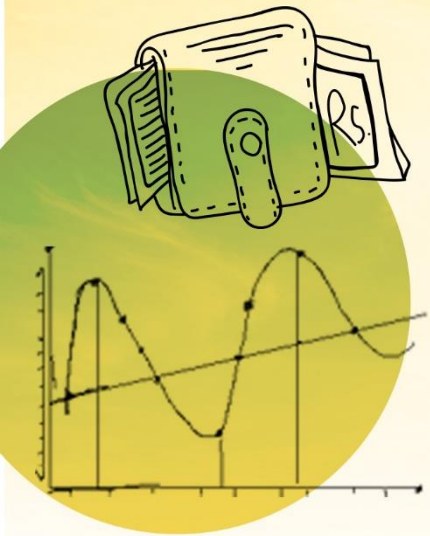
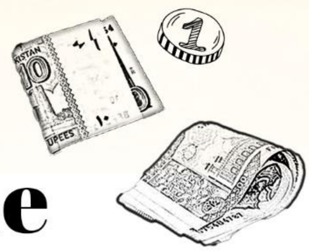
CASS
CENTRE for AEROSPACE & SECURITY STUDIES





Expenditure Side of Pakistan's Fiscal Deficit

Zahra Niazi
Research Assistant

Working Paper

President
Air Marshal Javaid Ahmed (Retd)

Edited by:
Sarah Siddiq Aneel

Layout
Hira Mumtaz

All correspondence pertaining to this publication should be addressed to CASS, Islamabad, through post or email at the following address:
Centre for Aerospace & Security Studies

+92 051 5405011
cass.thinkers@casstt.com
cass.thinkers
cassthinkers
@CassThinkers
Centre for Aerospace & Security Studies

Old Airport Road, Islamabad, Pakistan
www.casstt.com

CENTRE for AEROSPACE & SECURITY STUDIES

Expenditure Side of Pakistan's Fiscal Deficit

Working Paper

Zahra Niazi

Research Assistant

TABLE OF CONTENTS

Abstract

To date, much of Pakistan's fiscal consolidation efforts have focused on the revenue side of the budgetary deficit, while expenditure management has remained relatively neglected. Statistical modeling reveals that increases in both current and development expenditures contribute to a rise in Pakistan's overall fiscal deficit. A review of the government's budgetary allocations for FY 2024-25 and the past four fiscal years indicates significant potential for cost savings in government spending. The findings underscore the need to reduce the budgetary burden of mark-up payments through prudent debt management strategies, growth-oriented policies, and a data-driven approach to monetary policy. Furthermore, the study recommends reviewing defence spending, particularly employee-related expenses, to identify potential cost-saving opportunities and implementing broad-based power sector reforms to alleviate the fiscal burden of subsidies. It also calls for rationalising expenditures under the Benazir Income Support Program (BISP) by enhancing administrative quality, strengthening monitoring mechanisms, and improving public service delivery. Further, the study suggests downsizing by eliminating or merging government departments and agencies with overlapping functions and closing redundant entities. Comprehensive pension reforms, informed by international best practices, are also recommended. Finally, the study advocates for more equitable allocations under the Public Sector Development Program (PSDP) and for minimising operational inefficiencies in both allocation processes and spending activities.

Keywords: Expenditure, Revenue, Fiscal Deficit, Fiscal Consolidation, Public Expenditure Management, Debt Servicing.

1. Introduction

Public expenditure refers to the expenses incurred by the government to enhance social and economic services, maintain law and order, make interest payments, provide other governmental services, and carry out general administrative activities. It is one of the two primary components of budgetary composition, the other being revenue. The difference between revenue and total expenditure determines the fiscal balance. A fiscal surplus occurs when net revenue exceeds spending in a given year, while a fiscal deficit arises when government spending surpasses net revenue. In the case of a fiscal deficit, the government must rely on other financing sources, such as domestic or external borrowing, to bridge the gap.

Pakistan has long faced challenges in maintaining a sustainable balance between expenditure and revenue, resulting in persistent fiscal deficits averaging 6.1% of GDP from FY 1990-91 to FY 2023-24. Consequently, a significant portion of annual expenditure is financed through domestic and external borrowing, contributing to the unsustainable growth of the government's debt stock. For reference, in the FY 2023-24 budget, net revenue has been estimated at PKR 10.4 trillion against an expenditure estimate of around PKR 18.9 trillion.[1] A major part, i.e., 91.8%, of the PKR 8.5 trillion deficit is expected to be financed through domestic bank and non-bank borrowing, while some portion, i.e., 7.8%, is expected to be funded through external financing sources and a meagre part, i.e., 0.4%, through privatisation proceeds.[2]

Achieving fiscal consolidation to reduce unsustainable accumulation of debt is, thus, imperative for short- and long-term economic stability and growth. Much scholarly and practical attention until now has been concentrated on boosting revenues. Aggressive taxation measures, such as the removal of tax exemptions across all sectors, are known to negatively affect economic growth by discouraging savings, investment, and innovation, thus reducing the country's taxable capacity in the long run.[3] Likewise, petroleum levy has become one of the major sources of non-tax

---

1 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief,"* Islamabad: Finance Division, 2024, https://www.finance.gov.pk/budget/Budget_2024_25/Budget_in_Brief.pdf.

2 Ibid., 6.

3 Ihtsham ul Haq Padda and Naeem Akram, "The Impact of Tax Policies on Economic Growth: Evidence from South Asian Economies," *The Pakistan Development Review* 48, no. 4 Part II (2009): 961-971, https://www.jstor.org/stable/41261358.

income collection in Pakistan, but its high levels have adverse implications for economic growth and productivity.

Expenditure management, on the other hand, is a relatively disregarded domain. Public expenditure management is advocated worldwide as one of the central instruments for furthering fiscal consolidation. Its primary objectives include expenditure control, efficient resource allocation, and good operational management of the allocated resources. The end goal is to keep government expenses within sustainable limits, make the most of available resources, maximise social benefit, distribute public income more equitably, raise the levels of aggregate consumption, and promote efficiency and productivity of the economy.[4]

In view of this, the present *Working Paper* advocates for a fair share of focus on the expenditure side of fiscal deficit, where public expenditure management is given equal emphasis along with revenue-side reforms. Given the low private sector savings in developing countries, fiscal policy has a vital role in mobilising resources by reducing less productive spending and raising revenues.[5] The study, hence, aims to:

1. Analyse the impact of expenditure (current and development expenditure) on Pakistan's fiscal deficit,
2. Provide a detailed assessment of Pakistan's budget allocations to offer data-driven recommendations.

The paper is structured as follows: After the introduction, the second section details the breakdown of Pakistan's expenditure components. The third section outlines the study's methodology, followed by the presentation of results and findings. The fifth section offers a way forward based on the findings, followed by a conclusion.

---

4 Organisation for Economic Co-operation and Development, "Introduction. Reforming Public Expenditure: An Overview," in *Managing Public Expenditure: A Reference Book for Transition Countries,* ed. Richard Allen and Daniel Tommasi (Paris: OECD Publications Service, 2001).

5 James Daniel, Jeffrey Davis, Manal Fouad and Caroline Van Rijckeghem, "Fiscal Adjustment for Stability and Growth," (paper, International Monetary Fund, Washinton, D.C., 2006), https://www.imf.org/external/pubs/ft/pam/pam55/pam55.pdf.

2. Breakdown of Expenditure Components

Pakistan's Federal Budget's expenditure is divided into two main categories: current or non-development expenditure and development expenditure. The following are details of the two categories.

2.1. Current Expenditure

Current expenditure refers to short-term and day-to-day recurring expenses, including mark-up payments, pensions, defence affairs and services, grants and transfers, subsidies, running of the civil government, and provision for emergencies and others.

Mark-up Payments: Mark-up payments refer to the additional amount, including interest payments that must be paid over the principal amount of domestic and foreign debt.[6]

Pensions: The federal pension budget includes two major constituents: pensions for the civil sector and pensions for the military sector.[7]

Defence Affairs and Services: 'Defence administration' and 'defence services' are two constituents of defence spending. The primary head, 'defence services,' comprises four components: employee-related expenses, operating expenses, physical assets, and civil works. The allocation for defence affairs and services excludes pensions of retired military personnel. Additionally, funding for nuclear weapons, missile programmes, and other major military acquisitions is also believed to be financed through a separate channel.[8]

Grants and Transfers: The two major heads under this category include 'grants in aid and miscellaneous adjustments' and 'grants to others.' Under the first head are special grants allocated to provinces. 'Grants to others' include miscellaneous grants and grants earmarked for contingent liabilities and specific entities and projects, such as the National Internship Programs (NIP), Pakistan Remittance Initiative (PRI), Audit Oversight Board, Bait-ul-Maal, and National Disaster Management Authority (NDMA), among many others. Transfers made to provinces under the 7th National

---

6 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*
7 Ibid.
8 Shahnawaz Ali, "Inside the Defence Budget," *Profit*, June 24, 2024, https://profit.pakistantoday.com.pk/2024/06/24/inside-the-defence-budget-has-inflation-hit-the-military/.

Finance Commission (NFC) Award as per the set formula are deducted from revenue section.[9]

Subsidies: The major categories include subsidies to the power sector, petroleum, food (PASSCO), industries and production/Utility Stores Corporation, and other miscellaneous subsidies.

Running of Civil Government: Expenditure for running the civil government includes expenses for day-to-day operations of the civil government departments. It includes everything from the salaries and wages of government employees to operating expenses.[10]

Provision for Emergencies and Others: It consists of funds earmarked for emergencies or other contingencies.[11]

9 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*
10 Daniyal Ahmad, "Decoding the budget: A simple question of revenue and expenditure," *Profit*, June 9, 2023, https://profit.pakistantoday.com.pk/2023/06/09/decoding-the-budget-a-simple-question-of-revenue-and-expenditure/.
11 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*

Table 1: A Breakdown of Current Expenditure

Categories	Classification
A. Mark-up payments	1. Mark-up on domestic debt 2. Mark-up on foreign debt
B. Pension	1. Military Pension 2. Civil Pension
C. Defence Affairs and Services	1. Defence administration 2. Defence Services 2.1. Employee-related expenses 2.2. Operating expenses 2.3. Physical assets 2.4. Civil works
D. Grants and Transfers	1. Grants in aid and miscellaneous adjustments 1.1. Special grants to provinces 2. Grants to others 2.1. Contingent liabilities 2.2. Miscellaneous grants 2.3. Grants to specific projects and entities (e.g., BISP, Bait-ul-Maal, Higher Education Commission-HEC)
E. Subsidies	1. Subsidy to power sector 2. Subsidy to petroleum 3. Subsidy to food (PASSCO) 4. Subsidy to industries and production/ utility store corporation 5. Other subsidies
F. Running of Civil Government	1. Day-to-day operations of the civil government departments
G. Provision for Emergencies and Others	1. Disasters/ Pandemics like COVID-19 etc.

Source: Author's compilation.

2.2. Development Expenditure

The second category, development expenditure, refers to spending on creating assets that can provide long-term public goods. It includes the Federal Public Sector Development Programme (PSDP) and net lending.

Net Lending: Net lending comprises government's lending subtracted from the repayments it receives in any given fiscal year.[12]

Federal PSDP: It refers to the funds allocated for special packages and to the federal ministries, divisions, departments, and corporations to undertake development projects.[13]

Table 2: Breakdown of Development Expenditure

Categories	Classification
Net Lending	Government's lending - repayments
Federal PSDP	1. Federal ministries/divisions (e.g., Aviation Division, Cabinet Division, Climate Change Division, HEC) 2. Corporations (e.g., National Highway Authority-NHA, National Transmission and Dispatch Company-NTDC) 3. Projects' liabilities 4. Prime Minister's initiatives

Source: Author's compilation.

