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Edited by Nadeem Javed & Faheem Jehangir Khan

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PART I

FISCAL MANAGEMENT

Research Papers

THE TAX SYSTEM OF PAKISTAN AND THE AGENDA FOR TAX REFORMS

Hafiz A. Pasha[1], Hafsa Tanveer[2], and Fatima Malik[3]

ABSTRACT

The study focused on the key features of taxation in Pakistan. The report analysed various tax bases to identify existing tax gaps, highlighting discrepancies between potential and actual revenues, and providing insights into the underlying factors contributing to these shortfalls. Based on this in-depth analysis, a broad agenda for tax reforms has been presented at both the federal and provincial levels, which is projected to result in an overall increase of 3% of GDP, alongside additional reforms anticipated for the fiscal year 2024-25, aimed at increasing the efficiency and effectiveness of the tax system while addressing existing revenue shortfalls.

[1] Professor Emeritus, Beaconhouse National University, Lahore.

[2] Head of Department, Department of Economics, Beaconhouse National University, Lahore.

[3] Assistant Professor, Beaconhouse National University, Lahore.

SUMMARY

The report titled "The Tax System of Pakistan and the Agenda of Tax Reforms" has been prepared with the objective of undertaking an in-depth analysis of the tax system of Pakistan, both at the federal and provincial levels, thereby leading to a comprehensive agenda for tax reforms.

Chapter 1 describes the tax system of Pakistan in terms of the tax laws, tax rates and trends in revenues. Chapter 2 reviews the literature on tax reforms in Pakistan. The first section of the chapter highlights the reform proposals by the PIDE-PRIME Tax Reforms Commission of 2024. This is followed by listing recommendations for changes in the tax system proposed by Hafiz A. Pasha in his book on the Charter of the Economy (Pasha, 2021) and Saeed Ahmed's articulation of the required changes in the tax system (Ahmed, 2023). The last section focuses on the path of reforms adopted earlier in India.

Chapter 3 examines why the tax-to-GDP ratio in Pakistan has fallen from a peak of 11.3% of the GDP in 2017–18 to 10.5% of the GDP in 2023-24. Changes in the individual tax-to-GDP ratios are decomposed into 'rate' and 'base' effects. The conclusion is that the fall in the tax-to-GDP ratio is due entirely to the 'base effect' on the tax revenues. This is also confirmed by the low overall buoyancy coefficient of total tax revenues to the GDP of significantly below unity at 0.88.

Chapter 4 identifies the determinants of the tax-to-GDP ratio in a sample of 27 developing countries having a population of at least 20 million. The results of multiple regression analysis are that the tax-to-GDP ratio tends to be higher in countries with larger per-capita income, more income inequality, a smaller share of agriculture in the economy, and a higher imports-to-GDP ratio. The derived equation is used to predict the Federal tax-to-GDP ratio in 2023 in Pakistan. The predicted magnitude is higher by 1.4% of the GDP of the Federal actual tax-to-GDP ratio.

Chapter 5 uses the 'representative tax system' approach on the same sample of 27 countries as in Chapter 4. Pakistan has a ranking of 20th in the income tax-to-GDP ratio among the 27 countries. The ranking is somewhat better in the indirect taxes-to-GDP ratio at 16th. Overall, in relation to the average in the 27 countries, the approach reveals that the tax-to-GDP ratio of Pakistan needs to be higher by 3.1% of the GDP. This confirms the relatively poor performance of governments in Pakistan in generating tax revenues. Two-thirds of the shortfall is in direct taxes.

Chapter 6 uses the 'monetary' approach for quantification of tax evasion, first used by Tanzi (1993). There has, in fact, been a steady increase in the currency to circulation as a percentage of the money supply in Pakistan. Multiple correlation of this variable with the tax-to-GDP ratio, interest rate and number of bank branches, reveals that tax evasion was as high as 6% of the GDP in 2015-16 and has since declined to 4.2% of the GDP. This is still high and indicates that the withholding and advance tax regime has not played an adequate role in limiting tax evasion. The sectoral analysis reveals that the likelihood of tax evasion is the highest in the wholesale and retail trade sector of Pakistan.

Chapter 7 adopts the opposite approach to the estimation of the 'tax gap' via the 'bottom-up' approach. The findings confirm that there is substantial potential for generating more revenues at the Federal level, as indicated by the 'top-down' approaches adopted in Chapters 5 and 6. For example, the potential revenues from the personal income tax could be as much as 134% of the actual revenues. The tax gap is close to 27% of actual revenues in the case of the corporate income tax and 40% in the sales tax on goods.

Chapter 8 estimates the 'tax gap' in provincial taxes with the same 'bottom-up' approach. The tax gap is very large in the agricultural income tax at PKR 880 billion, with the tax base of 2023-24. Similarly, the tax gap in the sales tax on services is large at PKR 650 billion. Therefore, there is enormous potential for raising provincial tax revenues through reforms and stronger fiscal effort.

Chapter 9 looks at the taxation of property and how this could contribute substantially to inclusive growth, through the generation of revenues in a very progressive manner and with earmarking of revenues partly for poverty alleviation. The chapter highlights that the Constitution of Pakistan and federal and provincial tax laws enable various types of taxes on property in Pakistan, ranging from the urban immovable property tax, capital value tax, rental income and capital gains tax, and stamp duty.

The 'tax gap' in the urban immovable property tax is estimated at PKR 220 billion, while that in the capital value tax has been quantified at PKR 300 billion. Overall, over PKR 1,070 billion could be generated from property-related taxes, whereas the actual revenue in 2023-24 was only PKR 344 billion.

Chapter 10 determines the incidence of taxes in Pakistan. A review of the earlier research on Pakistan indicates only mild progressivity of the tax system. A separate analysis of the incidence of each federal tax is undertaken.

The income tax is significantly progressive, with 66% of the tax burden being borne by the top quintile. As opposed to this, the sales tax on goods is markedly regressive, while the customs duty has a neutral incidence, and the excise duty is slightly progressive. The overall incidence of federal taxes is only mildly progressive, similar to earlier findings. The progressivity will need to be bolstered by a higher incidence of direct taxes. Chapter 10 also reveals that there is considerable variation in the sectoral and sub-sectoral incidence of taxes.

Chapter 11 examines the large number of taxation measures in the 2024-25 Federal Budget and the estimates of the additional revenues from implementation of these measures. There are problems both with the targets for individual taxes and the estimated overall additional revenues. Consequently, a revised set of estimates is made of revenues in 2024-25. These are PKR 750 billion lower than the official targets.

In the first five months of 2024-25, there was a shortfall of almost PKR 400 billion in FBR revenues. However, the growth rate, in the presence of the wide-ranging taxation measures, is projected at 29%. This will contribute to raising the tax-to-GDP ratio from 10.5% in 2023-24 to 11.6% in 2024-25. This will still represent a significant improvement.

Chapter 12 starts with the perspective that there is a substantial tax gap, as highlighted by estimates that the actual to potential tax revenues are less than 1% in the agricultural income tax, 10% in the urban immovable property tax, 43% respectively in personal income tax and the sales tax on services. Overall, the 'tax gap' is estimated at 3.7% of the GDP. Also, there is a need to make the overall tax system more progressive by focusing particularly on income and property taxes.

Consequently, a comprehensive set of reforms has been presented in both federal and provincial taxes. The size of the tax bases is as of 2023-24. Proposals have also been made for changes in tax laws and in tax administration.

The total of additional revenues that can be generated by the implementation of the proposed reforms is PKR 2,505 billion. The methodology for the estimation of additional revenues from proposals is presented in the Technical Annexure. The direct tax revenues are likely to increase by PKR 1,900 billion, implying a share of almost 84% in the total increase. There is also a need to recognise that the share of provincial taxes in the targeted increase is larger, at almost 58%. This will be primarily due to the development of the agricultural income tax.

Overall, the recommended agenda for reforms has the potential to raise national tax revenues by 2.0% of the GDP. Combined with the increase in the tax-to-GDP ratio of 1.2% of the GDP due to taxation measures in the 2024-25Federal Budget, the outlook could be for an increase in the tax-to-GDP ratio from 10.5% of the GDP in 2023-24 to 13.8% of the GDP. This will close a large part of the total 'tax gap' in Pakistan.

1. THE TAXATION SYSTEM IN PAKISTAN

Pakistan's tax system is characterised by multiple structural problems. First, it has a low tax-to-GDP ratio, causing an overall large budget deficit during the last many years. Second, there has been an overall dependence on indirect taxation that has caused the incidence of taxes to be less progressive. Moreover, the industrial sector bears a disproportionate burden of taxes, which has increased the cost of doing business and affected production.

The Existing Taxes and Collecting Agencies

The 1973 Constitution of Pakistan allocates fiscal powers between the federal government and the provincial governments. The Federal Board of Revenue (FBR) is the federal government's principal collecting agency and is responsible for collecting various taxes, as shown in Table 1.

Table 1: Federal and Provincial Taxes and Collecting Agencies

Federal Board of Revenue	Provincial Board of Revenue	Provincial Excise and Taxation	Provincial Revenue Authority/ Board
• Income tax • Customs duty • Excise duty • Sales tax • Capital value tax	• Agricultural income tax • Land revenue • Stamp duty	• Urban immovable property tax • Tax on professions, trades, and calling • Provincial excise • Motor vehicle tax • Capital value tax on immovable property	• Sales tax on services

Source: Authors' computations.

The provincial governments also collect a wide range of taxes. These taxes are both direct and indirect. The existing direct taxes include the agriculture income tax and the urban immovable property tax, while the indirect taxes are the sales tax on services, land revenue, and the motor vehicle tax. The sales tax on services was transferred to the provincial governments following the 18th Amendment to the Constitution in 2010. It has emerged as the largest source of revenue at the sub-national level.

The Tax Laws

Federal Taxes

Income Tax Ordinance 2001

The personal income tax in Pakistan has an exemption limit of PKR 600,000 and has six slabs. The structural problem of Pakistan's income tax is the heavy reliance on the withholding taxes, of which many are regressive in nature. According to the FBR annual report of 2022-23, the withholding taxes contributed over 56% of the total direct tax collection. It has been estimated that they contributed 60% in 2023-24.

Withholding taxes are collected at source, such as when payments are made to suppliers, salaries are paid to employees, or when certain transactions occur. These withholding taxes are then adjusted against the final income tax liability of the taxpayer. The heavy reliance on withholding taxes in Pakistan's income tax system is due to the country's relatively narrow tax base, with a large informal economy and a high level of tax evasion.

However, the over-dependence on withholding taxes can create distortions in the tax system and place an additional burden on businesses and individuals. At present, it is customary to impose separate taxes on distinct income blocks. This has substantially diminished the tax system's progressiveness. Typically, only earned income is included in the tax return, while separate presumptive taxation applies to unearned income accrued as interest, dividends, property income, and capital gains.

Customs Duty Act 1969

The Customs Act 1969 regulates the import and export of goods into and out of Pakistan. It covers topics like customs duties, valuation of goods, exemptions, penalties, and enforcement. Customs duty had been the largest source of federal revenue collection till the early 90s. However, the

contribution of customs duty was reduced to only 1.1% of the GDP in 2022-23 from 1.9% in 2000-01. Since the adoption of trade liberalisation, the customs duty has had a maximum rate of 20%. However, there are some large regulatory duties on items that are classified as luxury goods.

Sales Tax Act 1990

The main law governing the sales tax system in Pakistan is the Sales Tax Act of 1990. This act outlines the framework for the imposition and collection of sales tax in the country. Sales tax is levied at domestic and import stages, excluding those items exempted in the 6th Schedule of the Sales Tax Act, 1990. Within the sales tax, the tax on imports is the major contributing component of the federal tax receipts. According to the Revenue Division Yearbook of 2023-24, the contribution of sales tax on imports was around 60% of the total sales tax receipts in 2023-24.

The Federal Excise Act, 2005

The excise duty in Pakistan is primarily governed by the Federal Excise Act of 2005 and its subsequent amendments. The federal excise duty (FED) is levied on the production of certain goods and the provision of specific services. It is imposed in addition to the standard sales tax. The goods and services subject to FED include cigarettes, tobacco products, beverages (alcoholic and non-alcoholic), cement, vehicles, telecommunications services, and certain financial services. Cigarettes, cement, big cars and air travel have a combined share of around 77% in FED revenues.

Provincial Taxes

Under the constitutional division of fiscal powers, provincial governments are assigned taxes that fall outside the residual powers of the federation. Specifically, two areas have been separated: the sales tax on services (distinct from the sales tax on goods) and the agricultural income tax (separated from the general income tax).

Sales Tax on Services Act, 2011

The sales tax on services is yielding significant revenue in all four provinces. It contributed almost 65% of the total provincial tax revenue in 2023-24. The tax rate on services varies from 15% to 16% in the provinces. However, certain services that include banking and telecommunication are subject to slightly higher tax rates.

Urban Immovable Property Tax Act, 1958

The provincial urban immovable property tax is a tax levied by the provincial governments of Pakistan on the ownership and occupation of immovable properties located in urban areas. Each province has its own legislative framework and regulations governing this tax. The tax applies to all types of immovable properties located within the defined urban areas of the province, including residential, commercial, and industrial properties. The tax rates range between 10% to 20% of the rental value, depending on the type of property and whether it is owner-occupied or rented.

Agriculture Income Tax Act, 1997

The 1973 Constitution of Pakistan gives provincial assemblies the exclusive power to make laws related to taxes on agricultural income. All four provincial governments have instituted some form of tax on agricultural land or income. In its implementation, this tax is largely a land tax (based on acreage) rather than a tax on agricultural income. As per the Punjab Agricultural Income Tax Act of 1997, the income is exempt from tax if the cultivated area is less than 12.5 acres.

Motor Vehicle Taxation Act, 1958

The Motor Vehicle Taxation Act of 1958 is a provincial-level legislation. Pakistan has regulated the taxation and registration of motor vehicles. It requires the registration of all motor vehicles operating within a province and permits a provincial government to levy various taxes on motor vehicles, such as annual token tax and registration fees.

The Stamp Duty Act, 1899

The Stamp Duty Act of 1899 is the primary legislation that governs stamp duty and stamp paper requirements in Pakistan. This duty is essential for establishing the legality of transactions.

Level of Tax Rates

Income Tax

The tax rates shown below are for 2024-25. The personal income tax rates are as follows for salaried individuals:

Table 2: Personal Income Tax – Salaried Income

SLAB	TAXABLE INCOME	RATE OF TAX
1.	Where the taxable income does not exceed PKR 600,000	PKR 0
2.	Where the taxable income exceeds PKR 600,000 but does not exceed PKR 1,200,000	5% of the amount exceeding PKR 600,000
3.	Where the taxable income exceeds PKR 1,200,000 but does not exceed PKR 2,200,000	PKR 30,000 + 15% of the amount exceeding PKR 2,200,000
4.	Where the taxable income exceeds PKR 2,200,000 but does not exceed PKR 3,200,000	PKR 180,000 + 25% of the amount exceeding PKR 2,200,000
5.	Where the taxable income exceeds PKR 3,200,000 but does not exceed PKR 4,100,000	PKR 430,000 + 30% of the amount exceeding PKR 3,200,000
6.	Where the taxable income exceeds PKR 4,100,000	PKR 700,000 + 35% of the amount exceeding PKR 4,100,000

Source: Authors' computations based on information gathered from the Pakistan Bureau of Statistics.

The tax rates for non-salaried income are given below:

Table 3: Personal Income Tax – Non-salaried Income

SLAB	TAXABLE INCOME	RATE OF TAX
1.	Where the taxable income does not exceed PKR 600,000	PKR 0
2.	Where the taxable income exceeds PKR 600,000 but does not exceed PKR 1,200,000	15% of the amount exceeding PKR 600,000
3.	Where the taxable income exceeds PKR 1,200,000 but does not exceed PKR 1,600,000	PKR 90,000 + 20% of the amount exceeding PKR 1,200,000

SLAB	TAXABLE INCOME	RATE OF TAX
4.	Where the taxable income exceeds PKR 1,600,000 but does not exceed PKR 3,200,000	PKR 170,000 + 30% of the amount exceeding PKR 1,600,000
5.	Where the taxable income exceeds PKR 3,200,000 but does not exceed PKR 5,600,000	PKR 650,000 + 40% of the amount exceeding PKR 3,200,000
6.	Where the taxable income exceeds PKR 5,600,000	PKR 1,610,000 + 45% of the amount exceeding PKR 5,600,000

Source: Authors' computations based on information gathered from the Pakistan Bureau of Statistics.

The rise in the incidence of the income tax with an increase in income is shown in Figure 1. According to the figure, the tax rate rises sharply with income, which shows that the tax is markedly progressive.

Figure 1: Incidence of Personal Income Tax by Level of Income (%)
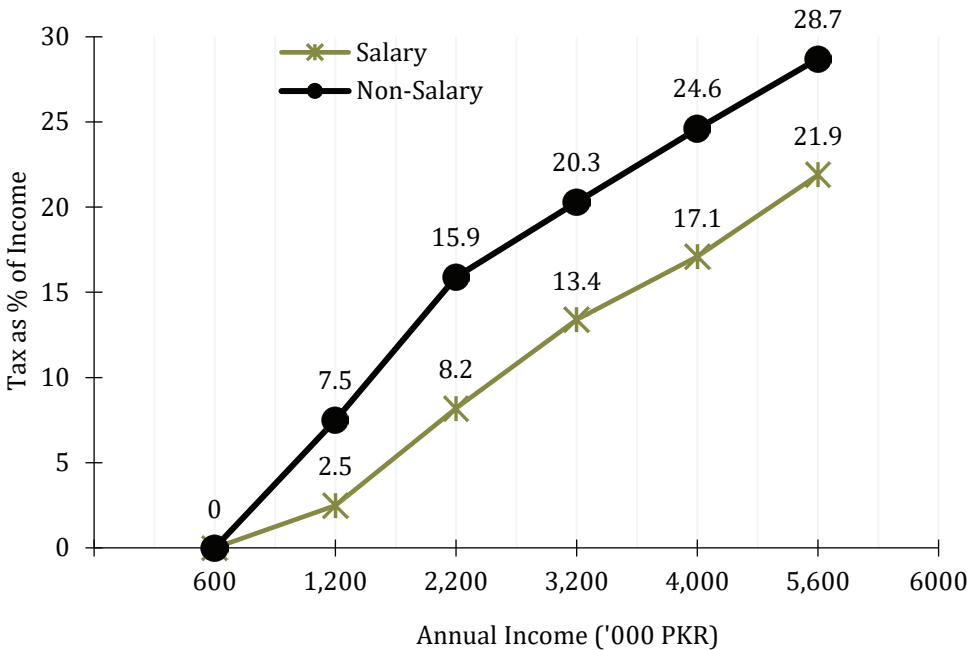
Source: Authors' computations based on information gathered from the Pakistan Bureau of Statistics.

A series of withholding/advance income and fixed tax rates are highlighted in Table 4.

Table 4: Withholding, Advance, and Fixed Taxes in the Income Tax Regime

Type	Section of the ITO	Tax Rate (%)
Imports	148	1% to 6%
Dividends	150	0% to 35%
Interest on bank deposits	151	15%
Rendering or providing particular services	152	4-9%
Payment for contracts	153	8%
Exports – Goods	154	1%
IT Services	154A	0.25%
Motor vehicles (by cc)	234	PKR 30,000 or % of value
Goods transport	234	PKR 2.50 per kg of laden weight
Electricity bill – commercial and industrial consumers	235	up to PKR 500 – zero > PKR 500 to PKR 20,000 10% > PKR 20,000 1950 + 5% of amount above PKR 20,000

Source: Authors' computations based on information gathered from the Pakistan Bureau of Statistics.

The table shows that the FBR has put in place a very comprehensive scheme of withholding and fixed taxes. These taxes yielded over 60% of the total income tax revenues in 2023-24. Advance tax and payment with returns contributed 37%, while the remaining 3% was contributed by the collection out of demand.

Sales Tax

The standard sales tax rate on goods is 18%. However, there are a number of schedules in the Sales Tax Act which give lists of imports or domestically produced goods that are either exempt or enjoy reduced rates, as shown in Table 5.

The provincial sales tax rate on services varies among the provinces. It ranged from a low of 13% in Sindh to a high of 16% in Punjab. However, Sindh has raised the rate to 16% in the 2024-25 budget.

Table 5: The Contents of Different Schedule

Schedule	Description	Items
Third	Taxed at retail price	Non-essential food items, motorcycles, auto rickshaws, household appliances, cement, etc.
Fifth	Exemptions	Supplies to Diplomats, Inputs into EPZ, Supplies to Gwadar Free Zone, Petroleum Crude Oil
Sixth	Exemptions, imports and supplies	Food items, books, medicines, medical equipment, materials for Gwadar Port, Pesticides, LNG for fertiliser manufacture, CKD Kits for electric vehicles, fertilisers (excluding DAP) POL Products
Eight	Tax Rates Lower than 18%	Imported natural gas (5%) Small locally manufactured cars (12.5%) Computers (10%) Inputs for pharmaceuticals (1%) Stationery (10%) Tractors (10%) Small mobile phones (10%)
11th & 12th	Specific Rates	Brick kilns, steel, etc.

Source: The Sales Tax Act of 1990.

Customs Duty

There are five rates of statutory import tariffs, i.e., 0%, 3%, 11%, 16%, and 20%. In addition, there are large regulatory duties imposed mostly on luxury imports.

The WTO publication, World Tariff Profiles, gives the average duty rates for different imports by Pakistan in 2022. These are presented in Table 6.

Table 6: Average Import Tariff on Different Import

	Share in Imports (%)	Average Import Tariff
Edible oil	7.8	6.7
Cotton	2.5	0.0
Minerals and metals	20.1	9.3
Petroleum	16.8	10.9
Chemicals	17.0	5.2
Textiles	4.0	11.4
Machinery	7.9	5.5
Transport equipment	5.7	22.7
Overall Average		**8.7**

Source: World Tariff Profiles, 2022, WTO.

Table 6 clearly shows that Pakistan has made a transition to a low import tariff regime. The average trade-weighted tariff is down to only 8.7%.

Extcise Duty

The excise duty is levied only on a few selected items at tax rates given below:

Table 7: Excise Duty Rates

Aerated Waters *(% of Retail Price)*	20
Locally Produced Cigarettes:	
If the retail price does not exceed PKR 12,500 per 1,000 Cigarettes	PKR 5,050 per 1,000 cigarettes
If the price exceeds PKR 12,500	PKR 16,500 per 1,000 cigarettes

Source: Authors' computations.

Therefore, an extremely high excise duty has been imposed on cigarettes to discourage their harmful consumption.

The Sales Tax on Services

The sales tax on services is a new tax that was levied under a special Act in 2011. The Province of Sindh earlier had a lower rate of 13%, compared to 16% in Punjab. Ninety per cent of the national revenue from this tax is collected from Sindh and Punjab, both contributing 45% each. The remaining 10% is the combined revenue from Khyber-Pakhtunkhwa and Balochistan.

There is a comprehensive list of services that are subject to this tax. The major services taxed are shown in Figure 2.

Figure 2: Major Services Liable to the Sales Tax on Services

No.	Services	No.	Services
98.01	Hotels, restaurants, marriage halls	98.11	Services by laundries
98.02	Advertisements	98.12	Telecom services
98.03	Chartered flight services	98.13	Services rendered by financial institutions
98.06	Sale of property services	98.14 & 98.15	Services rendered by professionals and consultants
98.07	Services rendered by property developers	98.18	Services rendered by security agencies and other special agencies
98.08	Courier services	98.23	Franchise services
98.10	Services by beauty parlours	98.24	Construction services

Source: Sindh Sales Tax on Services Act, 2011.

Figure 2 indicates the potentially comprehensive coverage of the sales tax on services. The following economic sectors fall within its ambit:

- Accommodation and Food Services
- Information and Communication
- Finance and Insurance Activities
- Other Private Services

However, the incidence of the tax on the combined value-added in these four sectors is only 4.4%. Therefore, there is enormous scope for the development of this tax, as it is also more progressive compared to other indirect taxes. Currently, the largest revenues are from airports, ports and terminal operators, franchises, telecommunications, and banks and insurance.

Petroleum Levy

The petroleum levy is a charge which substitutes for the sales tax on POL products. The objective of the federal government was to reduce the size of the divisible pool of taxes with the provincial governments, as per the NFC Award. Consequently, it has been declared as a non-tax source of revenue. However, in de facto terms, it is a tax and should be seen in combination with the sales tax. The IMF also views this as a tax.

As of October 2024, the maximum leviable petroleum levy is PKR 70 per litre. It is at PKR 60 per litre in the case of motor spirit and HSD, and PKR 50 per litre on light diesel, high octane blending components, and 95 RON petrol.

Trend in Tax Revenues

The tax-to-GDP ratio is low in Pakistan. Presently, it is close to 10.5% of GDP, as shown in Table 8, inclusive of the petroleum levy. The federal tax-to-GDP ratio, including the levy, stands at 9.7%. Despite a wide range of taxes, the provincial tax revenues are 0.8% of the GDP.

The trend in the tax-to-GDP ratio suggests that the tax-to-GDP ratio had been close to 8.8% of the GDP during the tenure of PPP (2008-09 to 2012-13). However, it rose significantly in 2017-18 and reached 11.3%. Since then, there has been a simultaneous decline in the federal and provincial tax-to-GDP ratios, reducing the overall tax-to-GDP ratio. There was some recovery in 2023-24.

Table 8: Trend in Tax Revenues from 2002-03 to 2023-24

	(PKR Billion)				(% of GDP)			
	Federal Tax Reve-nues (FBR)	Provin-cial Tax Reve-nues	Petro-leum levy	TOTAL	Federal Tax Reve-nues (FBR)	Provin-cial Tax Reve-nues	Petro-leum levy	TOTAL
2002-03	463	22	47	532	7.0	0.3	0.7	8.0
2007-08	1,010	41		1,051	8.0	0.3	0.1	8.4
2012-13	2,048	151	110	2,309	8.2	0.6	0.0	8.8
2017-18	4,065	401	179	4,645	10.4	1.0	0.2	11.3
2022-23	7,169	650	580	8,399	8.5	0.8	0.7	10.0
2023-24	9,311	774	1,019	11,104	8.8	0.7	1.0	10.5

Source: Fiscal Operations, Ministry of Finance.

As compared to some selected countries from South and East Asia, Pakistan has one of the lowest tax revenues as a percentage of GDP, as shown in Figure 3. The figure shows that tax revenues in Pakistan are relatively low compared to India and Nepal in South Asia, but higher than in Bangla-desh.

Figure 3: Government Tax Revenue as a Percentage of GDP in Selected Countries: 2021
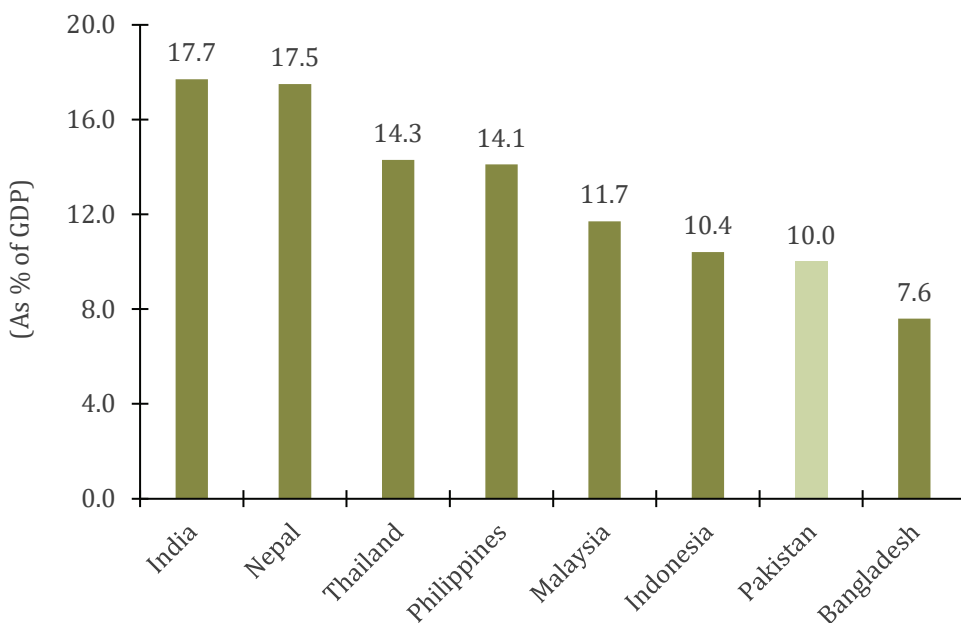
Source: WDI, World Bank.

Composition of Tax Revenues

The composition of tax revenues indicates a relatively regressive nature of the tax structure in Pakistan. Even though the share of direct taxes in FBR's total tax revenues has increased from 38.4% in 2007-08 to 49% in 2023-24, the rest, 51%, is still collected from indirect taxes, as shown in Figure 4.

Of the indirect taxes, almost 53% was collected from the sales tax on the goods, whereas 19% was collected from the customs duty in 2022-23. There has been a considerable annual growth of 23.5% in the petroleum levy. In absolute terms, the petroleum levy increased from PKR 128 bil-lion in 2021-22 to PKR 1,019 billion in 2023-24.

Figure 4: Percentage Share of Direct and Indirect Taxes in FBR Revenues
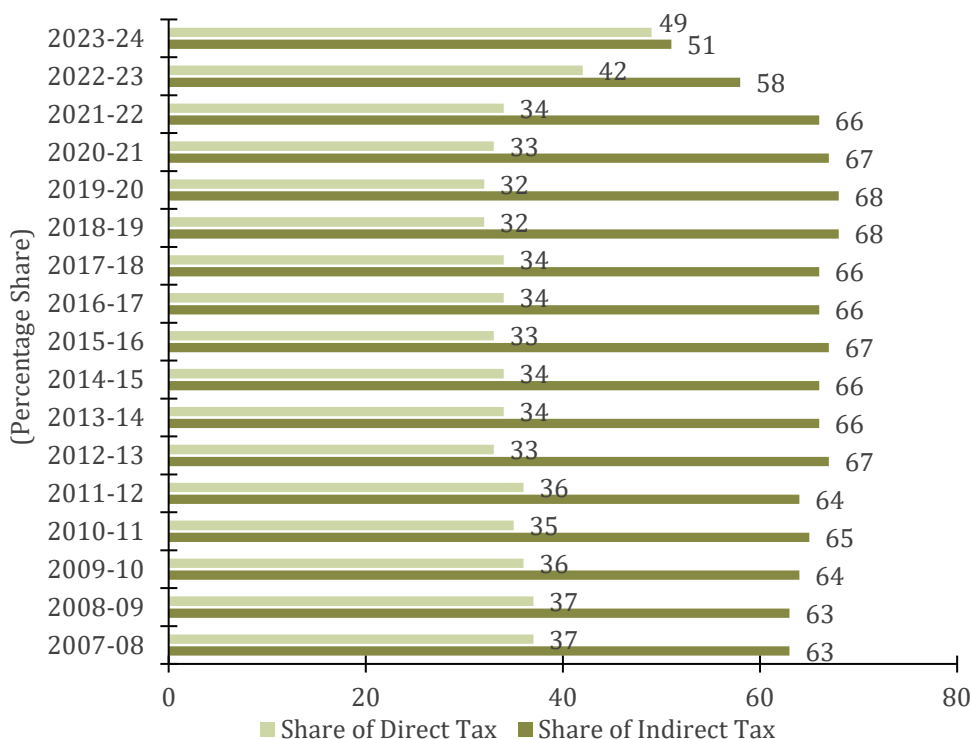
Source: Fiscal Operations, Ministry of Finance.

Table 9: Trend in Individual FBR Tax Revenues from 2002-03 to 2023-24
(PKR Billion)

	Income Tax	Sales Tax	Custom Duty	Excise Duty	Total
2002-03	153 (33.0) *	195	69	46	463
2007-08	378 (37.4)	385	150	87	1,010
2012-13	736 (37.9)	840	240	124	1,940
2017-18	1536 (39.9)	1,491	608	214	3,849
2022-23	3272 (45.6)	2,592	935	370	7,169
2023-24	4,530 (48.6)	3,098	1,104	577	9,309

*Figures in parentheses show the share of income tax in FBR revenues.
Source: Fiscal Operations, Ministry of Finance.

Trend in Provincial Tax Revenues

The sales tax on services generates significant revenues for all four provinces, as shown in Table 10. It has almost a 64% share of the total tax collected by the provinces. Punjab has 66% revenue collected through the sales tax, whereas it is 60% and 65% in Sindh and Khyber-Pakhtunkhwa, respectively. The highest share is in Balochistan, with 74% contributed by the sales tax in the total tax revenue.

Table 10: Trend in Provincial Tax Revenues from 2002-03 to 2023-24
(PKR Billion)

	Sales Tax on Services	Stamp Duty	Motor Vehicles	Others	Total
2002-03	-	7	4	11	22
2007-08	-	11	8	22	41
2012-13	-	18 (9.8%) *	14 (11.2%)	119 (33.7%)	151 (26.1%)
2017-18	224	63 (25.0%)	24 (10.8%)	90 (-5.5%)	401 (19.5%)
2022-23	417 (12.4%)	65 (0.6%)	32 (5.8%)	136 (8.2%)	650 (9.7%)
2023-24	504 (20.8%)	62 (-4.7%)	34 (6.2%)	174 (27.9%)	774 (19.1%)

*Annual compound growth rate.
Source: Fiscal Operations, Ministry of Finance.

2. REVIEW OF LITERATURE ON TAX REFORMS

This chapter focuses especially on tax reforms that have been identified for implementation in Pakistan in recent years. It also highlights the type of reforms proposed earlier in India.

The PIDE-PRIME Tax Reforms Commission (2024)

The objectives and parameters of a new tax policy are as follows:

1. A citizen-friendly, transparent, stable and predictable tax regime to stimulate growth and investment.
2. Simplification and harmonisation to facilitate taxpayers and ease of paying the taxes.
3. Automation and digitisation to eliminate direct interface between the taxpayer and the tax authority.

The major proposals for tax reforms are presented below:

Personal Income Tax

- Same rate of tax on all sources of income, irrespective of source.
- Exemption limit to be raised to PKR 800,000; six slabs with rates of 0%, 5%, 12.5%, 20%, 27.5%, and 35%; maximum rate to be attained at taxable income exceeding PKR 30,000,000.
- Withdrawal of deemed rental income, capital value tax on foreign assets, and super tax, among others.

Corporate Income Tax

- Corporate tax rate to be brought down to 25%; to be reduced further to make Pakistan regionally competitive.
- Withdrawal of super tax, turnover tax, inter-corporate dividend income, presump-tive/final tax regimes.

General Sales Tax

- Harmonised and equalised VAT mode across goods and services, provinces, and whole-sale and retail.
- VAT rate to be brought down to 10% in five years.

- Import of plant and machinery, industrial raw materials and intermediate goods to be zero-rated.

Customs Duty

- Elimination of exemptions and concessions.
- Withdrawal of regulatory duties and additional customs duties.

Excise Duty

- Higher excise duties on tobacco and other products declared harmful to health or the environment.

Withholding Taxes in Income Tax

- Should be classified as advance income tax.
- All kinds of withholding taxes, except on payroll, interest and dividends, should be dis-continued in the long run.

Tax Exemptions

- No new exemptions/concessions in GST, except activities supporting education and health, which should be zero-rated.
- Restore investment tax credits and accelerated depreciation allowance.

The Tax Reforms Commission estimated that the process of tax rationalisation would yield PKR 4 trillion additional revenue in the first three years. The increase would be 26% on the base collec-tion of 2021-22 by the third year. This is based on the presumption that the reduction in tax rates will lead to a substantial expansion in the tax bases.

Tax Administration Reforms

- 'Non-filers' should be treated as tax defaulters and prosecuted.
- VAT mode to be completed initially with commercial importers and wholesalers and Tier 1 retailers, and thereafter with Tier 2 and Tier 3 retailers.
- Priority to digitisation and automation.
- Make customs valuation rulings more transparent using AI algorithms.

- Enhance the capacity and autonomy of Pakistan Revenue Automation Limited (PRAL).

- Formation of a Pakistan Fiscal Policy Institute.

The Recommended Tax Reforms (2021) By Hafiz A. Pasha

Pasha (2021), in his book, Charter of the Economy, has identified the following tax reforms for Pakistan:

Direct Taxes

- Transition from blockwise to comprehensive income taxation.

- The rationalisation of the withholding tax regime.

- Changing the tax credit scheme.

- Broadening the base of the capital gains tax by the withdrawal of the exemption linked to the holding period.

- Progressive corporate income tax, rather than the super tax.

- Incentives for filing returns and penalties for non-filers.

- Taxation of large pensions.

- Tax exemption only to NGOs in education, health, and social safety nets.

- The retention of the initial depreciation allowance and tax credit on balancing, moderni-sation, and replacement (BMR).

- Reduction in the number of slabs in the personal income tax and an increase in the exemption limit.

- Higher income taxation of commercial banks.

- Taxing the informal sector through electricity bills, with more slabs.

Indirect Taxes

- Move towards a national integrated sales tax on goods and services with VAT features.

- The imposition of a sales tax and import duty on selected imported services on the 're-verse charge' principle.

- Subjecting more luxury consumer goods to sales taxation at the retail price.

- The levy of excise duty on activities that pollute the environment.

Other Recommendations

Ahmed (2023) has proposed a home-grown five-point agenda for tax reform. First, there is a need to clearly communicate the vision of tax policy and ensure strict adherence to it. Second, the Provincial governments are endowed with substantial fiscal powers, but their performance in revenue mobilisation has been very disappointing. Thus, top priority must be placed on increas-ing the revenue generation capacity of the provincial governments. Third, ad hoc and stopgap steps are to be done away with. They lead to distortions in the tax system and lead to the viola-tion of either horizontal or vertical equity. Fourth, there needs to be a strong and effective audit mechanism in place. Heightened risk of being caught and associated penalties can be a strong deterrent to tax evasion. Fifth, a fundamental institutional reform of the FBR is required. It needs to be restructured into a professional, autonomous organisation with an independent board of eminent personalities.

Tax Reforms in India

Acharya (2005) identified the following pending reforms in India:

Import Duties

Bringing down the level of import duties to 'East Asian Levels'; withdrawal of the complex pleth-ora of exemptions; reduction in the variation in import tariffs, especially on agricultural items.

Excise Duties

Resurrecting the role of (additional) special excises on luxury consumer goods and durables.

Integration of CENVAT and State VATs

This is to be achieved in a manner that most closely approximates the destination-based, unified, retail-level VAT for the country.

Direct Taxes

Withdrawal of wide-ranging exemptions, especially the location-specific tax breaks.

Tax Administration

A concerted programme is needed to deploy information technology, digitisation and modern risk assessment methods to both direct and indirect taxes.

Although they were identified in 2005, the above reform proposals are also very relevant for the tax system of Pakistan because the pace of reforms in Pakistan has been much slower than in India. India has achieved a much higher tax-to-GDP ratio of above 17%.

3. WHY THE TAX-TO-GDP RATIO HAS FALLEN

The fundamental problem with the tax system in Pakistan is that not only is the tax-to-GDP ratio low, but it has also been declining. It was 11.3% of the GDP in 2017-18 and has since fallen to 10.5% of the GDP in 2022-23, as shown in Figure 5. From 2017-18 to 2023-24, the biggest fall in the tax-to-GDP ratio was in 2018-19.

Figure 5: The Tax-to-GDP Ratio from 2017-18 to 2023-24
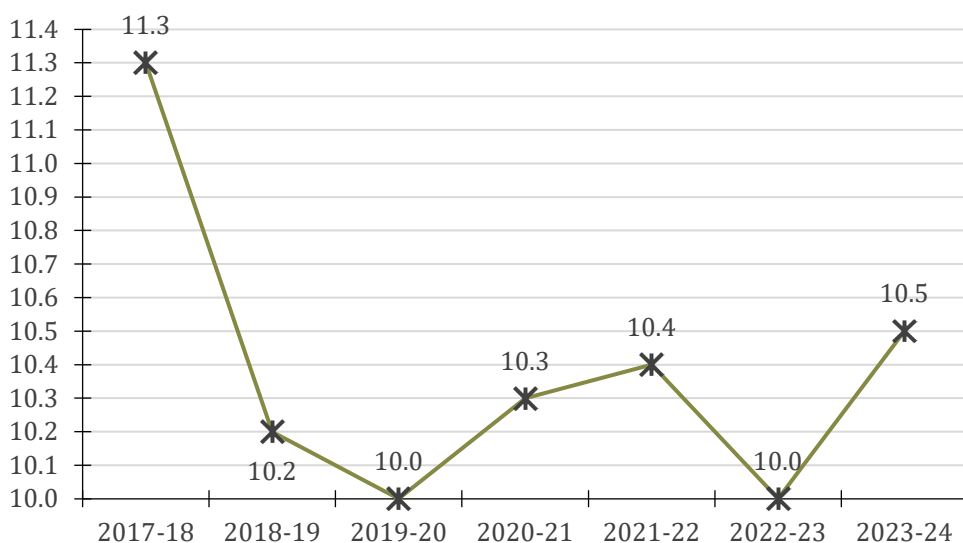
Source: Authors' computations based on information gathered from the Pakistan Bureau of Statistics.

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[4] This includes all the federal and provincial taxes identified in Chapter 1, plus petroleum levy.

Given that Pakistan's tax-to-GDP ratio is low and declining, this chapter aims to analyse the reasons for the drop in the tax-to-GDP ratio by 0.8% from 2017-18 to 2023-24.

Methodology

The objective of the analysis is to decompose the fall in the tax-to-GDP ratio into two parts, namely, the 'base' effect and the 'rate' effect, using the following equation:

$$\frac{T}{Y} = \left(\frac{T}{B}\right)\left(\frac{B}{Y}\right),$$

where T is tax revenue, B is tax base, and Y is GDP.

The 'base' effect quantifies whether the extent of the fall in the tax-to-GDP ratio is due to a decline in the size of the tax base in relation to the GDP. The 'rate' effect is the fall in the effective tax rate measured by the ratio of the tax revenue to the tax base.

Based on this, the change in year t in relation to the tax-to-GDP ratio in a particular year, o, is derived as follows:

$$\left(\frac{T}{Y}\right)_t - \left(\frac{T}{Y}\right)_o = \left(\frac{T}{B}\right)_t\left(\frac{B}{Y}\right)_t - \left(\frac{T}{B}\right)_o\left(\frac{B}{Y}\right)_o$$

This is transformed to:

$$\left(\frac{T}{Y}\right)_t - \left(\frac{T}{Y}\right)_o = \left(\frac{T}{B}\right)_t\left[\left(\frac{B}{Y}\right)_t - \left(\frac{B}{Y}\right)_o\right] + \left(\frac{B}{Y}\right)_o\left[\left(\frac{T}{B}\right)_t - \left(\frac{T}{B}\right)_o\right] \qquad [1]$$

The first expression on the RHS of the above equation is the change in the tax-to-GDP ratio due to the base effect, and the second term is the change due to the rate effect.

The above analysis was undertaken for the following taxes:

Income Tax • Sales Tax + Petroleum Levy • Sales Tax on Services • Import Duties • Excise Duty

The relevant tax base for each of the above taxes is repeated here and shown in Table 11 below.

Table 11: Tax Base of Individual Taxes

Tax	Tax Base
1. Income Tax	Non-agricultural GDP
2. Sales Tax on Goods + Petroleum Levy	Value added in large-scale manufacturing + rupee value of imports + import duty revenue
3. Sales Tax on Services	Value added in accommodation and food services, information and communication, finance and insurance and other private services
4. Import Duties	CIF PKR value of imports
5. Excise Duty	Value added in selected activities

Source: Authors' computations.

Change in the Individual Tax-to-GDP Ratio

The change in the individual tax-to-GDP ratio from 2017-18 to 2023-24 is given in Table 12 below.

Table 12: Change in Individual Tax-to-GDP Ratios
(PKR Billion)

	2017-18	% of GDP	2023-24	% of GDP	Change in % of GDP
Income tax	1,536	3.9	4,531	4.3	0.4
Sales tax on goods + petroleum levy	1,670	4.3	4,118	3.9	-0.4
Sales tax on services	224	0.6	505	0.5	-0.1
Import duty	608	1.6	1,104	1.0	-0.6
Excise duty	214	0.5	577	0.5	0.0
Other provincial taxes	177	0.4	269	0.3	-0.1
TOTAL	**4,429**	**11.3**	**11,104**	**10.5**	**-0.8**
GDP	39,190		105,741		

Source: Fiscal Operations, Ministry of Finance.

Table 9 indicates that the big falls were in the sales tax and import duty. Fortunately, the income tax-to-GDP ratio increased by 0.4% of the GDP.

Analysis of Individual Taxes

Income Tax

We first analysed why the income tax-to-GDP ratio increased by 0.4%. The relevant tax base of the income tax is the non-agricultural GDP of Pakistan. The federal income tax does not cover agricultural incomes, which are in the provincial domain.

The relevant ratios of the income tax are presented in Table 13.

Table 13: Income Tax (%)

	2017-18	2023-24	Change
Tax base as % of GDP	78.35	76.67	-1.68
Tax revenues as % of the tax base	5.01	5.60	0.59
Tax revenues as % of GDP	3.92	4.30	0.38

Source: Authors' computations.

Application of Equation 1 leads to the following decomposition:

The 'Base' Effect	The 'Rate' Effect	Overall Change in Tax-to-GDP Ratio
-0.1	0.5	0.4

The results indicate the presence of a significant 'rate' effect. This reflects the widespread coverage of the withholding tax regime and some enhancement in tax rates. However, the effective tax rate of the income tax in Pakistan is less than 6%. This highlights the high level of tax evasion in the country. The number of income taxpayers is 3.69 million, equivalent to less than 5% of the number of employed. In India, with a population about six times that of Pakistan, the number of income taxpayers is 25 times the number in Pakistan. Clearly, one of the reforms is the introduction of incentives and/or penalties to facilitate the filing of returns.

Sales Tax Plus Petroleum Levy

Part of the sales tax has been substituted by the petroleum levy. Therefore, the two taxes are taken together for the analysis. The tax-to-base and tax base-to-GDP magnitudes are given in Table 14.

Table 14: Sales Tax plus Petroleum Levy (%)

	2017-18	2023-24	Change
Tax base as % of GDP	29.11	25.86	-3.25
Tax revenues as % of Tax Base	14.64	15.01	0.37
Tax revenues as % of GDP	4.26	3.88	-0.38

Source: Authors' computations.

There has been a significant decline in the tax revenues to GDP ratio of almost 0.4% of the GDP.

This is attributable to the following effects:

The 'Base' Effect	The 'Rate' Effect	Change in Tax-to-GDP Ratio
-0.4	0.0	-0.4

The 'base' effect is due particularly to the efforts by the State Bank of Pakistan (SBP) to restrict non-essential imports by managing the letters of credit in 2022-23 and 2023-24. This implies a revenue loss of PKR 423 billion to the FBR.

Sales Tax on Services

The sales tax on services is levied by the provincial governments as per the allocation of fiscal powers in the Constitution of Pakistan, as highlighted earlier in Chapter 1.

The two ratios of the tax are presented in Table 15.

Table 15: Sales Tax on Services (USD Per Litre)

	2017-18	2023-24	% Change
Tax base as % of GDP	8.57	10.51	1.94
Tax revenue as % of tax base	6.66	4.54	-2.12
Tax revenue as % of GDP	0.57	0.48	-0.09

Source: Authors' computations.

The tax base has been curtailed by the lack of imposition of the tax on various services, especially the large number of private services.

The 'base' and 'rate' effects have been derived and are given below:

The 'Base' Effect	The 'Rate' Effect	Overall Change in Tax-to-GDP Ratio
0.1	-0.2	-0.1

Therefore, the small fall in the tax-to-GDP ratio is due to the decline in the effective rate. This is likely to be the consequence of evasion, especially by professionals who are operating more in the informal sector and providing services. The rate could also be significantly enhanced by broadening the tax base on services.

Import Duty

There was a time up to the early 90s when the FBR was heavily dependent on import duties. The process of trade liberalisation since then has reduced the contribution of import duties to total tax revenues.

The key ratios for import duty are presented in Table 16.

Table 16: Import Duty

	2017-18	2023-24	% Change
Tax base as % of GDP	18.63	15.22	-3.41
Tax revenues as % of tax base	8.32	6.85	-1.47
Tax revenues as % of GDP	1.55	1.00	-0.55

Source: Authors' computations.

Application of Equation 1 leads to the following decomposition:

The 'Base' Effect	The 'Rate' Effect	Overall Change in Tax-to-GDP Ratio
-0.2	-0.4	-0.6

The reason for the decline in the tax-to-GDP ratio is primarily attributable to efforts in recent years to reduce imports of non-essential high-duty imports like automobiles, electrical equipment, etc. This is clearly visible from Table 17.

Table 17: Contribution of Different Imports to Import Duty Revenues (%)

	2017-18	**2022-23**
Vehicles (non-railway)	16.0	9.5
POL products	11.7	30.0
Iron and steel	6.8	5.8
Machinery	6.4	3.9
Electrical equipment	5.1	4.0
Edible oil	4.6	5.1
Plastic resins	2.0	3.9
Others	49.4	37.8
TOTAL	**100.0**	**100.0**

Source: Authors' computations.

Table 17 reveals clearly the decline in the shares of automobiles and electrical equipment. The share of relatively low-duty POL products has increased from 11.7% to 30%.

Excise Duty

Currently, almost 60% of the revenue is from cigarettes and cement. The revenues from different industries are given in Table 18.

Table 18: Composition of Excise Duty Revenues (PKR Billion)

	2017-18	2022-23	Growth Rate (%)
Cigarettes	67	142	111.9
Cement	54	66	22.2
Services of travel by air	44	40	-9.1
Others	41	122	197.5
TOTAL	206	370	79.6

Source: Authors' computations.

There has been a small fall of less than 0.1% in the tax-to-GDP ratio. As such, the separate 'tax' and 'base' effects are very small. The excise duty rate has been enhanced substantially on cigarettes. However, the limited growth rate over the five years indicates the likelihood of substantial tax evasion. The track and trace system will have to be applied rigorously in this industry.

Overall Findings

A summary is presented below in Table 19 for each tax of the changes in the tax-to-GDP ratio and the decomposition of the changes into the 'base' and 'rate' effects.

Table 19: Change in Individual Tax-to-GDP Ratio and the 'Base' and 'Rate' Effects from 2017-18 to 2023-24 (%)

	Tax-to-GDP Ratio			'Base' Effect	'Rate' Effect	Change
	2017-18	2023-24	Change			
Federal						
Income tax	3.9	4.3	0.4	-0.1	0.5	0.4
Sales tax + petroleum levy	4.3	3.9	-0.4	-0.4	0.0	-0.4
Import duty	1.6	1.0	-0.6	-0.2	-0.4	-0.6
Excise duty	0.5	0.5	0.0	0.0	0.0	0.0
Provincial						
Sales tax on services	0.6	0.5	-0.1	0.1	-0.2	-0.1
Other taxes	0.4	0.3	-0.1	n.a	n.a	n.a
Overall	**11.3**	**10.5**	**-0.8**	**-0.6**	**-0.2**	**-0.8***

*Different from 0.8 due to rounding off.

Source: Authors' computations.

The important findings are as follows:

(i) The issue is whether the pricing policy on petroleum products is appropriate or not. A comparison is made of the prices of the two major petroleum products, i.e., motor spirit and HSD, in a sample of Asian countries. It appears that motor spirit is significantly underpriced in Pakistan. As such, there is a case for enhancement in the sales tax rate on this product even in the presence of the petroleum levy. A bigger reduction may be justified in HSD. This is likely to make the tax less regressive.

(ii) The fall in the tax-to-GDP ratio of import duty is due to the containment of high-duty luxury imports.

(iii) There has been a small fall of less than 0.1% of the GDP in the tax-to-GDP ratio of the excise duty. The excise duty rate has been enhanced substantially on cigarettes. However, the limited growth rate over the five years indicates the likelihood of substantial tax evasion. The track and trace system will have to be applied rigorously in this industry.

Elasticity and Buoyancy of Taxes

Another way to examine the trend in the overall tax-to-GDP ratio is to look at the elasticity and buoyancy of individual taxes and the overall tax system.

The measure of elasticity of an individual tax is the relationship between the growth of the tax base of the tax and the growth of the national economy over a specified period. It is represented by ε. On the other hand, the buoyancy measures the relationship between the actual growth of revenues from the tax and the GDP growth. It is represented by β.

The following outcomes are possible:

$\varepsilon < 1$ $\beta < 1$	Declining ratios of the tax base and tax revenues to the GDP
$\varepsilon < 1$ $\beta > 1$	Declining ratio of the tax base to the GDP, but rising ratio of tax revenues because of a rise in the effective tax rate
$\varepsilon > 1$ $\beta > 1$	Rising ratios of the tax base and tax revenues to the GDP
$\varepsilon > 1$ $\beta < 1$	Rising ratio of the tax base to the GDP, but falling ratio of actual tax revenues because of a decline in tax rates

There are two sets of earlier estimates of the elasticity and buoyancy of individual taxes and total tax revenues by Mukarram (2001) and Bilqees (2004). These estimates are presented in Table 20.

Table 20: Elasticity and Buoyancy of Individual Taxes and Total Tax Revenues (%)

	Mukarram (2002) 1980-81 to 2000-01		Bilqees (2004) 1974-75 to 2003-04	
	Elasticity	Buoyancy	Elasticity	Buoyancy
Income Tax	1.13	1.61	1.21	1.23
Sales Tax + Petroleum Levy	0.99	1.51	1.50	1.41
Customs Duty	0.32	0.55	0.43	-1.19
Excise Duty	0.47	0.76	0.44	0.48
Total Taxes	0.64	1.00	0.88	0.92

Source: Authors' computations.

Both estimates highlight the income tax elasticity and buoyancy estimates of greater than 1. The high elasticity is attributable to the exclusion of agricultural income from the tax base, which tends to grow less rapidly than the other sectors in the national income. The high buoyancy is also attributable to the expansion of the withholding tax regime in the '90s and the rising marginal tax rate with growing nominal personal incomes.

The lowest buoyancy is observed in customs duty. This reflects the continuing process of decline in the level of import tariffs, as part of the process of trade liberalisation and a greater focus on export promotion.

The high elasticity and buoyancy of the sales tax are attributable to the development of the value-added tax and the relatively fast growth of the large-scale manufacturing sector.

Table 21 presents the most recent estimates of the elasticity and buoyancy of taxes for the period 2017-18 to 2023-24. As highlighted earlier, this is a period during which the overall tax-to-GDP ratio declined.

Table 21: Estimates of the Elasticity and Buoyancy of Taxes:
2017-18 to 2023-24 (%)

	Elasticity	Buoyancy
Income tax	0.98	1.09
Sales tax + petroleum levy	0.90	0.91
Customs duty	0.81	0.60
Excise duty	1.07	1.00
Sales tax on services	1.21	0.82
TOTAL TAXES	0.97	0.88

Source: Authors' computations.

The worrying finding is that, unlike in the earlier years, the buoyancy coefficient is lower than the elasticity. This reflects the greater negative impact of falling rates, such as excise duty and petroleum levy rates, and greater sales tax undercoverage of services. Customs duty buoyancy has substantially reduced in recent years by physical controls over non-essential imports, like automobiles, consumer durables, mobile phones, and luxury foods, which have relatively high rates of import duty.

Clearly, the agenda for tax reforms must focus on raising the overall buoyancy of the tax system to significantly above unity.

4. DETERMINANTS OF THE TAX-TO-GDP RATIO

Choice of Countries

The criteria used for the selection of a country were as follows:

- Lower or upper-middle-income country
- A population of at least 20 million.

This resulted in the selection of 27 countries. They are identified in Figure 6, along with their tax-to-GDP ratios in 2023. There is substantial variation in the tax-to-GDP ratio among the sample countries. The maximum value in 2023 is observed in South Africa at 25.7%, while the minimum value is in Angola at 6.3%. Pakistan is closer to the lower end with a ratio of 9.3%.[5]

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[5] Lower than the observed overall ratio because of the non-inclusion of petroleum levy and provincial taxes.

Figure 6: Selected Countries and Their Tax-to-GDP Ratios in 202
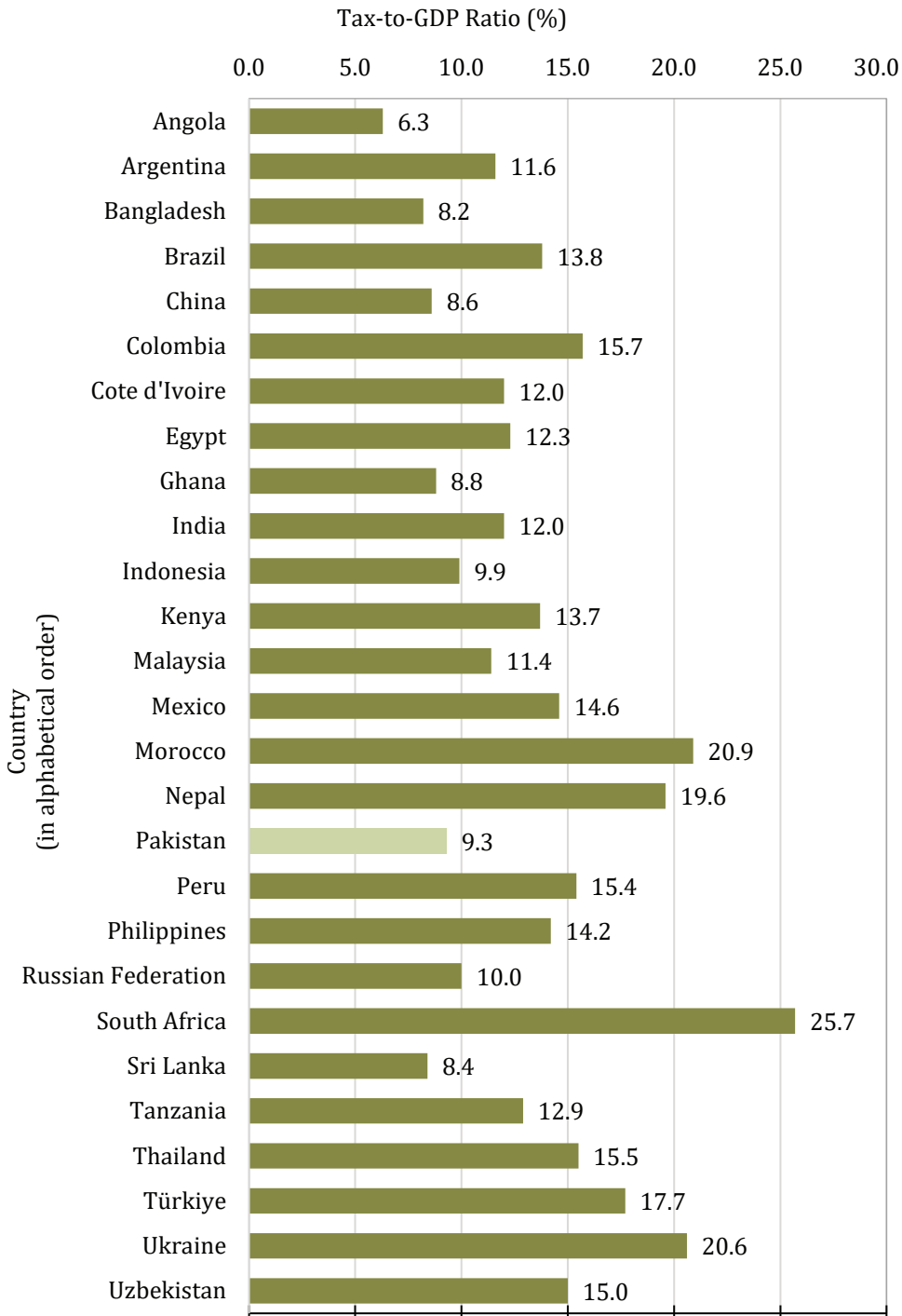
Source: World Development Indicators, World Bank.

