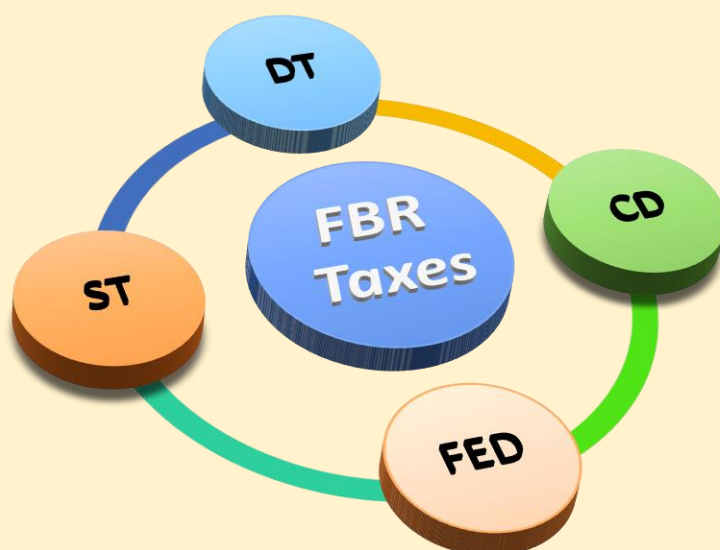


*EVIDENCE BASED REVENUE
FORECASTING
FY2024-25*



Federal Board of Revenue



Feedback & Comments

Questions and comments regarding the report may be communicated to Chief-II (Directorate General of Revenue Analysis), FBR, through email na_chiefRA-II@fbr.gov.pk, or phone +92 51 9211813.

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List of Acronyms

| | |
|--------|------------------------------------|
| CD | Customs Duty |
| CFY | Current Fiscal Year |
| DLI | Disbursement Linked Indicator |
| DT | Direct Tax |
| EBRF | Evidence-Based Revenue Forecasting |
| FBR | Federal Board of Revenue |
| FED | Federal Excise Duty |
| FY | Fiscal Year |
| GDP | Gross Domestic Product |
| LSM | Large Scale Manufacturing |
| PFY | Previous Fiscal Year |
| RA | Revenue Analysis |
| ST (D) | Sales Tax (Domestic) |
| ST (M) | Sales Tax (Imports) |

Preface

FBR is mandated to collect federal tax revenues for the government. Hence, the role of FBR is pivotal to the economy through resource mobilization efforts. Tax collection exercise is driven by accurate revenue forecasting for various revenue heads. This crucial assignment of revenue forecasting is assigned to Directorate General Revenue Analysis, which is ensured through a reliable revenue forecasting method based on head-wise tax buoyancy estimates and macroeconomic indicators.

This is the **fourth issue** of “**Evidence-Based Revenue Forecasting**” for FY2025 prepared by Directorate General Revenue Analysis team. This report fulfills the requirements of DLI-2 of World Bank’s project “Pakistan Raises Revenue Program”.

I appreciate the efforts put in by the Directorate General Revenue Analysis team, under the able guidance of Director General (Revenue Analysis), in producing the Evidence-Based Revenue Forecasting Report. I hope the technique used for revenue forecasting in this report provides fair estimates of the revenue targets that are compatible with the existing potential of the economy based on the projected economic performance parameters.

(Malik Amjed Zubair Tiwana)
Secretary Revenue Division /
Chairman Federal Board of Revenue

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1. Summary of Revenue Forecasts FY2024-25

The FBR revenue target for **FY2024-25**, without budgetary measures is projected at **Rs. 11,174** (billion). The projected target is 20.8% higher than the expected collection of Rs. 9,252 billion for FY2023-24 (Table 1).

