Royal Government of Bhutan

Ministry of Finance

Annual Macroeconomic Performance and Outlook Report

"Unlocking Growth Potential"

2025

Department of Macro-Fiscal and Development Finance

DISCLAIMER

The views shared and the errors made in this report are that of the authors.

Ministry of Finance

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Abbreviations

ADB:	Asian Development Bank
AKP:	Average Capital Productivity
ALP:	Average Labor Productivity
AMC:	Asset Management Company
APO:	Asian Productivity Organization
BDBL:	Bhutan Development Bank Limited
BIL:	Bhutan Insurance Limited
BLSS:	Bhutan Living Standards Survey
BNBL:	Bhutan National Bank Limited
BOBL:	Bank of Bhutan Limited
BOP:	Balance of Payment
BTN:	Bhutanese Ngultrum
CAB:	Current Account Balance
CAD:	Current Account Deficit
CAGR:	Compounded Annual Growth Rate
CGE:	Computable General Equilibrium
COTI:	Countries Other than India
CRR:	Cash Reserve Ratio
CSI:	Cottage and Small Industries
CY:	Calendar year
DHI:	Druk Holding and Investments
DMDF:	Department of Macro-Fiscal and Development Finance
EET:	Excise Equalization Tax
ESP:	Economic Stimulus Plan
FDI:	Foreign Direct Investment
FI :	Financial Institutions
FY:	Fiscal Year
FYP:	Five Year Plan
GDP:	Gross Domestic Product
GFS:	Government Finance Statistics
GMC:	Gelephu Mindfulness City
GNH:	Gross National Happiness
GST:	Goods and Services Tax
HHI:	Herfindahl-Hirschman Index
IIP:	International Investment Position
IMF:	International Monetary Fund
INR:	Indian Rupee
LDC:	Least Development Countries
LFS:	Labor Force Survey
MHP:	Mangdechu Hydropower Project
MLR:	Minimum Lending Rate
MoENR:	Ministry of Energy and National Resources
MoF:	Ministry of Finance
MoICE:	Ministry of Industry, Commerce, and Employment
MSME:	Micro, Small, and Medium Enterprises
MTFF:	Medium-Term Fiscal Framework
MU:	Million Units
MW:	Megawatt
NPL:	Non-Performing Loans
NPPF:	National Pension and Provident Fund
NSB:	National Statistics Bureau
OCASC:	Office of Cabinet Affairs and Strategic Coordination
OMO:	Open Market Operations
PHP-II:	Punatsangchhu-II Hydropower Project
RER:	Real Exchange Rate
RMA:	Royal Monetary Authority
SAM:	Social Accounting Matrix
SME:	Small and Medium Enterprises
SOEs:	State-Owned Enterprises
SUT:	Supply Use Table
TFP:	Total Factor Productivity
TFR:	Total Fertility Rare
TOT:	Terms of Trade
WB:	World Bank
WEO:	World Economic Outlook

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Executive Summary

Optimistic growth outlook driven by the commissioning of PHP-II and the accelerated hydropower development

Bhutan's economy is expected to grow by 8.93 percent, nearly doubling from 4.97 percent in 2024. This growth is mainly fueled by the commissioning of Punatsangchu-II Hydropower Project (PHP-II), increased tourist arrivals and construction of Khorlochuu and Dorjilung. Further, government interventions through the Economic Stimulus Program (ESP) are expected to boost output of agriculture and manufacturing sectors. However, the growth projection remains vulnerable to risks such as external shocks and climate change, mainly electricity generation.

Labor mobility is expected to gradually transition from the lower to higher productivity sectors. Workers are expected to move to the industry sector, which is projected to grow by 19.48 percent, primarily driven by the expansion of hydropower and construction. Agriculture is also projected to grow gradually, reflecting ongoing structural changes. The services sector, the other driver of economic growth, is expected to grow at 4.34 percent primarily driven by increased tourist arrival and length of stay mainly attributed to the ongoing airfare subsidy program. Nevertheless, this sector is highly vulnerable to external shocks and the global geopolitical uncertainties, including the emerging trade-war, which compounds the risk.

On the demand side, aggregate demand is projected to rise, primarily driven by strong public investments. With the increased collaboration between the public and private sector, this is also likely to increase private investment. Consumption, on the other hand, is expected to rise as government spending increases. However, due to weak supply-side, the external imbalance remains a concern. To mitigate the risks, efforts should be directed towards addressing the declining capital productivity and increasing domestic production through efficient allocation and utilization of both public and private resources. To boost the private sector, it is important to deregulate the domestic market and ensure that fiscal and monetary policy measures align with long-term economic growth and stability.

Expansionary fiscal policy aims to rectify structural challenges amidst declining fiscal multiplier

Despite the gradual increase in domestic revenue and external grants, Bhutan faces persistent fiscal challenges. The government's expansionary fiscal policy under the 13th FYP focuses on stimulating economic growth and addressing the structural issues, while targeting a fiscal deficit of 3 percent of GDP on average. This fiscal target is supported through higher revenue collection but it remains insufficient to keep pace with rising expenditures. The rising expenditure is financed through external grants and borrowings, which continues to fund capital investments and the budget is balanced through issuance of domestic bonds. Therefore, long-term fiscal sustainability

hinges on broadening the tax base and consolidating expenditures, which are also crucial steps to reduce reliance on external support and maintain macroeconomic stability.

The Medium-Term Fiscal Framework (MTFF) projects an increase in recurrent expenditure mainly on account of statutory payments such as interest rates, and pay and allowances. On the other hand, revenue remains concentrated on income tax and hydropower earnings. GST implementation is expected to increase revenue collection by 2 percent of GDP, but for the policy to be business friendly and reduce administrative cost, it is important to revisit and reduce the number of exemptions and Excise Equalization Tax (EET).[1] Nevertheless, capital expenditure inefficiencies at planning and implementation remains a concern. Fiscal multiplier analysis shows that recurrent expenditure spending has a higher impact on GDP as compared to capital expenditure, indicating capital expenditure inefficiencies. Further, the capital output ratio of 4:1 highlights that the economy needs 4 units of capital to produce only 1 unit of output. To ensure effectiveness of government investments, it is important to enhance expenditure planning and improve capital utilization.

Substantial government investments and concentrated credit risks characterized by high NPL could potentially exert pressure on reserves.

Bhutan's monetary and financial sector faces mounting challenges due to global economic uncertainties and domestic policy constraints. Overall inflation remains stable, however non-food inflation fell by 0.6 percent, signaling weakening consumption demand. The money supply (M2) is projected to grow by 14.57 percent and 12.31 percent in FY 2024/25 and 2025/26, respectively, increasing inflationary risks and reserves depletion. Liquidity in the market remains a concern, making reinstatement of liquidity management tools essential for stability. Despite RMA's accommodative policy stance, reliance on administrative measures, moratoriums and further credit deferment could potentially subdue the growth outlook.

Credit remains heavily concentrated in the housing sector, which also has the highest Non-Performing Loans (NPLs) in volume. In terms of ratio, the transport sector has the highest NPL ratio of 13.11. Such a trend could potentially cause systemic financial risk, necessitating stronger credit risk management. Further, the capital market remains underdeveloped, with market capitalization standing at about 21 percent of GDP, which again is dominated by financial institutions accounting to about 74 percent of the capital market. For capital market development, it is essential to ease access to avail the services. To foster financial resilience, the financial sector must diversify credit allocation and reduce interest rate spread, in tandem with the economic policies initiated by the government to ensure long-term economic growth.

[1] Goods and Services Tax Act of Bhutan, 2020.

Decline in exodus rate and increased remittance helps reduce the current account deficit projection.

The current account deficit is projected to decline to 11.81 percent of GDP due to decline in service imports and increase in remittances. The decline in services imports is mainly attributed to decline in exodus rate, which could be attributed to positive expectation created by the visionary Gelephu Mindfulness City (GMC) initiatives. However, the trade imbalances persist, with anticipated increase in imports from India, as a result the Indian Rupee (INR) reserves are projected to decline. On the financial side, improvement in inflows is expected on account of government borrowings rather than investments inflows.

While Foreign Direct Investment (FDI) remains low, regulatory improvements and deregulation of the domestic market combined with slight relaxation in capital controls could enhance productivity and economic diversification. While deregulation is important to attract investment, addressing transfer pricing issues to ensure FDI contributes to economic growth is essential. Boosting productivity to strengthen exports, managing external debt, and attracting FDI to capture the growing middle-income market in South-Asia will be crucial to address Bhutan's weakening competitiveness in the region.

Structural transformation of the labor market has not yet translated into widespread productivity gains.

Bhutan's economy has been transitioning from agriculture to industry and services sector since 1990. However, the premature deindustrialization of the industry sector and oscillating services sectors resulted in subdued productivity. As a result, the labor market transformation has been gradual with the agriculture sector still employing about 41 percent of the total employment in 2024, while contributing only about 12.63 percent to GDP, highlighting the productivity gap. This is followed by the public sector, employing about 18 percent and contributing only about 10.62 percent to GDP. Considering the low productivity, the youth unemployment remains persistently high at 19.1 percent, but expected to decline marginally in coming years. The slow productivity growth has resulted in increased household debt in recent times, not on account of investment but rather consumption, which could be a concerning trend.

Nevertheless, households in Bhutan experienced growing social progress with improved living standards bolstered by improved literacy rate and life expectancy. As a result, overall poverty in the country has been declining. However, the poverty in rural areas still remains high, calling for targeted interventions rather than blanket expenditure programs. With increased social progress comes the trade-off of declining fertility rate. The declining fertility rate (1.7), which is below the replacement rate of 2.1, with increased life expectancy is expected to push Bhutan into an aging society, while still remaining a lower middle-income country. This is likely to cause an increase in national burden for future generations and subdue future economic growth unless effective policy interventions are implemented to mitigate the long-term economic and social challenges.

The industrial sector shows signs of deindustrialization and fragmentation.

The industrial sector faces significant structural hurdles that prevent it from reaching its full potential. The sector's development is lopsided, with a heavy reliance on resource-based industries such as hydropower and mining. While these resource-based industries generate substantial gross output, they offer limited positive spillovers for stimulating growth in other sectors. Consequently, manufacturing remains less developed than in neighboring countries, with manufacturing share to GDP remaining well below levels observed in South Asian economies and showing signs of premature deindustrialization – a worrying trend where manufacturing shrinks before reaching typical levels in advanced economies.

Bhutan's limited domestic market, combined with difficult terrain and developing infrastructure restricts economies of scale, hindering large-scale industrial production and increasing costs. The industrial base is fragmented, dominated by Cottage and Small-scale Industries (CSI) (95.34 percent), many of which lack the technology, capacity, and access to funding needed for large-scale production, specialization or automation. This fragmentation, coupled with strong competition among Micro, Small, and Medium-sized Enterprises (MSME) hinders scaling and expansion. Moreover, these small-scale players face intense competition from large-scale enterprises that dominate the market segments (above 90 percent of market share is held by large-scale enterprises). This underscores the need for a comprehensive industrial development policy, similar to those employed by advanced economies, to guide strategic interventions and foster sustainable growth to revitalize the manufacturing sector.

Enhancing the productivity and efficiency of SOEs for accelerated economic growth

State-Owned Enterprises (SOEs), with combined assets of Nu. 371,868.974 million in 2024, plays an important role in Bhutan's economy by bridging market gaps. The SOEs, recently have undergone rigorous review and transformation as a result of overwhelming under performance for almost over two decades. While some SOEs have shown improvement in profitability and operational efficiency, overall performance remains a concern due to widespread inefficiencies, weak competitiveness, and shadowing government agency activities rather than bridging the market gap as intended.

Additionally, similar to economic wide phenomena of capital-intensive driven growth, SOEs are also following a similar trend. With the labor's share of gross profit below 50 percent for all the SOEs, and the capital productivity declining by more than 3 percent at national level, it highlights inefficiency and low productivity of SOEs. For SOEs to contribute meaningfully to address structural issues within the economy, it needs to increase the labor's share of gross profit to about 70 percent. Further, integrating the market through upstream and downstream linkages of suppliers along the supply chain and enhancing the value chain should be the priority for SOEs in the 13th FYP. As a market leader, SOEs need to constantly re-evaluate mandates, foster innovation, improve efficiency, and strengthen governance to keep Bhutanese economy competitive.

Declining capital productivity resulting in stagnant economic efficiency

Since 2008, the long-term growth has fallen to 4 - 5 percent due to declining capital productivity and stagnating total factor productivity (TFP). While labor productivity increased at an average rate of 5.0 percent annually between 1990-2022, capital productivity declined by 3.4 percent annually, reflecting inefficient capital allocation and utilization. Bhutan's capital-intensive growth has not translated into productivity gains. Sector-wise, labor productivity has improved except in tourism, whereby the capital cycle in the hotel and restaurant sector reduced productivity. Agriculture, the largest employer, remains one of the least productive sectors, growing at only 2.7 percent annually.

One of the most critical challenges facing the Bhutanese economy is the decline in capital productivity across a majority of the sectors. Capital investment growth of 9.5 percent on average has outpaced output growth of 6.2 percent, leading to inefficiencies. Bhutan's capital-output ratio (COR) increased to 4:1 in 2022, higher than the regional peers, indicating lower returns on investment. All sectors, including tourism, construction, and manufacturing, experienced decline in capital productivity, except for finance and insurance, which saw a moderate growth. Hydropower, while a key economic driver, suffers from delays and cost overruns, and has limitations on expanding installed generation capacity, resulting in long-run loss in productivity. Without better resource allocation, capital-intensive driven growth with excessive capital investment will continue to hinder productivity and economic growth.

TFP, which measures economic efficiency as a result of efficient utilization of labor and capital, has stagnated, raising concerns regarding Bhutan's competitiveness in a globally competitive world. Exacerbating the situation, Bhutan's productivity gap with India has widened by 2.7 percentage points on average per year since 1990. While manufacturing has seen a modest TFP growth of 0.2 percent annually between 1990-2022, it has declined at 0.5 percent on average since 2009. With persistent high youth unemployment, re-industrialization through boosting manufacturing productivity growth can provide the much-needed employment for youths and economic diversification. To ensure enhancement of productivity and economic growth, Bhutan must improve capital efficiency, improve industry sector (manufacturing, electricity, and construction) and enhance overall resource allocation.

Navigating the economic frontier – unlocking growth amid mounting challenges

Bhutan has made significant strides over the past few decades; however, key challenges that have emerged in the recent years are suppressing the full potential growth. Capital-intensive driven growth models with over reliance on hydropower and tourism, inefficient and concentrated private sector and overall decline in manufacturing sector are limiting diversification and economic growth. This is exacerbated by policy uncertainty, bureaucratic red tape and private sector rent seeking behavior on public resources. The persistent twin deficits – fiscal and current account – stem from weak supply-side and inefficient capital utilization. High interest rate spreads and rising

NPLs weaken financial stability, while excess money supply in the market in coming years could trigger inflationary pressure or external imbalance. External imbalance remains a key vulnerability due to weak and narrow exports and heavy reliance on imports, and SOEs are not able to boost production as intended during their formation. Inefficient capital allocation has resulted in stagnated TFP and low labor productivity growth, as a result youth unemployment has been a persistent issue.

With various challenges comes different opportunities for economic transformation through strategic initiatives. The visionary GMC initiative has already generated positive expectations resulting in real-time impact on decline in exodus and civil servants' attrition rates. It aims to enhance regional connectivity, trade and investment, requiring energy, digital infrastructure, goods and services, and a skilled workforce. Additionally, with fiscal reforms targeting to create a business-friendly fiscal regime, efficient utilization of capital and SOEs reforms – such as business process re-engineering and *kaizen* implementation – underway, it is expected to create business opportunities and an investment environment. Further, deregulation is also expected to grow the private sector and attract FDI. There is also an opportunity for implementing an industrial development policy to reverse the trend of premature deindustrialization. Tapping on to these opportunities has the potential of increasing the labor productivity of a relatively well-educated workforce and increasing capital utilization and efficacy of capital investment. This should increase the TFP and as a result shift away from a capital-intensive driven to productivity-led growth model for long-term economic stability and prosperity.

Leading Economic Indicators: Bhutan

Table 1: Leading Economic Indicators

Indicators	Units	2022/23	2023/24	2024/25	2025/26	2026/27
		2022	2023	2024	2025	2026
		Actual		Projection		
Real Sector						
Real GDP growth	% (CY)	5.2	4.9	5.0	8.9	5.8
Nominal GDP	Million Nu. (CY)	227,814	249,388	281,320	320,546	359,409
Agriculture Sector Growth	% (CY)	(1.1)	1.4	1.5	1.5	1.0
Industry Sector Growth	%(CY)	5.6	(0.0)	6.1	19.5	8.3
Services Sector Growth	%(CY)	6.8	7.9	5.4	4.3	5.1
GDP per Capita	US$ (CY)	3,833	3,920	4,343	4,956	5,467
Fiscal Sector						
Domestic Revenue	Million Nu. (FY)	44,875	56,014	57,203	65,144	71,293
Tax Revenue, in percent of GDP	*% (FY)*	*13.8*	*14.0*	*13.4*	*13.8*	*13.1*
Grants and Other Receipts	Million Nu. (FY)	15,594	14,181	20,190	24,207	31,346
Current Expenditure	Million Nu. (FY)	35,428	43,425	50,855	55,563	58,781
Capital Expenditure	Million Nu. (FY)	33,798	26,798	40,546	53,786	51,646
Fiscal deficit, in percent of GDP	*% (FY)*	*(4.73)*	*(0.16)*	*(4.65)*	*(5.85)*	*(2.05)*
Total Public Debt	Million Nu. (FY)	276,977	285,179	306,320	396,566	426,973
o.w Domestic Debt	Million Nu. (FY)	32,791	21,477	30,465	44,791	51,515
o.w External Debt	Million Nu. (FY)	244,186	263,702	275,855	351,775	375,458
External Sector						
Current Account Balance (CAB)	Million Nu. (FY)	(81,198)	(54,030)	(35,442)	(29,273)	(25,854)
o.w Trade balance (Goods)*	Million Nu. (FY)	(62,431)	(47,062)	(58,221)	(68,152)	(75,278)
CAB, in percent of GDP	*% (FY)*	*(34.0)*	*(20.4)*	*(11.8)*	*(8.6)*	*(6.8)*
Total International Reserves	Million US$ (FY)	574	624	972	1,244	1,857
Monetary Sector						
Inflation (average)**	% (CY)	5.6	4.2	2.8		
Money Supply	Million Nu. (FY)	216,699	220,405	252,523	283,609	320,163
Credit growth	% (FY)	25.1	5.1	7.3	9.2	29.8
Pure Excess Liquidity	Million Nu. (FY)	10,139	10,899	9,863	5,856	9,702
Labor and Household Sector						
Unemployment***	% (CY)	5.9	3.5	3.5	3.7	3.0
Youth Unemployment Rate***	% (CY)	28.6	15.9	19.1	15.7	14.0
Poverty rate	% (CY)	12.0	12.1	11.7	11.3	10.3

** This differs from the balance of trade(goods) in the BoP file. This figure is based on MFCTC's trade file which sources data from DRC's trade statistics and does not carry out the treatment as per the BoP file.*
***Average inflation from Jan - December*
**** Quarterly LFS for 2023 and 2024*

Chapter 1:
Macroeconomic Outlook

1.1 Introduction

The recent World Economic Outlook (WEO) update released by the International Monetary Fund (IMF) estimates the Global economy to expand by 3.3 percent in both 2025 and 2026, reflecting a slight improvement from the previous year's estimate of 3.2 percent. However, the growth estimates remain below the historical average of 3.7 percent observed from 2000 to 2019, underscoring persistent structural challenges and policy uncertainties. Advanced economies are expected to grow at a moderate pace, with the United States (US) leading at 2.7 percent in 2025 due to a resilient labor market, stable monetary policy, and strong investment activity.[2] Meanwhile, the Euro area faces slower expansion at 1.0 percent amid heightened political and economic uncertainty. Emerging markets and developing economies are expected to sustain stable growth, with China expanding at 4.6 percent and India at 6.5 percent.[3]

The World Bank (2025) estimates South Asia to exhibit strong growth of 6.2 percent in 2025 and 2026, largely driven by India's sustained growth momentum and public infrastructure investments. The growth estimates for Bangladesh have slowed to 5.0 percent in Fiscal Year (FY) 2023/24 due to political turbulence, supply constraints, and weakened investor confidence. In contrast, Pakistan and Sri Lanka saw positive growth driven by improved agriculture and industrial production after political stabilization. Nepal's economy grew by 3.9 percent, supported by increased hydropower production and strong tourism.

Our domestic economy is projected to experience a significant expansion of 8.93 percent in 2025 – nearly double the estimate of 4.97 percent in 2024. This surge in the growth estimates is primarily attributed to the commissioning of PHP-II and investments in new hydropower projects such as Khorlochuu and Dorjilung. Further, government intervention through counter-cyclical policy measures such as the Economic Stimulus Program (ESP) in the agriculture and manufacturing sectors are expected to enhance domestic production and create employment.[4] Additionally, the measures aimed at increasing tourist arrival through airfare subsidy for international tourists will have a further spill-over effect on the economic activities of hotel and restaurants, transportation and communications, and financial services.