The trend in the tax-to-GDP ratio of 27 chosen countries is shown from 2000 to 2023 in Table 22. Over a period of over two decades, there was an increase in the ratio in 16 countries and a fall in 11 countries. A large increase is observed in the case of Nepal, an LDC. The tax-to-GDP ratio went up in Nepal from 8.7% in 2000 to 19.6% by 2023. This is an extraordinary fiscal effort in a country with a low per-capita income. Other countries that showed a relatively big increase are Ukraine, South Africa, Mexico, and South Africa.

The biggest fall is observed in Angola. This is also a country with a low per-capita income. There was a large fall in the tax-to-GDP ratio from 28.7% to only 6.4%. Other countries that showed big declines in the ratio are Ghana, Sri Lanka, Kenya and the Russian Federation.

Table 22: Trend in Tax-to-GDP Ratio of the Selected Countries (% of GDP)

Country (in alphabetical order)	2000	2010	Change from 2000 to 2010	2023	Change from 2010 to 2023	Change from 2000 to 2023
Angola	28.7	16.6	-12.1	6.3	-10.3	-22.4
Argentina	9.6	12.9	3.3	11.6	-1.3	2.0
Bangladesh	7.2	7.8	0.6	8.2	0.4	1.0
Brazil	14.0	14.2	0.2	13.8	-0.4	-0.2
China	11.5	10.2	-1.3	8.6	-1.6	-2.9
Colombia	11.2	12.1	0.9	15.7	3.6	4.5
Cote d'Ivoire	9.3	10.2	0.9	12.0	1.8	2.7
Egypt	15.3	14.1	-1.2	12.3	-1.8	-3.0
Ghana	19.0	13.4	-5.6	8.8	-4.6	-10.2
India	8.8	11.0	-2.2	12.0	1.0	3.2
Indonesia	12.8	10.5	-2.3	9.9	-0.6	-2.9
Kenya	18.1	16.1	-2.0	13.7	-2.4	-4.4
Malaysia	13.7	13.3	-0.4	11.4	-1.9	-2.3
Mexico	9.1	9.7	0.6	14.6	4.9	5.5
Morocco	19.0	21.1	2.1	20.9	-0.2	1.9
Nepal	8.7	13.4	4.7	19.6	6.2	10.9
Pakistan	**7.5**	**9.4**	**1.9**	**9.3**	**-0.1**	**1.8**
Peru	12.6	15.5	2.9	15.4	-0.1	2.8
Philippines	12.4	11.6	-0.8	14.2	2.6	1.8
Russian Federation	13.7	13.0	-0.7	10.0	-3.0	-3.7
South Africa	21.0	22.5	1.5	25.7	3.2	4.7

Country *(in alphabetical order)*	2000	2010	Change from 2000 to 2010	2023	Change from 2010 to 2023	Change from 2000 to 2023
Sri Lanka	14.5	10.9	-3.6	8.4	-2.5	-6.1
Tanzania	9.0	9.9	0.9	12.9	3.0	3.9
Thailand	13.0	14.9	1.9	15.5	0.6	2.5
Türkiye	19.3	18.9	-0.4	17.7	-1.2	-1.6
Ukraine	13.6	15.0	1.4	20.6	5.6	7.0
Uzbekistan	12.0	13.2	1.2	15.1	1.9	3.1
Number of Countries: *Increase in Ratio*			**16**		**12**	**16**
Reduction in Ratio			**11**		**15**	**11**

Source: World Development Indicators, World Bank.

The list below identifies four types of countries based on Table 22.

Table 23: Types of Coutries based on Information in Table 22

Increase from 2000 to 2010; Increase from 2010 to 2023	Increase from 2000 to 2010; Decrease from 2010 to 2023	Decrease from 2000 to 2010; Increase from 2010 to 2023	Decrease from 2000 to 2010; Decrease from 2010 to 2023
Bangladesh	Argentina	Philippines	Angola
Colombia	Brazil		China
Cote d'Ivoire	**Pakistan**		Egypt
India	Peru		Ghana
Nepal	Morocco		Indonesia
South Africa			Russian Federation
Tanzania			Sri Lanaka
Thailand			Türkiye
Ukraine			Kenya
Uzbekistan			Malaysia
Medico			
[11]	[5]	[1]	[10]

Source: Authors' computations.

11 countries managed to increase the tax-to-GDP ratio throughout the period, while 10 countries exhibited the opposite trend. Pakistan was one of the 5 countries that had a variable trend of increase from 2000 to 2010 and fall thereafter.

Choice of Determinants

Diverse determinants of the tax-to-GDP ratio identified are as follows:

- GDP per capita *(current PPP$)*
- Imports of goods and services % of GDP
- Agriculture value added *(% of GDP)*
- Industry value added *(% of GDP)*
- Services value added *(% of GDP)*
- Gini Index of inequality
- Self-employed as % of total employment
- Score in the World Bank Governance Index

The above determinants include the level of per-capita income and the extent of income inequality. Variation in the structure of the economy is captured by the sectoral shares and level of international trade, as measured by the level of imports as a percentage of the GDP. An attempt was also made to explore the extent to which the informal economy reduces taxable capacity. This is measured by the share of the self-employed in total employment. Also, the quality of governance is included in this analysis, as it also implies better or worse tax administration.

Visual Analysis of Role of Determinants

The relationship between per-capita income and the tax-to-GDP ratio is shown by the scatter diagram in Figure 7. The relationship is not clear. The highest tax-to-GDP ratios are observed in middle-income countries. One of the highest-income countries, the Russian Federation, with a per-capita income

above USD 35,000, had a low tax-to-GDP ratio of 10%. The first indications are that there was no significant positive relationship between per-capita income and the tax-to-GDP ratio in 2023.

Turning to Figure 7, we see the tax-to-GDP ratio with respect to the level of income inequality, as measured by the Gini coefficient. There is a clustering in the scatter diagram in the range of the Gini coefficient from 0.3 to 0.5, with some indications that the tax-to-GDP ratio tends to be higher, as expected, with greater income equality. However, there are notable outliers. For example, Nepal had a very low Gini coefficient of 12.4%, but it had a high tax-to-GDP ratio of 19.6%. At the other extreme, Angola had a high Gini coefficient of 48.6% but a very low tax-to-GDP ratio of only 6.3%.

Figure 7: Per-Capita Income in PPP$ and the Tax-to-GDP Ratio: 2023
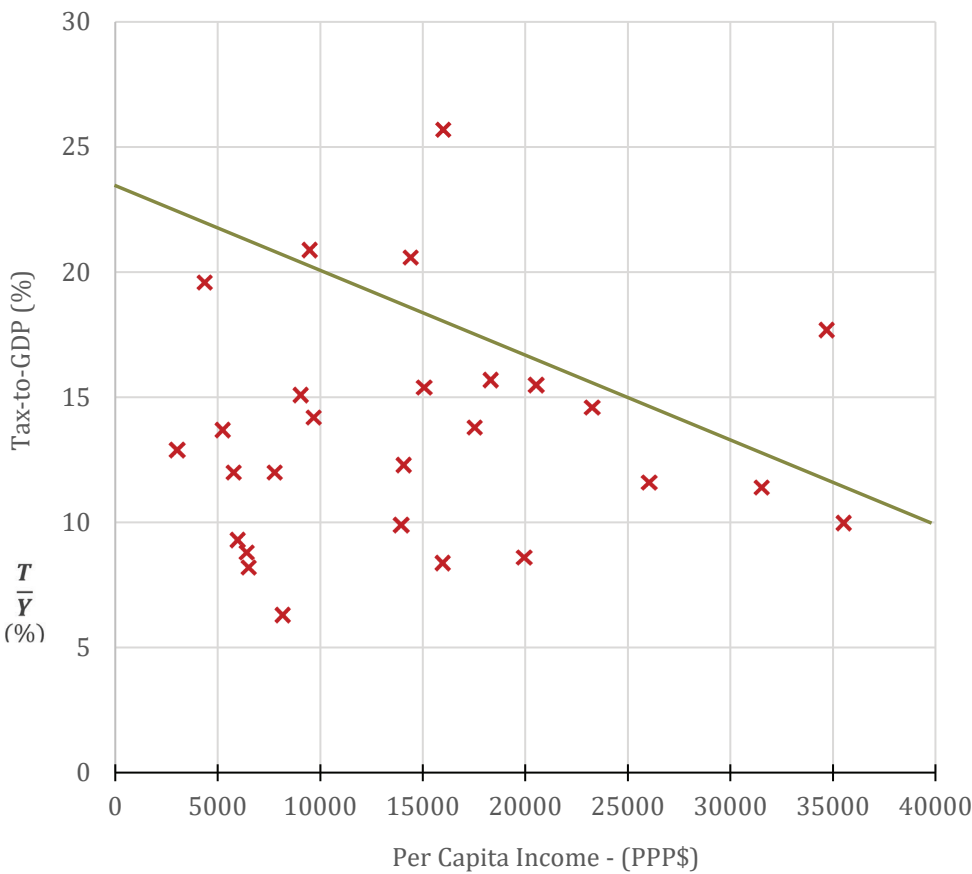
Source: Authors' computations.

Figure 8: The Level of Inequality and the Tax-to-GDP Ratio: 202

Level of Inequality
(Gini Coefficient)
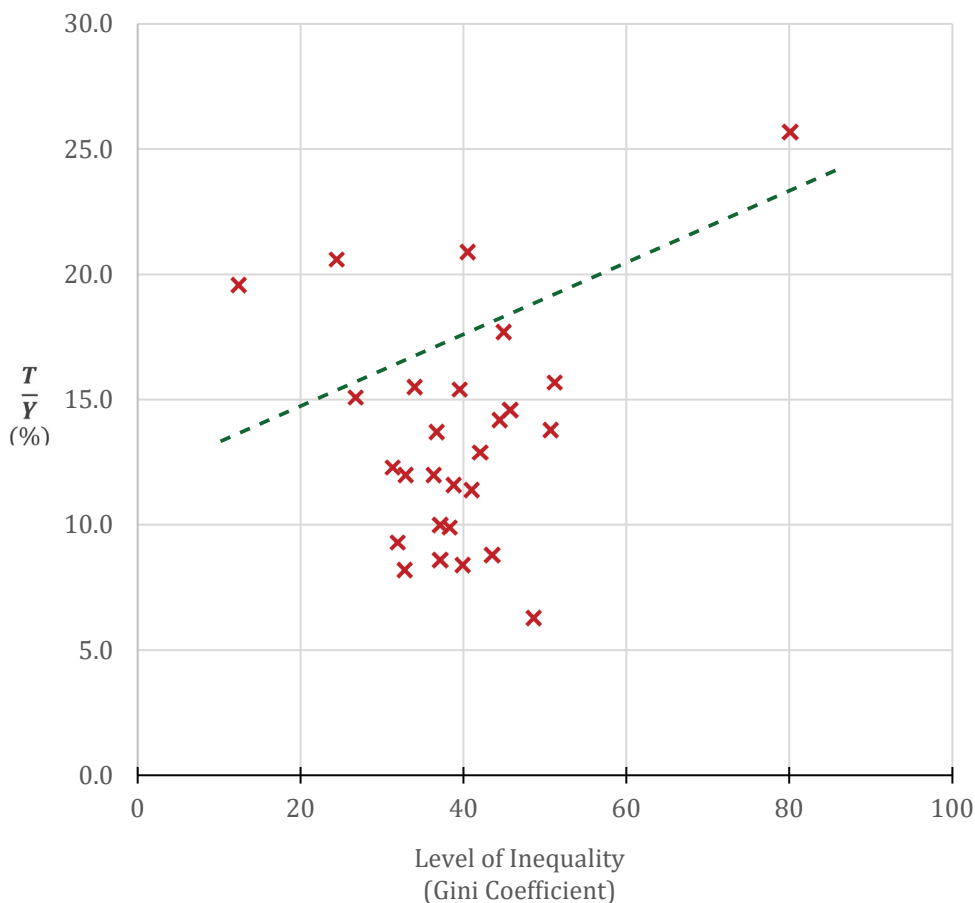
Source: Authors' computations.

Figure 9 presents the scatter diagram of the tax-to-GDP ratio and the share of imports in the GDP. There is a visible positive relationship. As the share of imports in the GDP increases, the tax-to-GDP ratio tends to rise significantly. Imports generally are a preferred tax base for higher rates and frequently for providing more protection to domestic industry and agriculture.

Figure 9: Imports as % of GDP and Tax-to-GDP Ratio: 2023
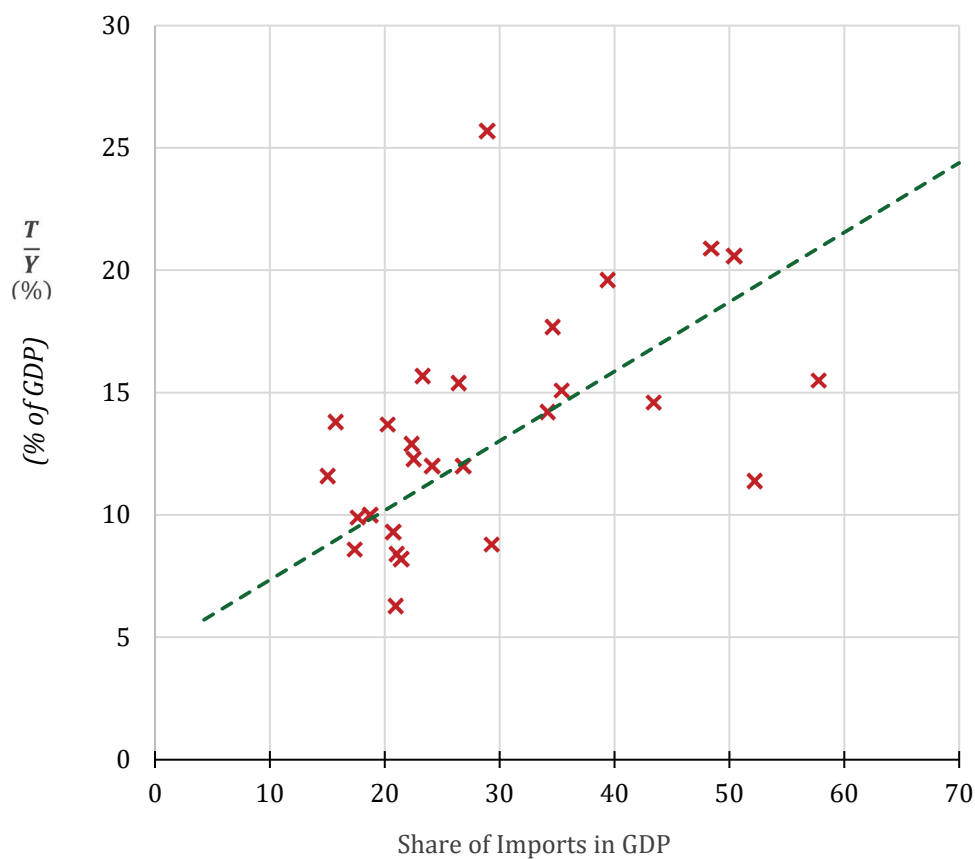
Source: Authors' computations.

Figure 10 shows the effect of agricultural GDP on the tax-to-GDP ratio in the 27 countries. Here, there is evidence of a negative relationship. The highest tax-to-GDP ratio of 25.7% was observed in South Africa, which had a very small share of agriculture of 2.3%.

Figure 10: Share of Agriculture in the GDP and the Tax-to-GDP Ratio: 2023
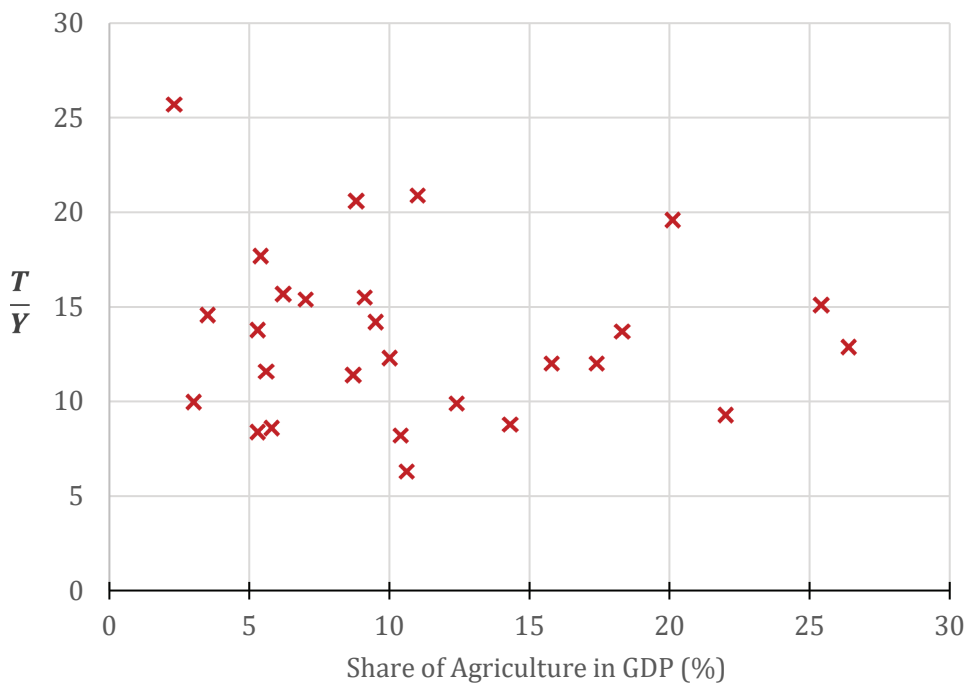
Source: Authors' computations.

The Results

The results of the regression analysis are given below:

$$\frac{T}{Y} = \underset{(7.00)\,*}{7.028} - \underset{(-1.93)}{4.9 \times 10^{-5}}\,Y + \underset{(7.29)\,*}{0.119}\,G - \underset{(-4.02)\,*}{0.094}\,Ag + \underset{(11.56)}{0.107}\left(\frac{M}{Y}\right)$$

R̄² = 0.266, **F** = 58.18 | *Significant at the 5% level

where

$\frac{T}{Y} =$ Tax-to-GDP Ratio *(%)*

$Y =$ GDP per capita, PPP$

$G =$ Gini Index of Inequality *(0% < G < 100%)*

$Ag =$ Share of the Agriculture Sector in the GDP *(0% < Ag < 100%)*

$\frac{M}{Y} =$ Imports of Goods and Services as % of GDP *(0% < $\frac{M}{Y}$)*

Therefore, the results imply the following:

$$\frac{\partial \left(\frac{T}{Y} \right)}{\partial G} > 0, \qquad \frac{\partial \left(\frac{T}{Y} \right)}{\partial A_g} < 0, \qquad \frac{\partial \left(\frac{T}{Y} \right)}{\partial \left(\frac{M}{Y} \right)} > 0$$

The relationship between Y and T/Y is insignificant and negative. Although this result is contrary to expectations, Figure 7 had indicated the likelihood of this happening. The other results are as expected. The positive relationship of the tax-to-GDP ratio with the Gini Index reflects that, especially in direct taxes, with exemption limit and rising marginal tax rates, the revenue yield would be higher with a more unequal income distribution, as a higher proportion of pre-tax income would face higher marginal income tax rates.

The negative relationship between the tax-to-GDP ratio and the share of agriculture in GDP **was** also consistent with expectations. This reflects the fact that the agricultural sector **is** characterised by limited documentation of transactions, which reduces the revenue potential of the income tax in this sector. In addition, a large share of agricultural output **consists of** basic food items, which are seldom subject to sales tax or other forms of taxation.

The positive relationship between the tax-to-GDP ratio and the level of imports highlights the presence of import tariffs and sales tax on imports as a measure of protection to the domestic industry and for increasing revenues. The estimated coefficient in the above equation is also relatively large, which implies that a 10% increase in the ratio of imports to the GDP adds over 1 percentage point to the tax-to-GDP ratio.

Pakistan's Performance

The above regression equation is used to predict the tax-to-GDP ratio of Pakistan in different years, given its characteristics in those years. The results are presented in Table 24. The difference between the predicted and actual magnitude is also shown in Table 20 and in Figure 11.

Table 24: Predicted and Actual Tax-to-GDP Ratio

	2010	2020	2023
Tax-to-GDP Ratio			
Predicted	10.2	10.3	10.7
Actual	8.4	9.3	9.3
Difference	-1.8	-1.0	-1.4

Difference = Actual – Predicted
Source: Authors' computations.

Therefore, the level of federal and provincial tax revenues combined, excluding the petroleum levy, should have been higher by 1.4% of the GDP in 2023. This is the minimum target of increase in the tax-to-GDP ratio in the design of the agenda for reforms.

Figure 11: Actual vs. Predicted Tax-to-GDP Ratio
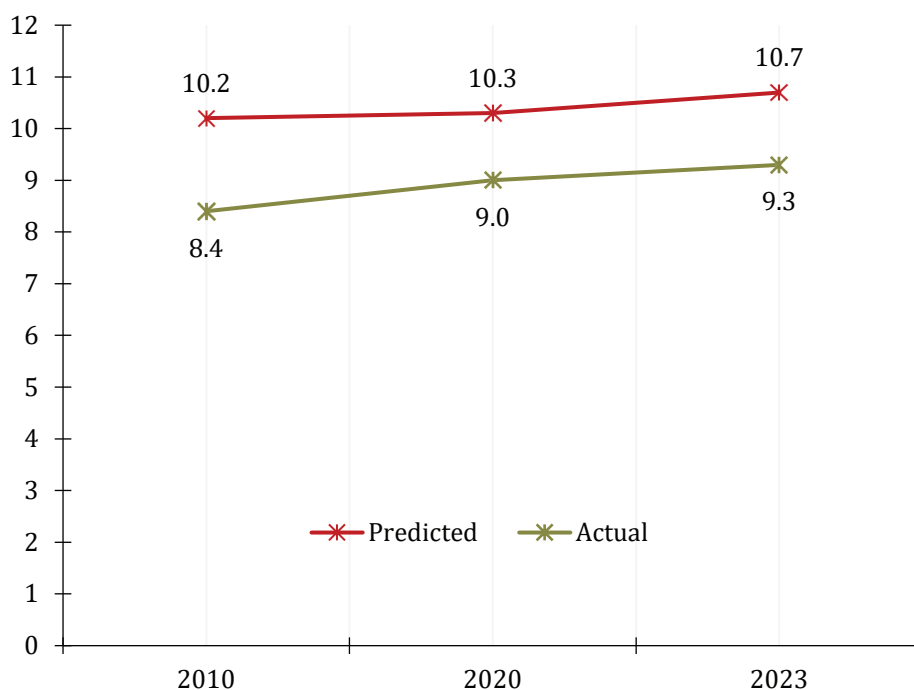
Source: Authors' computations.

Some important results emerge from the analysis. First, the nature of the evolution of the structure of the economy would have led to only a modest increase in Pakistan's tax-to-GDP ratio by 0.4% between 2010 and 2023.

Second, the gap between the predicted and actual tax-to-GDP ratio was the largest in 2010 at 1.8%. This gap narrowed to 1% of the GDP by 2020. However, the tax system appears to have performed poorly in 2023, and, consequently, the gap between the predicted and actual tax-to-GDP ratio widened to 1.3%.

Overall, Pakistan has emerged as a relatively poor performer with a lower tax-to-GDP ratio than the level achievable given its economic characteristics. This demonstrates the need and scope for achieving a higher tax-to-GDP ratio through reforms.

5. THE 'REPRESENTATIVE TAX SYSTEM' APPROACH AND POTENTIAL REVENUES

The 'representative tax system' approach has sometimes been used to quantify the level of potential tax revenues in a country and, consequently, the 'tax gap'. This approach was first developed by Bahl (1972) for measuring the tax effort in developing countries. It has subsequently been used by Lucke (1984), Martinez-Vasquez (1996), and, most recently, by Matsumoto (2022).

Methodology

The representative tax system involves the identification of countries included in the study, the tax base of a tax, and the incidence, t_{ij}, as the ratio of the tax revenues to the tax base.

For the ith country,

T_{ij} =   tax revenue in the *ith* country from the *jth* tax.

B_{ij} =   tax base in the *ith* country of the jth tax.

We have

t_{ij} =   effective tax rate in the *ith* country of the *jth* tax,

where

$$t_{ij} = \frac{T_{ij}}{B_{ij}} \; x \; 100 \quad ... \qquad ... \qquad ... \qquad [1]$$

The total number of countries chosen is n. Therefore, the average tax rate, t_j, of the *jth* tax across the countries is:

$$t_j = \sum_{i=1}^{n} t_{ij} \quad ... \qquad ... \qquad ... \qquad [2]$$

This analysis was undertaken for each tax, with the number of m corresponding to the total number of taxes.

The potential total tax revenue, T_P, can then be derived for Pakistan as:

$$T_P = \sum_{j=1}^{m} t_j \; B_{jP} \quad ... \qquad ... \qquad ... \qquad [3],$$

where

Bjp is the tax base of the *jth* tax in Pakistan.

There is the likelihood that the magnitude of the potential tax revenue could be higher or lower than the actual tax revenues, depending on the level of fiscal effort in the country.

Choice of Countries

The same countries have been selected as in Chapter 4. They are listed in Table 25 with the latest population estimate.

Table 25: List of Chosen Countries

No.	Country	Population *(Million)*
1	Angola	36
2	Argentina	46
3	Bangladesh	171
4	Brazil	215
5	China	1,412
6	Columbia	52
7	Côte d'Ivoire	28
8	Egypt	110
9	Ghana	33
10	India	1,417
11	Indonesia	275
12	Kenya	54
13	Malaysia	34
14	Mexico	128
15	Morocco	37
16	Nepal	30
17	**Pakistan**	**236**
18	Peru	34
19	Philippines	116
20	Russian Federation	144
21	South Africa	60
22	Sri Lanka	22
23	Tanzania	65
24	Thailand	72
25	Türkiye	85
26	Ukraine	38
27	Uzbekistan	35
	TOTAL POPULATION	4,985

Source: Authors' computations.

Income Tax

The latest estimates of the tax revenue from income, profits and capital gains as a percentage of the GDP were obtained from the World Bank's World Development Indicators (WDI).

The resulting magnitudes for each country are presented in Figure 12 in descending order of magnitude.

Figure 12: Income Tax as % of GDP

Ranking	Country	Value
1	South Africa	14.7
2	Brazil	7.8
3	Malaysia	7.6
4	Angola	7.6
5	Morocco	7.3
6	Mexico	7.1
7	Turkiye	6.3
8	Columbia	6.3
9	Peru	6.2
10	Ghana	6.0
11	India	6.0
12	Kenya	5.8
13	Thailand	5.7
14	Philippines	5.4
15	Uzbekistan	5.3
16	Ukraine	5.2
17	Nepal	5.1
18	Indonesia	4.1
19	Tanzania	3.9
20	Pakistan	3.4
21	Côte d'Ivoire	3.2
22	China	3.0
23	Bangladesh	2.5
24	Argentina	1.7
25	Sri Lanka	1.5
26	Russian Federation	0.9
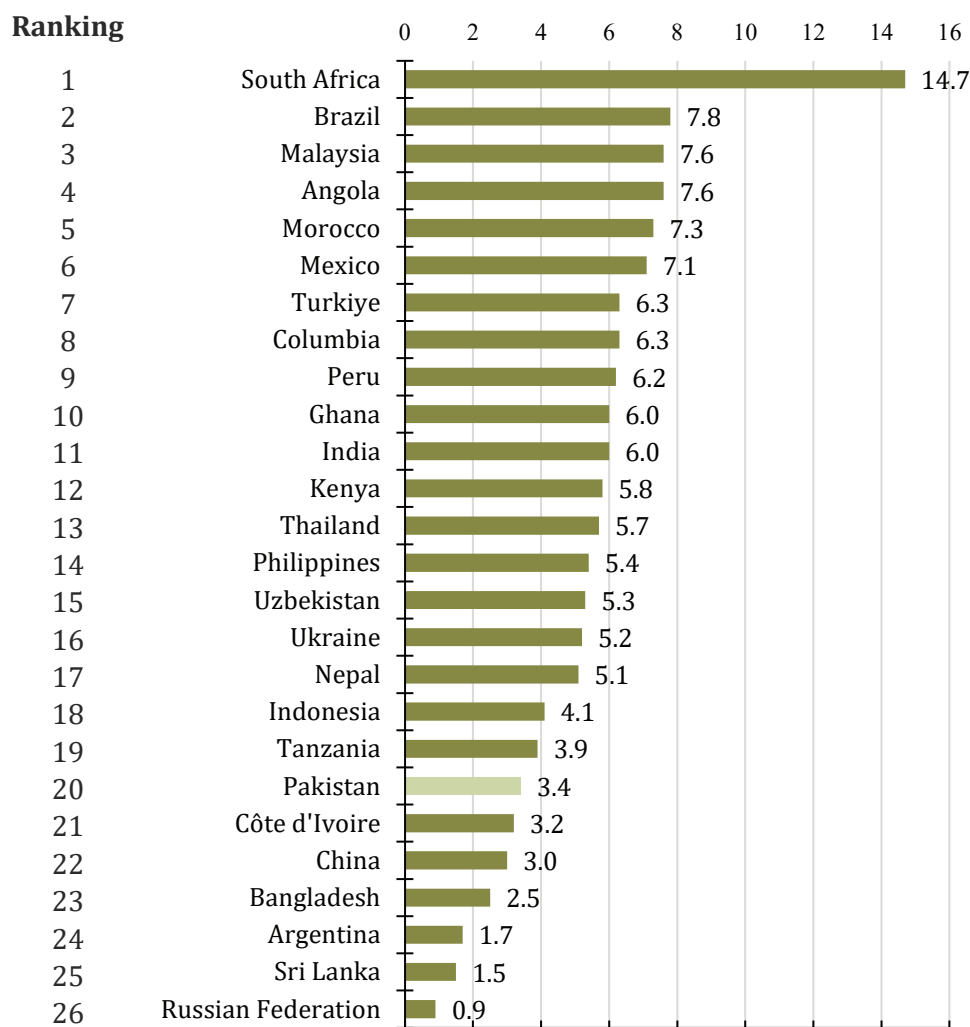
Source: World Development Indicators, World Bank.

The combined summary statistics for the selected 27 countries, as well as separately for the five South Asian countries, are given below in Table 26.

Table 26: Summary Statistics for the Selected Countries

	All Countries	**South Asian Countries**
Range:		
Maximum	14.7	6.0
Minimum	0.9	1.5
Average	5.6	3.7

PAKISTAN: 3.4
Ranking in 27 Countries: 20th
Ranking in 5 South Asian Countries: 3rd

Source: Authors' computations.

There is considerable variation in the income tax-to-GDP ratios. It ranged from as high as 14.7% in South Africa to a low of only 0.9% in the Russian Federation. Pakistan was ranked relatively low at the 20th position, with the income tax ratio of 3.4%. This is below the average for the 26 countries by 2.2 percentage points of the GDP. Clearly, the fiscal effort of Pakistan in the realm of direct taxes is disappointing and needs to be raised substantially. Within the South Asian countries, Pakistan was ranked third. India had a substantially higher ratio of 6% of the GDP. The average was 3.7% of the GDP, which was somewhat higher than the ratio for Pakistan.

Indirect Taxes on Goods and Services

The next measure of relative fiscal effort relates to the level of indirect tax revenues from taxes like the sales tax, as a percentage of the value added in the domestic production of goods and services. The country-wise magnitudes in descending order are presented in Figure 13, while the summary statistics are presented in Table 27.

Table 27: Summary Statistics on the Indirect Tax Revenues as % of Value-Added in Goods and Service

	27 Countries	**5 South Asian Countries**
Range:		
Maximum	14.8	12.8
Minimum	1.3	4.3
Average	7.9	7.2

PAKISTAN: 6.7
Ranking in 27 Countries: 16th
Ranking in 5 South Asian Countries: 3rd

Source: Authors' computations.

Figure 13: Countrywise Taxes on Goods and Services

Ranking	Country	Value
1	Morocco	14.8
2	Uzbekistan	13.1
3	Nepal	12.8
4	Ukraine	12.0
5	Turkiye	11.8
6	South Africa	11.2
7	Tanzania	10.0
8	Russian Federation	9.6
9	Columbia	9.5
10	Peru	9.3
11	Thailand	8.7
12	Kenya	8.3
13	Argentina	7.4
14	India	7.2
15	Côte d'Ivoire	7.2
16	Pakistan	6.7
17	Mexico	6.4
18	Egypt	6.4
19	Brazil	6.1
20	Ghana	6.0
21	Indonesia	5.3
22	China	5.0
23	Bangladesh	4.9
24	Philippines	4.6
25	Sri Lanka	4.3
26	Malaysia	3.2
27	Angola	1.3

Source: WDI, World Bank.

Pakistan's performance in indirect taxes on value-added in goods and services was also below average. However, the gap was smaller with respect to the other 26 countries at 1.2 percentage points of the GDP. Within South Asia, Pakistan had the same third ranking, behind Nepal and India. However, the difference from the regional average remained small at 0.5% of the GDP.

Average Unweighted Import Tariff

This information was obtained from the WTO's World Tariff Profiles of the WTO. The ranking of the 26 countries is shown in Figure 14.

The summary statistics are presented in Table 28.

Table 28: Summary Statistics of the Unweighted Average of Import Tariffs

	26 Countries	**5 South Asian Countries**
Range:		
Maximum	18.1	18.1
Minimum	2.3	5.9
Average	9.0	12.2

PAKISTAN: 10.3
Ranking among 26 countries: 13th
Ranking among 5 South Asian Countries: 4th

Source: Authors' computations.

Figure 14: Unweighted Average of MFN Import Tariffs

Ranking		
1	India	18.1
2	Turkiye	16.8
3	Kenya	14.3
4	Bangladesh	14.1
5	Morocco	14.0
6	Tanzania	13.9
7	Argentina	13.3
8	Nepal	12.8
9	Côte d'Ivoire	12.1
10	Ghana	12.0
11	Brazil	11.1
12	Angola	11.0
13	Pakistan	10.3
14	Thailand	9.7
15	Indonesia	8.0
16	South Africa	7.6
17	China	7.5
18	Uzbekistan	7.3
19	Mexico	7.1
20	Russian Federation	6.6
21	Philippines	6.1
22	Sri Lanka	5.9
23	Columbia	5.8
24	Malaysia	5.6
25	Ukraine	4.4
26	Peru	2.3

Source: WTO, World Tariff Profiles.

The level of import tariffs is not necessarily an indicator of fiscal effort. It is more likely to reflect the policymakers' view of the extent of effective protection that should be provided to domestic production activities against imported goods or services.

The level of import tariff in Pakistan was 10.3%, as compared to the average for the 26 countries of 9%. This is the only area of taxation where the incidence was higher than the average. However, Pakistan's average tariff was lower than the South Asian average.

Potential Additional Revenues

The tax-related data for most countries included in the analysis is for 2020-21. Therefore, the analysis is conducted with respect to the size of the tax base of Pakistan in 2020-21. The resulting estimates of additional revenue are presented in Table 29.

Table 29: Potential Additional Tax Revenues in Pakistan: 2020-21

	Tax Base (PKR Billion)	27 Countries	
		Difference	Additional Revenues
Tax on Income, Profits and Capital Gains	55,836	2.2	1,229
Indirect Taxes on Value-Added in Goods and Services	39,600	1.2	475
TOTAL			**1,704**
% of GDP			*3.1*

Source: Authors' computations.

The potential augmentation of revenues if Pakistan's tax ratio rises to the average of the 27 countries is large, at over 3% of the GDP. This will require both a rationalisation of tax rates and improved efforts at tax collection by a reduction in the quantum of tax evasion.

6. MONETARY APPROACH TO QUANTIFICATION OF TAX EVASION

A very innovative approach to quantification of the extent of tax evasion was first developed by Tanzi (1993). This involves estimation of the 'excessive' currency in circulation (induced by the presence of underground activities) and then by making some assumptions for deriving an estimate of the size of the underground economy.

The Methodology

The methodology essentially follows the methodology developed by Vito Tanzi and, more recently, in Pakistan by Kemal (2007).

The currency in circulation, deposits and money supply are designated as follows:

CC   = Currency in Circulation

D   = Deposits

MS   = Money Supply

We have

$$MS = CC + D \qquad \dots \quad \dots \quad \dots \quad [1]$$

and $\quad \dfrac{CC}{MS} = \dfrac{CC}{CC + D}$

The ratio of currency in circulation to money supply is taken to be dependent on the following:

- Per-capita income **(y)**

- Rate of inflation **(p)**

- Development of the banking system **(B),** measured as the number of branches to population ratio)

-      Tax-to-GDP ratio $\left(\dfrac{T}{y}\right)$

The equation to be estimated is as follows:

$$\frac{CC}{MS} = \beta_2 - \beta_1 y + \beta_2 p - \beta_3 B + \beta_4 \left(\frac{T}{y}\right) \quad \dots \dots \dots \text{[2]}$$

Therefore, the hypotheses are:

$$\frac{\partial \left(\frac{CC}{MS}\right)}{\partial y} < 0, \frac{\partial \left(\frac{CC}{MS}\right)}{\partial p} > 0, \frac{\partial \left(\frac{CC}{MS}\right)}{\partial B} < 0, \frac{\partial \left(\frac{CC}{MS}\right)}{\partial (T/y)} > 0$$

In effect, as per-capita income rises and with a more educated population, access to banking increases. A higher rate of inflation increases the transaction demand for cash and the need for larger cash balances. The development of banking services facilitates more depositors, especially in the relatively remote areas.

Higher incidence of taxes, as measured by the tax-to-GDP ratio, increases the gains from tax evasion and non-declaration of transactions. These transactions take place in cash to avoid any documentation and detection of evasion. Consequently, the currency in circulation to money supply ratio tends to be higher.

The methodology involves the determination of the currency in circulation ratio when the tax-to-GDP ratio is zero.

This is designated as:

$$\left(\frac{CC}{MS}\right)_0 = \left(\frac{CC}{MS}\right) - \beta_4 \left(\frac{T}{y}\right) \quad \dots \dots \dots \text{[3]}$$

The level of currency in circulation, (CC_0), in the absence of taxation, can be estimated from the following equation:

$$\frac{CC_0}{D + CC_0} = \left(\frac{CC}{MS}\right)_0 \quad \dots \dots \dots \text{[4]}$$

The quantum of tax evasion is given by:

$$TE = CC - CC_0 \quad \dots \dots \dots \text{[5]},$$

where CC is the actual level of currency in circulation.

Then the size of the underground economy is given by UGE.

$$\frac{TR}{GDP-UGE} = \frac{TE}{UGE} \quad \ldots \ldots \ldots \text{ [6],}$$

where TR is the actual tax revenues and GDP, the size of the economy.

Then the share, SUGE, of the underground economy can be determined as:

$$SUGE = \frac{UGE}{GDP} \quad \ldots \ldots \ldots \text{ [7]}$$

The Econometric Estimates

The time series of the ratio of currency in circulation to money supply is given in Figure 15. It has a U-shaped trend. It attained a peak of 29.38% in 2019-20 because of the emergency cash needs for medical assistance during the period of the COVID-19 pandemic. It also increased in 2022-23 because of the high rate of inflation of almost 30%. However, there was a significant decline in 2023-24.

Figure 15: The Currency in Circulation Ratio to Money Supply Ratio

1999-2000 to 2023-24
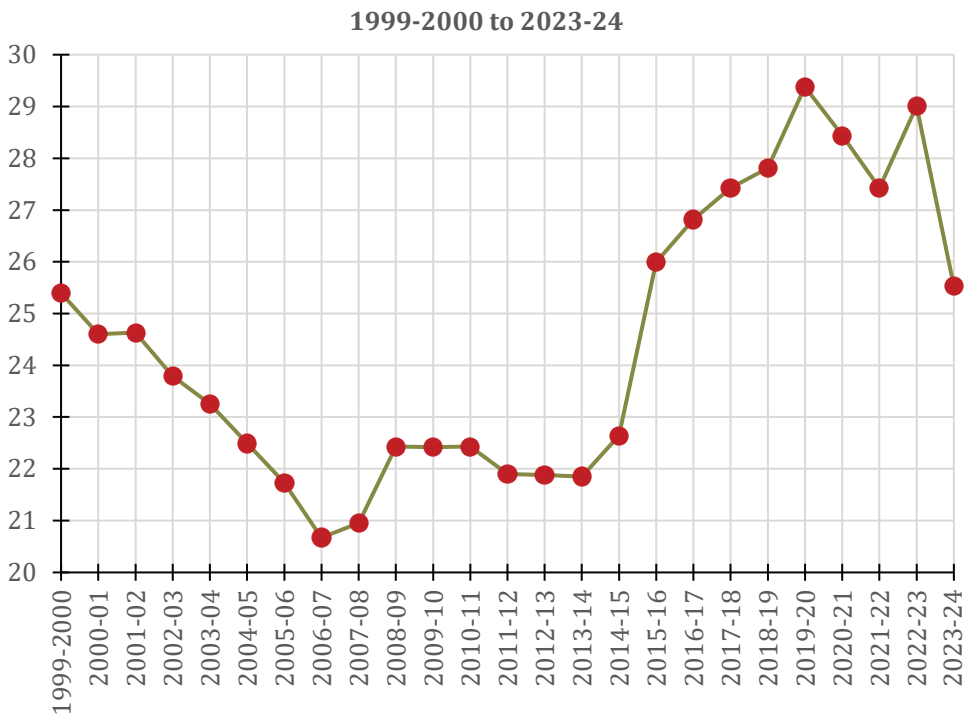
Source: State Bank of Pakistan & Ministry of Finance.

The results of the estimation of Equation [2] are presented in Table 30.

Table 30: Results of Estimation of the Regression Equation

	Coefficient	t-value
Constant	-3.889	-1.99**
Tax-to-GDP Ratio	1.198	3.02*
Rate of Inflation	0.106	2.17*
Banking Services	-0.572	-1.49
Lagged Dependent Variable	0.890	11.68*

= 0.91, F = 61.61, D-W = 2.02
*Significant at the 5% level, **significant at the 10% level
Source: Authors' computations.

The results confirm the significant role of the rate of inflation and the tax-to-GDP ratio in determining the magnitude of the currency in circulation to money supply ratio. The banking services variable has the right negative sign, but it is not significant.

Estimates of the Quantum of Tax Evasion

The estimated magnitude of tax evasion from 2001-02 to 2022-23 is given in Table 31.

Table 31: Estimated Quantum of Tax Evasion and Size of the Underground Economy of Pakistan

	Quantum of Tax Evasion (PKR Billion)	Annual Growth Rate (%)	Tax Evasion as % of GDP	Underground Economy as % of the GDP
2010-11	786	15.5	4.0	31.6
2015-16	1965	18.3	6.0	34.9
2018-19	2579	9.0	5.9	36.6
2022-23	4847	15.7	5.8	38.2
2023-24	4497	-7.2	4.2	30.8

Source: Authors' computations.

There was an increase in the magnitude of tax evasion, as a percentage of the GDP, up to 2022-23. It was 4.0% of the GDP in 2010-11 and rose to 5.8% of the GDP in 2022-23. In fact, the peak of 6% was attained in 2015-16. The good news is that there is evidence of a decline in the quantum of tax evasion in 2023-24. It declined, in absolute terms, by 7.2%. The latest estimate of the underground economy is 30.8% of the GDP. There is a need to give due credit to the FBR for doing a better job of tackling tax evasion in 2023-24, both by changes in tax laws and a more effective process of auditing returns.

Policy Implications

The not-so-surprising findings are the high incidence of tax evasion in Pakistan, with, fortunately, some evidence of a recent decline. This is despite the presence of an elaborate and comprehensive advance and withholding tax regime in Pakistan, which contributed to over 58% of income tax revenues in 2023-24.

The size of the informal economy is first estimated as a proxy for the underground economy. The informal economy consists of production units of the self-employed, households and establishments with employment of less than 10. The Labour Force Surveys (LFS) of the Pakistan Bureau of Statistics (PBS) give estimates in terms of employment of the size and sectoral composition of the informal economy of Pakistan. Estimates from the latest Survey of 2020-21 are presented in Table 32.

Table 32: Extent of Informal Employment and Sectoral Distribution 2020-21

	Total Employed	Total Informal Sector	% Employment in the Informal Sector**	Sectoral Share of Informal Employment (%)
TOTAL	**42.03**	**30.46**	**72.47**	
Manufacturing	10.02	6.15	61.38	20.19
Construction	6.39	5.97	93.40	19.60
Wholesale & Retail Trade	9.68	9.29	96.00	30.50
Transport & Communication	4.17	3.56	85.37	11.69
Community, Social & Personal Services	10.76	5.33	49.53	17.50
Others*	1.01	0.15	14.85	0.49

*Mining & Quarrying, Electric and Gas, Finance and Insurance; **Outside Agriculture
Source: Labour Force Survey, PBS.

The distribution by sector of the informal employment is also given in Table 33. The five sectors with a big share of informal employment are small-scale manufacturing, construction, wholesale and retail trade, transport and communications and community, social and personal services.

The withholding tax regime of Pakistan covers each of these sectors as indicated in Table 33, along with the revenue yield as a percentage of the sectoral value added.

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Table 33: Advance/Withholding Taxes by Sector and Revenues

	Covered by Sections of the ITO	Advance/ Withholding Tax Revenue (PKR Billion)	Revenue as % of Sectoral Value Added
Wholesale & Retail Trade and Manufacturing	148, 153, 235, 236	54	2.0
Transport and Communications	231, 234, 236	118	2.1
Construction	153	148	6.8
Community, Social and Personal Services	152, 153	122	1.2
TOTAL			2.1

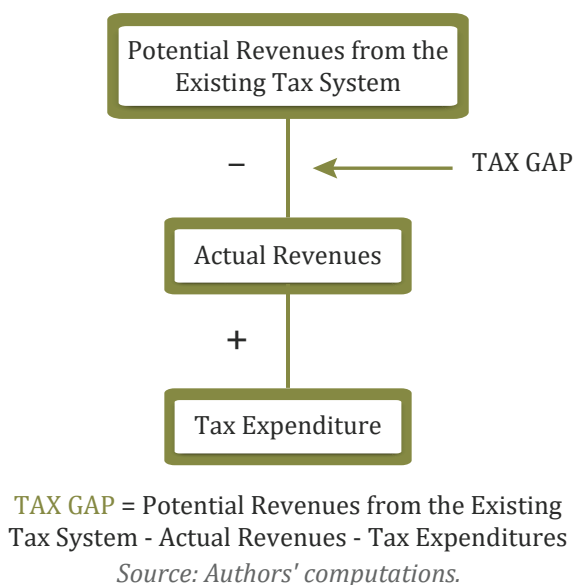*Source: FBR & Pakistan Economic Survey.*

Despite the elaborate regime of withholding and advance taxes, the collection is only 2% of the value added of sectors, with a high share of informal activities. The conclusion is that there is a need to identify the evasion even in these withholding/advance taxes and develop better collection mechanisms. Also, the withholding/advance tax rates are low in some sections of the ITO.

7. THE BOTTOM-UP APPROACH TO ESTIMATION OF THE 'TAX GAP' IN FEDERAL TAXES

The earlier chapter on the representative tax system had adopted a top-down approach to estimation of the tax gap. This chapter focuses on a bottom-up approach. The basic question is whether the two approaches lead to estimates of the tax gap which are not too far from each other.

The tax gap is shown in Figure 16 below. It is the gap between potential revenues and actual revenues plus the tax expenditure on exemptions and lower tax rates.

Figure 16: Identification of the 'Tax Gap' in a Tax

TAX GAP = Potential Revenues from the Existing
Tax System - Actual Revenues - Tax Expenditures
Source: Authors' computations.

'Tax Gap' in the Personal Income Tax

The 2022 FBR report on 'the tax gap' used the latest Household Integrated Economic Survey (HIES) of 2018-19 to estimate the tax gap in the personal income tax. This is the latest HIES. There are 116,499 earners covered in the national HIES survey.

The methodology used is to find, in the case of each earner/worker, the gross annual income, excluding any agricultural income. The tax liability was then derived by application of the statutory personal income tax rates. Summation across all the workers enabled the determination of the average tax liability. This was then blown up to get a national estimate of the potential revenue.

The problem with the HIES is the large understatement of income and expenditure by the respondents. This was tested by deriving the per-capita annual expenditure in different quintiles and applying this to the population in each quintile, and then summing up across the quintiles. The resulting estimate of national household consumption expenditure in 2018-19 was PKR 15,513 billion. According to the National Income Accounts, the actual magnitude was PKR 36,301 billion in the same year. Therefore, there is a need for substantial enhancement of reported incomes.

The assumption was also made that, facing higher marginal tax rates, earners in higher income quintiles are more likely to underreport their incomes.

The methodology used to derive the estimate of the personal income tax from each income quintile is given below.

We designated the following for the *ith* quintile:

Table 34: Methodolgy to Derive Personal Income Tax

Population in the quintile =	42.79 million in 2018-19
Household size =	h_i
Number of households =	$\dfrac{42.79}{h_i}\ million$
Average earners in each household =	e_i
Total earners =	$\dfrac{42.79}{h_i} \cdot e$
Share of Household Income = *(with some adjustment for more underreporting by higher quintiles)*	S_i
National household income* =	37,054 billion PKR
Average income per earner = (PKR)	$\dfrac{37054 \times 10^3 \times S \times h_i}{42.79\ e}$
The tax liability =	T_i
The overall tax payment =	$\dfrac{T\ e}{1000}\ billion\ Rs$

*Excluding retained profits by production units

Source: Authors' computations.

This is summed across the income quintiles.

Table 35 shows the results of the application of the above methodology. Only the top two quintiles have a tax liability. The three lower quintiles are exempt because of incomes below the exemption limit of PKR 400,000 per annum.

Table 35: Estimation of Potential Revenue from a Comprehensive Personal Income Tax: 2018-19

	Top Quintile	Second Quintile
Population *(million)*	42.79	42.79
Average household size *(numbers)*	4.72	5.78
Number of households *(million)*	9.066	7.403
Earners per household *(No)*	1.50	1.78
Total number of earners *(million)*	13.599	13.177
Share of national household income adjusted for underreporting	51.26	19.50
Total household income *(Billion PKR)*	18,994	7,234
Annual average income per earner *(PKR)*	1,396,720	548,987
Income tax liability per earner	129,008	11,898
Total potential income tax revenue *(PKR Billion)*	1,754	157
TOTAL *(PKR Billion)*		**1,911**
Less revenue from taxation of agricultural income at the same rates		341
NET POTENTIAL *(PKR Billion)*		**1,570**

Source: Authors' computations.

However, the above methodology does not exclude agricultural income and, as such, wrongly includes the tax liability of large agricultural income earners. Therefore, the methodology described below was used to estimate the personal income tax of agricultural income earners, which cannot be included in the potential tax revenue.

There are *i = 1, ...7,* slabs of farm size with individual farmer income above PKR 400,000. The resulting tax liability is given in Table 36, with net income after sharing with tenants per acre of PKR 70,000 in 2018-19.

Table 36: Potential Revenue from Agricultural Income Tax: 2018-19

	Number of Farms ('000)	Average Area of Each Farm	Income Per Farm	Potential Tax Per Farm	Total Tax Revenue (PKR Billion)
5 to 7.5	1132	5.7	470,141	1403	1.6
7.5 to 12.5	917	9.5	784,914	17991	16.5
12.5 to 25.0	561	16.7	1,373,610	76,861	43.2
25.0 to 50.0	210	31.9	2,623,963	284,293	59.7
50.0 to 100.0	66	62.0	5,101,863	900,012	59.4
100.0 to 150.0	12.6	111.1	9,144,423	2,065,327	26.0
150 and above	13.4	435.6	35,840,586	10,074,175	135.0
				TOTAL	**341.4**

Source: Agriculture Census.

The resulting estimate of the tax contribution if agricultural incomes were subject to the Federal personal income tax in 2018-19 is PKR 341 billion.

Overall, the estimated 'tax gap' is presented in Table 37.

Table 37: Estimation of the Tax Gap in the Personal Income Tax: 2018-19 (PKR Billion)

	FBR Tax Gap Report	This Report
Potential revenue from the personal income tax	1,453	1,570
Actual revenue from the personal income tax	670	670
Tax gap	783	900
Tax gap as % of actual revenue	**116.9**	**134.3**

Source: Authors' computations.

Therefore, the bottom line is that there is a considerable amount of personal income tax evasion in Pakistan. This is one of the areas where efforts need to be launched to identify segments of the economy where there is a greater need for documentation of transactions to curb rampant tax evasion.

'Tax Gap' in the Corporate Income Tax

The FBR Tax Gap Report includes only those sectors in the economy where business is carried out by corporations, either public or private. These are the following:

- Large-Scale Manufacturing

- Electricity, Gas and Water Supply

- Information and Communications

- Finance and Insurance

We have also focused on these sectors.

The rate of profitability and the corporate income tax paid were derived from the database of the SBP on public limited companies. The estimates are for the year 2022, which are presented below in Table 38.

Table 38: Composition of Value-Added in Sub-Sectors and CIT Paid: 2022 (PKR Billion)

	Profit before Tax	Depreciation	Employee's Remuneration	Value Added	Corporate Income Tax Paid
Manufacturing					
Textiles	181.7	42.5	153.4	377.6	33.0
Sugar	15.0	8.7	17.7	41.4	4.2
Food	56.4	11.6	44.1	112.1	16.9
Chemicals	202.2	30.6	90.0	322.8	81.4
Mineral Products	14.3	3.0	10.5	27.8	3.1
Cement	116.4	33.1	44.4	193.9	42.3
Motor Vehicles	54.2	12.1	32.3	98.6	24.9
Coke & Petroleum	351.7	36.6	60.9	449.2	146.5
Paper & Products	18.1	7.0	15.5	40.6	6.9
Elect Machinery	7.0	2.0	8.8	17.8	2.8
Other Manufacturing	80.6	14.5	46.9	142.0	27.0
TOTAL	**1097.6**	**201.4**	**524.8**	**1823.8**	**389.0**
Energy	317.5	71.8	103.7	553.0	131.0
Information & Communication	-14.2	50.6	85.0	121.4	-3.0
Banks	675.9	144.5	464.2	1295.7	356.1

Source: State Bank of Pakistan.

The next step was to derive the overall contribution to the corporate income tax by sector. It was assumed that private limited companies have a somewhat lower level of profitability than the generally larger public limited companies. As such, the overall level of profitability in relation to value-added was taken as 10% lower for the sector as a whole in relation to the level of profitability of public limited companies.

The potential tax revenue is derived in Table 39, based on the methodology given below.

We designate the following for a sector:

PVA	Value added by public limited companies (PLC)
RVA	Value added by the rest of the sectors
π	Rate of profits as % of value added in PLC

Then the potential tax revenue is given by T, where,

$$T=t\,[PVA \cdot \pi + 0.9\pi \cdot RVA]$$

The value of t is 29% generally, except for the financial sector, where it is 39%.

Table 39: Potential Tax Revenue from the Corporate Income Tax: 2022

	Value Added by Public Limited Companies (PLC)	Sectoral Value Added in 2021-22	Profitability of PLC* (%)	Overall Sector Profit	Potential CIT Revenue
Manufacturing	1824	7041	60.1	3918	1136
Electricity and Gas	553	1,086	57.4	702	204
Information and Communication	121	1,231	-11.3	n	-
Finance and Insurance	1,296	1,515	52.2	778	303
TOTAL	3794	10,873		5,398	1,643

As % of value added.
Source: Authors' computations.

Therefore, the estimated potential corporate income tax revenue was PKR 1,643 billion in 2021-22.

The estimated tax expenditure in this tax was derived by the FBR at PKR 139.5 billion in 2021-22.

The major tax expenditures in the corporate income tax in 2021-22 were as follows:

Table 40: Major Tax Expenditures in the Corporate Income Tax in 2021-22

		(PKR Billion)
1.	Part-VII of Chapter II of Section 49 of the ITO	26.5
2.	Deductible Allowance for WWF / WFP	11.8
3.	Tax Credit for Newly Established Industrial Undertaking	6.0
4.	Tax Credit for Investment in Plant and Machinery by New Undertaking	18.2
5.	Income from REIT Scheme	20.7
6.	Profits from Electric Power Generation Project	56.0
	TOTAL	**139.5**

Source: Tax Expenditure Report, FBR.

The resulting estimates of the tax gap in the corporate income tax are presented in Table 41.

Table 41: Tax Gap in the Corporate Income Tax (PKR Billion)

	FBR Estimates	This Report's Estimates
Gross tax collectable	1,380	1,390
Tax expenditure	-	140
Actual collection	985	985
TAX GAP	**395**	**265**

Source: Authors' computations.

Therefore, the two estimates are close to each other.

'Tax Gap' in the Sales Tax on Goods

The FBR 'Tax Gap' Report has quantified the tax gap in the Federal Sales Tax on goods by first identifying the sectors of the economy that come within the ambit of the tax, as follows:

- Mining and Quarrying

- Manufacturing Sector

- Electricity, Gas and Water Supply

The analysis was undertaken for 2019-20. The sales tax gap was derived as follows, based on the consumption approach:

Sales tax Gap =	Σ (Final Consumption) x 17% - Sales Tax Expenditure – Gross Tax Collection

We adopted a different approach to estimating the sales tax gap. Manufactured imports were categorised into two groups. The first group consists of consumer goods, which yield final sales tax revenue on the CIF value plus the revenue from import duties on these items.

The second part of the tax base is the entire large-scale manufacturing sector. The tax is quantified on the value of output of this sector. Information is available on the sectoral value of outputs from the PBS. Mining and Quarrying outputs were assumed to be largely inputs into the manufacturing and the gas sub-sector within the electricity and gas sector. The final sale of electricity and gas was included in the sales tax base. The input into industry was excluded from the tax base.

The overall sales tax base for a particular year is derived as follows:

Sales Tax on Goods Tax Base =	(CIF value **+** import duty paid) on manufacturing goods imports **+** value of Large-Scale Manufacturing Output *minus* the value of manufactured exports **+** non-industrial sales value of electricity and gas

The estimates are presented in Table 42.

Table 42: Size of the Sales Tax on Goods Tax Base (PKR Billion)

	2020-21	2021-22	2022-23
Value of manufactured consumer goods[1] imported *(CIF value + import duty)*	1,951	3,888	2,952
Value of Large-Scale Manufacturing [+] output	18,919	27,076	32,701
Value of manufactured exports [-]	-3,341	-4,695	-5,606
Electricity and Gas sales to non-industrial consumers [+]	3,279	2,894	5,205
Total potential tax base	20,808	29,083	35,252
Tax rate (%)	17	17	17.25**
Potential tax revenue	**2,527**	**4,944**	**6,081**
Tax expenditure***	840	1,478	2,960
Net collectable tax revenue	2,697	3,466	3,621
Actual revenue	1,990	2,531	2,592
TAX GAP	**707**	**935**	**1,021**
% of Actual revenue	35.5	36.9	39.7

* The goods included are vehicles (CBU), 80% of POL products, mobile phones, 50% of electrical equipment, aircraft and ships, clothing, medicines, and fertiliser and insecticides. ** The sales tax rate was enhanced from 17% to 18% in March 2023. *** The tax expenditure is estimated to have substantially increased because of the big increase in the petroleum levy as a partial substitute for the sales tax.