Table-1: FBR Revenue Forecasts for FY2025

(Rs. Billion)

| Tax Heads | Expected Base (Collection) | FBR Forecasts without Measures | Required Growth (%) |
|--------------------|-------------------------------|-----------------------------------|------------------------|
| | FY2023-24 | FY2024-25 | |
| DT | 3,721 | 4,586 | 23.2 |
| ST | 3,607 | 4,327 | 20.0 |
| FED | 600 | 701 | 16.9 |
| CD | 1,324 | 1,559 | 17.8 |
| Total (FBR) | 9,252 | 11,174 | 20.8 |

2. Revenue Trends

The growth trend of FBR collection over the past five years' period FY2019 to FY2023 shows an increasing trend except FY2019 wherein collection fell by negative (0.4) percent. However, in the following years revenue growth started picking up. The collection crossed Rs.7 trillion mark for the first time in the country's history during FY2023. Tax-wise revenue performance during this period is shown in Table 2.

Table 2: FBR Yearly Collection Trend (Rs. Billion)

| Tax Heads | FY 2019 | Growth (%) | FY 2020 | Growth (%) | FY 2021 | Growth (%) | FY 2022 | Growth (%) | FY 2023* | Growth (%) |
|----------------------|--------------|-------------|--------------|------------|--------------|-------------|--------------|-------------|--------------|-------------|
| DT | 1,446 | -5.9 | 1,523 | 5.4 | 1,731 | 13.6 | 2,285 | 32.0 | 3,270 | 43.1 |
| ST | 1,459 | -1.8 | 1,597 | 9.4 | 1,988 | 24.5 | 2,532 | 27.4 | 2,593 | 2.4 |
| FED | 238 | 11.6 | 250 | 5.2 | 277 | 10.6 | 321 | 15.8 | 370 | 15.3 |
| CD | 686 | 12.7 | 627 | -8.6 | 748 | 19.4 | 1011 | 35.1 | 931 | -7.9 |
| Overall (FBR) | 3,828 | -0.4 | 3,997 | 4.4 | 4,745 | 18.7 | 6,149 | 29.6 | 7,164 | 16.5 |

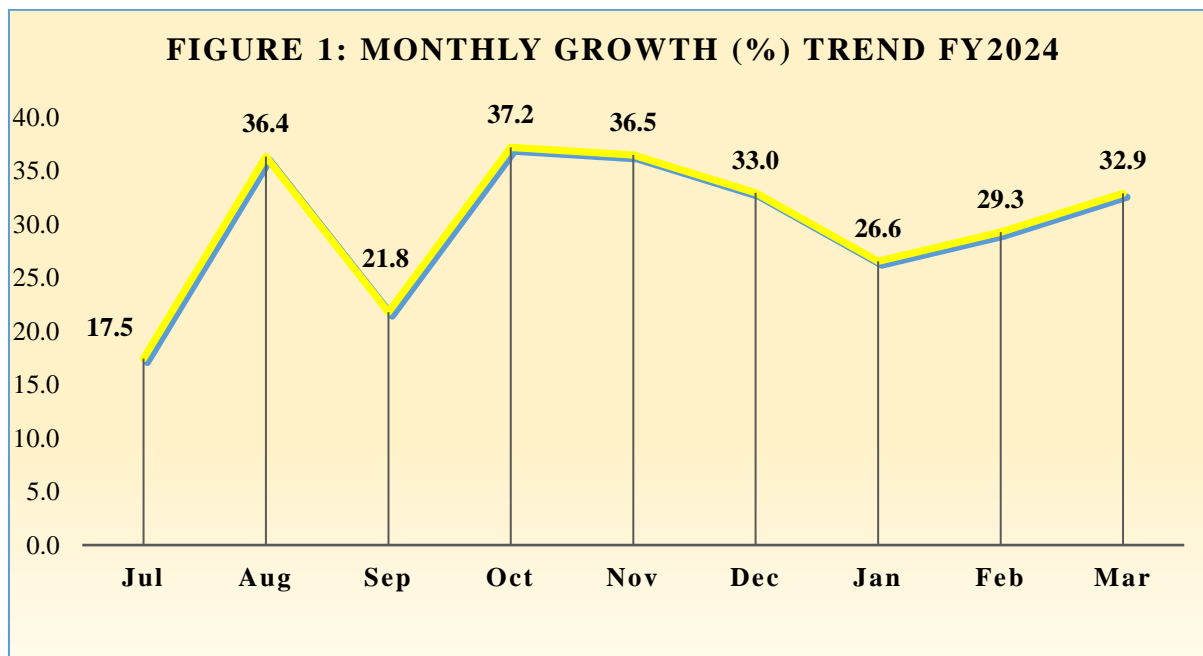
(*) Provisional

During the CFY July-March FY2023-24 the FBR revenue collection grew substantially i.e. by 30.2%, when compared with the corresponding period of PFY. All tax heads have recorded a positive growth. The tax-wise provisional collection for last nine months is shown in table 3.

