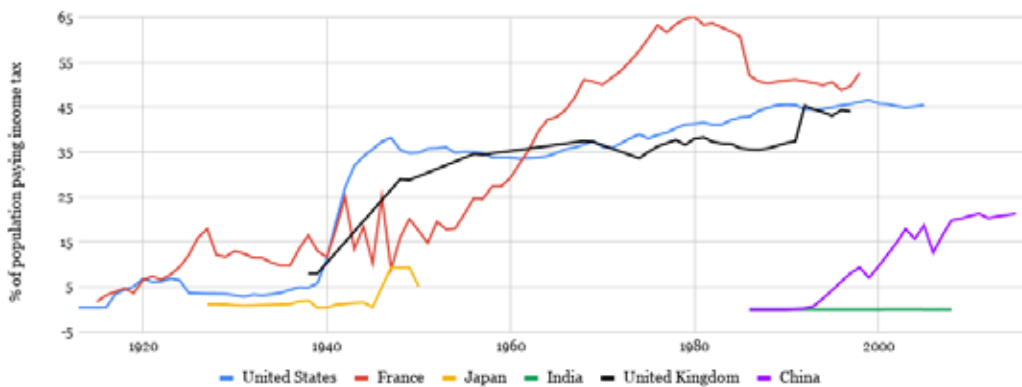
The tax base, which is closely linked to exemption levels, is the third key area where India still has to play catch up. The rise in exemption levels in India has been equal with per capita income growth, ensuring that India's taxation base does not rise above 2-3% of the population (Piketty and Qian, 2009). Figure 15 below charts the evolution of the tax base of all countries chosen for comparison. We can see that India has only marginally improved in comparison to drastic improvements of other countries.

Figure 14: Comparison of India with other Countries on the Ratio of Income Tax Exemption Level to Per Capita GDP in Local Currency



Source: Praveen Chakravarty, Bloomberg Quint

Figure 15: Comparison of Income Tax Base (% of population taxed) of India with other Countries²⁸



Source: Authors' Analysis. Data: Internal Revenue Service; HM Revenue & Customs; Piketty and Qian, 2009

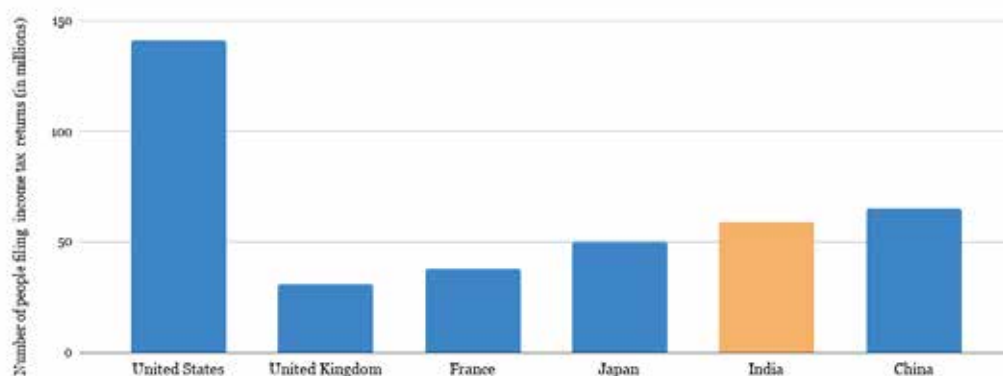
27. This would be real disposable per capita income that is not seasonally adjusted with data from the Federal Reserve.

28. Note for Figure 15: For France, data on tax base is calculated as percentage of households to total number of households paying income tax. Household is the tax unit defined as a married couple with dependents (such as children or old parents) or a single head of household with dependents. For China, the tax base is a projected calculation from the paper by Piketty and Qian.

We can also see the stark contrast in tax base in Figure 16 which is a comparison of the absolute number of individual income tax payers in India with other countries. India, despite having approximately four times the population of the US, has roughly only one-third the number of total taxpayers.