3. Data and Methodology

The study utilised time-series data to analyse the impact of federal expenditure (current and development) on fiscal deficit (study objective one). A dataset (Appendix A) for fiscal indicators as a percentage of GDP, including revenue, current expenditure, development expenditure, and fiscal deficit from FY 1990-91 to FY 2023-24, was collected from Pakistan's *Economic Surveys*. According to a general rule of thumb, the number of observations should be ten times the number of variables other than the dependent variable. Since the study included two independent variables (current and development expenditure as a percentage of GDP) and one control variable (total revenue as a percentage of GDP), a dataset comprising 34 fiscal years was considered appropriate. The selection of these specific years was based on availability of relevant data. Specifically, *Economic Surveys* 2023-24, 2021-22, 2013-2014, and 2008-09 were utilised as secondary data sources to gather the latest figures for the studied fiscal years.

12 Ahmad, "Decoding the Budget."
13 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*

In the first step, tests for stationarity were done using the Augmented Dickey-Fuller (ADF) unit root test. Any data that exhibits a long-term downward or upward trend, i.e., non-stationary data, can result in spurious or misleading results by stipulating a relationship between variables when there is none.[14] The non-stationary data was differenced to make it stationary, involving the process of calculating differences between consecutive observations in a time series to eliminate trends. After first-order differencing, 33 fiscal years[15] were considered for data analysis.

Next, ARIMAX analysis was performed using the SPSS software. It is viewed as a multiple regression model with one or more autoregressive (AR) terms or/and one or more moving average (MA) terms.[16] An AR term captures the relationship between the current value of a variable and its past value, while an MR term captures the impact of random shocks from the previous periods. ARIMAX analysis is considered a useful approach when the assumptions of multiple linear regression, such as the requirement for little or no autocorrelation in the data, cannot be met.

$$\Delta \text{Fiscal Deficit}_t = \alpha + \sum_{i=1}^{p}\phi_i \Delta \text{Fiscal Deficit}_{t-i} + \sum_{j=1}^{q}\theta_j \epsilon_{t-j} + \beta 1(\Delta \text{Current Expenditure}_t) + \beta 2(\Delta \text{Development Expenditure}_t) + \gamma(\Delta \text{Revenue}_t) + \epsilon_t$$

The above model was specified for the present study (Equation 1), where: ΔFiscal Deficit$_t$=dependent variable at time$t$; α = constant term; ϕ_i = coefficient for AR term where i is the lag order; θ_j = coefficient for the MA term where j is the lag order; $\beta 1$, $\beta 2$ = coefficients for the independent variables; γ = coefficient for the control variable; ϵ_t = error term at time t.

Budget allocations were assessed in detail (study objective two), based on budget data from the present fiscal year and the past four fiscal years (five fiscal years in total). FY 2024-25 figures are based on the initially budgeted allocation, while the figures for the preceding four fiscal years (FY 2023-24, FY 2022-23, FY 2021-22, FY 2020-21) are based on the revised estimates.

14 Eduard Baumöhl and Štefan Lyócsa, "Stationarity of Time Series and the Problem of Spurious Regression," *SSRN Electronic Journal*, (2009), http://dx.doi.org/10.2139/ssrn.1480682.

15 One fiscal year (FY91) was excluded from the dataset after applying first-order differencing because there was no preceding year's data available for differencing calculations.

16 Amelia Ririn, Desy Yuliana Dalimunthe, Elyas Kustiawan and Ineu Sulistiana, "ARIMAX Model for Rainfall Forecasting in Pangkalpinang, Indonesia," *IOP Conf. Series: Earth and Environmental Sciences* 926, (2021): 012034, DOI:10.1088/1755-1315/926/1/012034.

4. Results and Findings

4.1. Relationship between Expenditure and Fiscal Deficit

4.1.1. Test for Stationarity

The present study used the ADF test to test stationarity. The hypotheses of the ADF test include: H0 = the data needs to be differenced to make it stationary; H1 = the data is stationary and does not need to be differenced. The results from the ADF test, before and after first-order differencing, are presented in Table 3.

The p-values of current expenditure, development expenditure, and revenue were found to be non-significant ($p > 0.05$), necessitating the differencing of data to achieve stationarity. After first-order differencing (change between one observation and the next), the p-values for current expenditure, development expenditure, and revenue were found to be significant ($p \leq 0.05$), indicating that stationarity was achieved after first-order differencing.

Table 3: Results from Augmented Dickey Fuller Test of Stationarity

Variables	Before Differencing		After First-Order Differencing	
	ADF Statistic	p-value	ADF Statistic	p-value
Current Expenditure	-2.202	0.205	-6.286	<0.001
Development Expenditure	-2.302	0.171	-6.062	<0.001
Revenue	-1.740	0.411	-4.246	<0.001
Fiscal Deficit	-2.983	0.036	N/A	N/A

*Statistically significant ($p \leq 0.05$); *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$*
Note: All fiscal indicators have been expressed as a percentage of GDP.

4.1.2. Autoregressive Integrated Moving Average with Exogenous Variable (ARIMAX) Model

Table 4 highlights the results from ARIMAX Analysis. The coefficient (0.726) and p-value (< 0.001) for AR (Lag 1) suggest that the past fiscal deficit has a statistically significant ($p \leq 0.05$) and positive impact on the subsequent year's fiscal deficit. The p-values for independent variables and the constant indicate statistically significant evidence ($p \leq 0.05$) that changes in current expenditure, development expenditure, and revenue are associated with changes in fiscal deficit. The corresponding coefficients indicate that an increase in current expenditure (Coeff=0.507) and development expenditure (Coeff=0.585) leads to a corresponding increase in fiscal deficit. On the other hand, the negative coefficient for revenue (Coeff=-0.473) indicates that an increase in the government's revenue receipts leads to a decrease in fiscal deficit.

Table 4: Results from ARIMAX Analysis

Model Parameters			
	Estimate	**Standard Error**	**Sig**
Constant	6.361	.779	<0.001
AR (Lag 1)	.726	.155	<0.001
MR (Lag 1)	-.326	.240	.185
Differenced Current Expenditure (Lag 0)	.507	.107	<0.001
Differenced Development Expenditure (Lag 0)	.585	.195	.006
Differenced Development Expenditure (Lag 0)	-.473	.147	.003

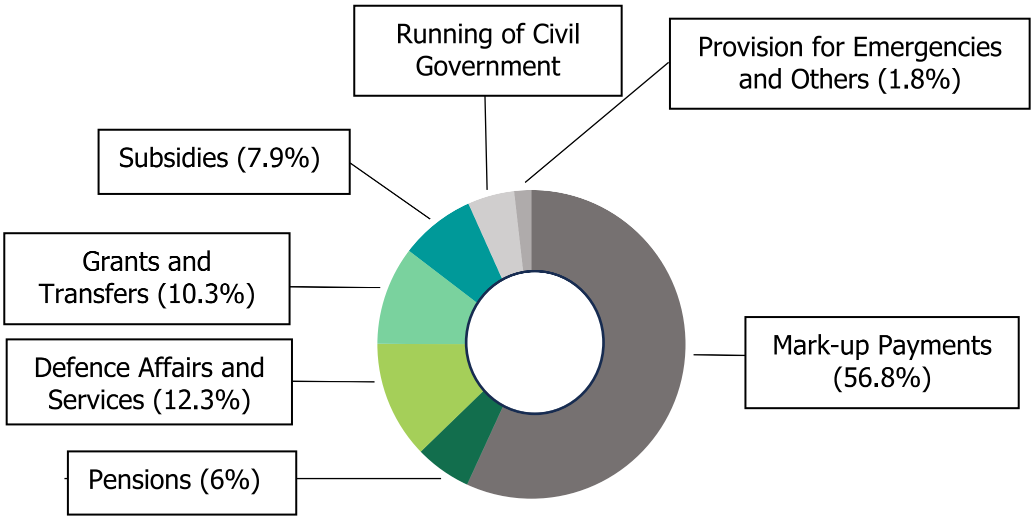
*Statistically significant ($p \leq 0.05$); *$p \leq .05$, **$p \leq .01$, ***$p \leq .001$*
Note: All fiscal indicators have been expressed as a percentage of GDP.

4.2. Budget Allocations

4.2.1. Current Expenditure

The charts below show percentage shares of the components of current expenditure. In the FY 2024-25 budget, the predominant portion, i.e., 56.8%, of current expenditure has been allocated for mark-up payments, followed by 12.3% for defence affairs and services, 10.3% for grants and transfers, 7.9% for subsidies, 5.9% for pensions, 4.9% for running of civil government, and 1.8% for emergencies and other contingencies (Figure 1).

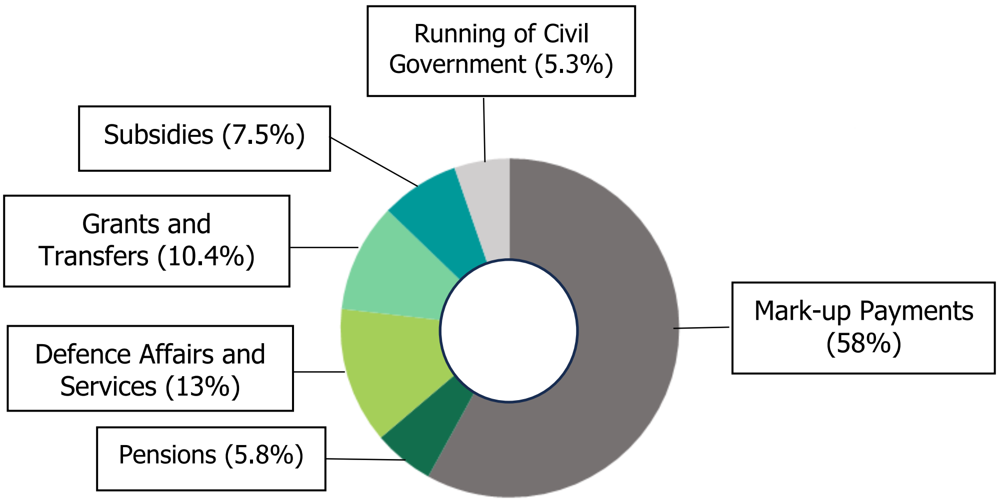
Figure 1: Current Expenditure (FY 2024-25)



Source: Federal Budget FY 2024-25.[17]

In FY 2023-24, the major portion, i.e., 58%, of current expenditure was spent on mark-up payments, followed by 13% for defence affairs and services, 10.4% for grants and transfers, 7.5% for subsidies, 5.8% for pensions, and 5.3% for running of civil government (Figure 2). In FY 2022-23 again, the pre-dominant portion, i.e., 52.4%, of current expenditure was spent on mark-up payments, followed by 15.1% for defence affairs and services, 10.4% for grants and transfers, 10.5% for subsidies, 5.8% for pensions, and 5.2% for running of the civil government (Figure 3).