Table 3: Net Collection July-March FY 2023-24 (Rs. Billion)

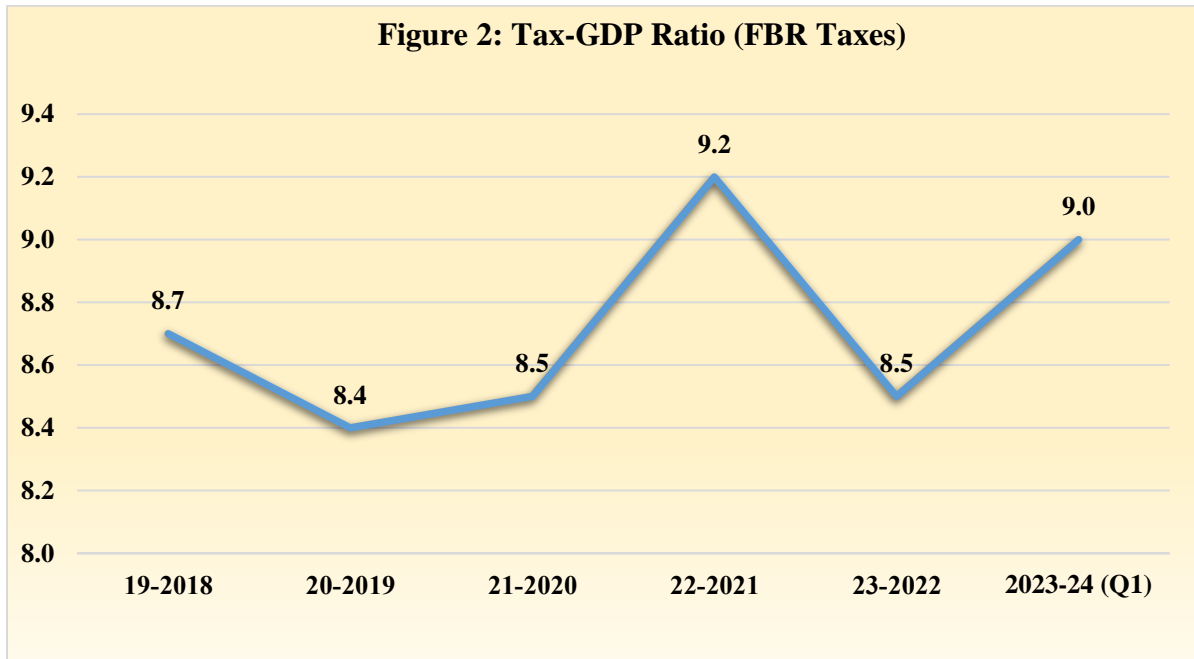
| Tax Heads | July-March | | Growth | |
|----------------------|--------------|--------------|--------------|-------------|
| | FY2023-24 | FY2022 -23 | Absolute | %age |
| DT | 3,265 | 2,309 | 956 | 41.4 |
| ST | 2,237 | 1,901 | 336 | 17.7 |
| FED | 402 | 245 | 157 | 64.2 |
| CD | 808 | 701 | 107 | 15.2 |
| Overall (FBR) | 6,712 | 5,156 | 1,556 | 30.2 |

The month-wise breakdown of growth trend is reflected in Figure 1 below. The monthly growth trend is mixed for each month as compared to the corresponding months of the PFY.



Tax-GDP Ratio

The trend of Tax-GDP ratio over the past few years is given below (Figure 2). The ratio remained in the range of 8.7 percent to 9.2 percent. Last year the Tax–GDP Ratio was 8.5 percent however, during current fiscal year (on the basis of Quarter 1 data) it has started improving and stands at 9.0 percent.



