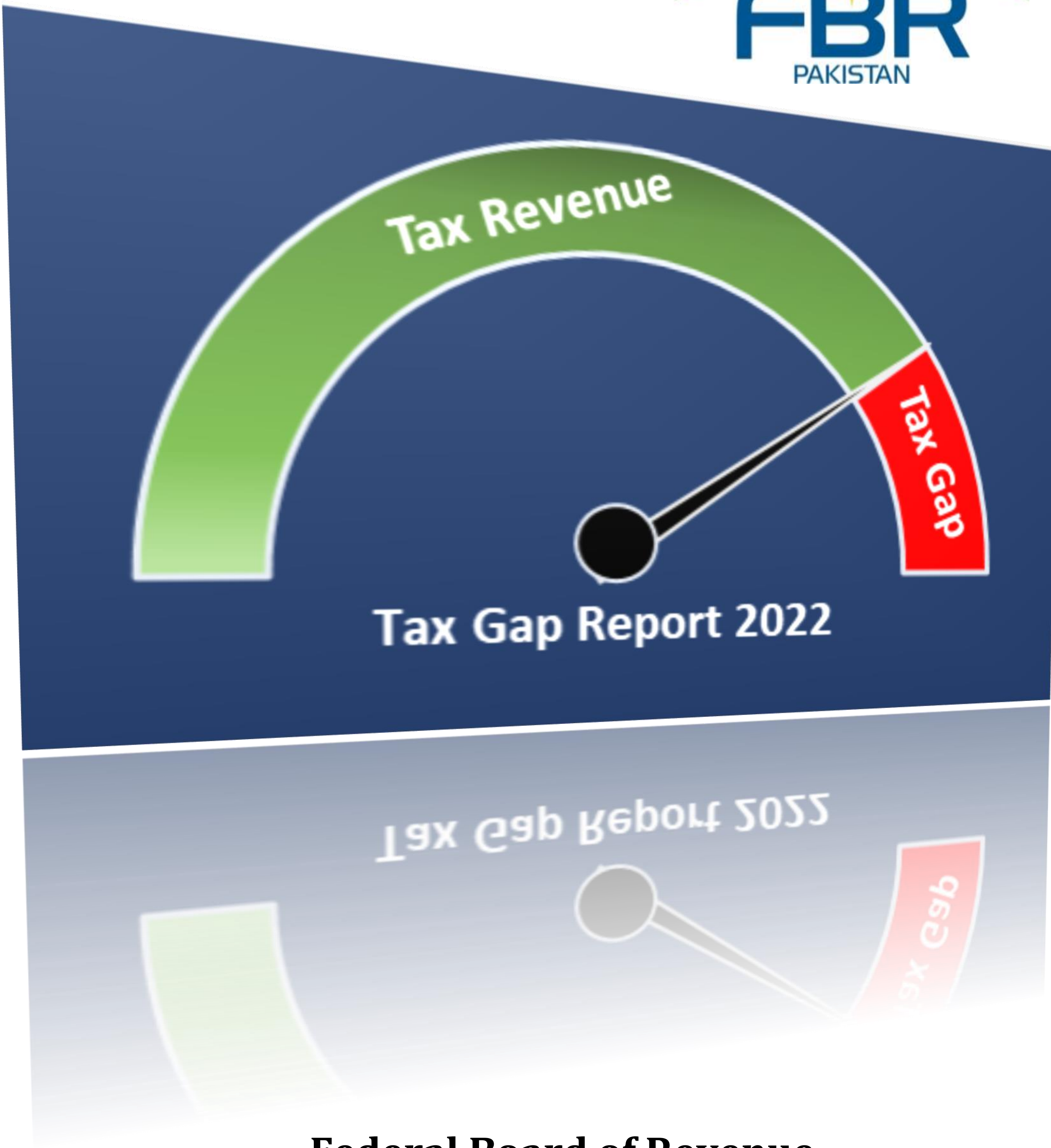

Tax Gap Report 2022

Federal Board of Revenue
Pakistan

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Feedback & Comments

Questions and comments regarding the report may be communicated to Chief-I (Directorate General of Revenue Analysis), FBR, through email chief.spr&s@fbr.gov.pk, or phone +92 51 9203308.

