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State of the Pakistan Economy Growth, Inflation, Welfare and the Budget: Financial Year 2024

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Abstract

The Lahore School of Economics macro model estimates that Pakistan's GDP growth for FY 2023-2024 is projected at 1.68%, reflecting ongoing weaknesses in sectoral performance, particularly in large-scale manufacturing, which barely broke even after a contraction of -2.9% in FY 2022-2023. In contrast, GDP growth is expected to rise to 3.3% for FY 2024-2025. This low growth trajectory has been corroborated by various institutions, with the GOP estimating 2.4% and the IMF at 2.0%. The report explores the structural hypothesis that Pakistan's GDP growth is constrained by external imbalances, leading to periodic crises and necessitating IMF bailouts. Inflation for FY 2023-2024 is estimated at 18.9%, down from a peak of 33% in FY 2022-2023, primarily driven by a significant depreciation of the exchange rate and a fiscal deficit of 7.4%. The budget for FY 2024-2025 is highly aspirational, increasing from PKR 14.5 trillion to PKR 18.9 trillion, with tax revenues projected to rise from PKR 9.4 trillion to PKR 12.9 trillion. However, reliance on borrowing remains high, comprising over half of the total budget, raising concerns about sustainability. The report emphasizes the necessity for reducing borrowing costs and generating growth while addressing rising poverty levels, which have escalated from 5% in FY 2019-20 to an estimated 18% in FY 2022-23 due to inflationary pressures.

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Introduction

The Lahore School of Economics estimates that Pakistan's GDP growth for FY 2023-2024 will be 1.68%, reflecting ongoing weaknesses in sectoral performance, particularly in large-scale manufacturing, which has barely improved from a contraction of -2.9% in FY 2022-2023. This low estimate aligns with structural hypotheses suggesting that external imbalances constrain GDP growth, leading to periodic crises and necessitating IMF bailouts. Low GDP growth rates below 5% help contain the current account deficit, while higher rates exacerbate it due to elastic imports. The cyclical nature of GDP growth indicates that low-growth phases require reserve accumulation through IMF support, while high-growth phases deplete these reserves. Overall, the report emphasizes the persistent hiatus in GDP growth since FY 2021-2022 and underscores the need to address underlying structural issues to foster sustainable economic recovery.

Inflation for FY 2023-2024 is estimated at 18.9%, by our model. For FY 2022-2023, when inflation peaked at 33%, the overwhelming driver of inflation has been the huge depreciation of the exchange rate, by some 52%, contributing to three quarters of the inflation rate. Over FY 2023-24, depreciation has come down to 12%, contributing just 6.04% to the inflation rate of 18.9%. The second major driver of inflation for FY 2023-2024 has been the fiscal deficit, estimated to be 7.4% over the fiscal year. A significant and increased contributor to inflation over FY 2023-24, has been the change in commodity prices, whose impact on inflation comes in at 5.4%.

The budget for FY 2024-25 is characterized as highly aspirational, increasing from PKR 14.5 trillion in FY 2023-24 to PKR 18.9 trillion. This rise is driven by an ambitious target for tax revenues, projected to grow from PKR 9.4 trillion to PKR 12.9 trillion, representing a PKR 3.6 trillion increase. However, this goal is set against the backdrop of a low-growth economy, with declining investment and increasing capital outflows, particularly as large-scale manufacturing has contracted over the past two years. The reliance on raising tax revenues above 10% of GDP is seen as problematic within the context of an economy struggling to recover.

The budget aims to align revenue scarcity with expenditure needs, as revenues accounted for only 48.2% of the total budget last year, necessitating over half of the budget to be funded through borrowing. This situation is exacerbated by the transfer of most federal revenues to provinces, leaving the federation with just 1% of total revenues and heavily reliant on borrowing to meet expenditure commitments. With expenditures set to rise nearly 30% year-on-year and debt servicing costs consuming a significant portion of the budget, the report highlights the need for reducing borrowing and generating sustainable growth while addressing rising poverty levels through targeted welfare measures.

Therefore, there are two imperatives for the economy.

One, a reduction in borrowing and its costs. Increasing expenditure based on more than half of it coming from borrowing is not sustainable or rational. Therefore, expenditures have to be cut. And the budget deficit lowered.

Two, generating growth. But if significantly increased taxation is a disincentive to growth, then again, expenditures must be lowered, to better match existing taxation, again, requiring the budget deficit to be lowered. If there are some expenditures to be ring-fenced, exigencies of the state come to mind, but so does welfare.

Welfare must to the fore. As a result of the gradual increase in inflation peaking at 33% over FY 2022-2023, incomes have eroded, especially for the lowest deciles of the income distribution. Increasing the poverty headcount from 5% of the population in FY 2019-20 to 9% in FY 2021-22, and then doubling it to 18% in FY 2022-23. We have estimated that the eradication of extreme poverty will require unrequited transfers to the poor, of 10% of revenues. If this is a large ask of a developing economy, a more immediately doable ask can also be estimated. We have estimated that the poor spend a quarter of their caloric basket on wheat and bread. This makes the first step in poverty eradication to spend 2.5% of revenues on provision of free wheat to the means tested poor population.

GDP Growth Estimates for Fiscal Year 2024

The Lahore School of Economics macro model for the Pakistan economy estimates that GDP growth over the Fiscal Year 2023-2024 has been 1.68% (See Table 1). This estimate for the whole FY 2023-2024 is based on observed values for the four quarters (Q1-Q4), of the year.