Source: Authors' computations.

A comparison of the estimate of the tax gap in the sales tax on goods is given in Table 43.

Table 43: Estimates of the Tax Gap in Sales Tax on Goods (PKR Billion)

	FBR 'Tax Gap' Report 2019-20	This Report		
		2020-21	2021-22	2022-23
Tax Collection	2,209	2,697	3,466	3,621
Actual Tax Collection	1,690	1,990	2,531	2,592
TAX GAP	**519**	**707**	**935**	**1,021**
Tax Gap as % of Tax Collection	**30.7**	**35.5**	**36.9**	**39.7**

Source: Authors' computations.

Therefore, our estimates of the tax gap as a percentage of the actual tax revenues are significantly higher than those of the FBR. The tax gap in the sales tax on goods was 1.2% of the GDP in 2022-23.

The overall estimate of the tax gap in Federal taxes is given in Table 44.

Table 44: Overall Estimates of the Tax Gap (PKR Billion)

Income Tax	In Report		% of GDP
	Year	Tax Gap	
Personal Income Tax	2018-19	900	2.05
Corporate Income Tax	2021-22	265	0.40
Sales Tax on Goods	2021-22	935	1.41
TOTAL			**3.86**

Source: Authors' computations.

Therefore, the estimate of the overall tax gap in the FBR revenues is close to 4% of the GDP. This is somewhat larger than the estimate of the tax gap of 3% of the GDP based on the top-down Representative Tax System methodology. This clearly shows a substantial potential for tax revenues, which could be almost 14% of GDP. However, even if it is achieved, it would still be less than that of India, which has achieved a tax-to-GDP ratio of 17%.

8. THE 'TAX GAP' IN PROVINCIAL TAXES

Level of Provincial Tax Revenues

The level of total tax revenues of each province as a percentage of the Provincial Gross Regional Product at current prices is presented in Table 45.

Table 45: Level of Provincial Tax Revenues: 2023-24 (PKR Billion)

	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Pakistan
Provincial Tax Revenues	326	364	54	30	774
Provincial Tax Revenues as % of Provincial GRP	0.56	1.22	0.37	0.70	0.73

Source: Fiscal Operations, Ministry of Finance; Pasha (2022a and b).

The overall provincial-tax to-GDP ratio of the four provinces combined is very low at 0.7% of the GDP. Sindh has the highest tax-to-GDP ratio of 1.2%, while the lowest ratio is that of Khyber-Pakhtunkhwa at less than 0.4%.

The composition of the provincial tax revenue by tax is presented in Table 46, for 2017-18 and 2022-23.

Table 46: Revenue from individual Taxes of the four Provinces Combined (PKR Billion)

	2017-18	2022-23	2023-24	Annual Growth Rate (%)
Sales Tax on Services	224	417	504	13.5
Stamp Duties	63	65	63	0.0
Motor Vehicle Tax	24	32	34	5.8
Land Revenue	18	21	24	4.8
Agricultural Income Tax	2	3	3	6.7
Others	64	104	146	13.7
TOTAL	**403**	**652**	**774**	**10.9**

Source: Fiscal Operations, Ministry of Finance; Provincial Budget Documents.

The largest tax at the provincial level is the sales tax on services. It was introduced in 2011 and has since grown to account for 64% of provincial tax revenues. Apart from this, there is a varied collection of taxes yielding relatively small magnitudes of revenue. Also, the growth rates of revenues from different sources are low.

'Tax Gap' in the Agricultural Income Tax

Recently, there has been a greater focus on the development of the agricultural income tax. The tax was legislated by the provincial governments almost three decades ago, but it has been in a state of limbo. Only PKR 3 billion was generated in 2023-24 from this tax by the four provinces.

The IMF's new three-year Extended Fund Facility for Pakistan has clearly identified the agricultural income tax as the tax to be developed. The structural benchmark included in the tax is as follows:

'Each province amends their Agricultural Income Tax legislation and regime to fully align with the federal personal income tax regime for small farmers and the federal corporate income tax regime for commercial agriculture so that taxation can commence from January 1, 2025.'

Therefore, based on the implementation of the above reform, the revenue potential of the agricultural income tax was quantified on the basis that the tax structure would correspond to that used currently for non-salaried personal income, with the maximum rate of 45%.

The methodology used is based on the following variables:

N_i	Number of farms in the *ith* size category; *i = 1 to 10*

The size distribution is given in Table 41 and is derived from the last Agricultural Census.

F_i	Average farm area in the *ith* size category
V	Average value-added per acre

It was assumed that there is no significant variation by farm size in value added per acre.

S_i	Share of the owner in the value-added $S_i < 1$

This allows for sharing with tenants and payment of wages for any labour input.

Therefore, the net income, I_i, in the *ith* size category is:

$$I_i = F_i \cdot V \cdot S_i$$

The tax amount to be derived on Ii, based on tax rates for non-salaried individuals:

$$t_i = t\,(I_i)$$

For the ith size category of farms, the total tax liability is:

$$T_i = N_i \; t_i,$$

and the overall tax potential is TP, where,

$$TP = \sum_{i=1}^{10} T_i$$

The estimates based on the application of the above methodology are presented in Table 41.

The results are as follows:

(i) Farmers owning up to five Acres will effectively be exempt because of a net annual income below PKR 600,000.

(ii) The tax liability rises rapidly with farm size, as larger farmers face higher marginal tax rates.

(iii) The estimated revenue potential of the agricultural income tax on crop income is PKR 880 billion on the estimated income from crops.

(iv) The revenue potential is equal to 8% of the projected value-added in the crop sector of the economy in 2023-24.

Clearly, the agricultural income tax has significant revenue potential. It will more than double the provincial tax-to-GDP ratio and increase the national tax-to-GDP ratio by 0.7% of the GDP.

Table 47: Size Distribution of Farms, Net Income of Owner and Income Tax per Owner

	Number of Farms ('000)	Farm Area Per Farm (Acre)	Culti-vated Area Per Farm (Acre)	Value Added of Farm (PKR '000)	% VA as Income of Owner (%)	Income of Owner (PKR '000)	Tax Li-ability per Farm on Owner (000)	Total Poten-tial Tax Revenue (PKR Billion)
Under 1.0	1,255	0.4	0.4	107	85.5	91	0	0.0
1.0 – 2.5	2,342	1.6	1.5	402	70.0	305	0	0.0
2.5 – 5.0	1,754	3.4	3.2	858	69.8	598	0	0.0
5.0 – 7.5	1,132	5.7	5.3	1,420	61.9	879	42	47.5
7.5 – 12.5	917	9.5	8.7	2,332	60.4	1,409	132	121.0
12.5 – 25.0	561	16.7	14.7	3,940	57.8	2,277	373	209.3
25.0 – 50.0	211	31.9	25.5	6,834	60.4	4,128	1,021	215.4
50.0 – 100.0	67	62.0	44.8	12,006	60.0	7,204	2,332	156.2
100.0 – 150.0	13	111.1	74.7	20,019	52.5	10,510	3,820	49.6
150.0 & above	13	453.3	114.1	30,659	51.6	15,820	6,209	80.7
TOTAL	8,265							879.7

Source: Authors' computations.

'Tax Gap' in the Sales Tax on Services

Examination of the existing tax system and the law on the sales tax on services reveals that the base of this tax consists primarily of the following four service sub-sectors in the National In-come Accounts.

- Accommodation and Food Services
- Information and Communication
- Banking and Insurance
- Other Private Services

These sectors are mostly location-specific, and there is little scope for shifting the burden of this tax between provinces. The respective sizes of the above sectors in each province were derived from Pasha (2022a and b).

The estimates of the tax gap are derived as follows:

Value added by the four sub-sectors in the province **i (i – 1, ..,4)**	$= V_i$
Share of the value added by the formal sector	$= F_i$
Sales Tax on Services tax rate in province **i**	$= t_i$
Actual revenue	$= T_i$
Then the Tax Gap, **TG_i**, is given by $$TG_i = V_i \cdot F_i \cdot t_i - T_i \qquad (i = 1, .., 4)$$	

The above magnitudes are given in Table 48.

Table 48: Tax Gap in the Sales Tax on Services (PKR Billion)

Sector	Value Added	Share of Formal Sector (%)	Value Added in Formal Sector	Tax Potential*
Accommodation and Food Services	1,534	14.7	225	36
Information and Communication	1,497	75.0	1,123	180
Banking and Insurance	3,711	83.3	3,091	495
Other Private Services	8,737	31.8	2,778	444
TOTAL				**1,155**
Actual Revenue				*504*
Tax Potential as % of Actual Revenue				*229.2*

*16% tax rate.
Source: Authors' computations.

The tax gap was relatively large at PKR 651 billion, equivalent to over 129% of the actual revenues. Typically, Sindh has exploited the tax base the most. In fact, it has the lowest tax rate at 13% and could raise it to either 15% or 16%, like the other provinces. This was done in the 2024-25 Budget.

Overall 'Tax Gap'

The tax gap in the provincial agricultural income tax and sales tax on services was PKR 1,530 billion on the tax base of 2023-24. Therefore, there is a substantial scope for the development of the provincial tax system. The potential level of tax revenue is PKR 2,304 billion, equivalent to 2.2% of the

GDP, whereas the actual level was 0.8% of the GDP in 2023-24. This highlights significant tax potential. However, when compared with other countries, such as India, where states collect nearly 6% of GDP, it becomes evident that there is room for improvement.

9. TAXATION OF PROPERTY AND INCLUSIVE GROWTH

Progressivity of Taxes on Property

The basic finding is that the inequality among income quintiles is greater in income from property than in total income. The former is derived as the imputed rental value of owner-occupied property by a household and/or rental income from a property owned.

The share in property income by quintile is given in Table 49. The data was obtained from HIES 2018-19. The distribution is given for the entire sample of households and separately for urban households. The latter distribution is relevant with regard to the urban immovable property tax.

Table 49: Share by Quintile of Property Income of All Households and Urban Households in Pakistan: 2018-19

	Bottom 20%	2nd	3rd	4th	Top 20%	Total
PAKISTAN						
Share of Property Income	5.1	7.8	11.0	18.8	57.3	100.0
Share of Total Income	8.6	12.4	15.3	20.5	43.2	100.0
URBAN PAKISTAN						
Share of Property Income	5.1	8.1	11.8	16.5	58.5	100.0
Share of Total Income	8.4	11.5	14.8	19.7	45.6	100.0

Source: GOP (2020).

The skewness in the distribution of property income is clearly more pronounced. For the country as a whole, the top quintile had 57.3% of the property income as compared to 43.2% of the total income. Similarly, the top quintile of urban households had 58.5% of the property income.

The two measures of inequality, namely, the Gini coefficient and Pashum Ratio, are presented for total income and property income, respectively, in Table 50.

Table 50: Gini Coefficient and Pashum Ratio of Inequality in the Distribution of Property Income: 2018-19

	Pashum Ratio	Gini Coefficient
PAKISTAN		
Total Income	0.532	0.310
Property Income	0.924	0.462
URBAN PAKISTAN		
Total Income	0.575	0.330
Property Income	0.997	0.461

Source: Derived from Table 49.

The Pashum Ratio is a more sensitive measure of inequality. It reveals that inequality in property income was higher by over 70% in relation to the inequality in total income. The advantage of property-related taxes is that they are generally the most important type of revenue that local/city governments can collect. This is facilitated by the physical identification of properties within particular jurisdictions. As for the progressivity of these taxes, these taxes can generate the funds needed to provide critical local services like water supply, sewerage, urban public transport, slum improvement and garbage collection. Therefore, taxes on property have the merit from both the viewpoint of progressivity and the use of the revenues generated more for the provision of basic services to low-income households.

Existing Taxes on Property

There are currently six taxes on property in Pakistan, as shown in Figure 17.

Figure 17: Provincial and Federal Taxes on Property

PROVINCIAL		FEDERAL	
1.	Urban Immovable Property Tax	1.	Income Tax on Rental Income
2.	Stamp Duty	2.	Capital Gains Tax on Property
3.	Capital Value Tax on Property	3.	Advance Tax on Sales/Purchases of Property

Source: Authors' computations.

A description of each of these taxes is given below.

Urban Immovable Property Tax: This tax is leviable in each province. In Punjab, it is chargeable under the Punjab Urban Immovable Property Tax Act of 1958, with amendments. The tax base is annual rental income, actual or imputed, with the exemption linked to the size of the plot. The tax rate is 20% on rented properties and 10% on owner-occupied properties. Both residential and commercial properties are covered by the Act.

Stamp Duty: This tax is leviable, for example, under the Sindh Stamp Act of 1899. It is at a fixed rate of 2% on the value of the property transacted.

Capital Value Tax on Property: This tax was introduced through the 18th Amendment to the Pakistan Constitution. Fiscal powers to collect this tax have been given to the provincial governments. It is leviable on the capital value of both residential and commercial properties at rates ranging from 1% to 3%.

Income Tax on Rents: This levy is covered by the Federal Income Tax Ordinance of 2001. Rental income from both residential and commercial properties from part of the tax base. The exemption limit is PKR 300,000 per annum. Thereafter, the tax slabs rise progressively, with the tax rates of 5% to 25%.

Capital Gains Tax on Property: This tax is also leviable under the Federal Income Tax Ordinance of 2000, and covers both residential and commercial properties. The tax base is the nominal increase in the value of property at the time of sale. There was an exemption earlier whereby if the transaction was within six years of the construction or earlier sale of the property. This facility has now been withdrawn in the Federal Budget of 2024-25. The tax is now leviable irrespective of the holding period at 15%.

Advance Tax on Sales/Purchase of Property: This is provided for under the withholding tax provisions of the Federal Income Tax Ordinance of 2001. The rate varies from 3% to 4% depending on the value of the property.

Level of Revenues

Latest estimates of revenue from the above taxes on property are for 2022-23. These are presented in Table 51.

Table 51: Revenues from Taxes on Property: 2020-21 and 2022-23
(PKR Billion)

	2020-21	2022-23	% of Total Tax Revenue***
PROVINCIAL		**68**	**10.5**
Urban Immovable Property Tax		22	
Stamp duty*		46	0.462
CVT on Property		0**	
FEDERAL		**202**	**2.8**
Income Tax on Rental Income		36	
Capital Gains Tax on Property		9	
Advance Tax on			
Sale of Property		72	
Purchases of Property		85	
TOTAL		**270**	**3.4**

*50% of revenue; **negligible; ***at different levels and consolidated
Source: Authors' computations.

Overall, taxes on property generated revenues of PKR 270 billion in 2022-23, by both the provincial and federal governments combined. The overall national tax collection during the year was PKR 7,169 billion. As such, the contribution by taxes on property was only 3.4%.

The very small generation of property-related revenues is further highlighted by the fact that these were equivalent to only 0.3% of the GDP. A comparison is made with the performance of selected developing countries in the level of revenue from property-related taxes in Table 52.

Table 52: Level of Revenues from Taxes on Property in Selected Developing
Countries (% of GDP)

Countries	Total Taxes on Property		Recurrent Taxes on Property* (% of GDP)
	% of GDP	% of Taxes	
Brazil	2.10	15.9	0.50
Indonesia	0.35	2.7	0.35
India	0.60	3.8	0.30
Morocco	1.76	5.7	0.35
Pakistan	**0.30**	**3.0**	**0.06**
Türkiye	1.20	4.2	0.90
Uzbekistan	1.27	4.0	0.70

Source: International Financial Statistics database, IMF.

Table 46 reveals considerable variation in the tax-to-GDP ratio of taxes on property. It ranges from a maximum of 2.1% of the GDP in Brazil to the lowest at 0.3% of the GDP in Pakistan. The table also reveals that the share of recurrent taxes, like the annual urban immovable property tax and the rental income tax, is relatively small in the majority of countries in the Table. Apparently, more reliance is placed on property transactions.

Elite Capture

The property-owning elite of Pakistan has played a fundamentally negative role in the development of property-related taxes in Pakistan. This includes the identification and implementation of the following measures by both the Federal and Provincial Assemblies and Governments:

(i)   Stopping the updating of Gross Annual Rental Values (GARVs) of properties for the determination of the tax liabilities under the Urban Immovable Property Tax Act. Consequently, in many of the metropolitan cities of Pakistan, like Karachi, the GARVs are out of date by over two to three decades.

(ii)   There has been no comprehensive survey of properties, both residential and commercial, in recent years by the relevant tax departments.

(iii)   The Capital Value Tax on Property, which is a proxy for the Wealth Tax, has been allocated to the provinces, like the agricultural income tax, with the expectation that provincial governments will not have the political will or capacity to collect these taxes.

(iv)   The tax rates on the rental income tax at the federal level have been kept low in relation to the rates on other income. The maximum tax rate is 25%, whereas the maximum tax rate on other incomes is 45%.

(v)   A special exemption was given on the capital gains tax on property if the holding period was less than six years. Fortunately, this exemption has now been withdrawn. However, instead of a progressive tax structure, capital gains on properties are subject to a flat rate of only 15%.

(vi)   Commercial properties have generally been outside the ambit of property taxation.

(vii)   No mechanisms have been formally established for cross-checking the reported property values, and corruption is rampant in the acceptance of declared values.

(viii) Large and high-value properties are frequently located in residential areas developed by the Defence Housing Authorities in the eight large cities of Pakistan. The urban immovable property tax is collected in these areas by the Cantonment Boards. These revenues are not shared with the municipal government, which is responsible for the construction and maintenance of connecting roads and bulk water supply.

Economic Impact of Low Taxation of Property

The economic impact of extreme under-taxation of property is becoming increasingly visible. The first major area of concern is the big change in the sectoral composition of investment by the private sector.

Table 53 indicates that there has been an alarming shift in private investment from industry to other sectors, especially real estate and other services. The absolute level of real private investment in the industrial sector in 2023-24 was even lower than the level in 1999-2000. Consequently, the share of industry in private investment has plunged from almost 27% to only 14%. After 2017-18, there has been a decline of over 52% in the level of private investment in the industrial sector.

The diversion is towards investment in real estate and other services. Cumulatively, the level of investment in real estate has increased since 1999-2000 by 150%, while it has actually declined in absolute terms in the industrial sector.

The explanation for this massive diversion of investment away from industry is due largely to the much higher tax burden on industry. Inclusive of all taxes, the previous chapter has revealed that the tax incidence on industry is five times the national average. It is substantially below the national average in the case of real estate.

The bottom line is that if this huge distortion persists in the tax system of Pakistan and with investment shifting to non-tradeable sectors, then export-led growth will be difficult to achieve. This is perhaps one of the strongest imperatives for reform of the tax system of Pakistan.

Table 53: Level of Private Investment by Sector (PKR Billion at 2015-16 prices)

	Agricul-ture	Share (%)	Industry	Share (%)	Real Estate	Share (%)	Other Services	Share (%)	Total Private Sector
1999-2000	612	34.8	474	26.9	280	15.9	394	22.4	1,760
2007-08	754	23.7	805	25.3	383	12.0	1238	38.9	3,180
2012-13	861	31.0	538	19.4	466	16.8	905	32.6	2,770
2017t18	988	35.4	969	25.0	563	14.5	1359	35.0	3,879
2022-23	1,052	32.1	598	18.0	673	20.5	956	29.2	3,279
2023-24	1,104	34.5	462	14.4	699	21.9	932	29.1	3,196

Source: National Income Accounts, PBS.

The explanation for this massive diversion of investment away from industry is due largely to the much higher tax burden on industry. Inclusive of all taxes, the previous chapter has revealed that the tax incidence on industry is five times the national average. It is substantially below the na-tional average in the case of real estate.

The bottom line is that if this huge distortion persists in the tax system of Pakistan and with in-vestment shifting to non-tradeable sectors, then export-led growth will be difficult to achieve. This is perhaps one of the strongest imperatives for reform of the tax system of Pakistan.

There is yet another reason why the boom in real estate has to be checked. The import of inputs is large, with no compensating exports from the output. The total import bill linked to residential and commercial construction was over USD 8 billion in 2023-24.

Estimate of Potential Revenue

The first estimate is for the urban immovable property tax. This is important as the revenues from this tax are shared with the municipal government and help in tackling urban poverty.

The steps to estimate the urban immovable property tax are as follows:

(i) Estimate of rental income, owner-occupied and rented, in residential real estate of PKR 3,705 billion in 2023-24 according to the National Income Accounts.

(ii)   Derivation of the urban share from the latest HIES at 46.3% of the nation-al rental income.

(iii)   Estimate that 77% of urban rental income accrues from owner-occupied housing units and 23% from rented units.

(iv)   Within rental income, the share of the top 40% was 69%. The corre-sponding share of the top 40% in owner-occupied housing was 68%. It was assumed that the remaining 60% were exempt.

(v)   The resulting estimates are as follows:

Table 54: Urban Immovable Property Tax

Type	Taxable Rental Income (PKR Billion)	Tax Rate (%)	Revenue Yield (PKR Billion)
Rented properties	272	20	54
Owner-occupied properties	911	10	91
TOTAL	1,183		145

Source: Authors' computations.

Figure 18: Estimation of the Tax Revenue from the Urban Immovable Property Tax: 2023-24
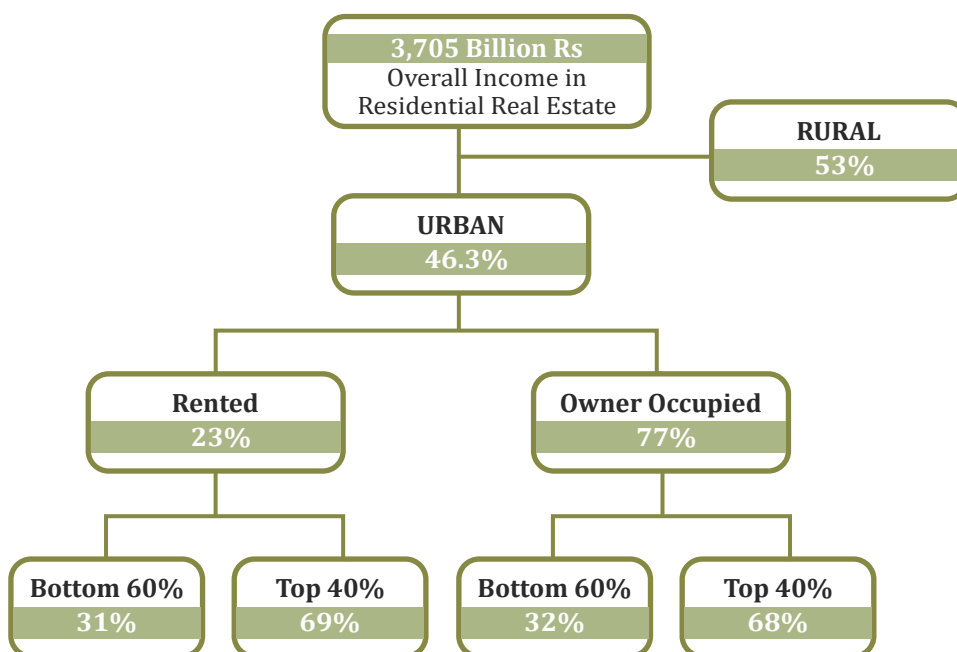
Source: National Income Account and HIES, PBS.

We turn next to the potential revenue from commercial properties. The Population and Housing Census of 2023 has given the number of commercial properties and residential properties in the urban areas of Pakistan. Based on the assumption that, on average, a commercial property has two times the rental value of a residential property, the tax base of commercial properties is estimated at 34% of the residential tax base. This implies that with the tax rate of 20%, the revenue yield should be PKR 80 billion.

Overall, the potential revenue yield from the urban immovable property tax is PKR 225 bil-lion, with the tax base of 2023-24.

The second estimate is for the rental income tax as follows:

(i)   The total value of actual rental income is estimated at 20% of the overall residential real estate income, according to the latest HIES. Both urban and rural rented properties are part of this tax base. As such, the estimated rental income from properties is PKR 740 billion.

(ii)   It is assumed conservatively that the tax base, beyond the exemption limit, is approximately two-thirds of the total actual rental income. This yields a tax base of close to PKR 500 billion.

(iii)   The marginal tax rate ranges from 5% to 25%. As such, with an average tax rate of 15%, the potential revenue in 2023-24 would have been PKR 75 billion.

The third estimate is for the Capital Value Tax on Property. The tax base currently exists only on properties transacted during a particular year. The estimation methodology is as follows:

(i)   It was assumed that 2% of the properties are traded annually.

(ii)   The ratio of capital value to rent of a property on average was 25.1

(iii)   Two-thirds of the value of traded properties was liable for CVT.

(iv)   The estimated value of taxable traded properties was approximately PKR 12,400 billion. With an average tax rate close to 2.5%, the potential revenue yield is close to PKR 300 billion.

The next estimate is for the potential revenue from the Capital Gains Tax on property:

(i)   It was assumed that, on average, a property is traded after 15 years.

(ii)   With an average inflation rate, 8% of the capital gains component in the trading value is 68%.

(iii) The revenue yield with a 15% tax rate is close to PKR 90 billion.

The final estimate is for the stamp duty on property transactions. If the under-reporting of value is 50% on average, then the potential yield from the stamp duty is PKR 70 billion.

Overall, a comparison is given below in Table 55 on the actual versus potential revenues from the various taxes on property.

Table 55: Actual versus Potential Tax Revenues from the various Taxes on Property: 2023-24 (PKR Billion)

	Actual Revenue*	Revenue Potential
PROVINCIAL	**81**	**355**
Urban Immovable Property Tax	26	225
Stamp Duties	55	80
Capital Value Tax on Property	N	50
FEDERAL	**263**	**465**
Income Tax on Rental Income	47	75
Capital Gains Tax on Property	12	90
Advance Tax on Sale/ Purchase of Property	204	300
TOTAL	**344**	**820**
% of GDP	**0.32**	**0.80**

*Based on projections from the levels in 2022-23 of 19% in the case of provincial taxes and 30% in federal taxes.
Source: Authors' computations.

The potential additional revenues in 2023-24 were PKR 476 billion. This would have raised the total tax revenue from taxes on property to 0.72% of the GDP, with a significant jump of 0.4% of the GDP. The precise set of reforms to realise this potential is described in Chapter 12.

10. THE INCIDENCE OF TAXES

The determination of the incidence of taxes is vital from the viewpoint of identifying the direction of future tax reforms in the country. There is a perception today in Pakistan that the overall bur-den of taxes is regressive because of the heavy reliance on indirect taxes. Therefore, the objective of the chapter is to quantify the incidence of taxes in terms of the burden placed on different in-come quintiles of the population in the country.

Review of Literature

The tax structure of Pakistan has been analysed by Kemal (1981), Alauddin & Raza (1981), Malik & Alli (1985), and Pasha (1995) to be regressive. This implies that the welfare of the poor is low-er as the incidence of tax falls more on them.

Malik & Saqib (1989) estimated the incidence of federal taxes, for the fiscal year 1978-79, on households belonging to different income brackets by covering all the major direct and indirect taxes. Effective tax rates on the commodities were slightly higher for the lower income group at 11.2% compared to the higher income group with the effective tax rate of 9.9%. The effective tax rate of direct taxes for the highest income group was 3.1% compared to zero for the lowest in-come group, making the overall effective rates slightly progressive.

A comprehensive incidence and distributional analysis of the GST in Pakistan was provided by Refaqat (2003). She also analysed households ordered by income and used HIES to estimate ef-fective tax rates for a detailed list of consumption items by expenditure deciles. She used house-hold annual consumption as a proxy measure for lifetime income. Based on lifetime income analysis with an effective tax rate of approximately 3.5% to 4.2%, she found that GST was somewhat progressive. Nevertheless, the annual incidence was regressive when households were sorted by income.

There is literature available that finds the overall tax structure to be rather progressive in Paki-stan. Martinez-Vazquez (2006) tabulated income and consumption from HIES. They estimated the federal taxes to be progressive, as 40% of the burden was borne by the highest income quin-tile, although their income share was higher.

Wahid & Wallace (2008) have analysed the incidence of taxes using HIES data for 2004-05 to investigate the incidence of direct and indirect taxes. The per-capita effective tax rate of the direct tax was 2.3% for the bottom decile compared to 6.7% for the highest decile. Moreover, it was 5.9% and 6.8% for the lowest and highest deciles, respectively, for indirect taxes. Their findings suggest that consumption taxes are distributed in a relatively more proportional manner, with households across the income distribution having a similar tax burden. However, direct taxes are more progressive, making the overall tax structure slightly more progressive.

Refaqat (2008) measured the social incidence of indirect taxes in Pakistan as a result of tax re-form processes during 1999-2001, focusing on indirect taxes. In this regard, the results show that a movement from dependence on trade tax revenue to GST revenues has made the tax system more progressive.

Jamal & Javed (2013) evaluated GST incidence and progressivity by applying the consumption data to assess the consumption tax structure by using the Kakwani index, which is used to measure tax progressivity. The results were derived at the national, regional, and provincial levels for three commodity groups, including food, non-durable, and durable expenditures. Their results showed that the overall incidence of GST was progressive, with the incidence of overall GST on the lowest decile being 4.41% compared to 5.49% for the upper decile for the year 2010-11. The GST in durable goods turned out to be more progressive, with an effective tax rate of 2.69% on the lowest decile compared to 4.01% on the upper decile. However, the GST in the food group was regressive, with a 1.66% incidence on the lowest and 1.02% on the upper decile. The relative intensity in terms of magnitude of the Kakwani index also confirmed the similar pattern of the GST.

Ara & Ahmad (2022) analysed the tax incidence of indirect taxes. They found that the combined incidence of the three major components of indirect taxes on essential items was 4.3 %, while the combined incidence on non-essential items was 2.8%. The pattern of incidence of each tax was regressive across all household deciles for essential food items, which account for a significant portion of the expenditures of impoverished households. However, the bottom 40% of households had a proportional pattern, while the top 60% had a progressive pattern.

In comparison to Pakistan, in the Indian taxation system, as highlighted by Toye (1976), the inci-dence of indirect taxes, particularly consumption taxes, appeared to be regressive. On the other hand, there is literature that supports the view that taxation in India is more progressive, as suggested by Ahuja

(1962). Aggarwal (1995) estimated the effective tax rates of major indirect taxes in India for the fiscal year 1989-90. The combined effective tax rate for most essential commodities ranged from approximately 3% to 4%. In contrast, luxury items, such as mineral water and tobacco products, often had much higher effective rates exceeding 30% implying some progres-sivity in indirect taxation.

Incidence of the Income Tax

The income tax is generally considered the most progressive tax in any tax system. The methodology applied here is based on the assumption that there is minimal shifting of direct taxes. In effect, the nominal and effective incidence are assumed to be the same.

The analysis of the incidence of income tax is based on the categorisation of the tax by the FBR. Seven major sources of income tax were identified, as shown in Table 56. These include advance payments of the corporate income tax, the tax on salaries, fixed tax on interest income from bank deposits and securities, fixed tax on dividends, withholding advance taxes on the sale of goods, contracts, electricity, telephone bills, and imports. These levies contributed 84% of the revenue from the income tax.

Different bases were used to allocate the tax payments among the income quantiles. For example, it was assumed that the burden of the corporate income tax falls on the owners of the equity of corporate entities. As such, the bulk of the incidence is likely to fall on the top income quantile. This is also the case with the tax on dividends.

Table 56 reveals that most of the components of the income tax were progressive. The solitary exception is the withholding tax on imports. Also, the withholding tax on electricity and telephone bills was less progressive.

Overall, the estimates in Table 56 reveal the strong progressivity of the income tax in Pakistan. The top quantile bore over 65% of the burden of the tax. The incidence of income tax on the lowest income quantile was 4%. Ideally, of course, both the fifth and fourth income quintiles should be completely exempted from the income tax.

Table 56: Overall Incidence and of Different Components of Income Tax: 2022-23

Item	% of Revenue	Basic for Allocation of Incidence	Share of Incidence (Quintile)						Type*
			Bottom	4th	3rd	2nd	Top	Total	
1. Advance corporate income tax	35.8	Ownership of equity	0	0	0	10	90	100	P
2. Contracts withholding tax	13.0								
2.1. Sales of goods 2.2. Contracts		Sale of goods housing rents	7.0	10.3	14.0	20.0	48.7	100	P
3. Salaries	8.4	Wages above the exemption limit	0	0	0	20	80	100	P
4. Bank interest and securities	9.6	Access to banking + receipts	6.1	10.2	14.3	21.3	48.1	100	P
5. Dividends	2.7	Ownership of equity	0	0	0	10	90	100	P
6. Electricity and telephone bills	5.6	Expenditure	6.7	10.3	14.8	20.2	48.0	100	P
7. Imports WT	8.9	Expenditure on imports	10.2	13.3	16.5	20.0	40.0	100	R
8. Others	16.0	Income	8.6	12.4	15.3	20.5	43.2	100	N
TOTAL	100.0	Overall Incidence	4.2	6.1	7.9	16.2	65.6	100	P**

*P = Progressive, N = Neutral, R = Regressive; **The Gini Coefficient of share in revenues versus share in income is 0.247

Source: Authors' computations.

Incidence of Indirect Taxes

The incidence of indirect taxes was derived on the assumption that there is full forward shifting of such taxes. As such, the distribution of the burden among quintiles depends on the consumption patterns. In the case of taxes on intermediate inputs or capital goods, the burden is placed on the goods produced with these inputs.

Sales Tax (Domestic)

Table 57 gives the incidence of the sales tax on domestic goods. The disaggregation includes eight major goods from which over 67% of the revenue was generated. These are electricity, POL products, sugar, natural gas, cotton yarn, cement, beverages and cigarettes. Appropriate tax bases of consumption expenditure were chosen for the distribution of the tax burden among income quintiles.

Four of the items yielding relatively large sales tax revenues appeared to have progressive tax incidence. These are electricity, natural gas, cement, and beverages. The other four items with a regressive incidence are POL products, sugar, cotton yarn and cigarettes.

Overall, the incidence of the sales tax (domestic) was regressive. Different measures of incidence are derived for each tax in Section 10.4.

Table 57: Overall Incidence and of Different Items in the Sales Tax (Domestic): 2022-23

Item	% of Revenue	Basic for Allocation of Incidence (*Per-Capita Expenditure*)	Share of Incidence (Quintile)						Type *
			Bottom	4th	3rd	2nd	Top	Total	
1. Electricity	22.9	Electricity bill	6.5	10.3	15.2	21.6	46.5	**100.0**	P
2. POL Products	15.6	Transport cost – direct and indirect	8.8	12.7	16.2	21.6	40.7	**100.0**	R
3. S*ugar	7.8	Sugar	17.3	19.1	20.4	21.0	22.2	**100.0**	R
4. Natural gas	4.9	Gas bill	4.1	9.1	15.0	25.0	46.8	**100.0**	P
5. Cotton yarn	4.9	Clothing	10.7	14.4	17.3	21.5	36.1	**100.0**	R

Item	% of Revenue	Basic for Allocation of Incidence (*Per-Capita Expenditure*)	Share of Incidence (Quintile)						Type*
			Bottom	4th	3rd	2nd	Top	Total	
6. Cement	4.2	Imputed rent of owner-occupied housing	5.6	8.5	12.3	18.8	54.8	**100.0**	P
7. Beverages	3.5	Beverages	6.0	9.8	14.4	21.8	48.0	**100.0**	P
8. Cigarettes	3.5	Cigarettes	12.0	15.6	18.4	22.2	31.8	**100.0**	R
9. Others	32.7	Other expenditures	7.6	12.6	14.3	20.0	45.5	**100.0**	P
TOTAL	**32.7**		**8.0**	**12.3**	**15.6**	**21.2**	**42.8**	**100.0**	**R***

*P = Progressive, R = Regressive; **The Gini coefficient of share in revenues versus share in income is -0.023
Source: Authors' computations.

Sales Tax (Imported)

Turning to the incidence of the sales tax (imported), eleven imports have been identified in Table 58, which collectively contributed more than 66% of the revenues. The remaining 34% was distributed among a large number of imported items, with a small revenue contribution by each item.

Table 58: Overall Incidence and of Different Items in the Sales Tax (Imported): 2022-23

Item	% of Revenue	Basic for Allocation of Incidence (*Per-Capita Expenditure*)	Share of Incidence (%)						Type*
			Bottom	4th	3rd	2nd	Top	Total	
1. POL Products	18.8	Transport Cost, Direct & Indirect	8.8	12.7	16.2	21.6	40.7	**100.0**	R
2. Edible oil	10.4	Vegetable Ghee	19.4	21.8	21.9	20.6	16.3	**100.0**	R
3. Iron & steel	7.7	Imputed Value of 0-0 Property	5.6	8.5	12.3	18.7	54.9	**100.0**	P
4. Plastics, resins	6.5	Beverages	6.0	9.8	14.4	21.8	48.0	**100.0**	P

Item	% of Revenue	Basic for Allocation of Incidence (*Per-Capita Expenditure*)	Share of Incidence (%)						Type *
			Bottom	4th	3rd	2nd	Top	Total	
5. Cotton + man-made filaments & fabrics	6.4	Clothing	10.8	14.4	17.3	21.5	36.0	**100.0**	**R**
6. Organic chemicals	4.7	Medicines	10.0	13.2	16.8	22.1	37.9	**100.0**	**R**
7. Electrical goods	4.0	Electricity	6.5	10.3	15.1	21.6	46.5	**100.0**	**P**
8. Oil seeds	3.0	Livestock Products	8.8	13.6	17.0	23.5	36.2	**100.0**	**R**
9. Tea and coffee	1.9	Tea and Coffee	14.7	17.8	19.6	21.4	26.5	**100.0**	**R**
10. Paper & paperboard	1.4	Stationery, books	8.2	12.6	16.7	22.0	40.4	**100.0**	**R**
11. Tanning or dying extracts	1.4	Footwear	11.3	15.2	17.7	22.0	33.8	**100.0**	**R**
12. Others	33.8	Other expenditures	9.4	12.5	15.6	20.5	42.0	**100.0**	**R**
TOTAL	**100.0**		**9.5**	**12.6**	**16.0**	**21.1**	**40.8**	**100.0**	**R****

*P = Progressive, R = Regressive. **The Gini Coefficient is -0.026.
Source: Authors' computations.

The striking finding is that eight out of the eleven items appeared to have a regressive incidence. Among the major revenue spinners are POL products, edible oil, and inputs into the textile sector. The three items with a progressive burden were iron and steel, plastics and resins, and electrical goods. Given the high number of items imported with a regressive sales tax incidence, it is not surprising that the overall incidence of the sales tax on imports is significantly regressive.

Customs Duty

There is a heavy concentration of revenues from the customs duty on two groups, namely, POL products and vehicles. Together, they contributed over 40% to the total customs duty revenues. The other three groups that had a significant share in revenues were iron and steel, edible oil and electrical goods. The estimates of incidence by income quintile are presented in Table 59.

Table 59: Overall Incidence and of Different Items in the
Customs Duty: 2022-23

Item	% of Reve-nue	Basic for Al-location of Incidence (*Per-Capita Expenditure*)	Share of Incidence (%)						Type *
			Bot-tom	4th	3rd	2nd	Top	Total	
1. POL Prod-ucts	31.0	Transport cost – direct & indirect	8.8	12.7	16.2	21.6	40.7	**100.0**	**R**
2. Vehicles	9.4	Assumed	0	0	5	20	75	**100.0**	**P**
3. Iron & steel	5.6	Imputed value of 0-0 property	5.6	8.5	12.3	18.7	54.9	**100.0**	**P**
4. Edible oil	5.2	Vegetable ghee	19.4	21.8	21.9	20.6	16.3	**100.0**	**R**
5. Electrical goods	4.1	Electricity bill	6.5	10.3	15.1	21.6	46.5	**100.0**	**R**
6. Others	44.7	Other ex-penditures	7.6	12.6	14.3	20.0	45.5	**100.0**	**P**
TOTAL	**100.0**		**7.6**	**11.6**	**14.4**	**20.6**	**45.8**	**100.0**	**p**

*P = Progressive, R = Regressive. **The Gini Coefficient is 0.033
Source: Authors' computations.

Excise Duty

Excise duty is the smallest indirect tax at the federal level. Six items contribute 84% to the reve-nue, as shown in Table 60. These are cigarettes, cement, beverages, inland and external travel by air and autos. The incidence of these five items is progressive. The notable exception is cigarettes, with the justification on health grounds.

Overall, given the dominance of revenues from items with progressive incidence, the overall inci-dence of the tax is progressive.

Table 60: Overall Incidence and of Different Items in the Excise Duty: 2022-23)

Item	% of Reve-nue	Basic for Al-location of Incidence (*Per-Capita Expenditure*)	Share of Incidence (%)						Type *
			Bot-tom	4th	3rd	2nd	Top	Total	
1. Cigarettes	39.6	Cigarettes	12.0	15.6	18.4	22.2	31.8	**100.0**	**R**
2. Cement	18.5	Imputed Rent of 0-0 Hous-ing	5.6	8.5	12.3	18.8	54.8	**100.0**	P
3. Beverages	8.7	Beverages	6.0	9.8	14.4	21.8	48.0	**100.0**	P
4. Inland Travel by Air	6.5	Assumed	0	0	10	30	60	**100.0**	P
5. External Travel by Air	4.8	Assumed	0	0	0	10	90	**100.0**	P
6. Autos	5.9	Assumed	0	0	0	10	90	**100.0**	P
7. Others	16.0	Other Ex-penditure	7.6	12.6	14.3	20.0	45.5	**100.0**	P
TOTAL	**100.0**		**7.6**	**10.7**	**13.5**	**20.5**	**47.7**	**100.0**	**P**

*P = Progressive, R = Regressive, **The Gini Coefficient is 0.054.

Source: Authors' computations.

Overall Incidence of Taxes

The first aggregation is of the indirect taxes in Table 61. The perhaps not-so-surprising finding is the somewhat regressive nature of these taxes, individually and combined.

However, the regressivity is mild in nature. This is indicated by the small differences between the shares in household income and in the incidence of the taxes of each income quintile.

Table 61: Tax Burden of Indirect Taxes

	Quintiles *(PKR Billion)*					
	Bottom	**4ᵗʰ**	**3ʳᵈ**	**2ⁿᵈ**	**Top**	**Total**
Sales Tax	*237*	*323*	*414*	*547*	*1048*	*2569*
Domestic	86	122	159	211	397	**975**
Imported	151	201	255	336	651	**1594**
Customs duty	*71*	*108*	*134*	*192*	*427*	*932*
Excise duty	*27*	*38*	*48*	*73*	*170*	*356*
Petroleum levy	*50*	*74*	*93*	*126*	*237*	*580*
Total burden of indirect taxes*	**385**	**543**	**689**	**938**	**1882**	**4437**
% Share	**8.7**	**12.2**	**15.5**	**21.2**	**42.4**	**100**
% Share in household income	*8.6*	*12.4*	*15.3*	*20.5*	*43.2*	*100.0*

The Gini Coefficient is **-0.005.*
Source: Authors' computations.

Turning finally to the overall incidence of federal taxes, the estimates are presented in Table 62. Given the marked progressivity of the income tax, it is not surprising that the overall incidence of federal taxes in 2022-23 was progressive.

Table 62: Overall Incidence of Federal Taxes

	Quintiles *(PKR Billion)*					
	Bottom	**4ᵗʰ**	**3ʳᵈ**	**2ⁿᵈ**	**Top**	**Total**
Direct / Income Tax	136	199	259	530	2146	3270
Indirect Taxes	385	543	689	938	1882	4437
TOTAL	**521**	**742**	**948**	**1468**	**4028**	**7707**
Share (%)*	*6.8*	*9.6*	*12.3*	*19.0*	*52.3*	*100.0*
% Share in HHY	*8.6*	*12.4*	*15.3*	*20.5*	*43.2*	*100.0*

*The Gini Coefficient is 0.101, implying progressivity.
Source: Authors' computations.

Two measures of the nature of incidence were used to derive the extent of progressivity or regressivity of taxes. These are the Gini Coefficient and the Pashum Ratio. The estimates are presented in Table 63. A positive magnitude indicates progressivity, and a negative magnitude reveals regressivity of the tax. The absolute magnitude indicates the extent of regressivity or progressivity.

*Table 63: Measures of Extent of Progressivity or Regressivity of
Direct, Indirect, and Total Taxes*

	Gini Coefficient	Pashum Ratio	Type
Direct / Income Tax	0.246	3.333	Significantly Progressive
Indirect Taxes	-0.018	-0.004	Mildly Regressive
Overall Federal Taxes	0.109	0.016	Mildly Progressive

Source: Authors' computations.

The measures of the extent of progressivity of direct, indirect and all taxes reveal that the overall tax system at the Federal level in 2022-23 was mildly progressive. The significant progressivity of the income tax is largely neutralised by the regressivity of the indirect taxes.

The bottom line for the agenda for tax reforms is to reduce the regressivity of indirect taxes and bolster the progressivity of direct taxes. The disaggregated analysis of each tax in the above sec-tions gives, in specific terms, the appropriate directions for change.

Degree of Progressivity of the Tax System

The low degree of progressivity of the tax system of Pakistan, with respect to the incidence on different income quintiles, has been revealed as relatively low, with a Gini coefficient of only 0.109. How does this degree of progressivity compare with the tax progressivity in other coun-tries, especially those in South and East Asia? This analysis is undertaken below.

Estimates of the Gini coefficient of the tax incidence by income quintiles are generally not availa-ble for many countries for recent years. Therefore, proxies were used to assess the likely progressivity of the tax system in a country.

The indicators chosen are as follows:

- Share in total revenues of direct taxes
- Share in total revenues of indirect taxes
- Maximum income tax rate
- Corporate income tax rate
- Sales tax rate

An index of tax progressivity was constructed based on these indicators. The methodology used is described in Technical Annexure-1.

The magnitudes of the indicators are presented in Table 64. The resulting estimates of the Index of Tax Progressivity are highlighted in Table 58 for the selected countries.

Table 64: Index of Tax Progressivity of Selected Countries

Ranking	Country	Index of Tax Progressivity (0 < I < 1)
1	Malaysia	0.556
2	India	0.538
3	Indonesia	0.487
4	China	0.480
5	Philippines	0.457
6	Thailand	0.453
7	**PAKISTAN**	**0.445**
8	Bangladesh	0.357
9	Mongolia	0.307
10	Sri Lanka	0.272

Source: Authors' computations.

Table 65 reveals that East Asian countries generally have a more progressive system. Within South Asia, only India appears to be ranked high in tax progressivity. The country with the highest index value was Malaysia. The share of income tax revenues in total revenues was the highest at 47.3% and it had the lowest sales tax rate at 10%. The lowest index value is for Sri Lanka. The share of income tax in total revenues was very low at 26.5% and the highest marginal income tax rate is only 18%.

Pakistan is ranked seventh on the Index of Tax Progressivity among the ten selected coun-tries. This is partly due to a relatively low share of income tax in total revenues and a relatively high sales tax rate of 18%, which tends to increase the regressivity of the tax system.

Table 65: Indicators of the Progressivity of the Tax System in Selected Countries

Country	Max Personal Income Tax Rate (%)	Corporate Tax Rate (%)	Sales Tax Rate (%)	Share in Total		Revenues (%)		Index of Progressivity
				Income Tax	Sales Tax	Customs Duty	Sales Tax + Customs Duty	
Bangladesh	25	27.5	15	25.8	43.2	9.4	52.6	0.357
China	45	25	13	36.3	52.2	3.1	55.3	0.480
India	42.75	35	18	45.6	40.8	5.0	45.8	0.538
Indonesia	35	22	11	37.9	34.7	2.5	37.2	0.487
Malaysia	30	24	10	47.3	19.5	1.5	21.0	0.556
Mongolia	20	25	10	20.6	38.6	12.8	51.4	0.307
Pakistan	**35**	**29**	**18**	**34.0**	**31.2**	**9.7**	**40.9**	**0.445**
Philippines	35	25	12	34.9	25.9	26.8	52.7	0.457
Sri Lanka	18	30	18	26.5	43.4	19.5	62.9	0.272
Thailand	35	20	7	35.5	43.9	4.0	47.9	0.453
Maximum	60	46.6	23.9	63.1			83.8	
Minimum	12	13.3	4.7	13.7			14.0	
Max – Min	48	33.3	19.2	49.4			68.8	

Data source: World Development Indicators (WDI) and Trading Economics.

Table 66: Index Value of the Progressivity of the Tax System in Selected Countries

Country	Max Personal Income Tax Rate (Index)	Corporate Tax Rate (Index)	Sales Tax Rate (Index)	Share in Total Revenues (%)		Index of Progressivity
				Income Tax (Index)	Sales Tax + Customs Duty (Index)	
Bangladesh	0.271	0.426	0.463	0.244	0.447	0.357
China	0.687	0.351	0.568	0.457	0.408	0.480
India	0.641	0.651	0.307	0.646	0.544	0.538
Indonesia	0.479	0.261	0.672	0.490	0.668	0.487
Malaysia	0.375	0.321	0.723	0.680	0.900	0.556
Mongolia	0.167	0.351	0.723	0.140	0.464	0.307
Pakistan	**0.479**	**0.471**	**0.307**	**0.410**	**0.614**	**0.445**
Philippines	0.479	0.351	0.619	0.429	0.445	0.457
Sri Lanka	0.125	0.502	0.307	0.259	0.299	0.272
Thailand	0.479	0.201	0.881	0.441	0.514	0.453

Source: World Development Indicators (WDI) and Trading Economics.

Sectoral Incidence of Taxes

An attempt was made to estimate the sectoral incidence of taxes, both direct and indirect, for 2022-23. This enables the identification of sectors that are relatively overtaxed, which has re-duced investment in and growth of these sectors. In addition, the sectoral tax bases that have not been adequately exploited also become visible.

Table 67 identifies the major tax bases that currently yield revenues across different sectors. The underlying methodology assumes that taxing inputs is equivalent to taxing outputs in sectors where those inputs are used to produce them. For example, taxes on sales of petroleum products fall primarily on the transportation sector.

Table 67: Major Tax Bases in the Sectors

Sector	Direct Taxes	Indirect Taxes
Industry		
Mining & Quarrying	Corporate Profits	
Large-Scale Manufacturing	Corporate Profits Dividends, Salaries	Output of Major Industries
Electricity and Gas	AT* on Electricity Bills	Electricity and Gas Sales
Construction	AT on Contracts	Cement, Iron and Steel
Services		
Wholesale & Retail Trade	AT on Sales AT on Imports	
Transportation & Storage		Petroleum Products Vehicles
Information and Communication		Telephones
Finance & Insurance	Corporate Profits AT on Interest Income from Deposits	
Real Estate	Rental Income AT on Purchase/Sale of Properties	
Public Administration and Social Security	Salaries	
Private Services	AT on Personal Income from Services Provided	

*AT = Advance tax in the income tax regime
Source: Authors' computations.

The advance/withholding tax regime generates revenues in sectors like electricity and gas, con-struction, wholesale and retail trade, finance and insurance, and real estate. The larger indirect tax bases are in the large-scale manufacturing sector and in the construction and transport sec-tors.

Based on the application of the above methodology, the nominal sectoral incidence of different taxes is derived in Table 68. The incidence of taxes on agriculture was very low, especially in the absence of significant collection from the agricultural income tax. Overall, it is estimated that in 2022-23, 50% of the tax revenues were generated from the industrial sector. This is the relatively overtaxed sector, as its share in the GDP is less than 18%.

Table 68: Sectoral Distribution of Federal Tax Revenues: 2022-23

	Income Tax	Customs Duty	Excise Duty	Sales Tax (Impor-ted)	Sales Tax (Dome-stic)	Petrole-um Levy	Total
Revenues *(PKR Billion)*	3272	932	370	1616	975	580	7,745
SECTOR							
AGRICULTURE	**0.0**	**3.1**	**0.0**	**3.0**	**2.0**	**0.0**	**108**
INDUSTRY	**32.8**	**55.3**	**82.8**	**64.5**	**84.1**	**25.3**	**3,893**
Mining & Quarrying	4.8	-	-	-	-	-	157
Manufacturing	18.5	46.7	64.3	50.8	60.4	25.3	2,824
Electricity & Gas	3.6	4.1	-	4.0	16.2	-	379
Construction	5.9	4.5	18.5	9.7	7.5	-	533
SERVICES	**67.2**	**41.6**	**17.2**	**32.5**	**13.9**	**74.7**	**3,744**
Wholesale & Retail Trade	16.8	9.1	-	15.7	2.2	-	910
Transport	1.6	30.5	17.2	14.0	11.7	74.7	1,174
Information & Communication	2.9	2.0	-	2.8	-	-	159
Finance & Insurance	28.0	-	-	-	-	-	916
Real Estate	6.5	-	-	-	-	-	213
Public Administration	6.6	-	-	-	-	-	216
Comm, Social & Private Services	4.8	-	-	-	-	-	157
							3,745
TOTAL	**100.0**	**100.**	**100.**	**100.0**	**100.**	**100.0**	

Source: Authors' computations.

Table 69 presents the sectoral incidence of the income tax. The effective rate was the highest in the industrial sector at 5.79% of the value added in the sector. The corresponding magnitude for the services sector was 4.82%. There is substantial variation in the incidence of the income tax at the sub-sectoral level. The highest incidence of over 27% was in the finance and insurance sec-tor, followed by the mining and quarrying sector, with an exceptionally large corporate income tax payment by the Oil and Gas Development Corporation (OGDC).

Table 69: Sectoral Incidence of the Income Tax

Sector	Share of Income Tax Revenues	Share of the GDP	Relative Incidence (Share of Revenues/ Share of GDP)	Effective Tax Rate (%)
AGRICULTURE	**0.0**	**24.6**	**0.0**	**0.00**
INDUSTRY	**32.8**	**21.8**	**1.50**	**5.79**
Mining and Quarrying	4.8	2.2	2.18	8.41
Manufacturing	18.5	14.3	1.29	4.98
Electricity and Gas	3.6	2.5	1.44	5.56
Construction	5.9	2.8	2.11	8.14
SERVICES	**67.2**	**53.6**	**1.25**	**4.82**
Wholesale & Retail Trade	16.8	21.4	0.78	3.01
Transport & Storage	1.6	5.4	0.30	1.16
Information & Communication	2.9	1.6	1.81	6.99
Finance and Insurance	28.0	4.0	7.00	27.02
Real Estate	6.5	4.2	1.55	5.98
Public Administration and Social Security	6.6	4.4	1.50	5.79
Comm, Social and Private Services	4.8	12.6	0.38	1.47
TOTAL	**100.0**	**100.0**	**1.00**	**3.86**

Source: Authors' computations.

Sub-sectors with a large share of informal activities are characterised by a low incidence of the income tax. It is relatively low in wholesale and retail trade, transportation and private services. Turning to the sub-sectoral incidence of indirect taxes. As shown in Table 70, it was substantially higher in the industrial sector at 15.3% and much lower in the services sector at only 3.38%. However, inclusion of the sales tax on services could increase the incidence somewhat.

The highest incidence at the sub-sectoral level is in the transportation sector due to the indirect taxes on petroleum products and vehicles. There is also a relatively high incidence of indirect taxes on manufacturing, electricity and gas and the construction sub-sectors.

Overall, based on the above findings, the Agenda of Tax Reforms must focus on broadening the tax base to the hitherto undertaxed sub-sectors and provide some relief, wherever possible, to the overtaxed sub-sectors.

Table 70: Sectoral Incidence of Indirect Taxes

	Revenue from Indirect Taxes (PKR Billion)	Share of Indirect Tax Revenues (%)	Share of GDP (%)	Relative Incidence of Indirect Taxes (Share of Revenues / Share of GDP)	Effective Tax Rate (%)
AGRICULTURE	**108**	**2.4**	**24.6**	**0.10**	**0.53**
INDUSTRY	**2,830**	**63.6**	**21.8**	**2.90**	**15.34**
Mining & Quarrying	0	0.0	2.2	0.0	0.0
Manufacturing	2,230	49.9	14.3	3.49	18.46
Electricity and Gas	261	5.8	2.5	2.32	12.28
Construction	339	7.6	2.8	2.71	14.33
SERVICES	**1,555**	**34.3**	**53.6**	**0.64**	**3.38**
Wholesale & Retail Trade	360	8.0	21.4	0.37	1.96
Transport & Storage	1,132	25.3	5.4	4.68	24.76
Information & Communication	64	1.4	1.6	0.86	4.54
Finance & Insurance	0	0.0	4.0	0.00	0.00
Real Estate	0	0.00	4.2	0.00	0.00
Public Administration and Social Security	0	0.0	4.4	0.00	0.00
Comm, Social & Private Services	0	0.0	12.6	0.00	0.00
TOTAL	**4,473**	**100.0**	**100.0**	**1.00**	**5.29**

Source: Authors' computations.

11. TAXATION MEASURES IN THE 2024-25 FEDERAL BUDGET

The federal budget of 2024-25 is extraordinarily ambitious in terms of the targeted growth rate in the FBR revenues. The FBR revenues are expected to increase from PKR 9,310 billion in 2023-24 to PKR 12,970 billion, yielding a growth rate of over 39%.

The objective of this chapter is to identify the multitude of taxation proposals in the budget and the determine the feasibility of the revenue target being achieved. This is of special importance because the new IMF program has identified the level of FBR revenues as one of the key targets for 2024-25.

Modifications of Revenue Targets

A serious error was made by the Federal Ministry of Finance in the estimation of likely revenues in 2023-24 from individual FBR taxes in early June at the time of presentation of the 2024-25 an-nual federal budget. The divergence between the revised estimates and the actual magnitudes is shown in Table 71.

There were large divergences between the actual magnitudes from the revised estimates. In the case of income tax, there was an understatement of 21.7%, while in the case of the other three taxes, there was a combined overstatement of 15.7%. The targets for 2024-25 were based on these wrong estimates for 2023-24.

Table 71: Revised Revenue Targets for FBR Taxes: 2024-25 (PKR Billion)

	2023-24		2024-25		2024-25	
	Revised Estimates	Actual	Original Target	Growth Rate (%)	Modified Target	Growth Rate (%)
Income Tax	3,721	4,530	5,512	48.1	6,504	43.6
Sales Tax	3,607	3,099	4,919	36.4	4,227	36.4
Customs Duty	1,324	1,104	1,591	20.2	1,327	20.2
Excise Duty	600	577	948	58.0	912	58.0
TOTAL	**9,252**	**9,310**	**12,970**	**39.3**	**12,970**	**39.3**

Source: Authors' computations.

The modified targets for 2024-25 are also presented in Table 64. The overall FBR revenue target in 2024-25 of PKR 12,970 billion remains unchanged. The target for income tax has been en-hanced, while targets for the other three taxes have been reduced in line with the lower actual revenues in 2023-24. The targeted growth rates, however, have remained largely unchanged. The IMF will also need to incorporate these modified individual FBR tax revenue targets for 2024-25.

Major Taxation Proposals and Revenues

The IMF has classified the taxation proposals into different categories, presumably with the agreement of the. We present below the groups of taxation proposals by tax in Table 72.