Preface

FBR plays central role in revenue collection for the Federal government. Despite FBR's best efforts in tax collection, a significant portion of tax revenue remains unpaid. This gap in tax revenue is attributed to tax evasion and avoidance practices. The tax loss incurred due to non-compliance is ultimately shifted to those who pay taxes.

I am pleased to present FBR's first Tax Gap Report 2022. This report covers the estimates of tax gap along with sources of data and methodology used.

This report estimates the potential gap in tax revenue for the Federal taxes, i.e., Income Tax, Sales Tax and Customs Duty. It comes up with suggestive theoretical estimates of revenue potential and tax compliance vis-a-vis non-compliance. According to international practices these tax gap estimates are calculated involving third party data that may be incompatible and subject to time lag. Existing literature suggests such estimates could be used for long-term policy design, rather than as short-term revenue gain measures at operational level.

The efforts put in by the Revenue Analysis team, under the able guidance of Director General (Revenue Analysis), in producing this Tax Gap Report are appreciated. I hope the tax gap report will be useful for stakeholders, particularly the policy makers to devise future tax policy and strategies to tap the maximum potential of tax revenue.

(ASIM AHMAD)
Chairman Federal Board of Revenue /
Secretary Revenue Division

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List of Acronyms

FBR	Federal Board of Revenue
FY	Financial Year (starting from July each calendar year and ending in June of the succeeding calendar year. For example FY 2022 means a period of 12 months starting from 1st July 2021 and ending on 30th June 2022)
ITC	International Trade Center
HIES	Household Integrated Economic Survey
LFS	Labor Force Survey
LSM	Large Scale Manufacturing
CD	Customs Duty

SUMMARY

The tax gap is broadly defined as the difference between what taxpayers should pay and what they actually pay. This report provides tax gap estimates to gauge the tax compliance of taxpayers with their Federal tax obligations. The estimates take into account the Federal level Income Tax, Sales Tax, and Customs Duty.

This report adopts the top-down and bottom-up approaches to estimate the tax gap. The top-down approach relies on the National Accounts Data and Supply-use Tables and is used to estimate the Sales Tax gap. The bottom-up approach relies on the microsimulations and is used to estimate the Income Tax and Customs Duty gap. This report measures the compliance gap and does not account for tax expenditure.

The summary of the tax gap estimates is reported as follows:

- **Overall Tax Gap is Rs. 1,289 billion that is 26%** of potential collectable tax under current regime
- **Sales Tax Gap is Rs. 519 billion that is 24%** of potential collectable tax under current sales tax regime
- **Income Tax Gap is Rs. 730 billion that is 31%** of the potential collectable tax under current income tax regime
- **Customs Duty Gap is Rs. 40 billion that is 11%** of the potential collectable customs duty

Table 1. Summary of Tax Gap Estimates (Rs. Billion)

	Year	Tax Collectable	Tax Collection	Tax Gap	Tax Gap (% of Tax Collectable)
Sales Tax	FY2020	2,209	1,690	519	24
Income Tax	FY2019/20	2,385	1,655	730	31
Customs Duty	FY2019	358	318	40	11
Total	**-**	**4,952**	**3,663**	**1,289**	**26**

INTRODUCTION 01

The overall shortfall in tax collection is comprised of the tax compliance gap and the tax expenditure gap. The compliance gap is generally the difference between tax collectable under the existing regime and actual tax collected. This report only takes account of the tax compliance gap.

The tax expenditure is the shortfall of tax revenues arising from policy provisions relating to exemptions, deductions, reduced rates and other such provisions providing relief to the taxpayers. The tax expenditure has been compiled in a separate report.

The tax gap estimates show that the tax gap is approximately 26 percent of potential collectable tax by FBR that represents 2.9 percent of GDP in FY2020. The Sales Tax gap is estimated at approximately Rs. 519 billion which is 24 percent of potential collectable sales tax. The income tax gap is estimated at about Rs. 730 billion which is 31 percent of total collectable income tax. In case of customs duty, the gap is Rs. 40 billion which is 11 percent of total collectable customs duty.

Due to data availability challenges this report is based on data relating to different financial years. For Sales Tax the data relating to FY2020 has been used whereas for Income Tax and Customs the data relating to FY2019 has been used. The applied rates of taxes and customs duty correspond to the same year to which the data relates.