However, the domestic growth estimates will depend on the performance of the global and regional economies. While the growth outlook remains optimistic, there are looming risks emanating from geopolitical uncertainties, trade policy shifts in major economies, and long-term structural challenges such as aging population and declining productivity growth. The studies by the IMF

[2] According to Goldman Sachs (2024), the Chief Economist writes "*The US economy is in a good place*".
[3] IMF Economic View (2024), estimated that India & China accounted for half of the global growth in 2024.
[4] A total Fund of Nu. 15 billion has been allocated for ESP.

concludes that the "Population aging is the most pervasive and dominant global demographic trend." (Bloom & Zucker, 2023, P.59). Furthermore, Bhutan remains highly vulnerable to the impacts of climate change and extreme weather events posing a serious hazard to the growth outlook.[5]

1.2 Global Economic Outlook

The global economy is projected to grow by 3.3 percent in 2025 and 2026, 0.1 percentage points higher than the growth observed in 2024 (IMF, 2025). The Organization for Economic Cooperation and Development (OECD: 2024) also estimates that the global economy will grow at the same rate in 2025 and 2026. However, the estimates remain below the historical average of 3.7 percent observed during 2000-2019. Li and Noureldin (2024) assert that without policy intervention and leveraging emerging technologies, the stronger growth rates of the past are unlikely to return.

The advanced economies are projected to grow by 1.9 percent and 1.8 percent in 2025 and 2026, respectively, as compared to a growth of 1.7 percent in 2024 (IMF, 2025). The US is projected to grow by 2.7 percent in 2025 owing to its robust labor market, less restrictive monetary policy stance, and accelerating investment, gradually decelerating after reaching the potential level by 2029. However, the recent tariff announcement by the US government will significantly weigh on its growth outlook and other major economies. It is estimated that the tariff of 25 percent on imports from Canada and Mexico and 10 percent on imports from China will reduce the long-run economic output by 0.4 percent before any foreign retaliation (York, 2025). The retaliatory tariff will reduce the US GDP by 0.05 percent, since the US goods will become less competitive in the foreign market. The Euro area is expected to experience a gradual growth of 1.0 percent in 2025, a downward revision of 0.2 percentage points from the October estimates amid heightened political and policy uncertainty in the areas of energy market, trade and tariff, and ongoing Russia-Ukraine war (IMF, 2025; WB, 2025).

The growth for emerging markets and developing economies is projected to remain stable with growth rate hovering around 4.2 percent in 2025 and 2026 (IMF, 2025). The growth estimates for China remain at 4.6 and 4.5 percent in 2025 and 2026, respectively, reflecting a dissipation of the trade policy uncertainty and labor supply shortage resulting from increase in the retirement age. India is projected to grow by 6.5 percent in 2025 and 2026 driven by robust domestic demand due to increased government spending in infrastructure and rural development.

The near term and medium-term risk to the baseline global outlook are diverse across economies amid elevated policy uncertainty. The on-going trade-war with retaliation threats by the countries following President Trump's announcement will have serious implications on the economic output and global trade. Additionally, the fiscal and monetary policy choices, intensity of the geopolitical

[5] The NDC Report estimated that Bhutan will require USD 0.385 billion for adaptation and USD 0.6 billion for mitigation initiatives in the short-term and an additional USD 6,484.8 million for long-term strategy.

fragmentation and international spillover, and pursuit of the appropriate structural reforms will shape the growth outlook (IMF, 2025; WB, 2025).

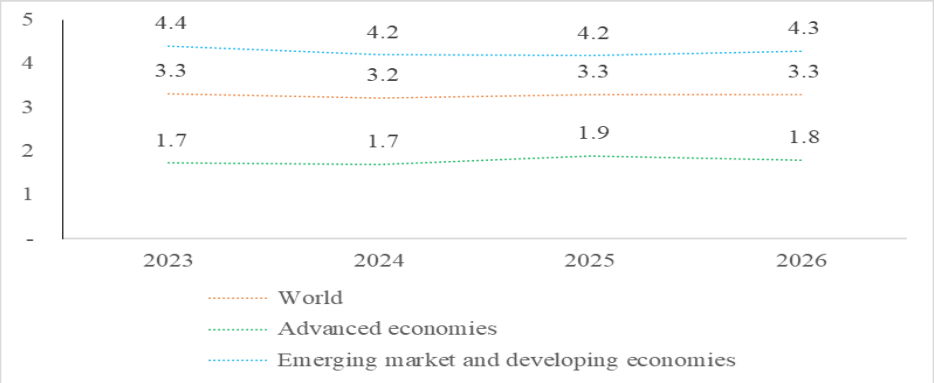

Figure 1: Global Economic Growth

Source: World Economic Outlook Update, January 2025

1.3 Regional Economic Prospect

The Asia and Pacific region is estimated to grow by 4.4 percent in 2025 in anticipation that easing global and domestic monetary conditions will boost private demand, contributing 60 percent to the global growth (IMF, 2024). The growth for South Asia is projected to average at 6.2 percent in 2025 and 2026, driven by the resilient activity in India.

The Indian economy recorded a growth of over 7.0 percent for a third consecutive year, driven by stable consumption and steadily improving investment demand. The World Bank projects the Indian economy to decelerate to 6.5 percent in FY 2024/25 from 8.2 percent in FY 2023/24, reflecting slowdown in investment and weak manufacturing growth. India's domestic projection shows growth at 6.4 percent in FY 2025/26 supported by agriculture and service sector (GoI, 2025). These trends are expected to continue maintaining India as one of the fastest growing major economies.

Given political turbulence in mid-2024 that dampened economic activity and worsened investor confidence, the growth for Bangladesh in FY 2023/24 has slowed to 5.0 percent. Further, the supply constraints weakened industrial activity and increased price pressure, reducing the household purchasing power (WB, 2025). The growth in Pakistan and Sri Lanka have turned positive on account of improved agricultural outputs and industrial production, following reduced political uncertainty and macroeconomic stabilization. Nepal is estimated to have grown by 3.9 percent in FY 2023/24, on account of higher hydropower production and strong tourism service activities.

The South Asian Region is projected to grow by 6.2 percent in 2025 and 2026, supported by strong growth in India. Further, India is poised to become the third largest economy by 2030, after the

US and China.[6] However, the risk to the growth outlook remains tilted to downside amid heightened policy uncertainty including trade policy and higher commodity price (WB, 2025). Additionally, tighter-than-expected monetary policy, climate-related natural disasters, and weaker-than-expected growth in major economies may impede the regional growth trajectory.

1.4 Domestic Economic Outlook: Supply-side

The economy is projected to grow by 8.93 percent in 2025, a significant increase as compared to the growth estimate of 4.97 percent in 2024. This increase is mainly on account of the commissioning of the PHP-II and anticipated commencement of construction of the Khorlochuu and Dorjilung hydropower projects.[7] This growth volatility reflects the sheer size of the economic vulnerability and susceptibility to the hydropower sector, and thus calls for an economic diversification to ensure stable and sustained growth. This is further substantiated by historical evidence, where the commissioning of each hydropower plant has consistently contributed to a spike in the growth trajectory.

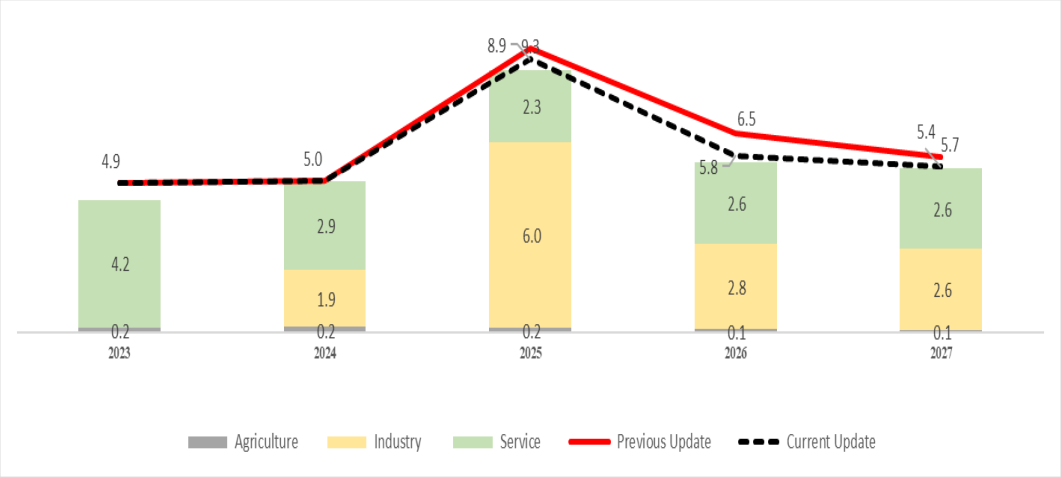

Figure 2: GDP Growth

Similar to the first quarter updates, the growth estimate for 2024 is expected to hover around 4.97 percent. The growth estimate for the construction sector is lowered on account of lower-than-anticipated spending in the construction of the Khorlochuu, Begana, and Gamri I hydropower projects. However, the growth for the electricity sector for 2024 is expected to perform better at 3.52 percent from an earlier estimate of 2.85 percent due to higher generation of Nikachhu, which increased to 529 million Units (MU) from an initial estimate of 474 MU. Additionally, the growth estimates for real net taxes have been revised from -0.42 percent to 0.41 percent based on the higher-than-anticipated mobilization of indirect tax revenue.

[6] Government of India (2024). Economic Survey 2024-25
[7] The construction cost of Khorlochhu and Dorjilung are estimated at Nu. 57 billion & Nu. 111 billion respectively.

The growth estimate for 2025 stands at 8.93 percent as compared to the previous quarter estimate of 9.27 percent. This reduction stems from the lower growth estimates in the mining & quarrying sector and public administration services. However, the downward revision is negated to a certain extent by the higher growth in the electricity due to the revision in the annual generation capacity of the PHP-II as we anticipate the full commissioning by June 2025.[8]

1.4.1 Agriculture Sector

The growth estimates for the agricultural sector stands at 1.52 percent and 1.49 percent for 2024 and 2025, respectively, unchanged from the previous quarter update in absence of reliable high frequency data. The crop production is estimated to contribute 0.05 percent to the agricultural sector growth, which is 0.96 percentage points higher than the actual sectoral contribution of -0.90 percent observed in 2023. The livestock production is projected to grow by 2.36 percent in 2025, contributing 0.90 percent to the agricultural sector growth. The forestry and logging sector is projected to grow by 3.08 percent, 1.18 percentage points higher than 2024 estimates.

Despite the various interventions initiated by the government, due to the fragmented and scattered nature of agricultural producers within the economy, the sector has not seen the desired outcome. Moreover, the impact of government intervention through the ESP is yet to be seen due to minimal disbursement. The ESP loan disbursement under the Window I and Window II amounts to Nu. 339.690 million and Nu. 236.034 million, respectively. With this, the disbursement rate stands at 10.3 percent and 11.8 percent from the total allocation of Nu. 3,300 million and Nu. 2,000 million under window I and Window II, respectively.[9]

1.4.2 Industry Sector

The industry sector is projected to grow by 19.48 percent in 2025 from a growth estimate of 6.24 in 2024, contributing 6.04 percent to the overall growth estimates. This growth is 0.62 percentage points lower than the first quarter estimates.

The growth estimate for the mining and quarrying sector is revised down to 3.98 percent for 2025 from an earlier estimate of 13.98 percent. The revision is primarily on account of lower-than-anticipated growth in export of mineral products observed in 2024, which saw only a marginal increase of 4.70 percent. The manufacturing sector growth is projected to hover around 4.55 percent in 2025 and 2026, an increase of 1.67 percentage points higher as compared to the growth estimated for 2024.

The electricity sector growth estimates for 2024 and 2025 are revised to 3.52 percent and 20.67 percent, respectively, from the first quarter growth estimates of 2.85 percent and 19.80 percent. This is on account of higher generation observed for Nikachhu in 2024 and revision in the generation capacity of the PHP-II, which is estimated to generate 4,575 MU of energy per year

[8] The generation capacity of PHP-II has been revised to 4,574 MU from earlier estimate of 4,357 MU
[9] Window I: Collateral-free concessional loan at 4% interest rate & Window II: Provides 4 percent interest subsidy

from an earlier estimate of 4,357 MU. However, with full generation of PHP-II anticipated only in June, generation this year is estimated at only 83.03 percent of the total generation capacity. Additionally, the small hydropower projects such as Yungichhu (32 MW), Burgangchhu (54 MW), and Suchhu (18 MW) are anticipated to begin commissioning in 2025, adding another 474 MU to the energy generation in 2025 and 496 MU by 2026.

The construction sector is projected to grow by 10.68 percent and 30.04 percent in 2024 and 2025, from a previous estimate of 12.05 percent and 29.92 percent, respectively. The downward revision of growth estimates for 2024 is mainly due to the lower-than-estimated spending in the hydropower construction such as Khorlochhu, Begana, and Gamri I. On the other hand, the upward revision of growth in 2025 is on account of higher disbursement estimates for PHP-I and Khorlochhu, and the anticipated construction of Dorjilung. In the near-term, the construction sector will be the key driver of the growth. This also means higher imports of the labor inputs and construction materials, making the growth outlook vulnerable to the external economic fluctuations.

1.4.3 Service Sector

The service sector is projected to grow by 4.34 percent in 2025 from an estimated growth of 5.38 percent in 2024, contributing 2.35 percent to the overall growth estimate. The performance of the service sector will be fueled by the growth contribution of the wholesale and retail trade (0.55 percent), transport and storage (1.21 percent), hotel and restaurants (0.86 percent), communication (0.65 percent), finance and insurance (0.54 percent), real estate and dwellings (0.22 percent), and education services (0.37 percent). However, the growth in the public administration services is estimated to decline by 2.62 percent given that the real wage and provident fund contributions growths are negative. This trend signals a need for reforms to social security and retirement plans to ensure adequate financial security, one of the key factors driving skilled worker exodus in recent years.

In the near-term, the performance of the service sector will be contingent upon the recovery anticipated in the tourism sector (MoF, 2024). In 2024, the sector received 144,973 SDF-paying tourists, achieving 96.5 percent of the arrival target of 150,000. In 2025, the total tourist arrivals target of the government stands at 250,000, gradually achieving the pre-pandemic level arrival by 2027. The government has launched an airfare subsidy scheme to enhance the tourist arrival and length of stay, to expedite the tourism sector recovery. The better performance in the tourism sector will have a positive spill-over effect on the service-based industries such as hotel and restaurant, real estate, communication, transport, and financial services.

In the medium-term, the economy's growth is projected to hover around 6.26 percent, slightly below India's growth rate which stands at 6.7 percent. However, the current growth estimates do not account for the development of the Gelephu Mindfulness City (GMC)**,** whose investments is estimated at 30 times the national GDP, amounting to US$100 billion (Campbell, 2025).

1.5 Domestic Economic Outlook: Demand-Side

The aggregate demand growth in 2025 is projected to increase to 8.93 percent as compared to the growth of 4.97 percent in 2024. The aggregate demand is projected to be fueled by the growth in public investment due to the increase in the capital expenditure to Nu. 38,334.315 million in FY 2024/25 from Nu. 30,672.055 million in FY 2023/24.[10] The recent budget call notification suggests that the government investment is further estimated to increase to Nu.53,786.420 million, enhancing the government investment demand by 25.46 percent and 16.12 percent in 2025 and 2026, respectively.[11] Similarly, private investment is projected to increase by 12.33 percent in 2025 from 3.35 percent in 2024, largely driven by the higher investment in the hydropower sector and private construction activities as the housing loan moratorium is lifted.

The government consumption is projected to grow by 3.48 percent in 2025 as compared to an estimated growth of 4.52 percent in 2024. This is mainly on account of minimal growth in the primary recurrent expenditure. On the other hand, private consumption will decline by 2.36 percent in 2025 due to the decline in the real wage growth, despite providing a certain cushion by the increase in private sector credit and inward household remittances.

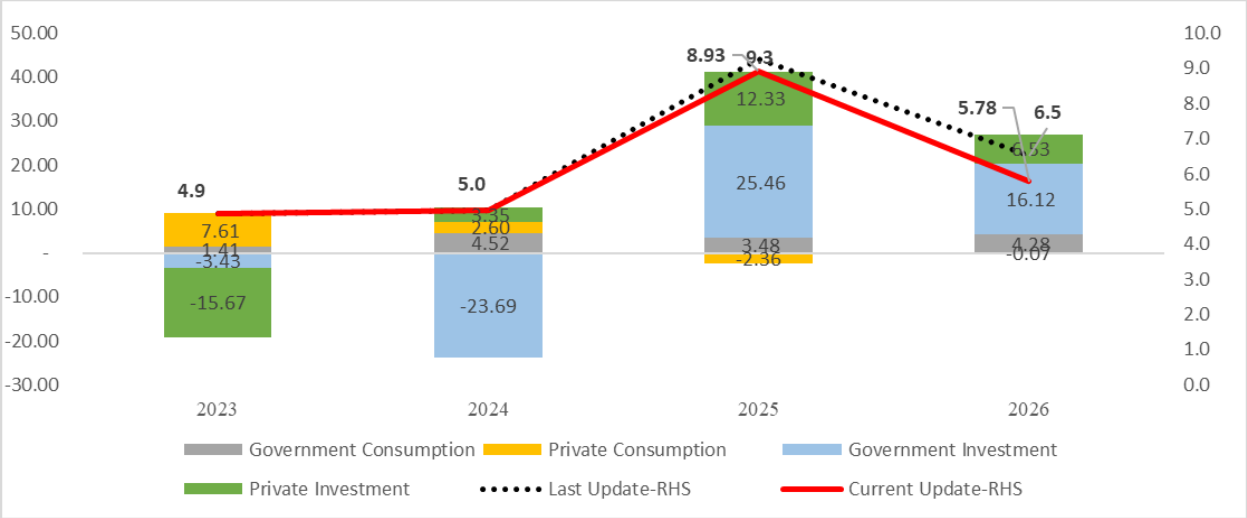

Figure 3: GDP by Expenditure

1.6 Output Gap

Although Bhutan has experienced positive economic growth over the past three years, the country's actual GDP remains below its potential since the COVID-19 pandemic, reflecting an untapped economic potential. The output gap was estimated at approximately 3.0 percent in 2022, indicating significant underutilization of resources, likely due to lingering effects of the COVID-

[10] Ministry of Finance (2024). National Budget Financial Year 2024-25

[11] Ministry of Finance (2025). Budget Call Notification for the Financial Year 2025-26

19 pandemic, disruptions in key sectors such as industry and tourism. However, as economic activities gradually recovered and the implementation of the 13th FYP began in July 2023, the gap narrowed to 0.6 percent in 2023, estimated at Nu. 155,964.142 million. This suggests that Bhutan is on the path to closing the gap, but still has room for further growth.

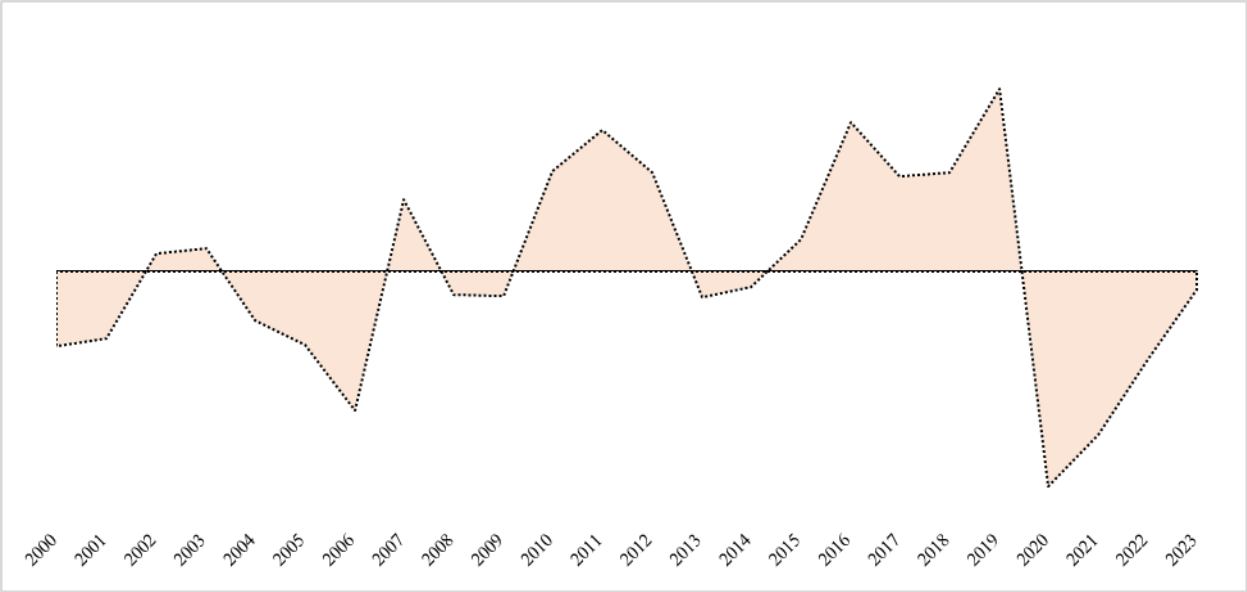

Figure 4: Output Gap

The achievement of the potential output will entail providing gainful employment opportunities in a more productive sector as one-sixth of the youth remain unemployed.[12] The skilling programs, innovation and entrepreneurship, and access to finance has to be strengthened. This will also address the skills shortages in the labor market as many experienced and skilled professionals migrate for education and employment opportunities abroad. The increase in government spending in the 13th FYP and ESP aimed at stimulating aggregate demand and achieving optimal growth, shall be duly monitored and the efficiency in the use of the capital expenditure utilization has to be strengthened.[13]

1.7 External Sector Vulnerabilities

Bhutan as an economy remains highly vulnerable to the external market shocks due to the high trade and financial exposures stemming from its reliance on the hydropower exports, persistent trade deficit, and rising external debt. The narrow export base, with limited diversification beyond hydropower and a few other sectors such as minerals and tourism, makes the economy vulnerable to external shocks. Another major concern is Bhutan's high external debt – exchange rate shock – and commodity market shocks. The main shock in the commodity market stems from fuel price

[12] The Fourth Quarter Labor Force Survey finds that youth unemployment rate is 17.7 percent.
[13] Capital Expenditure utilization as of 31st December stands at 17 percent in FY 2024-25.

volatility as it is influenced by geo-politics, trade disputes and economics. Therefore, to assess the shock of fluctuations of global oil prices, a simulation is carried out to study the impact on the domestic economic outlook for the period of 2025-2030 using a recursive dynamic Computable General Equilibrium (CGE) Model.