3. Head-wise Evidence Based Revenue Forecasts FY2024-25

The traditional methodology has been adopted to forecast FBR revenues for FY2024-25. The autonomous growth (Table 6) has been applied on base year FY2023-24. An increase of Rs. 1,922 billion is forecasted for FY2024-25, thus arriving at expected revenue collection of Rs. 11,174 billion (Table 4).

Table 4: Head-wise Revenue Projections for FY2024-25 without Budgetary Measures**(Rs. Billion)**

| Tax Heads | Expected Base FY2023-24 | Projections FY2024-25 (Without Measures) | Growth | |
|----------------------|----------------------------|---|--------------|-------------|
| | | | Absolute | %age |
| DT | 3,721 | 4,586 | 865 | 23.2 |
| ST | 3,607 | 4,327 | 720 | 20.0 |
| FED | 600 | 701 | 101 | 16.9 |
| CD | 1,324 | 1,559 | 235 | 17.8 |
| Overall (FBR) | 9,252 | 11,174 | 1,922 | 20.8 |

4. Conclusion

The revenue forecasting for FY2025 is estimated at Rs.11.17 trillion without budgetary measures. Most of the FBR taxes are buoyant and are positively correlated with actual variations in macroeconomic indicators used in the forecasting model. Hence, there is potential for achieving growth in tax revenues, provided that macroeconomic indicators perform well. With the improvement in local and global economic conditions, the tax revenues are expected to increase accordingly. Similarly, removing import restrictions further, the tax collection at import stage shall improve as well.

Annex-I

Methodology

The methodology for revenue forecasting is based on projections of macroeconomic indicators and tax buoyancy¹ value of each tax. The buoyancy estimates have been updated as per the FBR tax collection and National Accounts data for the 20-year period i.e. FY2003-04 to FYT2022-23. Table 6 reflects the respective buoyancies which are estimated using simple log regression method in excel sheets. The estimates of relevant macroeconomic indicators are applied on specific tax buoyancy estimates to arrive at the autonomous growth rate for that specific tax.

Tax-wise buoyancy estimates are calculated by using historical tax collection and respective tax base data. In this report the buoyancy estimates have been calculated on the data of tax collection, GDP, LSM and Imports for the years 2003-04 to 2022-23². GDP-Gross value addition at Current Factor Cost at market prices (inclusive of Taxes less subsidies) has been used for measuring the Buoyancy estimates.

¹ Tax buoyancy is ratio of percentage change in tax revenues to percentage change in tax base. In other words, it is an indicator to measure responsiveness of tax revenue in response to change in the base. A buoyant tax means the tax revenues increase more than proportionately in response to a rise in GDP or tax base.

² Available at <https://www.pbs.gov.pk/national-accounts-tables>

Annex-II

Table-5: Respective Tax Bases for Buoyancy Estimates

| Tax Heads | Tax Base |
|---------------------|---------------------------------|
| Direct Taxes | GDP (Non Agri) |
| Sales Tax (D) | Large Scale Manufacturing (LSM) |
| Sales Tax (M) | Import Value |
| Customs Duties | Import Value |
| Federal Excise Duty | Large Scale Manufacturing (LSM) |

The Tax-wise buoyancy formulas are given below:

$$DT \text{ Buoyancy} = \frac{\% \text{ Change in DT Collection}}{\% \text{ Change in GDP (Non - Agri)}}$$

$$ST(D) \text{ Buoyancy} = \frac{\% \text{ Change in ST(D) Collection}}{\% \text{ Change in LSM}}$$

$$ST(M) \text{ Buoyancy} = \frac{\% \text{ Change in ST(M) Collection}}{\% \text{ Change in Import Value}}$$

$$CD \text{ Buoyancy} = \frac{\% \text{ Change in CD Collection}}{\% \text{ Change in Import Value}}$$

$$FED \text{ Buoyancy} = \frac{\% \text{ Change in FED Collection}}{\% \text{ Change in LSM}}$$

Autonomous growth for each tax has been obtained by multiplying buoyancy estimates with respective macroeconomic indicators/bases. The autonomous growth has been applied on tax-wise expected collection for FY2023-24, which gives the expected additional amount of collection. This additional amount is added in the base year's tax-wise collection to arrive at the FBR revenue forecast for FY2024-25.