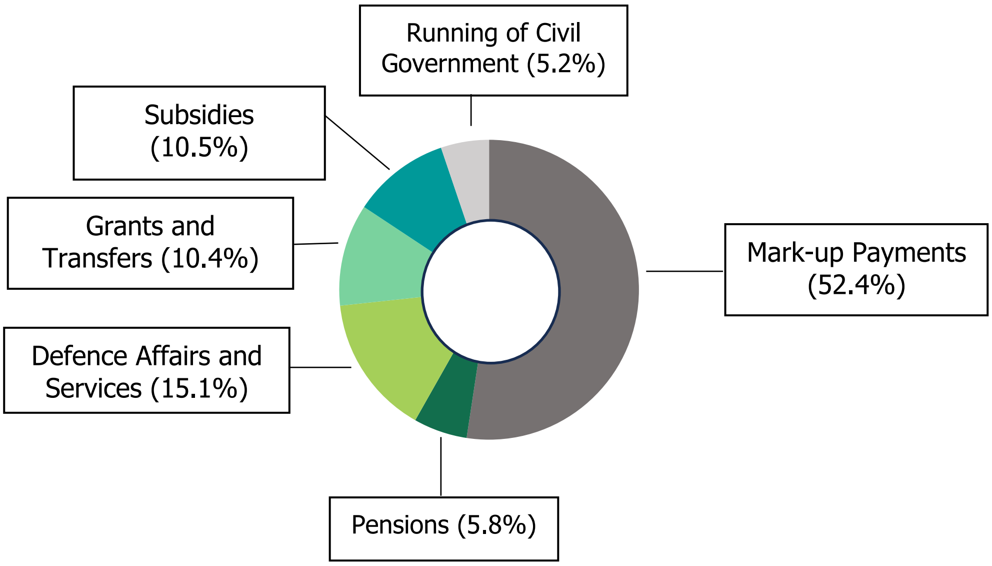
Figure 2: Current Expenditure (FY 2023-24)



Source: Federal Budget FY 2024-25.[18]

17 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*
18 Ibid.

Figure 3: Current Expenditure (FY 2022-23)

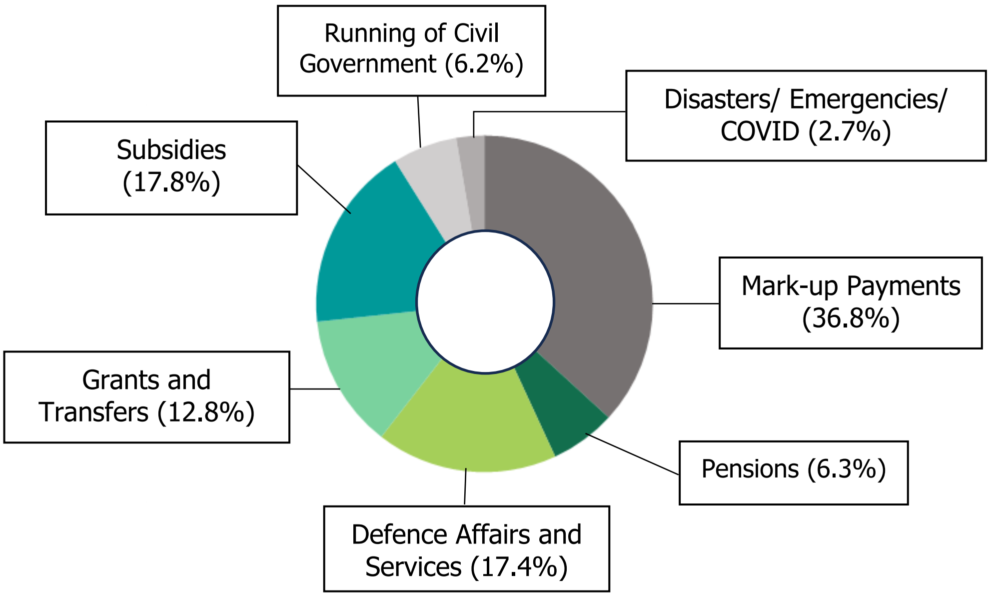


Source: Federal Budget FY 2023-24.[19]

In FY 2021-22, the highest portion, i.e., 36.8%, of the current expenditure was spent on mark-up payments, while the second highest was spent on subsidies (17.8%), followed by 17.4% for defence affairs and services, 12.8% for grants and transfers, 6.3% for pensions, 6.2% for running of civil government, and 2.7% for disaster/emergency/COVID (Figure 4). In FY 2020-21, the highest portion, i.e., 43.4%, of the current expenditure was spent on mark-up payments, while the second highest was spent on defence affairs and services (19.8%), followed by 14.2% for grants and transfers, 7.4% for running of civil government, 7.2% for pensions, 6.6% for subsidies, and 1.4% for disasters/emergencies/COVID (Figure 5).

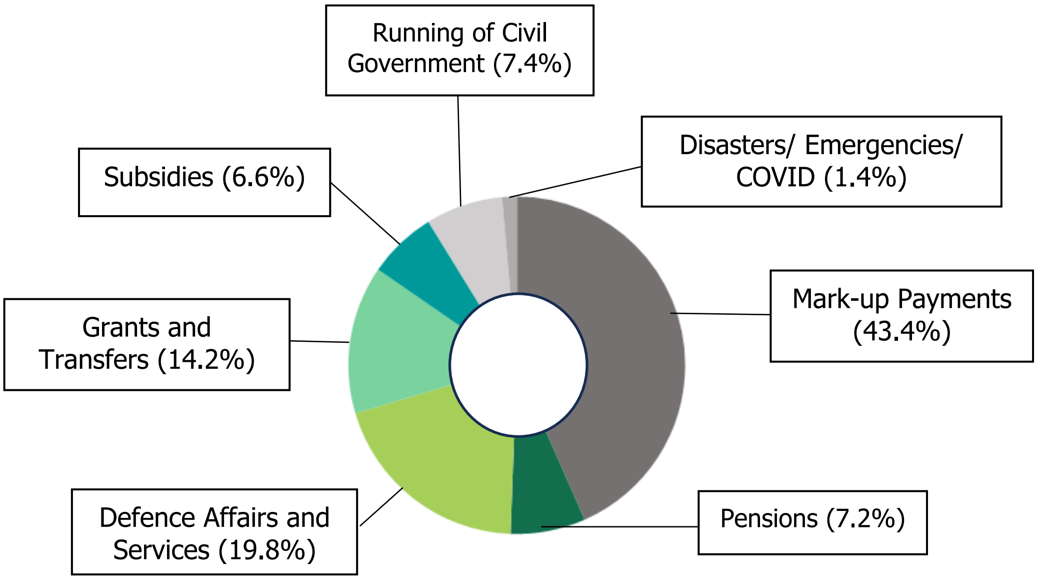
19 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief,"* Islamabad: Finance Division, 2023, https://www.finance.gov.pk/budget/Budget_2023_24/Budget_in_Brief.pdf.

Figure 4: Current Expenditure (FY 2021-22)



Source: Federal Budget FY 2022-23.[20]

Figure 5: Current Expenditure (FY 2020-21)



Source: Federal Budget FY 2021-22.[21]

Multiple takeaways can be drawn from this. First, 'mark-up payments' contribute most to the total current expenditure in Pakistan. Notably, the percentage shares of mark-up payments for FY 2024-2025, FY 2023-24, and FY 2022-23 are exceptionally

20 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief,"* Islamabad: Finance Division, 2022, https://www.finance.gov.pk/budget/Budget_2022_23/Budget_in_Brief_English.pdf.

21 Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief,"* Islamabad: Finance Division, 2021, https://www.finance.gov.pk/budget/Budget_2021_22/6_Budget_in_Brief_English_2021_22.pdf.

high (>50%). The United States Federal Reserve System (Fed) started hiking its interest rate in March 2022, bringing it from 0.25% in February 2022 to 4.5% by the end of that year and 5.5% by August 2023,[22] leading to higher debt servicing costs for debtor nations. At the time of this writing (mid-2024), the Fed had maintained key interest rate at 5%. Central banks in most advanced economies also adopted a similar monetary policy approach. Likewise, the key interest rate set by the State Bank of Pakistan (SBP) reached 16% by the end of December 2022 and 22% by the end of December 2023, compared to 9.75% in January 2022.[23] At the time of this writing, the SBP had maintained the key interest rate at 17.5%.[24] This high interest rate environment and government's augmented borrowing to finance fiscal deficits explain the exceptionally high percentage shares of mark-up payments for FY 2024-2025, FY 2023-24, and FY 2022-23.

Second, 'defence affairs' and 'grants and transfers' are also among the government's primary budgetary priorities (accounting for >20% of the share in current expenditure). The defence sector allocation accounted for the second-highest percentage share of current expenditure in four of the five fiscal years. Likewise, allocation for grants and transfers accounted for the third-highest percentage share of current expenditure in four of the five fiscal years. FY 2021-2022 was an exception when subsidy allocation assumed the second rank, bringing defence expenditure and spending on grants and transfers third and fourth in order, respectively. In FY 2021-22, there was a significant deviation in the actual spending on petroleum subsidies compared to the budgeted allocation. This deviation was due to increased subsidy allocation to the LNG sector to provide gas at lower rates to industries and disbursement of Price Differential Claims (PDC) to Oil Marketing Companies (OMCs) due to a rising trend of oil prices in the international market.[25]

Third, subsidy allocation is also among the government's four leading current expenditure priorities. In just FY 2020-21, subsidies contributed relatively less to current expenditure as the government reduced power sector subsidies in line with

22 Trading Economics, "United States Effective Federal Funds Rate," Accessed August 25, 2024, https://tradingeconomics.com/united-states/effective-federal-funds-rate.

23 Trading Economics, "Pakistan Interest Rate," Accessed August 25, 2024, https://tradingeconomics.com/pakistan/interest-rate.

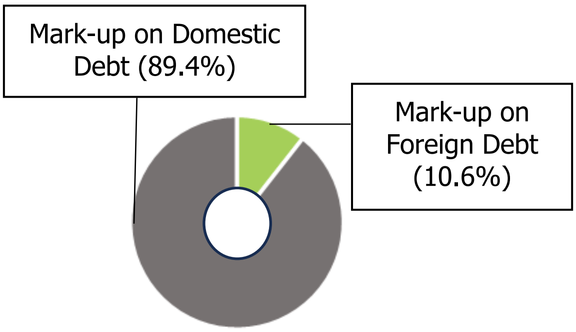
24 Ibid.

25 Shahbaz Rana, "Govt Clears Rs 55.5b in Price Differential Claims to OMCs," *Express Tribune*, May 17, 2022, https://tribune.com.pk/story/2356902/govt-clears-rs555b-in-price-differential-claims-to-omcs.

the IMF requirement.[26] Fourth, over the years, allocation for defence affairs and services, pensions, grants and transfers, running of civil government, and subsidies has been increasing in absolute terms. However, the relative percentage share of defence spending, grants and transfers, pensions, and expenses for running the civil government have declined in FY 2024-25, FY 2023-24, and FY 2022-23, compared to FY 2020-21 and FY 2021-22. This trajectory could be attributed to the higher total spending requirement for mark-up payments during these last three fiscal years.

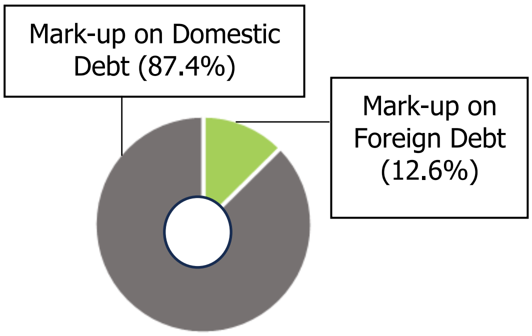
Mark-up Payments: Pakistan has been allocating the largest chunk of its resources to debt servicing, the primary burden of which is domestic debt, as the government heavily relies on domestic bank borrowing to fund its fiscal deficit. Mark-up payments on domestic debt account for over 85% of the budgetary mark-up payment burden. In the FY 2024-25 budget, 89.4% of the allocation for mark-up payments has been ear-marked for mark-up on domestic debt (Figure 6). Likewise, in FY 2023-24, FY 2022-23, FY 2021-22, and FY 2020-21, 87.4%, 86.9%, 88.1%, and 91.6% of the total allocation for mark-up payments were related to domestic debt, respectively (Figures 7, 8, 9, 10).