METHODOLOGY 02

2.1 Methodology for Sales Tax Gap

This report adopts the top-down approach to estimate Sales Tax gap. As a baseline methodology, we consider National Accounts data for FY2020 for calculation of Sales Tax gap. In this approach, we initially determine the Sales Tax base by taking into account those sectors of the GDP that come within the ambit of Sales Tax collectable by the FBR. By applying 17% sales tax on selected sectors' GDP, first we calculate the gross tax collectable. We subtract the tax expenditure from the gross tax collectable to calculate tax collectable under the current sales tax regime. Next, gross tax collection is subtracted from tax collectable to calculate tax gap. The following expression is used to calculate the sales tax gap.

Sales Tax gap = [Sum (Gross Value added×17%) – Sales Tax Expenditure – Gross Tax Collection]

For robustness of the results we use alternative Supply-Use table data which is explained in Section 2.1.3.

2.1.1 Sectors Included for Calculating Sales Tax Base

According to the Constitutional scheme of taxation[1] the Sales Tax on goods comes within the ambit of the Federation while Sales Tax on Services is within the ambit of the provinces[2]. Therefore, the following sectors have been included to calculate the tax base for FBR related Sales Tax;

- Mining and Quarrying
- Manufacturing Sector
- Electricity, Gas and Water supply

[1] Entry No. 49 of Federal Legislative List in the Fourth Schedule to the Constitution of Islamic Republic of Pakistan 1973

[2] The Federation is also entitled to collect the Sales Tax on Services within the Islamabad Capital Territory

- Wholesale and Retail Trade Sector

2.1.2 Exclusions

- ***Underground Economy:*** Since official underground economy estimates are not available, therefore, in this report we do not account for the underground economy for the tax gap calculations

- ***Agriculture Sector:*** We have also excluded the agriculture sector as it is largely exempt from the sales tax

- ***Construction:*** The economic activity in this sector largely comprises construction related services that fall within the provincial domain, therefore, we have excluded this sector from Sales tax gap calculations

- ***Services Sector:*** Since sales tax on services is within provincial domain almost all the services sectors are excluded from the Sales tax gap calculations

2.1.3 Robustness Checks

Value Added Approach: For robustness check, we use the Supply-use table which is a detailed input-output model of Pakistan's economy to estimate the potential Sales tax. This supply-use table provides information on final consumption as well as production and use of goods and services in the economy. It includes detailed information on gross value added, the use of intermediate inputs, value of import and exports, value of government and private sector investment expenditures for each of the 35 sectors. The most recent Supply-Use table was available for the FY 2020 which has been used to estimate the Sales Tax gap. In this approach, we directly calculate Sales Tax gap. Considering the same sectors as in section 2.1.1, we apply FBR's statutory rates for FY2020 to calculate the potential Sales Tax gap. The following expression is used to estimate sales tax gap:

Sales Tax gap = Sum (Gross value added × Respective sectoral tax rate) – Net Tax Collection

Consumption Approach: The supply-use table also provides information on the final consumption including the final consumption of domestic goods and imports representing the sales of commodities. Considering the same sectors as in section 2.1.1, we use consumption approach to estimate the compliance gap. In this approach, by applying 17% sales tax on final consumption, first we calculate the gross tax gap which includes both tax expenditure and tax gap. Next, we subtract the tax expenditure from the gross tax gap to calculate tax gap under the current sales tax regime. The following expression is used to calculate the tax gap:

Sales Tax gap = [Sum (Final Consumption×17%) – Sales Tax Expenditure – Gross Tax Collection]

2.2 Methodology for Income Tax Gap

2.2.1 Income Tax on Salaried, Non-Salaried Individuals and AOPs

The information on individual incomes and tax data is required to estimate the income tax revenue potential. The Household Integrated Economic Survey (HIES)[3] is the national level survey which collects information on income and expenditure of individuals. The latest HIES of 2018-19 is employed to estimate the income gap.

The sample size of the HIES is 25,676 households with 116,499 individuals. In this survey, we have individual reported income by type. Individuals report their type of work (paid, self-employed, family worker, agriculture) and their earnings for the previous month. They also report how many months they worked in the previous year. We rely on their monthly income and calculate the annual income. Further, this annual income also includes the income from other sources. Finally, using the individual level estimates of taxable income for each observation in the sample, a tax calculator is used to estimate income tax liabilities based on statutory rates in FY2019. Overall, we follow the following steps to estimate the tax gap.