Table 1: Estimates for GDP Growth Rate FY 2023-2024

	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25 (P)
GDP (\$ bn)			346.37	_
C (\$ bn)			256.25	
I (\$ bn)			54.81	
G (\$ bn)			36.31	
NX (\$ bn)			-1.0	
Growth Rate (%)	5.05%	0.05%	1.68%	3.34%

Source: Lahore School Modeling Lab Estimates, 2024

Sectoral Growth rates

This low estimate of GDP growth for FY 2023-2024 is based on a sustained weakness in sectoral growth, especially in large scale manufacturing (LSM)—which has barely broken—from the previous year FY 2022-2023 contraction of -2.9% (See Table 2).

Table 2: Sectoral Growth Rates

	FY 2022-2023	FY 2023-2024
Agriculture	1.5%	2.0%*
Industry	-2.90%	0.07%
LSM	-2.90%	0.07%**
Services	0.90%	0.33%*

Source: *LSML estimâtes, **PBS, GOP (June 2024)

This has been compounded by a weak, below-trend growth in agriculture. The bumper Rabi 2024 wheat crop was expected to boost agricultural growth. However, a 25% collapse in wheat prices for Rabi 2024 compared to Rabi 2023 has lowered the value of marketed output. A policy decision to import wheat, despite the upcoming Rabi harvest due, appears to be a contributing factor.

Trend growth in agriculture over the last six years comes has averaged 2.9% per annum (Economic Survey of Pakistan, 2018-23). However, trend growth in important crops during this period has been significantly lower, at just 1.4% per annum. We estimate that the decline in the value of the Rabi harvest has reduced agricultural growth for FY 2023-2024 to approximate 2%. Consequently, a flatline GDP growth ratefor FY 2022-2023 has been succeeded by a very weak GDP growth of 1.68% for FY 2023-2024.

Our GDP growth estimate aligns closely with the GOP's projection of 2.4% for FY 2023-2024 (See Table 3).

Table 3: Comparable Growth Rate Projections FY 2023-2024

Lahore School Modeling Lab (LSML)	1.68%
Government of Pakistan (GOP)	2.40%
International Monetary Fund (IMF)	2.00%
World Bank	1.80%
Asian Development Bank (ADB)	1.90%

Source: GOP (June 2024), IMF (April 2024 World Economic Outlook), World Bank (April 2024), Asian Development Outlook (April. 2024)

The IMF has a slightly higher estimate of 2.0% for FY 2023-2024, compared to ours. The Asian Development Bank and the World Bank also have smidge higher estimates of 1.8% and 1.9%, respectively, for FY 2023-2024.

Why this hiatus in GDP growth?

GDP Growth trends and their correlation to the Current Account

The fundamental question is: why has the hiatus in GDP growth persisted since FY 2021-2022? The trend GDP growth rate in the decade till FY 2021-2022 was 4.04% per

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annum, notwithstanding the dip into negative growth of half a percent during the Covid-19 year in 2020.

Table 4: Trend Current Account, Net Reserves, Budget Deficit and GDP Growth Rates

	FY 12-	FY 13-	FY 14-	FY 15-	FY 16-	FY 17-	FY 18-	FY 19-	FY 20-	FY 21-	FY 22-	FY 23-
	13	14	15	16	17	18	19	20	21	22	23	24
Total Exports (\$ mil)	32,016	30,931	30,616	28,038	28,614	31,345	30,801	28,452	32,092	40,247	36,124	36,614
Total Imports (\$ mil)	52,604	54,126	55,365	56,075	64,287	74,111	68,993	58,336	67,642	90,385	67,750	65,985
Current Account Balance (\$ mil)	-2,496	-3,130	-2,709	-4,961	-12,270	-19,195	-13,434	-4,449	-2,820	-17,481	-3,275	-1,000
Net Reserves with SBP (\$ mil)	6,008	9,033	13,088	16,819	16,144	9,789	7,285	11,231	16,119	9,814	4,445	9,385
Budget Deficit (%)	8.2	5.5	5.3	4.1	5.2	5.8	7.9	7.1	6.1	7.9	7.7	6.0
GDP Growth (%)	3.99	4.05	4.06	4.56	5.22	5.53	2.08	-0.47	3.94	5.05	0.05	1.68

Source: State Bank of Pakistan, 2024

There are two hypotheses for its causality.

The neoclassical/IMF hypothesis does not directly address GDP growth; instead it explains external imbalances in the Current Account as a result of domestic imbalances between savings and investment. Mahmood and Chaudhry (2024) argue that the causality extends beyond domestic imbalances, to include a significant imbalance between the rigidity of exports and the elasticity of imports concerning GDP growth.

In contrast, the structural hypothesis proposed by Chaudhry, ADB (2009), and Amjad & Shahzad (2019), directly addresses GDP growth and focuses on external imbalances. This hypothesis posits that while exports are highly inelastic with respect to GDP growth, imports are extremely elastic. It posits a tipping point approximating 5% GDP growth, beyond which imports increase dramatically, leading to an unsustainable Current Account balance.

Table 4 examines the hypotheses proposed by Chaudhry, ADB (2009) and Amjad & Shahzad (2019), generalizing that Pakistan's GDP growth is primarily constrained by imports. The LSM sector, along with agriculture, exhibits high import coefficients, indicating that Pakistan's GDP growth is better explained by external imbalances which lead to periodic crises. This necessitates recourse to IMF bailouts, suggesting that GDP growth is not primarily driven by domestic imbalances in resource allocation and efficiency.