Figure 6: Mark-up Payments (FY 2024-25)



Source: Federal Budget FY 2024-25.[27]

Figure 7: Mark-up Payments (FY 2023-24)



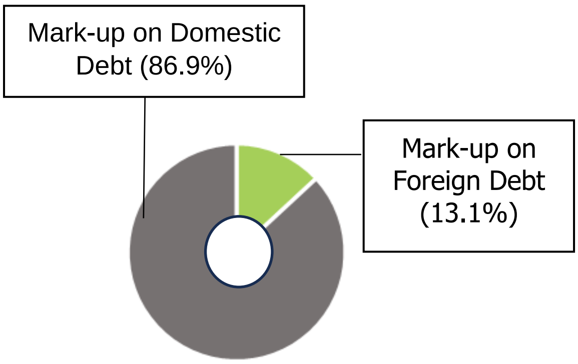
Source: Federal Budget FY 2024-25.[28]

26 Arif Habib Limited, *Pakistan Budget Preview: Revving up the Growth Engine*, report (Karachi: Arif Habib Limited, 2021), https://arifhabibltd.com/api/research/open?path=178/6497a70ae3d235cdcad54477.pdf.

27 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*

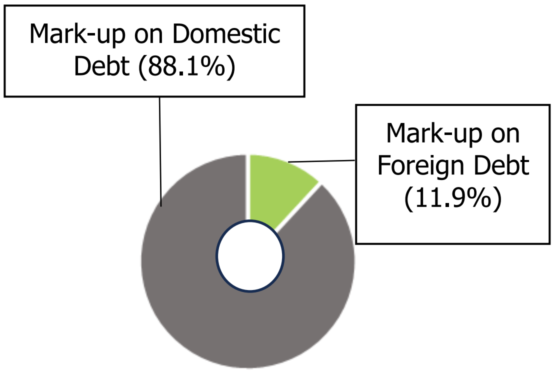
28 Ibid.

Figure 8: Mark-up Payments (FY 2022-23)



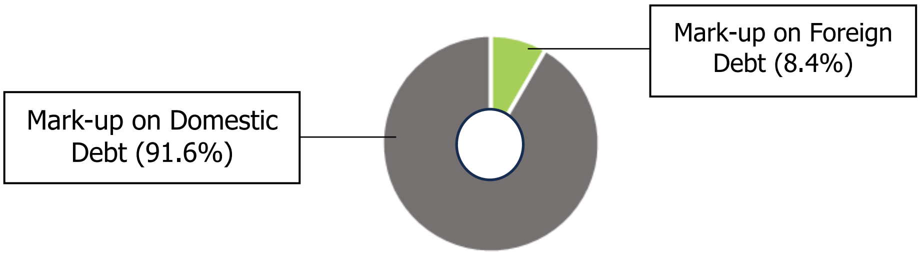
Source: Federal Budget FY 2023-24.[29]

Figure 9: Mark-up Payments (FY 2021-22)



Source: Federal Budget FY 2022-23.[30]

Figure 10: Mark-up Payments (FY 2020-21)

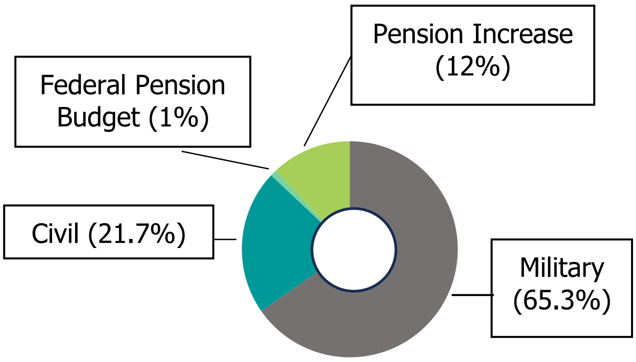


Source: Federal Budget FY 2021-22.[31]

Pensions: The share of military pensions accounts for a major portion of federal pension budget, as many military personnel retire earlier, resulting in longer pension durations for military retirees. Military pensions accounted for over 70% of the federal pension budget in FY 2023-24, FY 2022-23, FY 2021-22, and FY 2020-21 (Figures 12, 13, 14, 15). In the FY 2024-25 budget, 65.3% of the pension expenditure has been allocated for the military sector and 21.7% for the civil sector (Figure 11). 'Increase in pensions' accounts for 12% of the pension budget allocated for both military and civil sectors.

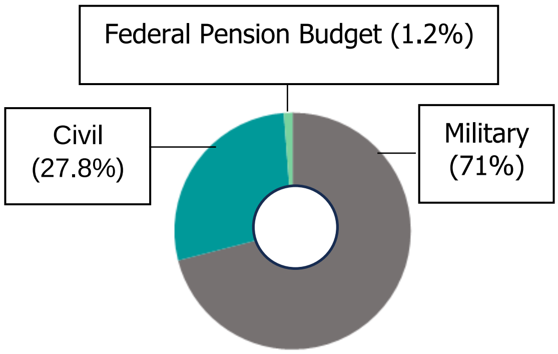
29 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief."*
30 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief."*
31 Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief."*

Figure 11: Pensions (FY 2024-25)



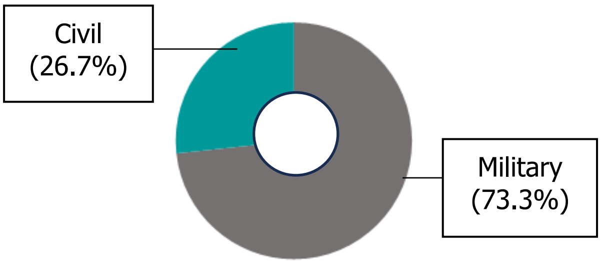
Source: Federal Budget FY 2024-25.[32]

Figure 12: Pensions (FY 2023-24)



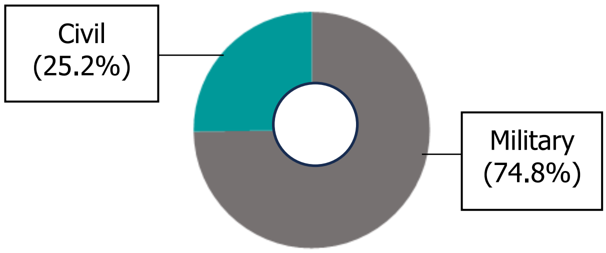
Source: Federal Budget FY 2024-25.[33]

Figure 13: Pensions (FY 2022-23)



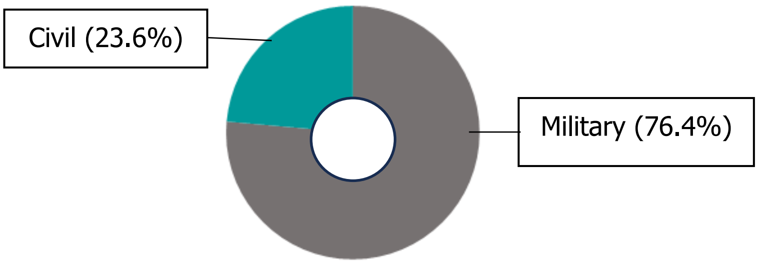
Source: Federal Budget FY 2023-24.[34]

Figure 14: Pensions (FY 2021-22)



Source: Federal Budget FY 2022-23.[35]

Figure 15: Pensions (FY 2020-21)



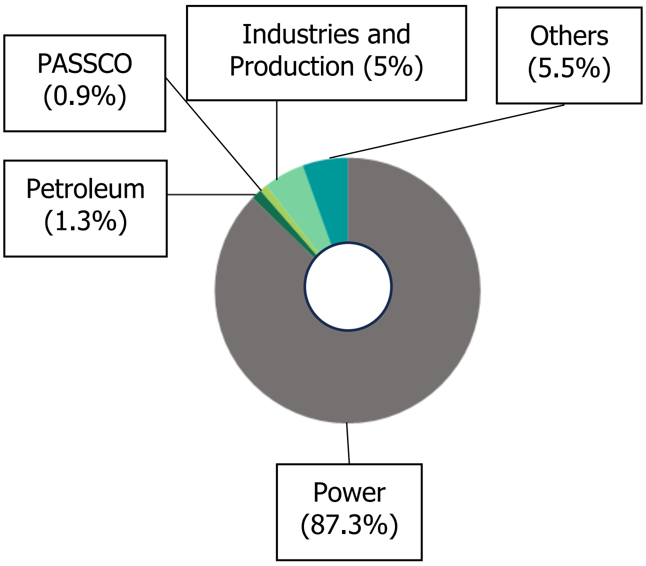
Source: Federal Budget FY 2021-22.[36]

Subsidies: A predominant portion of subsidies is allocated to the power sector. In FY 2024-25 budget, 87.3% of the subsidy expenditure has been earmarked for the power sector (Figure 16), while in FY 2023-24, FY 2022-23, FY 2021-22, and FY 2020-21, 54.5%, 78.9%, 70.8%, and 85.2% of the subsidy allocation was spent on the power sector, respectively (Figures 17, 18, 19, 20). A further breakdown of

32 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*
33 Ibid.
34 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief."*
35 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief."*
36 Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief."*

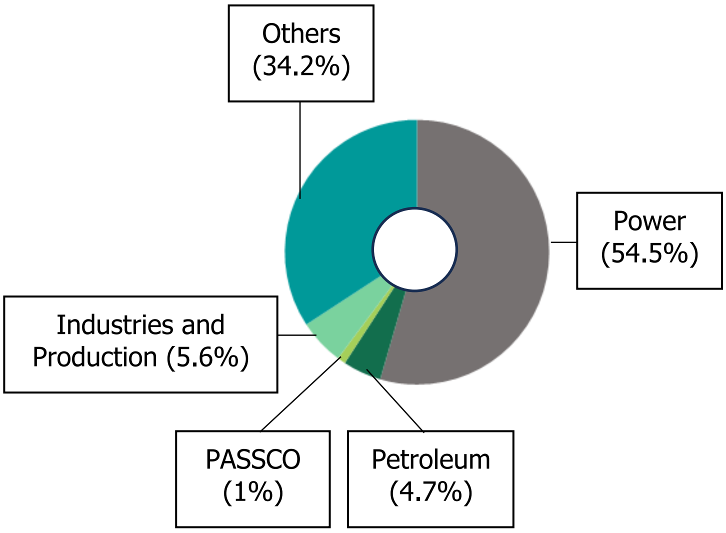
subsidies within the budget documents reveals that a major proportion of the power sector subsidies is allocated for IPPs and inter-disco tariff differentials. The government's contractual obligations with the IPPs require it to make guaranteed capacity payments to them regardless of electricity utilisation. The bills for capacity charges are shared between consumers through their electricity bills and the government through subsidy payments.[37] The inter-disco tariff differential subsidy (TDS) is extended to finance the gap between electricity tariff charged to distribution companies (DISCOS) by the Central Power Purchasing Agency (CPPA-G) determined by the National Electric Power Regulatory Authority (NEPRA) and the uniform electricity tariff charged to consumers by the DISCOS.[38]

Figure 16: Subsidies (FY 2024-25)



Source: Federal Budget FY 2024-25.[39]

Figure 17: Subsidies (FY 2023-24)



Source: Federal Budget FY 2024-25.[40]

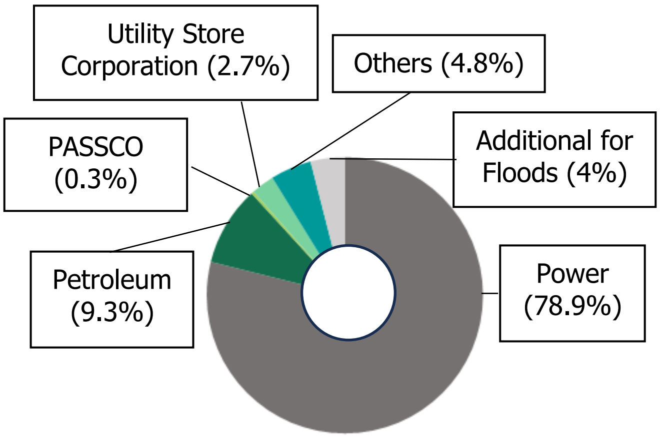
37 Khurram Hussain, "Analysis: Pakistan Pays Heavy Price for Excess Power Generation Capacity," *Dialogue Earth*, March 10, 2021, https://dialogue.earth/en/energy/pakistan-excess-power-generation/.