It is conventional wisdom that a broader tax base will enable marginal tax rates to be low and generate the same amount of revenue. Having highlighted these issues though, India has come a long way when it comes to tax reform.

Figure 16: Comparison of Income Tax Base (absolute population in millions) of India with other Countries ²⁹



Source: Authors' Analysis. Data: Tax Foundation; HM Revenue & Customs; Income Tax Department

3.2 India's Slow but Steady Tax Reform

We have already touched upon the reform recommendations of the Tax Reform Committee of 1953, the Kaldor Committee of 1959 and Direct Tax Enquiry Committee of 1971. With respect to personal income tax, the number of tax brackets have been reduced to three – namely 10%, 20% and 30% and the exemption limit has been increased to Rs. 5,00,000 (it could be debated if this is a reform feature). There have also been other attempts to increase the tax net, like the Voluntary Disclosure Scheme to bring in tax defaulters by giving them a one-time amnesty in 1997-98, and the constant efforts to bring self-employed earners into the tax net. The introduction of the Securities Transactions Tax and the Fringe Benefits Tax in the mid-2000s was an attempt to increase the tax base as well (Rao, 2000). The compulsory tax filing scheme in 2005, and more recently, the 2019-20 Union Budget, laying out new guidelines for the compulsory filing of income tax returns are attempts to force individuals to file returns as well. Yet, the process has been slow as India has taken its own time to inculcate tax-based reforms in the economy.

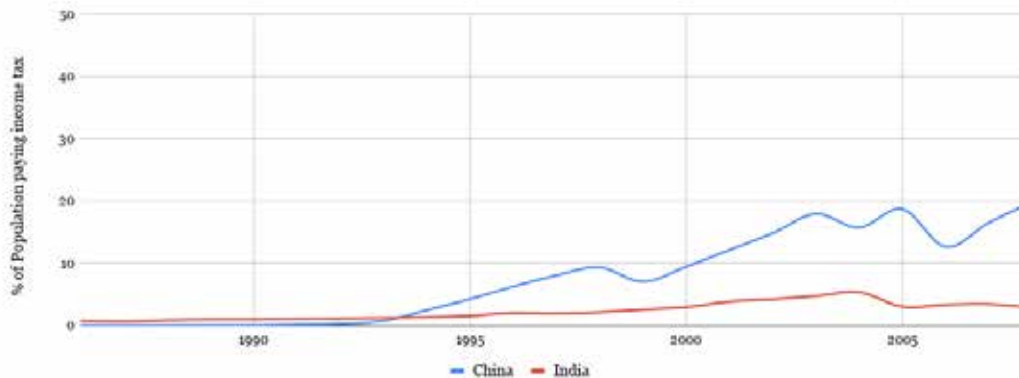
The Taskforce on Direct Taxes in 2002 suggested a slew of changes fundamental to the process of modernisation. The establishment of a Tax Information Network (TIN) was a major step in this direction. According to its website, the TIN system explicitly identifies its purpose as “modernization of the current system for collection, processing, monitoring and accounting of direct taxes using information technology.” The report suggested this Network to reduce transaction costs, improve information flow, simplify the logistics of tax collection, identify non-filers and increase costs of non-compliance.

The task force had also pushed for simplified tax slabs keeping these key characteristics in mind: “low rates, few nominal rates, a broad base, few exemptions, few incentives, few surcharges, few temporary measures and in the rare instances where there are exceptions, there should be clear guidelines.” A two-rate personal income tax schedule was suggested, giving good reasons for why a single rate or multiple rates may not be the best for the country. Further, the report noted that reforming a system like India will fundamentally require substituting “specific incentives” with “generalizable deductibles”. Given this, they would keep the exemption limits moderate. In the event of a low exemption limit, the number of tax slabs would have to increase, making it complicated. On the other hand, an increase in exemption limits would lead to revenue loss and the taxation at the entry point will have to be high to compensate for it. Thus, moderate exemption limits work best for India's tax reform process.