Examining GDP growth from FY 2012-2013 to FY 2023-2024, Figure 1 illustrates that GDP growth varied between 4% per annum and 4.6% per annum from FY 2012-

2013 to FY 2015-2016. During this period, the Current Account deficit ranged from \$2.5 bn and \$5 bn. Although exports remained sluggish, ranging between \$28 bn and \$32 bn, imports also stayed within a relatively low band of US\$52 billion to US\$56 billion. So, these four years can be characterized as a relatively lower GDP growth phase.

For the next two years, FY 2016-2017 and FY 2017-2018, GDP growth in Pakistan rose above 5% per annum, ranging between 5.2% and 5.5%. During this period, the Current Account deficit ballooned, more than doubling from its preceding base of US\$5 billion to US\$12 bn in FY 2016-2017, and then increasing further to US\$19 billion in FY 2017-2018. This ballooning of the Current Account deficit was not driven by exports, which remained stagnant within the same range of \$28 billion to \$32 billion as in the previous lower GDP growth phase. Instead, the increase was primarily due to imports, which surged from US\$56 billion to \$64 bn in FY 2016-2017, and then to US\$74 billion in FY 2017-2018. Thus, this higher GDP growth phase, is characterized by sluggish exports but highly elastic imports relative to GDP.

For the next three years, from FY 2018-2019 to FY 2020-2021, GDP growth declined to 2.1% in FY 2018-2019, contracted to -0.5% in FY 2019-2020 due to COVID-19, and recovered to 4% in FY 2020-2021. During this lower GDP growth phase, the Current Account deficit also came off the boil, dropping from a previous high of US\$19 billion in FY 2017-18 to US\$13 billion in FY 2018-19, and then further to a low of US\$4 billion in FY 2019-2020 and US\$2.8 billion in FY 2020-2021. Sluggish exports, still ranging between US\$28 billion and US\$32 billion, did not influence the Current Account deficit, but reduced GDP growth lowered imports from a peak of US\$74 billion in FY 2017-2018 to US\$68 billion in FY 2018-2019 and US\$58 billion in FY 2019-2020.

100,000 6 5.53 90,385 80,000 5 4.05 68,993 67,750 65,**9**85 60,000 64,287 3.94 58,336 54,126 55,365 56,075 36,124 36,614 %GDP Growth 30,801 40,000 .016 30,931 30,616 28,452 CA Balance (\$ Millions) 20,000 2.08 496 -3,130 -2,709 -20,000 -13,434 0 -17,481 0.05 -19,195 -0.47-40,000 -1 FY 12- FY 13- FY 14- FY 15- FY 16- FY 17- FY 18- FY 19- FY 20- FY 21- FY 22- FY 23-14 15 16 17 18 19 20 21 - Total Exports ····· Total Imports Current Account Balance GDP Growth (%)

Figure 1: GDP Growth, Imports, Exports and CA Balance

Source: State Bank of Pakistan, 2024

The second phase of lower GDP growth (below 5%) was characterized again by sluggish exports, but very elastic imports with respect to GDP. In the following fiscal year, FY 2021-2022, GDP growth rebounded slightly to 5.1%. However, during this period of higher growth, the Current Account deficit surged unprecedently from the previous year's low of US\$3 billion (FY 2020-2021) to US\$17 billion (FY 2021-22), a sixfold increase. Although exports rose to US\$40 billion in FY 2021-2022, this increase was insufficient to significantly mitigate the CA deficit. The primary driver behind the widening deficit was again the imports, which escalated from US\$67 billion in FY 2020-2021 to US\$90 billion in FY 2021-2022. Therefore, this second phase of high GDP growth was again characterized by relatively sluggish exports, while imports remained highly elastic with respect to GDP.

In summary, over the last decade leading up to FY 2021-2022, low GDP growth of below 5% kept a lid on the CA deficit. Conversely, high GDP growth, above 5% blew up the CA deficit, which cannot be well explained by sluggish exports, but imports, which are observed to be very elastic with respect to GDP. Imports tend to surge sharply as the GDP growth rate exceeds 5% and moderate when GDP growth falls below this threshold, bringing us to the current hiatus in GDP growth observed since FY 2021-2022.

Import dependence of GDP growth

With imports being highly elastic with respect to GDP growth, the relationship between them should not be viewed as a one-way street, where imports function solely as a response to GDP and where GDP growth exceeding 5% leads to surging imports. Instead, the causal relationship between imports and GDP growth must be viewed the other way around, with GDP growth as a function of imports. Certainly, in the case of Pakistan, GDP growth is heavily dependent on imports. We have estimated this coefficient of import dependence in production. The production of all goods in the economy requires capital goods (K goods), and intermediate goods such as energy and raw materials (I goods) as illustrated in Table 5. Consequently, K goods and I goods, can be grouped together as essential inputs needed for the production of other goods, as opposed to consumer goods (C goods).

Table 5: Imports Decomposition

FY 2022-2023	PKR (000s)	%
Total Import Payments	12,557,604,901	100%
I Goods	7,682,611,028	61%
Fuels	4,555,588,842	36%
K Goods	1,340,638,187	11%
C Goods	3,534,355,688	28%

Source: State Bank of Pakistan, 2023 & 2024

Imports into the economy can be classified as K goods and I goods, which are necessary for production, as well as C goods, which are consumed directly by consumers. The import dependence of production can be estimated as the sum of K goods and I goods imported, resulting in a high figure of 72%, as shown in Table 5.

The high import elasticity of GDP growth, along with the significant import dependence of production, permits sustained GDP growth only under two conditions:

First, exports must match imports, ensuring that the CA is balanced or positive. However, as observed, this is not the case for Pakistan which runs a chronic CA deficit that ranges between \$2 bn and \$5 bn when GDP growth is below 5%. In

contrast, this deficit balloons to between US\$12 billion and US\$19 billion, when GDP growth rises above 5%.