38 Robert Bacon, "Learning from the Power Sector Reform," (working paper, World Bank Group, Washinton, D.C., 2019), https://documents1.worldbank.org/curated/en/403611557151850485/pdf/Learning-from-Power-Sector-Reform-The-Case-of-Pakistan.pdf.

39 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*

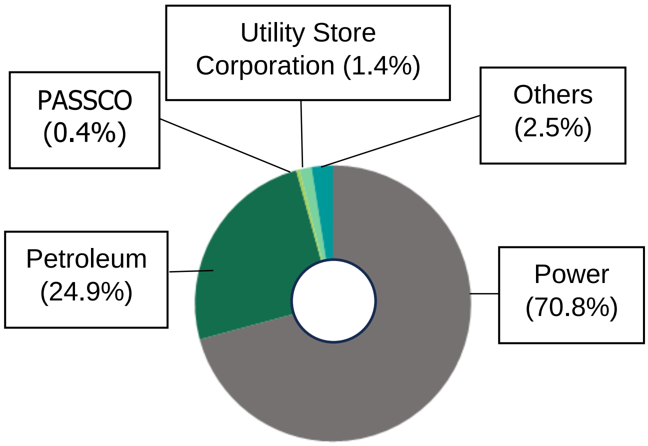
40 Ibid.

Figure 18: Subsidies (FY 2022-23)



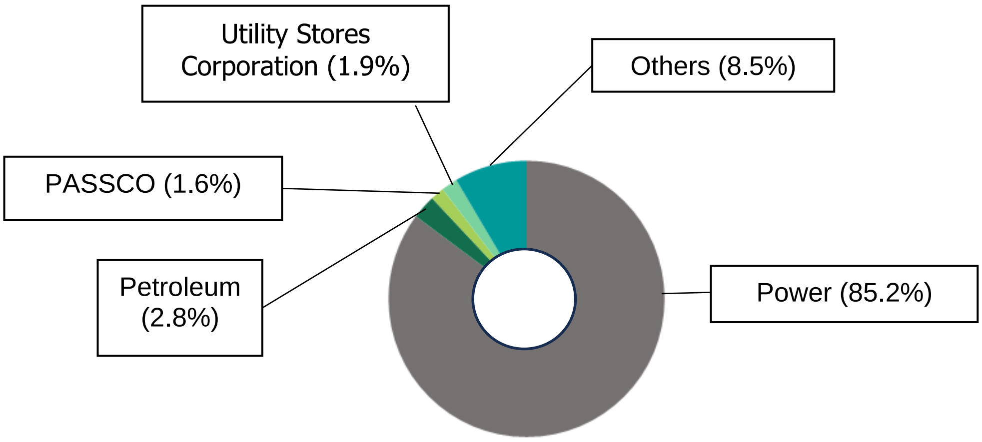
Source: Federal Budget FY 2023-24.[41]

Figure 19: Subsidies (FY 2021-22)



Source: Federal Budget FY 2022-23.[42]

Figure 20: Subsidies (FY 2020-21)

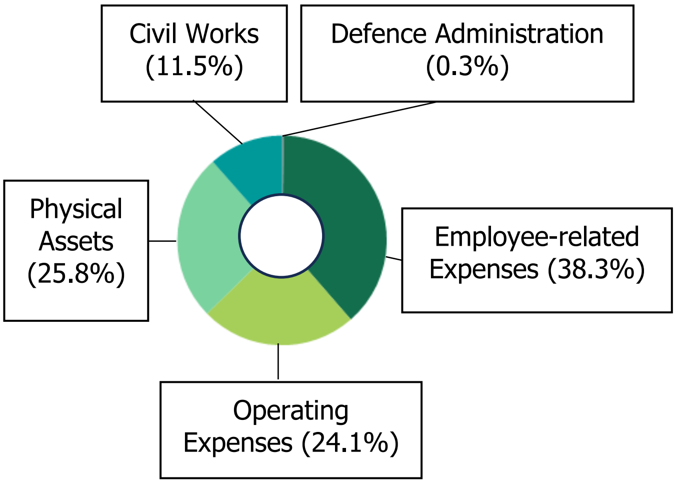


Source: Federal Budget FY 2021-22.[43]

Defence Affairs and Services: Employee-related expenses under the 'defence affairs' head account for the highest proportion of the federal defence budget. In the FY 2024-25 budget, a 38.3% share has been earmarked for employee-related expenses (Figure 21). Likewise, in other fiscal years, employee-related expenses accounted for over 35% of the defence budget (Figures 22, 23, 24, 25). The second highest proportion is spent on acquiring and maintaining physical assets, followed by operating expenses and civil works, respectively. 'Defence administration' head, on the other hand, accounts for a meagre proportion of federal defence budget.

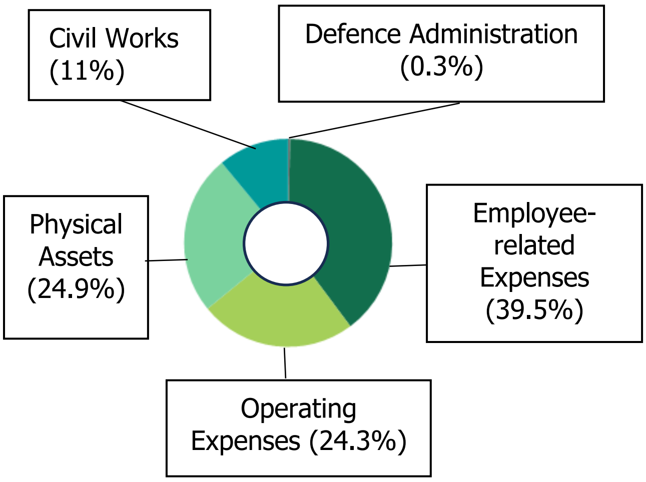
41 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief."*
42 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief."*
43 Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief."*

Figure 21: Defence Spending (FY 2024-25)



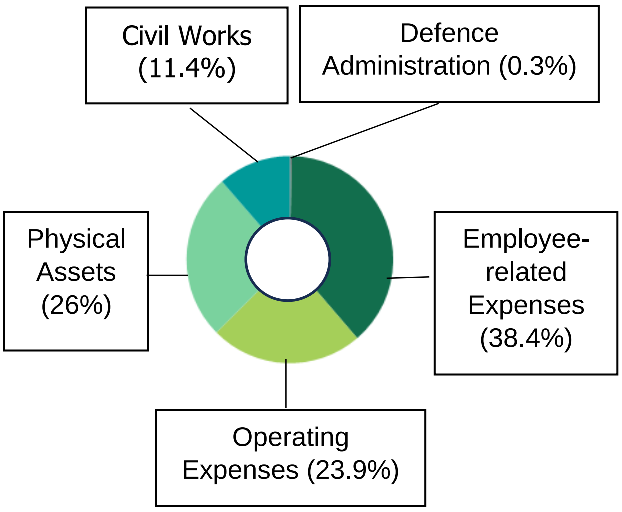
Source: Federal Budget FY 2024-25.[44]

Figure 22: Defence Spending (FY 2023-24)



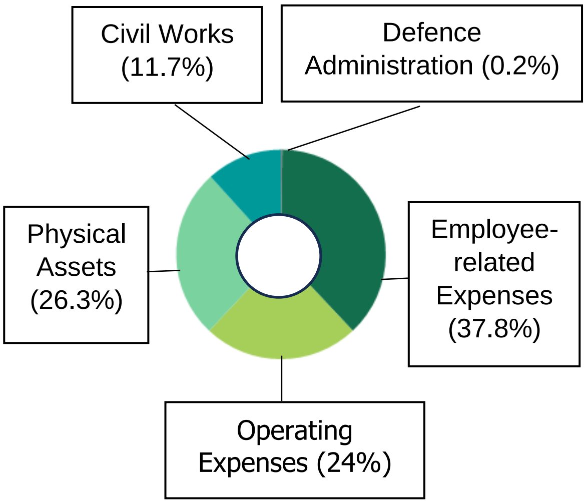
Source: Federal Budget FY 2024-25.[45]

Figure 23: Defence Spending (FY 2022-23)



Source: Federal Budget FY 2023-24.[46]

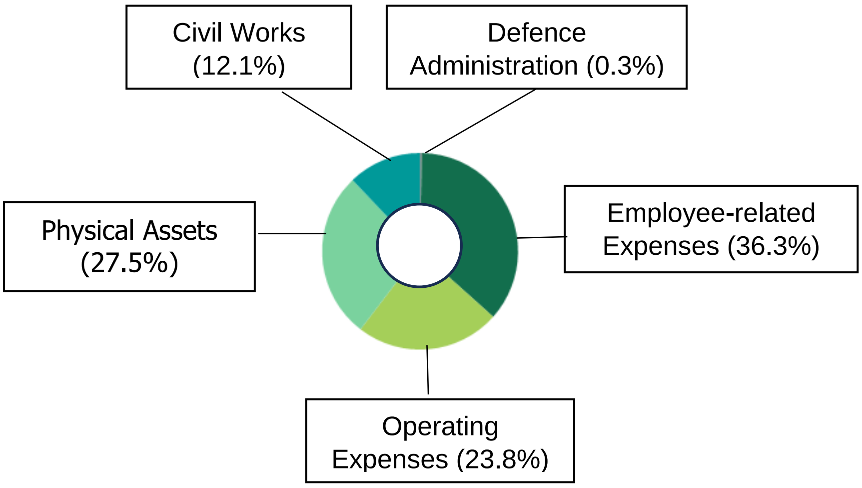
Figure 24: Defence Spending (FY 2021-22)



Source: Federal Budget FY 2022-23.[47]

44 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*
45 Ibid.
46 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief."*
47 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief."*

Figure 25: Defence Spending (FY 2020-21)



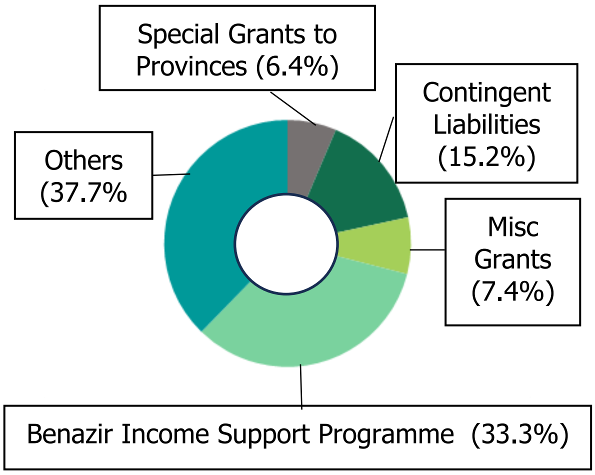
Source: Federal Budget FY 2021-22.[48]

4.2.2. Grants and Transfers to Provinces and Others

The highest proportions of 'grants and transfers' are allocated to BISP and contingent liabilities. In the FY 2024-25 budget, a 33.3% share from grants and transfers has been earmarked for BISP, followed by 15.2% for contingent liabilities (Figure 26). In FY 2023-24, FY 2022-23, FY 2021-22, and FY 2020-21, 31.4%, 35.3%, 22.6%, and 20.9% shares were spent on BISP, respectively, while 16%, 20.3%, 24.6%, and 34.6% shares were spent on contingent liabilities, respectively (Figures 27, 28, 29, 30). The categories of 'miscellaneous grants' and 'special grants to provinces' are also allocated significant shares. For instance, in the FY 2024-25 budget, a 7.4% share from 'grants and transfers' has been earmarked for the miscellaneous category, followed by 6.4% for special grants (Figure 26). Other smaller shares are allocated to several entities and projects. In the FY 2024-25 budget, for instance, a 37.7% share has been earmarked for over seventy entities and projects, categorised as 'others' (Figure 26).