29. Note for Figure 16: For Japan and the US, the data is from 2013 and 2016 respectively. For the UK, France and India, the data is for 2017. Data for China is from 2018.

Clearly, as we can see policymakers have kept these ideas of tax rate, tax base and exemption levels in mind while designing progressive tax policies. The impact of the ‘moderate exemption levels’ when compared with China is charted in Figure 17. The income tax base for China rose to almost 20% of the population in 2008, whereas India stagnated at 2.8% of the population that year. Exemption levels directly impact the number of people in the tax net. China recently increased its exemption levels in 2018 – from \$520 to \$745 – and the population taxed decreased from 145 billion to 80 billion (Fleming, 2019).

Figure 17: Comparison of India and China on Proportion of Population Taxed, 1986-2008³⁰



Source: Piketty and Qian, 2009

There are, of course, many other factors at play like GDP, the global footprint of the economy, the population growth rate etc., but those are outside the ambit of tax policy. We strongly suspect that the solution to India’s tax revenue problem lies there. Gaining political legitimacy from the public is crucial to increasing tax collection, and concurrently developing capacity within the state to police such norms is equally important. We discuss some of these factors that lie outside tax reforms in the next section.

3.3 Other Factors Affecting Fiscal Modernisation

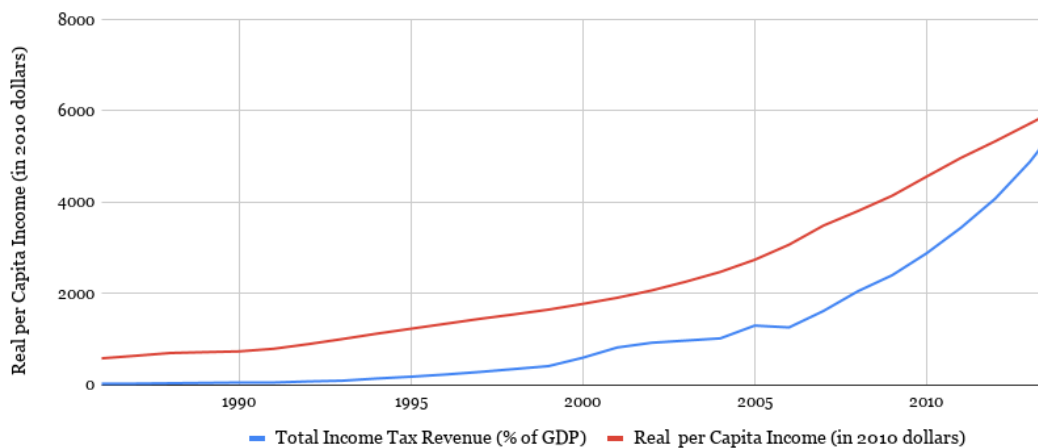
Developing countries, in general, lag behind in the share of tax revenues that they raise compared to their GDP levels. Timothy Besley and Torsten Persson (2014), in a paper titled ‘Why developing countries tax so little?’ give three generalisable reasons why this problem is pervasive: economic structures, political structures and societal norms and cultures. We unpack each of these in light of India’s political economy to explain, at least partly, the slow modernisation process that India is experiencing.

First, it is the economic structure of developing countries which makes taxation difficult. Besley and Persson point out that a high degree of informality in the economy impedes assessment of incomes of firms and their owners. In India, the degree of informalisation is high with close to 81% of employed persons working in the informal sector (The Wire, 2018). A major concern around increasing taxation in an economy with such a large informal sector is that it will only lead to more evasion and under-reporting of income. Instead, as the paper also argues, we need to create incentives for formalisation to take place, so more individuals can be brought into the wider tax base.