Second, given the persistent deficits in the Current Account, and their expansion with high GDP growth above 5%, such growth based on high import dependence must be financed through the reserves held by the State Bank of Pakistan.

Figure 2 shows that each phase of low GDP growth, FY 2012-2013 to FY 2015-2016 in the first low GDP growth phase, and FY 2018-2019 to FY 2020-2021 in the second low GDP growth phase, is based on depleted reserves being built up. In the first low GDP growth phase, reserves rise from US\$6 billion to US\$17 billion. In the second low GDP growth phase, reserves rise from US\$7 billion to US\$16 billion again. These reserves were primarily built up by recourse to lending from the IMF. The first low GDP growth phase largely coincides with the 22nd EFF (FY 2014 to FY2017) with the IMF. The second low GDP growth phase largely coincides with the 23rd EFF (FY FY2019 to FY2022).

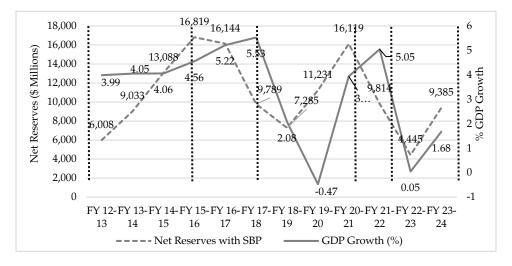


Figure 2: GDP Growth and Net Reserves

Source: State Bank of Pakistan, 2024

Each low GDP growth phase—having built up reserves—enabling a brief subsequent period of high GDP growth above 5%. This growth depletes accumulated reserves, necessitating another low-growth phase to rebuild reserves through IMF borrowing programs.

As Figure 1 shows, the first low growth phase from (FY2013-FY2017) saw reserves rise to US\$16 billion, permitting a brief high-growth phase (FY 2016-2018)

that reduced reserves to US\$9 billion. Similarly, the second low-growth phase (FY2019-FY2021) rebuilt reserves to US\$16 billion, enabling a brief high-growth period in FY 2021-2022 that again depleted inherited reserves to US\$9 billion.

This cyclicality arises from Pakistan's structural dependence on imported capital (K goods) and intermediate goods (I goods), which create high import elasticity relative to GDP growth. Chronic CA deficits—ranging from US\$2–5 billion during low-growth periods to US\$12–19 billion during high-growth phases—make short run GDP growth a function of reserves and force reliance on IMF programs. This leads toperpetuating alternating phases of prolonged low growth and unsustainable high growth.

Making short run GDP growth a function of reserves

Therefore finally, three conditions make short run GDP growth a function of reserves.

- a) A high elasticity of imports with respect to GDP; based on,
- A high coefficient of imports of K goods and I goods needed for production of output; combined with,
- c) Chronic Current Account deficits.

This makes short run GDP growth a function of reserves, with successive cyclicality between low growth and high growth phases, explaining the current hiatus in GDP growth. Table 4 shows that the last high GDP growth phase of 5.1% in FY 2021-2022, was based on a buildup of inherited reserves of \$16 bn. The brief high plunged reserves down to \$9 bn. The succeeding FY 2022-2023 saw reserves plunge to their lowest level in a decade to US\$4 billion. During this time, GDP growth flatlined according to all estimates, including ours, those from the Government of Pakistan (GOP), and other comparators.

A short Stand-By Agreement with the IMF has enabled a buildup of reserves to US\$9 billion for FY 2022-23. However, this has only allowed for a modest pickup in GDP growth, estimated at 1.68% over FY 2023-24. Consultations with the interim Finance Minister in early 2023 confirm reserves as the primary constraint on production. In that year, with reserves at a critically low level of US\$3 billion, Letters of Credit for imports had to be restricted, as allowing all applications could have resulted in a hemorrhaging of these last US\$3 billion. The criticality of reserves for raising GDP growth underscores new Finance Minister's policy to seek another borrowing program from the IMF a sin qua non. The recently signed 24th EFF of US\$7 billion with the Fund, should enable this. Our model projects that GDP growth accordingly should rise to 3.3% for FY 2024-25 (see Table 1).

Policy to raise GDP growth and dampen short run cyclicality

Short run GDP growth and its pronounced cyclicality are observed to be functions of reserves, predicated on three conditions: a high elasticity of imports with respect to GDP growth, a high coefficient of import of K and I goods for production, and the presence of chronic Current Account deficits that persist even during low GDP growth but balloon during high GDP growth phases exceeding 5%.

The fulcrum of these three conditions is the middle condition, which indicates a high coefficient of imports of K and I goods for production of output, calculated at 72%. Consequently, any constraint on the import of K or I goods will adversely affect production output and its growth over time. Therefore, it is essential to liberalize import of K and I goods as reserves build up.

The economy imports another 28% of C goods, as shown in Table 5. These goods are not necessary for increasing output or its growth over time.; therefore, imposing constraints on the import of C goods should not adversely affect output or its growth over time. Consequently, a five-year growth strategy could be based on completely eliminating the import of C goods. This will achieve two objectives: it would free up 28% of reserves for the import of K and C goods, and it would create a domestic market for C goods through import substitution, encouraging local investment. Both of these factors should enable a higher GDP growth rate for a given level of reserves while also dampening the short run cyclicality in GDP growth.

A longer-term strategy could mirror the import substitution approach for C goods by focusing on I goods where possible, over the next ten years, followed by K goods over the subsequent fifteen years. This would provide a comprehensive long-term perspective plan spanning the next thirty years.