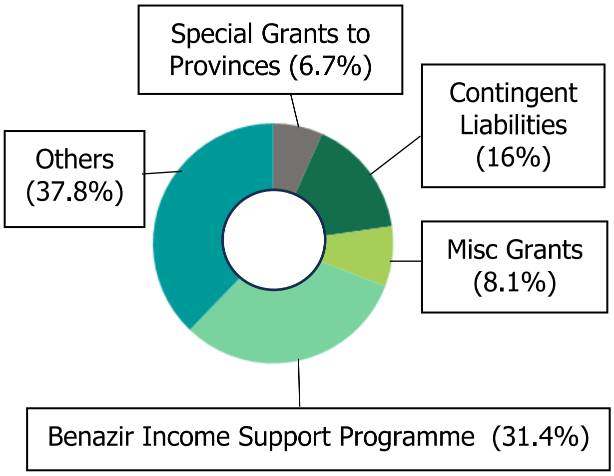
[48] Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief."*

Figure 26: Grants & Transfers (FY 2024-25)



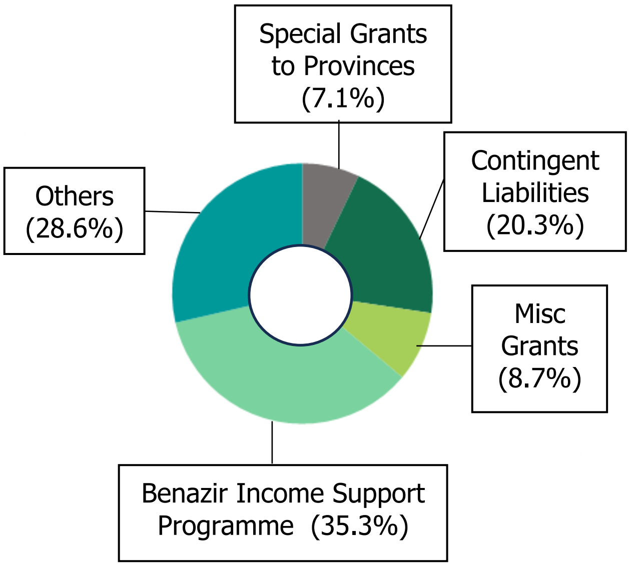
Source: Federal Budget FY 2024-25.[49]

Figure 27: Grants & Transfers (FY 2023-24)



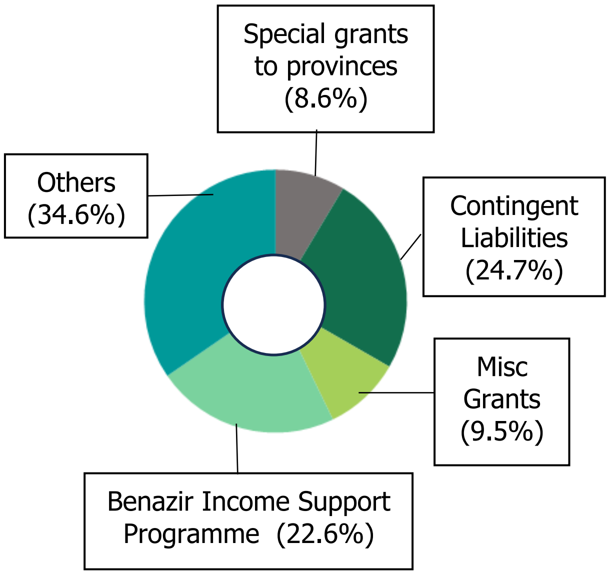
Source: Federal Budget FY 2024-25.[50]

Figure 28: Grants & Transfers (FY 2022-23)



Source: Federal Budget FY 2023-24.[51]

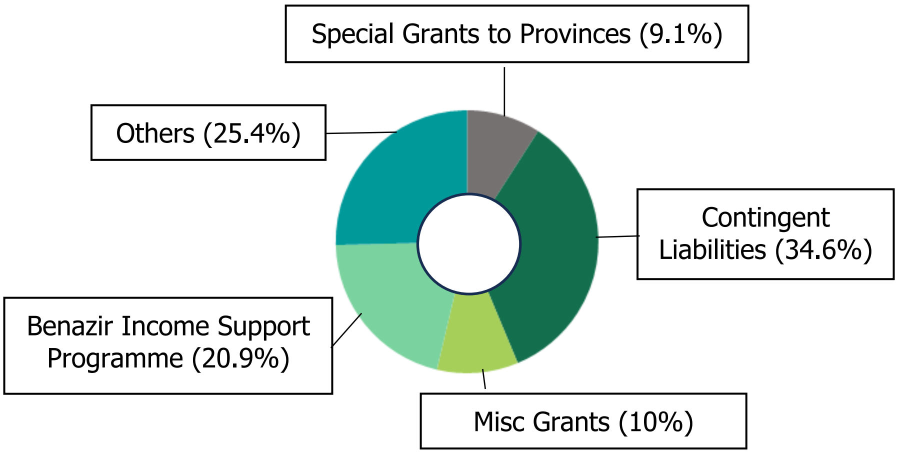
Figure 29: Grants & Transfers (FY 2021-22)



Source: Federal Budget FY 2022-23.[52]

49 Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*
50 Ibid.
51 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief."*
52 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief."*

Figure 30: Grants & Transfers (FY 2020-21)



Source: Federal Budget FY 2021-22.[53]

4.2.3. Development Expenditure

The major portion of development expenditure is spent on the Federal PSDP.

Federal PSDP: The allocation under Federal PSDP includes disbursement of funds to over 40 entities/projects. The figures below separately highlight the entities/projects that are among PSDP's top ten beneficiaries, while all remaining have been categorised as 'others.' The major priority under PSDP is assigned to NHA and the Water Resources Division, as they account for the highest percentage shares from the total PSDP allocation (Figures 31, 32, 34, 35). FY 2022-23 was a slight exception when the highest share was allocated to the Cabinet Division (Figure 33). However, the second and third highest shares were allocated to the NHA and the Water Resources Division, respectively.

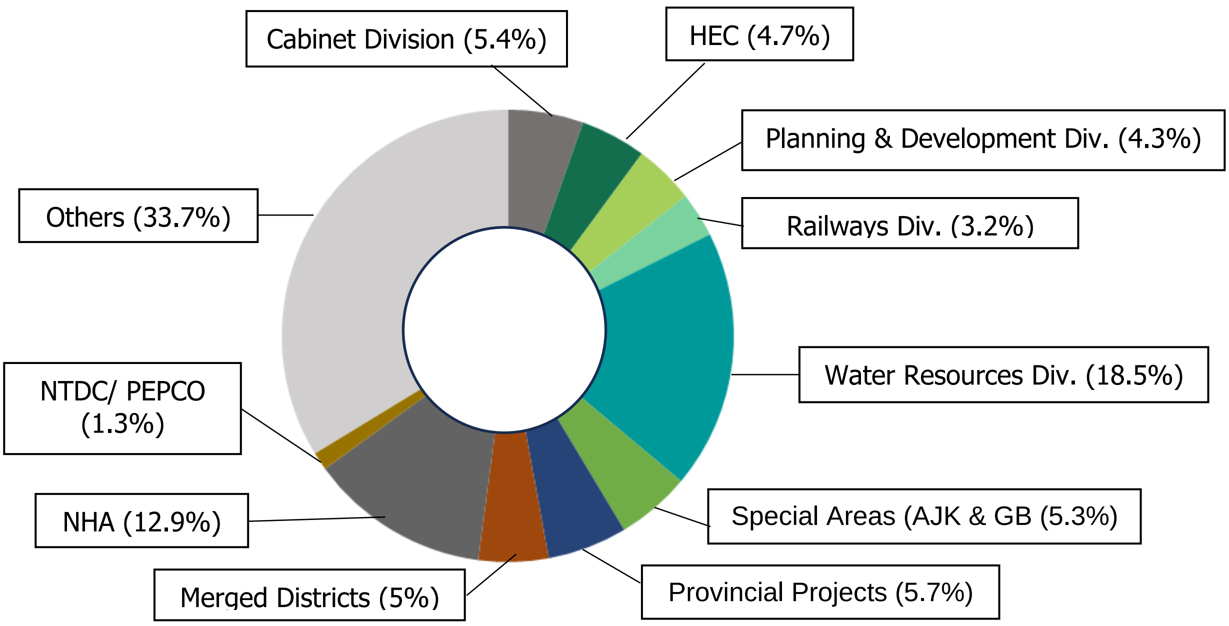
Other leading priorities include funds allocated to the Cabinet Division, Special Areas (Azad Jammu and Kashmir-AJK and Gilgit Baltistan-GB), provincial projects, merged districts of KPK, power sector (NTDC/ Pakistan Electric Power Company-PEPCO), and the finance division, as they are among the top five beneficiaries of allocation under PSDP in at least two of the five studied fiscal years (Figures 31, 32, 33, 34, 35). Notably, the Special Areas are among the top five beneficiaries in all the fiscal years and Cabinet Division in four of those years (Figures 31, 32, 33, 34, 35).

Moreover, the HEC and railways division are among the top ten beneficiaries in all of the studied budgetary years (Figures 31, 32, 33, 34, 35), the Pakistan Atomic Energy

53 Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief."*

Commission (PAEC) in four of the five studied years (Figures 32, 33, 34, 35), and the housing and works division in two of the studied fiscal years (Figures 32 & 34). Additionally, in the FY 2024-25 budget, a relatively significant portion of PSDP has also been earmarked for the Planning, Development & Special Initiatives Division, bringing it among the ten leading beneficiaries (Figure 31).