Further, governments need to actively pursue a policy to increase the tax base because economic development and growth, by themselves, will not generate greater revenues. As discussed earlier in this paper, Piketty and Qian’s comparison of India and China’s tax revenues illustrates this point. India has consistently increased its tax exemption with the result that tax revenues have stagnated at 0.5% of GDP. China’s modernisation has been driven by exemption levels and has helped it leapfrog the process despite introducing individual income tax as late as 1980 (Figure 18). On the other hand, data from RBI shows India’s income tax contribution to GDP stagnated at around 1-1.2% right up till 1998 and rose to a marginal 2.7% by 2018-19.

30. Note for Figure 17: Data is from the paper on Income Inequality and Progressive Income Taxation in China and India, by Thomas Piketty and Nancy Qian. Authors tabulated data for China using household survey tabulations. Data for India is from income tax returns tabulated by Banerjee and Piketty (2004)

Figure 18: China — Real Per Capita Income and Total Income Tax as a Percentage of GDP³¹



Source: Authors' Analysis. Data: The World Bank; Piketty and Qian, 2009

Second, Besley and Persson note that the power structures determined by political institutions often come in the way of fiscal modernisation. The question of who is taxed and at what level is decided by the political institutions of a country. When political power is concentrated in the hands of a wealthy elite, making the case for raising revenue for the purposes of redistribution becomes difficult. In poorly developed states, where there is a political system that does not allow for accountability and transparency, there is a high likelihood of this happening. India, being a democracy and having certain checks and balances in place, does have the necessary political institutions through which it can garner support and make the case for progressive welfare spending. However, there have been allegations in recent years of big business colluding to increase its profits, in turn hurting the poor. This takes away from the broader political legitimacy argument for the state to tax the people being exploited.

The last issue that Besley and Persson touch upon is that under-developed economies do not have strong compliance norms in payment of taxes. While this is an issue that could directly apply to India and explain the abysmal income tax base, the real challenge is to address the reasons for such a norm to emerge. If citizens of a state do not perceive value in payment of taxes due to poor service delivery by the state, paying taxes will never be a priority. Further, if there are ways to get around the system, reform will not be encouraged. Often, people who criticise the government for not bringing about reform in India are the ones to actively oppose reforms when they are the ones being affected (Shourie, 2008). They are enabled by the fact that political institutions can be influenced by bribing, rent-seeking and other means of getting around the system. The emergence of a culture of tax compliance is closely linked to the state's effectiveness in administering key functions, with political institutions at the core of this functionality. While war gave the necessary legitimacy to the countries analysed, India needs to find its feet by delivering on the services it has promised.

Generating income tax revenues depends heavily on state capacity and administrative capability; this ties into all three issues highlighted. Besley and Persson state that taxation is “a rule-based form of revenue extraction” resting upon the smooth functioning of a market economy. Therefore, political legitimacy depends upon a state that builds capacity to deliver services and supports institutions that foster a rule-based market economy. This can be seen in western economies such as the US and UK. They built institutions and garnered political legitimacy by shaping institutions that helped social and cultural norms evolve over the issue of taxation.

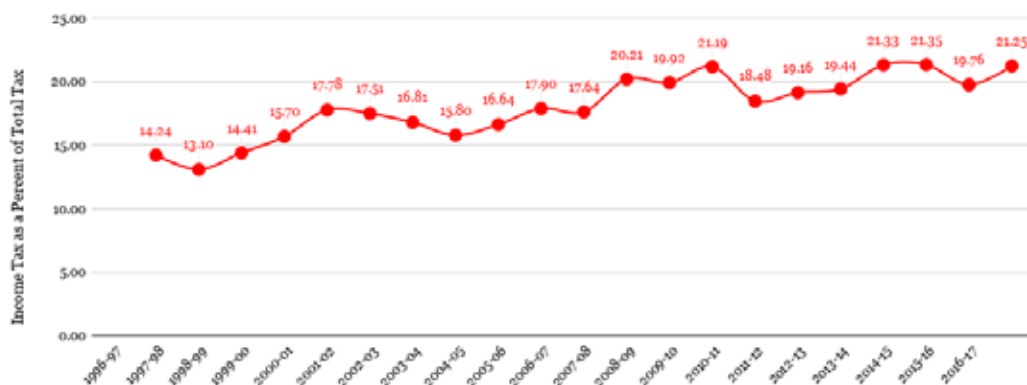
Shankar Acharya (2008) notes that between 2000 and 2008, there were two major policy focuses of the Indian government. The first was fiscal consolidation and the second, increasing the tax-GDP ratio “through better application of information technology and other means to strengthen tax administration”.