- Calculate the gross annual income (excluding agriculture income)
- Calculate the gross tax collectable by applying the statutory rates on gross income
- Subtract gross tax collection and tax expenditure from gross tax collectable to calculate the tax gap

[3] Source: Pakistan Bureau of Statistics

For robustness, we have used Labor Force Survey (LFS)[4] to analyze the same tax gap for the salaried individuals. The LFS collects information on employment type, sector, and earnings of individuals. We consider the LFS 2021 for the estimation of Income Tax gap. The sample size is 96,442 households surveyed during the four quarters of FY2021 to account for the seasonal variations in income. We followed all above steps to calculate potential tax liability and tax gap.

2.2.2 Corporate Income Tax

To estimate the revenue from corporate income tax, we have used Supply-use table FY2020. The corporate income tax base is calculated by using the gross value addition by the corporate sector which as per definition includes depreciation on assets and employees' compensation. We estimate tax depreciation allowances by obtaining information on investment expenditures (gross fixed capital formation) and applying average 50% depreciation rule to this data[5]. For employees' compensation, the data is obtained from Census of Manufacturing Industry survey 2016 where employment cost is 13% of gross value added. The depreciation and employees' compensation estimated is deducted from gross value addition of the corporate sector to obtain the corporate income tax base. We follow the following steps to estimate the tax gap:

1. Calculate Corporate Income[6,7]
2. Calculate Tax liability by applying statutory rates on sector-wise net profits
3. Tax gap = Gross Tax collectable – FBR's gross corporate tax collection – tax expenditure

2.2.2.1 Sectors Included in Corporate Income Tax Base

Since we rely on the Supply-use table to calculate the corporate income tax gap, some of the sectors in Supply-use table truly represent the corporate sector, while others are combinations of corporate and no-corporate sector. Therefore, we have taken only those sectors where

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[4] Source: Pakistan Bureau of Statistics

[5] The 50% average depreciation rate is estimated based on relevant sections of Income Tax Ordinance 2001 relating to depreciation including normal depreciation, initial depreciation and first year allowance

[6] Junji, Ueda (2018). 'Estimating the Corporate Income Tax Gap: The RA-GAP Methodology", International Monetary Fund, Technical Notes and Manuals

[7] See Section 2.2.2.1 for the details of the sectors included to calculate the corporate income tax gap

business is carried out purely by corporations and excluded all those sectors where non-corporate activity is possible.

To arrive at the precise corporate income gap estimates, following sectors are included:

- Large Scale Manufacturing (LSM)[8]
- Electricity and Gas Distribution
- Information and Communication
- Financial Intermediation and Insurance Sector

2.3 Methodology for Customs Duty Gap

The International Trade Center (ITC) compiles world customs data. A detailed exports and imports data reported to ITC by trade partners of Pakistan is collected to estimate the tax gap for the import partners of Pakistan. First, we calculate the import gap by using following expression:

Import Difference[9]= (Partner countries' exports to Pakistan)[10] – (Pakistan's imports from the partner country)[11]

Next, we use 8-digit commodity level data on imports from FBR to calculate effective duty rates for each country. Finally, we estimate potential customs duty gap by multiplying *Import Difference* between the countries with effective duty rates.

Due to non-availability of data of all countries which export to Pakistan, we calculate this gap for 60 countries which constitutes 67 percent of total imports in FY2019.

[8] The share of LSM is 75% in manufacturing GDP as per National Accounts data

[9] Hamanaka, Shintaro (2011). 'Utilizing the Multiple Mirror Technique to Assess the Quality of Cambodian Trade Statistics', Asian Development Bank, Working Paper No. 88

[10] Use ITC data

[11] Use FBR Customs data after subtracting the 10 percent discrepancy of CIF value from the import value reported by FBR data

TAX GAP ESTIMATES 03

3.1 Sales Tax Gap Estimates

Our estimates of Sales tax gap are reported in table 5. The sales tax gap is Rs. 519 billion which is 24 percent of the tax collectable under current sales tax regime.