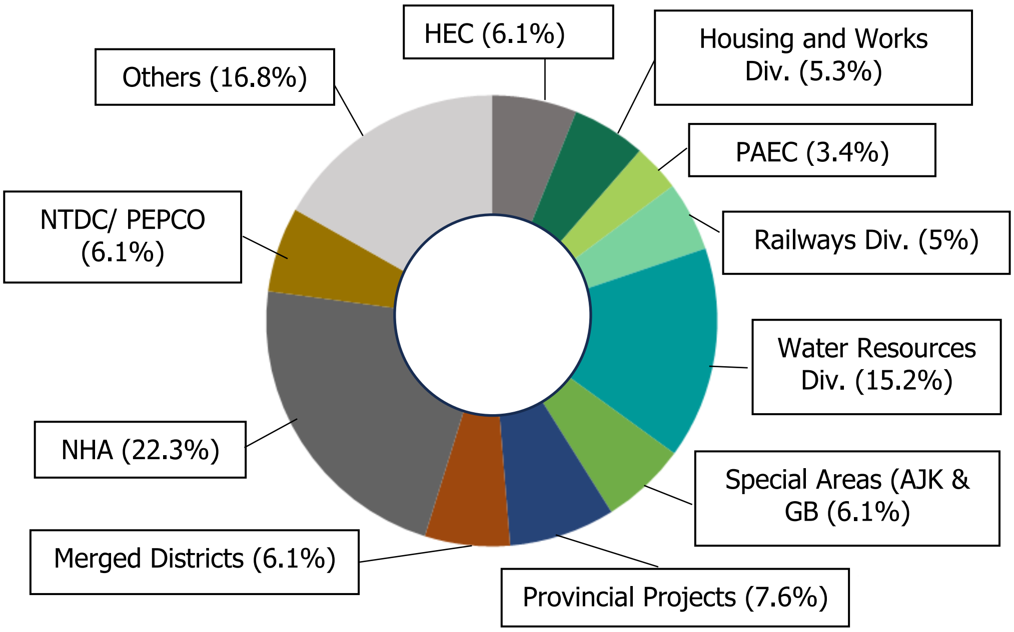
Figure 31: Federal PSDP (FY 2024-25)



Source: Federal Budget FY 2024-25.[54]

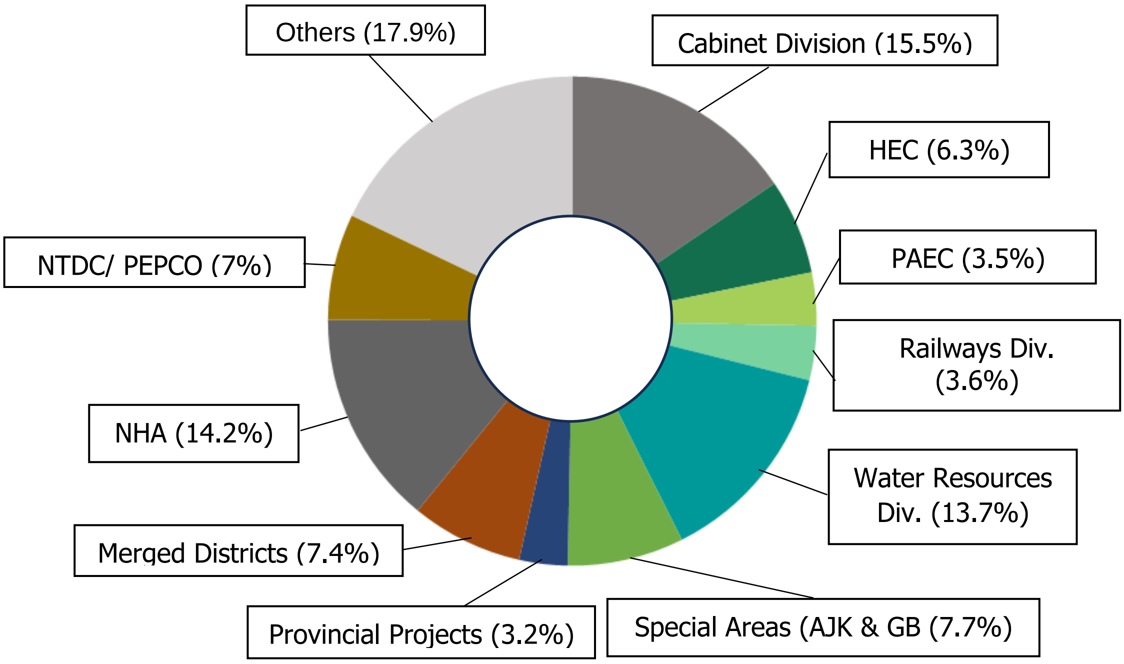
[54] Government of Pakistan, Finance Division, *"Federal Budget 2024-2025: Budget in Brief."*

Figure 32: Federal PSDP (FY 2023-24)



Source: Federal Budget FY 2024-25.[55]

Figure 33: Federal PSDP (FY 2022-23)



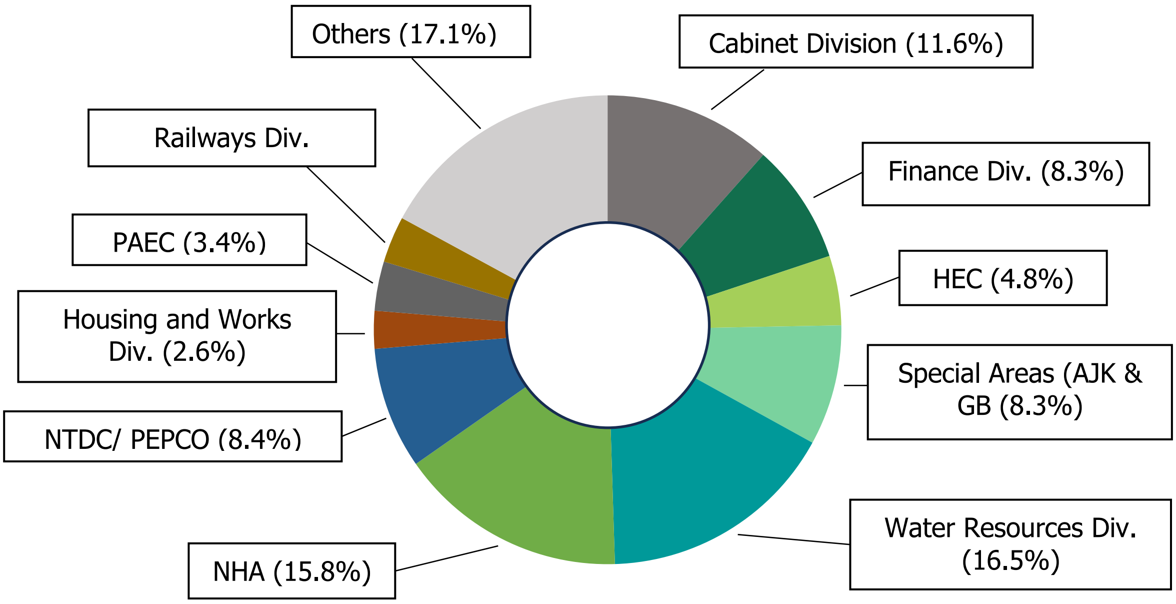
Source: Federal Budget FY 2023-24.[56]

---

55 Ibid.

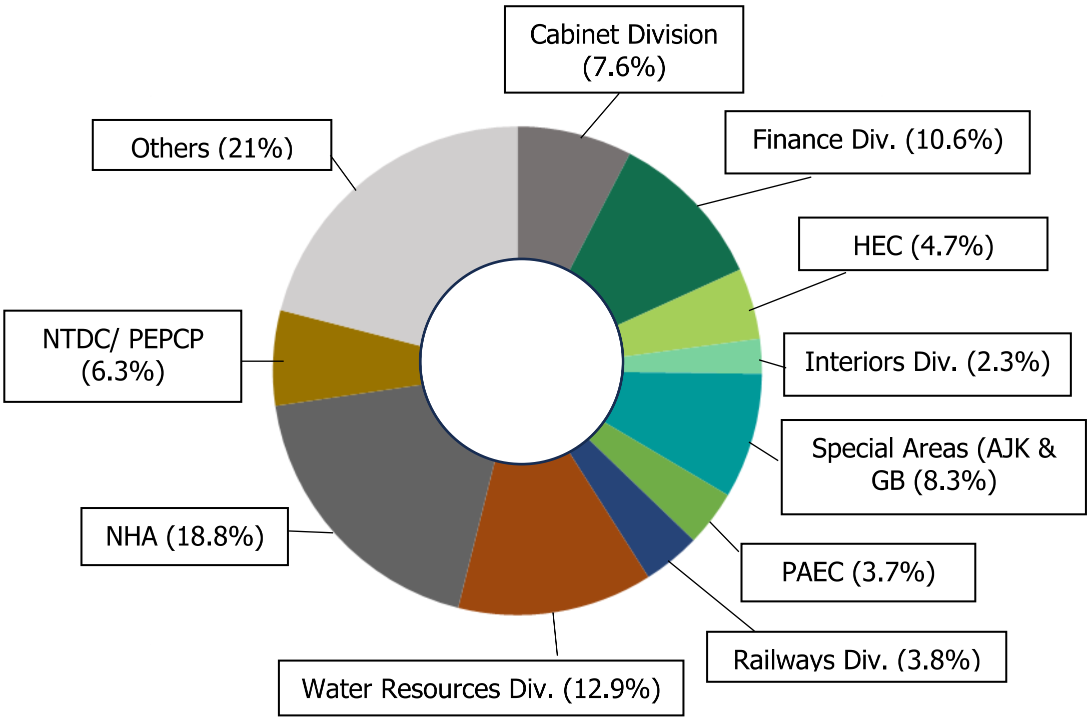
56 Government of Pakistan, Finance Division, *"Federal Budget 2023-2024: Budget in Brief."*

Figure 34: Federal PSDP (FY 2021-22)



Source: Federal Budget FY 2022-23.[57]

Figure 35: Federal PSDP (FY 2020-21)



Source: Federal Budget FY 2021-22.[58]

57 Government of Pakistan, Finance Division, *"Federal Budget 2022-2023: Budget in Brief."*
58 Government of Pakistan, Finance Division, *"Federal Budget 2021-2022: Budget in Brief."*

5. Way Forward

The present section outlines a way forward based largely on the assessment of the budgetary allocation in the five studied fiscal years while also eliciting major disclosures from the recent audit reports.

5.1. Mark-up Payments

The hefty burden of mark-up payments in the budgetary allocation necessitates urgent fixes and reforms on multiple fronts. Reducing the country's debt-to-GDP ratio requires pursuing a prudent debt management strategy, such as diversifying the debt portfolio or optimising borrowing costs, and growth-oriented policies, including strengthening the skills base of the labour force, enhancing competitiveness of export sectors, and improving the regulatory and business environment. Given the high levels of domestic mark-up payments burden, a data-driven approach to monetary policy should be pursued, carefully weighing the benefits of raising interest rates against its costs, including on debt servicing. A tighter monetary policy approach involving interest rate hikes to curb inflation–a strategy followed over the recent period–is considered suitable when demand-pull factors drive the latter. However, it might not be as effective when inflation is driven by cost-push factors, as had been the case with the inflationary surge in Pakistan over the recent period. A substantial amount can be saved in the national exchequer, even with a small reduction of 1-2% in interest rates.[59]

5.2. Defence Affairs and Services

Defence spending is one of the government's top current expenditure priorities, second only to mark-up payments, with the largest share allocated to employee-related expenses. While adequate military spending is essential for maintaining combat readiness, particularly given current geopolitical regional realities, a comprehensive review of defence expenditures, including employee-related costs, could identify potential areas for savings. These may include reducing duplication of efforts, re-evaluating workforce size, and streamlining auxiliary branches such as the medical and engineering corps.

---

59 Reuters, "Expert and Industry Views on Rate Cut," *Business Recorder*, June 11, 2024, https://www.brecorder.com/news/40307849.

5.3. Grants and Transfers

A notable portion of current expenditure is also allocated to grants. Budget management in Pakistan faces several challenges, including the allocation of funds without a proper needs assessment, lapses in funds due to the failure to surrender unutilised amounts in a timely manner, and ineffective record-keeping of financial commitments.[60] All grant transfers should be preceded by a thorough needs assessment, with the allocation process made transparent and spending by various entities closely monitored. Each year, the largest share of grant transfers is allocated to BISP. However, impact evaluations indicate that BISP transfers do not always achieve the desired outcomes, particularly in improving poverty indicators.[61] Experiences from across the world suggest that these support programmes can be made more effective in achieving desired outcomes through improvements in public service delivery, complementary interventions such as vocational training, robust administration and monitoring, involvement of recipients in the design of the programmes, and investment in capacity-building.[62]

5.4. Subsidies

Subsidy allocation is among the government's top four current expenditure priorities. Audit reports highlight several issues in this domain, including unauthenticated subsidy claims, unjustified payments, and underutilisation of allocated funds.[63] To address these challenges, the subsidy allocation process must be transparent and based on a rigorous and evidence-based needs assessment. This assessment should ensure that subsidies target the most pressing priorities and align with the intended outcomes. Reducing the fiscal burden of subsidies, particularly in the power sector, which consumes the largest share of subsidy allocation, requires comprehensive reforms. A significant portion of these subsidies is allocated to the inter-DISCO tariff differential and Independent Power Producers (IPPs). To reduce the financial strain

---

60 Auditor General of Pakistan, *Consolidated Audit Report (Federal Government) for the Audit Year 2023-24*, report (Islamabad: Auditor General of Pakistan, 2024), https://agp.gov.pk/AuditReports.