Annex-III

Table 6: Revenue Projections for FY 2024-25

(Rs. Billion)

| Macroeconomic Indicators | Growth Assumption % | Tax Heads | Buoyancy Estimates | Tax Heads | Autonomous Growth % |
|--------------------------|---------------------|-----------|--------------------|---------------------------------------|---------------------|
| GDP (Nominal) | 19.3 | DT | 1.20 | DT (GDP Nominal) * DT Buoyancy) | 23.2 |
| LSM(Nominal) | 19.1 | ST (D) | 1.11 | ST(D) (LSM Nominal * STD Buoyancy) | 21.3 |
| Total Imports | 16.9 | ST(M) | 1.13 | STM (Imports * STM Buoyancy) | 19.2 |
| Inflation | 15.6 | CD | 1.05 | CD (Imports * CD Buoyancy) | 17.8 |
| GDP (Real) | 3.7 | FED | 0.89 | FED (LSM Nominal * FED Buoyancy) | 16.9 |
| LSM (Real) | 3.5 | | | | |

| | DT | ST(D) | ST(M) | ST(Total) | CD | FED | Total |
|---|--------------|--------------|--------------|--------------|--------------|-------------|---------------|
| Expected Base Figures 2023-24 | 3,721 | 1,371 | 2,236 | 3,607 | 1,324 | 600 | 9,252 |
| Addition with Autonomous Growth | 865 | 292 | 428 | 720 | 235 | 101 | 1,922 |
| Projections 2024-25 w/o Measures | 4,586 | 1,663 | 2,665 | 4,327 | 1,559 | 701 | 11,174 |
| Growth (%) | 23.2 | 21.3 | 19.2 | 20.0 | 17.8 | 16.9 | 20.8 |

Annex-IV: Table-7: Growth Rate Variation (Robustness check)

10% Reduction in growth rates

| | DT | ST(D) | ST(M) | ST(Total) | CD | FED | Total |
|---|--------------|--------------|--------------|------------------|--------------|-------------|---------------|
| Expected Collection FY2023-24 | 3,721 | 1,371 | 2,236 | 3,607 | 1,324 | 600 | 9,252 |
| Tax-wise 10% Reduced Autonomous Growth Rates | 20.9 | | | 18.0 | 16.0 | 15.2 | 18.7 |
| FBR Forecasts without Measures FY2024-25 | 4,499 | | | 4,255 | 1,536 | 691 | 10,981 |

10% Increase in growth rates

| | DT | ST(D) | ST(M) | ST(Total) | CD | FED | Total |
|---|--------------|--------------|--------------|------------------|--------------|--------------|---------------|
| Expected Collection FY2023-24 | 3,721 | 1,371 | 2,236 | 3,607 | 1,324 | 600 | 9,252 |
| Tax-wise 10% Increased Autonomous Growth Rates | 25.56 | | | 21.97 | 19.54 | 18.60 | 22.85 |
| FBR Forecasts without Measures FY2024-25 | 4,672 | | | 4,399 | 1,583 | 712 | 11,366 |