Table 5. Sales Tax Gap Estimates (Rs. Billion)
(Consumption Approach-National Accounts Data)

	Tax Collectable	Tax Collection	Tax Gap	Tax Gap (% of Tax Collectable)
Sales Tax	2,209	1,690	519	24

3.1.1 Robustness Check

Table 6. Sales Tax Gap Estimates (Rs. Billion)
(Value Added Approach-Supply-use Table Data)

	Tax Collectable	Tax Collection	Tax Gap	Tax Gap (% of Tax Collectable)
Sales Tax	2,139	1,597	542	25

Table 7. Sales Tax Gap Estimates (Rs. Billion)
(Consumption Approach-Supply-use Table Data)

	Tax Collectable	Tax Collection	Difference	Tax Gap (% of Tax Collectable)
Sales Tax	2,240	1,690	550	25

- This Sales Tax gap largely falls in Food, Beverages, Tobacco, Textile, and Whole sale & retail trade sectors

3.2 Income Tax Gap Estimates

Table 8. Income Tax Gap Estimates (Rs. Billion)

	Gross Tax Collectable	Tax Expenditure	Tax Collectable	Tax Collection	Tax Gap	Tax Gap (% of Tax Collectable)
Income Tax	2,833	448	2,385	1,655	730	31%

- The compliance gap in income tax is Rs.730 billion which is 31 percent of the potential collectable income tax.

Table 8.1. Head-wise Income Tax Gap Estimates Including Tax Expenditure [12] (Rs. Billion)

Heads of Income Tax	Gross Tax Collectable	Tax Collection	Gross Tax Gap
Salaried Individuals*	153	125	28
AOP and Non-salaried*	1,300	545	755
Corporate Income **	1,380	985	395
Total	2,833	1,655	1,178

* based on HIES FY2019
** based on National Accounts Data FY2020

- As reported in Table 8.1, the tax gap for income tax on salaried income is approximately Rs.28 billion and non-salaried is approximately Rs.755 billion in FY2019. However, tax expenditure is not excluded from this estimate.

- The corporate tax gap is estimated to be approximately Rs. 395 billion in FY2020. However, the tax expenditure for corporate sector is also not excluded from this gap.

[12] Tax expenditure is not excluded from this estimate as head-wise disaggregated tax expenditure estimates are not available.

3.2.1 Robustness Check

Table 9. Income Tax Gap Estimates (Rs. Billion)

(Based on Labor Force Survey 2020-21)				
	Tax Collectable	Tax Collection	Tax Gap	Tax Gap (% of Tax Collectable)
Salaried Individuals*	173	142	31	17.9

* based on LFS FY2021

3.3 Customs Duty Gap Estimates

- In Table 10, we estimate that CD gap is Rs.40 billion which is approximately 11 percent of the collectable CD. As discussed in methodology, we calculate CD gap for 60 countries. The total CD collection was Rs. 318 billion from these import partners whereas import gap suggests that our CD collectable was Rs. 358 billion. The smuggling effect is not included in the CD collectable due to non-availability of official estimates on smuggled imports.
- There are 40 trading partners with a positive customs duty gap of Rs.49.2 billion, whereas there are 20 countries having a negative customs duty gap of Rs. 9 billion.
- These estimates exclude the discrepancies arising because of costs, insurance, and freight in order to arrive at the other possible reasons of the import gap.

Table 10. Customs Duty Gap Estimates (Rs. Billion)

	Tax Collectable (60 Countries, 67% of total imports)	Tax Collection (60 Countries)	Tax Gap	Tax Gap (% of Tax Collectable)
Customs Duty	358	318	40	11

APPENDIX

Appendix 1: Sales Tax Estimates (Rs. Billion)
(National Accounts Data)

	Rs. Billion
Sales Tax Base	16,394
Tax Collectable at 17%	2,787
Policy Tax Gap	578
Tax Collectable Under Current Regime	2,209
Gross Tax Collection	1,690
Tax Gap	519

Appendix 2: Sales Tax Estimates (Rs. Billion)
(Supply-Use Table Data)

	Rs. Billion
Sales Tax Base	16,576
Tax Collectable at 17%	2,818
Tax Expenditure	578
Tax Collectable Under Current Regime	2,240
Gross Tax Collection	1,690
Tax Gap	550