The CGE model for Bhutan using the Social Accounting Matrix (SAM) as given in Annexure I, was developed using the Supply-Use Table (SUT) 2017. The global oil price shock has been simulated under three scenarios – Scenario I: "10 percent increase," Scenario II: "20 percent increase" and Scenario III: "10 percent decrease" to study its implication on the different macroeconomic aggregates.

i. Fuel Import: If the global oil price rises by 10 percent and 20 percent, Bhutan's fuel imports are expected to decline by 2 percent and 3 percent, respectively, during the simulation period. However, a 10 percent decrease in global oil prices would lead to an average annual increase of 6 percent in Bhutan's fuel imports compared to the baseline level. We observe an asymmetric price transmission, as consumers have limited ability to reduce fuel consumption due to its necessity in essential economic activities despite the price fluctuation in absence of domestic supply of fuel. However, when price decreases, the consumer exhibits greater flexibility in increasing the fuel consumption, leading to a higher increase.

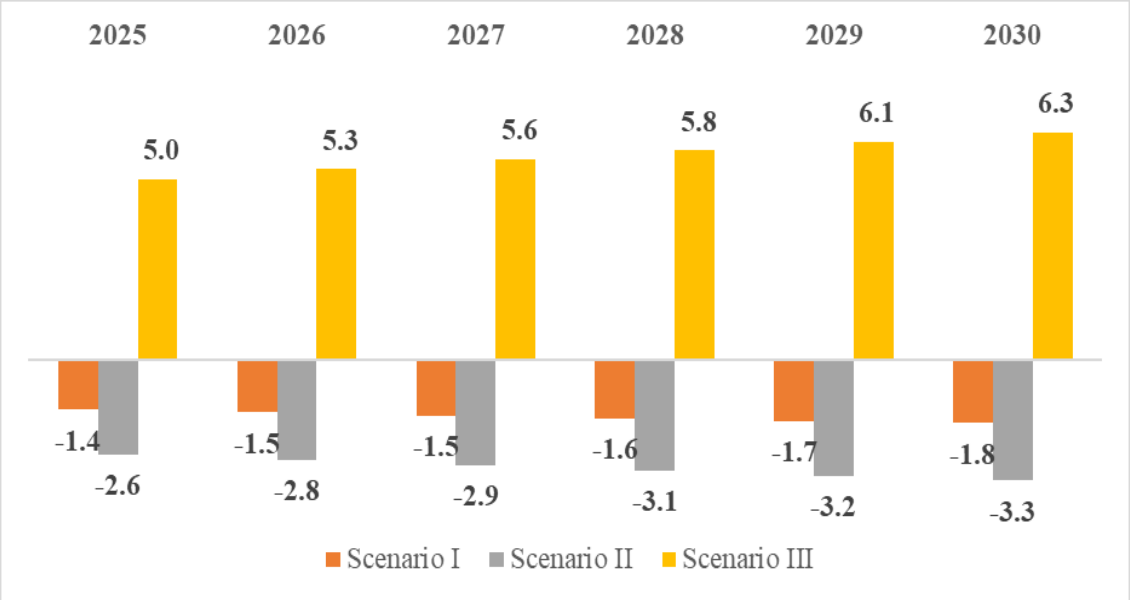

Figure 5: Impact on Fuel Import

ii. Tax revenue: Due to the decline in fuel imports caused by rising global oil prices, tax revenue is expected to decrease marginally by 0.1 percent and 0.2 percent under Scenario I and Scenario II, respectively. However, under Scenario III, tax revenue is projected to increase by 0.3 percent due to increased fuel imports. This is in tandem with the impact observed in the fuel import.

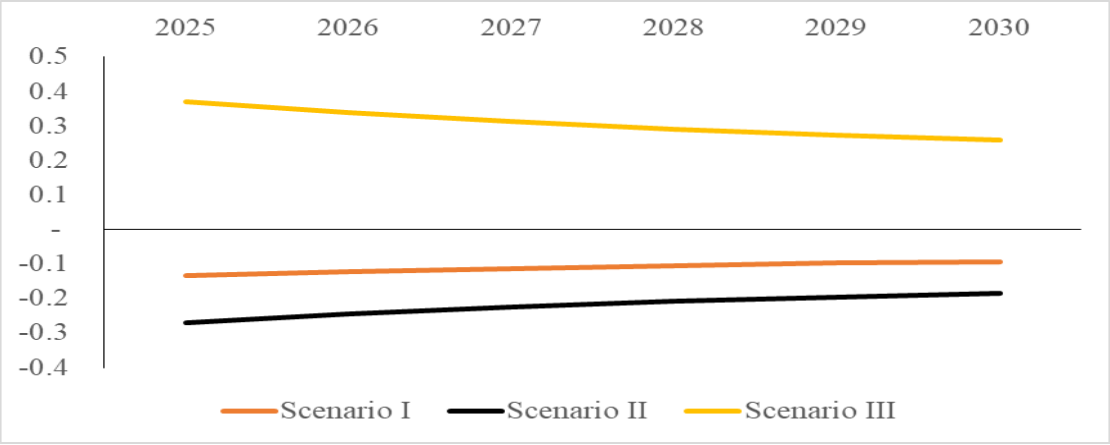

Figure 6: Impact on Tax Revenue

iii. Government Current Account Balance[14]: The government's current account deficit is expected to average 1.8 percent of GDP during the simulation period. However, a 10 percent and 20 percent increase in global oil prices will reduce imports, leading to lower tax revenue and widening the current account deficit to 2.0 percent and 2.2 percent of GDP, respectively. Conversely, higher tax revenue from a decline in oil prices will improve the current account deficit to 1.4 percent of GDP.

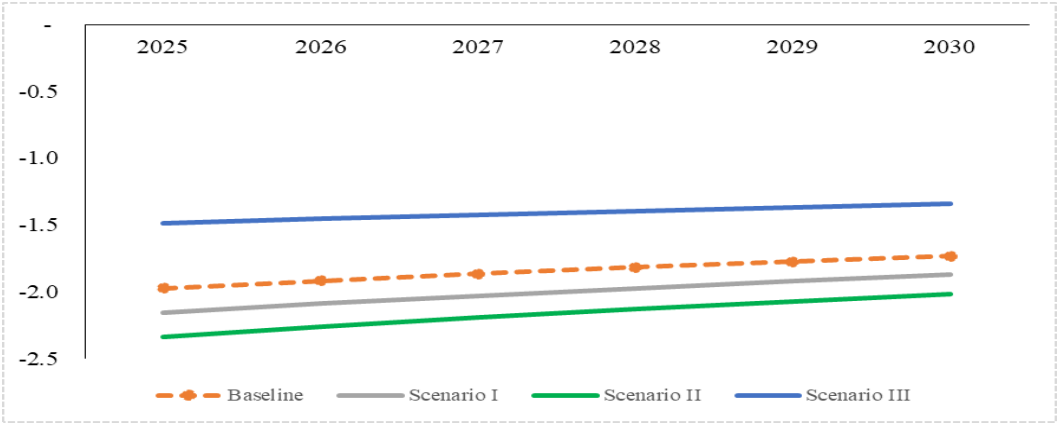

Figure 7: Government Current Account Balance (% of GDP)

iv. Total Output: An increase in fuel prices will push up the input costs for energy-intensive sectors like transportation and manufacturing. Since these sectors play a crucial role in the broader supply chain, the higher costs will cascade through the economy, leading to increased cost of production and delivery for other goods and services. As a result, consumers will face higher prices, reducing their disposable income and limiting both household consumption and investment. This inflationary pressure will gradually dampen overall economic activity and output. Conversely, a

[14] It is not comparable with the fiscal deficit as it excludes capital expenditure and external grants based on the structure of SAM.

decrease in fuel prices will lower input costs, making production more affordable and stimulating greater economic activity, thereby fostering growth across industries.

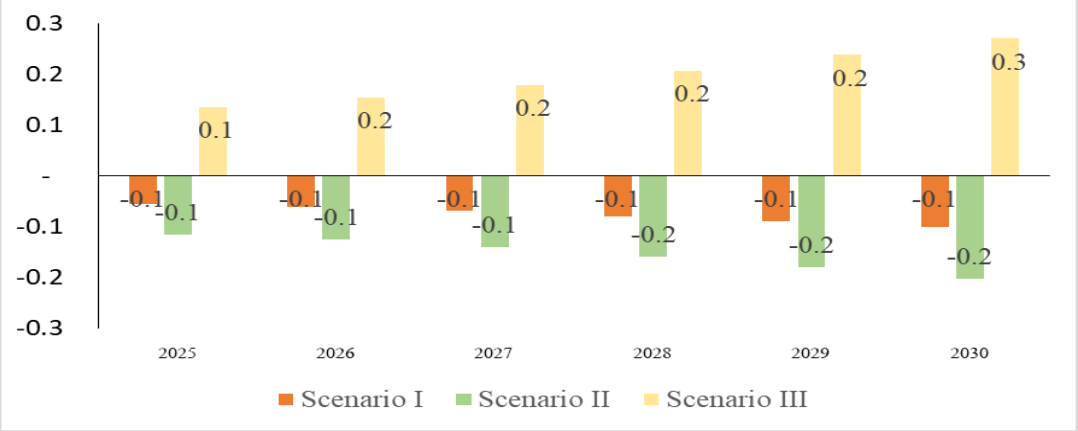

Figure 8: Total Output

v. Economic Growth: A rise in energy prices will lead to reduced economic activity and production, resulting in a slowdown in economic growth compared to baseline projections. Under Scenario I, growth is expected to decline by 0.7 percent, while in Scenario II, the decline could reach 1.4 percent. This is due to the increased cost burden on businesses and consumers, which restrains production, reduces disposable income, and dampens investment. Conversely, a decline in energy prices will ease production costs, boost consumer purchasing power, and encourage investment, ultimately driving higher economic growth through increased production and consumption.

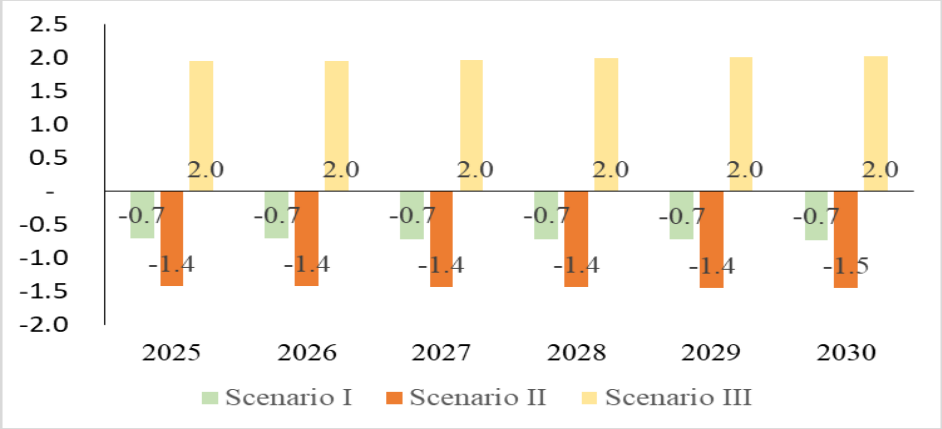

Figure 9: Impact on Economic Growth

1.8 Conclusion

Bhutan's economy is projected to grow by 8.93 percent in 2025, nearly doubling from the estimate of 4.97 percent in 2024. This surge is primarily attributed to the commissioning of the PHP-II hydropower project and increased investments in new hydropower constructions, including Khorlochhu and Dorjilung. The electricity sector is expected to see substantial growth, with an upward revision in generation capacity of PHP-II, while the construction sector is expected to remain a key driver of the economy in the near-term.

Meanwhile, the agricultural sector's growth remains steady at around 1.5 percent in both years, on account of low productivity, absence of large-scale commercial farming, and inadequate technological adoption. The impact of government intervention through ESP is yet to materialize, given slow disbursements and the production cycle.

The industry sector is expected to expand significantly, reaching 19.48 percent growth in 2025, though mining and quarrying growth projections have been lowered due to weaker-than-expected mineral exports performance in 2024. The service sector, while growing, is expected to slow slightly to 4.34 percent in 2025, with its performance closely tied to the recovery of tourism.

While medium-term growth is projected at 6.3 percent, slightly below India's 6.7 percent, Bhutan's long-term economic outlook could be significantly reshaped by the GMC project, a proposed $100 billion investment – 30 times the country's GDP – that could transform the national economy over the years. GMC is being envisioned to create new economic opportunities, enhance regional connectivity and transport, foster innovation and learning, and serve as a hub of mindful living. This gives a lot of hope for Bhutanese, living within and abroad, for a wide range of economic opportunities in future.

However, the baseline growth outlook will be shaped by the performance of other major and advanced economies. Current estimates show that a global oil price fluctuation alone can have a significant impact on the growth outlook by impacting the economic activity, highlighting the economy's vulnerability to the external economic, financial, and commodity market fluctuations.

Chapter 2:
Fiscal Situation and Outlook

2.1 Introduction

Governments around the world continue to face fiscal challenges, balancing limited revenue streams against rising spending obligations.[15] While many nations have experienced increased revenue post-pandemic, developing countries still struggle with inadequate fiscal support, mounting debt burdens, and structural economic constraints.

In recent years, Bhutan has witnessed an improvement in domestic revenue due to increased economic activities and fiscal reforms. The domestic revenue is projected to see a marginal increase of 0.95 percent compared to the previous quarter's estimate, primarily due to higher collections of indirect taxes and a profit transfer of Nu. 416.860 million from the Mangdechhu Hydropower Project (MHP). Similarly, external grants are estimated at Nu.18,172.989 million, reflecting a 11.60 percent increase in the same period based on additional incorporation. However, the revenue growth remains insufficient to match the pace of rising public expenditure, resulting in a widening fiscal gap in the absence of new revenue sources.

On the expenditure side, estimates for FY 2024/25 stands at Nu. 91,400.792 million, an increase by 1.76 percent from the previous quarter, which is attributed to additional incorporation of the capital expenditure from external financing, including the ESP. Consequently, the revised fiscal deficit for the FY 2024/25 stands at 4.65 percent of GDP, a slight improvement from previous quarter's estimates of 5.34 percent. As a result, in FY 2024/25, total public debt is estimated to reach Nu. 306,319.776 million, with further increases expected in the medium term to finance hydropower construction and meet budgetary deficits. The growing public debt necessitates stronger fiscal discipline, enhanced debt management strategies, and proactive policy measures to maintain macroeconomic stability. To enhance the analytical capacity for fiscal sustainability, the central government balance sheet for 2023 has been presented as per the Government Financial Statistics Manual (GFSM) 2014 standards.

2.2 Fiscal Policy

Bhutan's fiscal policy aims to ensure sustained economic growth while maintaining a sustainable fiscal path.[16] With the commencement of the 13th FYP, the government has adopted an expansionary fiscal policy that is countercyclical in nature designed to stimulate economic growth and close the potential output gap. The approved 13th FYP outlay stands at Nu. 512,000 million,

[15] As IMF (2024) Fiscal Monitor report states, "Deficits are high, and global public debt is very high and rising, projected to go above $100 trillion at the end of 2024"

[16] Ministry of Finance (2024). National Budget Financial Year 2024-25

marking a significant 65.16 percent increase from the approved 12th FYP outlay of Nu. 310,000 million.

In implementing the 13th FYP, the government's fiscal policy will be anchored on maintaining a fiscal deficit within 3.0 percent of GDP on average. This approach aligns with the broader fiscal policy objectives of ensuring sound fiscal discipline and maintaining a sustainable debt level. Government spending will be focused on strategic investments in infrastructure projects, economic development, social security, and good governance. Additionally, efforts will be made to enhance the efficient utilization of existing capital infrastructure, fiscal transparency and improve public financial management to optimize resource allocation and expenditure efficacy.

2.3 Medium-Term Fiscal Framework (MTFF)

In the 13th FYP, the resources have been allocated strategically within the MTFF to maintain the 3 percent fiscal deficit target. Despite the revised total outlay of Nu. 91,400.792 million, given the upward revision of resources to Nu.77,393.114 million, the overall fiscal balance for FY 2024/25 is projected to improve to a deficit of Nu. 14,007.678 million, accounting for 4.65 percent of GDP, showing a slight improvement by 0.69 percentage point as compared to the first quarter estimates. This is mainly driven by upward revision in the domestic revenue, other receipts, and external grants incorporated during the second quarter update.

In the medium term, the fiscal deficit for FY 2025/26 is projected to deteriorate to 5.85 percent of GDP before it improves to 2.05 percent of GDP in FY 2026/27. This is mainly due to an increase in recurrent expenditures including interest payment, without a proportionate increase in the resources. The primary deficit estimate stands at 2.28 percent and 3.38 percent of GDP in FY 2024/25 and FY 2025/26, respectively. This indicates the rising cost of debt repayment, which is over 50 percent of the fiscal deficit and represents about 14 percent of the current expenditure in FY 2024/25. However, with anticipated growth in tax and non-tax revenue, alongside the mobilization of external grants, the medium-term fiscal outlook including the primary balance is expected to improve. In addition, greater importance should also be placed on expenditure rationalization and fiscal adjustments.

Table 2: Medium-Term Fiscal Framework (Nu. in Million)

Sl. No	Particulars	2022/23	2023/24	2024/25		2025/26	2026/27
		Actual		Approved Budget	Revised Estimate	Projections	
A	**Total Resources**	**60,468.84**	**70,195.19**	**73,182.05**	**77,393.11**	**89,350.61**	**102,639.27**
1	**Internal Resources**	**46,105.52**	**59,579.63**	**56,660.43**	**59,220.13**	**67,284.68**	**73,545.49**
i	Domestic Revenue	44,874.88	56,014.46	54,749.94	57,202.76	65,143.68	71,292.89
a	Tax	31,486.54	35,037.37	39,246.35	37,723.00	44,116.76	47,120.55
b	Non-tax	13,388.34	20,976.73	15,503.60	19,479.76	21,026.92	24,172.33
ii	Other receipts[17]	1,230.64	3,565.17	1,910.48	2,017.36	2,141.00	2,252.60
2	**External Grants**	**14,363.32**	**10,615.57**	**16,521.62**	**18,172.99**	**22,066.23**	**29,093.78**
i	GoI	10,968.04	6,773.26	12,206.20	12,893.43	16,617.81	18,453.78
ii	Others	3,395.28	3,842.31	4,315.42	5,279.56	5,448.42	10,640.00
B	**Total Expenditure/ Outlay**	**69,226.17**	**70,626.00**	**89,154.22**	**91,400.79**	**109,349.42**	**110,426.82**
1	**Current**	**35,428.02**	**43,424.60**	**50,810.91**	**50,854.77**	**55,563.00**	**58,780.82**
i	Primary Current	31,391.50	38,301.73	43,662.55	43,704.46	47,060.00	48,172.39
ii	Interest payments	4,036.52	5,122.88	7,147.35	7,150.31	8,503.00	10,608.43
2	**Capital**	**33,798.15**	**26,798.00**	**38,344.31**	**40,546.02**	**53,786.42**	**51,646.00**
C	Fiscal Balance	**(11,222.14)**	**(430.81)**	**(15,972.17)**	**(14,007.68)**	**(19,998.81)**	**(7,787.55)**
	In percent of GDP	*(4.73)*	*(0.16)*	*(5.25)*	*(4.65)*	*(5.85)*	*(2.05)*

2.4 Quarterly Fiscal Framework for FY 2024/25

While the MTFF helps smoothen the cyclical component between the plan periods, it is essential to address the short-term cyclical component of fiscal spending within the fiscal year. The quarterly fiscal framework helps track the government activities within the FY. Gradually, it should help smoothen the spending within the FY.

[17] Including internal grants of BTFEC & BHTF.