Annex-V**Table 8: Historical Tax Collection (Rs. Million)**

| S.No | FY | DT | ST (Total) | ST (M) | ST (D) | FED | CD | Total |
|-------------|----------------------------------|------------------|-------------------|------------------|----------------|----------------|----------------|------------------|
| 1 | 2003-04 | 165,079 | 219,167 | 125,875 | 93,292 | 45,553 | 91,045 | 520,843 |
| 2 | 2004-05 | 183,372 | 238,537 | 144,845 | 93,692 | 53,104 | 115,374 | 590,387 |
| 3 | 2005-06 | 224,988 | 294,798 | 171,445 | 123,353 | 55,272 | 138,384 | 713,442 |
| 4 | 2006-07 | 333,737 | 309,396 | 175,909 | 133,487 | 71,805 | 132,299 | 847,236 |
| 5 | 2007-08 | 387,861 | 377,430 | 196,034 | 181,396 | 92,137 | 150,663 | 1,008,091 |
| 6 | 2008-09 | 443,548 | 451,744 | 203,715 | 248,029 | 117,455 | 148,403 | 1,161,150 |
| 7 | 2009-10 | 525,977 | 516,348 | 247,246 | 269,102 | 124,784 | 160,273 | 1,327,382 |
| 8 | 2010-11 | 602,451 | 633,357 | 308,648 | 324,709 | 137,354 | 184,853 | 1,558,014 |
| 9 | 2011-12 | 738,424 | 804,899 | 430,399 | 374,500 | 122,464 | 216,906 | 1,882,693 |
| 10 | 2012-13 | 743,409 | 842,528 | 429,831 | 412,697 | 120,964 | 239,459 | 1,946,360 |
| 11 | 2013-14 | 877,255 | 996,382 | 495,330 | 501,052 | 138,084 | 242,811 | 2,254,532 |
| 12 | 2014-15 | 1,033,720 | 1,087,790 | 553,028 | 534,762 | 162,248 | 306,220 | 2,589,978 |
| 13 | 2015-16 | 1,217,474 | 1,302,371 | 678,313 | 624,058 | 188,055 | 404,572 | 3,112,472 |
| 14 | 2016-17 | 1,344,226 | 1,328,965 | 702,565 | 626,400 | 197,911 | 496,772 | 3,367,874 |
| 15 | 2017-18 | 1,536,583 | 1,485,306 | 824,219 | 661,087 | 213,493 | 608,373 | 3,843,755 |
| 16 | 2018-19 | 1,445,508 | 1,459,213 | 810,357 | 648,856 | 238,186 | 685,575 | 3,828,482 |
| 17 | 2019-20 | 1,523,445 | 1,596,877 | 876,345 | 720,532 | 250,473 | 626,612 | 3,997,407 |
| 18 | 2020-21 | 1,731,255 | 1,988,305 | 1,115,912 | 872,393 | 277,046 | 748,391 | 4,744,997 |
| 19 | 2021-22 | 2,284,916 | 2,532,228 | 1,740,692 | 791,536 | 320,658 | 1,010,694 | 6,148,496 |
| 20 | 2022-23 (Provisional) | 3,269,828 | 2,593,287 | 1,618,171 | 975,116 | 369,779 | 930,943 | 7,163,837 |

Annex-VI:**Table 9: Tax Base Data (Rs. Million)**

| S.No | FY | GDP (mp) | GDP-non agr | LSM | Imports | Dutiable imports |
|-----------|----------------|-------------------|-------------------|-----------|------------|------------------|
| 1 | 2003-04 | 7,611,678 | 5,936,965 | 652,097 | 897,825 | 629,159 |
| 2 | 2004-05 | 8,619,232 | 6,759,675 | 820,629 | 1,223,079 | 869,815 |
| 3 | 2005-06 | 9,689,071 | 7,710,723 | 974,870 | 1,711,158 | 1,052,837 |
| 4 | 2006-07 | 11,165,234 | 8,939,115 | 1,125,730 | 1,851,806 | 1,010,603 |
| 5 | 2007-08 | 12,647,137 | 10,073,272 | 1,471,028 | 2,512,072 | 1,283,696 |
| 6 | 2008-09 | 14,705,698 | 11,501,779 | 1,540,254 | 2,723,570 | 1,337,629 |
| 7 | 2009-10 | 16,507,053 | 12,761,799 | 1,774,338 | 2,910,975 | 1,333,709 |
| 8 | 2010-11 | 19,731,030 | 15,031,169 | 2,314,710 | 3,455,287 | 1,521,329 |
| 9 | 2011-12 | 22,344,639 | 17,119,078 | 2,549,522 | 4,009,093 | 1,600,186 |
| 10 | 2012-13 | 25,042,169 | 19,105,273 | 2,718,555 | 4,349,880 | 1,652,823 |
| 11 | 2013-14 | 27,952,815 | 21,385,935 | 3,048,172 | 4,630,521 | 1,778,444 |
| 12 | 2014-15 | 30,425,880 | 23,347,956 | 3,079,209 | 4,644,152 | 2,703,371 |
| 13 | 2015-16 | 32,725,049 | 25,418,092 | 2,841,709 | 4,658,749 | 3,467,318 |
| 14 | 2016-17 | 35,552,819 | 27,744,281 | 3,083,146 | 5,539,721 | 4,067,138 |
| 15 | 2017-18 | 39,189,810 | 30,704,732 | 3,499,175 | 6,694,897 | 4,662,323 |
| 16 | 2018-19 | 43,798,401 | 34,741,824 | 4,266,145 | 7,443,253 | 5,054,709 |
| 17 | 2019-20 | 47,540,409 | 37,150,865 | 4,026,236 | 7,029,819 | 4,455,140 |
| 18 | 2020-21 | 55,836,225 | 43,182,336 | 4,916,269 | 7,221,754 | 4,268,621 |
| 19 | 2021-22 | 66,639,672 | 51,747,010 | 6,743,961 | 11,398,011 | 6,421,248 |
| 20 | 2022-23 | 84,068,755 | 64,418,780 | - | - | - |