31. Note on Figure 18: (1) Real per Capita Income is in 2010 constant dollars

(2) Data on total income tax revenue as a percentage of GDP from 2008-2015 are projections made by Piketty and Qian

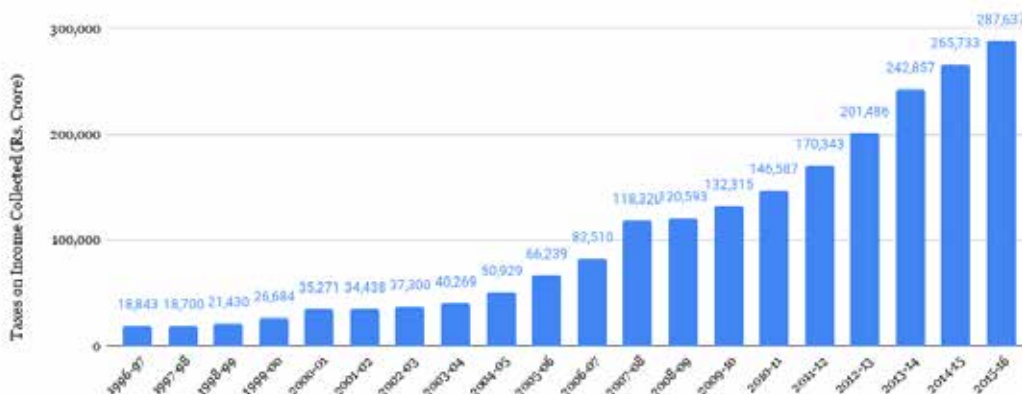
In fact, from Figure 19, we can see that the personal income tax as a percentage of the Centre’s tax collection steadily rose over the 2000s to reach the 20% mark. After the 2008 North Atlantic financial crisis, though, it has stagnated at that level. That said, total income tax collection is definitely on the rise as shown in Figure 20.

Figure 19: Income Tax as a Percentage of Total Tax Collection, 1996-2016



Source: Authors’ Analysis. Data: Union Budget, Government of India

Figure 20: Total Income Tax Collected by the Government of India, 1996-2016



Source: Authors’ Analysis. Data: Union Budget, Government of India

It is therefore the economic and political structures where fixes are most urgent. Reforms in indirect taxes have been apparent, but have impacted personal income tax only in a tertiary manner. Fundamental measures like the 88th Constitutional Amendment in 2003 gave the Central government the necessary backing to levy a service tax. The more recent passing of the Goods and Services Tax Act via which one goods and services tax (multi-stage, destination-based, value-added) subsumes many indirect taxes is an effort to reform the tax system. It is yet to be seen how this will impact the culture of paying taxes. But even if a spike is observed, capacity will have to be beefed up commensurately.

Tax evasion is influenced by a multitude of factors: from the capacity of the state to enforce and effectively collect tax to tax income structures, culture and social attitudes, and trust in the state. Tax evasion is also influenced by the likelihood of enforcement, the size of penalties and an individual’s appetite for risk (Slemrod, 2007). The collection of income tax, in particular, requires a substantially higher amount of effort and state capability compared to other taxes such as on trade (Rogers & Wellers, 2013). Tax evasion also depends on the prevailing social norm, defined in a broader context as the “tax-paying culture” (Bejakovic, 2008). While the reason for the emergence of such a norm in a modern state is complex, we argue that a state that is effective in providing public goods is important for helping inculcate a tax-paying culture.