Table 3: Quarterly Fiscal Framework for FY 2024-25 (Nu. in Million)

Sl. No	Particulars	FY 2023/24	FY 2024/25				
		Q2	Q1	Q2	Q3	Q4	Total
		Actual	*Provisional*		*Projections*		
A	**Total Resources**	**12,162.99**	**13,975.80**	**11,980.68**	**19,378.80**	**32,057.83**	**77,393.11**
1	**Internal Resources**	**10,213.85**	**12,696.43**	**10,345.42**	**13,630.20**	**22,548.08**	**59,220.13**
i	Domestic Revenue	9,495.05	12,203.58	9,972.46	13,196.35	21,830.37	57,202.76
a	Tax	6,818.52	8,831.87	8,257.17	7,773.86	12,860.09	37,723.00
b	Non-tax	2,676.53	3,371.71	1,715.29	5,422.49	8,970.28	19,479.76
	o/w interest receipts	*301.19*	*146.51*	*674.36*	*751.39*	*1,243.00*	2,815.26
ii	Other receipts	718.80	492.85	372.96	433.85	717.71	2,017.36
2	**External Grants**	**1,949.14**	**1,279.38**	**1,635.26**	**5,748.60**	**9,509.75**	**18,172.99**
i	GoI	1,012.85	333.69	546.78	4,525.89	7,487.07	12,893.43
ii	Others	936.28	945.69	1,088.48	1,222.70	2,022.68	5,279.56
B	**Total Expenditure/ Outlay**	**14,794.15**	**12,838.76**	**14,810.83**	**26,365.83**	**37,385.37**	**91,400.79**
1	**Current**	**10,153.62**	**10,110.86**	**10,749.15**	**14,333.10**	**15,661.67**	**50,854.77**
i	Primary Current (Regular)	9,298.69	8,553.76	9,594.82	12,078.68	13,477.22	43,704.46
ii	Interest payments	854.93	1,557.11	1,154.33	2,254.42	2,184.45	7,150.31
2	**Capital**	**4,640.53**	**2,727.90**	**4,061.68**	**12,032.73**	**21,723.70**	**40,546.02**
C	**Fiscal Balance**	**(2,832.86)**	**1,137.04**	**(2,830.15)**	**(6,987.03)**	**(5,327.54)**	**(14,007.68)**
	In percent of GDP	*(1.07)*	*1.51*	*(3.76)*	*(9.29)*	*(7.08)*	*(4.65)*
D	**Primary Balance**	**(1,977.94)**	**2,694.15**	**(1,675.82)**	**(4,732.61)**	**(3,143.09)**	**(6,857.37)**
	In percent of GDP	*(0.75)*	*3.58*	*(2.23)*	*(6.29)*	*(4.18)*	*(2.28)*

In the current quarter, the fiscal deficit deteriorated to Nu. 2,830.149 million, as opposed to a fiscal surplus of Nu. 1,137.040 million in first quarter of FY 2024/25. The fiscal deficit is about 3.76 percent of GDP, of which the primary deficit is about 2.23 percent of GDP. The fiscal deficit in the second quarter of FY 2024/25 is at a similar level to the same quarter of FY 2023/24, indicating that this is a trend. In the next two quarters, the fiscal deficits are expected to further deteriorate. The highest deficit of Nu. 6,987.031 million is projected to be in the third quarter, followed by a deficit of Nu. 5,327.537 million in the fourth quarter. The reason for lower fiscal deficit in the fourth quarter despite the higher expenditure is because of higher revenue inflows in the fourth quarter. This highlights the government's dependency on periodical/seasonal income tax to finance its activities. While it is not a major issue, it is important for the government to spread its income inflows evenly among the quarters. Therefore, a strategic shift of revenue reliance from income tax to goods and services tax would help smoothen fiscal path and cash management for the government.

Similarly, the quarterly primary balance is expected to be in deficits indicating increasing reliance on debt financing to balance its budget, increasing servicing cost. The current expenditure utilization in the second quarter is Nu. 10,749.145 million showing a modest increase from Nu. 10,110.862 million in the first quarter. On the other hand, capital spending grew by 48.89 percent compared to the previous quarter, reflecting a significant progress. The spending projections in the subsequent quarters reveal that current expenditure growth is linear while the capital spending

spikes a lot as we move towards the end of the FY. This erratic capital expenditure pattern could be attributed to many factors including the improper planning and programs execution. Moreover, to address the structural challenges in the economy, mainly declining capital productivity, the capital expenditure should be focused and existing capital utilization should be emphasized.

2.5 Fiscal Performance

2.5.1 Revenue

In the 13th FYP, one of the fiscal policy targets is to increase the tax-to-GDP ratio from the current 13 percent to 15 percent through various tax reforms aimed at expanding the tax base and adopting non-distortionary tax policies. For FY 2024/25, the tax-to-GDP ratio is expected to reach 13.40 percent, slightly exceeding the 13.00 percent target outlined in the Budget Report 2024/25[18]. As illustrated in Figure 10, revenue has shown a consistent upward trend over the years, with significant growth of 24.09 percent in FY 2017/18 and 24.82 percent in FY 2023/24. These surges were primarily driven by substantial improvements in tax performance during those periods. However, revenue growth for the current FY 2024/25 is expected to be more modest at 2.12 percent. Looking ahead, revenue is estimated to grow significantly by 13.88 percent in FY 2025/26, largely due to the anticipated profit transfer from the commissioning of PHP-II and implementation of GST.

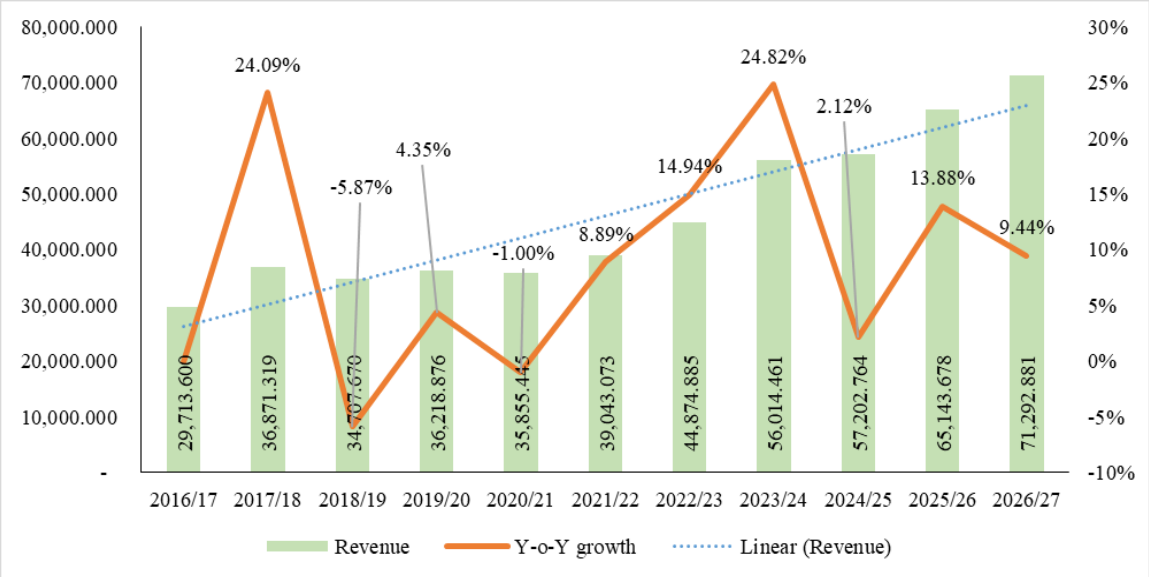

Figure 10: Revenue Growth Trend

The GST system is an efficient taxation system eliminating cascading effects of taxes and removes the distortionary effect through its broad-based application. As a business-friendly taxation system, introduction of GST is expected to enhance tax compliance, broaden tax base, and increase revenue

[18] Ministry of Finance (2024). National Budget Financial Year 2024-25

in the long-run, thereby contributing to a more sustainable increase in revenue collection. However, for the GST implementation to meet its expectations, it is important that the exemption list and EET be revised.

Table 4: Updated Revenue Collection and Estimation (Nu. in Million)

Sl. No.	Particulars	FY 2023/24		FY 2024/25			
		As of 31st December	Actual	Approved Budget	Revised	As of 31st December	% Realized
	Total Revenue	**24,343.48**	**56,014.46**	**54,749.94**	**57,202.76**	**22,176.04**	**38.77%**
A	**Taxes**	**14,300.65**	**35,037.73**	**39,246.35**	**37,723.00**	**17,089.05**	**45.30%**
1	**Taxes on Income, Profits & Cap. Gains**	**6,140.81**	**17,067.21**	**16,776.30**	**17,285.07**	**7,562.69**	**43.75%**
	o.w. CIT	4,279.24	11,966.94	11,990.68	11,908.24	5,228.29	43.90%
	BIT	492.92	1,712.94	1,930.73	1,833.71	545.30	29.74%
	PIT	1,368.65	3,387.34	2,854.89	3,543.12	1,789.10	50.49%
2	**Taxes on Property**	**80.90**	**709.24**	**708.39**	**772.03**	**97.11**	**12.58%**
3	**Taxes on Goods and Services**	**4,189.02**	**9,700.57**	**10,743.06**	**10,825.97**	**5,770.80**	**53.31%**
	o.w. Sales Tax	3,327.60	7,601.45	8,405.85	8,330.90	4,529.71	54.37%
	Excise Duty	326.30	717.98	765.01	780.04	370.28	47.47%
	Green Tax	305.45	813.47	908.26	1,096.01	647.77	59.10%
4	**Customs Duty**	**217.46**	**640.28**	**985.88**	**752.81**	**369.74**	**49.11%**
5	**Other Taxes**	**3,672.46**	**6,920.45**	**10,032.71**	**8,087.12**	**3,288.71**	**40.67%**
	o.w. Royalty	3,624.44	6,808.68	9,881.19	7,954.55	3,232.75	40.64%
B	**Other Revenue**	**8,911.43**	**18,335.78**	**13,381.42**	**16,568.30**	**3,731.91**	**22.52%**
	o.w. Interest Receipt from Corp.	1,541.42	2,999.50	3,136.76	2,815.26	389.82	13.85%
	DHI Dividend	-	5,058.29	4,066.21	5,649.19	-	0.00%
	Profit Transfer RMA	5,269.21	5,269.21	540.00	2,181.05	2,181.05	100.00%
	Profit Transfer MHP	2,000.00	2,000.00	-	416.86	-	0.00%
C	**Current Rev. from Govt. Agencies**	**1,071.46**	**1,813.26**	**1,465.86**	**2,006.84**	**1,282.33**	**63.90%**
D	**Capital Rev. from Govt. Agencies**	**59.93**	**827.69**	**656.32**	**904.63**	**72.76**	**8.04%**

The latest update on the revenue performance and projections of this FY is shown in Table 4. In the second quarter, the domestic revenue estimate for FY 2024/25 has been revised upward to Nu. 57,202.764 million from Nu. 55,486.252 million in the first quarter estimate. This increase is mainly on account of profit transfer of Nu. 416.860 million from MHP and upward revision in the indirect taxes based on actual collection realised as of 31st December 2024.

As of 31st December 2024, the cumulative domestic revenue collection stood at Nu. 22,176.041 million, which is 38.77 percent of the revised estimate. While the revenue collection in the first quarter was Nu. 12,203.579 million, the second quarter collection dropped to Nu. 9,972.462 million. This decrease could be attributed to the seasonality of the tax filling and one-time profit transfer of Nu. 2,181.047 million received from RMA in the first quarter. However, the revenue realized in this quarter has increased by 5 percent as compared to the same quarter in the FY 2023/24, primarily due to higher tax collection.

Overall, the majority of the revenue for FY 2024/25 is still expected to come from income tax contributing about 30.22 percent to the total revenue. This is closely followed by revenue from dividends and profit transfers, which is expected to contribute about 28.96 percent of the total revenue, followed by taxes on goods and services, and royalties. In total, almost about 40 percent of the entire revenue directly comes from the public sector financial and non-financial corporations.

2.5.2 Grants

Bhutan still receives substantial foreign aid in the form of grants amounting to about 23.48 percent of total resources. Of the various multilateral and bilateral development partners, India remains the major development partner with grants amounting 16.66 percent of total resource and over 70.95 percent of the total external grant in FY 2024/25. Since the domestic revenue is only sufficient to cover the cost of recurrent expenses and partially the capital expenditure, the infrastructural development projects are heavily dependent on external grants and borrowing.

The external grant estimate for FY 2024/25 has been revised to Nu.18,172.989 million during the second quarter, an upward revision from Nu.16,283.770 million in the previous quarter. This revision is mainly on account of external financing incorporations of the budgetary agencies relating to the project tied-assistance from development partners and the ESP amounting to Nu. 1,200 million.

As of 31st December 2024, the cumulative external grant receipts amounted to Nu. 2,914.639 million representing 16.04 percent of the total anticipated grant inflows for the fiscal year. The grant receipts from the GoI stands at 6.83 percent[19] of the revised estimate while the receipt from other development partners stands at 38.53 percent.

[19] Grants received from India excludes an ESP grant of Nu. 2,500 million received in current FY.

Table 5: External Grants (Nu. in Million)[20]

Sl. No.	Particulars	FY 2023/24		FY 2024/25			
		As of 31st December	Actual	Approved Budget	Revised	As of 31st December	% Incorporated
	Total External Grants	**1,949.13**	**10,615.57**	**16,521.62**	**18,172.99**	**2,914.64**	**16.04%**
A	**GoI**	**1,012.85**	**6,773.26**	**12,206.20**	**12,893.43**	**880.47**	**6.83%**
i.	PTA/SDP	1,012.85	6,773.26	10,539.54	11,893.43	880.47	7.40%
ii.	Programme Grants	-	-	1,666.67	1,000.00	-	0.00%
B	**Others**	**936.28**	**3,842.31**	**4,315.42**	**5,279.56**	**2,034.17**	**38.53%**
i.	Project-tied Grants	936.28	3,842.31	4,315.42	5,279.56	2,034.17	38.53%

2.5.3 Expenditure

In line with the expansionary fiscal policy adopted by the government, the government expenditure is expected to increase by 30.16 percent in the current FY. This pattern is also consistent with the previous trends as a consequence of the five-year planning cycle. As shown in Figure 11, government expenditure surged by 36.23 percent in FY 2019/20, the second year of the 12th FYP. A similar spike is observed in FY 2024/25, the first year of the 13th FYP, and in the subsequent FY 2025/26, the expenditure increases by 17.33 percent.

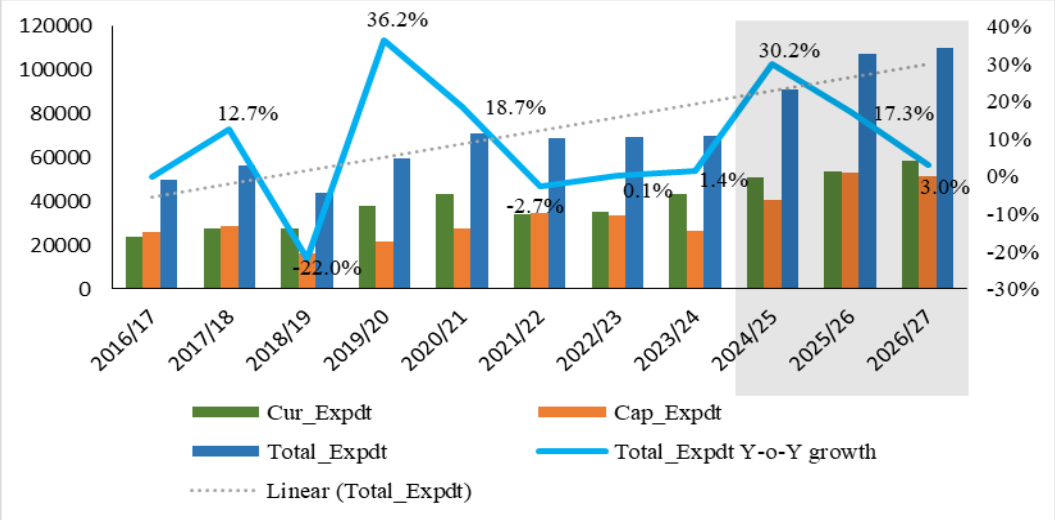

Figure 11: Trend in the Government Spending

[20] The grants receipts include only the budgetary grants excluding ESP.

Conversely, government spending tends to decline during the transition periods between FYPs. For instance, in FY 2018/19, expenditure growth dropped significantly by 21.98 percent as a result of the five-year planning cycle. Similarly, during the transition between the 12th and 13th FYPs, i.e. FY 2023/24, the expenditure growth was modest at 1.44 percent. It is therefore important that in the 13th FYP, an expenditure smoothing strategy should be adopted.

The latest update on the projected government spending for FY 2024/25 is provided in Table 6. The total projected outlay for the FY 2024/25 is revised to Nu. 91,400.792 million from the first quarter revised estimate of Nu. 89,818.107 million. This upward revision is mainly due to additional budget incorporation from the agencies during the quarter. The revised estimate reflects a 30.16 percent increase from FY 2023/24. Of this total, Nu. 50,854.770 million (55.64 percent of the revised estimate) is allocated for recurrent expenditure, while Nu. 40,546.022 million (44.36 percent of the revised estimate) is earmarked for capital expenditure.

Table 6: Updated expenditure estimates (Nu. in Million)

Sl. No.	Particulars	FY 2023/24		FY 2024/25			
		As of 31st December	Actual	Approved Budget	Revised	As of 31st December	% Utilized
	Total Expenditure	**27,200.15**	**70,223.00**	**89,154.22**	**91,400.79**	**27,649.59**	**30.25%**
I	**Current Expenditure**	**19,676.72**	**43,424.60**	**50,809.91**	**50,854.77**	**20,860.01**	**41.02%**
	Primary Current	17,228.09	38,301.73	43,662.55	43,704.46	18,148.57	41.53%
	Interest Payment	2,448.63	5,122.88	7,147.35	7,150.31	2,711.44	37.92%
II	**Capital Expenditure**	**7,523.43**	**26,798.40**	**38,344.31**	**40,546.02**	**6,789.59**	**16.75%**

At the end of the second quarter of FY 2024/25, total expenditure utilization reached Nu. 27,649.593 million, accounting for 30.25 percent of the revised estimate. This is slightly higher in absolute terms compared to Nu. 27,200.153 million recorded in the same quarter of the previous year. However, last year's expenditure utilization rate was higher at 35.61 percent of the revised estimate, indicating a slower pace this year. This lag in government spending raises concerns about the potential budget underutilization and expenditure planning undertaken by the agencies, as a result the spending may not have the desired impact on the economy. Ideally, by the midpoint of the FY, around 50 percent of the budget should have been utilized to ensure steady progress in planned activities. The concern is more pronounced in capital expenditure, where only 16.75

percent of the budget has been utilized, 7.78 percentage points lower than the same period last year. Given that capital investments are significant in nature and critical for infrastructure development, such improper planning could result in the mismanagement of the cashflow for the government and inferior procurement resulting in low quality infrastructure. The expenditure utilization is expected to gain momentum in the coming quarters as project implementation advances.

This cyclical nature of the government spending that follows the FYP needs strategic investment plans to minimize the distortion to the economy at the end and beginning of the plan period. Expansionary spending which helps stimulate growth during the plan period, is reversed during the down-turn in the economy at the beginning and the end of the FYP. As a small landlocked country with a nascent private sector, government investment to boost the economy is important. However, maintaining fiscal sustainability also remains crucial as the level of spending continues to grow. A well-calibrated approach of balancing economic stimulus with prudent fiscal management will be essential for ensuring long-term macroeconomic stability and sustainable development.

2.5.4 Public Debt

The total estimated public debt by the end of FY 2024/25 is projected at Nu. 306,319.776 million, reflecting a 4.0 percent decrease from the first quarter estimate of Nu. 319,066.504 million, accounting for 101.79 percent of GDP. The anticipated reduction in total public debt can be attributed primarily to a downward revision of external loan disbursement of small hydropower projects and the liquidation of the Basochhu hydropower project (Lower Stage). Additionally, there has been a shift in the borrowing approach for program loans from the first quarter for the program borrowing, reflecting the prudent public finance management stance taken by the government. Furthermore, 50 percent of the loans from the International Development Association is expected to be in the form of grants, which facilitate public debt management in the medium term. Consequently, in comparison to the first quarter projections, the public debt as a percentage of GDP is expected to decrease over the medium term.

Of the total public debt, approximately 90.05 percent of the total public debt by the end of FY 2024-25 will consist of external debt, while domestic debt is projected to account for 9.95 percent. For FY 2025/26, public debt is expected to rise by Nu. 90,246.063 million, driven primarily by the capitalization of the interest during construction for the PHP-II coupled with the increasing financing needs associated with the new hydropower projects and budgetary expenditures. In the medium term, both external and domestic debt levels are anticipated to increase due to additional disbursements related to hydropower initiatives and budgetary borrowings aimed at addressing the financing gap. This trend underscores the necessity for comprehensive financial planning to ensure sustainable debt management as financing requirements evolve.

