

## **WILL BROADENING OF THE TAX BASE BROADEN TAX REVENUE BASE? A CASE STUDY OF PAKISTAN**

*Zehra Farooq and Muzammal Rasheed*

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### **INTRODUCTION**

The addition of new taxpayers is generally considered a favourable policy outcome. However, it affects the Broadening of Tax Base (BTB) efforts by increasing the taxpayer-to-tax-officer ratio, which hinders enforcement due to officers handling more cases, and by raising public expenditure by adding more officers and resources. Recently, Pakistan created 145 new FBR district offices to bring in 2 million new taxpayers, utilizing third-party data for enforcement. However, the issues arise: most salaried individuals are already taxed at source, limiting revenue increase as a result of BTB efforts. Our study will comment on a surface level comparison of revenue per taxpayers with the increase in cost per taxpayer.

Our research question is: "In an environment with low tax enforcement capacity, is public expenditure on vertical broadening of the tax base an efficient policy choice for raising tax revenues?" We aim to provide empirical evidence on trends in taxpayer addition, compliance rates, and changes in income tax collection sources over the past decade. Additionally, we will estimate enforcement costs for new taxpayers against the revenue they generate and argue the effectiveness of broadening the tax base without structural reforms.

This research clarifies key aspects of broadening Pakistan's tax revenue base through new taxpayer inclusion. It evaluates the feasibility of this strategy in a low enforcement capacity environment, focusing on effective BTB activities and necessary reforms. Additionally, our analysis quantify new income and revenue generated from mass registrations, addressing compliance and post-registration contributions. We have conducted a preliminary assessment of administrative costs associated with new tax registrations, providing policymakers with essential insights into the financial efficiency and sustainability of these initiatives in the immediate term. Ultimately, the findings of this study will be relevant for tax administrators in shaping future tax policies to bolster economic stability.

## METHODOLOGY

Our main research question is: 'In a low tax enforcement environment, is public expenditure on broadening the tax base an effective policy for raising revenues?' Our core hypothesis suggests that BTB efforts do not significantly tap into previously untaxed incomes, making taxpayer gains insufficient to offset broadening costs. Despite the broad nature of the problem, our objective is multifaceted. We provide empirical evidence and analytical context on four dimensions. First, we analyse BTB trends over the past decade to determine how many new taxpayers (individuals, AOPs, firms) were added to the tax roll each year. We also examine compliance among these new taxpayers, assessing timely return filing and declaration of previously untaxed income. Next, we investigate if new taxpayers altered the sources of income taxes collected by the FBR and whether this expanded revenue is comparable to the immediate increase in employee-related and operating costs at the field office level. Lastly, we argue that without structural reforms broadening of the tax base may not be revenue efficient.

Our analysis examines Pakistan's tax policy in relation to the vertical broadening of the tax base, focusing on BTB activities and their revenue efficiency. We gathered data from various sources to evaluate the yearly additions to the tax register from 2014 to 2021, defining 'taxable person' as either a salaried or self-employed individual due to BTB's emphasis on individual registration. We analyze amnesty schemes, such as those from 2018, that target individuals using FBR's yearbooks and the online tax register for data compilation. We categorize new taxpayers as active or inactive filers. Thereafter, we explore the tax filing characteristics of newly registered individuals to assess their income types, revenue contributions, automation of revenue generation, and reliance on monitoring for compliance. Given Pakistan's 70% tax evasion rate (Best et al., 2021), monitoring new taxpayers could increase administrative costs. For this analysis, we utilize restricted access administrative data from tax returns filed between 2014 and 2021, which we have already obtained.

## FINDINGS OF THE STUDY

**Analysis of the BTB Outcome:** In the first phase of our analysis, we have focused on answering the following questions: how many new filers were added to the tax register over the years we observe i.e., 2014-2021; what types of incomes were made part of the revenue base to analyse as to what extent these incomes were previously untapped and untaxed; we look at compliance trends for all newly registered taxpayers, and regardless of whether they are salaried or business individuals, non-compliance would mean taxpayers need increased monitoring for the enforcement of tax laws; the amount of income that newly registered taxpayers declare in the year of registration; and finally, the aggregated growth in incomes declared once registered for taxes. Our analysis reveals that during 2014-2021, on average annually, 300,000 new taxpayers were added to the tax roll. The results of two years, i.e., 2018 and 2021, are outliers, notably due to the introduction of the voluntary declaration programs introduced by FBR, and the low number of registrations during 2021 can clearly be attributed to the aftermath of the global COVID-19 pandemic. We also focus on

what percentage of newly added taxpayers are salaried and non-salaried because registration of salaried individuals brings in incomes that have already been taxed. In contrast, registration of new business individuals will likely bring within the tax-net, incomes that escaped taxation previously. This latter class of taxpayers will require relatively higher enforcement and monitoring efforts to ensure consistent compliance in the future. Our analysis shows that almost 45% of newly registered taxpayers are salaried. Even in the years that appear as outliers regarding the number of newly registered taxpayers, we observe that 53% of all new registrations were salaried individuals in 2018, and in 2021, 56% of all new registrations were salaried individuals.