Source: Pakistan Bureau of Statistics, Government of Pakistan

* GDP after adjustments of taxes and subsidies or GDP at market value

| Medium-Term Macroeconomic Framework (Finance Division) | | | | | | |
|---|----------------|-----------------|------------------|----------------|----------------|----------------|
| | | Baseline | Projected | | | |
| | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 |
| Economic Growth | | | | | | |
| Real GDP Growth (%) | 6.2 | -0.17 | 2.6 | 3.7 | 4.8 | 5.5 |
| LSM (%) | 11.9 | -9.9 | 1 | 3.5 | 6.6 | 8.2 |
| Inflation (Average, %) | 12.2 | 29.2 | 24 | 15.6 | 7.5 | 7 |
| Nominal GDP (Rs. Billion) | 66,640 | 84,069 | 107,004 | 125,154 | 140,695 | 157,521 |
| Growth (%) | 19.3 | 26.2 | 27.3 | 19.3 | 12.4 | 12 |
| External Sector (\$ Million) | | | | | | |
| Current Account Deficit | 17,481 | 2,235 | 2,003 | 4,166 | 5,124 | 5,987 |
| CAD as % of GDP | 4.7 | 0.7 | 0.5 | 1 | 1.2 | 1.3 |
| Exports (goods) | 32,493 | 27,879 | 30,751 | 32,688 | 35,303 | 37,951 |
| Imports (goods) | 71,543 | 51,834 | 52,065 | 57,657 | 62,277 | 67,063 |
| Exports (Services) | 7,102 | 7,599 | 7,978 | 8,532 | 9,527 | 10,241 |
| Imports (Services) | 12,942 | 8,568 | 10,796 | 12,199 | 13,773 | 14,737 |
| Exports (Goods & Services) | 39,595 | 35,478 | 38,729 | 41,221 | 44,830 | 48,192 |
| Imports (Goods & Services) | 84,485 | 60,402 | 62,861 | 69,856 | 76,050 | 81,800 |
| In Rs (Million) | | | | | | |
| Exports (goods) | 5,765,922 | 6,915,107 | 8,856,280 | 9,906,909 | 11,030,371 | 12,224,807 |
| Imports (goods) | 12,695,391 | 12,856,905 | 14,994,670 | 17,474,191 | 19,458,141 | 21,602,322 |
| Exports (Services) | 1,260,258 | 1,884,856 | 2,297,689 | 2,585,884 | 2,976,519 | 3,298,834 |
| Imports (Services) | 2,296,573 | 2,125,207 | 3,109,156 | 3,697,213 | 4,303,251 | 4,747,051 |
| Exports (Goods & Services) | 7,026,180 | 8,799,963 | 11,153,969 | 12,492,793 | 14,006,890 | 15,523,641 |
| Imports (Goods & Services) | 14,991,965 | 14,982,112 | 18,103,826 | 21,171,404 | 23,761,392 | 26,349,373 |
| <i>Imports (Goods & Services) Growth%</i> | | | 20.8 | 16.9 | 12.2 | 10.9 |

Note: MEIs received from FD, however, Inflation taken 15.6, GDP Nominal 19.3 as directions received from the Chairman through Chief (Ops)