4.0 Conclusion: Crucial Learnings for Fiscal Modernisation

Learnings on fiscal modernisation reforms lie both within and outside the ambit of taxation policies. The changes around tax policies are informed by India's own experience, while those outside of it can be informed by the experience of the fiscally modernised countries discussed earlier.

Reforms related to Taxation

For India to fiscally modernise, there are three key takeaways from its past experience:

- 1. Income Tax Slabs and Tax Brackets:** Given that India has already undertaken reforms in order to simplify the number of income tax brackets, Arbind Modi (Modi, 2014) finds that further rationalisation is not feasible given that these rates are in line with international standards on income taxation. A typical developed economy taxes its citizens in the approximate range of 35-40% (Prasad, 2018). However, there are additional surcharges and cesses for different income brackets that raise the effective income tax paid well above these base rates. Removal of these surcharges will further simplify the income tax brackets but the loss in revenues to the government will have to be made up through an increase in the taxation base.
- 2. Exemption Levels:** The hike in exemption levels for the lowest tax bracket should not be out of sync with India's per capita income level. India currently has one of the highest exemption levels in the world at (Rs 2.5 lakh per annum) approximately 2.5 times the per capita income (of Rs 1 lakh per annum). The reduction in exemption levels can partly be achieved by formalisation of the economy – incentivising firms and individuals to become a part of the tax net. Policies like the Goods and Services Tax are major steps in this direction.
- 3. Ad-hoc Incentives:** As the Task Force on Direct Taxes in 2002 notes, India will have to substitute “specific incentives” with “generalizable deductibles” that are kept constant every year. Various tax breaks are introduced every year – from standard deductions for rental allowances and housing loans to deductibles for charitable purposes. Even the most recent interim budget of 2019 provided a full tax rebate, with income up to Rs 5 lakh no longer being taxed. The introduction of such yearly tax sops hinders progress on two fronts: a) tax base growth remains muted; b) it introduces a degree of complexity and uncertainty in the taxation system every year. This is especially true for governments in election years which dole out numerous tax breaks in the budget of that year due to political compulsions. Removing such exemptions and streamlining the tax system would ultimately also ensure a reduction in administrative and compliance costs.

Reforms outside of Taxation

As argued throughout the paper, political legitimacy and state capacity need to be built for India to complete its modernisation process.

- 1. Building Political Legitimacy:** The World Wars conferred legitimacy, and thus created the political space for building state capacity in the countries we analysed. More broadly, though, it was the commitment of a government to keeping its people secure by ‘winning a war’ which won their support. In India today, a well-functioning welfare state is key to building political legitimacy for collecting more taxes. Strengthening state capacity is a prerequisite here. For instance, the total strength of the Indian Administrative Service and the Indian Police Service is a mere 11,000 (Vaishnav, Mehta and Kapur, 2017) for a population of more than a billion. India has only a fifth as many public servants as the US, which has a population one-fourth India's size (Swami, 2012). The judiciary is another example. There are 3.3 crore pending judicial cases but only 16,119 judges. The Law Commission recommends at least 70,000 judges according to its benchmark of 50 judges per million population (Kaul, 2019).
- 2. Building Taxation Capacity:** Following this, the tax administration will need a new design and many more personnel to enforce a culture of tax payment and collection, i.e., build its state capacity. Currently, the ratio of tax administrators to population in the formal labour force is one of the lowest globally, with one tax administrator for serving 6,609 people. In New Zealand and China, the ratio is one administrator serving 430 people and 1,082 people respectively (Asian Development Bank,

2018). The analytics department of the tax administration in India has only 20 people compared to the UK which has 400 (Krishnan, 2015). According to the Tax Administration Reforms Commission of 2014, India has one of the highest number of disputes between tax administrations and taxpayers. The Commission has also addressed the question of quality, suggesting reforms including lateral entry for specialists, the integration of the direct and indirect tax administration, norms for filing easier returns, and a mechanism for faster settlement of income tax disputes.