61 Muhammad Kashif Saeed and Muhammad Azmat Hayat, "The Impact of Social Cash Transfers on Poverty in Pakistan-A Case Study of Benazir Income Support Programme," (paper, Munich Personal RePEc Archive, Munich, 2020), https://mpra.ub.uni-muenchen.de/99805/1/MPRA_paper_99805.pdf.

62 DFID, "Cash Transfers," (paper, Department for International Development, London, 2011), https://www.peiglobal.org/dfid-cash-transfers-evidence-paper.

63 Auditor General of Pakistan, *Consolidated Audit Report (Federal Government) for the Audit Year 2022-23*, report (Islamabad: Auditor General of Pakistan, 2023), https://agp.gov.pk/AuditReports.

of IPP payments, renegotiating IPP contracts and transitioning toward a competitive electricity market, where market dynamics drive generation capacity development, is crucial. Adopting electricity tariffs that reflect the actual cost of service delivery, without preferential treatment, would also minimise the financial burden of inter-DISCO tariff differentials on the national exchequer. To mitigate the impact of such changes on vulnerable segments, alternative measures, such as direct financial assistance to low-income households, should be implemented to ensure affordability and equity.

5.5. Pensions

While the pension budget contributes relatively less to total current expenditure, the pension bills for both military and civil sectors are still considered largely unsustainable. Several countries across the world have implemented a multi-pillar pension system, which offers valuable lessons for reforming Pakistan's pension structure. In a multi-pillar pension system, pillar zero, referred to as the 'old-age social protection floor', is financed from the general budget to ensure that all older persons in need have access to basic income security and essential healthcare. The first pillar, referred to as the 'mandatory defined contribution scheme', is financed through employer and worker contributions. A few countries also apply a second or complementary pillar to supplement the pension benefits from first two pillars. It is financed by employer's contributions and privately managed. The third pillar is the voluntary private pension scheme, encouraging individuals to supplement mandatory contributions with private savings.[64]

5.6. Running of Civil Government

Although the budgetary allocation for the running of the civil government is relatively modest, there remains considerable scope for reducing expenses in this area. Cost-saving measures can be effectively pursued by streamlining operations through the elimination or merger of departments and agencies with overlapping functions. This would not only reduce redundancy but also enhance operational efficiency. Digitising government operations offers another avenue for significant savings by reducing administrative overheads, minimising paperwork, and improving service delivery.

[64] International Labour Organisation, "The ILO Multi-Pillar pension model: Building equitable and sustainable pension systems," Accessed August 29, 2024, https://www.ilo.org/publications/ilo-multi-pillar-pension-model-building-equitable-and-sustainable-pension.

These measures, collectively, could lead to a leaner, more cost-effective civil government while improving governance outcomes. [65]

5.7. Federal PSDP

First, the allocation under PSDP highlights a highly inequitable distribution of funds across human development vs hard infrastructure, with the latter being the primary focal point at the expense of the former. The budgetary allocation must strike a balance between infrastructure development and human development. Second, audit reports reveal several lapses in the management of funds allocated under PSDP, including underutilisation of funds and lack of monitoring and evaluation of projects leading to ineffective use of resources. Such lapses can be avoided by implementing rigorous monitoring and evaluation processes and making ongoing adjustments to resource allocations. Additionally, there should be limits on funding new projects until previous ones have been completed.[66]

65 Usman W. Chohan, "Fixing Pakistan's Budget," (paper, Centre for Aerospace & Security Studies, Islamabad, 2024), https://casstt.com/fixing-pakistans-budget/.

66 Auditor General of Pakistan, *Consolidated Audit Report (Federal Government) for the Audit Year 2022-23*.

Table 5: Action Matrix

Areas	Proposed Actions/ Strategies	Responsible Entities (Primary)	Priority Level
Mark-up Payments	Pursue a Prudent Debt Management Strategy	Finance Division, Economic Affairs Division	High
	Implement Growth-Oriented Policies	All ministries, SBP, Board of Investment, FBR	High
	Pursue a Data-Driven Approach to Monetary Policy	SBP, Research Institutes	High
Defence Affairs and Services	Conduct a review of defence spending to identify potential areas for cost savings	Ministry of Defence, National Security Council, Armed Forces	High
Grants and Transfers	Conduct a needs assessment for grant transfers	Finance Division, Planning Commission	High
	Ensure transparency in the grant allocation process	Finance Division, Planning Commission, Auditor General	High
	Regularly monitor spending activities of various entities	Finance Division, Planning Commission, Auditor General	High
	Implement robust administration and monitoring, involve recipients in programme design	Ministry of Poverty Alleviation and Social Safety	High
	Improve public service delivery to ensure effectiveness of social support programmes	Relevant Ministries (e.g., Ministry of Education and Professional Training)	Medium
Subsidies	Conduct a needs assessment before allocating subsidies	Finance Division, Planning Commission	High
	Ensure transparency in the process of subsidy allocation	Finance Division, Planning Commission, Auditor General	High
	Implement broad-based power sector reforms including renegotiation of IPP contracts	Power Division, NEPRA	High
Pensions	Implement a multi-pillar pension system	Finance Division, Securities and Exchange Commission of Pakistan	High
Running of Civil Government	Eliminate or merge departments performing overlapping tasks	Establishment Division, Cabinet Division	Medium
	Digitise operations	Ministry of Information Technology & Telecom	Medium
	Shut down redundant govt. agencies/departments	Establishment Division, Cabinet Division	Medium
Federal PSDP	Strike a balance between infrastructure and human development in PSDP allocation	Finance Division, Planning Commission	Medium
	Implement monitoring and evaluation processes	Planning Commission , Auditor General	High
	Make ongoing adjustments to resource allocations	Finance Division, Planning Commission	Medium
	Implement limits on funding of new projects until previous ones have been completed	Finance Division, Planning Commission	High

Source: Author's Compilation.

6. Conclusion

For decades, Pakistan has been experiencing large fiscal deficits, which have led to an unsustainable rise in the build-up of public debt stock and hampered the country's economic growth and development. While much focus has remained on the revenue side of the budgetary deficit, concrete reforms to manage the expenditure side still need to garner the necessary focus. Statistical modelling has revealed that an increase in both current and development expenditure has a statistically significant and positive relationship with fiscal deficit in Pakistan. A review of the government's budgetary allocation in FY 2024-25 and over the past four fiscal years suggests that a thorough reassessment of expenditure is critical. A predominant portion of the budget is allocated to interest payments, increasing demand for the aggregate budget outlay and diverting resources away from other vital necessities. Reducing the budgetary burden of mark-up payments, thus, has to be the utmost priority. This requires implementing a prudent debt management strategy, growth-oriented policies, and an evidence-based monetary policy.

In other domains as well, there is ample room for reducing expenses and making allocations more efficient and effective. A thorough review of defence spending, particularly employee-related expenses, can be effective to identify potential areas for cost-saving. Allocation of grants and subsidies should also be made more transparent and needs based. Spending on programmes like BISP should be rationalised through robust quality administration and monitoring and improvements in public service delivery.

Furthermore, it is high time to curtail power sector subsidies through timely and broad-based power sector reforms. Comprehensive reforms of the pension system must be implemented by drawing lessons from international best practices. The cost of running the civil government can be significantly reduced through digitisation initiatives, which streamline operations and lower administrative overheads. Moreover, downsizing the government by merging entities with overlapping functions or eliminating redundant departments can contribute to substantial savings. Equally important is ensuring that allocations under the PSDP are made more equitable, with a strong emphasis on transparency and accountability in spending. These measures can help maximise the impact of public investment and ensure that resources are directed toward priority areas.

The overarching objective should be to exercise disciplined expenditure control, optimise resource utilisation, promote a more equitable distribution of public income, and enhance social benefits. At the same time, fostering efficiency and boosting economic productivity are critical for Pakistan to achieve sustainable development and long-term fiscal stability.

Appendix A

Fiscal Indicators as a Percentage of GDP

	Fiscal Year	Current Expenditure (%GDP)	Development Expenditure (%GDP)	Revenue (%GDP)	Fiscal Deficit (%GDP)
1	FY91	19.2	6.4	16.9	9.5
2	FY92	19	7.5	19.2	8.7
3	FY93	20.5	5.7	18.1	8.1
4	FY94	18.8	4.6	17.5	5.9
5	FY95	18.5	4.4	17.3	5.6
6	FY96	20.0	4.4	17.9	6.5
7	FY97	18.8	3.5	15.8	6.4
8	FY98	19.8	3.9	16.0	7.7
9	FY99	18.6	3.3	15.9	5
10	FY00	16.4	2.5	13.4	5.4
11	FY01	15.3	2.1	13.1	4.3
12	FY02	15.7	2.8	14.0	4.3
13	FY03	16.2	2.6	14.8	3.7
14	FY04	13.7	2.8	14.2	2.3
15	FY05	13.3	3.5	13.8	3.3
16	FY06	12.6	4.5	13.1	4.0
17	FY07	14.9	4.6	14.0	4.1
18	FY08	17.4	4.0	14.1	7.3
19	FY09	15.5	3.5	14.0	5.2
20	FY10	16.0	4.4	14.0	6.2
21	FY11	15.9	2.8	12.3	6.5
22	FY12	17.3	3.9	12.8	8.8
23	FY13	16.4	5.1	13.3	8.2
24	FY14	15.9	4.9	14.5	5.5

25	FY15	16.1	4.2	14.3	5.3
26	FY16	14.3	4.0	13.6	4.1
27	FY17	14.6	4.8	13.9	5.2
28	FY18	14.9	4.0	13.3	5.8
29	FY19	16.2	2.7	11.2	7.9
30	FY20	17.9	2.4	13.2	7.1
31	FY21	16.3	2.2	12.4	6.1
32	FY22	17.3	2.4	12.1	7.9
33	FY23	17.2	2.3	11.5	7.8
34	FY24	16.9	2.2	12.6	6.5

ABOUT THE AUTHOR

Zahra Niazi *is a Research Assistant (Economic Affairs and National Development) at the Centre for Aerospace & Security Studies (CASS), Islamabad, Pakistan. She holds a Masters in Development Studies, with majors in Peace, Conflict and Development, from the National University of Sciences and Technology (NUST), Pakistan. Her research interests include Sustainable Development, Peace and Development, and Development Economics.*

ABOUT CASS

Established in 2018, the Centre for Aerospace & Security Studies (CASS) in Islamabad is a non-partisan think tank offering future-centric analysis on aerospace and security issues. CASS engages with thought leaders and informs the public through evidence-based research, aiming to influence discussions and policies at the national, regional, and global level, especially concerning airpower, emerging technologies, traditional and non-traditional security.

VISION

To serve as a thought leader in the aerospace and security domains globally, providing thinkers and policymakers with independent, comprehensive and multifaceted insight on aerospace and security issues.

MISSION

To provide independent insight and analysis on aerospace and international security issues, of both an immediate and long-term concern; and to inform the discourse of policymakers, academics, and practitioners through a diverse range of detailed research outputs disseminated through both direct and indirect engagement on a regular basis.

CORE AREAS OF RESEARCH

Aerospace

Emerging Technologies

Security

Strategic Foresight

CASS www.casstt.com

CENTRE FOR AEROSPACE & SECURITY STUDIES, ISLAMABAD

Independence | Analytical Rigour | Foresight

Old Airport Road, Islamabad, Pakistan
cass.thinkers@casstt.com
Centre for Aerospace & Security Studies
+92 051 5405011
cassthinkers
@CassThinkers
cass.thinkers