Inflation Estimates

Inflation for FY 2023-2024, is estimated at 18.9% by our model, as shown in Table 6.

Time	Output	Budget	Exchange	Commodity	Inflation	Inflation	Inflation
Period	Gap	Deficit	Rate	Prices	(Model	(GoP	(IMF
			Depreciation		Est.)	Est.)	Est.)
	(% of	(% of	%	Impact on Þ	%	%	%
	GDP)	GDP)					
FY 2019-	-1.70	6.40	0.88	-2.00	5.28	9.30	9.30
20							
FY 2020-	-1.80	5.20	-0.78	9.07	13.49	8.20	8.20
21							
FY 2021-	0	7.00	3.59	7.69	15.88	11.00	11.00
22							

Table 6: Price Model Estimations from FY 2019- FY 2024

Time Period	Output Gap	Budget Deficit	Exchange Rate Depreciation	Commodity Prices	Inflation (Model Est.)	Inflation (GoP Est.)	Inflation (IMF Est.)
FY 2022- 23	0	5.00	26.26	2.04	33.30	29.0	29.0
FY 2023- 24	0	7.5	6.04	5.39	18.9	23.41* 12.57**	24.8

Source: Ministry of Finance (June 2024), IMF (Feb 2024 World Economic Outlook Update) *Average for FY 23-24

Our estimate of inflation at 18.9% for FY 2023-2024, lies midway between GOP's two estimates of average inflation for FY 2023-24, which are 23.4% and a year-on-year change of 12.6% (June 2023- June 2024). The year-on-year change indicates that inflation indeed has indeed moderated over the course of this fiscal year. Our model estimates inflation identifies four causal factors:

- An output gap,
- A budget deficit,
- Depreciation of the exchange rate,
- Global commodity prices.

For FY 2022-2023, when inflation peaked at 33%, the primary driver was the significant depreciation of the exchange rate, which fell by approximately 52%, contributing to three-quarters of the inflation rate, as shown in Table 6.

Over FY 2023-2024, depreciation has decreased to 12%, contributing only 6% to the overall inflation rate of 18.9%. The second major driver of inflation for this fiscal year has been the fiscal deficit, which is estimated at 7.5%. Additionally, a significant contributor to inflation has been the change in commodity prices, particularly energy prices, which have impacted inflation by 5.4%.

The output gap has exerted a disinflationary effect over the previous three fiscal years due to the Covid-19 pandemic lockdowns. However, post-pandemic, this output gap is estimated to have a neutral impact on inflation, neither disinflationary nor inflationary in nature.

The significance of the increase in energy prices on inflation

The most interesting variable to emerge from this report's estimation and analysis of inflation is energy prices. While the other major contributors to inflation—depreciation of the exchange rate, and the fiscal deficit—are larger than the variable of change in energy prices, both depreciation and the deficit lead to an increase in inflation almost inadvertently. The express aim of GOP is not to increase the price

^{**}Year on Year Change (June 2023- June 2024)

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level in the economy by allowing depreciation of the exchange rate, nor is it to increase the price level by running a budget deficit.

In contrast, the variable of change in energy prices, is distinct from these other major contributors. In the variable of change in energy prices, GOP is seen to actively raise energy prices as a stated policy. While some of these increases may be necessary to cover rising producer costs, our estimates indicate that a much larger part of the increase in energy prices is based on increased taxation. Thus, GOP's policy of reducing revenue shortfalls through increased energy taxation contributes significantly to inflation.

This report seeks to quantify the increase in consumer price of six main sources of energy and decompose this increase into the share attributed to producer prices and the share resulting from increased taxation. The six main sources of energy, whose consumer prices have increased over FY 2023-2024 are petrol, kerosene, high-speed diesel (HSD), electricity, coal, and natural gas.

This increase in energy prices for end consumers, whether households or firms, will have two significant effects.

First, the increase in energy prices for consumers will raise the cost of living, contributing directly to inflation.

Second, the increase in energy prices for firms—whether employers or sole producers of goods and services—will raise their production costs, creating a secondary multiplier effect on inflation as these increased costs are passed through to higher prices for goods and services produced.

This report estimates only the first direct effect of increase in energy prices on inflation, leaving the estimation of the secondary multiplier effect on inflation to follow.

Derivation of increase in energy prices

Table 7 estimates the change in consumer prices, for the six main sources of energy with publicly available data. The change reflects the nominal price per unit of energy for the consumer, averaged to account for variations in unit prices based on consumption levels.

Table 7: Increase in Energy Prices (unweighted % change) (June 2023 to June 2024)

	ΔSupplier Price	ΔTaxation	ΔConsumer Price
Natural Gas	103%	183.27%	134%
Electricity	52.99%	127.17%	93.19%
Coal	20%	0%	20%
Petrol	8%	20%	10%
HSD	2.73%	12.43%	6%
Kerosene	3.84%	33.27%	4.71%
Unweighted Average	32%	63%	45%

Source: Lahore School Modeling Lab estimates, 2024

Note: The price increase for each category is given for the change during the time period between t0 and t1, t0 being June 2023 and t1 being June 2024, except for Natural gas where t0 is Jan, 2023 and t1 is Feb 2024 and Petrol where t1 is May, 2024.

The average price of electricity per unit has increased by 93% over FY 2023-2024. This rise in the nominal price for consumers attributed to two factors: an increase in the nominal price charged by suppliers and an increase in the nominal rupee value of the tax charged by GOP. Table 7 shows that the price of natural gas has risen by 134% over FY 2023-2024, with the supplier's price increasing by 103% and GOP's tax rising by 183.3%. The price of electricity for consumers went up by 93%, with the supplier price rising by 53% and GOP's tax increasing by 127%.