Table 72: Major Taxation Proposals in 2024-25 and Expected Revenue

	Expected Revenues (Billion PKR)
1. INCOME TAX	994
Personal and Corporate Income Tax	357
• Bringing exporters into the regular income tax regime • Reducing the salary income tax slabs to five • Raising the maximum tax rate for non-salary income to 45%	
Enhancing Withholding Taxes and Direct Taxation	240
• Raising withholding tax for non-filers • Increasing taxes on property transactions with progressive rates • Eliminating reduced rates for capital gains • Increasing the motor vehicle advance tax • Increase in tax on dividends	
Improving Compliance Measures and Revenue Administration Measures	347
Bringing Retailers into the Tax Net through the Tajir Dost Scheme	50
2. SALES TAX	
Transforming the Sales Tax	286
• Moving some zero-rated products to the standard rate • Some education, health and agricultural inputs to be taxed at 5% or 10% • End of the Preferential Export Scheme	

	Expected Revenues (Billion PKR)
3. **CUSTOMS DUTY**	**65**
• Rationalising tariffs and eliminating concessions on import duty	
4. **EXCISE DUTY**	**413**
• Levy of FED on property sales and sugar • Harmonising the FED on locally manufactured and imported cigarettes • Increasing the FED on Cement and airline tickets	
TOTAL REVENUE FROM PROPOSALS IN 2024-25	**1,758**

Source: Authors' computations.

The estimate of revenue generation from taxation proposals is very large at PKR 1,758 billion, equivalent to 1.4% of the projected GDP in 2024-25. Over 56% of the additional revenues are anticipated from the taxation proposals in income tax. Some taxation proposals in indirect taxes are very regressive. These relate to taxation of education, health, medicines, sugar, etc.

An analysis was undertaken of the estimated revenues from the various taxation proposals. There is an upward bias in the magnitudes, especially in the following cases:

- Bringing exporters into the regular income tax regime

- Raising salary income and non-salary income tax rates

- Improving compliance and revenue administration measures

- Revenues from the Tajir Dost Scheme

- Taxation of agricultural inputs like fertiliser and pesticides, due to delays in implementation

- FED harmonisation on cigarettes is leading to more tax evasion

Overall, there is an optimistic estimate of additional revenues of PKR 1,000 billion from the taxation proposals in the 2024-25 Federal Budget, implying a shortfall of over PKR 750 billion, equivalent to 0.6% of the GDP.

Outlook for FBR Revenues in 2024-25

The IMF Program has also set quarterly targets for FBR revenues in 2024-25 in the list of indicative targets. These are shown in Table 73.

Table 73: Quarterly Projection of FBR Revenues in 2024-25 (PKR Billion)

	2023-24 (Actual)	2024-25 (Target)	Growth Rate (%)
QUARTER			
July – September	2,042	2,652	29.9
October – December	2,428	3,357	38.2
January – March	2,242	3,159	41.0
April – June	2,600	3,745	44.0
TOTAL	**9,311**	**12,913**	**38.7**

Source: Authors' computations.

Significantly, the IMF expects an acceleration in the quarter-wise revenue growth rates. The target growth rate in the first quarter is close to 30%. The targets may be missed due to low growth in the tax base, especially due to a negative 1% growth in the industrial sector and restricted growth of imports. Nevertheless, the rate of 30% growth achieved in revenues is a good performance. The target for growth rates in revenues rises to 44% by the fourth quarter. Such an acceleration in the growth rate of revenues during a financial year has generally not been seen before.

The outcome for the first quarter of FBR revenues has been reported by the Ministry of Finance. The revenues of individual taxes are given in Table 74.

Table 74: Growth in FBR Revenues in the First Quarter of 2024-25 (Billion PKR)

	July – September		Growth Rate (%)	Annual Target Growth Rate (%)
	2023-24	2024-25		
Income Tax	935	1230	31.6	43.6
Sales Tax	727	905	24.5	36.4
Customs Duty	252	276	9.9	20.2
Excise Duty	128	151	18.0	58.0
Petroleum Levy	222	262	18.0	26.5
TOTAL			**25.5**	**34.3**

Source: Authors' computations.

There has been a significant shortfall of the growth rate of 4.4 percentage points in the first quarter, implying that the FBR revenues were PKR 89 billion below the target.

The biggest shortfall in the observed growth rates is in excise duty and customs duty of 40 percentage points and over 10 percentage points, respectively. This is not surprising in the case of customs duty, as the rupee value of imports increased by only 5.7% in the first quarter of 2024-25. Also, the biggest source of excise duty is the cigarette industry. Production in this industry declined by almost 21% in the first two months of 2024-25.

The likelihood is that the FBR will make stronger efforts to reduce the shortfall in revenues with respect to the target agreed with the IMF for the first quarter of 2024-25. The enhanced agricultural income tax is also to be implemented by the four provincial governments from January 1, 2025. There is the likelihood that a mini-budget will also be introduced early in 2025 by the Federal government.

The projected revenues in 2024-25 are given in Table 75.

Table 75: Projected Level of Tax Revenues in 2024-25 (PKR Billion)

	2023-24	2024-25	Growth Rate (%)
FEDERAL TAXES			
Income Tax	4,530	6,110	35.0
Sales Tax	3,098	3,950	27.5
Customs Duty	1,104	1,240	12.5
Excise Duty	577	720	25.0
Petroleum Levy	1,019	1,220	20.0
TOTAL FEDERAL REVENUES	**10,328**	**13,240**	**28.2**
TOTAL PROVINCIAL REVENUES	**774**	**970**	**25.0**
TOTAL REVENUES	**11,102**	**14,210**	**28.0**
Tax Revenues as % of GDP	*10.5*	*11.7*	

Source: Authors' computations.

FBR revenues are expected to show fairly rapid growth of 29% in 2024-25. There will, however, still be a shortfall of up to PKR 950 billion. Provincial revenues are projected to increase by close to 25%. The actual growth in the first quarter of 2024-25 has been 21.7%.

The bottom line is that the combined total tax revenues of the FBR, provincial governments, and the petroleum levy may be successful in raising the national tax-to-GDP ratio by 1.2% of the GDP from 10.5% of the GDP to 11.6% in 2024-25. If it happens, this would be the first year in which the tax-to-GDP ratio would exceed the peak level of 11.3% attained in 2017-18.

12. THE AGENDA OF TAX REFORMS

The previous chapters laid the grounds for the presentation of a comprehensive agenda for reforms in both federal and provincial taxes. The primary conclusions are the scope for significant augmentation of the tax-to-GDP ratio and the need to make the tax system markedly more progressive. Figure 19 presents the actual tax revenues as a percentage of potential revenues, estimated in the earlier chapters. The overall tax gap was close to 3.7% of the GDP in 2023-24.

Figure 19: Actual Revenues as % of Potential Revenues from Different Taxes
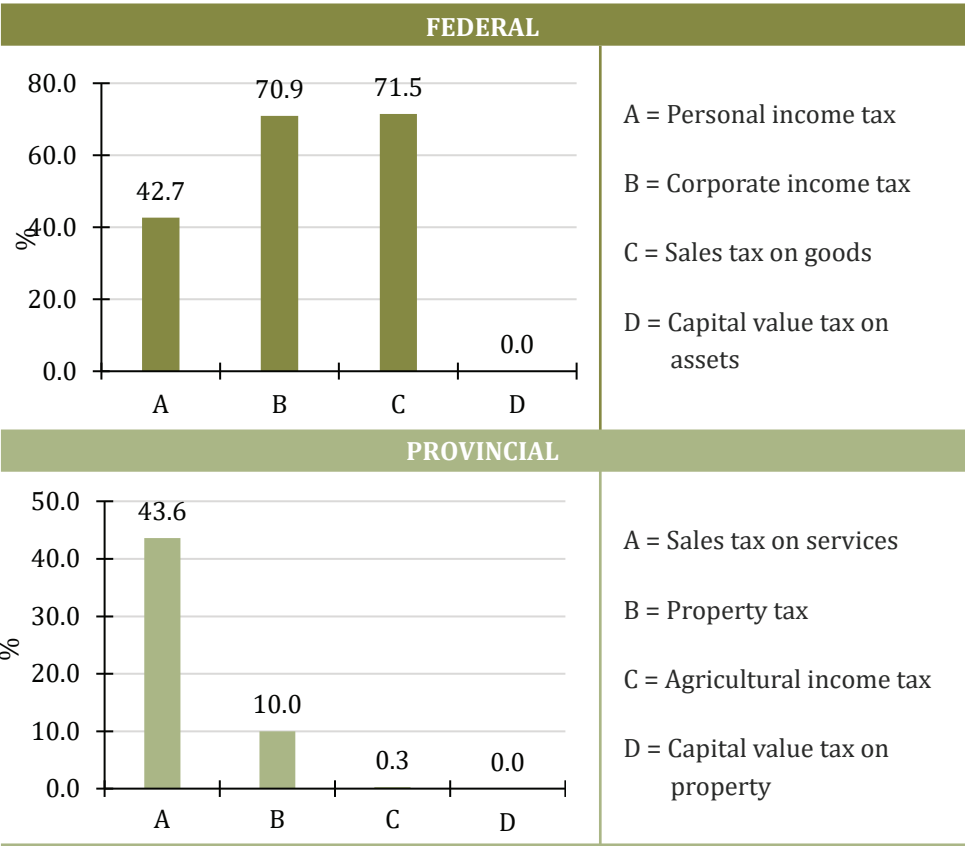
Source: Authors' computations.

The Technical Annexure-1 gives the methodology used for computing the potential impact on revenues from each reform.

Objectives of the Reforms

The reforms proposed are aimed at achieving the following objectives:

- Move to a higher revenue-yielding and more buoyant tax system.

- Make the tax burden more equitable across income groups.

- Achieve a more balanced sectoral tax incidence.

- Promote investment, savings, exports, employment, and more balanced regional development.

- Minimise the multiplicity of taxation and focus on gradual rationalisation of rates with broad-basing of revenue sources.

- Build in mechanisms, laws and institutional processes to check tax evasion and corruption.

- Promote integration and cooperation between the Federal and Provincial tax systems.

- Lead to a simpler, transparent and more friendly tax system, presently unwieldy and complex.

- Create a more modern, autonomous and functional tax administration.

- Formulate a tax policy that is more evidence-based and consistent.

Reforms in Federal Taxes

Personal Income Tax

1. This reform proposes the merger of unearned income with earned income, and a higher exemption limit and maximum rate at higher total income. Unearned income will include interest income from bank deposits, rental income from property, and capital gains realised on property.

The proposed tax structure is as follows:

Table 76: Proposed Tax Structure

Taxable Income	Rate of Tax
Up to PKR 1,000,000	0%
1,000,001 to 2,000,000	5% above PKR 1,000,000
2,000,001 to 3,000,000	PKR 50,000 + 15% of the amount above PKR 2,000,000
3,000,001 to 4,000,000	PKR 200,000 + 25% of the amount above PKR 3,000,000
4,000,001 to 5,000,000	PKR, 450,000 + 30% of the amount above PKR 4,000,000
Above 5,000,000	PKR 750,000 + 35% of the amount above PKR 5,000,000

Source: Authors' computations.

2. The same tax structure is proposed for all forms of income, that is, salary, non-salary personal income, and income of AOPs.

3. The reintroduction of the investment allowance to promote savings, up to 15% of taxable income. Investment exclusively in the following: medium-term or long-term National Saving Schemes.

   • Behbood Certificates

   • Defence Saving Certificates

   • Regular Income Certificates

   • Special Savings Certificates

4. Rationalisation of the withholding tax regime. Reduction in small withholding/advance taxes, including, for example, the following:

Section	Description
156 B	Withdrawal from the pension fund
233A	Stock exchange
235B	Tax on steel melters, rollers
236I	Advance tax on educational institutions
236Y	Advance tax on persons remitting amounts abroad

5. Enhancement of the withholding tax on electricity bills of commercial consumers, following the failure of the Tajir Dost Scheme, as shown below.

Table 77: Withholding Tax on Electricity Bills of Commercial Consumers

PRESENT*		PROPOSED	
Size of Bill	Tax Rate (%)	Size of Bill	Tax Rate (%)
Up to PKR 500	0%	Up to PKR 2,000	0%
PKR 501 – PKR 20,000	10%	PKR 2,001 to PKR 5,000	10%
PKR 20,001 and above	PKR 1,950 + 12% of the amount exceeding PKR 20,000	PKR 5,001 to PKR 20,000	15%
		PKR 20,001 and above	20%

* Under Section 235 of the ITO
Source: Authors' computations.

6. Enhancement of the withholding tax on commercial importers, under Section 148 of the ITO, as follows:

Table 78: Enhancement of the Withholding Tax on Commercial Imports

Current Rate	Proposed Rate
3.5	5.0
5.0	7.5

Source: Authors' computations.

7. Large annual pensions above PKR 2,500,000 to be subject to income tax at the flat rate of 10%.

8. The tax credit to NGOs should be made available only to those NGOs operating in the fields of social protection, education, and health.

Corporate Income Tax

1. Introduction of progressive corporate income tax linked to the pre-tax return on equity and withdrawal of the super tax, as follows:

Table 79: Progressive Corporate Income Tax

	Tax
▸ If pre-tax return on equity is less than 12%	29% of Profits
▸ If pre-tax return on equity is from 12% to 16%	29% on profits up to 12% of equity + 35% on profits above 12% of equity
▸ If pre-tax return on equity is from 16% to 20%	32.5% on profits up to 16% of equity and 40% on profits above 16% of equity
▸ If pre-tax return on equity is 20% or above	34.0% on profits up to 20% of equity and 45% on profits above 20% of equity

Source: Authors' computations.

2. Levy of a Federal Capital Value Tax on assets minus liabilities of a public or private company at the following rates:

Table 80: Levy of Federal Capital Value Tax

(Assets – Liabilities)	**Tax Rate**
Up to PKR 100 million	Exempt
PKR 100 million to PKR 500 million	0.25%
PKR 500 million To PKR 2,500 million	PKR 1.250 million + 0.50% of the amount PKR 500 million
PKR 2,500 million to PKR 10,000 million	PKR 11.250 million + 0.75% of the amount above PKR 2,500 million
PKR 10,000 million and above	PKR 67.5 million + of the amount above PKR 10,000 million

Source: Authors' computations.

3. The credit extended by commercial banks to the socially preferred sectors, including agriculture, SMEs, microfinance, small housing, and infrastructure, is only 12% of total advances.

The proposed taxation scheme is as follows:

a) If the share is below 20%, then an additional tax of 5% will be levied on pre-tax profits.

b) The provision for the deductibility of bad loans in these sectors will be increased to 3% of total advances.

4. *Fiscal Incentives for Investment:*

‣ Continuation of tax credit of 10% of the amount invested in the acquisition of plant and machinery for purposes of balancing, modernisation and replacement (BMR)

‣ A tax holiday for new investments in the industry anywhere in Pakistan for five years.

5. *Capital Gains Tax on Property*

Following the recent change in the Income Tax Ordinance, the following types of properties are subject to the capital gains tax:

(i) Properties traded from 2024-25 onwards will be subject to the capital gains tax, irrespective of the length of the holding period.

(ii) Properties traded earlier than 2024-25 and then sold before the expiry of the holding period of six years.

The appropriate tax base is the real capital gains and not the nominal capital gains. Based on the historical long-term trend in property values, the recommended annual inflation factor is 6%. Any real capital gains can then be taxed at a flat rate of 20%.

6. *Changes in Audit Policy*

The following proposals are being tabled for the improvement of the audit system:

(i) Within the next three years, increase the percentage of returns audited to 10%.

(ii) Develop a risk-based audit policy. The parameters of tax evasion should be identified on the basis of research on demands raised following audits of different types of taxpayers.

(iii) A new taxpayer may be exempted from audit for the first three years to promote compliance. This should apply only in the case of individual taxpayers and not companies or AOPs.

The time has also come for moving to a composite audit of income and sales tax returns under the IRS.

Federal Sales Tax

1.   Sales Tax on Import of Services

There is a potential tax base in the import of services. Under items 24 and 27 of the Federal Legislative List, the management of all imports is a federal responsibility.

The sales tax on imported services should be levied on the 'reverse charge principle', whereby the tax payment is made by the domestic recipient of the service and charged accordingly from the foreign provider of the service.

There are several imported services which could be charged the sales tax on services, including the following:

- Life Insurance Services
- Reinsurance
- Financial Services
- Computer and Information Services
- Business Services

There is a need to develop appropriate rules and procedures for tapping the full potential of the sales tax on the import of services. Also, a 3% import duty may be levied initially on the above services.

2.   Broadening the Tax Base

The Third Schedule of the Sales Tax Act of 1990 includes goods that are subject to sales tax by manufacturers on notified retail prices. This has been provided for under clause (a) of sub-section (2) of Section 3 of the Act. Currently, 17 items have been brought under the purview of this clause.

The provision has enabled the coverage of value added at the wholesale and retail stages. As such, it represents an important broad-basing of the sales tax system of Pakistan.

The proposal is to extend the taxation on the retail price to other consumer goods and consumer durables. Candidates for inclusion are vegetable ghee, paints, motor cars, TV sets, air conditioners, etc.

Customs Duty

1. *Escalation of Customs Duties*

Given the dire need for tax revenues to make up for the large emerging shortfall in FBR revenues, there is a case for the escalation of customs duties in the forthcoming budget of 2025-26. As such, the proposed tariff slabs are as follows:

Table 81: Proposed Tax Slabs

Present Customs Duty (%)	Proposed Customs Duty (%)
0	0
3	3
11	11
16	20
20	25

Source: Authors' computations.

The zero, 3% and 11% tariff slabs are on basic food and other items and should remain unchanged, with a few exceptions highlighted below. The likely increase, with the above changes in the tariff slabs, is 6% in customs duty revenues on an annual basis.

2. *Protection of Agriculture*

There has apparently been an agreement with the IMF that Pakistan will not offer procurement or support prices on crops like wheat, cotton, and sugarcane. This reinforces the need for more effective protection for farmers from imports. As such, it is recommended that the import tariffs be enhanced on wheat and cotton as shown below.

Table 82: Proposed Import Tariffs

Import Tariff (%)		
	Present	Proposed
Wheat	3	11
Cotton	0	11

Source: Authors' computations.

A change is not required for sugarcane, as the import duty on sugar is already high at 20% and in addition, there is a regulatory duty. The duty drawback scheme should be allowed on cotton for textile exports.

Excise Duty

1.   *Excise Duty on Polluting Industries*

There is a need for levying and charging a relatively high excise duty on industries which pollute the environment, like leather tanning, chemicals for acid making, brick production, etc. This is because smog has become a very serious problem, especially in Punjab.

Reforms in Provincial Taxes

Agricultural Income Tax

One of the Structural Conditionalities that has been agreed to for implementation in the current IMF Programme is as follows:

> *'Each province amends the Agricultural Income Tax Legislation and regime to fully align it with the personal income tax regime for small farmers and the federal corporate income tax regime for commercial agriculture, so that taxation can commence from January 1, 2025.'*

This will represent a major structural reform and broad-basing of the tax system of Pakistan.

The full revenue potential of the Agricultural Income Tax has been estimated in Chapter 8 at PKR 880 billion.

However, there is likely to be very strong resistance initially to the drafting and passage of the amended AIR law by the large landowners, who represent the feudal elite and have strong representation in the provincial assemblies. Furthermore, even if enacted, there will be very big constraints both in the assessment of tax liability and collection, especially from the large farmers.

There is a need, of course, to see in the short run by January 1, 2025, if the AIT is appropriately amended and passed. However, the failure of the Tajir Dost Scheme indicates that full taxation or organised and politically powerful taxpayers is very difficult in Pakistan.

Sales Tax on Services

There is a need to focus on the process of integrating the provincial sales tax on services with the federal sales tax on goods over the next few years. This reform was completed by India seven years ago.

The reform envisages the following:

(i)   Replacement of other domestic indirect taxes by the sales tax.

(ii)   Harmonisation of rates on goods and services to facilitate the move to a proper VAT. Consequently, an increase in the sales tax rate on services to 18%. This is likely to be progressive as the demand for services rises disproportionately with the income of households.

(iii)   Administration and harmonisation of the sales tax with the same tax return, common IT system and common rules, with the powers to audit being shared by the federal and provincial governments.

Urban Immovable Property Tax

This tax must have the highest priority in the mobilisation of resources by the Provincial governments, as the revenues generated are shared with the urban local governments. They are used for providing basic services like water supply, sewerage, roads and slum upgrading.

The first task is for the Provincial Excise and Taxation departments to upgrade the Gross Annual Rental Values (GARVs) of residential and commercial properties in their jurisdiction. Alternatively, the GARVs can be derived from the up-to-date Valuation of Immovable Properties by the FBR down to the individual locality level in the cities and towns of Pakistan.

The tax policy ought to be the exemption of small properties up to eight marlas in size. Thereafter, the recommended formula for deriving the GARV is as follows:

GARV = 0.04 MV,

where MV of the property is its market value based on the FBR Survey.

The recommended tax rates are 15% for a rented property and 10% for an owner-occupied property.

Some examples of the GARV valuation and property tax liability are given in Table 83 below.

Table 83: Examples of Valuation of GARV

City	Locality	Market Value per Marla ('000)	Size (Marlas)	Market Value ('000)	Status Rented (R)/ Owner Occupied (0-0)	Property Tax ('000)
1. Lahore	Allama Iqbal Town	1,407	20	28,140	0 – 0	112.6
2. Karachi	Abdullah Haroon Road	1,908	16	30,250	0 – 0	121.0
3. Abbottabad	Mansehra Road	2,855	12	34,260	0 – 0	205.6

Source: Authors' computations.

Capital Value Tax on Property

As highlighted earlier, this fiscal power has been given to the provincial governments following the 18th Amendment to the Constitution. However, the provincial governments have not yet effec-tively levied this tax. The Punjab Government levied this tax in the Finance Act of 2006. However, it was to be levied at 2% of the recorded value when a property was transferred. This is not the right concept underlying the incorporation of the tax in the Constitution. It is to be a proxy for the wealth tax, which had been repealed in 2003 and, therefore, is leviable every year as an asset.

The proposed structure of the tax at the provincial level is given below:

Table 84: Proposed Rates of the Annual Capital Value Tax on Property

Property Value	Tax Rate
Up to PKR 5 million	0%
PKR 5 million to PKR 10 million	0.25%
PKR 10 million to PKR 25 million	0.50%
PKR 25 million to PKR 100 million	0.75%
Above PKR 100 million	1%

Source: Authors' computations.

Overall Revenue Impact

The quantification of the revenue impact of the implementation of the agenda for tax reforms is given in Table 85.

Table 85: Revenues Mobilised by Implementation of the Tax Reforms

	Estimates of Impact of Revenues* (PKR Billion)
FEDERAL TAXES	**950**
INCOME TAX	**585**
Personal Income Tax	**235**
1. Merger of unearned income with earned income 2. Same tax structure for all forms of personal income	170
3. Reintroduction of Investment Allowance at 10% of taxable income	-110
4. Rationalisation of the Withholding Tax Regime	-25
5. Enhancement of withholding tax on commercial consumer electricity bills	100
6. Enhancement of withholding tax on commercial importers	70
7. Taxation of large pensions	20
8. Restriction of tax credit to NGOs	10
Corporate Income Tax	***350***
1. Introduction of progressive income tax and higher tax on banks, with no super tax	130
2. Levy of capital value tax	220
3. Minimum credit by banks to socially preferred sectors	-50
4. Fiscal incentives for investment	-50
5. Capital gains tax on property	-50
6. Changes in audit policy	150
Sales Tax	***230***
1. Sales tax on the import of services	150
2. Broadening of the sales tax base	80
*On the tax base of 2023-24	

Source: Authors' computations.

Table 86: Revenues Mobilised by Implementation of the Tax Reforms

	Estimates of Impact of Revenues* (PKR Billion)
Customs Duties	*100*
1. Escalation of customs duties	60
2. More tariff protection for agriculture	40
Excise Duty	*35*
1. Excise duty on polluting industries	35
PROVINCIAL TAXES	**1,445**
1. Agricultural income tax	880
2. Sales tax on services	150
3. Urban immovable property tax	220
4. Capital value tax on property	195
TOTAL ADDITIONAL REVENUES	**2,395**
% of GDP	2.2

*On the tax base of 2023-24
Source: Authors' computations.

Therefore, the comprehensive agenda for tax reforms, both at the federal and provincial levels, could generate PKR 2,395 billion of additional revenues on the 2023-24 tax base, equivalent to 2.1% of the GDP.

There are special features of the increase in revenues, as follows:

(i) There is a bigger increase in provincial revenues. This reflects the present underde-velopment of provincial taxes, especially the urban immovable property tax and the agricultural income tax.

(ii) The provincial tax-to-GDP ratio could go up from 0.8% of the GDP to 2.2% of the GDP. The federal tax-to-GDP ratio could rise from 9.7% of the GDP to 10.6% of the GDP. Combined, the national tax-to-GDP ratio could rise from 10.5% of the GDP to 12.8% of the GDP.

(iii) Income tax on all incomes, including agricultural income, could increase by PKR 14.85 billion, equivalent to 65.5% of the total increase from the reforms. This will make the tax system of Pakistan markedly more progressive.

In conclusion, the Agenda for Tax Reforms is comprehensive and progressive in character. Already, the reforms in the Budget of 2024-25 should raise the tax-to-GDP ratio from 10.5% in 2023-24 to 11.7% of the GDP. Following the implementation of the Agenda for Reforms, there could be another 2.3% of the GDP. Pakistan's tax-to-GDP ratio could rise to 14% of the GDP. This will represent an overall increase of 3.5% of the GDP.

Consequently, the present 'tax gap' quantified in the earlier chapters will be largely closed by the implementation of the proposed agenda for reforms.

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TECHNICAL ANNEXURE

The methodology and the data used for quantification of the revenue impact of each tax reform at the federal and provincial levels are given below. In many cases, data on the full relevant distribution of a variable was not available. Therefore, in such cases, averages were used for the quantification. This will tend to understate the impact of the reforms.

Federal Taxes

Personal Income Tax

1 & 2. Merger of Unearned Income with Earned Income and Same Tax Structure for all Personal Income

The revenues from the existing personal income tax system and the proposed system of taxation of total income are compared below.

Table 87: Comparison of Tax Revenues in the Existing System of Personal Income Tax and the Proposed New System (PKR)

Earned Income	Unearned Income	EXISTING SYSTEM			NEW SYSTEM		% Difference between [B] and [A]
		Tax on Earned Income	Tax on Unearned Income* [A]	Total	Total Income	Total Income [B]	
4,000,000	1,000,000	670,000	150,000	820,000	5,000,000	750,000	-8.5
4,000,000	2,000,000	670,000	300,000	970,000	6,000,000	1,100,000	13.4
5,000,000	1,250,000	1,015,000	187,000	1,202,500	6,250,000	1,187,500	-1.2
5,000,000	2,500,000	1,015,000	375,000	1,390,000	7,500,000	1,625,000	16.9
7,000,000	1,750,000	1,715,000	262,500	1,977,500	8,750,000	2,062,500	4.3
7,000,000	3,500,000	1,715,000	525,000	2,240,000	10,500,000	2,675,000	19.4
10,000,000	2,500,000	2,800,000	375,000	3,175,000	12,500,000	3,375,000	6.3
10,000,000	5,000,000	2,800,000	750,000	3,550,000	15,000,000	4,250,000	19.8

*Assumed at 15%
Source: Authors' computations.

The table clearly indicates that as the share of unearned income in total income increases, the new system progressively yields more revenues. A conservative assumption is that the increase in revenues is nearly 15%.

The total personal income tax paid both on earned and unearned income is as follows in 2023-24.

Table 88: Personal Income Tax

	Revenues (2023-24) (PKR Billion)
Tax paid by salaried individuals	367.9
Tax paid from non-salary income	161.5
Tax on bank deposits	489.1
Tax on rental income from property	42.0
Tax on Capital Gains on Property	96.0
TOTAL	**1,156.5**

Source: Authors' computations.

Therefore, the likely enhancement with the 2023-24 tax base is approximately PKR 170 billion.

3. Reintroduction of Investment Allowance

The proposed investment allowance is 10% of the taxable income.

The number of personal income tax payers in 2023-24 is reported by FBR at 4.8 million. Therefore, the average income tax paid per taxpayer is approximately PKR 110,000. This implies that the taxable income was PKR 1,732,000 with a marginal tax rate of 15%. A 10% investment allowance and a marginal tax rate of 15% imply that the average revenue loss per taxpayer would be approximately PKR 26,000.

It was assumed that 90% of the taxpayers would avail this facility. Therefore, the revenue loss is close to PKR 110 billion. However, this would lead to the investment of almost PKR 830 billion in government savings schemes. This should reduce interest rates on government bonds.

4. Rationalisation of the Withholding Tax Regime

Most of the withholding provisions to be withdrawn have small revenue implications. Therefore, the combined revenue foregone should not be more than PKR 25 billion.

5. Enhancement of Withholding Tax on Commercial Consumers' Electricity Bills

The available information from the NEPRA's State of the Industry report is that the average monthly consumption by a commercial consumer of electricity is 187.5 units. This implies a monthly bill of close to PKR 7,100. Therefore, the withholding tax would be PKR 355 per month and PKR 4,260 per annum per outlet, on average. As a result, the revenue could approach PKR 100 billion.

6. Enhancement of the Withholding Tax on Commercial Importers

This is estimated to yield an additional PKR 70 billion.

7. Taxation of Large Pensions

Information on the size distribution of pensions is not available. The presumption is that the revenue yield would be small at PKR 20 billion, mostly from the corporate sector.

8. Restriction of Tax Credit to NGOs

Likely additional revenues of PKR 10 billion.

Corporate Income Tax

1. Progressive Corporate Income Tax

There is a proposal to introduce a progressive corporate income tax. The estimated additional revenue from the corporate sector, with the data from the SBP, was approximately PKR 110 billion in 2023. It is projected at PKR 130 billion in 2024.

The other advantage of progressive corporate income tax is that it would reduce the tax burden on companies engaged in exports, like in the textiles industry, where profitability is relatively low.

2. Levy of Capital Value Tax

The proposal is to levy a capital value tax on the private and public limited companies' assets minus liabilities at the following rates:

Table 89: Capital Value Added Tax

Net Assets – Liabilities	Tax Rate
Less than PKR 100 million	0%
PKR 100 million – PKR 500 million	0.25%
PKR 500 million – 2500 million	PKR 1.25 million plus 0.5% on the amount above PKR 500 million
PKR 2500 million to PKR 12,500 million	PKR 11.25 million plus 0.75% on the amount above PKR 2500 million
> PKR 12,500 million	PKR 86.25 million plus 1% on the amount above PKR 12,500 million

Source: Authors' computations.

Estimates using the SBP database and the SECP statistics show that the capital value tax could yield an estimated revenue of PKR 220 billion.

3. Tax on Failure of Commercial Banks to give a Minimum Share of Credit to Socially Preferred Sectors

The credit extended by commercial banks to the social pretend sectors, including agriculture, SMEs, microfinance, small housing, and infrastructure, is only 12% of total advances.

The proposed taxation scheme is as follows:

If the share is below 20%, then an additional tax of 5% will be levied on pre-tax profits.

The provision for the deductibility of bad loans in these sectors will be increased to 3% of total advances.

It is assumed that banks will attain the minimum target of 20%. There may be some fall in profitability, leading to less revenue of PKR 50 billion, but it will greatly facilitate inclusive growth.

4. Capital Gains Tax on Property

The shift from taxation of nominal to real capital gains may lead to a revenue reduction of PKR 50 billion.

5. Changes in Audit Policy

This should be implemented with a target of raising additional revenues of PKR 150 billion.

Sales Tax

1. Import Duty + Sales Tax on Import of Services

An initial import duty plus a 15% sales tax will be applied on 'reverse charge' principle on the following services:

Table 90: Import Duty

	Imports (USD Million), 2023-24
Insurance services	420
Financial services	513
Telecom, computer and information services	396
Other business services	1,650
TOTAL	

Source: Authors' computations.

The total revenue yield on the 2023-24 tax base would have been PKR 150 billion.

2. Broadening the Sales Tax Base

The proposal is to levy the sales tax on manufacturers in specific industries, not on the ex-factory price but on the retail price. The industries that could be included in this category are manufac-turing products more for the higher income groups, as follows:

• Readymade garments	• Carpets	• Communication apparatus
• Footwear	• Detergents	• Electrical appliances
• Household textiles	• Automobiles	

The potential additional sales tax revenue is PKR 80 billion.

Customs Duty

1.   Escalation in Import Tariffs

Table 91: Import Tariffs

IMPORT TARIFF (%)	
Present	**Proposed**
16	20
20	25

Source: Authors' computations.

The proposed escalation in the import tariff structure is in the top two slabs as follows:

According to the WTO publication, World Tariff Profiles, 2023, the share of imports by Pakistan with import tariffs above 15% is 9.1%, with total imports of USD 54.8 billion. This is equivalent to imports of USD 5 billion.

Consequently, the additional revenues are estimated at PKR 60 billion.

2.   Protection of Agriculture

The proposed enhancement in import tariffs is as follows:

Table 92: Import Tariffs on Wheat and Cotton

	Import Tariff (%)		Imports in 2023-24 (USD Million)
	Present	**Proposed**	
Wheat	3	11	1,100
Cotton	0	11	450

Source: Authors' computations.

Based on the level of imports, the extra revenue is likely to be close to PKR 40 billion.

Excise Duty

1.   Excise Duty on Polluting Industries

The expected coverage is 5% of the manufacturing sector and the electricity and gas sector. The tax base is PKR 159 billion in terms of the value of output. The 25% excise duty will fetch PKR 35 billion from a reduced output.

Provincial Taxes

Agricultural Income Tax

Chapter 8 demonstrated on the basis of detailed calculations that the full potential of the agricultural income tax on the tax base of 2023-24 is PKR 890 billion.

Sales Tax on Services

The integration of the Provincial sales tax on services with the Federal sales tax on goods is proposed over the next three years. As such, no revenue impact is assumed in the short-run perspective.

Urban Immovable Property Tax

The full additional revenue potential of this tax has been quantified earlier at PKR 220.

Capital Value Tax on Property

The proposed structure of the capital value tax on property is as follows. It is to be levied like a wealth tax on all properties, above the exemption limit, and not just on traded or gifted properties. Both urban and rural properties will be in the tax base.

The proposed structure is as follows:

Table 93: Capital Value Tax

Value of Property (PKR)	Tax
Less than 10 million	Exempt
10 million – 25 million	0.25%
25 million – 100 million	0.50%
100 million – 500 million	0.75%
< 500 million	1.00%

Source: Authors' computations.

The Population and Housing Census of 2023 gives an estimation of the size distribution by number of rooms of residential property. The distribution is given below:

Table 94: Property Value and Tax Rates

Number	% of Housing Units		Estimated Property Value (PKR Billion)	Tax Rate	Revenues
	% of Rooms	% of Value			
1	12.1	6.0			
2	24.6	24.1			
3	21.6	26.4	18,200	0.25	45
4+	29.7	43.5	30,000	0.50	150
Total Number (Million)	**100.0**	**100.0**			**195**

Source: Authors' computations.

The tax base is likely to consist of properties with at least three rooms. The estimated revenue potential of the capital value tax on property is PKR 195 billion.

WILL BROADENING THE TAX BASE BROADEN TAX REVENUE BASE? A CASE STUDY OF PAKISTAN[1]

Zehra Farooq[2] and Muzammal Rasheed[3]

ABSTRACT

Policymakers in Pakistan are focusing on broadening the tax base (BTB), and the purpose is twofold: to decrease informality in the economy and to increase tax revenue. In this study, we aimed to evaluate the revenue efficiency of untargeted BTB. Specifically, in the first phase of our analysis, we assessed the per-taxpayer revenue benefit for each new taxpayer added to the current tax base. Over the seven years, from 2015 to 2021, for which the data were examined, the BTB activities managed to add nearly 3 million new taxpayers to the tax register. However, almost 45% of these new taxpayers are salaried individuals who contribute no new income, as their income tax is deducted at source. Additionally, among the new business individuals registered, only PKR 190 billion in untapped income declared was identified, which, even with constant tax rates of 35% applied to income, would yield only about PKR 9 billion in tax revenue per year.

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1. INTRODUCTION

At the outset, we can clearly see that Pakistan faces two significant problems: a tax gap issue and a tax revenue problem. According to the Tax Gap report published by the FBR in 2022, the tax gap, which is the difference between potential tax revenue and the actual revenue collected, stood at approximately PKR 730 billion for income tax and PKR 519 billion for sales tax. This indicates that in 2020, when the FBR collected PKR 1,655 billion in income tax revenue, there was an economic potential to collect PKR 2,385 billion. Various international donor agencies and researchers have asserted that the tax revenue collected by the country's revenue authorities is significantly below the maximum potential that could be achieved. Not only is there a wide tax gap, but there are also horizontal and vertical inequities that are exacerbated by a lack of structural reforms to the tax code. This leads us to the second problem: a narrow tax base is a primary concern and an underlying reason why Pakistan struggles to collect all taxes owed and reach its revenue potential.

Registration drives to broaden the tax base (through new taxpayer registrations) have gained increased popularity worldwide, especially in developing countries (Moore, 2020). These drives are considered a good policy measure to decrease informality in the economy and increase tax revenue generation (Brockmeyer et al., 2019). Furthermore, in the case of mass registration or the formalisation of firms, it has been indicated that forcing firms to register can lower their cost of business (Benhassine et al., 2018). A relevant political economy context is provided by Moore (2023), who pointed out that, in addition to the practical expectations from registration campaigns, there are political motivations linked to expanded tax registers, especially for countries that have to fulfil foreign donor agency requirements. Despite their undisputed popularity across the developing world, especially as witnessed in substantial evidence that exists for sub-Saharan Africa (Gallien et al., 2023), studies have shown that post-registration revenue contributions by newly registered taxpayers, especially firms, have been disappointing (Benhassine et al., 2018). All this evidence clearly suggests that untargeted registration campaigns, those not based on third-party data or risk analysis, often generate limited fiscal gains.

All these observations point towards a gap within the literature. To the best of our knowledge, there is a lack of research that analyses historical trends in revenue generated by newly registered taxpayers (both in terms of the type of a taxpayer and the type of income) and evaluates these gains against the

administrative cost of monitoring new registrations. The current study aims to fill this gap using data from Pakistan. This study is unique for two reasons. First, registration drives, as well as their outcomes, are context-specific, where the needs of one country's revenue requirements and political priorities may not overlap perfectly with those of another developing country. Second, most of the current evidence in the literature focuses on sub-Saharan Africa. Therefore, our study is the first to evaluate the merits of mass registration in Pakistan and empirically check if they have the capacity to tap into previously untaxed revenue, thereby broadening the revenue base.

In recent years, several measures have been adopted to broaden the tax base in Pakistan. However, most of them have focused on BTB by adding more taxpayers to the tax register. In most cases, the efforts have resulted in the addition of individuals and small businesses to the tax base, and as such, contributions to revenues have been negligible. Amongst all the newly added individuals, barely 50% file their tax returns regularly and voluntarily, and amongst those that do, a small percentage file a positive and previously untaxed amount as income. This observation raises a question of whether untargeted mass BTB drives yield enough revenue to justify the public expenditure needed for it.

Using the FBR's latest annual performance reports (FBR, 2020 and 2021), we observed the following trends for the years 2020 and 2021:

Table 1. Tax Collection Trends for Tax Years 2020 & 2021

Head	2020	2021	Increase/ (Decrease)
Collection from income tax (PKR billion)	1,523	1,726	203
Collection from Sales Tax (PKR billion)	1,596	1,981	385
Collection from Income Tax withholding (PKR billion)	1,091	1,237	146
Total tax revenue collection (PKR billion)	**3,996**	**4,734**	**738**
Collection from individuals (PKR billion)	1,085	1,311	226
Percentage contribution to total revenue	27.1%	27.6%	0.5%
Collection from corporations	2,648	3,174	526
Percentage contribution to total revenue	66.2%	67.0%	0.8%
Collection from Associations of Persons (AOPs) (PKR billion)	241	249	8
Percentage contribution to total revenue	6.03%	5.25%	-0.78%
Number of new taxpayers registered (numbers)	1,202,487	735,488	(466,999)

Source: Tax collection data from PRAL & FBR.

It must be noted that efforts to broaden the tax base are not a new policy measure in Pakistan. In fact, the BTB Directorate was established by the FBR in 2017 (Paracha, 2017) and, until that year, a total of 1.07 million income tax returns were filed with the FBR, whereas the FBR has the data of 3.1 million domestic electricity consumers. Nevertheless, these consistent efforts have proven to be useful in terms of the size of the tax register. As can be seen in the table, in the year 2020 alone, almost 1.2 million new taxpayers were added to the income tax net. In 2021, despite economic problems posed by the COVID-19 pandemic, 0.735 million new taxpayers were added to the tax net. With the addition of these new taxpayers, the total population of individuals eligible for income tax stands at 7.287 million, according to the annual performance review of the FBR.

The table also highlights some other interesting trends. For example, the FBR collected an additional PKR 738 billion in tax revenues in 2021, but 71% of those revenues can be attributed to tax receipts from corporations. AOPs contributed less than 10% to total tax revenue, while individuals contributed nearly 27%. Even though seemingly positive, looking at these trends alone, there is no way to determine the amount of revenue generated by the taxpayers that were newly registered, nor is it easy to tell how much revenue can be attributed to different tax persons, or different income streams, highlighting the need for a deeper analysis that our study aims to conduct. It is important to note that these numbers are not adjusted for inflation, and once adjusted, the insights can be significantly different.

The new taxpayers who have been added to the tax register require monitoring, administrative oversight, and tax enforcement. One way to think about why this can be a concern in a low tax enforcement capacity environment is through the following numbers. The FBR has a total number of 23,000 employees for the Inland Revenue Service (IRS). For a taxpayer population of more than 10 million, including individuals and corporations, this means 434 probable taxpayers per employee. This workforce also includes the clerical staff, which is generally not responsible for tax enforcement functions directly. Among 23,000 employees, there are 1,752 personnel who are responsible exclusively for the enforcement of tax laws. This means 5,707 probable tax persons per officer. This, in turn, means 68,493 new sales tax returns, 68,493 new Federal Excise Duty returns, and 5,707 new income tax returns will need to be reviewed and desk audited per officer per year. This is in addition to the audits mandated by the FBR.

In this context, adding new taxpayers can impact broad-based taxation efforts in two significant ways. Firstly, expanding the tax net increases the taxpayer-to-tax officer ratio, potentially diluting enforcement as each officer must assess, audit, or monitor more cases. Secondly, accommodating a broadened tax net with additional officers and logistical resources will lead to increased public expenditure. Nevertheless, one key benefit of having more taxpayers in the tax net is the documentation of the economy. Even though the potential to reap immediate revenue benefits may not be there, the possibility exists. On the cost side, Pakistan recently contemplated establishing 145 new district offices (FBR, 2023) across the country to bring two million new taxpayers within the tax net during this fiscal year. It is envisioned, that as a key element of stronger enforcement, these new offices will be able to utilize third-party data from other organizations in Pakistan, such as NADRA, electricity vendors, and telecommunication companies. Furthermore, to ensure stringent tax compliance, officers will be empowered to invoke Section 114B of the Income Tax Ordinance and will be well within their rights to disconnect electricity, gas, or telephone connections of non-compliant taxpayers. According to the press release issued on its website by the FBR, it seems that the primary objective of this initiative is to bring in additional tax revenue.

However, before this expectation can be realised, two salient facts bear mentioning. First, for most salaried individuals, income is already taxed at source and therefore, even after registration, it is unlikely that these individuals will add anything to the tax revenue base. Secondly, the tax code is set up in a way that makes it difficult for firms that earn substantial profits to simply escape the tax net. If they are operating in the informal sector, they lose access to banking facilities (or suffer heavy transaction costs), and they are often unable to participate in government programmes and/or transact with other formal firms due to the input/output claims register within the sales tax return. If larger, more profitable firms are already part of the tax net, and no new stream of income is being added to the tax base even after mass registrations, the question is whether the revenue benefit justifies the cost of these new registrations. The policy question, therefore, is not whether to broaden the base, but how to balance targeting precision with administrative feasibility.

2. REVIEW OF THE LITERATURE

Due to empirical evidence suggesting that mass tax registration drives aimed at btb have the potential to reduce informality within a country's economy and increase tax revenues as more taxpayers are added to the tax register, tax base broadening activities have been especially popular in developing countries (Moore, 2020). While most of his evidence originates from sub-Saharan Africa and the exact tax environment may vary significantly between different countries, the "obsession with registration" that Moore (2023) notices about African tax systems is also present in Pakistan. He correctly notes that the expansion of the tax register is motivated not only by revenue needs but also by political economy considerations, as a robust tax register enhances credibility when presenting cases to donor agencies. Furthermore, the fact that formalization brings certain other advantages with it, such as creating an indirect deterrence effect and allowing state machinery more face time with the target population, has been highlighted as the third most likely reason for the popularity of this policy measure (Gallien & Boogaard, 2023). Building on this discussion, the present study focuses on untargeted taxpayer registration drives, which differ fundamentally from risk-based or data-driven approached in both motivation and expected fiscal yield.

Given their popularity, several papers have evaluated such registration drives and estimated the benefits of adopting such measures. However, registration drives vary significantly in how they are implemented. For example, Brockmeyer et al. (2019) did an email experiment in Costa Rica and found that enforcement emails, which require firms to register, not only increase registration in numbers but also post-registration compliance by the new firms. They noted that formalization of these new firms also has other spillover benefits, such as the ability of these firms to act as a source of third-party information by engaging in formal transactions with other firms, and their ability to bring more economic activity within the tax net.

Other studies note that while there are obvious benefits of registration drives, these forced registrations might be accompanied by increased costs, and these costs might even be higher than what standard estimates might indicate (Benhassine et al., 2018). This point is further enforced by other studies that demonstrate that what underscores the benefit of mass registrations, especially of firms, is the size of the firms in terms of productivity, market share, their potential to bring in revenue, and their capacity to bring in additional untapped revenue (Mascagni et al., 2022; Lediga et al., 2020).

While most of the work mentioned thus far has focused on the implications of registration drives, there is some work (see, for example, Gallien et al., 2023) that focuses on the politics of registration drives and explains why the outcomes of registration drives are poor, why they do not generate enough revenue, and why one inadvertent result of these untargeted registration drives might be that the tax register ends up overrepresenting the low-income strata in an economy, which is in itself bad for equity.

Other than the papers on mass registration drives, a paper by van den Boogaard & Beach (2023) looked at the implications and efficiency losses of untargeted enforced registrations and tax collections in Sierra Leone and Togo. Their focus, however, was registration drives aimed at rural areas, where they found that the tax potential is barely enough to cover the cost of these registration drives, let alone account for surplus tax revenue as a result.

Our study, barring a direct discussion on the political economy aspect, contributes to several strands of literature, but is different in two key aspects. First, it looks at the entire tax register of Pakistan and not just firms. Second, it takes into account and evaluates all new registrations added to the tax register.

3. RESEARCH QUESTION AND METHODOLOGY

Our main research question is whether the public expenditure on BTB is an efficient policy choice for raising tax revenues in an environment with low tax enforcement capacity. The core hypothesis of our paper is that BTB drives do not tap into large sources of previously untaxed incomes. This may mean that per-taxpayer gains of formalization are not large enough to outweigh the cost of broadening (Lediga et al., 2020).

The problem statement of this study stems from a broad question on tax policy vis-à-vis public expenditure, and accordingly, empirical evidence and analytical context on four broad dimensions are provided. We start with analyzing the trends in BTB efforts via mass registrations over the last ten years to identify exactly how many taxpayers (individuals, AOPs, and firms) have been added to the tax net every year on a year-on-year basis. In addition to that, we look at compliance trends amongst those who have been added to the tax net, i.e., whether they continue to file returns on time since being added to the tax net, and whether they are declaring previously untaxed

income in these declarations. Next, we look at how the addition of new taxpayers has changed the distribution of sources from which income taxes are collected by the FBR.

The study also investigates whether untargeted mass addition of new taxpayers helps FBR to tap into additional streams of income that had previously escaped the tax net. The study also looks at whether the increase in tax revenue is commensurate with the effort and resource cost of monitoring these new taxpayers in the tax net. The next logical step is to estimate the approximate cost of enforcement for the newly added taxpayers and compare that to the revenue that they bring in. Finally, building upon the analysis, the efficiency of the policy, in terms of revenue collection, to broaden the tax base in the absence of structural reforms, is discussed.

Data

This study presents an in-depth case study of Pakistan's tax policy vis-à-vis BTB. The primary aim of the analysis is to evaluate BTB activities and associated revenue gains to determine the revenue efficiency of these policies. Accordingly, the study consists of a diverse range of agents, and therefore, the data were drawn from a variety of sources. The data and methods presented in this section are intertwined, given the nature of this study.

The first step of our analysis was to evaluate the number of tax persons added to the tax register every year from 2014 to 2021. A taxpayer, in the context of our study, means either a salaried individual or a self-employed individual, given that BTB drives focus on registering individuals rather than companies and businesses. Furthermore, amnesty schemes, such as those in 2018 that were analysed, also tend to focus on individuals. We used the FBR's yearbooks and the online tax register published by the FBR to compile this data. These new taxpayers added to the tax register were then distinguished by their activity status, i.e., whether they are active tax filers or not.

We then took a deeper look into precise characteristics of tax filings by these newly registered tax persons to determine the types of income that have been added to the tax base, the exact contribution to the revenue base, how much of this revenue contribution is automated and generated through existing sources such as tax withholding, and finally, how much of this new revenue is conditional upon monitoring. The last part of this equation is especially important if we have new taxpayers whose contribution to revenue is contingent upon compliance.

Given that the tax evasion rate within Pakistan has been established at 70% (Best et al., 2021), if the newly registered taxpayers require monitoring to draw in the revenue, this means an increased cost of administration and enforcement will have to be taken into account. For this study, the increase/decrease in employee-related expenses and operating expenses in the field offices as a measure of the increase/decrease in the cost of enforcement was used. For this step of the analysis, restricted access administrative data on tax returns filed by tax persons from tax year 2014-2021 were used.

The next step of the analysis deals with the public expenditure side of the equation. We started by determining the number of officers that are responsible for tax enforcement in the FBR field offices and determined the taxpayer-to-tax officer ratio before new additions to the tax register. Following this, a new dataset was constructed that holds information on the cost of administration and enforcement for each field office of the FBR. This data came from the AGPR and the Ministry of Finance.

Finally, to understand the policymaking part of the BTB and connect it to the intention and expectations behind these registration drives, in-person interviews of tax administrators and field officials from the FBR headquarters and also field formations were conducted.

A notable aspect of our study is that it brings together a variety of different administrative datasets, both public and restricted access, for this analysis.

4. FINDINGS

During the first phase of our analysis, we focused on answering the following aspects:

i.   The number of new filers that were added to the tax register from 2014 to 2021.

ii.   The types of income that were made part of the revenue base were analysed to determine the extent to which these incomes were previously untapped and untaxed.

iii.   The compliance trends for all newly registered taxpayers, regardless of whether they were salaried or business individuals.

Non-compliance would mean taxpayers need increased monitoring for the enforcement of tax laws.

iv.   The amount of income that was declared by newly registered taxpayers in the year of registration.

v.   The aggregated growth in incomes is declared once registered for taxes.

Table 1-6 presents the results of the data analysis.

Table 2. Number of Old and New Filers for Every Year, 2014-2021

Tax Year	Number of Filers	Number of Newly Registered
2014	1,108,177	
2015	1,350,325	367,732
2016	1,599,220	330,375
2017	1,930,069	398,529
2018	2,830,049	949,199
2019	3,142,855	560,352
2020	3,286,852	306,589
2021	2,871,756	74,579
TOTAL		2,987,355

Source: Administrative income tax returns data from PRAL (2024).

In Table 2, we used the data from individual tax returns to calculate the number of tax return filers for every year and bifurcate the number of taxpayers that were newly registered. It is useful to note that since our data starts from the tax year 2014, in all the analyses presented here, we ignored the values for the year 2014, given that in the absence of data from 2013, a comparative analysis is not possible. For example, in Table 1, the number of newly registered taxpayers for 2014 could not be calculated in the absence of data on total taxpayers in 2013.

It can be seen in Table 2 that, on average, around 300,000 taxpayers were registered by the FBR annually from 2014 to 2021. Two years stand out in the table, i.e., tax years 2018 and 2021. In 2018, the largest number of taxpayers was registered with the FBR, amounting to nearly 1 million individuals, whereas in 2021, the lowest number of filers registered was at just under 75,000 individuals. These vast differences can be explained by the fact that a

large-scale amnesty schemes for individuals were introduced by the government, and the return filing date, which under normal circumstances would have been 30th September 2018, was extended to 9th August 2019. A spike in the number of newly registered taxpayers for tax year 2019 may also be attributed, to some extent, to the spillover effect of the amnesty schemes. On the other hand, the low number of registrations for 2021 can clearly be attributed to the aftermath of the global COVID-19 pandemic.

Prima facie, these numbers indicate a good outcome of the BTB activities, although it can justifiably be argued that taxpayers also become filers due to the application of higher rates for non-filers. Thus, even if a partial increase in the taxpayer population can be attributed to BTB activities, without looking at the bifurcation of these newly registered taxpayers by the type of income they are bringing to the revenue base, not much can be said about the impact on revenue or expenditure.

In Table 3, all newly registered individual taxpayers are categorised into two groups, namely, salaried and non-salaried, that is, those who generate income from business or other sources.

Table 3. Newly Registered Taxpayers Bifurcated by Type of Income

Tax Year	Number of Newly Registered	New Salaried	New Non-Salaried	Percentage of Salaried in Newly Registered
2014	0			
2015	367,732	164,488	203,244	45
2016	330,375	142,772	187,603	43
2017	398,529	159,703	238,826	40
2018	949,199	498,645	450,554	53
2019	560,352	232,618	327,734	42
2020	306,589	111,062	195,527	36
2021	74,579	41,877	32,702	56
TOTAL	2,987,355	1,351,165	1,636,190	Avg: 45%

Source: Administrative income tax returns data from PRAL (2024).

In Table 3, the percentage of newly registered taxpayers who are salaried individuals is presented. In the Income Tax Ordinance (ITO), a salaried individual is defined as someone for whom more than 50% of income is from a salary, on which tax is withheld at source. On the other hand, a non-salaried individual is defined as one whose 50% (which was increased to 75% in 2021)

of total income comes from running a business and tax from that business income is paid along with filing of annual income tax return. The reason the individuals were divided into salaried and non-salaried groups is that registration of salaried individuals brings in incomes that have already been taxed, whereas the registration of new business individuals will likely bring income within the tax net that previously escaped taxes.

As can be seen in Table 3, for nearly every year in our data, almost 45% of all newly registered taxpayers are salaried individuals. Even in the years that appear as outliers in terms of the number of newly registered taxpayers, 53% of all new registrations were salaried individuals in 2018, and in 2021, 56% of all new registrations were salaried individuals. This composition indicates that much of the apparent expansion in the tax base reflects formalization of already-taxed income rather than incorporation of new revenue potential.

From the point of view of cost-of-enforcement, these results present a good picture because, for salaried individuals, given that their taxes are withheld at source, no additional enforcement monitoring is required, and salaried individuals are also exempt from audits, thereby further reducing the cost of enforcement. On the other hand, enforcement and monitoring will be required if new taxpayers are non-compliant, i.e., they do not regularly file their tax returns post-registration.

The post-registration behaviour is presented in Table 4. For our context, non-compliers are those individuals who have failed to file at least one tax return in the years post-registration. As can be seen in the table, up until 2018, it was mostly non-salaried new individuals who were non-compliant, but in tax year 2018 and onwards, a greater share of newly registered salaried individuals are also non-compliant. Regardless of the number, it is worth noting that the point of this inquiry was to see whether newly registered taxpayers add to the expenditure required to administer and enforce taxes. Salaried individuals, whose taxes are deducted at source, typically do not require active monitoring or enforcement unless they fail to file their tax returns. However, if non-compliance is observed among this group, who ideally should not need such oversight, it results in increased public expenditure. This happens because additional resources are needed to enforce compliance among newly registered taxpayers, especially if the workforce at the FBR does not expand proportionally to the growth in the tax register. While it is true that initially 13% of all newly registered taxpayers in 2015 were found to be non-compliant for at least one year, non-compliance (to the extent of tax return filing) kept decreasing in the following as non-compliers were only 8% in 2016, 4% in 2017, 3% in 2018, and 1% in 2019 before going to 0% of non-compliers.

Table 4. New Registered Taxpayers by Compliance Status

Tax Year	Number of Newly Registered	Salaried Non-Compliers*	Non-Salaried Non-Compliers**
2014	0	0	0
2015	367,732	21,366	26786
2016	330,375	12,680	15,223
2017	398,529	7,102	9,762
2018	949,199	21,409	9,779
2019	560,352	4,737	2,580
2020	306,589	0	0
2021	74,579	0	0
TOTAL	2,987,355	67,294	64,130

*Salaried non-compliers: the numbers in this column indicate the number of newly-registered salaried individuals who failed to file their tax return for at least one year, post-registration. **Non-salaried non-compliers: the numbers in this column indicate the number of newly-registered non-salaried individuals who failed to file their tax return for at least one year post-registration.*
Source: Administrative income tax returns data from PRAL (2024).

In Table 5, an estimate of the amount of income that is brought in by both types of new taxpayers every year is shown. In the table, all income amounts are reported in billions of rupees, and the tax year means the year in which the taxpayers were registered. In the Type of Taxpayer column, 0 indicates a non-salaried individual and 1 indicates a salaried individual. It may be useful to note that while salaried individuals are those for whom more than 50% of their total income comes from a salary, they may still have some business income even though it accounts for less than 50% of their total income. The same is the case for business individuals; more than 50% of their total income comes from their business, but they may still have an office job from which they draw a salary, even though it may account for less than 50% of their total income.

Therefore, Row 3 of the table shows that new business individuals (Type 0) registered in 2015 brought in a total income amounting to PKR 417.9 billion, out of which income from business amounted to PKR 31.08 billion. Similarly, Row 4 shows that new salaried individuals (Type 1) registered in 2015 brought in a total income of PKR 136 billion, out of which income from salary amounted to PKR 135 billion.

As explained before, the year 2014 should be ignored, as the figures for 2014 are the total income in that year for all registered taxpayers and not just for newly registered taxpayers.

Table 5. Income Declared by Newly Registered Taxpayers (PKR Billion)

S. No	Type of Taxpayer	Tax Year	Total Income	Total Salary Income	Total Business Income (loss)
1	0	2014	…	…	…
2	1	2014	…	…	…
3	0	2015	417.90	0.46	31.08
4	1	2015	136.30	135.09	0.32
5	0	2016	40.04	0.48	26.60
6	1	2016	105.50	104.80	0.11
7	0	2017	51.40	0.25	34.60
8	1	2017	116.50	115.80	0.16
9	0	2018	111.20	0.67	(101.01)
10	1	2018	335.70	333.30	0.49
11	0	2019	179.03	0.97	159.90
12	1	2019	147.10	145.80	0.32
13	0	2020	36.80	0.19	29.05
14	1	2020	69.20	68.90	0.14
15	0	2021	0.03	0.05	7.30
16	1	2021	33.40	33.30	0.05
Total			**1,780.1**	**940.06**	**189.11**

Source: Administrative income tax returns data from PRAL (2024).