Table 7: Medium-Term Debt Projections (Nu. in Million)

Sl. No	Particulars	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
		Actual	Estimate	Projections			
	Total Public Debt	**285,179.41**	**306,319.78**	**396,565.84**	**426,972.83**	**469,502.18**	**494,469.65**
	% of GDP	107.47%	101.79%	116.64%	112.53%	111.62%	103.92%
1	**Domestic Debt**	**21,477.36**	**30,465.24**	**44,790.77**	**51,515.01**	**61,734.16**	**74,069.64**
	% of GDP	8.09%	10.12%	13.17%	13.17%	14.68%	15.57%
	% of Total Public Debt	7.53%	9.95%	11.29%	12.07%	13.15%	14.98%
2	**External Debt**	**263,702.05**	**275,854.54**	**351,775.07**	**375,457.82**	**407,768.02**	**420,400.01**
	% of GDP	99.38%	91.67%	103.47%	98.95%	96.94%	88.36%
	% of Total Public Debt	92.47%	90.05%	88.71%	87.93%	86.85%	85.02%
i	**Hydro Debt**	167,194.63	180,968.97	259,941.71	286,586.79	318,778.95	332,692.43
	% of GDP	63.01%	60.14%	76.46%	75.53%	75.79%	69.92%
	% of Total Public Debt	58.63%	59.08%	65.55%	67.12%	67.90%	67.28%
ii	**Non-Hydro Debt**	96,507.43	102,717.57	104,657.36	100,687.03	99,587.07	97,087.58
	% of GDP	36.37%	34.13%	30.78%	26.54%	23.68%	20.41%
	% of Total Public Debt	33.84%	33.53%	26.39%	23.58%	21.21%	19.63%

The central government debt is projected to decline to Nu. 112,124.089 million (37.26 percent of GDP) for FY 2024/25, down from the first quarter estimate of Nu. 121,441.198 million. This decrease is primarily due to an enhancement in overall resources, which has resulted in a diminishing need for domestic borrowings. As a result, the central government debt as a percent of GDP is anticipated to improve relative to the projections made in the first quarter, remaining well within the threshold prescribed by the Public Debt Management Policy.

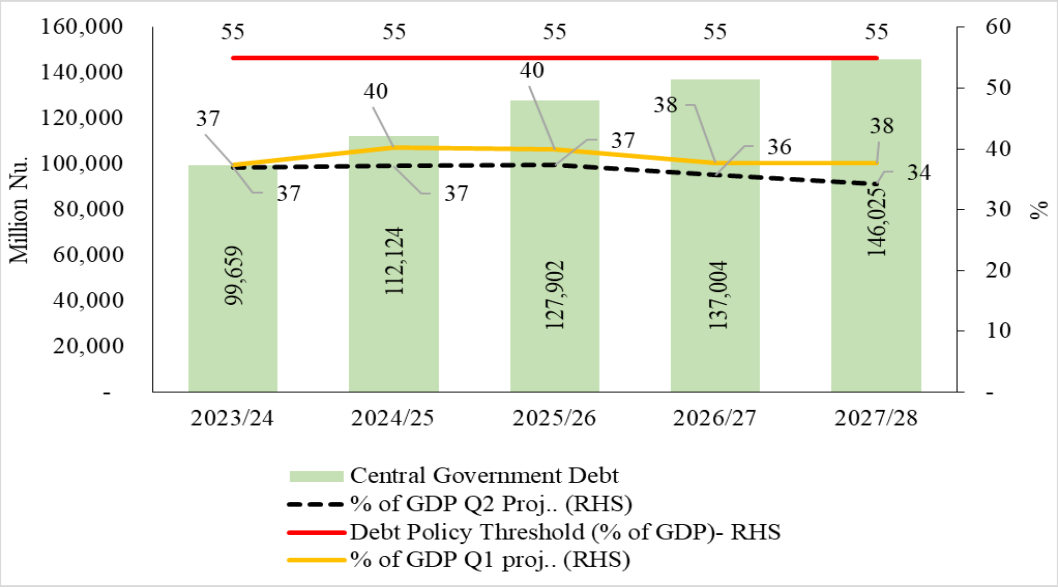

Figure 12: Central Government Debt

2.6 Efficacy of Fiscal Spending

2.6.1 Fiscal Multiplier

The fiscal multiplier measures the impact of a change in the government spending or taxation on a country's overall economic output. It provides us with an indication of how economic output responds to the government fiscal policy. In simpler terms, it quantifies how much economic activity is generated by one unit of ngultrum spent by the government through fiscal policies. The fiscal multiplier based on the fiscal data from the FY 2009/10 to FY 2023/24 is presented in Table 8.

Table 8: Fiscal Multiplier

Particulars	Fiscal Multiplier
Recurrent Expenditure	1.1
Capital Expenditure	0.1
Total Expenditure	0.8

The fiscal multiplier for the government spending is positive, indicating the positive impact of the government spending on the economic output. It implies that for every unit of government spending, the gross domestic output will increase by 0.8 units. However, since the multiplier is less than 1 unit, it indicates that government spending has a weaker effect, each ngultrum generating less than a ngultrum of output. As opposed to the rational expectation, the spending multiplier is higher for recurrent than capital expenditure. This implies inefficiencies in the capital spending, a finding further corroborated by the declining capital productivity discussed in Chapter 8.

2.6.2 Counter-cyclical Fiscal Policy (Fiscal Stance and Impulse)

The government uses counter-cyclical fiscal policy to correct economic fluctuations such as recession and boom. For instance, during the COVID-19 pandemic, counter-cyclical fiscal measures such as deferral and waiver of BIT, CIT, rental, electricity, and demand charges were implemented. Additionally, quasi-fiscal operations in the form of direct income support and loan interest relief to the household were granted through *Druk Gyalpo Relief Kidu*.

In the 13th FYP, an ESP amounting to Nu. 15 billion will be implemented over the period of two years. This, in addition to the significant increase in the plan outlay indicates expansionary fiscal stance of the government. Table 9 suggests that over the next three FYs, an expansionary fiscal plan is possible. The positive fiscal impulse for the FY 2024/25 and FY 2025/26 indicates that government fiscal spending is expansionary compared to preceding years. However, the rate of expansion in FY 2026/27 is lower than that of FY 2025/26.

Table 9: Fiscal Stance and Fiscal Impulse

FY	Fiscal Stance	Fiscal Impulse
2022/23	0.02	(0.04)
2023/24	(0.01)	(0.03)
2024/25	0.03	0.04
2025/26	0.03	0.01
2026/27	(0.00)	(0.03)

This balance sheet represents the stock of non-financial assets, financial assets, and liabilities of the budgetary central government of Bhutan. It is important to note that the closing balance sheet of one FY serves as the opening balance sheet for the next. This continuity allows us to link one year's balance sheet to the next, creating a series of integrated balance sheets that align with the transactions and economic flows recorded each year. It is important to note that the figures presented here might be different from what is presented in traditional fiscal presentations because of differences in classification.

2.7 Budgetary Central Government Balance Sheet[21]

The Ministry of Finance has been developing the use of Government Finance Statistics to strengthen fiscal analysis in recent years**.** This effort aligns with the IMF's phased migration strategy to implement the GFSM 2014 as the standard for fiscal data. The migration strategy includes incorporating key elements of GFSM 2014 presentation in staff reports and continuing technical assistance to develop Bhutan's capacity to produce comprehensive GFS-compliant data.[22] These include development of a preliminary GFS series (2016-2023) for the budgetary central government and identifying data gaps, with a particular focus on reporting balance sheet data and expanding coverage to the broader public sector.

The current traditional fiscal reports include some balance sheet data but do not link stocks and flows. Balance sheet data developed until now indicate the usefulness of the GFS framework as an analytical tool for fiscal sustainability. Where select balance sheet data have been included, the focus has primarily been on presenting the concept of gross debt, with limited analysis or discussion of alternative debt measures. A main reason for not including a more comprehensive set of balance sheet data – particularly regarding financial assets – is that the traditional fiscal reporting is not able to produce these data on a regular basis due to various factors.

GFS also allows expansion of institutional coverage of the fiscal data beyond the central government to include the general government and broader public sector, such as sub-national government, extrabudgetary funds, and public enterprises, aligning with macroeconomic statistics. Fiscal surveillance should move beyond cash-flow reporting and a narrow debt definition to a

[21] Mr. Gary Jones, GFS expert with IMF, has been supporting the development of the government balance sheet since 2017 and the results discussed herewith is attributed to his continued support.
[22] Four IMF technical assistance missions have taken place through SARTTAC, achieving significant milestones from 2018 to 2024

comprehensive framework linking economic transactions, deficit, assets, liabilities, and fiscal risks. The integrated balance sheet analysis, cross-sector linkages and spillovers into policy formulation are crucial for long-term fiscal sustainability as Bhutan opens up to the rest of the world. As key sources and users of funding, as well as holders of non-financial assets, it is essential to enhance the understanding of wealth and financial markets. The development of a balance sheet matrix for Bhutan showing asset and liability positions in and between key sectors can generate additional indicators for economic analysis. The following section presents the balance sheet of the government. While this is the first time such a presentation has been made, some data gaps, such as information on specific categories of assets and liabilities, have been identified and will be addressed on a continuous basis.

2.7.1 Government Balance Sheet

As illustrated in Table 10, the integrated balance sheet serves as a valuable tool for fiscal policy analysis and decision making. For FY 2022/23, the closing net financial worth stood at Nu. 12,160.159 million, reflecting a decline of Nu. 21,347.513 million from the opening net financial worth of Nu. 33,507.672 million. This reduction is attributed to transactions and other economic flows occurring throughout the FY.

Despite this decline, the positive net financial worth of Nu. 12,160.159 million indicates that financial assets exceed liabilities, representing 5.10 percent of GDP at the end of FY 2022/23. While this is a favorable position, it underscores the need for prudent and sustainable fiscal policies to prevent further deterioration of financial health. Maintaining a strong net financial worth requires a balanced approach to revenue generation, expenditure management, and debt sustainability to ensure long-term fiscal stability.

If the net financial worth continues to deteriorate, it is concerning as it suggests steady increase in liabilities outpaces the net accumulation of financial assets. This trend can indicate fiscal imbalances and potential financial instability. However, if the increase in liabilities is directed toward investments in productive non-financial assets, such as infrastructure, education, or technology, that yield reasonable returns and contribute to economic growth, the decline in net financial worth may be sustainable. These investments can enhance productivity, generate higher revenue over time, and ultimately offset the debt burden, ensuring long-term fiscal stability.

Thus, while a deteriorating net financial worth is a cause of concern, its impact depends on the utilization of borrowed funds. Prudent debt management and strategic investments are key to ensuring that liabilities translate into sustainable economic gains rather than financial distress.

Table 10: Integrated Balance Sheet of Bhutan as of June 30, 2023

June 30 /Nu. In million	2022	2023				
INTEGRATED BALANCE SHEET	Closing balance	Transactions	Other economic flows			Closing balance
	2022		Holding Gains and Losses	Other volume changes	Residual	2023
1 REVENUE		**59,131.1**				
Taxes		**26,706.6**				
Taxes on income, profits, and capital gains		14,644.6				
Taxes on property		4.8				
Taxes on goods and services		9,355.3				
o/w Green taxes / Taxes on Pollution		900.5				
o/w Excises		574.8				
Taxes on international trade and transactions		1,039.7				
Grants		**14,363.3**				
Other revenue		**17,751.5**				
2 EXPENSE		**40,201.2**				
Compensation of employees		**18,758.0**				
Use of goods and services		**5,780.2**				
Interest		**4,036.5**				
Subsidies		**1,334.6**				
Grants (to Thromdes)		**1,875.6**				
Social benefits		**2,896.8**				
Other expense		**5,519.5**				
GOB Gross Operating Balance (1 minus 2)		**18,929.9**				
31 Nonfinancial assets	...	**28,093.5**	...	...	...	...
Fixed assets	...	28,002.4	...	...	...	...
Nonproduced assets	...	91.1	...	...	...	...
2M Expenditure (=2+31)		**68,294.7**				
Net lending (+) / Net borrowing (-) (1-2-31) or (1-2M)		**-9,163.5**				
statistical discrepancy / financing gap		0.0				
Net Financial Worth (and changes in):	**33,507.7**	**-9,163.5**	**-7,877.5**	...	**-4,306.5**	**12,160.2**
Financial assets	**291,088.0**	**6,539.6**	**-5,520.9**	...	**-2,969.5**	**289,137.1**
Currency and deposits	1,888.5	1,123.8	...	...	-2,969.5	42.8
Debt Securities	...	...	...	...	...	...
Loans	171,435.5	4,617.2	...	...	0.0	176,052.7
Equity and Investment Fund Shares	117,764.0	798.6	-5,520.9	...	0.0	113,041.7
Liabilities	**257,580.3**	**17,040.1**	**2,356.6**	...	**0.0**	**276,976.971**
Currency and deposits	...	...	...	...	...	...
Debt Securities	27,700.0	153.6	...	...	0.0	27,853.6
Loans	229,880.3	16,886.5	2,356.6	...	0.0	249,123.4
Memorandum items:						
Net financial worth	33,507.7					12,160.2
Net financial worth (in percent of GDP)	17.4					5.1
Gross debt	257,580.3					276,977.0
Gross debt (in percent of GDP)	133.6					116.8
Net debt	84,256.3					100,881.5
Net debt (in percent GDP)	43.7					42.6
Nominal GDP (Nu. In millions)	**192,818.4**					**237,052.7**
Contingent liabilities - Guaranteed Debt	5,070.9					4,779.7
Contingent liabilities - Guaranteed Debt (%GDP)	2.6					2.0
Gross debt - NonHydro	33,077.3					39,375.2
Gross debt - NonHydro (in percent of GDP)	17.2					16.6
Net debt - NonHydro	24,042.6					30,561.3
Net debt - NonHydro (in percent of GDP)	17.1					19.1
Guaranteed debt - NonHydro	202.3					101.2
Guaranteed debt - NonHydro (in percent of GDP)	0.10					0.04

2.8 Conclusion

The fiscal policy under the 13th FYP reflects a decisive adoption of expansionary fiscal policy aimed at stimulating economic growth and addressing the structural challenges plaguing Bhutanese economy. The substantial increase in fiscal outlay underscores the government's commitment to the achievement of the strategic goal of attaining a high-income country by 2034. While the planned fiscal deficit of 3 percent of GDP is in line with the 13th FYP deficit target, short-term fiscal pressure remains, necessitating prudent management of expenditure and debt. Ensuring fiscal discipline while fostering economic transformation and growth requires efficient and effective expenditure policy and tax policies that not only mobilize resources but are business friendly.

Despite an upward trajectory in revenue performance, the reliance on tax revenue remains volatile due to seasonal fluctuations. The planned implementation of GST is a crucial step towards broadening the tax base, enhancing government cash flow and avoiding cascading effect of taxes that is witnessed under the current sales tax regime. However, the current GST law to be effective will require revision of the EET and exemptions. Additionally, successful execution will require robust administrative capacity and public awareness. With the implementation of GST, there is no longer a need for providing separate fiscal incentives as the GST system removes the cascading effect. Meanwhile, external grants continue to be a significant resource, with India as the largest contributor.

On the expenditure side, expenditure management poses other challenges, with recurrent spending projected to rise, driven by interest payment and administration cost, and inefficient capital utilization. While capital expenditure growth aligns with development priorities, execution efficiency remains a concern mainly with improper planning and inefficient post evaluation of infrastructure projects resulting in decline in capital productivity in the economy. Further, the historical pattern indicates a cyclical spending surge towards the middle of plan, while spending slows towards the beginning and end of the FYP cycle, underscoring the need for smoothening the expenditure and adopting counter-cyclical approach to public expenditure. Within the plan period and especially during the fiscal year, enhancing capital utilization, eliminating last-minute procurement, and prioritizing high-impact projects will be critical to maximizing fiscal policy effectiveness.

Looking ahead, Bhutan's fiscal trajectory will depend on its ability to sustain economic momentum and address the structural challenges within the economy while maintaining fiscal prudence. Strengthening public financial management and improving expenditure efficiency to eliminate sunk cost will be key to ensuring fiscal policy effectiveness. A well-coordinated fiscal strategy targeting spending efficiency supported by other initiatives such as deregulating domestic industries and developing industry development strategy will be crucial in achieving the country's vision of a high-income country.

Chapter 3:
Monetary and Financial Market Situation and Outlook

3.1 Introduction

The uncertainties surrounding the global geopolitical situation, compounded by the potential trade war, poses significant risks to the macroeconomic stability of a small economy like Bhutan. While the interest rate in advanced economies is expected to decline to 4.20 percent, the report also states that the progress of inflation reduction is stalling (IMF, 2024). This poses a risk of further tightening of monetary policies to bring down the sticky inflation in advanced economies resulting in capital flights from developing economies and tightening of domestic monetary policy irrespective of the economic outlook. This will be further exacerbated by the increased tariff by advanced economies, which can be seen in the fall of manufacturing outputs in emerging markets led by China.

A stable and well-performing monetary and financial sector is pivotal in maintaining macroeconomic stability and supporting economic growth. These include inflation, money supply, liquidity, credit growth, and financial market performance, all of which influence broader economic conditions. In the case of Bhutan, with a pegged exchange rate regime and strong capital control, the ability of the monetary policy to influence the market is limited. Therefore, a significant portion of the RMA's effort is focused on maintaining the exchange rate regime through effective reserves management.

Post-pandemic, due to decline in foreign reserves, significant effort was directed towards management of the reserves. As a result, moratoriums were imposed on vehicle imports and housing credit. Additionally, with the slow recovery of the post-pandemic economy, the loan deferment facility continued till 30th June 2024, which was further extended to 30th June 2025.[23] While the financial sector is slowly recovering, continued deferment could impact the financial institutions. Moreover, such measures used during exceptional economic crises should not be continued for a longer time as it is subject to moral hazard and rent-seeking behavior.

The 13th FYP period is characterized by significant government-led investment through budgetary spending and the ESP, aimed to revitalize economic growth and restore Bhutan's growth trajectory to its long-term growth potential. Overall, huge injections of money in the economy to increase the aggregate demand with limited supply will naturally result in either increase in prices or reduction in reserves as the demand will be met through increased imports. Therefore, it is essential to have proper monetary policy tools to address issues such as an increase in price, excess liquidity

[23] As of December 2024, a total of 5,083 loans have been granted deferment (BDBL=3,849; BOBL=225; BNBL=322; T-Bank=34; DPNB=173; RICBL=378; BIL=99; NPPF=3)

and depletion of reserves, so that the application of extreme counter-productive administrative measures such as a moratorium can be prevented.

3.2 Monetary Policy Operation

The RMA Act of 2010 mandates that its primary objective is to formulate and implement monetary policy to achieve and maintain price stability. In pursuit of this objective, the RMA employs a one-to-one pegged exchange rate with the INR as a monetary policy tool. To support the pegged exchange rate regime, it focuses on the prudent management of external reserves.

Given the pegged regime and significant dependency on imports, coupled with weak monetary policy transmission mechanism, the adoption of "inflation targeting" to manage price and economic stability is ineffective. Therefore, RMA uses Cash Reserve Ratio (CRR) as a monetary policy tool to maintain price stability in the economy by managing liquidity and money supply. The Monetary Policy Statement 2024 reaffirms its commitment to an accommodative monetary policy stance, relying on reserve requirements as the primary tool for regulating credit growth and money supply.

3.3 Price and Inflation

In December 2024, the general inflation increased to 2.02 percent from 1.87 percent in November 2024, bringing the national average inflation for January to December 2024 to 2.83 percent.[24] The increase in the inflation is due to rise in prices in the food and non-alcoholic beverages, offset by declining prices in non-food items. The divergent trends in price movements, with food prices rising and non-food items experiencing deflation, present significant implications for Bhutan's economy such as the policy dilemma in terms of responding to the mixed inflationary pressures. Moreover, in the long-run, rising food prices might require fiscal responses from the government through targeted fiscal measures to provide social safety nets for vulnerable groups. Figure 13 shows the year-on-year monthly inflation trend, however, it is to be noted the figures are likely to change when the rebasing of backward series becomes available.

[24] The CPI was rebased in May 2024 and NSB is yet to publish the backward series. Therefore, average inflation of 2.83 is not the actual inflation but rather statistical average.

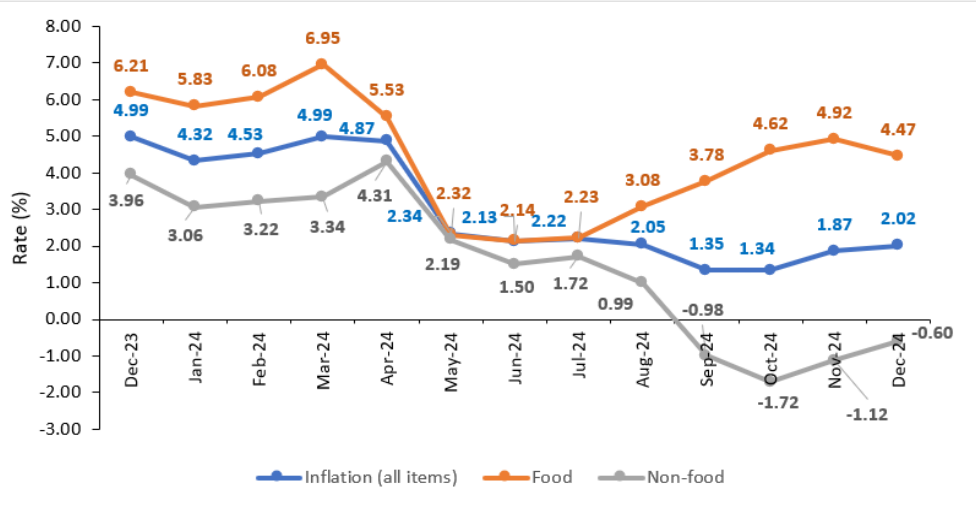

Figure 13: Year-on-Year Monthly Inflation Rates

Historically, Bhutan's economy has been closely linked to India due to geo-political, cultural and economic ties. Bhutan's currency peg to the INR constrains the effectiveness of monetary policy in managing inflationary pressures and reserves, thereby relying on fiscal policy and macro-prudential regulations. These factors have resulted in Bhutanese economy being heavily influenced by the Indian economy. As a result, inflation that is being experienced in Bhutan is mostly due to cost-push inflation associated with the Indian economy.