The price of coal has gone up by 20% over FY 2023-2024, with the supplier price rising by 20% while GOP's tax remained constant.

The price of petrol for consumers increased by 10% over FY 2023-24, with the supplier price rising by 8% and GOP's tax went up by 20%.

The price of High-Speed Diesel (HSD) increased by 6% over FY 2023-24, with the supplier price rising by 2.73% and GOP's tax increasing by 12.43%.

The price of kerosene went up by 4.71% over FY 2023-24, based on a suppliers' price increase of 3.84% and a GOP tax increase of 33.27%.

In terms of the nominal prices charged to consumers, the average price across these six sources of energy has risen by 45%. On average, GOP's tax has increased by 63% over the past year, while supplier prices have risen only by 32%.

While GOP is sovereign in its decision to raise revenues through ad valorem taxes on goods and income taxes to plug its deficits, it is important to note that these ad valorem taxes significantly raise consumer prices more than suppliers' prices. Additionally, ad valorem taxes are regressive, particularly for energy sources like petrol and high-speed diesel, where low-income consumers cannot be adequately protected.

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Derivation of weighted increases in energy prices to determine impact on inflation

Nominal price increases in the six main sources of energy directly impact consumers and consequently, inflation. However, consumer reliance on these energy sources varies. Therefore, the impact of these nominal price increases is weighted by this reliance to determine the proportionate impact on inflation.

Furthermore, energy constitutes only a part of the consumer basket of goods used to calculate the Consumer Price Index for estimating inflation. This coefficient of energy share is applied to the weighted price increases to determine the energy impact on inflation of 5.4% (See Table 5).

The weighted increase in energy prices for consumers is presented in Table 8, decomposed into the share of this increase from suppliers' price and the share from GOP's tax.

Table 8: Increase in Energy Prices (weighted % change) (June 2023 to July 2024)

	ΔSupplier Price	ΔTaxation	ΔConsumer Price
Natural Gas	19.45%	22.18%	41.64%
Electricity	4.13%	11.72%	15.84%
Coal	3.8%	0.00%	3.8%
Petrol	0.53%	0.32%	0.85%
HSD	0.19%	0.43%	0.62%
Kerosene	0.04%	0.01%	0.05%
Weighted Average	4.69%	5.78%	10.47%

Source: Lahore School Modeling Lab Estimates, 2023 & 2024

A 0.85% increase in consumer price for petrol was observed from June 2023 to June 2024, with 0.53% attributed to suppliers' price and 0.32% to GOP's tax. Kerosene's weighted consumer price rose marginally by 0.05%, while coal saw a 3.8% increase entirely by suppliers' price. High Speed Diesel (HSD) experienced a 0.62% weighted consumer price increase, comprising 0.19% from suppliers' price and 0.43% from GOP's tax. Natural gas recorded the highest weighted price rise at 41.64%, with 19.45% from suppliers' price and 22.18% from GOP's tax.

The weighted average increase in consumer prices across all six energy sources rose by 10.47% over FY 2023-2024. Of this total, 4.69 percentage points stemmed from supplier's price increases while 5.78% from GOP's tax.

While GOP's revenue raising efforts through ad valorem taxation cover a yawning fiscal deficit, they have proven inflationary and regressive in the case of petrol, which has a uniform tariff. However, these tariffs have been observed to be progressive with use, for natural gas and electricity.

Welfare

The gradual increase in inflation peaking at 33% over FY 2022-2023, has eroded incomes, particularly for the lowest deciles of income distribution. As a result, the poverty headcount, which had decreased to approximate 5% of the population of the country by FY 2019-2020, has climbed since. By FY 2021-22, poverty rose to 9% of the population and the surge in inflation over FY 2022-2023 doubled this figure to 18%. Table 9 estimates the transfers needed to eradicate poverty completely. With a poverty rate of 5%, these transfers would amounted to just 3% of annual revenues. However, with an 18% poverty rate, the required transfers have risen to 10% of annual revenues.

Table 9: Poverty Run FY 2023-2024 (Extreme Poverty \$1.90)

Time Period	Total Shock (p°-Y°) %	Poverty Line* (PKR)	Poverty Headcou nt (%)	Populati on to Sample Ratio	Pov. Gap Sample (PKR)	Pov. Gap (Pop.) Daily Transfer	Annual Transfer (PKR mil)	Tax Value (PKR bil)	% of Tax Value (%)
						(PKR 000s)			
FY 2017-	-	211.0	4.47	1,320.2	246,599	325,568	118,832	5,200	2.29
18									
FY 2018-	-1.75	214.7	4.76	1,320.2	268,504	354,487	129,388	4,900	2.64
19									
FY 2019-	5.65	226.8	5.97	1,320.2	370,605	489,285	178,589	6,270	2.85
20				,	,	,	,	•	
FY 2020-	3.85	235.6	7.16	1,320.2	465,011	613,924	224,082	6,900	2.80
21	0.00	200.0	7.10	1,020.2	100,011	010,721	221,002	0,700	2.00
FY 2021-	7.15	252.4	9.49	1.320.2	689,129	909,809	332.080	8,000	5.44
	7.13	232.4	2.42	1,320.2	009,129	202,007	332,000	0,000	J. TT
22	22.45	2100	40.50	4 220 2	4.05/.00/	2 (00 200	050.044	0.600	0.02
FY 2022-	23.15	310.8	18.73	1,320.2	1,976,326	2,609,208	952,361	9,600	9.92
23									

Source: Pakistan Bureau of Statistics, 2019-2024 & Ministry of Finance, 2019-2024

The total transfers needed to eradicate poverty, while aspirational, demand urgent policy action. There has been some policy discussion about lowering the price of wheat as a welfare measure to make it more affordable, especially for the poor. The problem with such a policy is that it lowers agricultural output and incomes, as estimated above in this report.