If 2014 is ignored, it can be seen that the total income brought in amounted to PKR 2.2 trillion, but when the categorization shows that total salary income brought in as a result of BTB activities amounted to PKR 940 billion. To restate, salary income may not be considered an addition to the revenue base, given that taxes on salary are withheld at source and are likely part of the tax revenue even in the absence of these new registrations. On the other hand, income brought in from the registration of new business individuals, income that we may consider to be previously untaxed and hence an addition to the revenue base, amounted to PKR 189 billion only, a mere 20% of total salary income and 8.6% of all income brought in through new registrations.

As mentioned previously, the year 2018 is an outlier because the government announced amnesty schemes in that year, which served as an exogenous shock that impacted registrations and declarations in 2018. While these are only stylised facts and not causation, the findings still show noteworthy differences. As already discussed, nearly 1 million new taxpayers were registered during 2018, which is a much greater number than in other years. Table 4 provides further evidence of the impact of the amnesty schemes. In Row 9 of the table, it can be seen that those who registered as new business individuals during 2018 filed losses instead of taxable income in their declarations. While they may have declared cash, properties, and other assets to avail the benefits of amnesty schemes and may also have paid tax revenue on those assets as per the amnesties, they failed to declare taxable income, declaring PKR 101 billion in losses instead. The declaration of business losses in 2018 likely reflects strategic reporting behavior within the parameters of the amnesty framework rather than genuine income contraction.

Table 5 also highlights another important finding when it comes to an analysis of newly registered taxpayers. As can be seen in the final row, ignoring the year 2014, it can be observed that the total income that was tapped into, as a result of BTB activities, amounted to PKR 2.2 trillion, out of which only PKR 190 billion can be attributed to previously untaxed income and thus is an addition to the revenue base. Even if we assume that a tax rate of 35% on this income to generate tax revenue, it can be assumed that at most BTB activities generated PKR 66 billion in additional tax revenue over 7 years from nearly 3 million newly registered taxpayers. This translates to approximately PKR 9.4 billion per year. Compared to the nearly PKR 3 trillion and PKR 7 trillion annual budgetary targets of the FBR in 2014 and 2021, respectively, or to PKR 6 billion that was paid only in advance taxes by just one of the largest tobacco manufacturers in Pakistan, this amount is negligible.

Table 6. Year-on-Year Growth in Salary Income of New Taxpayers

S. No.	Type of Taxpayer	Tax Year	Salary Income Growth (%)
1	0	2014	-0.26
2	1	2014	8.44
3	0	2015	-0.27
4	1	2015	9.70
5	0	2016	-0.23
6	1	2016	9.76
7	0	2017	-0.15
8	1	2017	9.04

S. No.	Type of Taxpayer	Tax Year	Salary Income Growth (%)
9	0	2018	-0.13
10	1	2018	7.26
11	0	2019	-0.10
12	1	2019	5.76
13	0	2020	-0.05
14	1	2020	4.56
15	0	2021	0.00
16	1	2021	0.00

Source: Administrative income tax returns data from PRAL (2024).

In addition to focusing on immediate-term compliance trends, another aspect of the analysis is a focus on income declaration trends for newly registered taxpayers, post-registration. Tables 6 and 7 present this analysis. In both Tables 6 and 7, the results for tax year 2014 are ignored for the reason previously discussed. For the results in these tables, the year-on-year growth in incomes declared by every taxpayer was calculated. These growth rates were then aggregated by groups based on the type of taxpayer and the year of registration. Therefore, in Table 6, Row 3 shows that salary income for new business individuals (Type 0) registered in the tax year 2015 registered a decline of 0.27% when averaged over 2016 to 2021. This can be expected because Type 0 identifies business individuals, and while they may have had some income from salary, it constituted less than 50% of their total income. Similarly, Row 4 of the table shows that salaried individuals (Type 1) registered in 2015 had an average growth rate of 8.44% in salary income. In fact, a growth rate of 10% is observed, on average, in salary income, which is close to annual increments that are usually expected in salaries.

Table 7 presents the same results but for year-on-year growth in business income. It is startling to observe that for all of the newly registered taxpayers, business income, which, to reiterate, actually is previously untaxed income, shows a negative trend. In nearly all the years, at least a 10% decline in declared business incomes was observed, which in some years even exceeded a 100% decline, which means the business started filing losses. While only a meagre amount of total income filed by newly-registered business individuals was observed, the results indicate that the situation looks even bleaker for the years after the registration.

Table 7. Year-on-Year Growth in Business Income for New Filers

S. No.	Type of Taxpayer	Tax Year	Business Income Growth (%)
1	0	2014	-806
2	1	2014	-4.11
3	0	2015	-11.0
4	1	2015	-7.58
5	0	2016	-24.7
6	1	2016	-1.66
7	0	2017	-233
8	1	2017	-0.92
9	0	2018	-3.74
10	1	2018	-2.50
11	0	2019	-84.1
12	1	2019	-0.28
13	0	2020	1.76
14	1	2020	-0.06
15	0	2021	0.0
16	1	2021	0.0

Source: Authors' calculations using the administrative income tax returns data from PRAL (2024).

In this part of the analysis, the income declared per taxpayer and the composition of income declared in every year of newly registered taxpayers are discussed. The focus is on the year 2018 because tax return filings in this year were influenced by large-scale amnesty schemes targeting the entire population of potential taxpayers.

In Table 8, the year of registration, the total amount of income declared by the taxpayers (excluding the income reported as tax exempt), and the income declared per taxpayer for each year, are provided. It is interesting to note that while the highest number of taxpayers were registered in 2018, presumably to avail the amnesty scheme, the amount of income declared per taxpayer is the lowest in all the other years. This shows that even though the amnesty scheme successfully attracted more people into the tax net, it drew in the low-income segment of the population. This may even include individuals who would have previously not registered due to the small quantum of their taxable activity, but were lured by the amnesty scheme.

As mentioned earlier, an ideal goal of the BTB is not only to increase the number of taxpayers on the register, but also to enhance the tax base in terms of untapped revenue potential. Our data analysis indicated that the revenue potential per new taxpayer is relatively low. From an enforcement angle, if many of those who availed the amnesty scheme were lower-income earners, ensuring and sustaining their compliance will involve an increase in administrative challenges. Resultantly, the cost of this enforcement may outweigh the potential revenue gains from this segment of the population.

Table 8. Income Declared per New Registered Taxpayers

Year of Registration	Total Taxpayers	Total Income less Exempt Income	Income per Taxpayer
2015	367,732	172,282,235,635	468,499
2016	330,375	134,949,223,320	408,473
2017	398,529	150,986,760,887	378,860
2018	949,199	233,702,613,471	246,210
2019	560,352	307,117,382,530	548,079
2020	306,589	98,491,753,570	321,250
2021	74,579	40,769,176,249	546,658

Source: Authors' calculations using the administrative income tax returns data from PRAL (2024).

Figure 1. Composition of Income in the Year of Registration
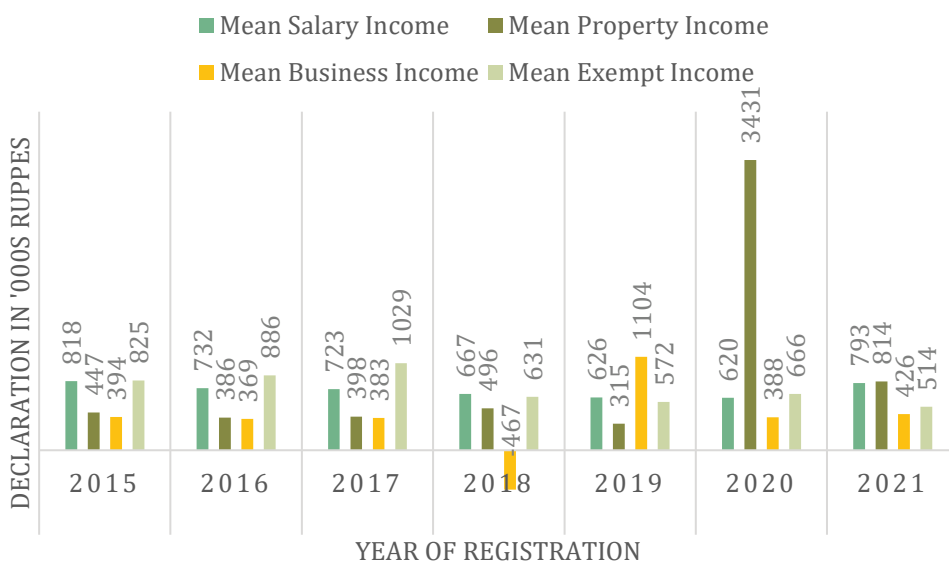
Source: Authors' calculations using the tax returns data from PRAL (2024).

In Figure 1, we go beyond looking at the total income to instead focus on the composition of income declared in the year of registration. The purpose behind this analysis was to discern the types of income that dominate the declaration by the newly registered taxpayers. The focus is on four types of incomes, i.e., incomes from salary, business, property, and tax-exempt incomes. Especially for 2018, this detailed breakdown helps in understanding the sectors that were most influenced by the amnesty scheme or the kind of income that was "whitened" (legalised by declaring it). This analysis is also useful in ascertaining the effectiveness of the amnesty schemes for targeting a diverse population of previously unregistered taxpayers and bringing them into the tax net.

It is clear that, except for some deviations, the composition of income declared is consistent across all years. The year 2018 stands out in three distinct ways, as evident from Figure 1. Those who were newly registered in the year 2018 declared the lowest income from property, nearly the lowest exempt income, and most importantly, business losses amounting to PKR 467,000, on average. This reveals reporting behaviour that points towards strategic financial disclosures of the individuals declaring these incomes. Such a significant declaration of business losses indicates that several individuals may have viewed the amnesty scheme as an opportunity to regularise their financial status and use the declaration of accumulated losses to safeguard against future tax liabilities. Furthermore, low income from property and nearly the lowest amount of exempt income declared indicate that the amnesty was seen as an opportunity to report previously hidden or unreported assets at a lower cost, especially since it was announced that taxpayers availing the amnesty would not be audited. This aspect is especially important because it highlights the role of the amnesty schemes in changing the composition of declared incomes, impacting tax policy and enforcement strategies in the long run.

A deeper look at the data reveals an even more diverse range of reporting behavior. Figures 2,3, and 4 show the composition of the incomes of the newly registered taxpayers in 2017, 2018, and 2019, respectively, and how the composition of reported income changed for these new people in the next tax filing year. In 2018, the reported salary, business, and even exempt incomes were higher in the following year after registration. The increase in business is especially worth noting since business losses were reported in the year of registration, i.e., 2018. As discussed earlier, this may just be strategic financial reporting where the initial declaration of losses was just a financial tactic to minimise tax liability, and therefore, the subsequent increase in reporting may indicate a correction of this initial strategic response. From a positive lens, it could be presumed that after having registered, the businesses may have

adjusted their reporting behaviour. This could be the result of an improved understanding of their tax obligations, a ripple effect of the positive benefits associated with being part of the formal economy, and even a response to the expectation of closer scrutiny by the tax administration. Given that Figure 4 shows the data for 2019, the continuing effects of the amnesty could have encouraged a more accurate reporting of incomes.

Figure 2. Evaluating Persistence in Composition for Tax Year 2017
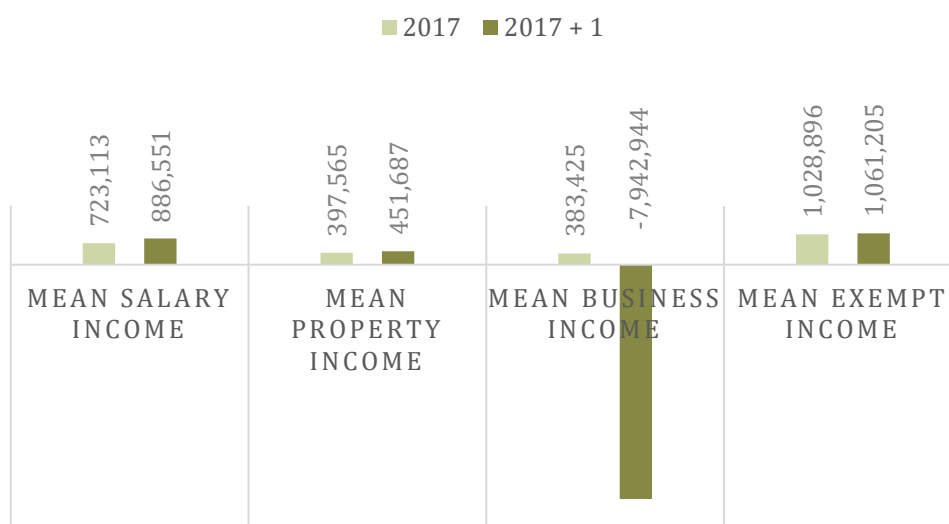
Source: Authors' calculations using tax returns data from PRAL (2024).

Figure 3. Evaluating Persistence in Composition of Income for Tax Year 2018
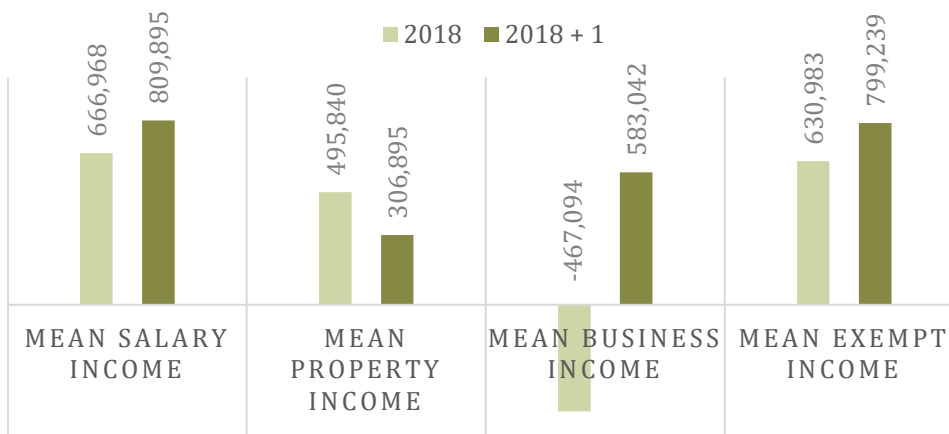
Source: Authors' calculations using tax returns data from PRAL (2024).

Figure 4. Evaluating the Persistence in the Composition of Income for Tax Year 2019
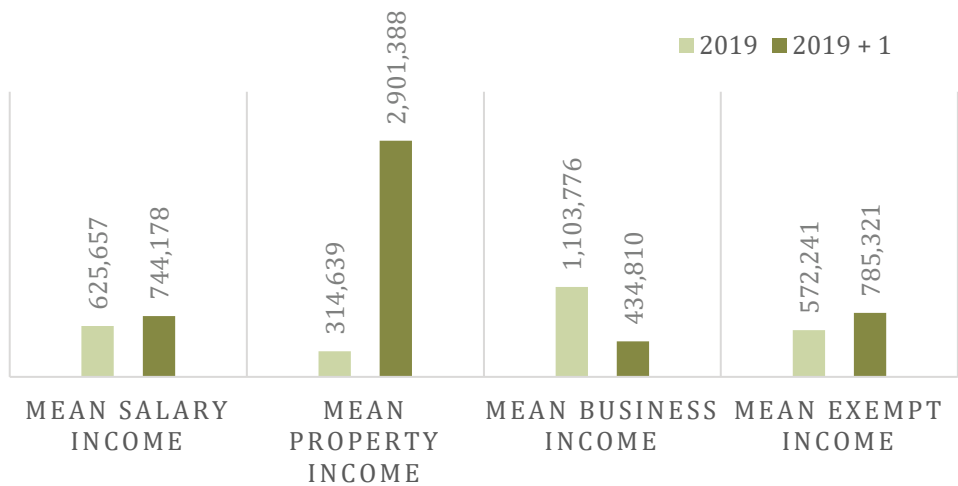
Source: Authors' calculations using the tax returns data from PRAL (2024).

Similarly, Figures 5 and 6 show the average taxable income reported by the newly registered taxpayers for all the years included in the analysis. The trends in both the figures clearly show that while declarations under other heads of income may not have been the highest in the year 2018 - the year of the amnesty – the declared taxable income was the highest. This is a positive in several different ways.

Figure 5. Comparison of Taxable Income across Various Years for Newly Registered Taxpayers
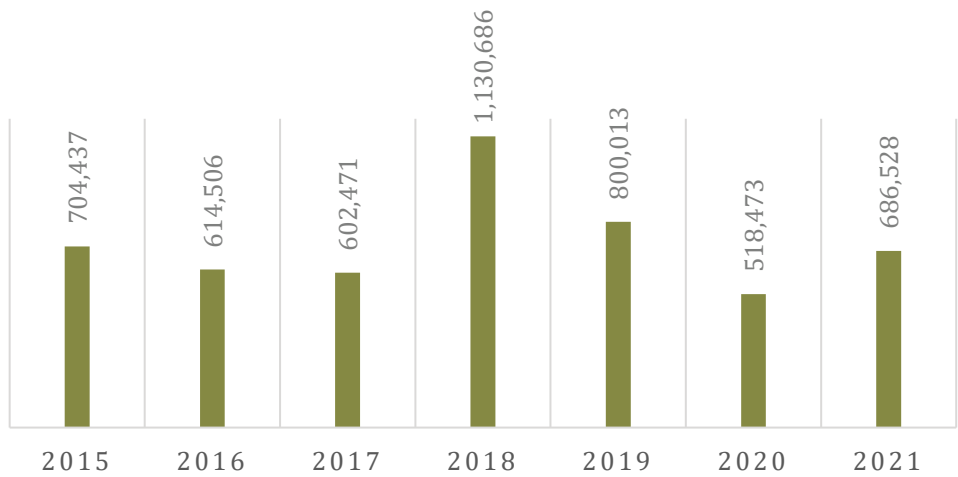
Source: Authors' calculations using the tax returns data from PRAL (2024).

First, this trend indicates that the amnesty scheme was successful at targeting and incentivising taxpayers to declare their previously hidden taxable income, as compared to other types of income. The tax amnesty was geared towards targeting and correcting underreported income, especially for increasing tax revenue. Therefore, taxpayers might have been more willing to declare this income with the knowledge that they would be able to avail lower tax rates and without penalties, as well as immunity from audit on their declarations.

Furthermore, an uptick in taxable income in 2018 points towards an immediate revenue benefit, thereby supporting the short-term goal, which was revenue generation, of the amnesty scheme. The spike in the taxable income also suggests that the amnesty scheme served as a behavioural reset for the taxpayers, and the pivot towards increased compliance shows that there might be a shift in norms. This could result in more compliance and thus more revenue in the future, but long-term gains will have to be ascertained through continuous monitoring.

Figure 6. Comparing Declared Incomes to Taxable Incomes for Years 2017, 2018, and 2019
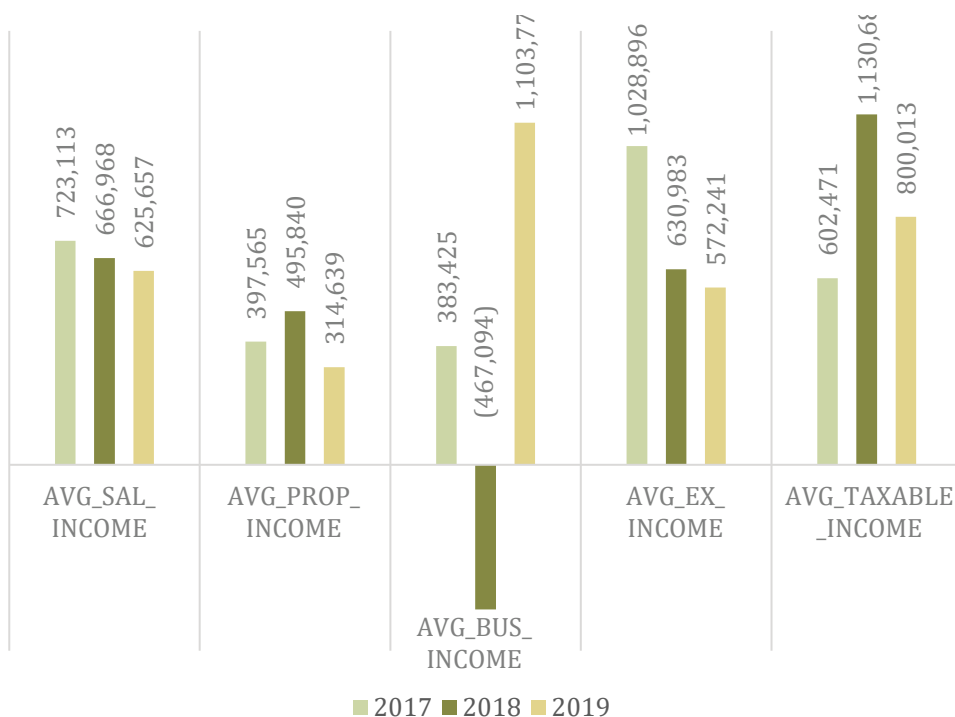
Source: Authors' calculations using the tax returns data from PRAL (2024).

Lastly, the amnesty's success in increasing taxable income declarations may also reflect growing public confidence, although this assumption needs to be analysed within the political economy backdrop. Having said that, an increase in taxable income serves as a strong case for the strategic use of amnesty schemes to improve compliance and evasion.

Figures 7, 8, and 9 show the data at the tax field office levels to ascertain taxpayer persistence and determine the impact on employee-related and operating expenses. It is critical to analyse these figures, given that they provide an analytical overview of the direct outcomes of the amnesty in terms of taxpayer behaviour as well as administrative response from the tax administration. The purpose is to comment, albeit briefly, on the effectiveness of the amnesty scheme, resource allocation, and, accordingly, to inform policy.

Figures 7 and 8 show the persistence. Figure 7 attempts to show the proportion of the newly registered taxpayers in 2018 who remained compliant by filing taxes in the following year, i.e., 2019. However, this analysis is distinguished by the tax field office. As Figure 8 shows, the retention rates remained at around 80%, on average, for all field offices. The slight variability can indicate the differences in effectiveness of the field office, particularly in engaging with the taxpayer. Furthermore, the fact that not all those who registered in 2018 were retained shows that while the amnesty was effective in encouraging initial registrations and declarations, the tax compliance was not sustainable or requires more monitoring and enforcement to sustain.

Figure 9 compares the changes in employee-related expenses and operating expenses for each tax office from 2018 to 2019. There are three notable observations. Most tax offices showed an increase in both the employee-related expenses and the operating expenses. This was to be expected given the large increase in the number of taxpayers due to the amnesty scheme in 2018 and the resultant need for enhanced enforcement capacity.

While the increase in cost per taxpayer seems to be in sync with the taxable income declared per taxpayer, it needs to be evaluated against the retention rates and the revenue generated from these new taxpayers in the long run. Since the costs also increase in the long run, the offices with high-cost increases but modest taxpayer retention rates can be indicative of administrative inefficiencies or misallocation of resources. It can also be seen that even though the retention rate is evenly spread across all tax offices, some offices managed to keep their expenses relatively stable, which is indicative of more efficient capacity utilization. These differences suggest that efficiency

outcomes may depend less on the scale of registration and more on how effectively field offices allocate enforcement resources post-registration. This particular insight highlights the potential for more in-depth research into understanding the strategies that allow for such efficiency and how those insights could inform improvements in other tax administrative offices in the field.
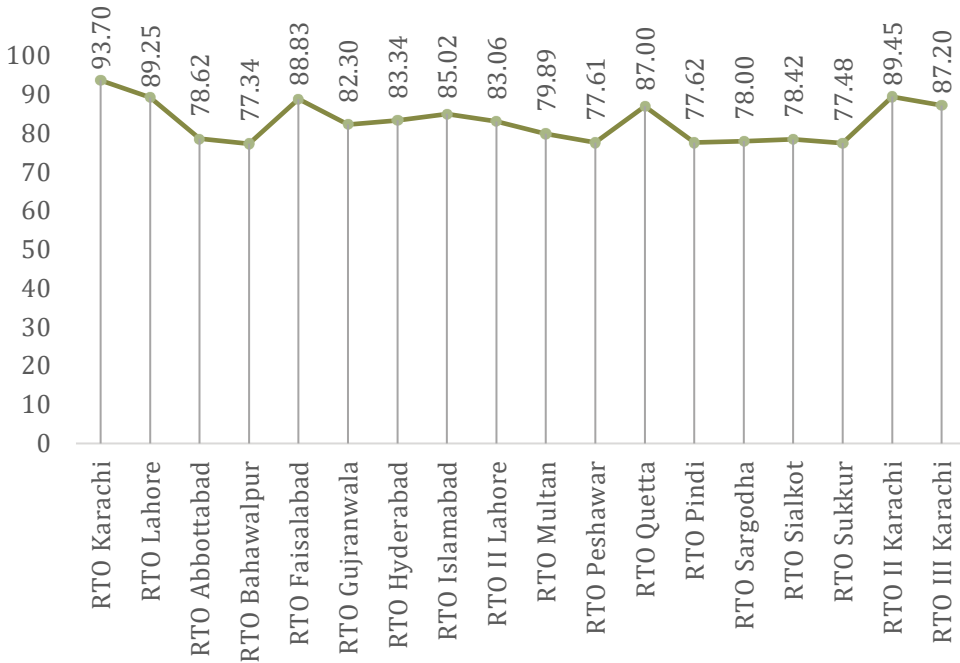
Figure 7. Comparison of the Number of Newly Registered Taxpayers Who Also Filed in 2019

■ Number of Taxpayers Registered in 2018 - Filing in 2019
■ Number of New Taxpayers Registered in 2018
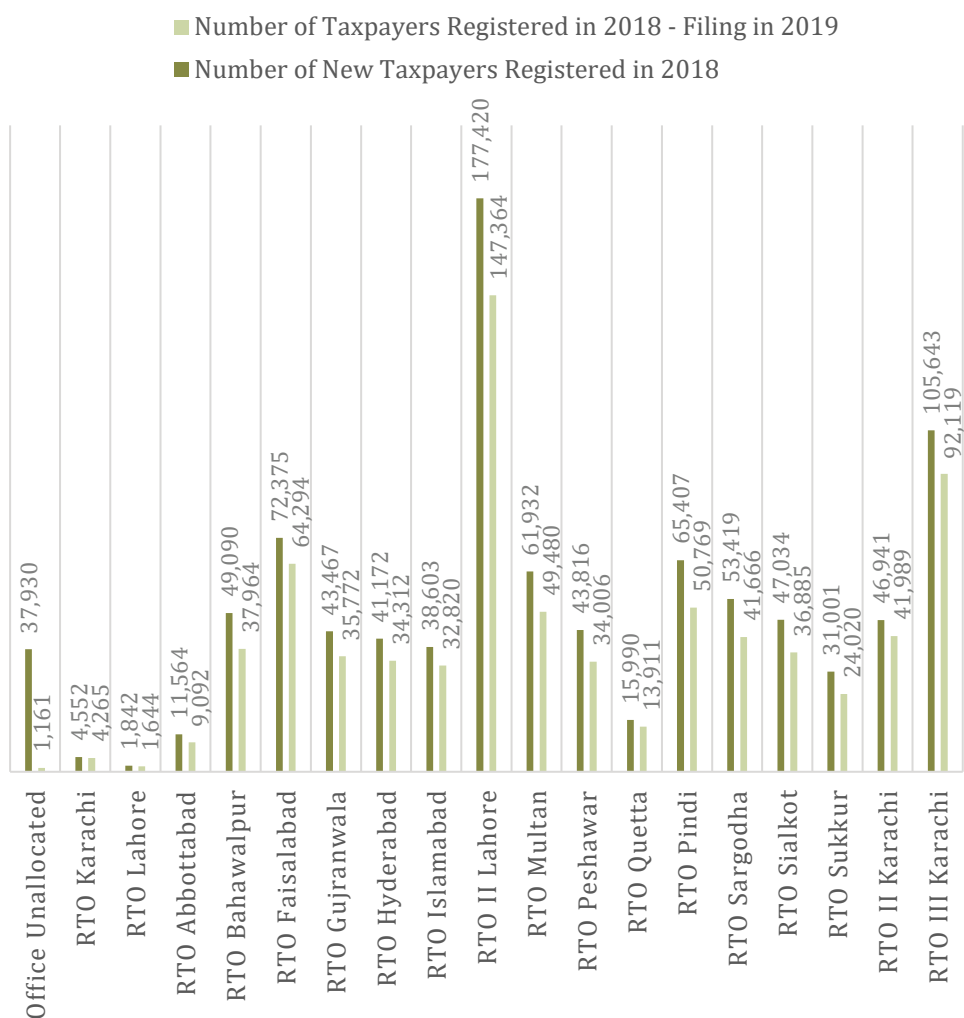
Source. Authors' calculations using the tax returns data from PRAL (2024).

Figure 8. Percentage Retention of Newly Registered Taxpayers by Tax Office for 2018/2019

Source: Authors' calculations using the tax returns data from PRAL (2024).

Figure 9. Evaluation of Increase/Decrease in Employee-Related and Operational Expenses from 2019 To 2019 by Field Office
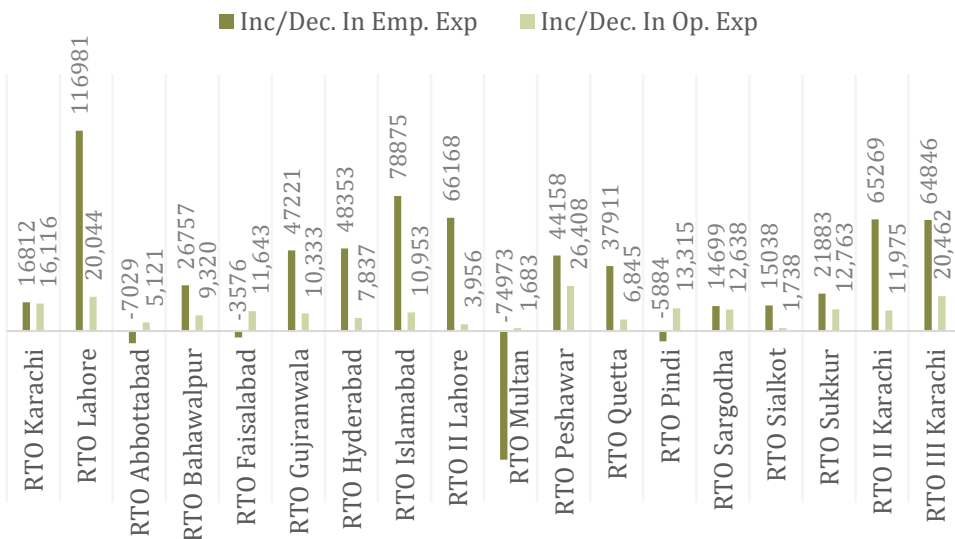
Source. Authors' calculations using the tax returns data from PRAL (2024).

5. CONCLUSIONS AND RECOMMENDATIONS FOR POLICY

From a policy standpoint, the findings offer important insights into the fiscal efficiency of untargeted broadening of Pakistan's tax base. The primary objective of any such policy is to increase tax revenue while enhancing documentation of the economy. One avenue toward this goal is through the inclusion of new taxpayers; however, the evidence presented here suggests that the effectiveness of this approach depends critically on the design and targeting of broadening initiatives. In particular, the study provides empirical evidence on the revenue potential and feasibility of untargeted registration drives within Pakistan's low-enforcement-capacity context.

Between 2015 and 2021, untargeted broadening efforts added nearly three million new taxpayers to the register. However, about 45 percent of these were salaried individuals whose incomes were already subject to withholding, implying limited addition of previously untaxed income. Among the business individuals newly registered, only PKR 190 billion in untapped income was declared, yielding, even under favorable assumptions, no more than PKR 9 billion in additional annual revenue. While compliance among new registrants improved gradually, reported business incomes showed a declining trend in subsequent years, suggesting that initial gains from registration were not sustained and that the fiscal yield of untargeted expansion remained modest.

The composition of incomes declared by newly registered taxpayers, particularly during the 2018 tax amnesty, indicates patterns of strategic reporting behavior. Although the amnesty successfully drew a large number of new registrants, the revenue potential of their declarations remained limited, and widespread reporting of business losses suggests that many taxpayers used the opportunity to regularize assets while minimizing current and future liabilities. Examination of the 2018–2019 period further shows that sustaining compliance after registration remains challenging: increases in employee-related and operational expenditures at field offices did not necessarily correspond to stronger retention or compliance outcomes. These findings point to persistent structural inefficiencies within field formations and underscore the importance of aligning administrative resources with measurable performance indicators such as taxpayer persistence and net revenue contribution.

The findings underscore the need for a more targeted and evidence-based approach to broadening the tax base. To realize the full potential of such initiatives, multiple data sources should be integrated to identify and prioritize previously untapped income streams across sectors. This approach can help address the low revenue yield observed under untargeted registration drives. Ensuring sustained compliance and minimizing evasion, particularly among non-salaried individuals, require continuous taxpayer engagement supported by data- and technology-driven monitoring systems. Equally important is improving administrative efficiency through better resource allocation and performance-based budgeting. Ultimately, the cost-effectiveness of taxpayer addition, measured against retention and revenue generation, should serve as the benchmark for evaluating all future BTB initiatives.

The results reaffirm that broadening the tax base can only yield significant revenue gains when guided by a targeted approach that leverages multiple data sources to capture previously untaxed income, particularly in sectors such as business, agriculture, and real estate. While the evidence remains correlational, it offers analytical insights that can inform the design of more effective BTB policies. The analysis makes clear that expanding the taxpayer register alone does not guarantee higher revenues; rather, sustained gains depend on post-registration compliance and the consistent integration of previously untaxed income into the formal tax net over time.

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SINGLE SUB-NATIONAL REVENUE COLLECTING AUTHORITY: A CASE OF BALOCHISTAN

Noor ul Haq Baloch[1] and Zia ur Rehman[2]

ABSTRACT

The province of Balochistan relies heavily on federal transfers to fulfil its fiscal obligations. This study examines the governance, technological, and enforcement challenges associated with consolidating tax collection functions under the Balochistan Revenue Authority (BRA), as well as the feasibility and potential benefits of such consolidation. A mixed-methods approach was employed to analyse the case of tax agency consolidation in Balochistan. The findings reveal operational inefficiencies, governance issues, and technological shortcomings that have adversely affected taxpayer compliance, revenue collection, and overall satisfaction. The results indicate that consolidation under the BRA holds promise but requires reforms to address operational, governance, technological, and stakeholder engagement challenges. Moreover, the findings suggest that consolidation could mitigate redundancies and improve efficiency; however, its success depends on incremental implementation and active stakeholder participation. The study concludes that consolidating tax functions under the BRA could help resolve systemic issues, enhance local revenue generation, and reduce dependence on federal resources. It further recommends strengthening Balochistan's tax administration by addressing existing challenges and adopting best practices.

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[1] Chairperson, Gwadar Port Authority, Gwadar.

[2] Senior Research Associate, Ministry of Planning, Development and Special Initiatives.

1. INTRODUCTION

Background

The Balochistan government struggles to generate sufficient revenue, relying unsustainably on federal transfers, with only PKR 33.8 billion in provincial tax receipts versus PKR 481.17 billion from federal transfers in FY 2023-24 (Government of Balochistan, 2025). Taxation is central to social policy, affecting resource distribution and welfare state politics (Ruane et al., 2020). It is a key tool for governments to achieve social and economic reforms, impacting human development and poverty reduction (Shettigar et al., 2024), while tax revenue challenges, such as weak tax administrations and tax avoidance, hinder their full potential (McCoy et al., 2017).

Pakistan's largest province, Balochistan, faces significant socioeconomic challenges, with 71% of the population living below the poverty line. The province is both underdeveloped and impoverished (Iqbal & Ahsan, 2024). Balochistan possesses the highest rate of multidimensional poverty, as evidenced by the Multidimensional Poverty Index (MPI) values of 0.39 (Saddique et al., 2023; Haq et al., 2024). Apart from poverty, socioeconomic issues like low education, healthcare, and infrastructure hinder productivity and economic growth (Bashir et al., 2022).

Balochistan's revenue collection responsibilities are divided among five agencies: the Balochistan Revenue Authority (BRA), the Board of Revenue (BOR), the Excise and Taxation Department (ETD), the Transport Department (TD), and the Energy Department (ED). Due to this fragmented framework, tax collection remains insufficient to meet provincial needs (Government of Balochistan, 2024b). Despite the presence of five tax-collection agencies, which need to be integrated into a single revenue agency, the province has a revenue shortfall, at least in potential taxes. However, no significant research has addressed tax integration at the provincial level in Pakistan.

Globally, the EU has made efforts to combat tax competition and harmonise corporate tax systems, with some success in driving down and converging corporate tax rates (Klofat, 2017; Stutzenberger & Bräutigam, 2019). However, unanimous decision-making requirements have hindered further integration (Jaakkola, 2023). Tax integration in the USA has been a topic of significant research and debate. Integration of corporate and shareholder taxes could reduce distortions and address concerns about income shifting and corporate inversions (Graetz & Warren, 2016). Carbon tax integration

with fiscal reform, particularly through reducing capital income tax rates, has been proposed as an effective policy for economic and environmental benefits (Jorgenson et al., 2015).

Similarly, regional examples from South Asia further emphasise the transformative potential of tax reforms. Tax integration in India has been a focus of reform efforts to address fiscal imbalances and improve revenue collection (Jain, 2016). The introduction of the Goods and Services Tax (GST) has been a significant step towards harmonising the tax structure and reducing cascading effects, potentially enhancing revenue efficiency (Khoja & Khan, 2020). Su (2024) has examined the impact of the merger of national and local tax bureaus in China on corporate tax evasion, finding that the merger improved tax transparency and reduced corporate tax evasion.

For Balochistan, provincial tax revenues are predominantly derived from the sales tax on services (STS), Balochistan Development and Maintenance of Infrastructure Cess (BDMIC), motor vehicle tax (MVT), and property tax. Additionally, non-tax revenues are generated through regulatory functions and charges for certain social and economic services (Government of Balochistan, 2025). Similarly, the revenue assignment of provincial governments can also be analysed, according to the constitutional scheme, as given in Table 1.

Table 1. Provincial Revenue Assignment as per Constitutional Provision

Provincial Taxes	Constitutional Scheme
Direct Taxes	
Property tax	Residuary, but there is a bar in the Federal List (subject 51)
Capital gains	Assigned through the bar on the federation in the Federal List (subject 50)
Agriculture income tax	Through the bar on the federation in the federal List (subject 47)
Indirect Taxes	
Excise duty on alcohol/liquor/narcotics	Assigned to the province by the bar on the federation in the Federal List (subject 44)
Sales tax on services	Residuary assignment
Tax on professions	Article 163 of the Constitution
Motor vehicle tax	Residuary assignment
Stamp duty	Residuary assignment
Registration fee	Residuary assignment
Mutation fee	Residuary assignment
Natural gas excise duty	Article 161 of the Constitution
Hydro profits	Article 161 of the Constitution
Electricity duty	Article 157(2) (b) of the Constitution

Source: Constitution of Pakistan.

However, taxes such as CVTIP, UIPT from the ETD, and AIT from the BOR exhibit sluggish growth despite having significant potential (Government of Balochistan, 2024a). Based on 2017-18 GDP estimates, Salam (2022) projected income tax revenues from crops in Balochistan to be PKR 4-5 billion, but Balochistan's 2017-18 agricultural revenue was only PKR 17 million. It highlighted differences in agricultural tax rates across provinces, as presented in Table 17 of the appendix. Additionally, in 2018 and 2019, Balochistan collected PKR 25 million in agricultural income and land-based taxes due to low tax rates and large exemptions (Rana et al. 2021). However, low population density and high service delivery costs pose challenges. Water scarcity limits agricultural productivity across districts (Safi et al., 2014). Agriculture accounts for 42.3% of employment and 19.2% of GDP, but only 0.6% of tax revenue, according to the SBP report (2017–18). Salman & Shah (2023) reported that Balochistan's GDP in 2020-21 was PKR 3,899 billion, with livestock as the largest agricultural contributor. Agricultural tax collections were only PKR 39.25 million despite significant government expenditures. The province's expenditure on both non-development and development in the agriculture sector is significant, as shown in Table 18 of the appendix. Suriya Nauman Rehan & Co. (2020) highlighted that at a 5% rate, agriculture income tax revenues should not be less than PKR 4.75 billion in Balochistan. The agricultural land base tax is given in Table 19 of the appendix, while the UIPT's potential is in Table 20 of the appendix.

Regarding the UIPT, Pasha (2011) analysed that UIPT and capital value tax are the most revenue-generating property taxes. In Phase III of the 18th Amendment, food and agriculture were devolved, among others. According to Bukhari & Haq (2015), Balochistan often fails to meet budgetary targets, with the ETD underperforming in revenue collection due to significant limitations. Many affluent property owners evade taxes. In 2013-14, the actual collection was PKR 48.3 million, far below the budgeted PKR 86 million. Lopez-Calix & Touqeer (2013) found that, despite urbanisation and rising property values, low UIPT revenue is due to exemptions, property undervaluation, rate differentials encouraging evasion, and ineffective administration. Rana (2020) found that the 18th Constitutional Amendment significantly impacted decentralisation in Pakistan. Although duties on property succession, estate duty, capital gains, and the general sales tax on services were devolved to provinces, most functions were reassigned to federal ministries, with only 11 devolved to provinces, while many remained unchanged. Rumi et al. (2014) estimated the 18th Amendment devolution expense at PKR 363 billion, with PKR 80 billion in unresolved issues related to the former Ministry of Labour. Despite initial challenges, Balochistan effectively communicated and managed power transfer responsibilities, similar to other provinces.

The primary aim of this study is to explore the viability of consolidating various high-potential taxes, specifically, the CVTIPT, UIPT, and AIT, which are under the umbrella of the BRA. Legally, the BRA can assume responsibility for taxes from other departments.

Research Gap

Previous research has explored taxation challenges in developing economies and the impact of fiscal decentralisation on provincial autonomy. However, little attention has been given to the specific challenges faced by Balochistan in consolidating tax functions under a single authority. While studies have addressed the general inefficiencies in Pakistan's tax administration, there is a clear gap in the literature when it comes to assessing the effectiveness of consolidating tax collection at the sub-national level in the unique context of Balochistan. This research aims to fill this gap by examining the feasibility and potential benefits of consolidating taxes under BRA.

Research Objectives

1. To assess the inefficiencies in tax collection among Balochistan's main tax agencies (BRA, ETD, and BOR).

2. To evaluate the feasibility and potential advantages of consolidating tax collection operations under the BRA.

3. To examine the governance, technological, and enforcement hurdles that could hinder the consolidation process.

4. To present policy recommendations aimed at enhancing tax collection efficiency and provincial revenue.

Research Questions

This study seeks to answer the following key research questions:

1. What are the existing inefficiencies in Balochistan's tax collection systems, specifically regarding CVTIP, UIPT, and AIT?

2. In what ways can the consolidation of taxes under BRA enhance revenue generation and tax compliance?

3. What are the key challenges (e.g., governance, enforcement, political) associated with consolidating taxes under an authority?

Significance of the Study

This research is important as it addresses an important policy concern of Balochistan's reliance on federal transfers and its underutilised provincial tax resources. This study aims to examine the potential advantages of consolidating tax functions under BRA, offering practical recommendations to enhance fiscal autonomy, governance, and tax compliance in Balochistan. Beyond the provincial level, this study may also contribute to broader discussions regarding sub-national tax reform and fiscal decentralisation in developing economies. If implemented successfully, the proposed reforms may exemplify a framework for other provinces in Pakistan encountering similar challenges in tax administration.

The study is structured as follows. The next section presents a comprehensive review of the literature on related themes and analyses of revenue agencies, provincial authorities and respective collections. Section 3 describes the methodology and data, including both quantitative and qualitative approaches. Section 4 presents the results and discussions, offering insights into the performance of the revenue authorities. Lastly, Section 5 concludes the study by discussing its limitations, presenting policy recommendations based on the research findings, outlining implications for future research, and offering final thoughts.

2. REVIEW OF LITERATURE

The literature review explores taxation and revenue systems both conceptually and empirically, emphasising subnational governance, tax integration, and revenue mobilisation. Integrating research on tax compliance, digitisation, the informal economy, and the political economy of reform presents an effective framework for evaluating the potential advantages of merging high-potential taxes under a single authority. The research examines structural and administrative challenges in essential revenue-generating departments to enhance tax collection efficiency in Balochistan, informed by existing literature.

Subnational Taxation and Revenue Integration

Research on subnational taxation and revenue integration indicates several significant findings. Introducing a subnational value-added tax can enhance sales tax collection in underdeveloped countries (Sen & Wallace, 2022). Regional economic integration enhances tax in the presence of effective institutions (Nnyanzi et al., 2016). Increased revenue decentralisation correlates with enhanced budget balances for subnational governments (Asatryan et al., 2015; van Rompuy, 2016). Subnational tax sovereignty and vertical transfers can facilitate regional convergence in GDP per capita; nevertheless, the efficacy of transfers declines with more dependency (van Rompuy, 2020). Regional integration can yield varied impacts on a small jurisdiction's fiscal revenue and GDP per capita, reliant upon its initial efficacy in delivering public inputs (Han & Song, 2017). The development of a new fiscal framework for regional public finance must incorporate concepts of equity, openness, and efficacy alongside the potential for regional secession.

Performance of Revenue Authorities

Recent studies have analysed the results of revenue authorities and tax administrations in multiple countries. The establishment of semi-autonomous revenue authorities (SARAs) in developing nations has not markedly enhanced government revenues (Sarr, 2016), although tax audits have demonstrated a positive effect on taxpayer compliance (Mebratu, 2016). The South African Revenue Service has effectively implemented a balanced scorecard methodology for performance management (Kumar et al., 2022). A cross-country examination indicates the possibility of enhanced efficiency in tax revenue collection (Nguyen et al., 2020). Determinants influencing tax revenue performance include tax evasion, psychological egoism, tax education, and technology adoption (Mu et al., 2023; Mu et al., 2022). Furthermore, tax incentives, shown by China's Income Tax Revenue Sharing Reform, have had a beneficial effect on firm financial performance (Fang et al., 2022).

Challenges and Barriers to Tax Integration

The integration of tax systems and economic policy encounters various impediments in different situations. In Africa, barriers to economic integration comprise polarisation, weak political will, and legislative anomalies (Pasara, 2020). Corporate tax integration has challenges due to distortions and the movement of worldwide income (Graetz & Warren, 2016).

The adoption of integrated reporting systems is impeded by their flexibility and absence of prescriptive guidelines (Dumay et al., 2017). The adoption of modular integrated creation encounters intellectual, financial, and technological obstacles (Wuni & Shen, 2020). The effect of regional economic integration on tax collection is reliant on the quality of institutions (Nnyanzi et al., 2016). The development of global software faces integration difficulties stemming from incompatibilities and complexities (Zafar et al., 2017). In Ghana, the incorporation of blockchain into tax policy for the digital economy faces obstacles related to institutions, technology, and stakeholder involvement (Anomah et al., 2024).

Tax Compliance

Tax compliance is affected by numerous economic, social, and institutional elements. Economic elements such as trade liberalisation, foreign direct investment, and the development of the banking sector exhibit a favourable impact on tax collection (Chettri et al., 2023). Confidence in the government and attitudes toward its authority influence voluntary compliance (Inasius et al., 2020). Perceptions of corruption adversely affect taxpayer conduct (Rosid et al., 2018). For small and medium enterprises, referral groups, audit possibility, tax understanding, and views of system equity substantially influence compliance (Inasius, 2019). Tax fines and e-filing systems are also significant factors (Kushwah et al., 2021). Tax education can enhance compliance by improving perceptions of system fairness and moral views (Kwok & Yip, 2018). Furthermore, the ease of tax compliance, choices of government expenditure, and tax morale affect voluntary compliance behaviour (Hassan et al., 2021).

Informal Economy and Taxation

The informal sector and taxation exhibit complicated issues. Research indicates that parameters such as the rule of law, the complexity of the tax system, and labour market restrictions affect informal economic activity (Nagac, 2015). In South Asian countries, trade openness, life expectancy, and foreign direct investment have a beneficial effect on tax income (Chettri et al., 2023). In contrast to the neoliberal viewpoint, increased regulation and government involvement might decrease informal employment (Williams, 2017). The tax gap in informal sectors can be significant, influenced by firm-level components that impact tax compliance (Danquah & Osei-Assibey, 2018). Cross-national disparities in informalisation are associated with economic and social factors (Williams, 2014). Furthermore, tax morale

significantly impacts informal entrepreneurship, driven by components including perceived tax equity and political stability (Williams & Bezeredi, 2018).

The informal economy in Pakistan presents considerable obstacles to tax compliance and revenue generation. Research shows that institutional quality, fiscal policies, and tax rates affect the magnitude of the informal sector and tax evasion (Qamar et al., 2020; Khan et al., 2020). Taxing the informal sector is considered difficult due to low revenue potential and high collection costs. However, recent studies highlight additional advantages, including economic growth and better governance (Joshi et al., 2012 and 2014). Strategies to improve tax compliance include reducing compliance costs, strengthening the advantages of formalisation, and utilising trade associations as agents for tax collection (Akeju, 2018; Somuah, 2011). Nonetheless, substantial tax hikes may result in income shifting, a transition to informal employment, and diminished revenue collection (Waseem, 2018). Better tax enforcement may augment revenues, diminish informality, and elevate GDP (Ilzetzki & Lagakos, 2017). Additionally, it is estimated that 70% of Quetta city's economy operates within the informal sector (Shahzad, 2023). Addressing taxation in the informal economy necessitates a holistic strategy that takes into account both technical aspects and wider developmental consequences.

Tax Digitisation and Automation

Recent studies underscore the increasing significance of tax digitalisation and automation in South Asia. Although digitalisation might enhance tax administration and inclusion, it may result in premature formalisation, negatively impacting vulnerable individuals (Roy & Khan, 2021). Countries such as China, India, and South Korea have used diverse strategies to digitise their tax systems (Olowska, 2020). The digitisation of trade brings issues for policymakers, as South Asian nations may incur revenue losses from the restriction on digital trade tariffs (Choudhury, 2020). Taxation is considered an effective means for distributing the benefits of automation and AI, while it entails adjustments to contemporary corporate practices (Merola, 2022). Elements such as trade liberalisation, foreign direct investment, and the advancement of the banking sector substantially influence tax revenue in South Asian nations (Chettri et al., 2023). Collaborative efforts in Industrial Revolution 4.0 technologies could lead to inclusive growth for South Asian nations (Mukherjee & Satija, 2020).

In a nutshell, Sen & Wallace (2022) and Nnyanzi et al. (2016) highlight the transformative potential of regional integration in improving fiscal balances and GDP growth, underlining the need for institutional reforms in Balochistan. Similarly, Nguyen et al. (2020) emphasise the importance of semi-autonomous structures, tax audits, and incentives to enhance revenue mobilisation—concepts that directly support the study's objectives. Furthermore, Inasius et al. (2020) and Kushwah et al. (2021) underscore the role of taxpayer behaviour, e-filing systems, and education in improving compliance—key considerations for modernising tax systems in Balochistan. However, Williams & Bezeredi (2018) and Danquah & Osei-Assibey (2018) highlight the complexities of addressing informal sector dynamics, a significant challenge for the province. Lastly, Olowska (2020) and Roy & Khan (2021) emphasise the need for technological advancements to improve transparency and efficiency, supporting the study's emphasis on integrating modern systems under a single authority. These findings collectively provide a compelling rationale for consolidating CVTIP, UIPT, and AIT under one authority, aligning with the broader goal of enhancing governance, compliance, and revenue generation in Balochistan.

Analysis of Revenue Agencies

A detailed review of their websites and collections, along with revenue authorities, was conducted to assess the performance of the BRA, ETD, BOR, TD, and ED. This provided insights into their operational efficiencies and revenue capabilities. Moreover, the tax definitions of each department can be seen in Table 21 of the appendix. However, a comparative analysis of revenue departments explores each of the strengths and challenges, as shown in Table 22 of the appendix. These insights can help with the reforms needed for consolidation.

Revenue Departments Analysis

The establishment of the BRA in 2015 marked a significant advancement in modernising tax administration in Balochistan. As shown in Figure 2 of the appendix, the STS collection grew under BRA compared to FBR. As SARA, BRA exemplifies the potential benefits and challenges of integrating tax operations within a single institution, such as expanded scope and new regional offices Table 22 of the appendix. This study's findings confirm that conventional tax-collection agencies in Balochistan demonstrate inherent deficiencies that compromise their efficacy, with challenges and growth shown in Table 22 of the appendix. Complications such as intricate tax systems, limited tax bases,

antiquated legislation, and insufficient technology integration hinder their capacity to conform to contemporary tax administration requirements (Negatu, 2019; Mtasiwa, 2013). Moreover, tax evasion, avoidance, and the improper use of exemptions persist widely, further reducing revenue collection capacity (Mtasiwa, 2013). Furthermore, institutional challenges, including inadequate resources, underqualified personnel, and corruption, are prevalent (Kyoma et al., 2022). These factors have decreased operational efficiency and eroded public trust, thereby complicating the achievement of voluntary compliance. Adverse taxpayer perceptions, insufficient comprehension, and cultural resistance further exacerbate these difficulties (Tegegn & Kebede, 2016).

The BRA's collection of PKR 27,034 million in 2024, as presented in Figure 1 —substantially surpassing the revenues generated by traditional departments—demonstrates its ability to function as a more efficient and effective tax-collection entity. This significant performance disparity highlights the feasibility of consolidating tax operations under BRA, which is more proficient in mobilising revenue resources and streamlining processes. Taliercio Jr (2004) argues that SARAs, such as the Brazilian Revenue Authority, benefit from increased autonomy, enabling them to operate independently of bureaucratic constraints. Similarly, the enhanced autonomy of the BRA in Balochistan has also facilitated prompt decision-making, reinforced accountability, and fostered the attraction and retention of skilled professionals through competitive compensation. However, evidence suggests that these advantages necessitate continuous political support and a strong organisational framework (Mann, 2004). Moreover, consolidation under BRA would enable centralised monitoring, minimising duplication among several tax-collection organisations and promoting a more cohesive strategy for tax policy and administration.

Comparable achievements have been seen in other areas where SARAs efficiently optimised procedures and enhanced compliance (von Haldenwang, 2010). BRA has the capacity to rectify technological inefficiencies seen in conventional departments. By using contemporary IT systems and incorporating digital platforms for taxpayers, BRA has minimised manual processing mistakes and enhanced taxpayer satisfaction (Nisar, 2006). This necessitates significant investment in infrastructure and personnel training to address current limits. Although SARAs initially enhance performance, they frequently encounter difficulties in maintaining these improvements over time (Therkildsen, 2004). Political meddling, insufficient ongoing support, and organisational complacency might diminish their efficacy. BRA must aggressively mitigate these risks to guarantee long-term sustainability and success.

The consolidation under BRA presents a strategic opportunity to rectify structural flaws within Balochistan's tax system. By consolidating tax activities, BRA may simplify regulations, minimise administrative redundancies, and provide a singular point of responsibility, therefore enhancing transparency and confidence among taxpayers. The consolidation process must incorporate comprehensive taxpayer education initiatives to improve awareness and promote voluntary compliance. Studies indicate that public confidence in tax authorities markedly rises when taxpayers view the system as equitable and transparent (Tegegn & Kebede, 2016; Levi, 1988). The BRA must streamline tax procedures and offer accessible e-governance tools to promote engagement.

Additionally, consolidation in Balochistan requires robust political backing and an organisational structure emphasising autonomy and effectiveness. Mann (2004) and Taliercio Jr (2004) underscore that these criteria are essential for the success of SARAs. Protecting BRA from excessive political intervention will allow it to preserve operational autonomy and concentrate on meeting its revenue objectives. Consolidation should adopt a staged strategy to reduce interruptions and provide incremental enhancements. Pilot projects may be executed to evaluate the integration of functions, enhance procedures, and resolve difficulties before comprehensive implementation. This conforms to optimal methodologies for administering intricate organisational transformations (Bird & Zolt, 2011). Finally, BRA must implement systems for ongoing monitoring and review to maintain the advantages of consolidation. Performance metrics, routine evaluations, and stakeholder feedback mechanisms will guarantee accountability and promote adaptive management. Moreover, their collection from FY2015-16 to FY2022-23 can be seen in Figure 1. It demonstrates each ability in provincial tax revenue.

Moreover, the consolidation of tax departments within a revenue authority entails complex power dynamics and possible opposition. Research indicates that coercive and legitimate power can affect tax compliance, with legitimate power typically resulting in more favourable outcomes (Hofmann et al., 2013; Van Dijke et al., 2019). Opposition to reforms may arise from established political interests, elite resistance, and bureaucratic entities (Jibao & Prichard, 2015; Boon & Verhoest, 2018). Departments, including ETD, BOR, and finance, may oppose consolidation due to concerns regarding diminished authority and resource distribution. Nonetheless, elements like ethnic diversity and electoral competition can occasionally promote reform by fragmenting opposition (Jibao & Prichard, 2015). Power analysis frameworks facilitate the understanding of resistance strategies, yet they predominantly emphasise

agency-based and coercive power rather than structural dimensions (McGee, 2016). Small states may utilise diverse resistance strategies in reaction to new tax regulations, contingent upon their affiliations with the financial sector and international organisations (Crasnic, 2020). Effective reform implementation necessitates meticulous attention to power dynamics, resistance, and context-specific variables (Winkler-Titus & Crafford, 2022; Noda, 2016).

Figure 1. Collection of Tax Revenues by Each Department from FY 2015-16 to FY 2022-24 (PKR Million)
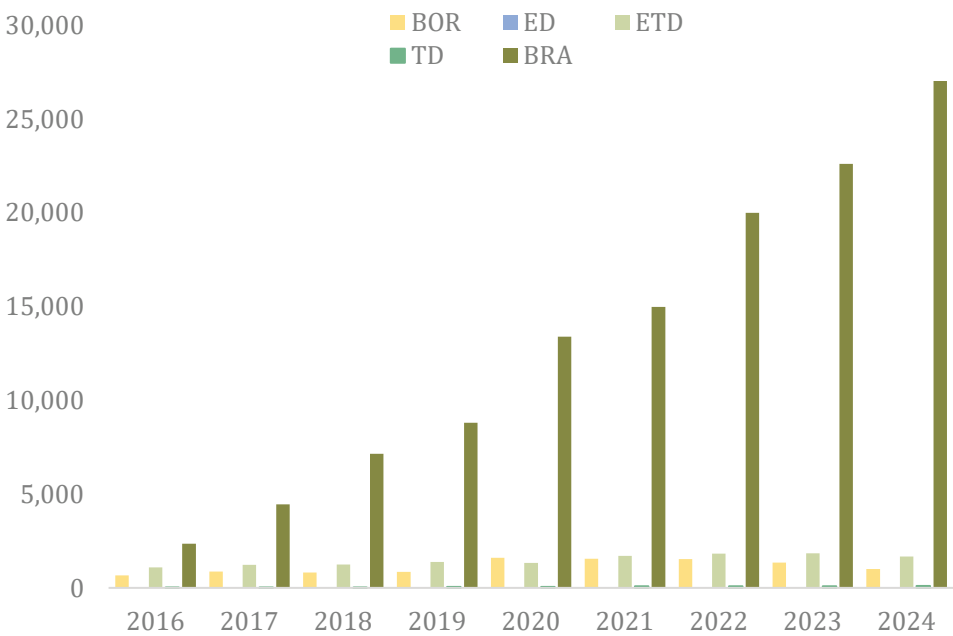
Source: Government of Balochistan, 2024b.