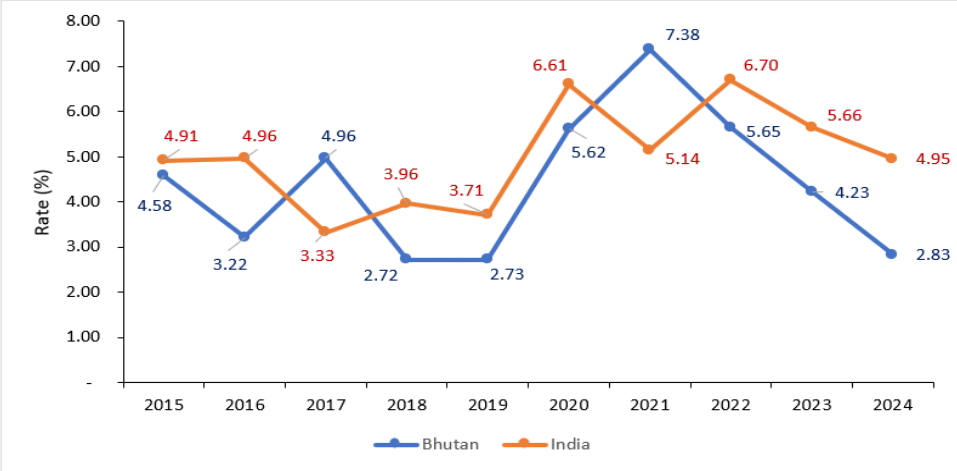

Figure 14: Annual inflation rates of India and Bhutan (2015-2024)

The parallel movements in inflation rates between Bhutan and India highlight their significant economic relationship, with both countries experiencing similar shock patterns, particularly during the 2020-2021 period when both countries saw notable inflation spikes. This is further substantiated by a strong positive correlation of 0.68, indicating a close price association and movements between the two countries. The results suggest that a 1 unit increase in India's inflation

is associated with a 0.60 unit increase in Bhutan's inflation. However, Bhutan's inflation displays greater volatility and fluctuations compared to India's relatively stable trajectory.

3.4 Money Supply

The money supply (M2) is projected to reach Nu. 252,522.750 million in FY 2024/25, with further expansion to Nu. 283,609.190 million in FY 2025/26, reflecting a growth rate of 12.31 percent. These projections indicate an upward revision compared to the previous quarter's estimates for both FY 2024/25 and FY 2025/26. This is primarily attributed to sustained growth in key components, including savings, time and foreign deposits.

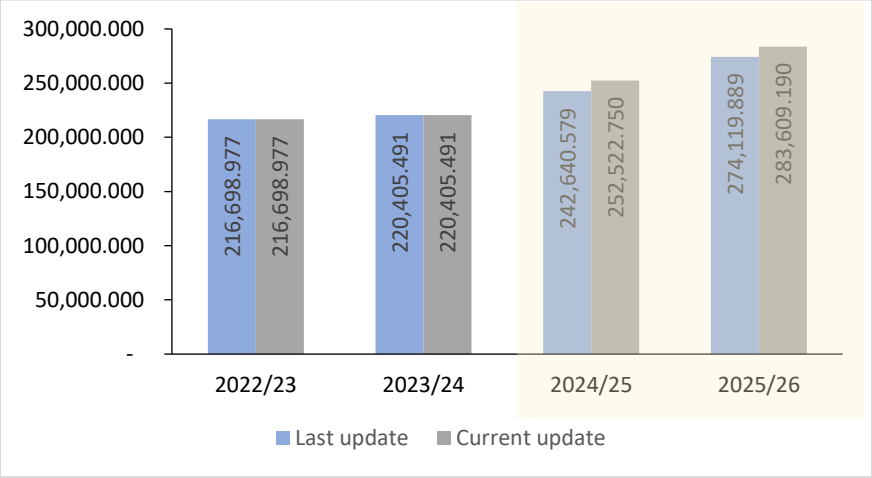

Figure 15: Money supply (M2)

The growth of the M2 indicates increased injection of money in the economy and liquidity in the financial system. Increased M2 without subsequent increase in the domestic production could potentially result in inflation or depletion of reserves, as observed post-pandemic. The impact of monetary expansion depends on how private sector credit is distributed across the sectors. When credit is directed toward productive sectors, it promotes sustainable economic growth. Conversely, credit channeled into unproductive sectors may exacerbate inflationary pressures and external imbalances, potentially causing macroeconomic volatility.

In view of money supply growth, the money multiplier has demonstrated an upward trajectory, increasing from 4.70 in FY 2023/24 to 5.12 in FY 2024/25. This indicates that for every Ngultrum introduced into the banking system, the money supply in the economy increases by 5.12 times, as a result of the fractional reserve banking system. While this trend supports economic growth, it also poses a risk of excess liquidity, and thus inflationary pressures if monetary expansion outpaces real sector productivity. Looking ahead, the money multiplier is projected to rise further to 5.32 in FY 2025/26, underscoring the need for prudent liquidity management to maintain macroeconomic stability.

3.5 Credit Situation

3.5.1 Sectoral Credit

The total outstanding credit is projected to reach Nu. 236,409.152 million in FY 2024/25, with a further increase of 9.20 percent in FY 2025/26. This growth is primarily driven by credit expansion in housing, tourism and hospitality, manufacturing, and trade and commerce.

Among these, housing holds the largest share of the credit portfolio, with Nu. 77,203.477 million – 32.66 percent of total credit– as shown in Figure 16. This is followed by hotel and tourism with Nu. 29,220.697 million, reflecting substantial investment in tourism infrastructure development and hospitality sector. Manufacturing ranks third, with a credit exposure of Nu. 27,787.868 million, underscoring its importance in the overall credit landscape. The credit allocation pattern reveals a significant concentration in the real estate market such as housing and tourism, highlighting potential sectoral concentration risks. With capital cycle phenomena overshadowing tourism and housing being a non-tradable sector, concentration of credit allocation into these sectors might increase financial sector risks significantly.

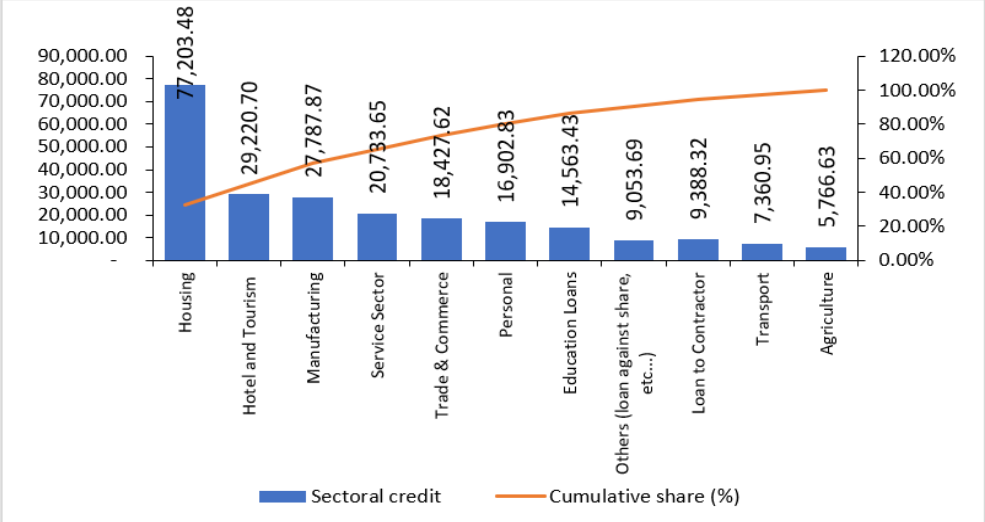

Figure 16: Sectoral Credit and Cumulative Share (%)

Despite being a vital sector that supports the majority of the population, agriculture continues to receive limited credit, reflecting lower returns of rural enterprises. Acknowledging the financial constraints faced by agriculture producers, various policies such as priority sector lending scheme, national credit guarantee and others were instituted. However, the sector records a relatively high level of NPLs, highlighting the low productivity of the agriculture sector and risks associated with agricultural lending. Lack of proper supply and value chain, logistic and market access are some of the major factors contributing to lower agricultural sector productivity. Meanwhile, the service sector receives moderate credit support, suggesting scope for optimizing credit distribution. The

concentration of loans in specific sectors requires close monitoring from a financial stability perspective, as high exposure to a few sectors increases systemic risks, especially during sector-specific downturns.

3.5.2 Non-Performing Loans

The data reveals concerning levels of NPLs across various sectors. As of November 2024, housing shows the highest NPL at Nu. 1,426.914 million, followed closely by trade and commerce at Nu. 1,372.549 million, and transport at Nu. 890.513 million. The concentration of NPLs in these sectors indicates potential for systemic vulnerabilities in the financial sector.

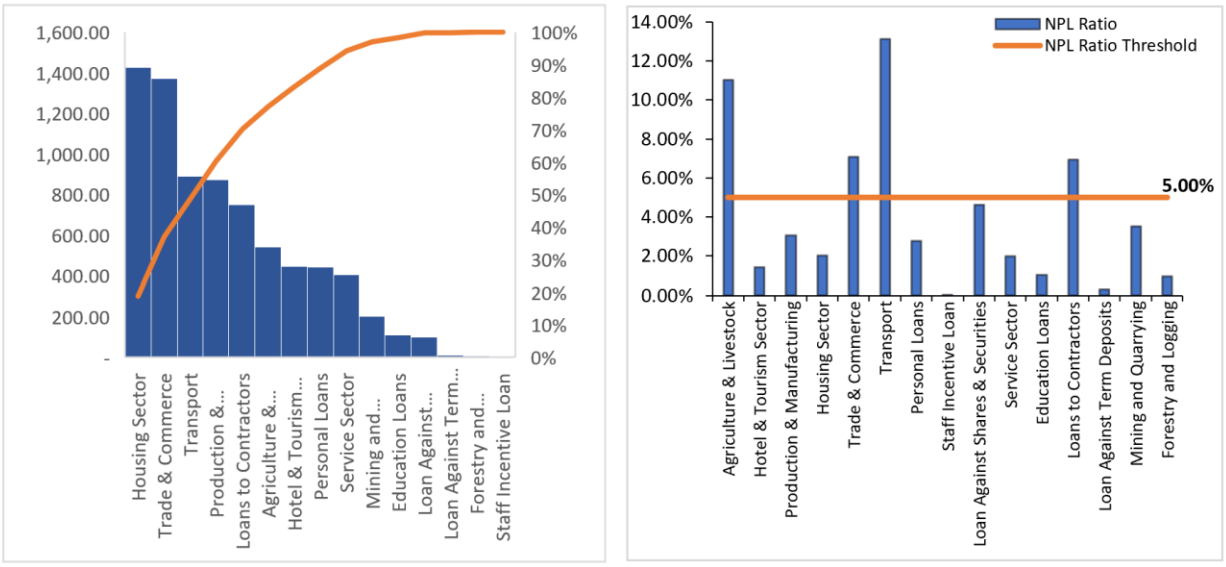

Figure 17: Sectoral NPL and Ratio against NPL Ratio Threshold

Further, the NPL ratio threshold of 5.00 percent has been breached in 4 of the 15 loan categories, as shown in Figure 17.[25] Most notably, transport exhibits the highest NPL ratio at 13.11 percent, followed by agriculture and livestock at 11.01 percent. Personal and manufacturing also show concerning levels breaching the threshold. These elevated ratios point to substantial risk factors within the banking sector's credit portfolio. High NPL in housing, combined with its dominant share of total credit, presents a significant risk to the overall banking sector's asset quality. Additionally, the elevated NPL ratios in transport and agriculture sectors, despite their relatively smaller credit shares, suggest underlying structural issues that require attention. The persistent breach of the 5 percent NPL ratio threshold across multiple sectors indicates broader systemic credit quality concerns that necessitate comprehensive response strategies.

[25] Royal Monetary Authority. (2024). *Prudential regulations 2024*.

3.6 Liquidity and Policy Rates

3.6.1 Liquidity

The CRR, a key tool for managing liquidity in the market, is set at 8.00 percent and expected to remain unchanged for FY 2024/25 and FY 2025/26. Current estimates for liquidity after meeting the CRR is projected at Nu. 14,107.633 million. However, the liquidity outlook for the subsequent periods are expected to follow a downward trajectory, primarily driven by the increase in import due to anticipated disbursement of the ESP loans and increased investment activities across various sectors.

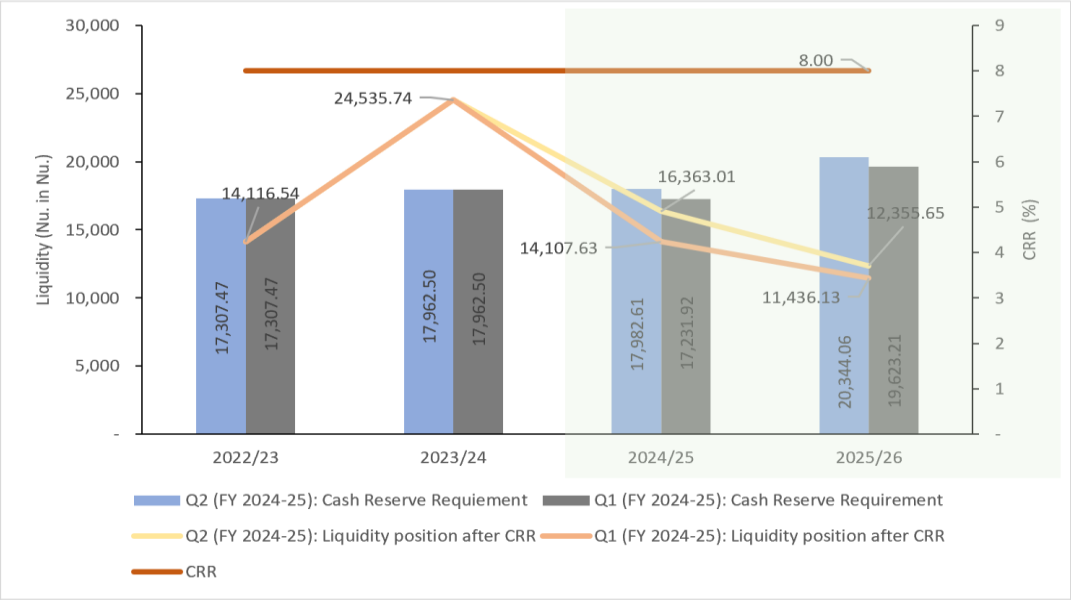

Figure 18: Liquidity Position

The reintroduction of the sweeping arrangement in the coming year, which was temporarily suspended in June 2023, is expected to manage excess liquidity in the banking sector. As a result of these factors, the projected liquidity positions after accounting for CRR for both FY 2024/25 and FY 2025/26 are anticipated to be notably lower than the projections made during the previous quarter. Nevertheless, it is important to highlight that excess liquidity followed by administrative measures resulting in tighter liquidity conditions has been the trend in the past two decades. Therefore, it is critical to institute diverse tools to address financial market concerns rather than relying on administrative measures, which is counterproductive to economic growth.

3.6.2 Policy Rates

The RMA's establishment of a 6.50 percent policy rate is expected to be a crucial monetary policy stance.[26] The implementation of this policy rate is expected to create a foundation for developing

[26] Royal Monetary Authority. (2024). *Annual Report 2024* (p. 92).

a more market-based monetary policy operational framework. Through instruments like Open Market Operations (OMO), RMA can enhance its capacity to manage systemic liquidity more effectively. This development is particularly crucial for fostering a more dynamic and better financial market infrastructure in Bhutan. However, it is important to note that the Minimum Lending Rate (MLR) was established with similar objectives, yet the monetary policy transmission effectiveness was limited. Therefore, due to the pegged-exchange rate regime, it is important to deploy various measures to influence the financial market.

3.7 Interest Rates

3.7.1 Lending Rates

The lending rates as of 2024 show significant variation across different sectors and financial institutions (FI). Personal loans have the highest lending rates, reaching up to 14.00 percent with Bhutan Insurance Limited (BIL), while government employee loans show relatively lower rates at 8.50 percent, reflecting their lower risk profile. Rates for general trade range from 11.16 to 13.00 percent, indicating the sector's moderate risk assessment by FIs. Among the FIs, BOBL offers competitive rates, especially in business and trade financing, while BIL tends to maintain the highest rates, reflecting its distinct risk assessment approach, as shown in Figure 19. Overall, the lending rate spread between highest and the lowest is 6.00 percent, reflecting different risk appetite by the FIs' on different lending products.

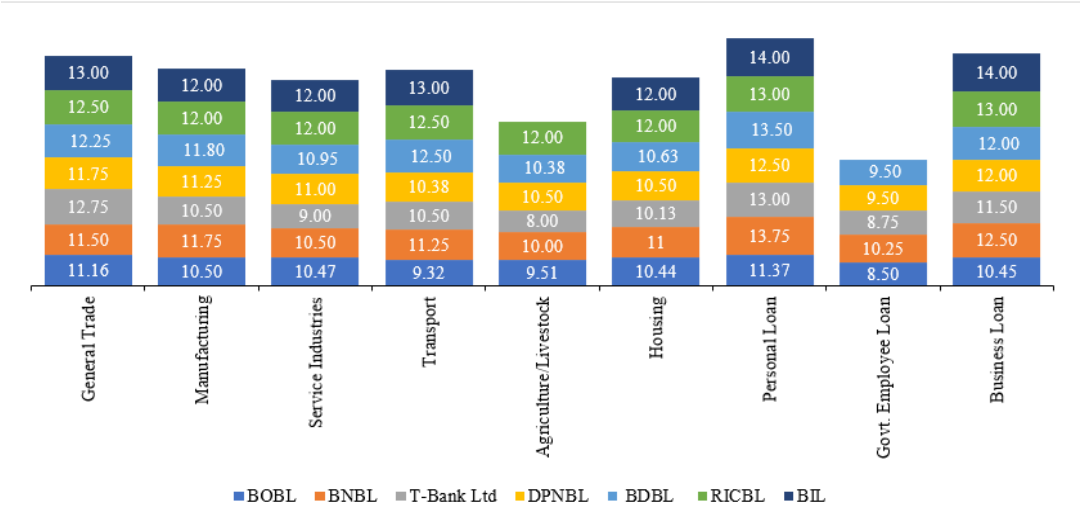

Figure 19: Lending Rates in Percent[27]

The lending rate environment is expected to remain relatively stable in the short term, though competitive pressures may drive selective rate adjustments in specific sectors. As a result of the sticky yet high lending rate, the government has offered concessional credit in various forms for

[27] The rates presented are the averages of the rates segmented by maturity.

over a decade, more recently, the concessional credit line through ESP. However, such continued interventions are not beneficial to the FIs as well as the overall economy. There is potential for more sophisticated pricing models that FIs can adopt, that better reflect borrower credit worthiness and sector-specific risks. Competition among the FIs may also catalyze innovation in lending products and pricing structures, potentially leading to more differentiated offerings for various customer segments. This evolution in lending rates should contribute to a more efficient and competitive financial sector while maintaining prudent risk management practices.

3.7.2 Deposit Rates

Among the five deposit taking banks, BDBL offers the highest interest rate at 5.60 percent, while BOBL offers the lowest at 4.50 percent for saving deposits. For recurring deposits, BNBL offers the highest interest rate at 7.72 percent, while BOBL has the lowest rate at 6.70 percent. In fixed deposits, BDBL offers the highest interest rate at 7.36 percent, while BOBL offers the lowest at 6.23 percent, as shown in Figure 20.