A more comprehensive growth cum welfare policy would involve supporting the price of wheat to ensure growth in agricultural output and incomes, while simultaneously providing free wheat to the means tested poor population. Fatima (2025) estimates that the consumption basket of the poor comprises 25% of expenditure on wheat and bread, which is essential for them to just climb over the poverty line. Therefore, if 10% of annual revenue is needed to eradicate poverty completely, then 25% of this 10% will be required to provide free wheat to this poor population, resulting in an estimate of 2.5% of annual revenue needed to provide

^{*}Lahore School Modeling Lab Estimations: Poverty line reflects the per adult equivalent per day

free wheat to the means tested poor population, making a substantive and necessary contribution to welfare.

The Budget for FY 2024-2025

The Budget for FY 2024-2025 (see Table 10) is a highly aspirational budget. The budget rises from PKR 14.5 trillion last fiscal year FY 2023-2024 to PKR 18.9 trillion this fiscal year—an ambitious increase in tax revenues of PKR 3.6 trillion—since tax revenues are projected to rise from PKR 9.4 trillion to PKR 12.9 trillion this year.

Table 10: Budget Comparison FY 2023-24 and FY 2024-25

	FY 2	2023-2024	FY	2024-2025
	PKR	Budget Spent	PKR	Budget Spent
	(bn)	(%)	(bn)	(%)
Total Resources (I+II+III+IV+V)	14,484	100.00%	18,877	100.00%
1. Tax Revenue (FBR) - Federal	9,415		12,970	
Consolidated Fund				
2. Non-Tax Revenue	2,963		4,845	
a) Gross Revenue Receipts (1+2)	12,378		17,815	
b) Provincial Share (Nominal Value)	5,399		7,438	
Total Borrowing (II+III+IV+V)	7,505	51.82%	8,500	45.03%
I. Net Revenue Receipts (a-b)	6,979	48.18%	10,377	54.97%
II. Non-Bank Borrowing (NSSs &	1,906	13.16%	2,662	14.10%
Others) - Public Account				
III. Net External Receipts - Fed.	2,724	18.81%	666	3.53%
Consolidated Fund				
"IV. Bank Borrowing (T-Bills, PIBs,	2,860	19.75%	5,142	27.24%
Sukuk) - Fed. Consolidated Fund"				
V. Privatization Proceeds - Fed.	150.16%	0.10%	30	
Consolidated Fund				
Total Expenditure	14,484	100.00%	18,877	100.00%
A. Current	13,344	92.13%	17,203	91.13%
Interest Payments	7,303	54.73%	9,775	56.82%
Grants & Transfers to Provinces	1,408	10.55%	1,777	10.33%
Defence Affairs & Services	1,804	13.52%	2,122	12.34%
Pension	801	6.00%	1,014	5.89%
Subsidies	1,064	7.97%	1,363	7.92%
Running of Civil Govt	714	5.35%	839	4.88%
Provision for Emergency and others	250	1.87%	313	1.82%
B. Development & Net Lending	1,140	7.87%	1,674	8.87%
Federal PSDP	950	83.33%	1,400	83.63%
Net Lending	190	16.67%	274	16.37%

Source: Ministry of Finance, 2024

The budget seeks to match the scarcity of revenues to the exigencies of expenditures.

Revenues

Revenues last fiscal year comprised only 48.2% of the total budget, necessitating reliance on borrowing to comprise more than half, at 51.8%. The ambitious revenue target for FY 2024-2025, set at 55% of the total budget, aims to reduce this reliance on borrowing to 45%.

The high reliance on borrowing is largely necessitated by the federation's revenues being almost entirely transferred to the provinces. These provincial transfers consistently account for 47% of the total budget, slightly less than revenues at 48% of the total budget. This leaves the federation with only 1% of the revenues from the total budget, making it entirely dependent on borrowing to meet its considerable expenditure commitments.

The primary source of this borrowing last fiscal year was domestic bank borrowing, which accounted for 19.8% of the total budget. This reliance on domestic non-bank borrowing is expected to increase to 27% of the total budget this fiscal year. The increased reliance on domestic bank borrowing allows foreign borrowing to decrease from 18.8% of the total budget last fiscal year to 3.5% this fiscal year. Reliance on domestic non-bank borrowing remains relatively constant at approximately 14% of the total budget.

Expenditures

Expenditures—which determine the size of the total budget—rise from PKR 14.5 trillion last fiscal year, to PKR 18.9 trillion this fiscal year, reflecting a nearly 30% year-on-year increase. Given the reliance on borrowing, this significant increase in expenditures is profligate.

Current expenditure continues to dominate the total budget, accounting for 92%, with little change from the previous fiscal year. This dominance allows for crowding out development expenditure, with the proposed allocation for the PSDP in FY 2024-2025 set at only PKR 1.4trillion.

The largest ticket item on current expenditure remains debt repayment, which has risen from 54.8% of total expenditures last fiscal year to 56.8% this fiscal year. Other current expenditures for this fiscal year include defense at 12.3%, provincial grants at 10.3%, subsidies at approximately 8%, pensions at around 6%, and administration at roughly 5%, all showing minimal variation compared to the fiscal year.