Comparative Analysis of Provincial Revenue Authorities

Moreover, Pakistan's fiscal decentralisation has led to the establishment of provincial revenue authorities, such as SRB, KPRA, PRA and BRA, to manage service-based tax collection. This analysis explores their structures, performance, and advancement to provide insights into improving revenue authorities, which can better examine the BRA performance for consolidation, as shown in Table 2.

Table 2. Comparative Analysis of Revenue Authorities

Category	Sindh Revenue Board (SRB)	Punjab Revenue Authority (PRA)	Khyber Pakhtunkhwa Revenue Authority (KPRA)	Balochistan Revenue Authority (BRA)
Establish-ment Year	2010	2012	2013	2015
Legal framework	Sindh Revenue Board Act, 2010, SSTS Act, 2011, SWWF Act, 2014, SWPF Act, 2015	Punjab Revenue Authority Act, 2012 PSTS Act, 2012 PIDC Act, 2015 PWWF Act, 2019	KP Finance Act, 2013 KPSTS Act, 2022 KPIDC Act, 2022	BSTS Act, 2015 BDMIC Act, 2019 WPPF Act, 2022 WWF Act, 2022
Regional offices	Hyderabad, Sukkur, Mirpurkhas, Larkana, Shaheed Benazirabad	Bahawalpur, Gujrat, Sargodha, Sialkot, Rahim Yar Khan, Sahiwal, Multan, Rawalpindi, Faisalabad, Gujranwala, Lahore (2)	Dera Ismail Khan, Kohat, Bannu, Abbottabad, Mardan	Gwadar, Hub, Panjgur, Turbat, Taftan, Chaman
Revenue performa-nce (FY 2023-24)	Rs. 236.8 billion Overall Growth[1]: 27.8% SSTS: 44% SWWF: 35% SWPPF: 78%	Rs. 239 billion Overall Growth: 20% PSTS: 17% PWWF: 92% PIDC: 55%	Rs. 35 billion Overall Growth: 37% KPIDC: 50% KPSTS: -12.54%	Rs. 27 billion Overall Growth: 22.73% BSTS: 30% BDMIC: 33.3% WWF & WPPF: Rs. 0.1 billion
Advancem-ents	Online tax payment, e-registration, CRMs[2], PRAL[3] integration, PoS[4] system, tax workshops, annual reports, Sindh Institute of Fiscal Management, Tax Policy Wing	Online tax payment, e-registration, CMS[5], MIS[6] Information Centre, PRAL integration, PoS system, tax workshops, SARA[7] approach for tax evasion	Online tax payment, e-registration, CRMs, PRAL integration, PoS system, tax workshops, RCS[8] for compliance, RIMS for transparency, Citizen Portal, annual reports	Online tax payment, e-registration, CMS, MIS Information Centre, PRAL integration, PoS system, tax workshops, VAT self-assessment, IT capability building

[1] For FY 2022-23; [2] compliance risk management; [3] Pakistan Revenue Automation Limited; [4] point of sale; [5] complaint management system; [6] management information system; [7] management information system; [8] revenue collection strategy.
Sources: Authors' compilation based on the information on the websites of the finance divisions and provincial revenue authorities.

The analysis identifies significant inefficiencies in Balochistan's tax collection and potential reform opportunities through integration under the BRA. Comparative analysis identifies deficiencies in structures, operations, and technology, highlighting opportunities to improve financial efficiency, accountability, and governance in accordance with the study's aims.

3. METHODOLOGY

Design

This study used a mixed-methods approach to examine tax agency consolidation in Balochistan, combining qualitative and quantitative research for a comprehensive analysis of local issues. This design allows for triangulation, validating results across different sources, and captures a thorough understanding by merging qualitative depth with quantitative breadth. We employed an explanatory sequential design, in which quantitative findings inform qualitative research. Creswell & Clark (2018) note that case study design enhances mixed methods, providing insights into experiences. Creswell & Clark (2018) argue that integrating both forms of data improves understanding of perceptions that could be overlooked when analysed separately. The qualitative component utilised thematic analysis to identify patterns, while the quantitative component applied descriptive statistics to describe stakeholder perspectives. Focus group discussions (FGDs) gathered stakeholder insights, laying the groundwork for the quantitative instrument. Creswell (2022) emphasises FGDs in developing research questions from experiences. FGDs in taxation have explored attitudes toward corporate tax and revaluation practices.

After the FGDs, we conducted semi-structured interviews with stakeholders, including tax department directors and experienced taxpayers, gathering diverse insights into the tax system, addressing institutional resistance, and making collaboration recommendations. Merging these insights with survey data enhances validity and counters biases. A structured questionnaire survey targeting active taxpayers was conducted using random sampling to ensure representation, identifying significant patterns regarding redundancies and satisfaction. Data synthesis through "meta-inferences" combines results, enriching mixed methods research. This approach improves understanding of tax agency consolidation, offering actionable recommendations for policymakers. Overall, the mixed-methods approach ensures scientifically robust and practically relevant conclusions.

Participants

Participants were selected based on a convenience sample from key stakeholder groups in tax administration in Balochistan. Key stakeholders were officials from the BRA, the ETD, the BOR, and the Finance Department. Taxpayers included individuals and businesses, while private sector and civil society stakeholders had interests in taxation. The research team approached the participants directly and informed them about the study's objectives. Most were not proficient in English, so interviews and questionnaires were conducted in Urdu to minimise misunderstandings and ensure accurate responses. Subsequently, interview recordings were transcribed and translated into English for analysis. This adaptation ensured that data was collected reliably and inclusively. However, some focus group participants and individual respondents were uncomfortable with being recorded, so their comments were documented verbatim during the sessions.

FDG Data Sampling

FGDs were used to gather in-depth insights on tax consolidation under the BRA and the challenges and opportunities in Balochistan's tax system. This method involves collecting data from a small group of respondents chosen from a larger population. Four discussions were held, two in April/May and two in September/October 2024 (Table 3). With 6-9 participants each, sessions typically lasted 60-120 minutes, guided by general questions. Initial questions focused on personal experiences with tax departments, helping participants to identify key challenges. Discussions then shifted to broader concepts of tax consolidation and its outcomes, aiming to capture diverse views. A cross-section of officials and taxpayers from various backgrounds was included in the FGDs, such as the BOR, the ETD, the BRA, and taxpayers from the agriculture and property sectors (Table 3). The aim was homogeneity within groups regarding relationships with tax departments while ensuring diversity in age and education. Ultimately, 26 participants, aged 32-60, participated in the FGDs.

Table 3 shows the focus groups' composition. The group codes in the results section relate to their corresponding focus group conversations.

Table 3. Composition of Focus Groups

Group and Place	Group code	Number of participants	Age range
Quetta			
Tax officials (BOR, BRA, TA, ETD and ED) Excise & taxation officer Assistant commissioner Additional secretary Deputy director Assistant secretary	Q-1	7	32-60
Quetta			
Taxpayers (Agriculture, Property, QCCI, BRA taxpayer)	Q-2	5	35-65
Hub			
Tax officials (Treasury, ETD, BRA) Officials (LIEDA, COC)	H-1	7	35-70
Gwadar			
Tax officials (Treasury, ETD, BRA) Officials (XEN irrigation, XEN C&W, COC)	G-1	7	32-60

Source: Authors' compilation.

Qualitative Data Collection Procedure

Semi-structured interviews with officials, taxpayers, and stakeholders were conducted to gain insights into their perspectives on operational challenges, governance gaps, technological inefficiencies, and taxpayer engagement in Balochistan's tax administration. The interviews, conducted in Urdu to ensure accessibility, allowed participants to express themselves comfortably. The interviews were transcribed verbatim and translated into English to retain the meaning. Each session lasted 35 to 50 minutes, balancing guided questions with open discussions on key themes. Audio recordings, made with the participants' consent, captured nuances for better analysis and were securely stored to protect confidentiality. The transcriptions were meticulously created to reflect participants' precise words and intent, adhering to ethical guidelines for robust thematic analysis of Balochistan's revenue systems. However, some comments were documented verbatim during the sessions.

Quantitative Data Collection Procedure

To complement the qualitative component, a structured questionnaire was administered to gather numerical data on stakeholder perceptions, attitudes, and trends regarding tax administration in Balochistan. This quantitative face-to-face survey was conducted between October and November 2024, employing a systematic approach to ensure data validity and reliability.

The questionnaire was designed to capture comprehensive insights across four thematic areas: General Information – demographic details, including age, gender, education level, etc. Current Tax Experiences – questions addressing respondents' interactions with tax authorities, challenges faced, and perceptions of tax processes. Finally, respondents' views on the proposed consolidation of tax functions under the BRA were elicited. The questionnaire was made available in both Urdu and English to mitigate potential language barriers, ensuring inclusivity and minimising the risk of misinterpretation. This bilingual approach aimed to enhance participants' comprehension and comfort when responding.

Before full implementation, a pilot survey was conducted of a sample of 24 respondents from the target population. The pilot study tested the clarity, relevance, and structure of the questionnaire. Feedback from the pilot respondents was used to refine the questions and improve the overall design, ensuring that the instrument effectively captured the desired data while minimising ambiguity.

Sampling and Data Collection

A random sampling strategy maximised representativeness by distributing 500 questionnaires to individual taxpayers from various tax department directories in Quetta and Hub Districts, capturing diverse urban and semi-urban perspectives in Balochistan. However, only 203 respondents completed the questionnaires, yielding a response rate of about 40.6%. After review, 190 questionnaires were validated for analysis, excluding those with incomplete data or inconsistencies.

The study faced challenges due to the low response rate, attributed to a reluctance to participate in sensitive tax discussions, time constraints for completing the survey, and general mistrust in tax-related research. Mitigation efforts included clarifying the study's purpose, ensuring confidentiality, and offering bilingual questionnaires, but these did not significantly improve the response rate.

Data underwent rigorous review for reliability. Responses were screened for completeness and consistency, with incomplete or contradictory questionnaires excluded. The remaining data were cross-checked against pilot study results to validate the refined questionnaire's effectiveness. The validated sample of 190 responses supported quantitative analysis, laying a strong foundation for statistical examination and adhering to strict ethical standards.

Data Analysis

Qualitative Data Analysis

The qualitative interviews were analysed using thematic analysis, guided by the framework developed by Braun & Clarke (2006). Themes were identified inductively, capturing recurring patterns and unique insights from participants. The analysis was conducted using ChatGPT, an AI language model increasingly recognised for its ability to facilitate dynamic and context-sensitive qualitative analysis.

In the vibrant environment of modern research, the amalgamation of new technologies has modernised the research methodologies used for data analysis (e.g., Hariri, 2023; Morgan, 2023; de Zúñiga et al., 2023). Among these technologies, ChatGPT, a front-line language model introduced by OpenAI, stands out as a distinct instrument capable of managing and producing human-like content (Hariri, 2023; Lingard, 2023). Analogously, N-Vivo is a prevalent program for qualitative data analysis, including benefits such as effective data management, transparency, and visualisation capabilities (Vignato et al., 2022; Mozzato et al., 2016). It accommodates several kinds of data and analytical techniques, including thematic content analysis (Oliveira et al., 2016; Phillips & Lu, 2018). Nevertheless, N-Vivo presents several drawbacks, such as elevated expenses, insufficient tutorials, and a significant learning curve (Andrade et al., 2020; Vignato et al., 2022).

Scholars contend that excessive dependence on coding characteristics can detract from more profound analysis (Vignato et al., 2022). Although N-Vivo can improve consistency and rigour in qualitative research (Bergin, 2011), it does not supplant the researcher's responsibility in coding and interpretation (Oliveira et al., 2016). The program's efficacy is contingent upon the researcher's proficiency in content analysis techniques (Oliveira et al., 2016). Taking into account its disadvantages, recent studies have investigated the potential applications of ChatGPT in qualitative thematic analysis,

highlighting the advantages of this tool in terms of both efficiency and data handling capabilities. Lee et al. (2024) and Turobov et al. (2024) have established that ChatGPT can assist with the coding of transcripts, the generation of themes, and the preprocessing of quotes. ChatGPT not only enhances efficiency but also provides additional insights.

ChatGPT has the potential to considerably minimise the time required for analysis in comparison to human coders (Prescott et al., 2024; Şen et al., 2023), along with its capability to swiftly process vast amounts of data (Marchandot et al., 2023). Researchers have developed frameworks for designing effective prompts (Zhang et al., 2023) and noted that ChatGPT's performance in theme discovery often corresponds with human researchers. Precisely, the performance of ChatGPT in detecting themes frequently aligns with that of experienced researchers (Wachinger et al., 2025).

Overall, ChatGPT offers considerable advantages (Shoufan, 2023). However, while ChatGPT possesses the potential to serve as a supplementary tool in qualitative research, human supervision remains essential to ensure accuracy and contextual comprehension (Lee et al., 2024; Morgan, 2023). Despite being in the early stages of its application in thematic analyses, ChatGPT has received significant recognition from researchers and remains an effective tool for qualitative data analysis. Consequently, considering the recommendations presented in the literature, we prioritised supervision to ensure both accuracy and comprehension of the context.

Quantitative Data Analysis

Quantitative data were analysed using Stata-17 statistical software. Descriptive statistics is a fundamental method for summarising and presenting data in a meaningful way (Baffoe-Djan & Smith, 2019; Downie & Starry, 2019). It involves analysing quantitative or qualitative data to describe patterns and characteristics of a sample group (Delaney, 2010; Sharma et al., 2018). Common descriptive measures include central tendency, dispersion, and distribution, which can be presented through tables, graphs, and numerical summaries (Cleff, 2013; Dong, 2023). While descriptive statistics do not allow for conclusions beyond the analysed data, they provide a foundation for further statistical analysis and hypothesis testing (Downie & Starry, 2019; Dong, 2023). Descriptive analyses are widely used in research, appearing in nearly 70% of nursing research articles (Berndt, 2009). Understanding descriptive statistics is crucial for researchers,

decision-makers, and consumers of research to interpret and evaluate data effectively across various fields, including business, economics, and applied linguistics (Baffoe-Djan & Smith, 2019; Cleff, 2013).

A normality test was performed before statistical analysis to ensure the appropriate use of descriptive methods. This analytical approach was selected because descriptive statistics are particularly effective in capturing the central tendencies and variability within the data, providing a clear and accessible overview of key patterns.

The integration of these analytical methods—qualitative thematic analysis via ChatGPT and quantitative descriptive analysis via Stata —ensured a comprehensive examination of the research questions. By combining the depth of qualitative insights with the breadth of quantitative trends, the study provided a well-rounded and robust understanding of the issues at hand.

Justification for Methods

The methodological choices were driven by the study's objectives and the nature of the research questions. A mixed-methods design was essential to explore the complex and multifaceted challenges in tax administration, combining the exploratory power of qualitative research with the generalizability of quantitative data. The use of thematic analysis was justified for its ability to provide a systematic framework for interpreting qualitative data (Braun & Clarke, 2006). Leveraging ChatGPT for thematic analysis was a novel and effective choice, supported by emerging research recognising its capacity to replicate and enhance traditional qualitative methods (Hariri, 2023; Morgan, 2023; Jalali & Akhavan, 2024).

Stata was selected for quantitative analysis because of its reliability and comprehensive statistical capabilities, particularly for descriptive analysis. The combination of thematic analysis for qualitative data and descriptive statistics for quantitative data allowed for a holistic understanding of the research problem, ensuring that findings were both deep and broad.

Ethical Considerations

Ethical principles were strictly adhered to throughout the study. Participants were informed of their rights, including the ability to withdraw, and their data was kept confidential and anonymous. Data were stored securely, with all identifiers removed during analysis.

4. RESULTS AND DISCUSSION

This chapter presents the results of the study using a mixed methods approach to investigate the consolidation of tax agencies in Balochistan, integrating both qualitative and quantitative methods analyses. By adopting a triangulated mixed-methods approach, the research ensures that findings are robust, validated, and capable of informing evidence-based recommendations for policy and operational improvements.

Qualitative Thematic Results

This section analyses qualitative findings from semi-structured interviews and focus groups with key stakeholders, including officials from Balochistan's Finance Department, the BRA, the BOR, the ETD, and various taxpayers.

The inquiry used a thematic framework to explore participants' perspectives on operational inefficiencies, governance issues, technological needs, the potential for consolidating tax services under BRA, and taxpayer compliance. The data is categorised into five main themes: operational challenges, governance gaps, technological inefficiencies, perceptions of consolidation, and taxpayer engagement. The themes and corresponding observations are summarised in Table 4, followed by analyses contextualising the results in the broader research aims.

Table 4. Codes and Themes Derived from the Thematic Analysis

Themes	Codes	Frequency
Operational challenges	Insufficient staffing	8
	Over-reliance on contract and deputation employees	1
	Manual processes	20
	Delays due to outdated workflows	11
Governance gap	Lack of comprehensive performance metrics	6
	Weak internal audit mechanisms	5
	Corruption vulnerabilities due to manual processes	5
	Political interference	3
	Minimal inter-departmental coordination	14
Technological inefficiencies	Limited adoption of IT tools	30
	Outdated infrastructure	
	No professional training in IT or modern systems	22

Themes	Codes	Frequency
Perception of consolidation	Mixed perceptions of tax consolidation under BRA	9
	Potential to streamline processes and enhance revenue	21
	Concerns about BRA's capacity and resource limitations	5
	Legal and administrative hurdles	6
	Need for phased implementation	3
Taxpayer engagement and compliance	Low tax awareness among the public	32
	Resistance to compliance	12
	Mistrust in authorities	17
	Poor taxpayer engagement	13
	Lack of visible public benefits linked to tax revenue	40
	Inconsistent engagement with other revenue departments	14
	Limited taxpayer education initiatives	49
	No structured feedback channels for stakeholders	24

Source: Authors' compilation.

Operational Challenges

Participants expressed significant operational challenges, highlighting inadequate staffing, poor training, and reliance on manual processes. Most felt that insufficient staffing, contract overreliance, manual workflows, and delays from outdated processes are major issues for tax-collection institutions in Balochistan. A respondent brought up the following problem:

"We are severely understaffed. Our sanctioned strength is 80, but we are currently working with less than half that, and most of these are temporary appointments. This creates ambiguity and limits our ability to plan for the long term" [TA2[3]]

Another respondent highlighted the ramifications of inadequate staff:

"The understaffing issue is not just about numbers but also about quality. Many positions remain vacant because we cannot find qualified and skilled candidates. Many of our staff lack the technical expertise to deal with complex cases. Without proper training, the system cannot deliver." [TA4]

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[3] Group code, see Table 23 in the appendix.

Concerns regarding manual procedures were more widespread. Across all departments, manual procedures are a pervasive problem, as disclosed by a respondent:

"Every time there's a mistake in my property tax records, it takes weeks to resolve because everything is done manually. It's frustrating and completely avoidable if the system were digitised." [TP2]

Interviewees commonly viewed technological skill deficiencies as a systemic issue affecting the productivity of tax departments, resulting from insufficient training and limited access to modern technology. This gap in skills has reduced efficiency and hindered efforts to modernise tax administration.

An interviewee acknowledged:

"Our staff lacks expertise in modern tax administration practices. They rely heavily on outdated methods, which limit their capacity to deliver efficient services". [TA2]

A respondent added:

"Employees are not trained to handle complex IT systems or analyse taxpayer data effectively. This is a major bottleneck in modernising our processes." [TA1]

One interviewee argued that:

"Technical expertise is minimal across most departments. Employees are still following decades-old practices, which are no longer viable in today's environment." [TA4]

Another interviewee argued that:

"Many staff members struggle with technical knowledge, especially when it comes to property tax valuation or using basic IT tools." [TA6]

An informant stated:

"The (tax) process is handled by inexperienced officers, and often, they have irrelevant degrees, making it inaccurate and prone to errors, further impacting taxpayers unfairly". [TP2]

Findings show staff lack technical and soft skills, restricting their ability to engage with taxpayers and handle administrative tasks effectively. Several informants acknowledged the need for skill development:

"While some staff are competent in manual tasks, they lack the analytical and digital skills required for advanced tax administration." [TA2]

One participant accentuated:

"The problem is not just technical skills; employees also lack interpersonal skills, which are critical when dealing with taxpayers." [TA7]

Another voiced dissatisfaction:

"The staff don't seem to have the skills to answer basic questions. They always refer me to their seniors or ask me to come back later." [TP3]

Participants agreed that while tax collectors meet basic educational requirements, their qualifications often fall short of the specialised demands of the job. A respondent indicated that:

"Many of our staff meet the basic qualifications on paper, but they lack the specialised knowledge needed for tax-related work." [TA4]

This view was echoed by another informant who overwhelmingly commented:

"Political influence during recruitment often results in hiring underqualified individuals, which reduces the overall competence of the department." [TA5]

Talking about this issue, an interviewee said:

"Even employees with academic qualifications are not given practical training, so their skills remain underdeveloped." [TA3]

Participants agreed that corruption in revenue authorities stems from systemic inefficiencies and discretionary powers, not from employees' misconduct. As one interviewee put it:

"Manual processes create loopholes that can be exploited for corruption. It's not widespread, but it happens due to a lack of oversight." [TA1]

One participant commented:

"Corruption is more common in property valuation, where discretion plays a big role. Without transparency, it's hard to ensure fairness." [TA6]

Other responses to this question revealed:

"The services provided are not satisfactory. Bribery is common: for example, if the official tax is 10,000, they suggest paying 3,000 and taking an amount like 2,000 for themselves. Despite such practices, the tax amount officially recorded remains 10,000, and these visits by tax officials do not result in better service delivery". [TP2]

Talking about this issue, an interviewee remarked:

"I have not encountered corruption so far, but I believe that processes could be streamlined and simplified to enhance transparency". [TP3]

Moreover, from the FDGs at Hub, Gwadar and Quetta, participants highlighted:

"Major challenges include fragmented tax systems, inadequate staff, manual operations, and weak enforcement mechanisms. Additionally, Industries often lack proper documentation, which complicates registration." [H-1[4]]

"Taxpayers highlighted the lack of awareness regarding AIT, unfair valuations and sudden tax hikes. Compliance costs and reliance on tax experts due to system inefficiencies. Similarly, concerns about bribery, particularly in property valuation processes and excessive documentation, are the obstacles faced." [Q-2]

"Low rates, exemptions, and outdated valuation mechanisms fail to unlock the full revenue potential [Q-1]. The outdated valuation systems do not reflect current market conditions, severely undermining revenue potential." [G-1]

Operational challenges were prominent in the interview data, indicating they are ingrained in Balochistan's tax authorities. These challenges hinder efficiency, frustrate taxpayers, and undermine confidence, leading to low compliance. Addressing them requires a comprehensive strategy with better staff recruiting, regular capacity-building, and new automated technologies to enhance operations and taxpayer trust compliance.

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[4] Group code, see Table 3.1.

Governance Gaps

Most respondents noted that governance gaps are a significant issue, citing challenges like political interference, poor accountability, inadequate inter-agency cooperation, and a lack of transparency. These deficiencies seriously undermine Balochistan's tax authority, negatively impacting internal operations and stakeholders' confidence. Several informants elucidated the issue clearly:

"Policy decisions are often influenced by political agendas rather than operational priorities. This creates inconsistencies in implementation and reduces the credibility of the system." [TA7]

One of the participants underlined:

"Political interference often dictates recruitment and exemptions, creating inefficiencies and reducing staff morale." [TA6]

Another participant stressed:

"Political pressure leads to the issuance of unjustified exemptions, which not only reduces revenue but also erodes public confidence in the system." [TA4]

These results indicate that accountability issues in tax departments hinder their performance management and reform efforts. Establishing performance goals and conducting self-appraisals regularly is vital for enhancing productivity and engaging stakeholders' trust in Balochistan. An interviewee elaborated on this, stating:

"There is no clear mechanism to hold departments accountable for their performance. This lack of accountability leads to inefficiencies and, in some cases, corruption." [TA5]

A participant commented:

"Without accountability frameworks, underperformance is rarely addressed, which perpetuates a culture of complacency." [TA7]

One of the interviewees believed:

"When there is no accountability, taxpayers feel like their money is being wasted. This perception directly affects compliance." [TP2]

Several respondents' concerns were the absence of formal communication among revenue authorities. As a respondent was particularly critical of the issue:

"We have minimal interaction with other departments like ETD or BOR. There is no formal platform for sharing data or aligning strategies, which often leads to duplication of efforts." [TA2]

Talking about this issue, an interviewee shared:

"We work in silos. There is no structured system for inter-agency data sharing or joint strategy formulation." [TA6]

One informant reported that:

"Inconsistent communication between departments often leads to overlapping responsibilities, confusing staff and taxpayers." [TA4]

These results suggest that poor communication among tax-collection institutions has led to fragmented procedures and inefficiencies. A standardised data exchange platform could enhance collaboration and efficiency among tax bodies.

Transparency results indicate a significant demand for removing the obstacle. Commenting on this question, one of the interviewees said:

"The lack of transparency in policy-making and revenue allocation creates scepticism among taxpayers and staff alike." [TA1]

Another remarked:

"When decisions are made behind closed doors, it creates an environment where corruption can thrive. Transparency is essential to restoring trust." [TA6]

One participant showed concern by expressing that:

"I do not know how my taxes are being utilised. It would motivate people to comply if the government were more transparent." [TP3]

Many interviewees believe that internal and external communication transparency issues have eroded public trust and fuelled perceptions of inefficiency and corruption. Consequently, poor governance of tax-collection institutions has led to taxpayer mistrust, according to their perspective:

"I do not feel confident that my taxes are being used effectively. There's a general perception that funds are mismanaged or diverted." [TP4]

Lastly, FDGs at Hub and Gwadar, participants highlighted:

"Tax revenue from major industries is being diverted to Sindh due to their head office locations." [H-1]

"Commercial properties leased out in Gwadar, especially in emerging trade zones, are underreported and undertaxed. The tourism industry in Gwadar remains largely untaxed." [G-1]

Overall, findings indicate that governance and administrative issues have weakened the effectiveness of Balochistan's tax-collection agencies. Political engagement has further diminished institutional autonomy, while a lack of accountability and transparency has increased inefficiencies and decreased taxpayer trust. Inadequate inter-agency communication has also reduced operational efficiency, underscoring the need for improvements. Respondents noted the necessity for better accountability, transparent evaluations, and structured collaboration to address these deficiencies. Therefore, reducing political interference and establishing clear accountability lines are crucial for rebuilding taxpayer trust. Addressing these deficiencies requires rebuilding administration, restructuring governance, improving supervision, and engaging key stakeholders.

Technological Inefficiencies

From the interview conducted with the participants, technological inefficiencies have surfaced as a significant barrier to the modernisation and efficiency of tax administration. The informants consistently underlined outdated IT systems, inadequate infrastructure, and limited digital literacy among employees as significant issues. A stated:

"Our reliance on PRAL and Excel sheets is unsustainable. These tools are not designed for the volume or complexity of data we manage. We need integrated systems that can handle modern tax administration requirements." [TA1]

Other responses to this question included:

"We cannot identify patterns of tax evasion or conduct detailed audits without advanced analytics tools, which are currently unavailable to us." [TA2]

According to interviews, the infrastructure issues have further compounded these challenges. As shared:

"Even when we have the tools, poor internet connectivity and frequent power outages make it difficult to use them effectively. These are basic issues that need to be resolved before we can talk about modernisation." [TA3]

Further, acknowledged:

"We rely on manual systems for most processes, which makes even simple tasks like updating property tax records incredibly time-consuming." [TA4]

Another interviewee alluded to the notion of the deficiencies of current digital networks. As elucidated:

"I tried to file my taxes online, but the portal kept crashing. I eventually had to visit the office, which defeated the purpose of having an online system." [TP2]

One of the participants recommended:

"Tax processes should be digitised and streamlined to reduce delays and bureaucratic hurdles". [TP3]

Another interviewee brought attention to:

"We need dedicated IT specialists, but such roles are rarely prioritised in recruitment. Without proper expertise, even the best systems will fail to deliver." [TA6]

Inadequate internet connectivity and persistent power outages have intensified these problems, as told by respondents:

"Our internet and power systems are frequently down, which delays processes and frustrates taxpayers." [TA3]

In answering the interview questions, informants also mentioned the necessity for more sophisticated technologies to facilitate audits and investigations. A respondent commented:

"Without dedicated software for data analysis, we cannot effectively identify patterns of tax evasion or streamline our investigations." [TA1]

Additionally, the interviewee identified that the deficiency of IT integration was principally frustrating for taxpayers, who confronted challenges with online services that were sometimes inaccessible. Taxpayer provided feedback:

"The online portals are slow, and there is no support if you face an issue while filing taxes. It feels like the system is designed to discourage compliance." [TP2]

Additionally, from FDGs at Quetta, Gwadar, and Hub, participants commented:

"Expanding GIS-based property mapping to all urban centres would help in identifying unregistered properties [Q-1]. A centralised database accessible by all tax authorities could enhance coordination and ensure consistency in property tax evaluation." [G-1]

"While we've adopted a single portal for some services, many areas still operate manually." [H-1]

The interview findings emphasise the importance of investing in modern IT infrastructure, staff training, and digital platforms. Respondents noted that technological inefficiencies hinder the detection of tax fraud trends and the speeding up of compliance. Therefore, tax authorities must upgrade IT systems, set up specialised data centres, and provide personnel training. Using advanced technologies can improve processes, reduce errors and biases, and speed up the decision-making process.

Perceptions on Consolidation

The interview findings revealed mixed responses to the unification of tax institutions under BRA. While BRA's potential to streamline operations and improve efficiency is acknowledged, concerns about its readiness to assume additional responsibilities persist. Talking about this issue, an interviewee remarked:

"Consolidation could be transformative for the province's revenue system, but it requires careful planning. Right now, we don't have the capacity or resources to take on such a large-scale reform." [TA1]

Commenting on consolidation, one of the interviewees made the observation:

"Consolidating specific taxes under BRA is expected to boost provincial revenue and reduce redundancies". [TA2]

Nonetheless, doubts over the BRA's capacity and preparedness to undertake more substantial responsibilities remained prevalent:

"The success of consolidation will depend on addressing existing inefficiencies within BRA. If these issues are not resolved first, consolidation could end up magnifying the problems rather than solving them." [TA4]

A small number of those interviewed firmly opposed the consolidation:

"The Finance Department does not support transferring these taxes to BRA due to human resource capacity issues. BRA lacks the capacity to effectively assess and collect these taxes. Additionally, there are legal complexities associated with such a transfer. Tehsildars remain the most suitable option for tax collection". [TA7]

As another interviewee, when asked, suggested:

"The tax system should be integrated into a single tax system/unit. In my opinion, it will improve efficiency and tax collection, reduce taxpayer confusion, and increase compliance, whereas a negative impact would be the mandate of tax agencies that will compromise". [TE1]

As one participant expressed dissatisfaction with the consolidation under BRA:

"We do not support consolidating agricultural income tax collection under the BRA. We are not satisfied with BRA based on our experience with the Balochistan Sales Tax on Services (BSTS) for contractors. Initially, when BSTS was not enforced, the system worked better. Under BRA's supervision, contractors are now required to pay an additional percentage of tax directly to BRA, which has significantly increased costs. As a result, contractors have started using low-quality materials in government projects such as tubewells, roads, and infrastructure, directly impacting landowners. This has led to a decline in work standards, creating challenges for agricultural productivity". [TP1]

Other taxpayers exhibited cautious optimism on the proposal. As one interviewee put it:

"If consolidation reduces the burden of dealing with multiple tax departments, it would be a great reform, but only if the system is transparent and user-friendly". [TP2]

One informant reported that:

"I do not have specific concerns (about consolidation under BRA), but I do emphasise that the system must be made transparent and user-friendly. I anticipate an improvement in service delivery, optimisation of processes, and a decrease in bureaucratic delays. Additionally, a significant proportion of the personnel within all tax departments lack relevant academic qualifications and skills, which I expect these issues would be considered while consolidating tax departments." [TP3]

However, from the FDGs at Hub, Quetta, and Gwadar, participants commented:

"The major challenge would be the redistribution of roles and potential conflicts over authority. [H-1]. The legal framework for transferring AIT to BRA is unclear and may require amendments to existing laws." [Q-1]

"Consolidation would streamline tax processes, enhance compliance through a unified system, and improve revenue collection." [G-1]

These results provide insights, revealing interviewees' ambivalence and concerns about implementation. Comparing the findings highlights the need for a gradual consolidation strategy focused on capacity-building and stakeholder engagement for a smooth transition. Reforming institutions, like establishing a centralised revenue authority for tax and social contributions, typically spans 4 to 5 years (World Bank, 2008). The results indicate that while consolidation can reduce redundancies and improve efficiency, its success depends on incremental implementation and stakeholder involvement. Transparent communication on the objectives and benefits of consolidation is crucial to building public trust. Many governments have considered merging tax departments and agencies into one cohesive entity.

Taxpayer Engagement and Compliance

In the survey's final part, respondents addressed taxpayer engagement and compliance. These elements are vital for effective tax administration; however, informants in Balochistan raised concerns about the lack of initiatives to boost awareness, trust, and voluntary compliance. The analysis revealed primary challenges, including inadequate taxpayer education, distrust of authorities, poor engagement, complex procedures, and weak feedback mechanisms. These problems lead to low compliance rates and reluctance to meet obligations. Most participants noted that insufficient engagement and education are significant barriers to compliance, indicating areas needing urgent improvement that:

"We've tried to conduct awareness sessions, but these efforts are sporadic and underfunded. Most taxpayers still don't understand their obligations or how to comply." [TA1]

Another interviewee expressed this sentiment:

"I've never received any guidance or communication from tax authorities. It feels like they expect us to figure everything out on our own." [TP1]

In response to the question, a participant affirmed:

"Most people don't even know their tax obligations or the benefits of paying taxes. The government needs to do more to create awareness." [TP2]

The respondents thought that people are unaware of their tax obligations and the benefits that taxation brings to society due to the absence of organised taxpayer education and awareness campaigns. They recommended that it is necessary to implement comprehensive public awareness initiatives, especially in rural areas where tax literacy is low.

When the participants were asked about their trust in the tax collection revenue authorities, the majority commented that there is also a lack of trust in the tax system, which is another factor significantly hindering compliance. One participant stated:

"Taxpayers often perceive revenue authorities as corrupt or inefficient. This mistrust stems from a lack of transparency and visible results." [TA7]

An interviewee explained:

"People resist paying taxes because they feel the money is not being used effectively or for public welfare. There's a perception that the money is wasted or mismanaged by the government. There's no accountability or reporting on how funds are allocated. There's no visible return on what we pay." [TP3]

Another interviewee added:

"It's hard to comply when you feel like the system is not working in your favour. The perception of corruption makes people reluctant to pay." [TE1]

The majority of those who responded to this item felt that restoring public adherence and encouraging people to voluntary compliance requires demonstrating taxation's real benefits and transparency about how it works.

In this regard, a participant remarked:

"Our procedures are outdated and overly complicated. Taxpayers often must make multiple trips to the office to complete a single transaction." [TA1]

This view was echoed by another informant who shared:

"Many people find the tax filing process intimidating and confusing. Simplifying the system is essential to encourage compliance." [TA6]

One of the respondents explained:

"The process is so complex that it feels easier to avoid it altogether. If they made it simpler, more people would participate." [TP2]

It was discovered from the interview that intricacies and ineffective processes have discouraged taxpayers from voluntary compliance. On the other hand, reforming processes, digitising operations, and offering intuitive online platforms may significantly reduce compliance barriers in future.

An informant conveyed that:

"We do not have a formal mechanism for taxpayers to provide feedback or voice their concerns. This creates a disconnect between the authorities and the public." [TA1]

Another interviewee remarked:

"There is no way to communicate directly with the authorities. If we have a problem, we must go through bureaucratic hurdles to resolve it." [TP3]

Whereas FDG respondents from Hub, Quetta, and Gwadar mentioned:

"The lack of awareness among industrialists and individuals regarding tax laws creates a significant hurdle [H-1]. *Limited taxpayer education and lack of trust in the system are major barriers to compliance."* [Q-1]

"Small businesses frequently complain about insufficient awareness campaigns and the lack of guidance on tax filing requirements." [G-1]

The lack of feedback mechanisms has distanced taxpayers and limited the authorities' ability to address complaints effectively. Establishing formal channels for taxpayer feedback can improve compliance, engagement, and

trust in revenue authorities. Taxpayer adherence is crucial for increasing tax revenue in Balochistan. However, the absence of effective educational initiatives, along with distrust towards tax institutions and complex systems, presents significant barriers. Addressing these issues requires a comprehensive strategy focused on transparency, simplicity, and taxpayer-centric programs. Enhancing trust and encouraging voluntary compliance will improve revenue collection and strengthen the social contract between Balochistan's government and its citizens.

Quantitative Results

Table 5 presents the findings of the tax collection survey in Balochistan, providing insights into the educational backgrounds of the respondents. While 27.9% have only completed secondary school, the majority, 57.9%, hold higher education qualifications. Additionally, 3.2% possess no formal education, and 11.1% have only completed primary school. Out of the 190 respondents in the sample, the vast majority have advanced qualifications.

Table 5. Education Level

Education	Frequency	Per Cent
Primary education	21	11.1%
Secondary education	53	27.9%
Higher education	110	57.9%
No formal education	6	3.2%
Total	190	100%

Source: Authors' calculations.

Table 6 indicates that the majority of respondents fell within the age categories of 18 to 30 years (38.9%) and 31 to 40 years (36.8%). A mere 3.7% of participants were aged over 50, while a lesser percentage, 20.5%, fell within the age range of 41 to 50 years. The total number of respondents in the sample was 190, with the predominant age groups being those in their 30s and 40s.

Table 6. Age

	Frequency	Per Cent
18-30	74	38.9%
31-40	70	36.8%
41-50	39	20.5%
Above 50	7	3.7%
Total	190	100%

Source: Authors' calculations.

According to the survey conducted in Balochistan, 15.8% of respondents hailed from the Hub district, whereas 84.2% originated from Quetta. The entire sample comprised 190 individuals, as detailed in Table 8.

Table 8. District

	Frequency	Per Cent
Hub	30	15.8
Quetta	160	84.2
Total	190	100.0

Source: Authors' calculations.

The respondents from each sector are represented in Table 9. Notably, the medical and pharmacy sector exhibited the highest percentage representation, followed by the restaurants and hotels industry.

Table 9. Sectors

	Frequency	Per Cent
Agriculture and food	5	2.6
Medical and Pharmacy	69	36.3
Banking Sector	6	3.2
Business sector	25	13.2
Corporate sector	7	3.7
Petrol Pumps	21	11.1
Restaurant and Hotels	37	19.5
IT Sector	6	3.2
Transportation Sector	8	4.2
Others	6	3.2
Total	190	100.0

Source: Authors' calculations.

The results presented in Table 10 indicate that the business sector contributes the most, accounting for 56.3% of the total, as per the tax collection figures of Balochistan. Contributions from individuals comprise 20%, while government agencies contribute 8.4%. Additionally, 15.3% is accounted for by other sources.

Table 10. Type of Taxpayer

	Frequency	Per Cent
Business	107	56.3
Government Entity	16	8.4
Individual	38	20.0
Other	29	15.3
Total	190	100.0

Source: Authors' calculations.

The sales tax on services is the most frequently paid, accounting for 39.5% of the total shown in Table 11. Other significant taxes include excise duty (3.7%), land taxes (5.8%), and property taxes (8.9%). Hotel, professional, and transport-related taxes contribute lower proportions. Nonetheless, 14.7% of respondents indicated they paid other taxes.

Table 11. Which Taxes Do You Currently Pay?

	Frequency	Per Cent
Electricity Duty	30	15.8
Excise Duty	7	3.7
Hotel tax	6	3.2
Land Taxes	11	5.8
Professional Tax	8	4.2
Property Tax	17	8.9
Sales Tax on Service	75	39.5
Transport-Related Taxes	8	4.2
Other	28	14.7
Total	190	100.0

Source: Authors' calculations.

Table 12 reveals that many taxpayers (34.7%) engage a tax consultant, followed by in-person payments at tax offices (23.7%), and online payments (20%). Additionally, 21.6% utilise alternative strategies. There were 190 responses in all.

Table 12. How Do You Typically Pay Your Taxes?

	Frequency	Per Cent
In person at the tax office	45	23.7
Online	38	20.0
Through a tax consultant	66	34.7
Other	41	21.6
Total	190	100.0

Source: Authors' calculations.

Table 13 summarises overall experiences with tax-collection departments. Responses for the Excise Taxation and Anti-Narcotics Department were mixed: 10.5% very dissatisfied, 31.1% dissatisfied, 31.6% neutral, 26.3% satisfied, and 0.5% very satisfied. There is a notable challenge in improving overall service satisfaction since many respondents were dissatisfied or indifferent. Regarding BRA, 2.1% reported very low satisfaction, while 7.9% had low satisfaction. Most respondents, 44.2%, were satisfied, and 40.5%

were neutral, with 5.3% highly satisfied. This suggests satisfactory operations, though enhancing neutral perceptions is crucial. The views on the Board of Revenue were varied: 23.2% were dissatisfied, 3.2% were extremely dissatisfied, 42.1% were neutral, 28.9% were pleased, and 2.6% were very satisfied. The substantial neutral responses highlight a need to increase satisfaction among dissatisfied and neutral individuals. Dissatisfaction seems to grow with the Transport Authority, where 33.2% expressed dissatisfaction and 2.6% extreme dissatisfaction. Only 2.1% were extremely satisfied, with 37.9% neutral and 24.2% satisfied. This indicates a need to address transportation service issues. The Energy Department received poor ratings: 11.1% were very dissatisfied, 38.9% were dissatisfied, 28.9% were neutral, 20.5% were satisfied, and 0.5% were very satisfied. This reflects significant dissatisfaction, indicating a necessity for improvements to meet public expectations in general.

Table 13. Overall Experience with the Tax-Collection Departments

S. No	Statements	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1	Excise Taxation and Anti-Narcotics Department	20 10.5%	59 31.1%	60 31.6%	50 26.3%	1 0.5%
2	Balochistan Revenue Authority	4 2.1%	15 7.9%	77 40.5%	84 44.2%	10 5.3%
3	Board of Revenue	6 3.2%	44 23.2%	80 42.1%	55 28.9%	5 2.6%
4	Transport Authority	5 2.6%	63 33.2%	72 37.9%	46 24.2%	4 2.1%
5	Energy Department	21 11.1%	74 38.9%	55 28.9%	39 20.5%	1 0.5%
6	"How satisfied are you with the current tax payment process?	14 7.4%	72 37.9%	42 22.1%	58 30.5%	4 2.1%

Source: Authors' calculations.

The challenges of the current tax system are noted in Table 14. About 36.3% of respondents found tax laws complex, 23.2% found them somewhat complex, while only 16.8% felt it was very challenging. Additionally, 18.9% were neutral, and 4.7% did not see complexity as an issue. This shows many struggles with understanding tax legislation. Respondents also mentioned several departments handling these complexities. Many, 44.2%, found it challenging, and 17.9% found it somewhat difficult, while 1.6% said it was not

difficult at all. This indicates that dealing with multiple agencies creates significant burdens for taxpayers. Regarding clarity in tax rules, 40% found the lack of clarity difficult, while 24.2% were neutral. Conversely, 13.7% classified it as quite difficult, and 16.8% as difficult. This underscores the need for clearer tax guidance and communication.

Compliance costs are a major concern, with 19.5% finding compliance somewhat difficult, 42.6% considering it difficult, and 14.2% labelling it difficult. Only 1.6% viewed compliance costs as unproblematic, highlighting the financial strain on taxpayers.

A significant portion of respondents (30%) indicated that they regarded the issues of corruption and bribery as exceedingly challenging. The majority, 31.6%, regarded them as difficult, while 9.5% perceived them as rather difficult. Conversely, a small minority (5.8%) maintained that bribery and corruption did not pose a problem, whereas 23.2% remained neutral. This indicates a prevailing apprehension among the populace regarding corruption within the tax collection system and its implications for taxpayers.

Table 14. The Challenge of the Current Tax System

S.no	Statement	Chal-lenging	Slightly Challeng-ing	Neutral	Very Chal-lenging	Not Chal-lenging at All
1	Complexity of tax laws	69 36.3%	44 23.2%	36 18.9%	32 16.8%	9 4.7%
2	Multiple departments to deal with	84 44.2%	34 17.9%	25 13.2%	44 23.2%	3 1.6%
3	Lack of clarity in tax requirements	76 40%	26 13.7%	46 24.2%	32 16.8%	10 5.3%
4	High compli-ance costs	81 42.6%	37 19.5%	42 22.1%	27 14.2%	3 1.6%
5	Corruption and bribery	60 31.6%	18 9.5%	44 23.2%	57 30%	11 5.8%

Source: Authors' calculations.

A significant finding from the results is that consolidation under a single entity has strong support among taxpayers (see Table 15). Regarding the tax payment procedure, 53.7% considered it useful, 15.3% very useful, 19.5% neutral, 6.8% slightly useful, and 4.7% least useful. For reduced compliance costs, 43.7% found it helpful, 20% very helpful, 22.6% neutral, 11.6%

somewhat helpful, and 2.1% not helpful. In terms of enhanced tax administration, 46.3% deemed it helpful, 24.7% very helpful, 17.4% neutral, 10% somewhat helpful, and 1.6% not helpful. Lastly, improved taxpayer services were positively received: 52.1% found it beneficial, 21.6% very beneficial, 15.8% neutral, 7.9% slightly beneficial, and 2.6% not beneficial. These findings support the qualitative results, indicating a generally positive attitude toward tax reforms and consolidation, with many respondents acknowledging their beneficial effects.

Table 15. Opinion on Consolidation

S. No	Statement	Beneficial	Very Beneficial	Neutral	Slightly Beneficial	Not Beneficial at All
1	Simplified tax payment process	102 53.7%	29 15.3%	37 19.5%	13 6.8%	9 4.7%
2	Reduced compliance costs	83 43.7%	38 20%	43 22.6%	22 11.6%	4 2.1%
3	Improved tax administration	88 46.3%	47 24.7%	33 17.4%	19 10%	3 1.6%
4	Better taxpayer services	99 52.1%	41 21.6%	30 15.8%	15 7.9%	5 2.6%

Source: Authors' calculations.

Table 16 outlines public perceptions of tax consolidation under the BRA. The results show that 52.1% agreed and 14.7% strongly agreed that tax procedures would be simplified with BRA's consolidation. Regarding corruption reduction in tax collection, 46.3% agreed, 33.2% were neutral, and 9.5% disagreed. A singular revenue administration under BRA received 54.2% positive responses for increased transparency, while 10.5% disagreed. Improved taxpayer services through consolidation garnered 62.6% agreement, with 10% strongly affirming better services. Agreement on consolidating tax responsibilities under BRA for compliance reached 51.6%, and 32.6% were neutral. Technology adoption by the BRA was supported by 52.1%, including 21.1% strongly supporting it. Digital systems for agricultural taxation saw 45.8% support, with 22.6% neutral and 14.2% strongly agreeing. Additionally, 56.3% agreed on the need for educational programs to boost taxpayer awareness and compliance. Furthermore, 51.1% believed consolidation would improve tax collection efficiency, and 60.5% strongly advocated for simplified tax laws to encourage compliance. There is also a notable demand for accountability, with 53.7% agreeing that the government

should ensure the BRA's accountability to mitigate abuses. The survey reflects strong public backing for BRA's tax simplification and accountability measures in education. These findings significantly reinforce the qualitative insights findings.

Table 16. Consolidation under BRA

S. No		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Consolidating tax administration under the BRA will simplify the tax process.	1	13	49	99	28
		0.5	6.8	25.8	52.1	14.7
2	BRA has the potential to reduce corruption in tax collection	2	18	63	88	19
		1.1	9.5	33.2	46.3	10.0
3	A unified revenue administration under BRA will improve transparency in tax collection.	2	11	54	103	20
		1.1	5.8	28.4	54.2	10.5
4	Consolidation will lead to better taxpayer services.	1	15	36	119	19
		0.5	7.9	18.9	62.6	10.0
5	"Moving tax responsibilities to BRA will lead to increased tax compliance among taxpayers.	0	9	62	98	21
		0	4.7	32.6	51.6	11.1
6	BRA's adoption of technology-driven processes will enhance efficiency.	3	8	40	99	40
		1.6	4.2	21.1	52.1	21.1
7	Digital systems (e.g., online tax filing and payment) should be implemented for agricultural tax.	10	23	43	87	27
		5.3	12.1	22.6	45.8	14.2
8	Taxpayer education programs are necessary to increase awareness and compliance.	1	11	23	107	48
		0.5	5.8	12.1	56.3	25.3

S. No		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	Tax collection efficiency will improve if revenue functions are consolidated under a single authority like BRA.	2	13	42	97	36
		1.1	6.8	22.1	51.1	18.9
10	"Simplifying tax laws and procedures will encourage me to comply with tax obligations.	3	10	35	115	27
		1.6	5.3	18.4	60.5	14.2
11	"The government should ensure accountability mechanisms to prevent	0	9	29	102	50
		0	4.7	15.3	53.7	26.3

Source: Authors' calculations.

Discussion

This section elaborates on the implications of the results, contextualising them within existing literature and their relevance to tax system reforms in developing economies. The findings reveal a complex interplay of operational, governance, and technological challenges, consolidation under a single entity, and taxpayer compliance. The findings are consistent with global studies on tax administration in developing economies (Hidayat & Defitri, 2024; World Bank, 2008).

The findings reveal significant operational inefficiencies in Balochistan's revenue agencies due to resource constraints, understaffing, and manual processes, echoing Bird & Zolt (2004). These inefficiencies result in tax processing delays and taxpayer dissatisfaction, particularly due to outdated manual record-keeping, aligning with Martinez-Vazquez & McNab (2000). Governance issues like political interference and lack of accountability hinder effective tax administration, as noted by Fjeldstad & Moore (2008), stressing the need for governance reforms. Performance benchmarking and inter-agency collaboration are weak, leading to mistrust, reflecting Prichard's (2016) arguments for transparent governance. Technological limitations, like poor connectivity and power outages, complicate tax operations, corroborating Bahl & Bird (2008)'s findings on the importance of

modernisation. Taxpayers reported frustrations with slow online portals and fragmented workflows due to a lack of IT integration, underscoring previous research on digital platforms' efficiency. While digital transformation offers potential, it also presents challenges, as discussed by Hidayat & Defitri (2024).

Participants generally supported tax function consolidation under the BRA to reduce redundancies despite concerns about capacity. Optimism exists that consolidation can simplify interactions if transparency is maintained, reflecting Slemrod & Gillitzer's (2014) views on centralised systems' benefits. Previous studies have highlighted fragmentation's burdens, with Mikesell (1981) advocating for consolidation to enhance resource use. Participants were cautiously optimistic about the BRA's consolidation potential but stressed the need for careful planning, in line with the World Bank (2008). Inadequate education initiatives and distrust hinder taxpayer compliance, aligning with Torgler's (2007) findings on education's role. Transparency in revenue use is crucial for rebuilding trust, as argued by Levi (1988). Simplifying procedures and employing user-friendly digital tools are vital steps. Overall, solutions must address both substantive and procedural complexities while leveraging technology, as per Bhat et al. (2021). World Bank (2008) recommends an approach focusing on risk management, large taxpayer services, client orientation, IT centralisation, electronic filing incentives, and a thematic emphasis on staffing and process functions.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

This study aimed to investigate the complexities of tax administration in Balochistan by exploring operational challenges, governance gaps, technological inefficiencies, stakeholder perceptions of consolidation, and taxpayer engagement and compliance. Employing a mixed methods approach that integrated qualitative thematic analysis and quantitative descriptive statistics, the research provided a comprehensive understanding of the systemic issues and opportunities within the province's tax system. The findings underscore the need for fundamental reforms to enhance efficiency, build trust, and facilitate a successful consolidation of tax functions under the BRA.

The study revealed significant operational challenges stemming from resource constraints, understaffing, and reliance on manual processes. These inefficiencies hinder the ability of revenue authorities to meet their revenue collection targets and create frustration among taxpayers. Consistent with existing literature, the findings highlight that capacity-building measures, including recruitment, training, and automation, are critical to improving operational performance.

Governance gaps were another dominant theme, with participants emphasising political interference, lack of accountability, and weak inter-agency coordination. These deficiencies undermine the credibility of tax institutions and erode public trust. The absence of clear performance benchmarks and transparent decision-making exacerbates inefficiencies, leaving stakeholders sceptical about the effective use of tax revenue.

The research also identified significant technological inefficiencies, with outdated systems and inadequate infrastructure limiting the effectiveness of tax administration. The reliance on tools like PRAL and Excel for data management creates delays and inaccuracies, while poor internet connectivity and frequent power outages in rural areas further impede progress. The findings align with global best practices that emphasise the transformative role of integrated IT systems in modernising tax administration.

Stakeholders expressed optimism about the consolidation of tax functions under the BRA, viewing it as an opportunity to reduce redundancies and streamline processes. However, concerns about the BRA's capacity to manage additional responsibilities highlighted the importance of phased implementation and preparatory measures. Stakeholders noted that transparency and engagement would be critical for gaining public support and ensuring the reform's success.

Finally, the study highlighted low levels of taxpayer engagement and compliance, driven by inadequate education, mistrust of authorities, and complex procedures. Many taxpayers lacked awareness of their obligations and were sceptical about how their taxes were utilised. Simplifying processes and launching targeted education campaigns emerged as critical strategies to foster voluntary compliance and rebuild trust.

Overall, the findings demonstrate that while consolidation under the BRA holds promise, it must be supported by comprehensive reforms addressing operational, governance, technological, and engagement challenges. This research contributes to the broader discourse on tax administration in developing regions by providing actionable insights into the specific context of Balochistan.

Limitations

The accuracy and completeness of the secondary data used in this study relied on the quality of reporting by the Finance Department of Balochistan and the websites of provincial revenue departments. At the same time, the primary analysis covered the period from 2016 to 2024. The surveys were conducted with a limited sample of 190 participants due to the reluctance stemming from the sensitive nature of the topic and a lack of tax education. Additionally, the study could not fully account for the informal economy, which is a significant factor in Balochistan, due to a lack of accessible data. Moreover, less literature was available on this study, specifically in Balochistan.

Recommendations

To achieve an efficient and trustworthy tax administration system in Balochistan, this study offers a series of recommendations that address the identified challenges and align with global best practices.

First, addressing operational challenges requires a strategic focus on capacity building. Revenue authorities should prioritise the recruitment of qualified personnel, offering permanent contracts to reduce turnover and build institutional knowledge. Training programmes should be implemented to equip staff with the skills needed for modern tax administration, including technical and interpersonal competencies. Transitioning from manual processes to automated systems is essential to improve efficiency, reduce errors, and enhance taxpayer satisfaction.

Governance reforms are critical to rebuilding trust and improving institutional credibility. Political interference must be minimised through the enforcement of merit-based recruitment and decision-making processes. Clear accountability frameworks should be established, incorporating performance benchmarks and regular evaluations to ensure transparency. Strengthening inter-agency coordination by introducing centralised platforms for data sharing and collaboration would address duplication of efforts and streamline workflows.

The modernisation of technology is indispensable for overcoming the limitations of outdated systems. Significant investments in IT infrastructure, including integrated software solutions and reliable internet connectivity, especially for industries and rural areas, are necessary. Specifically, it includes digitising land records and tax processes across all districts, implementing GIS for property and agricultural tax assessments, and creating centralised, user-friendly platforms for taxpayers. Upgraded real-time monitoring tools and mobile applications can address technological inefficiencies, while tailored tax compliance tools and automated systems improve transparency and reduce manual errors. Establishing a centralised revenue database, integrating inter-departmental data-sharing platforms, and launching grievance redressal mechanisms further streamline operations. Implementing user-friendly digital platforms for taxpayers would simplify compliance processes and encourage greater participation. A phased rollout of these technologies, supported by comprehensive training for staff, would ensure a smooth transition to a digitised tax system.

The quantitative and qualitative results of this study validate that consolidating tax functions under the BRA offers an opportunity to address many of the systemic issues identified in this study. For example, consolidating tax functions under the BRA presents a significant opportunity to improve Balochistan's tax collection system. By reducing administrative inefficiencies, adopting modern technologies, and strengthening enforcement mechanisms, the province could significantly increase its revenue generation and reduce its reliance on federal transfers. Moreover, the overall collection performance and comparative analysis of these five revenue agencies further strengthen consolidation reform. However, the success of these reforms will need to address the resistance to consolidation under the BRA. Early and transparent stakeholder engagement is crucial, focusing on addressing concerns and highlighting benefits like efficiency and reduced redundancies. Transparent communication, participatory decision-making, and capacity-building initiatives can foster trust and support. Influential stakeholders, including BRA leadership, government officials, and political actors, should drive reforms through advocacy and policy alignment. A phased approach with pilot testing in smaller towns can minimise disruptions, allowing for system refinement and smoother implementation.

Finally, fostering taxpayer engagement and compliance requires a multifaceted approach. Public awareness campaigns should be launched to educate taxpayers about their obligations and the benefits of paying taxes. These campaigns should utilise accessible media platforms and include

localised, culturally relevant messaging. Simplifying tax procedures and providing clear, step-by-step guidance will reduce barriers to compliance. Building trust through transparent reporting on the utilisation of tax revenues and visible public investments will further encourage voluntary compliance. The path to tax reform in Balochistan is not without challenges, but the potential rewards—both in terms of fiscal autonomy and improved public services—make it a goal worth pursuing.

Implications for Future Research

This study outlines challenges and opportunities in Balochistan's tax administration while highlighting areas for future research. Several areas require further exploration to enhance the empirical foundation and policy effectiveness of tax integration efforts. First, to project the potential revenue from tax consolidation under the BRA, a quantitative fiscal impact assessment is necessary. Future research should estimate the short- and long-term financial effects of consolidation under a single authority using econometric models, revenue forecasting methods, and comparative fiscal analyses. Such an analysis would offer a more tangible foundation for assessing the suggested reforms' sustainability and economic viability. Secondly, a deeper political economy analysis is needed to assess governance challenges, inter-agency conflicts, and legal constraints in tax consolidation. Future studies should explore how political incentives, stakeholder resistance, and administrative inertia impact tax policy reforms in Balochistan. Finally, increasing the sample size is essential to bolstering policy suggestions.

Future research should include viewpoints from a larger range of taxpayers, businesses, and rural communities to ensure a more representative analysis, as this study primarily focused on stakeholders in a few urban and semi-urban areas. In addition, longitudinal studies are needed to assess the long-term impacts of BRA consolidation on revenue collection, taxpayer satisfaction, and institutional efficiency. Further research should investigate socio-cultural factors affecting tax compliance behaviour, as these insights could improve engagement strategies. Additionally, future studies might explore integrating advanced technologies like AI and machine learning to enhance tax administration processes.