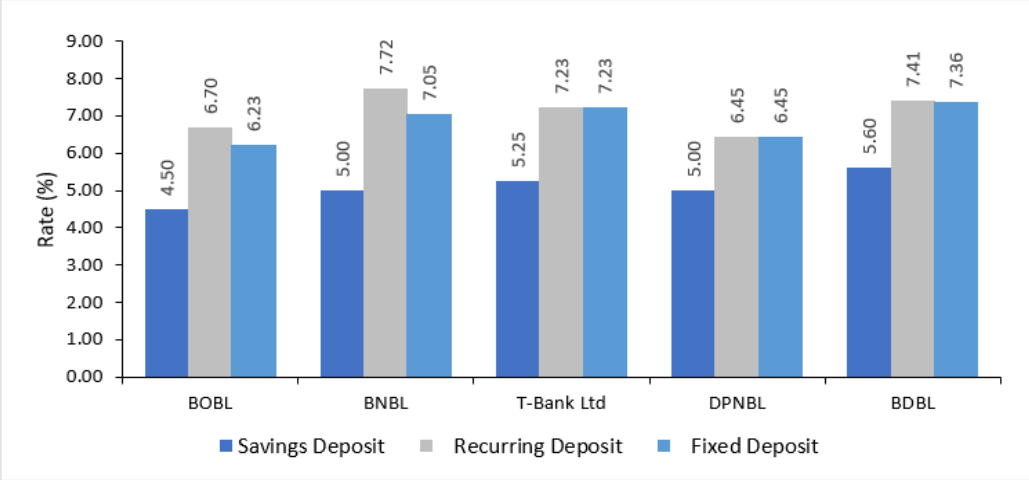

Figure 20: Deposit Rates

The current interest rate structure indicates healthy competition among banks, with some institutions offering higher rates to attract long-term deposits. This competitive environment is likely to continue, with banks adjusting rates in response to economic conditions and market dynamics. Higher deposit rates for longer durations, particularly in recurring and fixed deposits, indicate that banks are strategically focusing such instruments as their source of stable capital and to reduce asset-liability maturity mismatch. However, it is important to note that the interest rate spread between lending and borrowing is about 6.28 percent, which is relatively high compared to other economies.[28] While policy decisions need to be based on weighted interest rate spread, a simple interest rate spread also highlights the inefficiency and risk-adverse nature of FIs.

[28] Business Standard (2024). The interest rate spread hit a low of 2.25 percent for Public Sector Banks of India.

3.8 Capital Market

The capital market is essential for economic growth, providing alternative sources of long-term funding for businesses, governments and individuals. A well-functioning capital market strengthens the financial system, fosters growth and boosts investor confidence. With a market capitalization of Nu. 59,077.402 million, it represents approximately 21.00 percent of the GDP. The Royal Securities Exchange of Bhutan plays a modest but growing role in the financial system.[29] Currently, there are 18 listed companies with 9 security brokerage firms.

The market structure is heavily dominated by the FIs, which accounts for 73.56 percent of total market capitalization. This indicates a strong concentration in financial services, making the market highly reliant on the stability of the banking and insurance industries. This is followed by the manufacturing sector accounting for 21.40 percent. The tourism and services sector holds the smallest share at 5.04 percent despite its significant contribution to the economy, suggesting underrepresentation in the capital market.

Figure 21: Market Capitalization by Sector

Bhutan's capital market must evolve beyond its current FIs dominance by fostering greater sectoral diversification. Encouraging manufacturing, tourism, and technology-driven industries to participate in the market will enhance economic resilience. Additionally, supporting SMEs through incentives to access equity financing can strengthen market depth. Investments in tourism and services, alongside policies to boost industrialization and domestic production, will further expand market participation. However, to encourage market participation, it is important to review and reduce the regulation and bureaucratic procedures that are restricting participation in the capital market.

[29] The market capitalization, amounting to Nu. 59,077.402 million, is as of January 31, 2025.

3.9 Conclusion

The monetary and financial sector of Bhutan remains a cornerstone of economic stability and growth. However, the monetary policy framework, anchored by Ngultrum's peg to the INR, limits RMA's ability to manage inflation and interest rates. This challenge is compounded by inflation volatility, particularly in food prices, highlighting Bhutan's vulnerability to external shocks. Addressing these risks requires fiscal interventions and structural reforms, including strengthening domestic food production and supply chain efficiencies.

While the expansion of broad money supply and private sector credit reflects financial sector growth, the concentration of credit in housing, tourism, and manufacturing raises concerns over sectoral imbalances. High NPLs in transport, agriculture, and housing further indicate financial stability risks, necessitating stronger credit risk management. Liquidity conditions are expected to remain a challenge, making the reinstatement of liquidity management tools essential for stability. Further, high interest rate spread between lending and borrowing must also be addressed, since high interest rate spread only calls for government interventions through concessional credit that is distorting the financing market.

Despite steady progress, Bhutan's capital market remains underdeveloped and heavily concentrated in the FIs, limiting diversification. Expanding market participation beyond FIs to include manufacturing, tourism, and SMEs is imperative for fostering deeper financial market development and long-term economic resilience. Easing the regulation and bureaucratic process should improve access to the capital market resulting in market diversification.

Moving forward, Bhutan's monetary and financial authorities must focus on strengthening the effectiveness of monetary policy transmission, diversifying credit allocation, addressing sectoral NPL challenges, and fostering broader capital market participation. A strategic and well-balanced approach combining prudent regulatory oversight with economic diversification will be crucial in sustaining financial stability and promoting sustainable economic growth.

Chapter 4:
External Sector: Situation and Outlook

4.1 Introduction

Global trade dynamics in 2025 are characterized by policy uncertainty with governments in major economies implementing protectionist trade measures. In addition, geopolitical tensions in Ukraine and the Middle East could impact the energy and commodity prices. Accordingly, the IMF has projected a slowdown in global trade volumes. Amidst this, there is a shift in global trade and investment patterns with India emerging as a key player. These global trends present challenges and opportunities for a small economy like Bhutan who continues to face significant external imbalances.

Bhutan continues to face a persistent current account deficit, driven by its reliance on imports, external grants, and borrowings. The country's current account deficit is projected to reach 11.81 percent of GDP in FY 2024/25 and 8.62 percent in FY 2025/26, necessitating sustained capital and financial inflows, primarily in the form of grants and external borrowings, to bridge the gap. As such, the current account deficit is being financed through increase in inflows in the capital and financial account in the medium term for implementation of 13th FYP and accelerated hydropower development.

While the foreign reserves position is expected to improve in FY 2024/25, reaching US$ 971.537 million, and further in the medium term, this growth will largely stem from the accumulation of convertible currency reserves, whereas INR reserves are projected to decline. With limited export base, the buildup is also the result of inflows of grants and borrowings and as such, the economy remains vulnerable to external shocks, which can be exacerbated by global policy uncertainty. Therefore, maintaining an adequate reserve ratio to support the pegged exchange rate remains crucial to absorb external shocks.

The current account deficit will persist in the external sector albeit with some improvements and there is a positive outlook on the reserves position. However, the external sector continues to exhibit structural weaknesses in the economy.

4.2 Global Trade Dynamics

According to the IMF (2025), there is a downward revision in global trade volumes in anticipation of intensified protectionist trade policies that may come in the form of tariffs and other trade barriers that will discourage investment, disrupt supply chain and the trade flows. The economic policy uncertainty along with geopolitical tensions from ongoing conflicts in the Middle East and Ukraine could further impact the commodity and energy prices putting an inflationary pressure, exacerbating macroeconomic challenges (IMF, 2025).

At the same time, a shift in global trade and investment patterns is emerging, with increased investment and flows in India, Africa, Central Asia, and the Middle East while China and Russia experience decline in investment (Seong, et al., 2024). India is emerging as a key player, attracting increased investment from Asia, the US and Europe as exemplified by increased energy imports from Russia and exports of electronics and refined petroleum products to the US and Europe. These trends indicate a growing integration of India into global production networks.

For Bhutan, a small relatively closed economy[30] with heavy reliance on imports of goods, with India as the primary trading partner, these global developments present both challenges and opportunities. While the macroeconomic uncertainties and inflationary pressures pose risks that require enhanced capacity to absorb external shocks, India's emergence as a major player in global trade networks could benefit Bhutan, given the strong trading relationship and access/proximity to the Indian market which would require diversification.

4.3 Balance of Payment

The overall balance of payment in FY 2024/25 is projected to have a surplus of Nu. 28,112.466 million, an upward revision from Nu. 12,586.276 million projected in the previous quarter.

4.3.1 Current Account Balance

The Current Account Deficit (CAD) has been persistent, highlighting the structural issues of supply-side weaknesses. The Current Account Balance (CAB) in FY 2024/25 is projected to improve by 16 percent compared to the projection of the same period from the previous year. The improvement is primarily driven by upward revision in service exports during the current quarter of FY 2024/25 compared to the projection from the same quarter in FY 2023/24.

Comparing quarter to quarter projections, the CAD is expected to improve by 40.91 percent, to Nu. 35,442.188 million in FY 2024/25 (11.81 percent of GDP) compared to the previous quarter projection of Nu. 59,975.084 million (19.90 percent of GDP). The improvement in the CAD is on account of improvement in services and secondary income accounts. The service import is projected to decline compared to the previous projection by 34.49 percent as a result of downward revision in education related travels mainly attributed to the reduction in exodus rate.

The secondary income is expected to improve due to projected increase in inward remittances. Inward remittance from Countries Other than India (COTI) is projected at Nu. 17,566.557 million, an increase of more than 100 percent compared to previous quarter projection of Nu. 8,697.674 million. As of September 2024, an inward remittance of Nu. 5,269.938 million was recorded from COTI. This indicates an increased number of Bhutanese residing abroad (net migration) with the per-capita remittances in FY 2024/25 projected at Nu. 22,601.665, up from Nu. 11,471.862. There are no inward remittances recorded from India.

[30] Strong capital control and significant barriers with countries other than India.

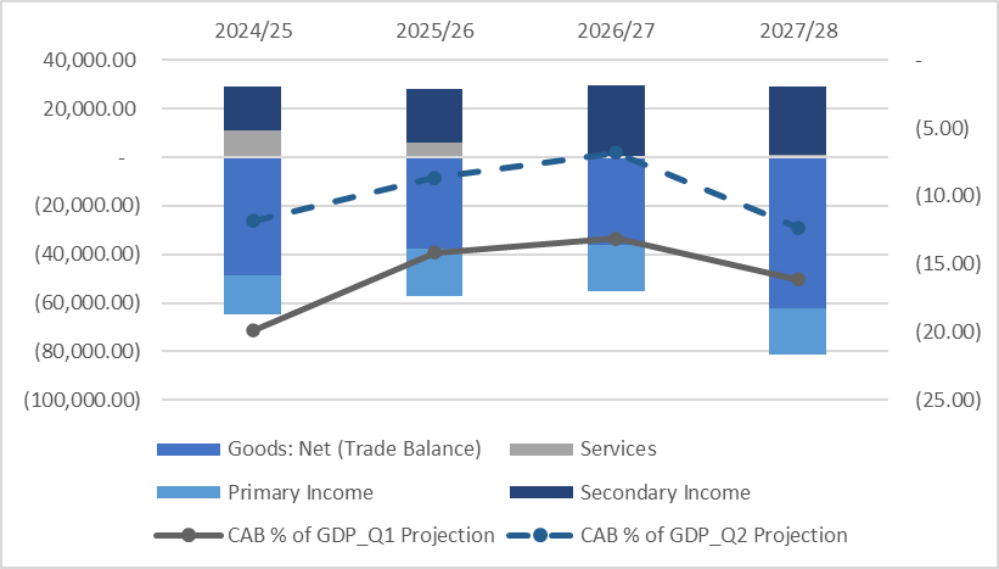

Figure 22: Current Account Balance Update

The medium-term outlook projects an improvement in current account, which is attributed to the bond redemption in FY 2025/26 and FY 2026/27. Additionally, the hydropower export is projected to increase, bolstered by the commissioning of PHP-II. The CAD is projected to improve to 8.62 percent and 6.80 percent of GDP in FY 2025/26 and FY 2026/27, respectively, before worsening in FY 2027/28 to 12.31 percent. This alludes to the fact that the structural CAD is not yet addressed and the supply-side weakness still persists. If this continues, it will lead to Bhutan resorting to more external borrowings to finance the external imbalance.

While a deficit can be beneficial depending on the composition of imports, and their impact on growth, the relationship between the CAB and drivers of economic growth suggests underlying issues. Long-term growth drivers (discussed in Chapter 8) indicate a decline in capital productivity across industries, which offsets labor productivity gains. This reinforces the view that Bhutan's high CAD reflects inefficient allocation of resources and deeper structural challenges within the economy.

4.3.1.1 Merchandise Trade[31]

The trade deficit is projected to increase to Nu. 58,220.517 in FY 2024/25, which is 6.70 percent higher than the previous quarter projections. This is mainly driven by an increase in import of merchandise goods from India, projected to increase to Nu. 117,369.798 million, which is 3.13 percent higher than previous projection. Import of goods from India for 2024 was projected at Nu. 85,491 million in the previous quarter, while the provisional data recorded an import of Nu.

[31] The merchandise trade deficit details and projections in this section is based on the Department of Revenue and Customs. The trade deficit projection in this section differs from trade balance under current account balance which is RMA's projection based on BoP data.

92,090.388 million, which is higher by 8 percent. As a result, the baseline revision for 2024 also led to an increase in the projected import for FY 2024/25.

Quarter on quarter comparison of trade data indicate that merchandise trade deficit (excluding electricity) in the current quarter worsened by 26.02 percent compared to the previous quarter. The increase in trade deficit is mainly on account of an increase in imports from COTI by 53.51 percent, from Nu. 4,368.116 million to Nu. 6,705.506 million in the first quarter and second quarter, respectively. This is attributed to increased import of data processing machines in the second quarter. In the same quarter, import from India also increased by 11.16 percent while export improved marginally by 4.48 percent.

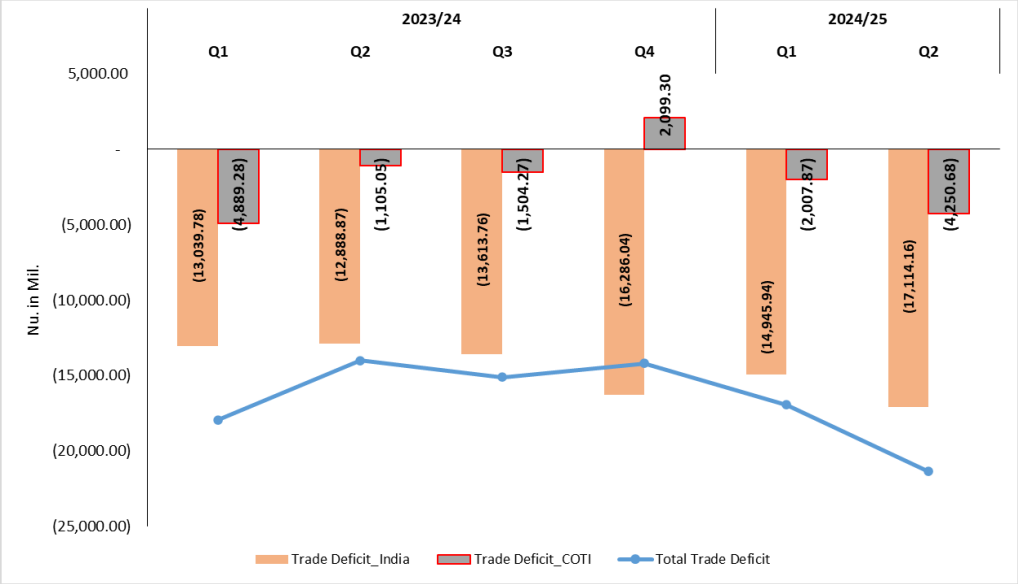

Figure 23: Trade Statistics Update

The merchandise trade deficit (excluding electricity) recorded an improvement of 4.18 percent from Nu. 70,573.029 million in 2023 to Nu. 67,623.440 million in 2024. The improvement in trade deficit is mainly on account of improvement in merchandise trade with COTI by 59.46 percent. The imports from COTI have shown a volatile trend in recent years. There has been a stable upward trend in import of goods from COTI since 2018, increasing at 18.32 percent on average between 2019-2021. However, it recorded a sharp spike in 2022, when import surged by 77.46 percent, but has since declined by 27.47 percent on average in 2023 and 2024. On the other hand, the trade deficit with India worsened in 2024 compared to 2023 by 9 percent.

Bhutan's trade pattern indicates that it imports from approximately 83 nations but exports to only about half that number, totaling 34 countries in 2024.[32] Trade is highly concentrated with its top 10 trading partners, accounting for 97.52 percent of total trade, of which 84.28 percent is with India. In terms of total imports, 84.89 percent is sourced from India while 79.52 percent of total

[32] This is based on provisional trade statistics data from DRC, MoF for goods and electricity trade sourced from MFCTC

exports goes to India. Among its top 10 trading partners, Bhutan had a trade surplus with only 4 of them. The highest trade surplus is with Bangladesh of Nu. 5,080.24 million, followed by South Korea (Nu. 1,078.37 million), Nepal (Nu. 402.94 million) and the US (Nu. 100.22 million). The trade surplus with these countries is driven by a narrow range of export commodities primarily iron and steel, mineral products (boulders and gypsum) and vegetable products (cardamom). This reflects a limited and low value export base as exhibited by the export of boulders and gypsum. Additionally, iron and steel exports will be dependent on the global market, with Bhutan facing competition from large players like China and India, making it vulnerable to price volatility and global demand. Similarly, cardamom exports and other agricultural products face competition.

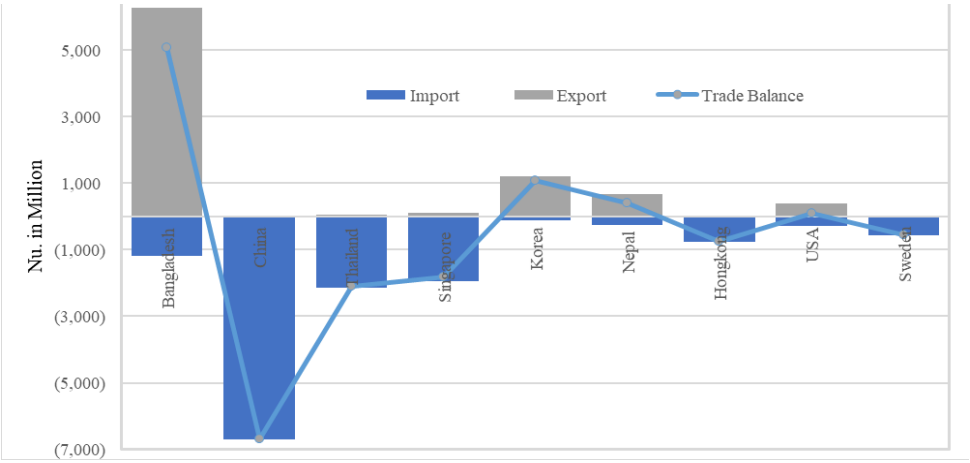

Figure 24: Trade Patterns with top trading partners (excl. India)

In the medium term, the trade deficit is projected to worsen in FY 2025/26 and FY 2026/27 mainly resulting from worsening trade deficit projected with India. The import of goods is expected to increase from India taking into consideration the anticipated imports for new hydropower developments.

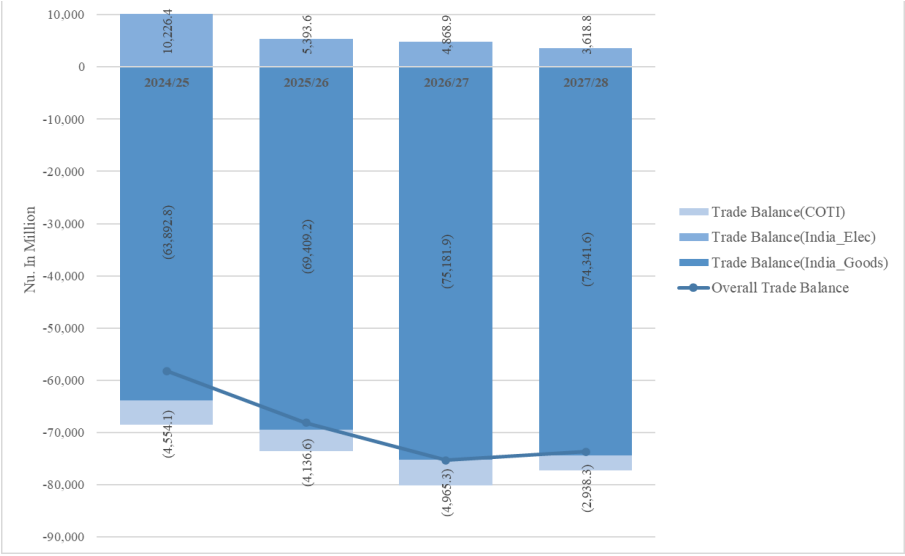

Figure 25: Balance of Trade Projections

4.3.1.2 Terms of Trade

Terms of trade (TOT) measures the ratio of export prices to import prices which provides an indication of a country's economic health. Bhutan's TOT has fluctuated over the past decade, with a deterioration observed after 2018 signaling increasing import costs relative to export earnings.

The TOT index peaked in 2017 (102.51) and 2018 (101.87), reflecting positive terms of trade. However, there's been a downward trend since then, with a sharp decline from 99.69 in 2021 to 86.01 in 2023. This decline can be attributed to the rising import costs of mineral products, metals and chemical products, which have been exacerbated by global inflation and supply chain disruptions. On the other hand, the export prices did not see a corresponding rise as shown in Figure 26.

In 2024, the TOT showed a slight improvement of 87.06, up from 86.01 in 2023. This was primarily driven by improved export prices of metals and metal articles. However, overall, TOT remains well below 100, suggesting that the export earnings are not sufficient to fund imports, leading to a worsening in the trade balance.