Thus, India needs to focus on state capacity, both outside and inside of tax administration, to fiscally modernise. State capacity here refers not just to administrative capacity to raise income tax collection, but the delivery and reform of essential welfare services. Strengthening such capacity and thereby building political legitimacy are key to modernising tax administration.

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Appendix

	Indicator	Data Source	Additional notes on data
Figure 1	India- Real Per Capita Income and Total Income Tax as a Percentage of GDP	Real per Capita Income in 2010 dollars is from World Bank, Total Income tax revenue as a percent of GDP is from the Reserve Bank of India and Union Budgets	
Figure 2	United States- Real Per Capita Income and Total Income Tax as a Percent of GDP	Total Income tax revenue as a percent of GDP is from Office of Management and Budget; Real per Capita Income is in 1990 International Geary-Khamis dollars from the Maddison Project	Data for Total Income Tax as a percent of GDP is only available from the year 1934
Figure 3	United Kingdom- Real Per Capita Income and Total Income Tax as a Percent of GDP	Total Income tax revenue as a percent of GDP is from UK Public Revenue; Real per Capita Income is in 1990 International Geary-Khamis dollars from the Maddison Project	We use the Maddison series data for real per capita income in purchasing power terms for lack of an alternative historical series
Figure 4	France- Real Per Capita Income and Total Income Tax as a Percent of GDP	Individual Income Tax in 1000 Francs for 1915-1998 is from Piketty, 2018. Individual Income Tax from 1999-2017 in Euro million from OECD database. GDP in Euro billions from World Bank. Real per Capita Income is in 1990 International Geary-Khamis dollars from the Maddison Project	<ol style="list-style-type: none"> 1. Individual Income tax as a percent of GDP was calculated from the data collected on individual income tax and GDP. 2. We use the Maddison series data for real per capita income in purchasing power terms for lack of an alternative historical series

	Indicator	Data Source	Additional notes on data
Figure 5	Japan- Real Per Capita Income and Total Income Tax as a Percent of GDP	Individual Income Tax is from the Historical Statistics of Japan and the Japan Statistical Yearbook (2005) Until fiscal 1945, the data on Individual Income Tax is thousands of yen. From 1946 to 1979 in millions of yen and from 1980 in in one hundred millions of yen. Data on GDP is from the Historical Database from the University of Groningen from 1927-1940. From 1940-1955 it is from the National Tax Agency. From 1955-2017, it from the Japan National Accounts	1. Individual Income tax as a percent of GDP was calculated from the data collected on individual income tax and GDP. 2. We use the Maddison series data for real per capita income in purchasing power terms for lack of alternative historical series
Table 1	Western Countries and their per capita income inflection point	Data on per capita income levels collated from individual country tables	Data for Total Income Tax as a percent of GDP is only available from the year 1934
Table 2	The Democratic Presidential era from 1932-1952 ushered in a period of dramatic progressive tax reforms	Data is from the Library of Congress	We use the Maddison series data for real per capita income in purchasing power terms for lack of an alternative historical series
Table 3	Liberal governments from 1908-1922 ushers in progressive income taxes	Data is from the BBC on Prime Ministers and Politics Timeline	
Figure 6	United Kingdom - Marginal tax rates on the highest tax bracket and tax base (% of population taxed) 1900- 1997	Top Marginal tax rates from 1900-2013 is from Our World in data and from Piketty, 2014. Number of individual taxpayers is from HM Revenue and Customs. Total Population data is from the UK office of National Statistics	1. The tax base is calculated from the total population data and number of individual tax payers. 2. Data on top marginal tax rates includes general income tax supplements, but excludes all other taxes and social contributions (e.g. the NHS in the UK)