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APPENDIX

Figure 2. STS Collection Growth Rate (PKR Billion

FBR STS Growth

BRA STS Growth
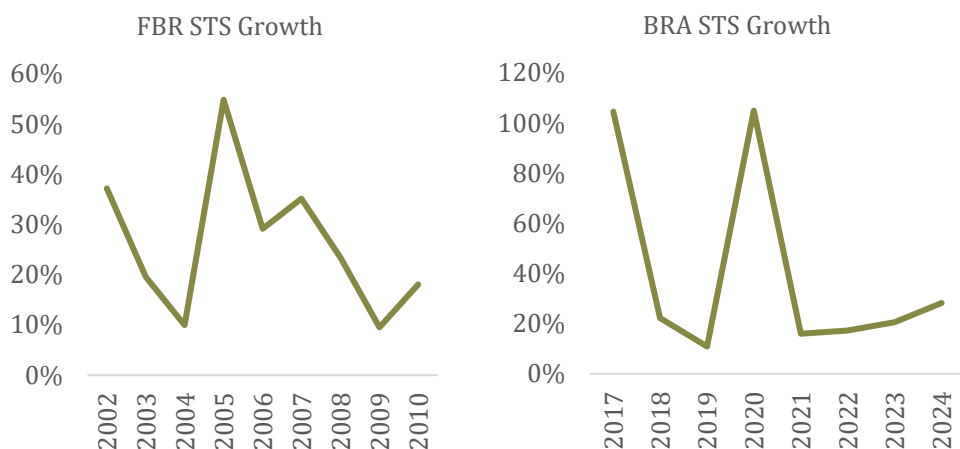
Source: Finance Department, Government of Balochistan.

Table 17. Land-Based Taxes in Pakistan

Category	1 Acre	1 to 12.5 Acres	12.5 to 25 Acres	25 to 50 Acres	50 Acres and Above	Orchards
PKR/Acre						
Balochistan	50	50	50	50	50	200
Sindh	200	200	200	200	200	700
KP	0	225	340	340	340	900
Punjab	0	0	300	400	500	600

Source: Salam (2022).

Table 18. Agriculture Share in the Total GDP of Balochistan

Agriculture sectors	Share (PKR Billion)	Share (% of GDP)	Development Expenditure (PKR Million)	Non-Development Expenditure (PKR million)	Agriculture Income Tax (PKR Million)
Major and Minor Crops	460	11.81	3,889.19	9,377.54	39.25
Livestock	840	21.53	808.203	3,639.09	
Fisheries	34	0.88	178.268	1,102.64	
Forestry	51	1.31	336.464	1,249.31	

Source: Government of Balochistan (2022) and Salman & Shah (2023).

Table 19. Agriculture Land Base Tax

Description	Amount (Million)
Total agricultural land in Balochistan (1,060,000 hectares x 2.47105)	2.619 Acres
Irrigated mature orchard (211,800 hectares x 2.74105)	0.523 Acres
Tax @ 200 per acre (A)	104.63
Irrigated land other than orchard (848,200 hectares x 2.47105)	2.096 Acres
Tax @ 50 per acre (B)	104.797
Total revenue potential under the existing tax structure (A+B)	209.47

Source: Suriya Nauman Rehan & Co. (2020).

Table 20. Potential of UIPT

Description	Data
Population of Balochistan	12,344,408
Average household size	7.84
Number of Houses	1,574,542
Assume 50% of houses are exempt (less than 5,000 sq. feet)	787,290
Average expenditures on house rent per annum	57,508
Gross annual rental value (million)	45,433
Net ARV (90%) of GARV	40,890
Tax @ 15% PKR million	6,133.4

Source: Suriya Nauman Rehan & Co. (2020).

Table 21. Tax Definitions

Tax Definitions	Department
UIPT is a tax levied on the annual value of buildings and lands in designated urban areas, assessed and collected by the government. (Balochistan Urban Immovable Property Tax Act, 1958)	Excise, Taxation and Anti-Narcotics Department
CVTIPT is a tax on the capital value of immovable property payable on acquisition by purchase, gift, inheritance, or lease renewal, as specified by law. (Balochistan Finance Act,2013)	Board of Revenue
Agricultural income includes revenue from land used for agriculture, income from cultivating or processing produce for market, and income from buildings on or near such land used by cultivators or rent receivers. **(**Balochistan tax on land and agricultural income ordinance, 2000)	Board of Revenue
Sales Tax on Services is a tax levied on the value of taxable services provided, rendered, initiated, received, originated, executed, or consumed in a specific area, whether by a resident or non-resident person, in the course of an economic activity, including its commencement or termination. (Balochistan Sales Tax on Services Act, 2015) Cess is a tax on goods transported via government-provided infrastructure, based on value, weight, and distance. (Balochistan Infrastructure Cess Act, 2021)	Balochistan Revenue Authority
Land tax is a levy charged annually on cultivable land owned by individuals, assessed and collected by the provincial government as per prescribed rates. (Balochistan tax on land and agricultural income ordinance, 2000)	Board of Revenue
The Balochistan Companies' Profits (Workers Participation) Act mandates companies to allocate a portion of their annual profits into a Workers Participation Fund to benefit eligible workers, ensuring their participation in company profits. [Balochistan Companies' Profits (Workers Participation) Act, 2022]	Balochistan Revenue Authority
Stamp duty is a provincial tax on legal and financial instruments, collected on property and share transfers, registrations, and power of attorney, as per the Balochistan e-Stamp Rules, 2021. (Balochistan Stamp Act, 1899)	Board of Revenue
The Balochistan Motor Vehicle Tax is a provincial levy on motor vehicles, payable annually or quarterly, based on vehicle type, weight, and use. (Balochistan Motor Vehicle Taxation Act, 1958)	Excise, Taxation and Anti-Narcotics Department
Entertainment tax is a duty levied on payments for admission to entertainment events, including cinemas, exhibitions, and performances. (Balochistan Entertainment Duty Act, 1958)	Excise, Taxation and Anti-Narcotics Department

Tax Definitions	Department
The Act establishes a fund to support worker welfare through contributions from industrial establishments and other sources, governed by the Balochistan Revenue Authority. (Balochistan Workers' Welfare Fund Act, 2022)	Balochistan Revenue Authority
A tax levied on the value of goods imported or exported under licenses issued as per the Imports and Exports (Control) Act, 1950, with rates determined by the value of the transactions. (The Balochistan Finance Act, 1963)	Excise, Taxation and Anti-Narcotics Department
Cinema Tax is a levy on cinemas in Balochistan, imposed on payments for admission to exhibitions or shows, and varies based on cinema classification and seating capacity. (Balochistan Entertainments Duty Act, 1958).	Excise, Taxation and Anti-Narcotics Department
Capital Gains Tax is a levy on profits or gains arising from the sale, exchange, or transfer of immovable property in specified urban areas of Balochistan. (The Balochistan Finance Act, 1963)	Excise, Taxation and Anti-Narcotics Department
A tax levied on individuals engaged in specific professions, callings, or trades, such as legal practitioners, contractors, and income tax practitioners, with amounts determined by classifications. (The Balochistan Finance Act, 1963)	Excise, Taxation and Anti-Narcotics Department

Table 22. Comparative Analysis of Balochistan Revenue Agencies

Depart-ment	Estab-lished	Responsibilities	Key features	CAGR[5]	Challenges
BRA	2015	Balochistan Sales tax on services. Balochistan development and maintenance of infrastructure cess. Balochistan companies' profits (workers' participation). Workers' Welfare Fund.	Digitisation (e-registration, filing, payment systems). Use of PRAL and fiscal devices for POS data. Regional offices in Gwadar, Hub, Panjgur, Turbat, Taftan, and Chaman.	38%	Limited taxpayer education. Revenue leakage to other provinces. Strength of staff.
BOR	1972	Agriculture income tax capital value tax on immovable property stamp duty land revenue transfer of property, registration	Digitised land records in some districts. E-stamping and computerised Registration of Deeds. Online tax calculators.	11%	High exemptions. Staff R&D limitations. Manual records.
ETD	1972	Urban immovable property tax. Motor vehicle taxes , provincial excise. Hotel and business tax. Profession, trade & calling.	Digitise vehicle registration	8%	Underdeveloped IT and record system. Manual management of Land records. Staff expertise.
ED	2013	Electricity duty	Focuses on the exploration and development of oil, gas, renewable, and alternative energy resources	8%	Minimal collections. Low recovery of duties. Record Management gaps
TD	2006	Vehicle route permit fee	Regulations, permits, safety		Manual system. Record management gaps.

Sources: Authors' compilation based on information on the websites of the Finance Division & Provincial Revenue Authorities.

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[5] Compounded annual growth rate.

Table 23. Interview Respondents

Sr. No.	Code	Affiliation	Designation	Qualification	Experience	Round	Interview Duration (Minutes)	Industry
1	TA1	Tax Authority	Member Operation	MBBS	24 Years	First Round	45	BRA
2	TA2	Tax Authority	Member HR	MS	20 Years	First Round	35	BRA
3	TA3	Tax Authority	Secretary Revenue	MS	19 Years	First Round	40	BOR
4	TA4	Tax Authority	Legal Officer	LLB	25 Years	First Round	45	BOR
5	TA5	Tax Authority	Director General	MA	16 Years	First Round	45	ETD
6	TA6	Tax Authority	Assistant director (Admin)	BA	06 Years	First Round	45	ETD
7	TA7	Tax Authority	Additional Secretary	MBA	20 Years	First Round	50	Finance Department
8	TP1	Taxpayer	Agriculture taxpayer	B. A	18 Years	First Round	45	Private sector
9	TP2	Taxpayer	Property taxpayer	M.A	20 Years	First Round	40	Private sector
10	TP3	Taxpayer	Sales tax services for the taxpayer	M.A	10 Years	First Round	40	Private sector
11	TE1	Tax expert	Tax agent	MS	12 Years	First Round	40	Private sector
12	TP4	Taxpayer/tax consultant	Sr. Member Quetta Chamber of Commerce and Industry	LLB	25Years	First Round	45	Private sector

Source: Authors' compilation.

UNVEILING THE TRAJECTORY: HOW THE 18TH CONSTITUTIONAL AMENDMENT RESHAPED FUNCTIONAL SPENDING MULTIPLIERS IN PAKISTAN

Iffat Ara[1] and Muhammad Sabir[2]

ABSTRACT

This study addresses the impact of 18th Constitutional Amendment in 2010 and the subsequent transfer of a significant share of revenues to the provinces under the 7th NFC Award on economic growth. For this, it estimates the government spending multipliers for both federal and provincial expenditures, which allows assessing the impact of government spending patterns on economic growth. Using the structural vector autoregressive (SVAR) model, impulse response functions (IRFs) were generated to calculate expenditure multipliers of various categories of public spending. The analysis is based on quarterly data spanning the period from 2001-02: Q1 to 2023-24: Q4. The findings indicate that debt servicing inflates the short-run aggregate multiplier in the post-Amendment period but contributes little to sustained economic activity. Further, development spending multipliers declined sharply while current expenditures multipliers rose in the post-Amendment period. Category-wise analysis reveals notable improvements in the multipliers of education, health, and law and order expenditures. In contrast, multipliers for roads, highways, and bridges, as well as for irrigation and agriculture, show a significant decline.

[1] Independent Researcher, Karachi.

[2] Principal Economist, Social Policy and Development Centre (SPDC), Karachi.

1. INTRODUCTION

Significant reforms occurred in 2010, when, under the 18th Constitutional Amendment, seventeen ministries/divisions were stipulated to be dissolved at the federal level and devolved to the provinces. Accordingly, the 7th NFC Award also transferred a sizeable share of revenues to the provinces. These reforms were likely to transform the role of provinces from just passive service providers to active drivers of national development.

Before the 18th Constitutional Amendment, provincial governments were already financing and delivering key social services like education, health, and public safety. However, the provinces' role significantly expanded after the reforms, which aligns with the expanded functional responsibilities devolved to them. This is evidenced by the rising share of these services in the total current expenditures of provinces. While averaging at 25% between 1997-98 and 2009-10, the share climbed steadily to 35% in 2017-18 (Figure 1). Furthermore, the development spending surged even more dramatically, reaching a peak of 50% in 2016-17 compared to a pre-reform share of just 16%-20 % (SPDC, 2018). A subsequent dip in the share of provincial expenditures after 2017-18 potentially reflects factors like federal debt-servicing obligations or partial re-assumption of devolved functions.

Figure 1: Distribution of Expenditures (% of Total Expenditures)
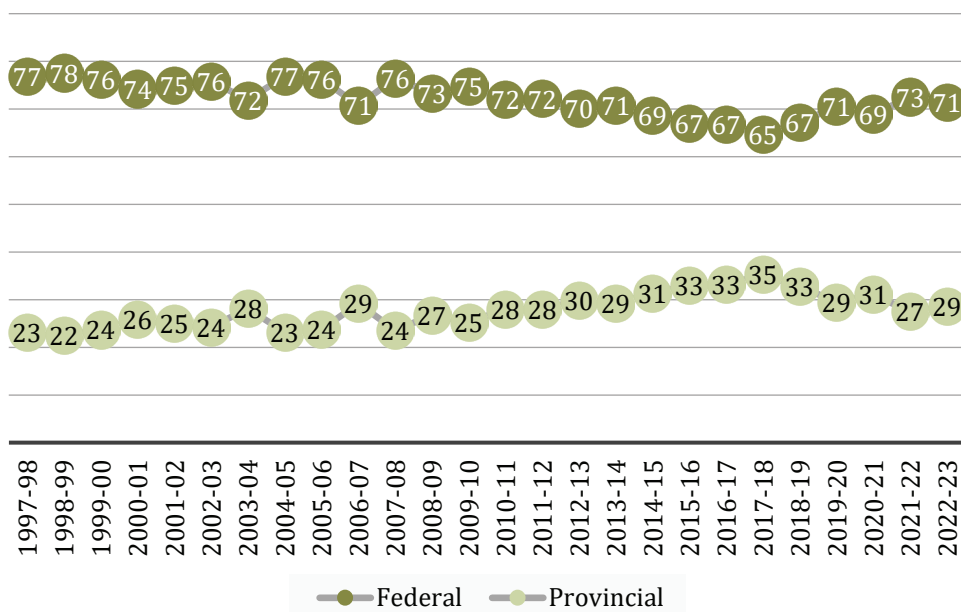
Source: GOP. (Various Issues). Pakistan Economic Survey.

After the passage of more than twelve years, a pivotal question arises whether these reforms actually happened to accomplish this transformation. While there are some studies that have explored the fiscal implications of these reforms, a critical gap persists in analysing their broader economic impact on Pakistan's growth trajectory. To understand the effect of these reforms, a comprehensive evaluation of the effects of the 18th Constitutional Amendment and the 7th NFC Award on economic growth, as well as examining the dynamics behind these shifting spending patterns, is crucial. This entails investigating the impact of government spending on account of increased NFC-induced fiscal flows on economic growth. Therefore, this study estimates government spending multipliers, which measure the short-term impact of spending on economic growth and assess the long-term success of these reforms to guide future policy decisions.

Earlier empirical research has examined the impact of fiscal components on the long-run growth by linking the government spending or revenues with economic growth rates (Feder, 1983; Landau, 1983; Ram, 1986; Grier & Tullock, 1989; Romer, 1990; Barro, 1990 and 1991). In this regard, Zagler & Dürnecker (2003) have presented a well-researched survey of the related literature. Later, it was realised to study the effect of government spending on economic growth in the short run to capture the impact of discretionary fiscal policies on output growth. This led to the estimation of fiscal multipliers that measure the short-term impact of discretionary fiscal policy on output.

A review of existing literature reveals a scarcity of empirical research evaluating the impact of spending by the federal and provincial governments on Pakistan's economic growth. This study aims to fill this gap by estimating the spending multipliers for the consolidated federal and provincial government spending. In addition to consolidated spending, the study also analyses government spending according to its functional categories based on the Project to Improve Financial Reporting and Auditing (PIFRA) classification.[3]

Analysing the impact of spending on economic growth by functional categories is crucial not only for understanding the true transmission mechanisms of fiscal policy, but also for identifying the effectiveness of reforms. Empirical research suggests that the effect on economic growth varies when different expenditure categories are considered (Gemmell, 2004; Devarajan et al., 1996; Kneller et al., 1999; Acosta-Ormaechea et al., 2013;

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[3] In 1996, the Government of Pakistan, with support from the World Bank (WB), launched the Project to Improve Financial Reporting and Auditing (PIFRA) to align with international accounting standards.

Afonso & Jalles, 2014). Examining component-specific impacts assists in informing evidence-based, effective stabilisation and fiscal consolidation policy decisions in Pakistan's evolving federal landscape.

Structural vector autoregressive (SVAR) models are commonly used to estimate government spending multipliers (Perotti, 1999; Blanchard & Perotti, 2002; Dime et al., 2021). This study also utilises the SVAR model and generates impulse response functions (IRFs) to estimate expenditure multipliers for different categories of public spending. It uses quarterly data covering the period 2001-02: Q1 to 2023-24: Q4. In order to assess the impact of the 18th Constitutional Amendment, government expenditure multipliers are estimated separately for the pre-Amendment period (2001-02: Q1 to 2009-10: Q4) and the post-Amendment period (2010-11: Q1 to 2023-24: Q4).

This study is a novel effort in Pakistan in the sense that it ventures beyond aggregate multipliers to explore the nuanced dynamics of various spending categories. It helps in identifying the specific drivers of economic growth and provides invaluable insights for evidence-based fiscal policy decisions.

The structure of the reports is as follows. Section 2 presents a review of the relevant literature, while Section 3 discusses the research methodology. Section 4 describes data collection and transformation, and Section 5 explains the behaviour of variables used in the analysis. Section 6 furnishes the results and their explanation, while Section 7 presents conclusions. Finally, Section 8 proposes policy recommendations.

2. LITERATURE REVIEW

While a vast body of research has explored the link between fiscal policy and economic growth, a crucial gap remains in understanding the separate impacts of individual functional components of government spending on growth, particularly in contexts such as Pakistan's evolving fiscal federalism.

Earlier empirical research has examined the impact of fiscal components on long-run growth by linking government spending or revenues with economic growth rates. Generally, the studies have estimated the traditional empirical growth equation by expressing economic growth rate as a function of government spending along with other relevant variables, using cross-section data (Feder, 1983; Landau, 1983; Ram, 1986; Grier & Tullock, 1989; Romer, 1990; Barro, 1990 and 1991). In this regard, Zagler & Dürnecker (2003) is a well-researched survey article on the topic.

Examining the impact of government spending by functional classification has rarely been done in the existing research. However, empirical research summarised by Gemmell (2004) describes the importance of distinguishing between productive and non-productive government expenditures. It suggests that the effect on economic growth varies by different expenditure categories.

In this regard, an initial work was carried out by Devarajan et al. (1996), which developed a model by combining empirical observations and a theoretical framework. They derived the conditions under which the change in the composition of government expenditures (current and capital) leads to a higher steady-state growth rate of the economy. They then examined the components of the government expenditure that are productive. To this end, they estimated a pooled regression of 43 developing countries by expressing GDP per capita as a function of total expenditures-GDP-ratio, foreign exchange black market, the share of government spending by each economic classification in total expenditures, and a shock term (a weighted average of world interest rate, export and import prices). The findings indicate that an increase in the share of current expenditure positively affects economic growth, but capital expenditure's effect on economic growth is negative. They reasoned that even productive expenditures, when used in excess, could become unproductive. This implies that governments misallocate public expenditures in developing countries, i.e., favour capital expenditures at the expense of current expenditures.

Kneller et al. (1999) grouped functional components of government expenditures into two groups. The first group was expenditures with a substantial (physical or human) capital component, which they termed productive, such as general public services, defence, education, health, housing, and transport & communication. The second group was expenditures without a capital component, which they termed non-productive. These non-productive expenditures included social security and welfare, recreation, and economic services. Their estimation of an endogenous growth model for a panel of 22 OECD countries showed that productive expenditures boosted growth, whereas non-productive expenditures did not.

Acosta-Ormaechea et al. (2013) studied the effects of public expenditure on long-run growth for a panel of 56 countries, using the dynamic panel generalised method of moments (GMM) approach. The results suggested that a reallocation involving a rise in education spending has a positive and statistically robust effect on growth, when this is associated with an offsetting reduction in social protection spending.

Afonso & Jalles (2014) examined the component of government spending that has a stronger influence on per-capita GDP growth rates. They estimated a standard growth model, where GDP per capita depends on population growth, investment, education, trade openness, and government expenditures, using a large panel of developed and developing countries. The findings indicated that government spending on public wages, interest payments, subsidies, and government consumption has a negative effect on output growth. They also found that spending on social security and welfare is less growth-enhancing, while spending on education and health is growth-enhancing.

The later generation of studies analysed the effect of government spending on economic growth in the short run in order to capture the trend of the impact of discretionary fiscal policies on output growth. This led to the estimation of fiscal multipliers that measure the short-term impacts of discretionary fiscal policy on output. In general, the studies that have estimated the government spending multipliers utilised either vector autoregressive (VAR)/structural VAR, or a two-stage estimation method.

Perotti (1999) analysed the effects of deficit cuts implemented by 19 OECD countries that were facing large government debt by employing a flexible two-stage strategy. It allowed the author to exploit variation in economic conditions across space and time to gauge their impact on fiscal policy transmission. The first stage estimated a fiscal policy rule that defines the statistical process of government spending and provides estimates of spending shocks. The second stage used contemporaneous and lagged values of the estimated policy shocks to trace the dynamic effects of government spending on several macroeconomic variables of interest by estimating the IRF. The findings indicated that, in many cases, private consumption boomed rather than contracting.

The seminal work on estimating fiscal multipliers using VAR was done by Blanchard & Perotti (2002). They characterised the dynamic effects of shocks in government spending and taxes on economic activity in the United States. They described residuals obtained from the reduced form of the system of equations, estimated using VAR, as capturing the automatic effects of unexpected movements in activity on fiscal variables, which act as fiscal policy shocks. Once these shocks are identified, their dynamic effects on GDP can be traced using IRFs. Their results showed that positive government spending shocks affect output positively, and positive tax shocks affect output negatively. The multipliers for both spending and tax shocks are typically small. They also examined the effects of taxes and spending on the components of GDP. The findings indicated that both increases in taxes and increases in government spending have a strong negative effect on investment spending.

Corsetti et al. (2012) employed a two-stage estimation method on a panel of OECD countries to compute the government spending multiplier. They found that the effects of government spending vary with the economic environment, such as exchange rate regime, public indebtedness, and health of the financial system. The fiscal shocks were identified as residuals from an estimated spending rule, and their macroeconomic impact was traced under different economic environments. The results of the estimated spending rules showed that government spending exhibits no clear cyclical pattern, but responds negatively to weak public finances, thus contributing to debt stabilisation. The unconditional responses to a positive spending shock indicate an increase in output, almost no response of consumption, and some crowding-out of investment and net exports. However, conditional responses differ systematically across exchange rate regimes, as real appreciation and external deficits occur mainly under currency pegs. They also find output and consumption multipliers to be unusually high during times of financial crisis.

Ramey & Zubairy (2018) investigated whether U.S. government spending multipliers are higher during periods of economic slack (measured by the unemployment rate) or when interest rates are near the zero lower bound. They constructed historical quarterly data for the period 1889-2015 for the U.S., covering multiple large wars and deep recessions. The historical series included real GDP, GDP deflator, government purchases, federal government receipts, population, the unemployment rate, interest rates, and defence news. They used Jordà's (2005) local projection method to estimate impulse responses and baseline estimates of multipliers and employed the Blanchard and Perotti (BP) to identify spending shocks. In addition, they introduced a new instrumental variables method for estimating cumulative multipliers in a one-step instrumental variables regression. Their findings did not show any evidence of large multipliers when the U.S. economy experienced substantial slack, and that multipliers are greater than one at the zero lower bound in the full sample.

Dime et al. (2021) estimated the effects of fiscal policy measures by computing fiscal multipliers using quarterly data for a panel of nine developing Asian economies. They employed a VAR model but used local projections to extract the impulse responses. They assumed several scenarios ranging from the baseline (that does not consider any possible regime shifts) to alternatives that allow for regime shifts in trade openness, debt fragility, economic cycle, monetary policy stance, and exchange rate system. The findings suggested that economies that are more open to trade, have a higher level of debt, or adopt a more flexible exchange rate have smaller or

statistically insignificant spending multipliers compared with those that are less open to trade, have a lower debt level, or adopt a less flexible exchange rate.

Konstantinou et al. (2022) also used a two-stage estimation methodology on a panel of 33 OECD countries to estimate government spending multipliers for 11 different functional categories of spending. They also looked at variations in the state of the business cycle (recession vs. expansion). The results indicated heterogeneity among the functions of government spending. The expenditure categories producing positive and high multipliers included public services, defence, public order, transport and communication, health, recreation, and education. On the other hand, the expenditure categories producing negative multipliers are economic services. They found expenditure multipliers of environmental protection, housing, and social protection spending to be insignificant. Furthermore, multipliers for public services, defence, public order, transport and communication, health, recreation, and education are higher in recession than in expansion.

3. METHODOLOGY

The study employed an SVAR model and drew IRFs to estimate expenditure multipliers for various categories of public expenditure.

Model Specification

SVAR, including government expenditure (E) and GDP (G), is:

$$E_t = c_1 + a_{11}E_{t-1} + a_{12}E_{t-2} + b_{10}G_t + b_{11}G_{t-1} + b_{12}G_{t-2} + v_{Et}$$

$$G_t = c_2 + a_{20}E_t + a_{21}E_{t-1} + a_{22}E_{t-2} + b_{21}G_{t-1} + b_{22}G_{t-2} + v_{Gt}$$

The model can also be written as:

$$E_t - b_{10}G_t = c_1 + a_{11}E_{t-1} + b_{11}G_{t-1} + a_{12}E_{t-2} + b_{12}G_{t-2} + v_{Et}$$

$$a_{20}E_t - G_t = c_2 + a_{21}E_{t-1} + b_{21}G_{t-1} + a_{22}E_{t-2} + b_{22}G_{t-2} + v_{Gt}$$

The model in matrix form can be illustrated as:

$$\begin{bmatrix} 1 & -b_{10} \\ -a_{20} & 1 \end{bmatrix} \begin{bmatrix} E_t \\ G_t \end{bmatrix} = \begin{bmatrix} c_1 \\ c_2 \end{bmatrix} + \begin{bmatrix} a_{11} & b_{11} \\ a_{21} & b_{21} \end{bmatrix} \begin{bmatrix} E_{t-1} \\ G_{t-1} \end{bmatrix} + \begin{bmatrix} a_{12} & b_{12} \\ a_{22} & b_{22} \end{bmatrix} \begin{bmatrix} E_{t-2} \\ G_{t-2} \end{bmatrix} + \begin{bmatrix} v_{Et} \\ v_{Gt} \end{bmatrix}$$

To identify structural shocks, the model up to p lags can be written as:

$$A_0 \begin{bmatrix} E_t \\ G_t \end{bmatrix} = C + A_1 \begin{bmatrix} E_{t-1} \\ G_{t-1} \end{bmatrix} + A_2 \begin{bmatrix} E_{t-2} \\ G_{t-2} \end{bmatrix} + \begin{array}{c} \cdots \\ \cdots \end{array} + A_p \begin{bmatrix} E_{t-p} \\ G_{t-p} \end{bmatrix} + \begin{bmatrix} v_{Et} \\ v_{Gt} \end{bmatrix}$$

OR

$$\begin{bmatrix} E_t \\ G_t \end{bmatrix} = A_0^{-1}C + A_0^{-1}A_1 \begin{bmatrix} E_{t-1} \\ G_{t-1} \end{bmatrix} + A_0^{-1}A_2 \begin{bmatrix} E_{t-2} \\ G_{t-2} \end{bmatrix} + \begin{array}{c} \cdots \\ \cdots \end{array} + A_0^{-1}A_p \begin{bmatrix} E_{t-p} \\ G_{t-p} \end{bmatrix} + A_0^{-1} \begin{bmatrix} v_{Et} \\ v_{Gt} \end{bmatrix}$$

The study used the Cholesky identification scheme to identify exogenous government expenditure shocks. This requires ordering the variables in the VAR model from the most exogenous to the least exogenous. Specifically, in this study, government spending was placed first and GDP second.

$$\text{Let,} \quad A_0^{-1} = \begin{bmatrix} \alpha_{11} & \alpha_{12} \\ \alpha_{21} & \alpha_{22} \end{bmatrix}$$

Cholesky identification strategy

$$\begin{bmatrix} E_t \\ G_t \end{bmatrix} = \begin{bmatrix} \alpha_{11} & 0 \\ \alpha_{21} & \alpha_{22} \end{bmatrix} \begin{bmatrix} v_{Et} \\ v_{Gt} \end{bmatrix}$$

This restriction implies that:

When there is a change in E, there is a contemporaneous effect on E => $\alpha_{11} > 0$.

When there is a change in E, there is a contemporaneous effect on G => $\alpha_{21} > 0$.

When there is a change in G, there is no contemporaneous effect on E => $\alpha_{12} = 0$.

When there is a change in G, there is a contemporaneous effect on G => $\alpha_{22} > 0$.

Impulse Response Function

$$\begin{bmatrix} E_t \\ G_t \end{bmatrix} = \sum_{i=0}^{\infty} \delta_i \begin{bmatrix} v_{E,t-i} \\ v_{G,t-i} \end{bmatrix}, \qquad \delta_i = A_0^{-1}B_i$$

In the equation for the IRF above, B$_i$'s are coefficients from the reduced form VAR.

The Expenditure Multiplier (EM) is defined as

$$EM_h = \frac{\sum_{i=1}^{h} \delta_{i,G}}{\sum_{i=1}^{h} \delta_{i,E}},$$

where $\delta_{i,G}$ and $\delta_{i,E}$ Are elements of δ_i Corresponding to E and G.

The study used quarterly data and expressed multipliers as a ratio of cumulative GDP response for four quarters to cumulative expenditure shock for four quarters.

Blanchard & Perotti (2002) expressed the multiplier as the ratio of the peak output response to the initial government spending shock. Many subsequent studies have adopted either this definition or considered the average output response to the initial government shock (Ramey & Zubairy, 2018). However, multipliers should instead be calculated as the ratio of the integral of the output response to the integral of the government spending response (Mountford & Uhlig, 2009; Uhlig, 2010). Integral multipliers are more relevant for policy analysis as they quantify the cumulative GDP gain relative to the cumulative government spending over a specified period.

4. DATA COLLECTION AND TRANSFORMATION

To estimate the government expenditure or spending multipliers, quarterly data on government spending and macroeconomic indicators spanning from 2001-02: Q1 to 2023-24:Q4 were collected. This section discusses the collection of data, illustrates the transformation of different variables used in the analysis, and evaluates the performance of these variables over the period of study.

Data Collection

While quarterly data offer a more granular perspective on economic dynamics, challenges related to data availability and consistency across variables and regions necessitated rigorous data collection and processing. The subsequent section elaborates on the specific methodologies employed for data collection and construction for each variable.

Key Macroeconomic Indicators

The national-level dataset encompassed core macroeconomic indicators, including real GDP, GDP deflator, general government deflator, consumer price index (CPI), State Bank's discount/policy rate and exchange rate. However, significant data limitations were encountered for these variables. For real GDP, GDP deflator, and general government deflator, a substantial gap existed spanning from 2001-02: Q1 to 2014-15: Q4. Furthermore, the CPI series exhibited inconsistencies due to multiple base years (2000-01, 2007-08, and 2015-16), necessitating data harmonisation.

To address the identified data gaps, a tailored approach was implemented for each variable. Initially, the Denton method was considered for converting annual data to quarterly frequencies. However, for real GDP, a more robust solution was found in Tahir et al. (2018). They generated quarterly GDP estimates for Pakistan for the 1978: Q1 to 2015-16: Q4 period, with 2008 as the base year. They utilised annual real GDP and quarterly index based on variables, such as CPI, industrial production, imports, exports, and money supply (M2). To align these estimates with the official real GDP series, which employed a different base year (2015-16), a reconciliation process was undertaken. This involved applying quarterly shares from Tahir et al. (2018) to the official annual GDP data with base 2015-16, resulting in a consistent quarterly GDP series for the period 2001-02: Q1 to 2014-15: Q4. The quarterly GDP for the period 2015-16: Q1 to 2023-24: Q4 was obtained from the Pakistan Bureau of Statistics (PBS), Government of Pakistan.

Quarterly data on CPI, and annual data on GDP deflator and general government deflator were obtained from various issues of the Pakistan Economic Survey. The quarterly CPI series with different base years was rebased to the 2015-16 base year to ensure consistency. This harmonised CPI series was subsequently employed to convert the available annual data on GDP deflator and general government deflator into quarterly estimates spanning from 2001-02: Q1 to 2023-24:Q4. The general government deflator was constructed using nominal and real values of expenditures on public administration and social security.

Consolidated Expenditures

Data on a quarterly series of consolidated (federal and provincial combined) public expenditures were obtained from Fiscal Operations, Ministry of Finance, Government of Pakistan. The categories of expenditures include current expenditures, development expenditures, domestic debt servicing and external debt servicing.

The federal expenditures on domestic debt servicing involve intra-national transfers, and those on foreign debt servicing constitute an outflow with a potential zero multiplier. A net (inflows less outflows) current expenditure series was constructed by excluding expenditures on debt servicing from consolidated current expenditures. This net current expenditure series was used to estimate the multiplier.

Data on the PIFRA classification of ten expenditure categories (see Table 1) are available only for federal expenditures in the Ministry of Finance's Fiscal Operations. In order to overcome this, these data were sourced from Poverty Reduction Strategy Paper (PRSP) documents, which provide quarterly data by different expenditure categories (Table 1), mostly related to public service, for both federal and provincial governments.

General public service is the biggest head of expenditures that encompasses expenditures largely related to debt servicing. Since the study does not consider the expenditures on debt servicing, this category was excluded from the analysis. Expenditures on defence services were also excluded as these are not linked with the 18th Constitutional Amendment. Similarly, expenditures on environmental protection, housing and community amenities, recreation, and culture and religion were not included because they have a small share in total expenditures. Finally, expenditures on social protection mainly contain BISP expenditures, which are in the federal domain and shared by the provincial governments. Though the provincial governments do have some expenditures on social protection, their magnitude is very small in their total expenditures.

For the remaining categories, the corresponding expenditure categories were drawn from the PRSP documents. For economic affairs, corresponding expenditure categories in PRSP include irrigation and agriculture, subsidies (fuel/energy), roads, highways, and bridges. For the public order and safety affairs category, it is the spending on law and order, while the services category includes the corresponding expenditure categories in the PRSP documents, which are expenditures on health affairs and education affairs.

There were some inconsistencies in the PRSP data. For example, only the annual series of PRSP expenditures is available for the period 2017-18 to 2022-23. In order to get the quarterly series for this period, average annual shares for each quarter were computed for the period 2012-13: Q1 to 2016-17:Q4, and were applied to the annual series.

Table 1: Expenditures Categories as Per Fiscal Operations and PRSP Documents

Categories in Fiscal Operations	Categories in PRSP	Status
General Public Service	-	X
Defence Affairs and Services	-	X
Public Order and Safety Affairs	Law and Order	✓
Economic Affairs	Irrigation; agriculture; subsidies; road, highways, bridges	✓
Environment Protection	Environment/Water Supply & Sanitation	X
Housing & Community Amenities	-	X
Health Affairs & Services	Health	✓
Recreation, Culture and Religion	-	X
Education Affairs and Services	Education	✓
Social Protection	Social Security & Welfare	X
-	Natural Calamities & Other Disasters	X
-	Rural Development	X
-	Justice and Administration	X

Source: Fiscal Operations, the Ministry of Finance and PRSP documents.

Transformation of Variables

Pre-2016 studies use variables in logs (GDP and spending) and transform the estimated elasticities into impulse responses ex post, using the sample average of the government spending-to-GDP ratio. However, in post-2016 studies, researchers found that this approach might be problematic as there may be variations in the sample averages, and ex post conversion creates bias in the estimated multiplier (Ramey & Zubairy, 2018). To mitigate this problem, the Gordon & Krenn (2010) transformation is helpful. It suggests estimating "potential output" and then using it to normalise all the variables. This normalises the units of all variables, which means that there is no need for an ex post transformation. This study employed this transformation and computed potential GDP following Corsetti et al. (2012), Ramey & Zubairy (2018), and Konstantinou et al. (2022).

5. PERFORMANCE OF VARIABLES: 2001-02 TO 2023-24

Before estimating disaggregated multipliers for government spending, expenditure categories were meticulously investigated. This section presents the performance of the variables by evaluating them in the pre-era and post-era of the 18th Amendment. The period 2001-02 to 2009-10 is considered the pre-era, and the 2010-11 to 2023-24 period is considered the post-era.

Macroeconomic Variables

The magnitude of fiscal multipliers may vary based on a country's specific structural characteristics and prevailing economic conditions, as shown in Table 2. Among structural factors, the level of development is particularly significant, with fiscal multipliers being larger in advanced economies compared to developing countries. Countries like Pakistan, which are low-income economies, tend to have a lower magnitude of multiplier.

Trade openness is a key factor, as countries with lower trade openness tend to have higher fiscal multipliers. Also, nations with flexible exchange rate regimes exhibit lower multipliers since exchange rate adjustments absorb shocks, offsetting the impact of fiscal measures. Likewise, countries with high debt levels generally experience lower multiplier effects because fiscal stimulus can negatively affect private demand and increase the interest rate risk premium. Similarly, fiscal multipliers are higher when there is greater monetary accommodation, such as when interest rates are low or near zero. The size of fiscal multipliers is also influenced by the source of deficit financing. They tend to be larger when external financing is greater than domestic financing (Lahouel et al., 2024).

Table 2: Factors Affecting Multiplier

Determinants	Impact on size fiscal multiplier
Income level	(+)
Trade openness	(-)
Exchange rate flexibility	(-)
Public debt	(-)
Degree of monetary policy accommodation (low rate of interest)	(+)
Source of funding	External financing>domestic financing

Source: Authors' computation based on Lahouel et al. (2024).

Table 3 displays figures of key macroeconomic indicators in the pre- and post-18th Amendment periods. Trade openness, measured as the trade-to-GDP ratio, has generally hovered around 30% over the past two and a half decades. It stood at 29.6% in the pre-Amendment period and 28.7% in the post-Amendment period. The minimal difference in trade openness indicates that this factor is unlikely to significantly influence variations in the size of the fiscal multiplier between the two periods. The exchange rate has never operated solely on a market-based flexible mechanism. It has predominantly functioned as a managed float and has often been artificially fixed. As a result, this factor leads to a larger magnitude of the multiplier. However, there was a massive depreciation of the rupee-dollar exchange rate in the latter period. Average annual depreciation in the rupee was 4.4% in the former period, while it was 9.6% in the latter period. This could tend to reduce the size of the multiplier in the post-era.

Pakistan is among the countries with a high level of public debt. On average, the debt-to-GDP ratio increased to 66% in the post-Amendment period, compared to 51% in the pre-Amendment period. Since an increase in public debt reduces the size of the multiplier, this factor could contribute to determining the size of the multiplier in the post-Amendment period. The interest rate that grew minimally at an average rate of less than 1% per annum in the pre-era, rose enormously at an average rate of nearly 8% per annum in the post-era. This could also tend to reduce the size of the multiplier in the post-era compared to that in the pre-era. Among other factors, the significant growth occurred in inflation. The CPI inflation was, on average, 8.8% per annum in the former period compared to 10.6% per annum in the latter period.

Table 3: Average Annual Growth in Key Macroeconomic Indicators (%)

	2001-02 to 2023-24	2001-02 to 2009-10	2010-11 to 2022-23
Average Annual Growth			
Real GDP	3.94	4.67	3.48
Consumer Price Index	9.86	8.78	10.56
SBP Policy/interest rate	5.00	0.60	7.83
Exchange Rate (Rs/$)	7.56	4.38	9.61
% of GDP			
Trade-to-GDP ratio	29.1	29.6	28.7
Debt-to-GDP ratio	60.0	51.5	65.9

Sources: Pakistan Economic Survey, GOP; Statistical Bulletin, SBP; Online Data catalog, the World Bank.

Immense growth in inflation, interest rates, and exchange rates may have hindered economic growth in the later period by raising production costs. The growth in real GDP remained, on average, at 3.5% per annum in the post-era, which is much lower than the growth rate of 4.7% in the pre-era. In Pakistan, the commodity-producing sector accounts for 50% of the overall GDP. This sector, particularly manufacturing, is heavily reliant on imports. The depreciation of the rupee, along with a surge in inflation, increased production costs. Furthermore, the continual growth in interest rates discouraged private investment. All these factors worked together to put downward pressure on output.

Consolidated Expenditures

The composition of consolidated expenditures is presented in Table 4. In the pre-era, current expenditures, on average, constituted 81% per annum of total expenditures, while development expenditures constituted 19%. This composition changed in the post-era, where the share of current expenditure increased to 83% and that of development expenditure declined to 16.6%.

Table 4 also gives the share of expenditures that went into debt servicing. In the former period, debt servicing was, on average, 21.6% per annum of total expenditures, while in the latter period it increased to 25%. Within debt servicing, the share of domestic debt servicing soared, while that of foreign debt servicing shrank. Table 4 further shows that, excluding debt servicing, the share of current expenditures slightly dropped in the post-era.

Major components of combined federal and provincial service-related expenditures as a percentage of total expenditures are also presented in Table 4. Expenditures on education emerged as a top priority as its average share per annum remained at over 9% in both periods. This is followed by expenditures on subsidies. The average annual share of all service-related expenditures in total expenditures, which constituted 28% in the pre-era, climbed to 39% in the post-era. The highest increase occurred in the subsidies component (from 4.3% to 8.4 %), followed by health (from 2.8 % to 4.8 %) and law and order (from 2.8 % to 4.7 %).

Growth in consolidated expenditures is displayed in Table 5. In the period before the amendment, average annual growth in consolidated total expenditures was 10%, whereas in the period preceding the amendment, it declined by two-thirds and stood at 3.6%. In the case of current expenditures, the average annual growth rate declined from 9.4% in the former period to 4.8% in the latter period. Growth in debt servicing portrayed an increase from

7.3% to 9.3%. However, once the expenditures on debt servicing were excluded, average growth in current expenditures became 11% per annum in the pre-era and then declined to 3% in the post-era. In the case of development expenditures, the average annual growth rate that was 16% in the former period declined massively to less than 1% in the latter period.

Table 4: Composition of Consolidated Expenditures (% Share in Total Expenditures)

Categories	Overall period 2001-02 to 2023-24	Pre-18th Constitutional Amendment 2001-02 to 2009-10	Post-18th Constitutional Amendment 2010-11 to 2022-23
Expenditures by major heads			
Current Expenditure	82.39	80.90	83.36
Servicing of Domestic Debt	20.71	17.95	22.48
Servicing of Foreign Debt	2.97	3.65	2.53
Total Debt Servicing	23.68	21.60	25.01
Current Excl. Debt Servicing	58.72	59.30	58.34
Total Development Expenditure	17.61	19.10	16.64
Expenditures by Components			
Roads, Highways, & Bridges	3.49	2.86	3.89
Education	9.48	9.04	9.76
Health	4.00	2.78	4.78
Irrigation/Agriculture	3.35	3.25	3.42
Law and Order	3.96	2.80	4.71
Subsidies	6.76	4.29	8.36
Other	3.82	3.36	4.12
All service related expenditures	34.86	28.37	39.04

Source: Fiscal Operations, the Ministry of Finance and PRSP documents.

Among service-related expenditures, growth in all categories depicted a decline in the post-era period compared to that in the pre-era, except for subsidies. For example, average annual growth in expenditures on roads, highways, bridges, and irrigation/agriculture was as high as 35% and 31 %, respectively, in the pre-era, which reduced to 9% and 3%, respectively, in the post-era period. Average annual growth in service-related expenditures on education and health also reduced from 11% and 14%, respectively, in the pre-era to 2% and 8%, in the post-era.

Table 5: Growth in Consolidated Expenditures (Average Annual Rate %)

	Overall period 2001-02 to 2023-24	Pre-18th Constitutional Amendment 2001-02 to 2009-10	Post-18th Constitutional Amendment 2010-11 to 2022-23
Expenditures by major heads			
Total Expenditure	6.21	10.31	3.87
Current Expenditure	6.46	9.43	4.77
Servicing of Domestic Debt	9.35	9.77	9.11
Servicing of Foreign Debt	6.44	-4.06	12.45
Total Debt servicing	8.56	7.27	9.29
Current Excl. Debt Servicing	5.94	11.12	2.98
Total Development Expenditure	6.26	16.10	0.63
Real GDP	3.88	4.90	3.30
Expenditures by Components			
Roads, Highways, & Bridges	18.67	34.84	9.42
Education	5.51	11.31	2.20
Health	10.31	14.31	8.03
Irrigation/Agriculture	12.96	30.69	2.83
Law and Order	3.67	8.17	1.10
Subsidies	11.02	10.77	11.16
Other	17.19	15.81	17.98
All service related expenditures	13.25	28.61	4.48

Source: authors computation based on data from Fiscal operations and PRSP Expenditures.

Figure 1 shows the trend in the magnitude of expenditures. It further illustrates this growth pattern. The magnitude of total current expenditures increased with some slight dips over the entire period. However, an increase in debt servicing reduced the pace of the magnitude of current expenditures.

This is portrayed by the gap between current expenditures total and current expenditures excluding debt servicing, which is persistently widening over time. Development expenditures depict an increase in size, though with some peaks and troughs, till 2016-17. Since then, however, there has been a continuous decline in its size, indicating that growth in these expenditures has died down.

Figure 2: Trend in the Magnitude of consolidated Expenditures
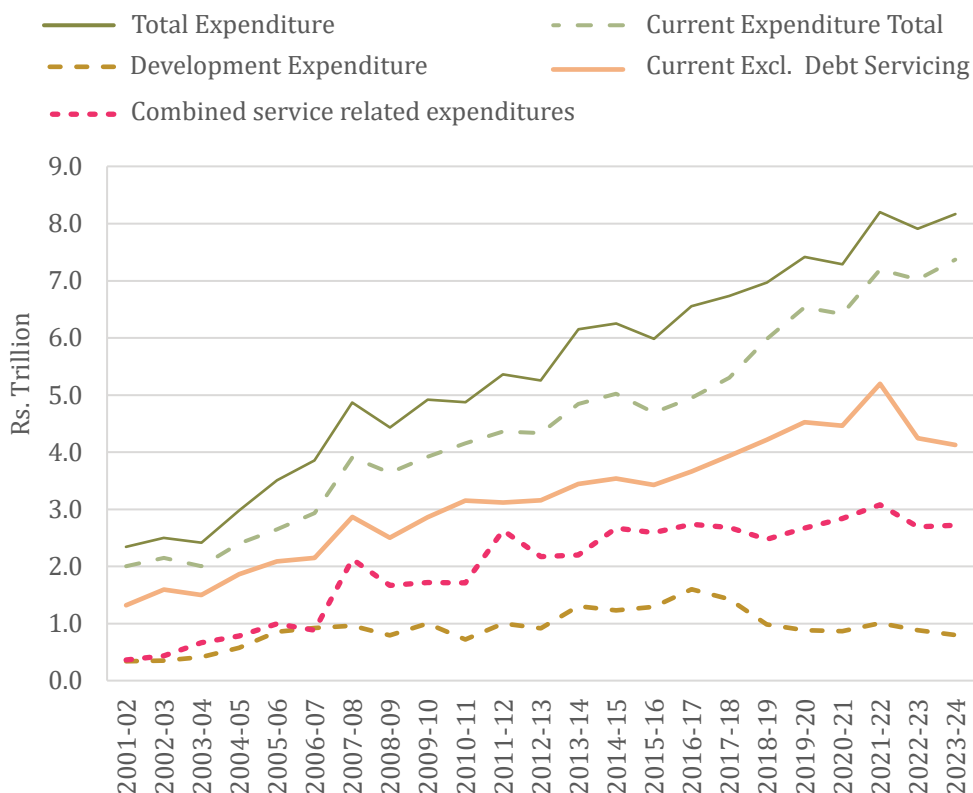
Source: Authors' computations.

Table 6 shows consolidated federal and provincial expenditures as a percentage of GDP. In the pre-era, total consolidated expenditures as a percentage % of GDP were, on average, 16.1% per annum, while in the post-era, they increased to 19.8%. Component-wise, current expenditures were, on average, 15.3% of GDP per annum during the pre-era, increasing to 16.1% of GDP in the post-era. This increase happened primarily on account of an increase in the ratio of debt servicing-to-GDP, which increased from an average of 4.1% to 4.9% per annum. Excluding this ratio, the average annual current expenditures-to-GDP ratio contracted to 11.2% and 11.3 % in the two periods.

On the other hand, development expenditures as a percentage of GDP remained almost the same at an average of 3% per annum in both periods. Since the growth rate in the latter period faded away, the share remained the same.

Table 6: Consolidated Expenditures as % of GDP (Average Annual Percentage Share)

Categories	Overall period 2001-02 to 2023-24	Pre-18th Constitutional Amendment 2001-02 to 2009-10	Post-18th Constitutional Amendment 2010-11 to 2022-23
Expenditures by major heads			
Total Expenditure	18.33	16.13	19.75
Current Expenditure	15.12	13.02	16.47
Servicing of Domestic Debt	3.85	2.92	4.46
Servicing of Foreign Debt	0.53	0.57	0.51
Total Debt Servicing	4.39	3.49	4.96
Current Excl. Debt Servicing	10.74	9.54	11.51
Total Development Expenditure	3.21	3.11	3.27
Expenditures by Components			
Roads, Highways, & Bridges	0.66	0.48	0.78
Education	1.74	1.45	1.92
Health	0.76	0.45	0.95
Irrigation/Agriculture	0.62	0.54	0.67
Law and Order	0.75	0.46	0.93
Subsidies	1.29	0.77	1.63
Other	1.49	0.90	1.87
All service related expenditures	7.30	5.05	8.74

Note: These percentages are based on nominal values of expenditures and GDP.
Source: authors computation based on data from Fiscal operations and PRSP Expenditures.

Figure 2 portrays the pattern of different components of expenditures as a percentage of GDP over the entire period. It shows that the ratio of total current expenditures to GDP declined in the 2002-06 period, remained almost steady during 2007-17, and increased thereafter. The ratio of debt servicing to GDP also declined in 2002-06, remained firm during 2007-17, but increased subsequently. It can be said that after 2016-17, an increase in the debt servicing-to-GDP ratio slowed down the increase in the other current expenditures-to-GDP ratio. On the other hand, development expenditures as a percentage of GDP increased during 2002-06, remained within the same range during 2007-17, then declined afterwards. For the combined service-related expenditures-to-GDP ratio, an upward pattern is seen in the period 2002-12, declining in the remaining period.

Figure 3: Consolidated Expenditures as % of GDP
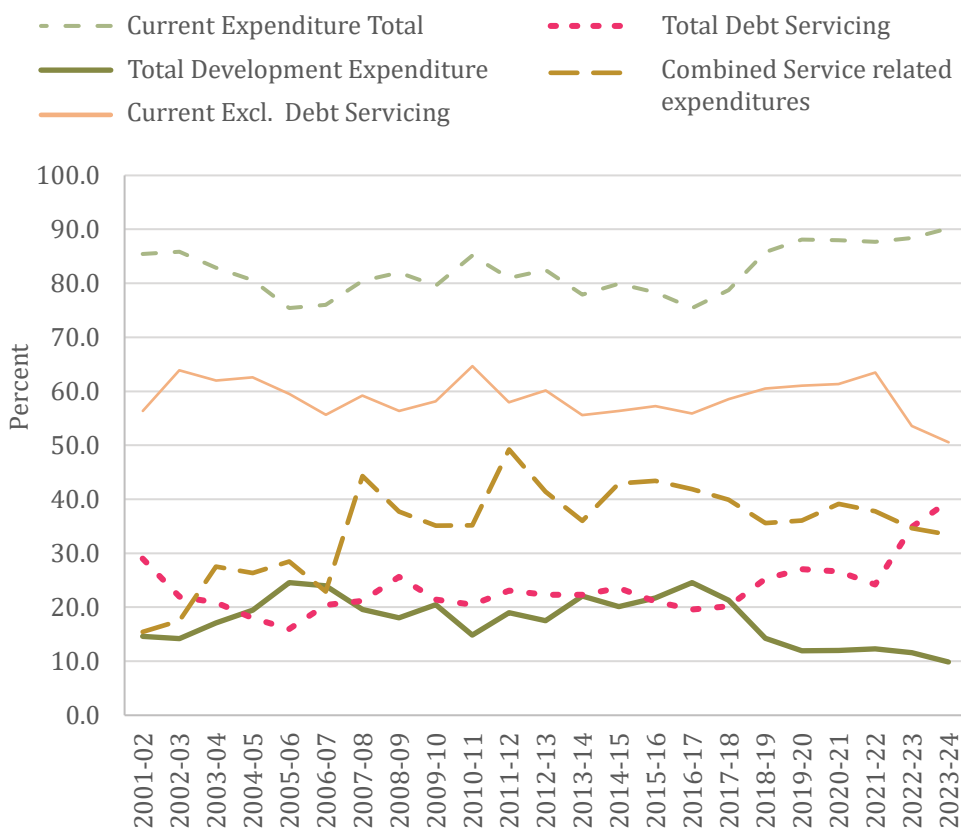
Source: Authors' computations.

The analysis indicates that there was an increase in the magnitude of expenditures in the pre-Amendment period. Due to an enormous increase in the magnitude of expenditures on debt servicing in the post-amendment period, the increase in the magnitude of all other current expenditures slowed down considerably. However, the magnitude of development expenditures depicts a decline in the post-era. On the growth front, all expenditures portrayed a decline except debt servicing, while the growth of service-related expenditures declined considerably, and that of development expenditures almost vanished. This suggests that in the post-era, the priority of governments is to retire debt, but it has come at the cost of development and service-related expenditures.

6. RESULTS AND EXPLANATION

Before estimating the VAR model, nominal values of consolidated expenditures categories were deflated by the general government deflator to transform them into real values. This adjustment accounted for inflation, ensuring that the data accurately reflected changes in purchasing power over time. All variables were normalised using the estimated potential GDP. The GDP series depicts a big drop in quarters 2019-20:Q1 and 2020-21:Q4 due to the COVID-19 pandemic lockdowns. A dummy variable was used for these quarters. Current expenditures excluded debt servicing, so they are referred to as net current expenditures.

To estimate the VAR, variables must have lags. The optimal number of lags was determined using the AIC and HQC criteria. These criteria suggested three lags of variables in all the VAR specifications. IRFs were estimated for a horizon of eight lags.

The models were estimated for two sub-sample periods to estimate the differential output effects of change in the composition of public spending between federal and provincial governments in the aftermath of the 18th Constitutional Amendment and the 7th NFC Award.

1. Pre-18th Constitutional Amendment period (pre-era): 2001Q1 – 2010Q4

2. Post-18th Constitutional Amendment period (post-era): 2011Q1 – 2024Q4

The descriptive statistics of variables in real form and normalised form, for the pre- and post-18th Amendment periods, are shown in Annexure Table A1. The total number of observations is 92, of which 36 are in the pre-era and 56 are in the post-era.

Multipliers for government spending depict the impact of a shock to expenditures on GDP or economic growth. The magnitude of the multiplier states the increase in GDP due to a shock to government spending by one rupee. These multipliers were computed at one-year and two-year integral (cumulated) periods.

Multipliers: Aggregate Total Expenditures (including Debt Servicing)

Multipliers for total expenditures and their constituent categories experienced significant shifts following the 18th Constitutional Amendment. In the pre-era, the estimated one-year integral multiplier is 0.40, and the two-year integral is 0.39, as shown in Table 7. These values suggest that each rupee of total government spending (including debt servicing) generated less than a rupee of economic output within the first two years. This indicates a relatively low aggregate stimulus effect when considering all government outlays. In the post-era, the estimated one-year integral multiplier surges dramatically to 2.82, while the two-year integral collapses to a mere 0.08. The one-year multiplier of 2.82 is indeed very high, though not entirely unprecedented in certain economic contexts or model specifications where specific channels are dominant.

Table 7. Multipliers for Total Expenditures (Including Debt servicing)

One-year integral	0.40	2.82
Two-year integral	0.39	0.08

Source: Authors' computation.

The findings for the pre-era align with typical developing country experiences, where the modest size of multipliers suggests limited capacity to leverage public spending for sustained growth due to constrained fiscal space. This stark shift in the post-era suggests that in the short run (within one year), total government spending had a much larger impact on headline GDP. However, the near-zero two-year multiplier indicates that this initial burst of activity is not sustained and quickly dissipates.

The High Post-Period Aggregate Multiplier in the Short-Term (one-year): The Role of Debt Servicing

A very high one-year aggregate multiplier (2.82) in the post-18th Constitutional Amendment period, especially when it includes the large and growing component of debt servicing, is a key finding. The share of debt servicing in total expenditures has increased from an average of 21.6% in the pre-era to an average of 25% in the post-era. And with total debt servicing, the share of domestic debt servicing that, on average, constituted 83% of total debt servicing in the pre-era, increased to 90% in the post-era. The servicing of domestic debt represents transfer payments to holders of government debt.

Its impact on overall economic activity is complex and depends critically on how these funds are utilised by the recipients and the structure of the economy.

Channels through which Debt Servicing Impacts Multipliers: A Sectoral Perspective

In the post-era, domestic debt servicing largely shifted to borrowing from commercial banks and the public compared to borrowing from the State Bank (printing of money) in the pre-era. It has the following implications.

- A significant portion of debt servicing payments flows as interest income to various entities, including individuals holding savings instruments and institutions like banks and pension funds. Given Pakistan's economic structure, where the services sector constitutes a large share of GDP (around 55%), the spending of this interest income translates into increased demand for services, like wholesale and retail trade (around 20% of GDP), transportation (around 10% of GDP), and other personal and social services. As these services are heavily consumption-driven, and perhaps less reliant on formal bank credit, got affected by government borrowing. The consumption boost from debt servicing transfers can have a significant positive impact on their output. This large component of the economy is experiencing a positive demand shock from these transfers, which may likely have contributed substantially to the observed high one-year aggregate multiplier.

- While the financial sector itself represents a smaller portion of GDP (around 2%), high government borrowing at attractive, low-risk rates provides a profitable avenue for financial institutions to invest in government bonds. This activity contributes directly to the financial sector's own value addition and GDP.

- High government borrowing to finance debt servicing and other expenditures can absorb a significant portion of available credit in the formal financial system. This can crowd out lending to other sectors, particularly large-scale manufacturing (LSM), which constitutes 12% of GDP, and is more dependent on formal banking finance. Furthermore, the massive allocation of government resources towards debt servicing directly crowds out more productive government spending, notably development expenditure, which typically has a higher and more sustained multiplier effect.

The positive consumption-driven demand for the much larger services sector, as a result of debt servicing transfers, could have led to a net positive impact on aggregate demand only in the short run. Therefore, the overall short-run aggregate multiplier for total expenditures (including debt servicing) turned out to be significantly high.

Medium-Term Impact (Two-year)

The high aggregate multiplier did not sustain till the medium term, as depicted by the near-zero two-year aggregate multiplier. This rapid washout of the initial stimulus can be attributed to the following factors that counteract the short-term gains:

- The crowding out of credit to the private sector caused by extensive government borrowing disproportionately affects sectors like the LSM, which is a crucial component of the commodity-producing sector. The sustained growth capacity of the LSM sector and its contribution to exports and employment rely heavily on investment and access to finance. When this sector is starved of credit, it hinders expansion, modernisation, and overall productive capacity, creating a structural drag on the economy that limits the ability of initial demand impulses to translate into sustained output growth.