**Post-registration Behaviour:** Our analysis of the post registration behaviour of newly added taxpayers reveals that up to 2018, non-salaried taxpayers are more non-compliant than salaried taxpayers. While post 2018, it was mostly salaried new individuals who were observed as non-compliant. While it is dismal to note that 13% of all newly registered taxpayers in 2015 were found to be non-compliant, the percentage keeps going down in the years that followed, where we find that non-compliers amount to nearly 8% in 2016, 4% in 2017, 3% in 2018 and 1% of newly registered taxpayers in 2019 before going to 0% of non-compliers.

We also analysed the **tax revenue base (total income) brought in due to BTB activities** by newly added taxpayers and found that total salary income brought into tax revenue base amounts to Rupees 941 billion. On the other hand, income brought in from the registration of new business individuals, the income that we may consider to be previously untaxed and hence an addition to the revenue base, amounts to Rupees 190 billion only, a mere 20% of total salary income and 8.6% of all income brought in through new registrations.

We also observe the **total yield in terms of income that is tapped into, as a result of BTB activities**, amounts to Rupees 2.2 trillion, out of which only Rupees 190 billion can be attributed to the previously untaxed income and thus an addition to the revenue base. Even if we assume that a tax rate of 35% was applicable to this income to generate tax revenue, we can say that at most BTB activities have generated Rupees 66 billion in additional tax revenue over the 7 years from nearly 3 million newly registered taxpayers. This translates into approximately Rupees 9.4 billion per year.

While focusing on the long-term compliance trends, another aspect of our analysis was to focus on **income declaration trends for newly registered taxpayers post-registration**. We find that salaried individuals registered in 2015 declared an average growth in salary income at the rate of 8.44%. For all of the years, we observe a growth in salary income of about 10% on average which is close to annual increments that are usually expected. A startling observation is that business income shows a negative trend for all newly registered taxpayers. In nearly all the years, we see at least a 10% decline in declared business incomes, which in some years even exceeds a 100% decline in income, which means the businesses started filing losses. While we noted meagre amounts in total income being filed by newly registered business individuals, our results indicate that the picture looks even bleaker for the years post-registration. A deeper analysis into the income composition of newly registered taxpayers during the 2018 amnesty year reveals significant shifts in taxpayer behaviour, with initial declarations of business

losses followed by increased reported business income, suggesting strategic underreporting initially, which was corrected in subsequent filings. The data from 2018-2019 on taxpayer persistence and administrative costs across tax offices show that while the amnesty led to a surge in registrations, the retention of these taxpayers varied greatly, pointing to challenges in maintaining compliance post-amnesty. Additionally, the rise in administrative expenses did not consistently align with improved taxpayer retention or increased tax revenue, highlighting potential inefficiencies in how resources are allocated within the tax system.

## CONCLUSIONS AND POLICY RELEVANCE

- From a policy standpoint, our research findings are expected to provide benefits across several important dimensions. The primary goal of any policy to expand the tax revenue base is to increase the tax revenue. One effective strategy is the inclusion of new taxpayers, known as the vertical broadening of the tax base. Our study offers evidence supporting this approach's viability, especially in a tax environment with low enforcement capacity, such as in Pakistan.
- Analysing the seven-year period from 2015 to 2021, we found that the broadening of tax base efforts led to registering nearly 3 million new taxpayers; however, around 45% of them are salaried workers who do not brought in new income. Additionally, we identified only 190 billion rupees in undeclared income among registered businesses, which could optimally yield just 9 billion rupees in annual tax revenue.
- Our findings suggest that, for the efforts to broaden the tax base to impact revenues significantly, it is crucial to leverage multiple data sources to target previously unregistered income from sectors like business, agriculture, and real estate. Although our evidence is correlational, it provides empirical insights that can guide tax policy on the vertical broadening of the tax base.
- Based on the challenges we have identified pertaining to the amnesty scheme of 2018, we recommend that targeted monitoring programs may be in place to ensure post-registration compliance for taxpayers that are newly registered each year. Furthermore, it is also recommended to align field office budgets with actual performance based on revenue outcomes and taxpayer retention rates, in addition to compliance levels within field offices. For compliance, the use of machine learning to improve administrative efficiency is also recommended.
- Clearly, simply adding taxpayers to the tax register will not achieve the intended results. Furthermore, our results highlight that Pakistan's revenue authority can effectively benefit from mass registrations only by ensuring high compliance rates after registration and capturing previously untaxed income in subsequent years. Our analysis indicates that although compliance trends are not entirely unfavourable, there exists a concerning decline in the reported income in the years subsequent to the registration of businesses.