	Indicator	Data Source	Additional notes on data
Figure 7	United States - the exemption levels on the highest and lowest tax bracket from 1913-2017	The data on the historical exemption levels for the highest and lowest tax bracket for married people filing jointly is from Tax Policy Centre	
Figure 8	United States - Marginal tax rates on the highest and lowest tax brackets and tax base (% of population taxed) 1913-2015	The data on the historical exemption levels for the highest and lowest tax bracket for married people filing jointly is from Tax Policy Centre. Data on individual taxpayers is from Internal Revenue Service and data on population is from the US Census Bureau	The tax base is calculated from the total population data and number of individual taxpayers
Figure 9	US Employment numbers in Treasury 1940-2014	The data is from the United States Office of Personnel Management	
Figure 10	US Employment numbers in Civil Federal Agencies 1940-2014	The data is from the United States Office of Personnel Management	
Figure 11	Public sector employment in UK 1855- 2018	The data is from the Office for National Statistics	
Figure 12	France -Marginal tax rates on the highest and lowest tax bracket and tax base (% of population taxed) 1915 -2017	The data on tax base is from Piketty, 2001 for the years 1915-98. For the period 1999-2012, data is from the French Tax Office. The data for the Marginal tax rates on the highest and lowest tax bracket is from 1915 to 2017 from Institut des Politiques Publiques	

	Indicator	Data Source	Additional notes on data
Figure 13	Japan - Marginal tax rates on the highest tax bracket and tax base (% of population taxed) - 1887-1950	The data on the marginal tax rates is taken from Atkinson and Piketty, 2010. The data for number of individual taxpayers is from Income tax return statistics from Ohkawa et. al (1974)	The tax base is calculated from the total population data and number of individual taxpayers
Figure 14	Comparison of India with other countries on the ratio of income tax exemption level to per capita GDP in local currency	The data is taken from Bloomberg Quint with author Praveen Chakravaty compiling the data	
Figure 15	Comparison of income tax base (% of population taxed) of India with other countries	The data is collected from various sources for each individual country	
Figure 16	Comparison of income tax base (absolute population in millions) of India with other countries	The data is collected from various sources for each individual country	
Figure 17	Comparison of India and China on proportion of population taxed from 1986-2008	Data is from the paper on Income Inequality and Progressive Income Taxation in China and India, by Thomas Piketty and Nancy Qian. Authors tabulated data for China using household survey tabulations. Data for India is from income tax returns tabulated by Piketty and Banerjee (2004)	
Figure 18	China - Real Per Capita Income and Total Income Tax as a Percent of GDP	Real Per Capita Income is from the World Bank and Income tax as a percent of GDP is from Piketty and Qian, 2009	

	Indicator	Data Source	Additional notes on data
Figure 19	Income Tax as a percentage of Total Tax Collection from 1996-2016	The data is compiled from Union budget documents of India over the years	The tax base is calculated from the total population data and number of individual taxpayers
Figure 20	Total Income tax collected by the Government of India (1996-2016)	The data is compiled from Union budget documents of India over the years	

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About the Author

Prakhar Misra is Associate at IDFC Institute. His research focuses on data empowerment and privacy, the link between infrastructure investment and job creation, and state capacity. Previously, he was a Chevening Scholar reading for a Masters in Public Policy, University of Oxford. He has conducted research on trends in the evolution of Indian nationalism at Blavatnik School of Government. He also worked on setting up a microfinance institution for the Roma in Eastern Europe.

Sharmadha Srinivasan is Associate at IDFC Institute. Her research focuses on the link between infrastructure investment and job creation, healthcare as re-architecting welfare, and regional divergence. Previously, she worked at the Belgian Consulate in Mumbai as an Economic Affairs and Diplomacy Assistant to the Consul General. She also worked as a researcher covering geo-economic and international trade issues at Gateway House.

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3rd Floor, Makhija Chambers, 196 Turner Road, Bandra (W), Mumbai 400 050