- Perhaps most critically for the medium term, the persistent fiscal challenges signaled by high debt servicing and reinforced by significant fiscal slippages (e.g., government unveiling much higher revised estimates of the fiscal deficit compared to budget estimates) severely erode business and investor confidence. Such fiscal instability signals unpredictability in government policy, potential future austerity measures, or increased taxation. This shattered confidence discourages private investment in long-term projects, hinders job creation, and dampens overall economic dynamism. Without sustained investment and positive expectations, the economy cannot build upon the initial demand stimulus from debt servicing transfers, leading to the observed collapse of the multiplier in the medium term.

Net Total Expenditures (Excluding Debt Servicing): A More Refined View

In order to isolate the impact of debt servicing, multipliers for net total expenditures, which exclude debt servicing, were also estimated, portrayed in Table 8. In the pre-period, the one-year multiplier is 0.56, and the two-year multiplier is 0.61. These are slightly higher than the total expenditure multipliers including debt servicing, suggesting that the non-debt component of spending had a slightly greater impact per rupee. In the post-period, the one-year multiplier is 1.66, and the two-year multiplier is 0.97, which suggests that once the expenditures on debt servicing are excluded from total expenditures, the one-year multiplier significantly reduces to 1.66 compared to the headline total expenditure of 2.82.

Table 8: Multipliers of Net Total Expenditures (Excluding Debt servicing)

One-year integral	0.56	1.66
Two-year integral	0.61	0.97

Source: Authors' computations.

This confirms that debt servicing inflates the short-run aggregate multiplier but contributes little to sustained economic activity. The net total expenditure multiplier of 1.66 (one-year) in the post-period is still considerably higher than in the pre-period (0.56), indicating that the remaining non-debt spending was more stimulative in the short run. The two-year multiplier of 0.97 suggests that the impact is closer to unity and more sustained once debt servicing is excluded.

Short-term Multiplier (One-year)

The substantial increase in the one-year integral multiplier for net total expenditures (from 0.56 to 1.66) following the 18th Amendment and the 7th NFC Award can be largely attributed to the fundamental shift in fiscal architecture and the nature of provincial spending enabled by these reforms.

- The 7th NFC Award dramatically increased the provincial governments' share of the divisible pool of resources to 57.5 %. This provided provinces with substantially greater financial capacity, leading to a significant increase in their overall expenditures. This higher level of spending, even excluding debt servicing, injected a larger volume of funds into the economy through provincial channels.

Medium-term Multiplier (Two-year)

The two-year multiplier of 0.97 indicates that the stimulus does not vanish and maintains a moderate and sizeable impact on GDP in the medium term. Compared to the pre-period's two-year multiplier of 0.61, the post-amendment 0.97 represents a substantial improvement in the sustained effectiveness of non-debt government spending. A multiplier close to unity in a developing country context suggests that fiscal policy in this category is reasonably effective in generating economic output over the medium term, despite the challenging macroeconomic environment. The difference between the one-year (1.66) and two-year (0.97) multipliers highlights that while the initial demand impulse is very strong, translating it into sustained, compounding economic activity remains a challenge, preventing the two-year multiplier from remaining as high as the first year's.

Multipliers: Current and Development Components of Expenditures

Computing multipliers by breaking up total expenditures into their current and development components gives an elaborate picture. Current expenditures were taken as net of expenditure on debt servicing. The estimated multipliers are reported in Table 9.

Table 9. Multipliers by Components of Expenditures

	Pre-18th Constitutional Amendment	Post-18th Constitutional Amendment
Net Current Expenditures		
One-year integral	0.59	1.13
Two-year integral	0.55	0.47
Development Expenditures		
One-year integral	1.29	0.66
Two-year integral	1.69	0.41

Source: Authors' computations.

In the pre-era, net current expenditure (excluding debt servicing) multipliers are relatively stable, with one-year and two-year integrals of 0.59 and 0.55, respectively. This means that a rupee increase in current expenditures leads to an increase of Rs. 0.59 in economic growth in the first year after the shock. In the second year after the shock, the multiplier slightly declines to 0.55. These figures suggest consistent impacts across both short- and medium-term

horizons. Post-amendment, the one-year integral rose to 1.13, potentially reflecting improved short-term efficiency facilitated by decentralised governance. However, the two-year integral declined to 0.47, revealing challenges in sustaining economic impacts over time. The possible reasons attributed to the increase in the short-term multiplier from 0.59 to 1.13 could be the following.

- A considerable portion of the increased provincial fiscal space, as a result of the 7th NFC award, was directed towards current expenditures. While federal current spending remained relevant, the scale of provincial current spending, relative to their previous capacity and to the overall non-debt spending envelope, grew significantly.

- A large chunk of these increased provincial current expenditures was allocated to employee-related costs (salaries, allowances, etc.). Spending on government employee salaries has a very direct and immediate impact on household income. Households, in turn, tend to have a relatively high marginal propensity to consume (MPC), meaning a large portion of this additional income is quickly spent on goods and services. This rapid injection of income and subsequent consumption significantly boosts aggregate demand, contributing to a higher measured multiplier in the short term, particularly in a services-heavy economy like Pakistan.

- Beyond employee costs, increased provincial current spending also targeted key social services like education, health, and security (police). While some of this involves employee costs, it also represents direct spending on service delivery, infrastructure related to services, and in-kind transfers to the population. Spending on these services directly contributes to the services component of GDP. Furthermore, improved access to or quality of these services can free up household resources previously spent on private alternatives or address basic needs, indirectly supporting other forms of consumption or even productivity over time. This spending, particularly benefiting a wider base of the population, including potentially marginalised groups, ensures that a significant portion of the fiscal transfer translates into economic activity.

The decline in the multiplier to 0.47 in the medium-term in the post-period indicates that the consumption-driven multipliers reduce their impact on economic growth with time.

Development expenditures, exhibiting the highest multipliers in the pre-Amendment era with one-year and two-year integrals of 1.29 and 1.69, respectively, demonstrate significant growth potential for infrastructure and capital investments. However, post-amendment, these multipliers declined sharply to 0.66 and 0.41, respectively. Besides governance challenges and escalating costs due to inflation, this reduced effectiveness can be attributed to fiscal constraints. In the post-era, growth of development expenditures significantly declined compared to that in the pre-era, as discussed in section 5. This happened due to a large allocation towards debt servicing. This directly reduced the resources available for public development expenditure, which has historically shown a higher and more sustained multiplier effect in the pre-period. Lower public investment in infrastructure, human capital, and other growth-enhancing areas limits the economy's long-term supply potential.

Decline in net total expenditure multiplier (from 1.66 to 0.97) in the medium-term could be attributed to both decline in the net current expenditure multiplier (from 1.13 to 0.47) and decline in the development expenditure multiplier (from 0.66 to 0.41). The former happened due to a short-lived consumption-driven multiplier in the short-term, while the latter occurred because stimulus to development expenditures continues declining till the medium-term.

Sensitivity/Robustness Check

To evaluate the robustness of the estimated fiscal multipliers and gain insight into the interplay between fiscal stimulus and the broader macroeconomic environment, multipliers are also estimated by introducing control variables for key macroeconomic indicators in the model. These include: nominal policy rate, nominal exchange rate, and inflation (measured by CPI growth). The results are shown in Table 10. The explicit purpose of incorporating these controls is to isolate the impact of fiscal policy by accounting for the influence of monetary policy stance, inflationary pressures, and exchange rate movements. This approach allows inferring the potential effectiveness of fiscal spending in scenarios where these macroeconomic factors might have followed a different trajectory than observed.

Net Total Expenditures

Comparison of the uncontrolled and controlled estimates for the pre-period reveals the increasing role of the macroeconomic environment during that time. Upon controlling for the macroeconomic variables, the one-year multiplier rises to 1.1 from 0.56, and the two-year multiplier rises to 1.3 from 0.61. This upward revision suggests that the macroeconomic dynamics prevalent in the pre-period, particularly as inflation and exchange rate pressures emerged and the policy rate began to climb (following an initial period of lower rates and central bank financing), were acting as a dampening force on the fiscal impulse. Controlling for these factors reveals an underlying multiplier effect for net total expenditures at unity during this period, indicating a reasonable degree of effectiveness.

Table 10. Multipliers Estimates by Controlling Macroeconomic Variables

	Pre-18th Constitutional Amendment	Post-18th Constitutional Amendment
Net Total Expenditures		
One-year integral	1.12	1.94
Two-year integral	1.26	1.12
Net Current Expenditures		
One-year integral	1.19	0.98
Two-year integral	0.49	0.36
Development Expenditures		
One-year integral	1.23	1.80
Two-year integral	1.54	0.71

Source: Authors' computations.

The comparison of uncontrolled and controlled estimates for the post-period strikingly highlights the impact of a more challenging macroeconomic environment. Once the macroeconomic variables are uncontrolled, the one-year multiplier increases to 1.94 from 1.66. This provides strong empirical evidence that the severe macroeconomic headwinds prevailing in the post-amendment era significantly constrained the observed short-run effectiveness of fiscal stimulus. The underlying potential of net total expenditures to boost immediate output was considerably higher (approaching 2), but the adverse monetary and external conditions notably reduced the actual realised impact. However, the controlled two-year

multiplier remains the same at one. This suggests that while the initial potential stimulus is very strong, its capacity to translate into sustained activity over two years is reduced to half when the persistent drag from structural issues and potentially still challenging macroeconomic conditions (even after controlling for their average impact) is accounted for.

Net Current Expenditures

In the pre-period, controlling for monetary policy and inflation dramatically increases the estimated multipliers from sub-unity (0.59/0.55) to significantly above unity (1.19). This suggests that in the relatively stable macroeconomic environment of the pre-period, current spending itself might have had a moderate direct impact; the prevailing monetary conditions and low inflation were highly conducive to the transmission of this fiscal impulse. Controlling for these factors reveals a much higher underlying potential for current spending to stimulate output in a stable macroeconomic setting.

In the post-period, the picture changes. The uncontrolled estimates showed a one-year multiplier above unity (1.13) that rapidly tapered (0.47 two-year). However, upon controlling for the period's high policy rate and inflation, one-year multipliers slightly decreased to 0.98 from 1.13, while two-year multipliers substantially decreased to 0.36 from 0.47. This indicates that the specific dynamics of high inflation and tight monetary policy in the post-period were not necessarily straightforward "headwinds" that simply dampened an underlying higher multiplier. Instead, they were deeply knotted with nominal spending and price level movements, and controlling for them potentially removes a component of the observed nominal impact, revealing a lower underlying real multiplier. The results suggest that translating current expenditures into real economic activity was challenging in this environment, and the macroeconomic turbulence itself was part of the complex transmission mechanism, not just an external dampener.

Development Expenditures

In the pre-period, controlling for macroeconomic variables results in only minor changes to the estimated multipliers (1.29/1.69 uncontrolled vs. 1.23/1.54 controlled). This suggests that in the relatively stable macroeconomic environment of the pre-period, the prevailing monetary policy, inflation, and exchange rate dynamics were already quite conducive or at least not significant hindrances to the effectiveness of development spending. The uncontrolled estimates closely reflect the underlying multiplier effect of public investment during this stable period.

In the post-period, the contrast is dramatic. The uncontrolled estimates showed low and rapidly tapering multipliers (0.66 one-year, 0.41 two-year), suggesting weak effectiveness. However, when controlling for the severe macroeconomic headwinds of this period (high policy rate, inflation, and exchange rate volatility), the one-year multiplier jumps significantly to 1.80, and the two-year multiplier rises to 0.71. This striking difference reveals that the challenging macroeconomic environment was a major constraint, significantly dampening the observed effectiveness of development spending. The underlying potential for public investment to stimulate immediate output was substantially higher (close to 1.8), but adverse macroeconomic conditions prevented this potential from being realised in the observed data. While the two-year multiplier also improves with controls, it remains below unity and well below the one-year controlled multiplier, indicating that translating this high potential initial impulse into sustained medium-term growth remains a significant challenge, even when accounting for these specific macroeconomic frictions.

Appraisal

The sensitivity analysis indicates that the results for net total expenditures multipliers, with and without macroeconomic controls, lend support to the reliability of key findings. While the precise magnitudes of the multipliers change depending on whether controls are included, and the relative standing of the two-year multipliers between the pre- and post-periods shifts, the core policy-relevant conclusion remains consistent: the short-run impact of net total expenditures is significantly higher in the post-18th Amendment period compared to the pre-period. Furthermore, the finding of a clear tapering effect in the post-amendment period, where the two-year multiplier is considerably lower than the one-year multiplier, is also consistently observed across both specifications.

Regarding robustness of the multiplier for net current expenditures, the core finding of a tapering effect in the post-18th Amendment period (one-year multiplier significantly higher than the two-year) is robust across both specifications. However, the level and relative position of the multipliers between the pre- and post-periods change significantly when controls are added. This indicates that while the tapering phenomenon in the post-period is reliable, the precise effectiveness of current spending and its comparison across periods is highly sensitive to how one accounts for the prevailing monetary policy and inflation environment. The findings underscore that current expenditure multipliers are particularly susceptible to

macroeconomic conditions. Since current expenditure largely caters for consumption, even after controlling for macroeconomic variables, the two-year multiplier eventually dies out.

For development expenditures multipliers, the findings reveal that they exhibit a spreading effect in the pre-period (two years higher than one year) and a tapering effect in the post-period (one year higher than two years) are robust across specifications. Crucially, the analysis robustly reveals that the challenging macroeconomic environment in the post-period acted as a severe dampener on the effectiveness of development spending, particularly in the short run. The significant improvement in the one-year multiplier upon inclusion of controls consistently highlights this fact. It is worth noting that a post-era substantial increase in the one-year net total expenditure multiplier occurs on account of a substantial increase in the one-year development expenditures multiplier.

Multipliers by Classifications of Expenditures

Table 11 presents the estimated multipliers by expenditure categories, showing the effect of the shock by each category on GDP in the pre- and post-18th Constitutional Amendment eras.

Based on the expenditure pattern in the pre-era, the accumulated multiplier for combined services-related expenditures is 0.40 in the first year and then declines to 0.38 in the second year. This indicates that while services provided an initial boost, their medium-term impact remained limited. On the other hand, considering the expenditure pattern in the post-era, the accumulated multiplier increased from 0.40 to 0.72 in the first year and then declined to 0.29 in the second year. This highlights the need for better prioritisation and delivery of services to enhance sustained economic benefits, particularly within decentralised governance frameworks.

The picture, however, varies when multipliers were estimated by different categories of these service-related expenditures. Expenditures pattern in the pre-era shows that the highest magnitude of multiplier is for irrigation and agriculture, followed by roads, highways and bridges; law and order; and education and health. Expenditure patterns in the post-era indicate that the highest magnitude of multiplier is for law and order, followed by education and health; roads, highways and bridges. The extent of the multiplier for subsidies is lowest in both periods.

Shocks of expenditures on roads, highways and bridges; irrigation and agriculture; and Law and order cause a higher impact on growth in the second year in both the pre- and post-18th Constitutional Amendment periods, as portrayed by their estimated accumulated multipliers.

Table 11. Category-Wise Multipliers

	Pre-18th Constitutional Amendment	Post-18th Constitutional Amendment
All Service-Related Expenditures		
One-year integral	0.40	0.72
Two-year integral	0.38	0.29
Education and Health		
One-year integral	1.31	2.18
Two-year integral	1.72	2.10
Law and Order		
One-year integral	1.99	2.49
Two-year integral	2.59	3.32
Roads, Highways and Bridges		
One-year integral	4.01	0.54
Two-year integral	4.91	0.77
Irrigation and Agriculture		
One-year integral	4.55	-0.02
Two-year integral	5.42	2.67
Subsidies		
One-year integral	0.47	-0.55
Two-year integral	0.26	-0.49

Source: Authors' computations.

Education and health sectors exhibited marked improvements in multipliers post-amendment. In the pre-era, the one-year integral multiplier is 1.31 and the two-year integral multiplier is 1.72, suggesting that the impact of expenditure shock on GDP increases in the second year. In the post-era, the one-year integral multiplier is 2.18 and the two-year integral multiplier is 2.10, indicating that the impact on GDP slightly declines in the second year. The year-wise comparison between the two periods points out that the one-year integral for education rose from 1.31 to 2.18, and the two-year integral remained consistently high at 1.72 and 2.10, respectively. This emphasises the critical role of social sector investments in driving economic growth, even in the face of macroeconomic and fiscal challenges. The

sustained impact underscores the potential of education and health expenditures to enhance human capital and productivity. Notably, these sectors were primarily devolved to provincial governments under the 18th Amendment.

Law and order expenditures also demonstrated a similar positive trend, where the impact of shock increases in the second year. Furthermore, one-year integral increases from 1.99 to 2.49 and the two-year integral rises from 2.59 to 3.32. This highlights the economic value of investments in public safety and security, which contribute to a stable environment conducive to economic activity. The stronger multipliers post-amendment may reflect increased provincial government efforts to improve law enforcement and justice systems.

Conversely, multipliers for roads, highways, and bridges exhibited a significant decline post-amendment. The one-year integral plummeted from 4.01 to 0.54, and the two-year integral dropped from 4.91 to 0.77. This sharp reduction indicates inefficiencies in project execution, escalating costs due to inflation, and governance bottlenecks. Given the critical role of transportation infrastructure in economic growth, addressing these challenges is paramount.

For irrigation and agriculture, the one-year integral declined from 4.55 to -0.02, indicating a complete reversal of short-term impacts post-amendment. However, the two-year integral improved from 5.42 to 2.67, suggesting that while immediate outcomes were negative, medium-term benefits remained substantial. This suggests that inefficiencies in immediate implementation, possibly due to delays or misallocation of resources, may have undermined short-term impacts.

However, it is observed that the impact of shocks on economic growth increases in the second year for both types of infrastructure-related expenditures. This underscores that the outcomes of investments in such projects tend to materialise with a time lag.

Finally, subsidies demonstrated a negative trend post-amendment, with the one-year integral declining from 0.47 to -0.55 and the two-year integral falling from 0.26 to -0.49. This indicates that subsidies may have become counterproductive, potentially distorting markets and leading to inefficiencies.

It is essential to consider the size of the multiplier in the context of the performance of key macroeconomic indicators during the two periods, as macroeconomic stability influences the impact of public sector spending. With reference to the macroeconomic factors that affect the multiplier, as discussed in Section 5, the influence of factors causing the magnitude of the multiplier to be lower in size is stronger in Pakistan. For example, a substantial increase in the debt-to-GDP ratio during the post-era could have played a significant role in lowering the size of the multiplier in that period. Similarly, growth in interest rates might have contributed to a reduction in the size of the multiplier in the post-amendment era compared to the pre-amendment era.

7. CONCLUSION

This study estimated government spending multipliers for the periods before and after the 18th Constitutional Amendment. The objective was to examine the impact of government spending on economic growth, particularly in light of increased fiscal transfers to the provinces following the 7th NFC Award and the 18th Constitutional Amendment. To achieve this, the SVAR model was estimated, and IRFs were generated using quarterly data from 2001-02:Q1 to 2023-24:Q4. The multipliers were calculated for overall government expenditures as well as for different categories of public spending. The period from 2001Q1 to 2010Q4 is categorised as the pre-18th Constitutional Amendment period, while 2011Q1 to 2024Q4 represents the post-18th Constitutional Amendment period.

The empirical analysis reveals the following: the one-year integral multiplier of total expenditure depicted higher magnitude in the post-period while the two-year integral collapses. However, once expenditures on debt servicing are excluded the size of multiplier reduced drastically, suggesting that debt servicing inflates the short-run aggregate multiplier but contributes little to sustained economic activity.

Component-wise, the one-year integral multiplier for current expenditures (excluding debt servicing) increased in the post-amendment period, reflecting improved short-term efficiency supported by decentralized governance. However, the two-year integral declined, indicating challenges in maintaining the economic impact over time. Development expenditures exhibited the highest multipliers in the pre-amendment era, with the two-year integral slightly exceeding the one-year integral—demonstrating strong potential for

sustained growth through infrastructure and capital investments. In contrast, post-amendment, these multipliers dropped sharply. Moreover, while the multiplier for development expenditures exceeded that of current expenditures in the pre-era, it became smaller in the post-era.

The sensitivity analysis confirms the reliability of the main findings, even though the exact multiplier values shift depending on whether macroeconomic controls are included. For net total expenditures, the key takeaway remains: their short-run impact is significantly stronger in the post-18th Amendment period, with a consistent tapering effect (one-year multiplier is greater than two-year multiplier). For net current expenditures, the tapering effect in the post-period is also robust, but the effectiveness of spending and cross-period comparisons is highly sensitive to inflation and monetary policy. These multipliers are particularly vulnerable to macroeconomic conditions and tend to weaken over time since they mostly support consumption. For development expenditures, the results consistently show a spreading effect pre-period (two-year is greater than one-year) and a tapering effect post-Amendment. The sharp rise in the one-year multiplier after controls are included suggests that the post-period macroeconomic instability significantly weakened the short-run impact of development spending. Notably, the large post-period increase in the one-year net total expenditure multiplier is driven by a rise in the one-year development expenditure multiplier, once the influence of monetary policy stance, inflationary pressures, and exchange rate movements are controlled in the model.

Across various expenditure categories, the multipliers for education and health, and law and order showed an increase in the post-amendment era. Conversely, the multipliers for roads, highways, bridges, and irrigation and agriculture were significantly higher in the pre-amendment era.

It can be observed that, apart from current expenditures and education, the multipliers for other components indicate a weaker performance in the post-18th Constitutional Amendment period. It could be since the government's top priority during this era was retiring debt, which led to increased spending on debt servicing. Consequently, budget allocations for development expenditures appeared to be compromised.

Furthermore, the overall macroeconomic performance, which plays a critical role in shaping the spending multiplier, remained weak and unstable in the post-amendment era. For instance, the debt-to-GDP ratio deteriorated, interest rates surged significantly, inflation experienced substantial growth,

and the rupee-dollar exchange rate depreciated sharply. These factors contributed to lower multiplier values, as they absorbed the impact of expenditure shocks.

8. RECOMMENDATIONS AND POLICY IMPLICATIONS

The findings highlight the need for policies that deliver economic stimulus while safeguarding long-term fiscal sustainability.

The differentiated impacts of various spending categories highlight the need for strategic resource allocation. For example, maintaining or even increasing investments in education, health, and law and order is crucial, as these sectors consistently demonstrate strong multiplier effects, even during economic crises. Simultaneously, redirecting resources away from inefficient subsidies towards sectors with higher growth potential is essential to ensure fiscal sustainability.

Emphasis is required on fiscal prudence as the negative multipliers associated with some spending categories underscore the need for responsible debt management and efficient revenue generation.

There is a need to adapt spending strategies during times of exchange rate fluctuations, fiscal stress, or financial crises that can mitigate potential negative impacts and maximise the positive effects of government spending.

While the pre-18th Amendment era demonstrates the transformative potential of development expenditure, its impact has waned since devolution. The erosion of fiscal space, particularly at the federal level, may have hindered the execution of joint development projects, potentially leading to implementation delays. Strengthening planning, monitoring, and execution frameworks, including mechanisms to ensure timely allocation of funds, is essential to revitalise the growth impact of these investments.

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ANNEXURE

Table 9: Descriptive Statistics of Variables In Real Form

	Pre-era		Post-era		Full Period	
	2001-02 to 2023-24		2001-02 to 2023-24		2001-02 to 2023-24	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
GDP	5,313,189	695,125	8,146,848	1,191,434	7,038,025	1,725,499
Total expenditures	888,426	308,237	1,677,998	436,806	1,369,035	549,529
Net current expenditures	520,810	181,664	968,115	256,967	793,083	317,463
Development expenditures	172,977	96,407	266,766	151,149	230,066	139,646
Total PRSP expenditures	267,841	187,101	640,647	252,569	494,766	292,382
PRSP education & health	104,706	40,819	241,122	69,821	187,742	89,825
PRSP Irrigation/ agriculture	30,850	24,492	55,901	26,079	46,098	28,158
PRSP Law and order	27,081	22,359	77,543	15,869	57,797	30,946
PRSP roads, highways, bridges	27,126	28,232	64,222	44,667	49,706	42,939
PRSP subsidies	48,174	82,220	133,621	118,486	100,185	113,329

Source: Fiscal Operations, the Ministry of Finance and PRSP documents.

Table 10: Descriptive Statistics of Real Variables in Normalized Form

	Pre-era		Post-era		Full Period	
	2001-02 to 2023-24		2001-02 to 2023-24		2001-02 to 2023-24	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
GDP	1.0019	0.0233	0.9989	0.0181	1.0001	0.0202
Total expenditures	0.1644	0.0422	0.2053	0.0410	0.1893	0.0458
Net current expenditures	0.0965	0.0257	0.1186	0.0246	0.1100	0.0271
Development expenditures	0.0316	0.0153	0.0334	0.0199	0.0327	0.0181
Total PRSP expenditures	0.0480	0.0295	0.0795	0.0271	0.0672	0.0319
PRSP education & health	0.0193	0.0057	0.0295	0.0072	0.0255	0.0083
PRSP Irrigation/ agriculture	0.0055	0.0040	0.0069	0.0026	0.0064	0.0033
PRSP Law and order	0.0048	0.0037	0.0096	0.0021	0.0077	0.0037
PRSP roads, highways, bridges	0.0048	0.0047	0.0078	0.0049	0.0067	0.0050
PRSP subsidies	0.0082	0.0138	0.0169	0.0148	0.0135	0.0150

Source: Fiscal Operations, the Ministry of Finance and PRSP documents.

PART II
FISCAL MANAGEMENT

Policy Briefs

THE TAX SYSTEM OF PAKISTAN AND THE AGENDA FOR TAX REFORMS

Hafiz A. Pasha, Hafsa Tanveer, and Fatima Malik

INTRODUCTION

The policy brief presents a thorough analysis of Pakistan's tax system at both the federal and provincial levels. The tax revenue as a percentage of GDP of Pakistan is not only low but has been declining during the last few years, as it stood at 10.5% of GDP in 2023-24.

The brief examines the decline in the tax-to-GDP ratio by decomposing the tax ratios into 'base' and 'rate' effects. It also navigates through the determinants of the tax-to-GDP ratio using a cross-country regression analysis and identifies the potential for Pakistan for the year 2022–2023. A representative tax system and bottom-up approach are used to estimate the tax gap. Both approaches come up with a significant tax gap of above 3% of GDP.

Moreover, a substantial tax gap is also revealed at the provincial level. In addition, a detailed analysis of the incidence of each federal tax reveals a mild progressivity of Pakistan's tax structure. In view of the identified problems of the tax structure, enormous potential for tax reform exists both at the provincial and federal levels.

The brief focuses on detailed proposals for tax reforms aiming at creating a buoyant tax system that promotes equity across different income groups as well as a balanced sectoral tax incidence. It advocates broadening the tax base while protecting the savings, investment, and employment in the economy. Moreover, the measures suggested also intend to increase the integration of the provincial and federal tax system to make it simpler and transparent.

FEDERAL TAX REFORMS

The reform agenda proposed in the report outlines a comprehensive suggestion for the federal income tax, particularly focusing on the personal income tax and corporate income tax.

Personal Income Tax

- The reform recommends merging unearned income (like interest and rental income) with earned income, featuring a higher exemption limit and progressive tax rates.

- The proposed tax structure suggests an exemption for income up to PKR 1,000,000, while suggesting an increasing rate for higher income brackets, peaking at 35% for incomes above PKR 5,000,000.

- Reintroduction of an investment allowance of up to 15% of taxable income, applicable to specific national savings schemes.

- Reducing small withholding taxes and enhancing withholding tax rates for electricity bills for commercial consumers.

- Implementing a flat 10% income tax on pensions exceeding PKR 2,500,000.

Corporate Income Tax

- Introduction of a progressive corporate income tax based on pre-tax return on equity and withdrawal of the super tax, with rates varying from 29% to 45%.

- Levy of a federal capital value tax on assets minus liabilities of a public or private company.

- Introduction of a tax rate of 5% additional tax on pre-tax profits of commercial banks if the credit share is below 20% of the socially preferred sectors.

- Extending a tax credit for investments in plant and machinery and offering a five-year tax holiday for new industrial investments.

- Continuation of the tax credit of 10% of the amount invested in the acquisition of plant and machinery for purposes of balancing, modernisation, and replacement (BMR)

- A tax holiday for five years for new investments in the industrial sector anywhere in Pakistan.

- Taxing capital gains on property at a flat rate of 20% based on real gains, adjusted for inflation.

Federal Sales Tax

- Under items 24 and 27 of the Federal Legislative List, the management of all imports is a federal responsibility. The sales tax on imported services

should be levied on the 'reverse charge principle', whereby the tax payment is made by the domestic recipient of the service and charged accordingly from the foreign provider of the service.

- Extending sales tax to the retail price of various consumer goods and durables to increase the tax base and revenue from this sector.

Customs and Excise Duties

- Increased customs duties on high tariff slabs, from 16% to 20% and from 20% to 25%, respectively, to address revenue shortfalls.

- A need for effective protection for the farmers is suggested by increasing the tariff rates on wheat and cotton by increasing them to 11%.

- Implementing higher excise duties on industries contributing to environmental pollution. This will be an effective measure in the light of the alarming issue of smog, especially in Punjab.

PROVINCIAL TAX REFORMS

Agricultural Income Tax

- A major reform involves aligning the agricultural income tax (AIT) with the personal income tax structure on other incomes. This comes as an integral part of the IMF bailout package of 2024 and aims to commence from January 1, 2025.

- This reform is expected to unlock a revenue potential of PKR 880 billion, although it may face some resistance from large landowners.

Sales Tax on Services

- There is a need to focus over the next few years on the process of integrating the provincial sales tax on services with the Federal sales tax on goods to facilitate the move to a proper VAT.

- Consequently, an increase in the sales tax rate on services to 18%. This is likely to be progressive as the demand for

services rises disproportio-nately with the income of households.

Urban Immovable Property Tax

- Upgrading the Gross Annual Rental Values (GARVs) of residential and commercial properties in the Provincial Excise and Taxation departments, based on the Survey of Properties by the FBR, down to the individual locality level in the cities and towns of Pakistan.

- The tax policy ought to exempt small properties up to 8 Marlas in size. Thereafter, the recommended formula for deriving the GARV is 4% of the property value.

The recommended tax rates are 15% for a rented property and 10% for an owner-occupied property.

Capital Value Tax on Property

- Encourage provinces to implement a yearly capital value tax on real estate, replacing the inefficient transfer/sales tax system with yearly assessments determined by the market value of property.

The comprehensive agenda for tax reforms, both at the federal and provincial level, could generate PKR 2,395 billion additional revenues on the 2023-24 tax base, equivalent to 2.1% of the GDP.

This potential increase in revenue has significant features that indicate the presence of underdevelopment of provincial taxes, especially the urban immovable property tax and the agricultural income tax.

- The recommended tax reforms can potentially increase the provincial tax-to-GDP ratio from 0.8% to 2.2%. The federal tax-to-GDP ratio could rise from 9.7% to 10.6%. Combined, the national tax-to-GDP ratio could rise from 10.5% of the GDP to 12.8% of the GDP.

- Income tax on all incomes, including agricultural income, could increase by PKR 14.85 billion, equivalent to 65.5% of the total increase from the reforms. This will make the tax system of Pakistan markedly more progressive.

In conclusion, it needs to be said that the agenda for tax reforms is comprehensive and progressive. Already, the reforms in the Budget of

2024-25 should raise the tax-to-GDP ratio from 10.5% in 2023-24 to 11.7% of the GDP.

If the proposed agenda is implemented, it would add another 2.3% of the GDP. Pakistan's tax-to-GDP ratio could rise to 14% of the GDP. This will represent an overall increase of 3.5% of the GDP.

Consequently, the present 'tax gap' quantified will be largely narrowed by implementing the proposed agenda of reforms.

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

Zehra Farooq and Muzammal Rasheed

INTRODUCTION

Broadening the tax base is often viewed as a favorable policy measure for enhancing revenue mobilization and documentation. Yet, in practice, expanding the taxpayer register can place strain on limited administrative capacity. An increase in the taxpayer-to-tax-officer ratio may dilute enforcement effectiveness and elevate public expenditure through the creation of new offices and staff. Pakistan recently considered establishing new district tax offices with the aim of registering two million new taxpayers and this illustrates the trade-off. Because a substantial proportion of newly added taxpayers, particularly salaried individuals, are already subject to withholding at source, the resulting expansion in the tax base does not necessarily translate into a proportional increase in tax revenue. This study therefore compares the additional revenue generated per taxpayer with the administrative cost incurred per taxpayer, to evaluate the fiscal efficiency of such broadening efforts.

The study addresses a central policy question: *In a setting with limited enforcement capacity, does public expenditure on untargeted broadening of the tax base constitute an efficient means of raising additional revenue?* To explore this, the analysis examines trends in taxpayer registration, compliance behavior, and shifts in the composition of income tax collections over the past decade. It further assesses the administrative costs associated with monitoring newly registered taxpayers relative to the incremental revenue they contribute, providing evidence on whether broadening the tax base, absent deeper structural reforms, can deliver sustainable fiscal gains.

This research examines the implications of broadening Pakistan's tax revenue base through the untargeted taxpayer inclusion drives. It evaluates the feasibility of this strategy in a low-enforcement-capacity environment, assessing both the effectiveness and fiscal efficiency of horizontal broadening efforts. The analysis quantifies the additional income and revenue

generated from mass registrations and evaluates post-registration compliance behavior. A preliminary assessment of administrative costs associated with these new registrations provides insight into the short-term financial sustainability of such initiatives. The findings offer evidence to inform future tax policy design and administrative reforms aimed at enhancing revenue mobilization and economic stability.

METHODOLOGY

The study's core hypothesis is that untargeted, large-scale broadening of the tax base does not substantially capture previously untaxed income, resulting in revenue gains that are insufficient to offset the administrative costs of expansion. The analysis proceeds along four empirical dimensions. It first traces trends in taxpayer additions over the past decade, distinguishing between individuals, associations of persons (AOPs), and firms. It then examines the compliance behavior of newly registered taxpayers, including the timeliness of return filing and the extent to which previously untaxed income was declared. Next, it assesses whether new registrations altered the composition of income tax collections and whether any corresponding revenue increase matched the rise in employee-related and operational

expenditures at the field-office level. Finally, it evaluates the broader proposition that, in the absence of structural reforms, untargeted broadening may be fiscally inefficient.

The analysis focuses on Pakistan's tax policy relating to the horizontal broadening of the tax base and evaluates the revenue efficiency of such untargeted initiatives. Using data from 2014 to 2021 drawn from multiple sources, the study tracks yearly additions to the tax register. A "taxable person" is defined as either a salaried or self-employed individual, consistent with the emphasis of BTB efforts on individual registration. The analysis also incorporates years with amnesty schemes, including the 2018 scheme, using data from the FBR's yearbooks and online tax register. Newly registered taxpayers are classified as active or inactive filers, and their return-filing characteristics are analyzed to assess the composition of declared income, revenue contributions, and the extent of reliance on monitoring for compliance. Given Pakistan's estimated 70 percent tax-evasion rate (Best et al., 2021), sustained oversight of newly added taxpayers can substantially raise administrative costs. Accordingly, this study employs restricted-access administrative data from income tax returns filed between 2014 and 2021.

FINDINGS OF THE STUDY

BTB outcomes. During 2014–2021, an annual average of 300,000 new taxpayers were added to the tax roll. The years 2018 and 2021 appear as outliers: the former due to voluntary declaration programs introduced by the FBR, and the latter due to the economic disruptions of the COVID-19 pandemic. Approximately 45% of newly registered taxpayers fall into the salaried category, meaning that incomes already taxed at source dominate new registrations. By contrast, registration of business individuals is more likely to bring previously untaxed income into the net but requires greater enforcement and monitoring to sustain compliance. Even in the outlier years, salaried taxpayers represented 53% of new registrations in 2018 and 56% in 2021.

Post-registration behavior. Analysis of compliance patterns shows that, up to 2018, non-salaried taxpayers displayed higher rates of non-compliance than salaried taxpayers. After 2018, however, non-compliance was concentrated among newly registered salaried individuals. Non-compliance among newly registered taxpayers declined over time, from 13% in 2015 to 8% in 2016, 4% in 2017, 3% in 2018, and 1% in 2019, reaching zero thereafter.

Revenue outcomes. Newly registered taxpayers added salary income worth PKR 941 billion to the tax base. In contrast, new business registrants contributed only PKR 190 billion, representing about 20% of total salary income and 8.6% of all income generated through new registrations. Overall, BTB activities tapped into PKR 2.2 trillion in income, of which only PKR 190 billion potentially represented previously untaxed income. Even under an assumed tax rate of 35% on income (not profit), the maximum additional tax revenue generated would amount to PKR 66 billion over seven years, or about PKR 9.4 billion per year, from nearly three million new registrants.

Income declaration trends. Growth in declared salary income averaged about 10% annually, broadly consistent with typical wage increments. By contrast, declared business income showed a persistent negative trend. Newly registered businesses frequently reported losses, with some years recording declines of over 100%, indicating shifts from positive income to reported losses. Consequently, the contribution of business income to the tax base was both limited and unstable.

Amnesty-related behavior. Analysis of the 2018 amnesty year reveals significant behavioral shifts:

initial declarations of business losses in the amnesty year were followed by subsequent increases in reported business income the following year, suggesting strategic underreporting corrected in later filings. Data for 2018–2019 also highlight wide variation in taxpayer persistence across tax offices and a mismatch between rising administrative costs and improvements in compliance or revenue, pointing to inefficiencies in resource allocation.

CONCLUSIONS AND POLICY RELEVANCE

- The central policy goal of vertical BTB is to increase tax revenue by incorporating new taxpayers into the register. Evidence from 2015–2021 indicates that nearly three million new taxpayers were registered; however, approximately 45% were salaried workers, whose incomes were already taxed. The registration of businesses contributed only PKR 190 billion in undeclared income, yielding at most PKR 9 billion annually in additional tax revenue.

- For BTB efforts to generate significant revenue gains, policy design must leverage multiple data sources to target

unregistered income in sectors such as business, agriculture, and real estate. Although evidence remains correlational, the findings provide empirical insights relevant to Pakistan's limited enforcement environment.

- Lessons from the 2018 amnesty scheme highlight the need for targeted monitoring of newly registered taxpayers to ensure post-registration compliance. Field office budgets should be aligned with actual performance, measured by revenue outcomes, taxpayer retention, and compliance levels. Greater use of machine learning is recommended to enhance administrative efficiency.

- Expanding the taxpayer register alone will not deliver substantial revenue gains. Long-term effectiveness depends on sustaining compliance and capturing untaxed income in subsequent years. Although compliance trends show gradual improvement, the consistent decline in reported business income after registration underscores structural weaknesses in BTB outcomes.

SINGLE SUB-NATIONAL REVENUE COLLECTING AUTHORITY: A CASE OF BALUCHISTAN

Noor ul Haq Baloch and Zia ur Rehman

INTRODUCTION

Tax revenue constitutes the foundation of any society's fiscal governance and the provisioning of public services. It supplies the governments with the essential resources needed to invest in infrastructure, education, healthcare, and other vital sectors. In underdeveloped regions, such as Balochistan, the efficient collection of taxes functions not merely as a means of generating revenue but also as a significant tool for achieving economic stability, reducing dependence on external transfers from the federal government, and fostering growth and self-sufficiency.

Despite being the largest province of Pakistan in terms of geographical area, the province of Balochistan continues to be one of the most financially reliant on federal transfers to meet its fiscal requirements. For the fiscal year 2023-24, Balochistan's provincial tax receipts were only PKR 33.8 billion, in stark contrast to PKR 481.17 billion received from federal transfers. The province's inadequacy in revenue generation is a principal factor contributing to this dependency, particularly regarding its sub-national taxation systems. Similarly, the high potential taxes, namely, the capital value tax on immovable property (CVTIP), urban immovable property tax (UIPT), and agricultural income tax (AIT), continue to be markedly low. The responsibility for collecting these taxes in Balochistan is distributed between the Board of Revenue (BOR) and the Excise, Taxation & Anti-Narcotics Department (ETD). The province has five revenue agencies: the Balochistan Revenue Authority (BRA), a semi-autonomous revenue authority; the Board of Revenue (BOR); the Excise and Taxation Department (ETD); the Transport Department (TD); and the Energy Department (ED). This fragmented organisational structure has resulted in inadequate tax collection to fulfil the province's needs.

Subsequent to the 18th Constitutional Amendment, which conferred greater fiscal autonomy to provinces, the BRA was instituted in 2015 to enhance tax collection efficacy. Numerous countries have instituted more autonomous tax institutions, which are referred to as SARA[1]. The primary rationale for this development stems from the necessity to generate sustainable revenue, enhance service quality, and improve governance within the tax administration sector. Since its establishment, the BRA has consistently exceeded the performance of all primary departments tasked with revenue collection in Balochistan, as illustrated in Figure 1.

Notwithstanding the establishment of the BRA and its commendable performance, significant provincial taxes in Balochistan continue to be under-collected, resulting in overall revenue generation that is markedly below its potential. The division of tax collection responsibilities among various revenue agencies, including the BRA, the ETD, and the BOR, has resulted in overlapping jurisdictions, inefficiencies in enforcement, and reliance on outdated collection mechanisms. The problem lies in Balochistan's inability to consolidate its tax administration under a single authority, which could otherwise lead to significant improvements in tax compliance, enforcement, and overall revenue generation.

Figure 1. Collection of Tax Revenues by Each Department from FY 2015-16 to FY 2022-24 in PKR Million
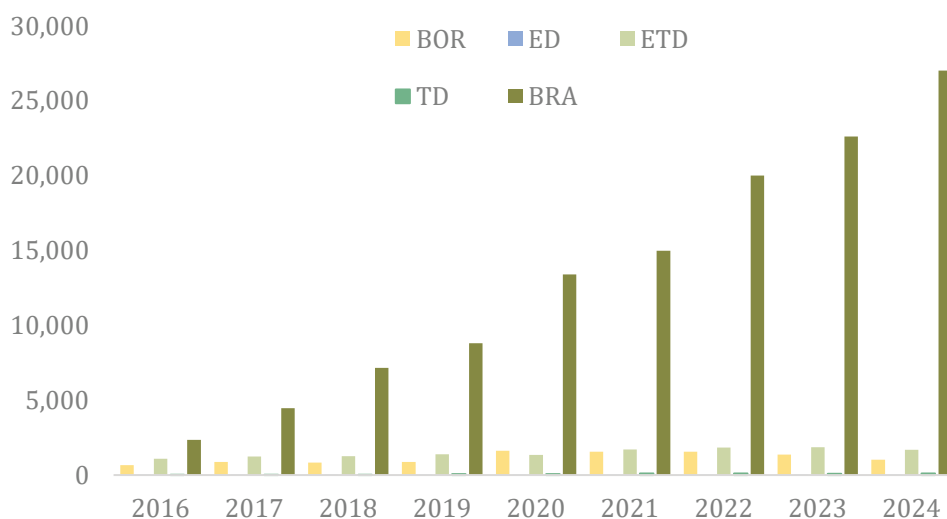
Source: Government of Balochistan, 2024b.

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[1] SARA are also known as Revenue Authority Model or Unified Semi-Autonomous Revenue Bodies.

This study explored whether consolidating key taxes under BRA could streamline tax collection, enhance governance, and improve the province's fiscal autonomy. It also examined the feasibility and potential benefits of consolidating taxes under BRA.

The primary objectives of the study were:

1. To analyse the governance, technological, and enforcement challenges that could hinder the consolidation process.

2. To assess the feasibility and potential benefits of consolidating tax collection functions under the BRA.

3. To provide policy recommendations for improving tax collection efficiency and increasing provincial revenue.

4. To assess the inefficiencies in tax collection among Balochistan's main tax agencies (BRA, ETD, BOR).

METHODOLOGY

This study used a mixed-methods approach to examine tax agency consolidation in Balochistan, combining qualitative and quantitative research for a comprehensive analysis of local

issues. This design allows for triangulation, validating results across different sources, and captures a thorough understanding by merging qualitative depth with quantitative breadth. We employed an explanatory sequential design, where quantitative findings inform qualitative research.

The qualitative component utilised thematic analysis to identify patterns, while the quantitative component applied descriptive statistics to describe stakeholder perspectives. Focus group discussions (FGDs) gathered stakeholder insights, laying the groundwork for the quantitative instrument. Following FGDs, we conducted semi-structured interviews with stakeholders, including tax department directors and experienced taxpayers, gathering diverse insights into the tax system, addressing institutional resistance, and making collaboration recommendations. Merging these insights with survey data enhances validity and counters biases.

A structured questionnaire survey targeting active taxpayers identified significant patterns regarding redundancies and satisfaction, with stratified sampling ensuring representation. Data synthesis through "meta-inferences" combines results, enriching mixed methods research. This approach improves understanding of tax agency consolidation, offering actionable

recommendations for policymakers. Overall, the mixed-methods approach ensures scientifically robust and practically relevant conclusions.

FINDINGS

The findings of the study revealed systemic issues and opportunities for reform aimed at enhancing efficiency, trust, and consolidation within the framework of the BRA.

The study highlighted operational issues due to resource constraints, understaffing, and manual processes that have impaired revenue collection and frustrated taxpayers. Findings highlighted the need for capacity-building measures like recruitment, training, and automation for better performance. Political interference, lack of accountability, and poor inter-agency coordination weaken tax institutions' credibility and public trust. The lack of performance benchmarks and transparent decision-making has worsened inefficiencies, leading to stakeholder scepticism about tax revenue usage. Additionally, technological inefficiencies, such as outdated systems and inadequate infrastructure, have limited effectiveness. Dependence on third parties for data automation has caused delays and inaccuracies, worsened by poor internet and

frequent power outages in Balochistan. Findings align with global best practices and emphasise integrated IT systems to modernise tax administration.

Both qualitative and quantitative data results show optimism for consolidating tax functions under BRA but raise concerns about its capacity for added responsibilities; phased implementation and preparation are essential. The results suggest transparency and engagement are critical for public support and successful reform. Low taxpayer engagement has resulted from poor education, mistrust of authorities, and complex processes. Results show that many potential taxpayers are unaware of their obligations and sceptical of tax use. Simplifying processes and launching educational campaigns are essential for improving compliance and rebuilding trust.

The quantitative result shows that the business sector contributes 56.3% of Balochistan's tax collection, individuals 20%, government agencies 8.4%, and other sources 15.3%. Feedback from the tax department reveals mixed results: Most respondents expressed dissatisfaction with Excise Taxation, Anti-Narcotics, the Board of Revenue, the Transport Authority, and the Energy Department, indicating low satisfaction levels. Most respondents in the report show

satisfaction with the Balochistan Revenue Authority, but this still highlights the need for improvement.

The survey reveals challenges in the tax system: most find tax laws complex and difficult. While many struggle to comprehend tax legislation and feel burdened by multiple agencies, most believe that clarity is not easily attainable, emphasising the need for clearer guidance. Compliance costs concern many, as they find them problematic and perceive these costs as a source of financial strain for taxpayers. The majority also view corruption and bribery as significant challenges.

A key finding is that consolidation under one entity reflects strong perceptions of tax reforms. Most respondents believe it will simplify tax payments, reduce compliance costs, improve administration, and enhance taxpayer services. These findings align with qualitative results, showing a positive attitude toward tax reforms and consolidation, with many recognising their beneficial effects.

Public perceptions regarding the Balochistan Revenue Authority (BRA) suggest that the consolidation of tax administration streamlines the taxation process. The BRA can potentially mitigate corruption in tax collection, enhance transparency, and improve taxpayer services. The delegation of responsibilities to the BRA is expected to augment taxpayer

compliance. Furthermore, technology-driven processes will facilitate increased efficiency by implementing digital systems for agricultural taxation. Educational programs are essential in fostering awareness and ensuring compliance among taxpayers. Consolidating revenue functions under the BRA is anticipated to enhance operational efficiency further. The simplification of tax legislation will promote adherence to obligations, while robust accountability mechanisms are imperative to prevent any misuse of authority by the BRA. Mixed method results confirm BRA consolidation offers promise but needs reforms to address operational, governance, technological, and engagement issues. This research offers valuable insights into tax administration in developing regions like Balochistan.

CONCLUSION

This study aimed to investigate the complexities of tax administration in Balochistan by exploring operational challenges, governance gaps, technological inefficiencies, stakeholder perceptions of consolidation, and taxpayer engagement and compliance. Employing a mixed methods approach that integrated qualitative thematic analysis and quantitative descriptive statistics, the research provided a comprehensive understanding of the systemic issues

and opportunities within the province's tax system. The findings underscore the need for fundamental reforms to enhance efficiency, build trust, and facilitate a successful consolidation of tax functions under the BRA.

RECOMMENDATIONS

This study recommends enhancing Balochistan's tax administration by addressing challenges and adopting best practices.

UNVEILING THE TRAJECTORY: HOW THE 18TH CONSTITUTIONAL AMENDMENT RESHAPED FUNCTIONAL SPENDING MULTIPLIERS IN PAKISTAN

Iffat Ara and Muhammad Sabir

INTRODUCTION

After devolution under the 18th Constitutional Amendment and the subsequent transfer of a sizeable share of revenues to the provinces in 2010, the role of provincial governments significantly expanded, which aligns with the expanded functional responsibilities devolved to them.

After the passage of more than twelve years, a pivotal question arises whether these reforms have actually accomplished their objectives. In this context, it is crucial to investigate the impact of government spending patterns, on account of increased NFC-induced fiscal flows, on economic growth. Therefore, the estimation of government spending multipliers allows for measuring the impact of spending on economic growth. It also helps assess the long-term success of these reforms and guide future policy decisions.

The objective of this study is to estimate the government spending multipliers resulting from increased fiscal transfers to the provinces. The study uses quarterly data for consolidated expenditures (federal and provincial combined) covering the period 2001-02: Q1 to 2023-24: Q4, where the pre-Amendment period (pre-era) is 2001-02: Q1 to 2009-10: Q4, while the post-Amendment period (post-era) is 2010-11: Q1 to 2023-24: Q4. The multipliers are estimated separately for each period.

The findings indicate that debt servicing inflates the short-run aggregate multiplier in the post-Amendment period but contributes little to sustained economic activity. Further, development spending multipliers declined sharply while current expenditures multipliers rose in the post-Amendment period. Category-wise, multipliers of education and health sector

expenditures and for law and order, show notable improvements in the post-Amendment period. Conversely, multipliers for roads, highways, and bridges, along with irrigation and agriculture, show a significant fall.

METHODOLOGY

The study employed a structural vector autoregressive (SVAR) model and drew impulse response functions (IRFs) to estimate the expenditure multipliers. It used the Cholesky identification scheme to identify exogenous government expenditure shocks. Multipliers were computed as a ratio of the cumulative GDP response for four quarters to the cumulative expenditure shock for four quarters. The lag selection criteria suggested three lags of variables for all VAR specifications. The IRFs were estimated for a horizon of eight lags.

Multipliers were calculated for overall government expenditures as well as for different categories of public spending. Nominal values of consolidated expenditures categories were deflated by the general government deflator to transform them into real values. All variables were used in normalised form using the estimated potential GDP. A dummy variable was used for the quarters 2019-20:Q1 and 2020-21:Q4 to capture the COVID-19 Pandemic-induced lockdowns.

FINDINGS AND CONCLUSIONS

Pre-Amendment, consolidated current expenditures, on average, constituted 81% per annum of total expenditures, while consolidated development expenditures were 19%. Post-Amendment, this composition changed to 83% and 16.6%, respectively.

Multipliers for total expenditures and their constituent categories experienced significant shifts following the 18th Constitutional Amendment (see Table). Before the amendment, the total expenditure multiplier was modest, with one-year and two-year integrals of 0.40 and 0.39, respectively. This aligns with typical developing country experiences, suggesting limited capacity to leverage public spending for sustained growth due to constrained fiscal space. Post-Amendment, the one-year integral surged to 2.82, indicating a strong short-term stimulus. However, the two-year integral plummeted to 0.08, signalling a rapid dissipation of these gains. While initial spending spurred growth, structural inefficiencies, high inflation and interest rates possibly diluted long-term impacts.

For net current expenditures, excluding debt servicing, pre-Amendment multipliers were

relatively stable, with one-year and two-year integrals of 0.59 and 0.55, respectively. These figures suggest consistent impacts across both short- and medium-term horizons. Post-Amendment, the one-year integral rose to 0.98, potentially reflecting improved short-term efficiency facilitated by decentralised governance. However, the two-year integral declined to 0.40, revealing challenges in sustaining economic impacts over time. This decline may be attributed to factors such as inflation and unaccommodated monetary policy.

Development expenditures had the highest pre-Amendment multipliers, with one-year and two-year integrals of 1.29 and 1.69, respectively, demonstrating significant growth potential for infrastructure and capital investments. However, post-Amendment, these multipliers declined sharply to 0.66 and 0.41, respectively. This could be attributed to fiscal constraints. In the post-era, growth of development expenditures significantly declined compared to that in the pre-era. Furthermore, addressing inefficiencies in project execution and improving governance are crucial to restoring the growth potential of development spending.

The picture, however, varies in the case of different service-related expenditure categories. In the pre-era, the highest multiplier effect occurred in irrigation and agriculture, followed by roads, highways, and bridges, and law and order. In the post-era, the highest multiplier effect is associated with law and order, followed by education and health, and roads, highways, and bridges. The extent of the multiplier for subsidies is lowest in both periods.

Education and health sectors exhibited marked improvements in multipliers post-amendment. The one-year integral for education soared from 1.31 to 2.18, while the two-year integral remained consistently high at 1.72 and 2.10, respectively. This emphasises the critical role of social sector investments in driving economic growth. Notably, these sectors are primarily devolved to provincial governments under the 18th Amendment.

Law and order expenditures also demonstrated a positive trend, with the one-year integral increasing from 1.99 to 2.49 and the two-year integral from 2.59 to 3.32. This highlights the economic value of investments in public safety and security, which contribute to a stable environment conducive to economic activity.

Table 1: Multipliers by Overall Expenditures and Categories

	Pre-18th Constitutional Amendment	Post-18th Constitutional Amendment
Total Expenditures		
One-year integral	0.40	2.82
Two-year integral	0.39	0.08
Net Current Expenditures		
One-year integral	0.59	0.98
Two-year integral	0.55	0.40
Development Expenditures		
One-year integral	1.29	0.66
Two-year integral	1.69	0.41
All Service-related Expenditures		
One-year integral	0.40	0.72
Two-year integral	0.38	0.29
Education and Health		
One-year integral	1.31	2.18
Two-year integral	1.72	2.10
Law and order		
One-year integral	1.99	2.49
Two-year integral	2.59	3.32
Roads, Highways and Bridges		
One-year integral	4.01	0.54
Two-year integral	4.91	0.77
Irrigation and Agriculture		
One-year integral	4.55	-0.02
Two-year integral	5.42	2.67
Subsidies		
One-year integral	0.47	-0.55
Two-year integral	0.26	-0.49

Source: Authors' computaions.

Conversely, multipliers for roads, highways, and bridges exhibited a significant decline post-amendment. The one-year integral plummeted from 4.01 to 0.54, and the two-year integral decreased from 4.91 to 0.77. Also, for irrigation and agriculture, the one-year integral declined from 4.55 to -0.02, indicating a complete reversal of short-term impacts post-amendment. However, the two-year integral improved from 5.42 to 2.67, suggesting that while immediate outcomes were negative, medium-term benefits remained substantial.

Subsidies demonstrated a negative trend post-amendment, with the one-year integral declining from 0.47 to -0.55 and the two-year integral falling from 0.26 to -0.49.

This indicates that subsidies may have become counterproductive, potentially distorting markets and leading to inefficiencies.

These results show that, except for education and health, the multipliers for expenditures related to development indicate a weaker performance in the post-18th Constitutional Amendment period. It could also be due to increased spending on debt servicing. Consequently, budget allocations for development expenditures appeared to be compromised.

For instance, average annual growth in consolidated current expenditures (excluding debt servicing) declined from 11% per annum in the pre-era to 3% in the post-era. But growth in consolidated development expenditures fell from an average annual rate of 16% to less than 1% in the post-era. In contrast, growth in debt servicing portrays an increase from 7.3% to 9.3%.

The magnitude of fiscal multipliers may vary based on a country's specific structural characteristics and prevailing economic conditions. Among structural factors, the level of development is particularly significant, with fiscal multipliers being larger in advanced economies compared to developing countries. Countries like Pakistan, which are low-income economies, tend to have a lower magnitude of multiplier.

Countries with high debt levels generally experience lower multiplier effects because fiscal stimulus can negatively affect private demand and increase the interest rate risk premium. Pakistan is among the countries with a high level of public debt. On average, the debt-to-GDP ratio increased to 66% in the post-amendment period, compared to 51% in the pre-amendment period. Since an increase in public debt reduces the size of the multiplier, this factor could contribute to determining the size of the multiplier in the post-amendment period.

Similarly, fiscal multipliers are higher when there is greater monetary accommodation, such as low or near-zero interest rates. In the post-era, interest rates rose sharply at an average rate of nearly 8% per annum compared to less than 1% annum in the pre-era. This could also tend to reduce the size of the multiplier in the post-era. Among other factors, the significant growth occurred in inflation. The CPI inflation was, on average, 8.8% per annum in the former period compared to 10.6% per annum in the latter period. Furthermore, there was a massive depreciation of the rupee-dollar exchange rate in the latter period. Average annual depreciation in the rupee was 4.4% in the former period, while it was 9.6% in the latter period.

The continual growth in interest rates discouraged private investment, whereas the depreciation of the rupee, along with a surge in inflation, increased production costs in the later period. All these factors worked together to place downward pressure on output. The growth in real GDP remained, on average, 3.5% per annum in the post-era, which is much lower than the growth rate of 4.7% in the pre-era. These factors also contributed to lower multiplier values, as they absorbed the impact of expenditure shocks.

POLICY RECOMMENDATIONS

The substantial shifts in fiscal multipliers observed post-18th Amendment underscore the pivotal role of provincial governments in driving economic growth. Effective intergovernmental coordination is crucial to ensure efficient resource allocation towards high-impact sectors such as development and essential services.

While the pre-18th Amendment era demonstrated the transformative potential of development expenditure, its impact has waned since devolution. The erosion of fiscal space, particularly at the federal level, may have hindered the execution of joint development projects, potentially leading to implementation delays. Strengthening planning, monitoring,

and execution frameworks, including mechanisms to ensure timely allocation of funds, is essential to revitalise the growth impact of these investments.

The stark divergence between one-year and two-year multipliers, particularly for total and net current expenditures post-18th Amendment, highlights the need for policies that deliver immediate economic stimulus while safeguarding long-term fiscal sustainability.

Maintaining or even increasing investments in education, health, and law and order is crucial, as these sectors consistently demonstrate strong multiplier effects, even during economic crises. Simultaneously, redirecting resources away from inefficient subsidies towards sectors with higher growth potential is essential to ensure fiscal sustainability.

The diminished effectiveness of development spending post-18th Amendment points to potential governance and institutional constraints. Strengthening accountability, transparency, and rigorous evaluation mechanisms is crucial to improving fiscal outcomes.

Furthermore, it is also essential to consider the size of the multiplier in the context of the overall macroeconomic performance, which plays a critical role in shaping the spending multiplier.

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