Three burdens of the new budget

The new budget brings three heavy burdens with it: the burden of additional taxes, the burden of foreign debt servicing and the burden of abiding and increasing subsidies, that do not go to welfare.

The Burden of Additional Taxes

The proposed increase in tax revenue of PKR 3.6 trillion between FY 2023-2024 and FY 2024-2025 (see Table 11) relies on an increase in direct taxes of PKR 1.3 trillion and indirect taxes of PKR 2.3 trillion. The increase in direct taxes is entirely due to a PKR 1.2 trillion increase in income taxes. Unfortunately, the incremental incidence of the tax across income groups is regressive.

The increase in indirect taxes is primarily reliant on a PKR 1.5 trillion increase in sales tax. Indirect taxes are inherently regressive in their impact across income groups. Additionally, critical goods affecting welfare, such as pharmaceuticals, medical supplies, agricultural produce, school books and stationery, are set to be newly taxed, while the level of the General Sales Tax (GST)is set to rise from 17% to 18%.

Table 11: Tax Revenue Comparator

Classification (Rs in Million)	Budget 2023-24	Budget 2024-25
FBR TAXES (I + II)	9,252,000	12,970,000
I. Direct Taxes	3,721,000	5,512,000
Income Tax	3,681,888	5,454,062
Capital Value Tax	10,573	15,662
Workers Welfare Fund	11,231	16,637
Workers' Profit Participation Fund	17,308	25,639
II. Indirect Taxes	5,531,000	7,458,000
Customs Duties	1,324,000	1,591,000
Sales Tax	3,607,000	4,919,000
Federal Excise	600,000	948,000

Source: Ministry of Finance, 2024

The Burden of Foreign debt servicing

Foreign debt servicing due over the next FY 2024-2025 comes to PKR 5 trillion, (see Table 12), which amounts to US\$18 billion at the current exchange rate. Another estimate of debt maturing to be repaid over FY 2024-2025 comes in at US\$20 billion (Ministry of Finance, 2024).

Table 12: Net External Receipts Decomposition

Classification (Rs in Million)	Budget 2023-24	Budget 2024-25
External Receipts	5,053,335	5,685,801
Foreign Loans and Repayment (-)	2,382,222	4,989,963
Repayment of Short-Term Credits (-)	47,875	29,500
External Resources (Net)	2,623,238	666,338

Source: Ministry of Finance, 2024

The Burden of Subsidies

Subsidies came in at PKR 1 trillion in the last FY 2023-2024 (see Table 13), which have increased to PKR 1.4 trillion for FY 2024-2025, a significant increase of 40%.

Table 13: Subsidies

Classification (Rs in Million)	Budget 2023-24	Budget 2024-25
Subsidy to Power Sector (WAPDA/PEPCO/KESC)	584,000	1,190,000
Subsidy to Petroleum	50,600	18,400
Subsidy to Food (PASSCO)	10,000	12,000
Subsidy to PASSCO for Wheat Reserve Stock	8,500	8,000
Subsidy to PASSCO on Account of Cost	1,500	4,000
Differential for Sale of Wheat		
Subsidy to Industries & Production	60,000	68,000
Others Subsidies	366,400	75,012
Wheat Subsidy to GB	16,568	15,872
Total Subsidies	1,071,000	1,363,412

Source: Ministry of Finance, 2024

The entire increase in subsidies is accounted for, by the subsidy increase for the power sector, principally WAPDA, PEPCO, and KESC. This subsidy was Rs. 0.6tr in the last fiscal year. It is projected to more than double to Rs. 1.2tr over the next fiscal year. Accounting for an overwhelming 87% of total subsidies.

Other subsidies constitute insignificant amounts, such as those for Utility Stores, Housing Finance Mera Ghar, and PASSCO for wheat storage. The only food subsidies for consumers are minimal, with PKR 15 billion allocated for wheat for Gilgit-Baltistan, and PKR 4 billion for PASSCO's cost differential in selling wheat.

As such, these persistent and increasing subsidies do not contribute to improving welfare and instead constitute a burden.

Policy on the exigencies of the budget

The new budget for FY 2024-25 increases expenditure primarily by increasing borrowing and the burden of taxes.

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Increasing expenditure through borrowing exacerbates repayments, which now account for 57% of total expenditures. This policy is unsustainable and profligate and this perverse gordian knot will have to be cut.

The exigency of increasing the tax take above 10% of GDP has been accepted without economic debate or consideration of the broader context. The economy remains trapped in a cycle of low growth trap, with declining investment, and increasing capital outflows, contraction in Large Scale Manufacturing over the past two years, and reliance solely on agriculture. Increasing the tax take will not reverse this low-growth trap and reflects irrational pricing policy in a market economy.

Two imperatives emerge for addressing these challenges. First, borrowing and its associated costs must be reduced. Increasing expenditure based on borrowing that constitutes more than half of the budget is neither sustainable nor rational, necessitating expenditure cuts and lowering the budget deficit.

Second, generating growth must be prioritized. If significantly increased taxation acts as a disincentive to growth, then again, expenditures must again be lowered to better align with existing taxation levels, further requiring a reduction in the budget deficit.

Certain expenditures may need to be ring-fenced for state exigencies and welfare priorities. Welfare must take precedence. Estimates suggest that eradicating extreme poverty would require unrequited transfers to the poor, amounting to 10% of revenues. While this may be a substantial ask of a developing economy, an immediate step could involve allocating 2.5% of revenues to provide free wheat to the means-tested poor population, addressing their caloric needs and making a substantive contribution to welfare.

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