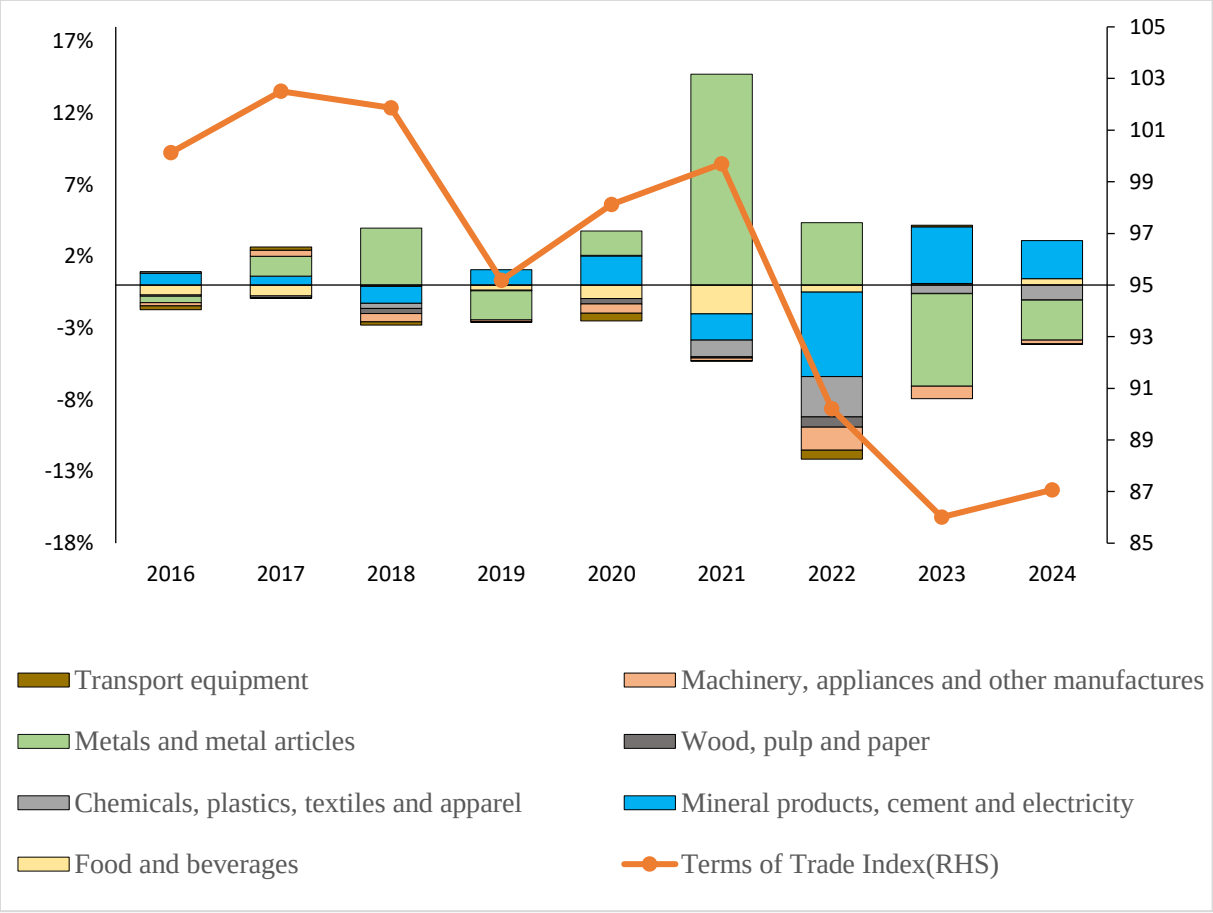

Figure 26: Terms of Trade and Components

Source: Export Import Price Indices, NSB

4.3.2 Capital Account Balance

The capital account balance in FY 2024/25 is projected at Nu. 9,949.878 million, an increase of 14.75 percent compared to the projection from the same period in the previous fiscal year. The capital account inflow is anticipated from the disbursement for the hydropower projects and budgetary grants for investment, of which 86.53 percent of the capital inflows is projected from India. In the medium term, the capital account is expected to see further growth, driven by increased inflow of grants as the implementation of the 13th FYP reaches its peak. This period will also coincide with the significant advancement in hydropower development.

At present, the capital account substantially contributes in supporting the balance of payments and the accumulation of reserves. While strengthening the capital account is necessary in the short to medium term to maintain external balance, long-term reliance on it is unsustainable. Therefore, it is important that the supply-side should be boosted to reduce the CAD and the subsequent shock on the reserves.

4.3.3 Financial Account Balance

The net financial inflows in FY 2024/25 is projected at Nu. 53,604.776 million, which is 1.50 percent lower than the previous quarter projection. The slight revision is on account of downward revision in FDI while external borrowings have been revised upwards. This implies that the net financial inflows to finance the CAD is not on account of FDI, but rather external borrowings.

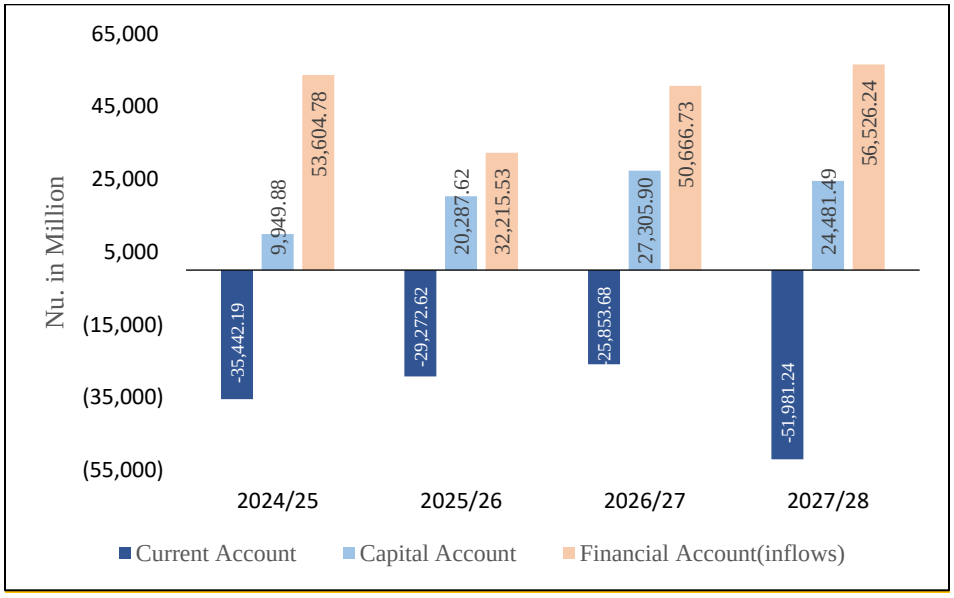

Figure 27: Balance of Payment Projection

In the medium term, net financial inflow is projected to decline on account of increased trade credit before increasing in FY 2026/27 and FY 2027/28 driven by increase in hydropower and budgetary external borrowings. However, since this is a financial account, it needs to be noted that at a later

date, the principal will need to be re-paid along with interest. Thus, for a sustainable financial account, there has to be a shift from external borrowings towards FDI inflows.

4.3.3.1 Foreign Direct Investment

The FDI is projected at Nu. 4,833.227 million in FY 2024/25, a downward revision by 18.85 percent compared to the previous quarter projection. The FDI in the medium term is projected to improve at a stable rate of 5 percent annually.[33] Currently, most FDI inflows in Bhutan are concentrated in the high-end tourism market and other sectors, which are relatively mature compared to other industries. While efforts to promote FDI have been ongoing for nearly 2 decades, the actual inflow of FDI has been limited due to various factors, including regulatory constraints. With the decline in capital productivity and stagnation of TFP, FDI has to be prioritized as a tool for enhancing productivity rather than means to attract foreign currency inflows.

The 13th FYP targets a FDI of Nu. 500 billion, which would be a challenge given the current trajectory. Nevertheless, an Economic Development Board (EDB) chaired by the Hon'ble Prime Minister has been instituted to streamline and expedite foreign investment. This initiative aims to minimize bureaucratic hurdles, reduce regulatory complexities, and eliminate red tape, thereby fostering a more efficient investment environment that could result in increased inflow of FDI. Global experience suggests that fostering FDI requires a balanced approach, including streamlining regulations and adopting measured capital control policies. Traditionally, FDI in Bhutan has been promoted through fiscal incentives, but such policy instruments create a distortionary effect in the market, displacing the domestic industries against already competitive foreign investors. Thus, it is imperative that should Bhutan want to enhance productivity within the shortest duration, FDI has to be prioritized by providing the right incentives without impacting the domestic industries.

4.4 Foreign Reserves

Bhutan's foreign reserve position is projected to improve to US$ 971.537 million at the end of FY 2024/25, by 19 percent compared to previous quarter projections on account of improvements in the current account. This is enough to finance 25 months of essential imports. As of 25th January, 2025, the external reserves amounted to US$ 866.060 million (RMA, 2025), fulfilling the constitutional requirement of maintaining 12 months of essential imports.[34]

[33] Estimates do not take into account the anticipated inflows for GMC.
[34]Essential imports are valued at US$ 464 million.

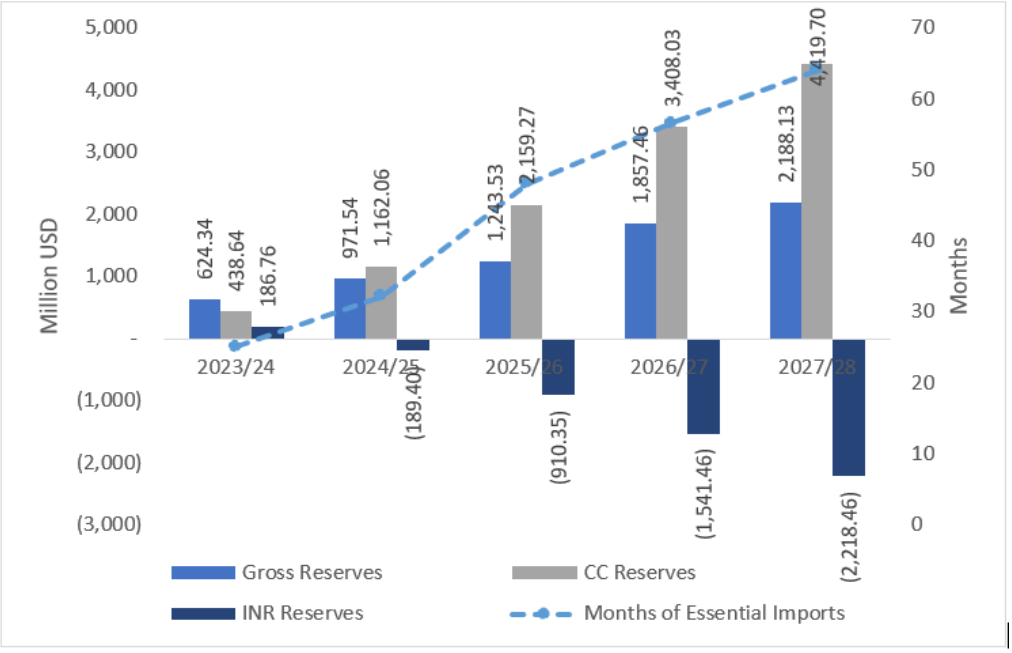

Figure 28: Foreign Reserves Position

While the overall foreign reserve is expected to improve over the medium term, it is worth noting that the projected buildup in the foreign reserve is driven by improvements in CC reserve position, whereas, the INR reserves position is expected to decline. This creates a potential mismatch, as India remains Bhutan's primary trading partner, exposing Bhutan to exchange rate fluctuations risks and higher transaction costs as CC reserves are converted into INR to finance imports from India. While this is not a major concern yet, improving INR earnings will help mitigate any potential exchange rate shocks.[35]

4.5 Exchange Rate

Bhutan's fixed exchange rate regime of pegging BTN to INR provides price stability and reduces transaction costs in light of India's role as the primary trading partner. In this regard, BTN mirrors the INR's nominal exchange rate trends. The nominal exchange rate shows that the value of BTN against USD depreciated marginally from Nu. 81.611 in FY 2022/23 to Nu. 83.102 in FY 2023/24 as shown in Figure 29. This depreciation has dual implications: it increases the cost of imports from COTI and at the same time, potentially enhancing the competitiveness of Bhutanese exports. This is particularly significant given the recent spikes seen in import of goods from COTI which exerts further pressure on reserves. However, Bhutan's reliance on imported raw materials and the resulting increase in production costs undermine the competitiveness in export market that would result from currency depreciation.

[35] Rupee crunch

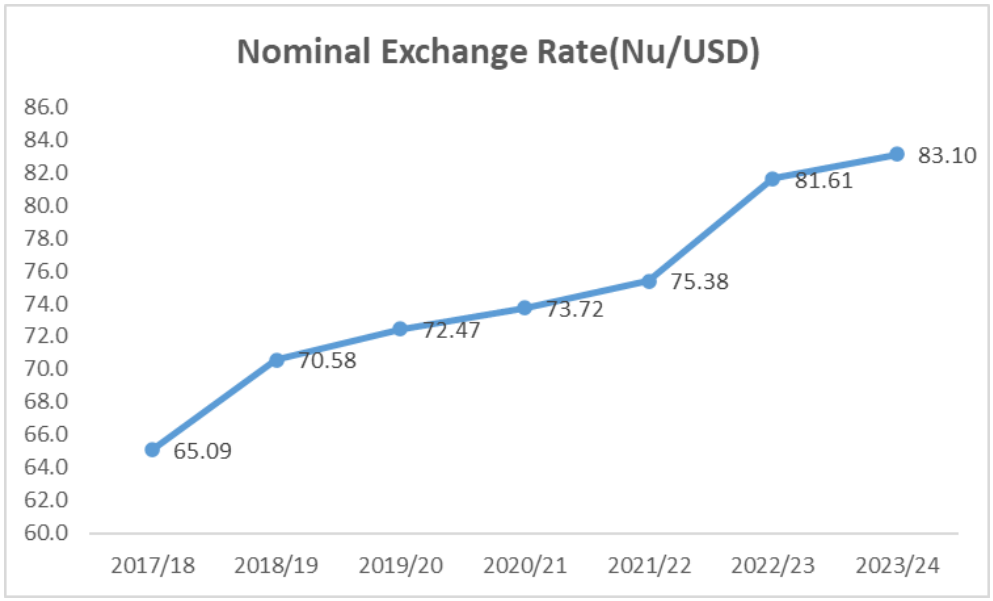

Figure 29: Nominal Exchange Rate (Nu/USD)

Source: Monthly Statistical Bulletin, January 2025

The pegged currency regime with lower overall productivity as compared to India results in overvaluation of BTN while looking at the Real Exchange Rate (RER), which accounts for relative price levels for Bhutan and India. Historically, the RER is estimated to be more than 1 indicating an overvaluation of the BTN relative to the INR. This made Bhutanese goods and services relatively more expensive and also placed pressures on the INR reserve position. However, there was a significant shift in 2024, where the RER declined to approximately 0.983 signaling an undervaluation of the BTN. This may be a result of the CPI rebasing done in May 2024, as RER is normally expected to shift on account of structural changes within the economy through improved competitiveness and enhanced productivity.

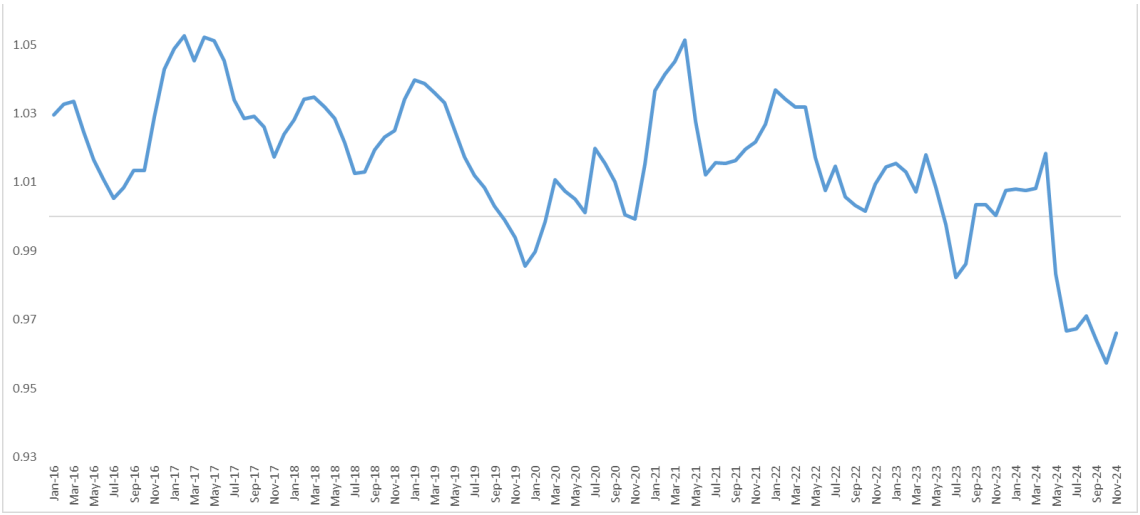

Figure 30: Real Exchange Rate (Nu/INR)

As domestic electricity demand increases, the reduction in exports could result in a further deterioration in the economy's competitiveness especially if this does not translate into a proportionate increase in the export of other products which use electricity as an input. It is also essential to address the transfer pricing issues so that the economic entity operating within Bhutanese territory contributes meaningfully in enhancing the productiveness and competitiveness of Bhutan with the rest of the world. Such effort will result in strengthening and maintaining stability of the Bhutanese currency to absorb external shocks.

4.6 International Investment Position

The net International Investment Position (IIP) of Bhutan stands at negative US$ 4,199.432 million at the end of June 2024. The total financial assets amounted to US$ 496.986 million, a decrease of 29.70 percent from June 2023. Reserve assets represent the majority of the asset (49.42 percent) which has declined by 55.64 percent from the previous year. This provides a buffer to absorb external shocks but the decline could put pressure on maintaining adequate reserves. On the other hand, total external financial liabilities increased by 1.00 percent from US$ 4,649.882 million in the previous year to US$ 4,696.419 million. The increase was mainly driven by the loans, which increased from US$ 4,363.127 million in June 2023 to US$ 4,423.797 million, comprising 94.20 percent of the total liabilities.

Table 11: International Investment Position

	Jun-22	Jun-23	Jun-24
Net IIP	**-3,489.94**	**-3,942.88**	**-4,199.43**
Assets	**983.40**	**707.00**	**496.99**
Currency and deposits	62.68	63.60	67.43
Trade credits	115.68	89.62	183.93
Reserve assets[1]	803.78	553.78	245.63
Others	1.27	0.00	0.00
Liabilities	(4,473.34)	(4,649.88)	(4,696.42)
Direct investment in Bhutan	(138.03)	(147.40)	(141.84)
o.w. Equity	(108.73)	(108.08)	(103.99)
o.w. Intercompany debt	(29.29)	(39.32)	(37.85)
Currency and deposits	(64.49)	(72.31)	(79.25)
Loans	(4,192.14)	(4,363.13)	(4,423.80)
Trade credits	(44.77)	(33.07)	(26.13)
SDR allocations	(33.91)	(33.97)	(25.39)

Source: Monthly Statistical Bulletin, January 2025, RMA

4.7 Conclusion

Bhutan's external sector outlook in 2025 is marked by both improvements and persistent vulnerabilities. The structural CAD is projected to decline to 11.81 percent of GDP in FY 2024/25 and improve to 8.62 percent in FY 2025/26. Although high, the decline is on account of lower service imports and high remittance inflows, with subsequent improvement in foreign reserves. However, structural trade imbalances and a reliance on external borrowings underscore weaknesses and lack of productivity in the economy. Strengthening competitiveness through addressing the structural issues remains critical to maintaining an adequate reserve ratio for macroeconomic stability.

The trade deficit is expected to widen due to rising imports, from both India and COTI. In 2024, exports to COTI increased by 43.88 percent, but the overall trade deficit remained high due to a surge in trade deficit with India by 21.91 percent. Key import drivers include mineral fuels, and data processing machines, comprising 19.27 percent and 10.55 percent of merchandise imports, respectively. The CAD is financed through improvement in capital and financial account, with external borrowing and grants, financing about 67 percent of the deficit. Nevertheless, FDI, which is an important source of improving productivity and production know-how in the economy, remains low at just 1.8 percent of GDP.

The continued depreciation of the Ngultrum, coupled with Bhutan's dependency on India for trade, necessitates policy interventions to mitigate external shocks. Further, the deterioration of terms of trade represents erosion of consumer purchasing power, worsening of trade deficit, and reduced competitiveness constraining the growth. Going forward, enhancing export diversification, strengthening foreign investment inflows, and managing external debt prudently will be critical in ensuring Bhutan's macroeconomic stability and long-term resilience in an increasingly uncertain global trade environment. More importantly, it is crucial that Bhutan address the supply-side weaknesses to increase production within the economy to address the structural CAD.

Chapter 5:
Household and Labor Market

5.1 Introduction

Bhutan's economy has experienced significant structural shifts over the past few decades, transitioning from a predominantly agrarian society to one increasingly reliant on industry and services. Despite these changes, the labor market transformation has not kept pace with the evolution of the goods market. While agriculture still dominates the labor force, accounting for over 41% of employment, its contribution to GDP has declined significantly. The lack of proper industrialization and stagnation of the service sector have created limited productive employment opportunities, particularly for the growing youth population. This mismatch has resulted in persistent youth unemployment, a pressing issue for policymakers, as well as challenges in labor market integration.

The shift away from agriculture is evident in Bhutan's evolving employment landscape, with the services sector becoming the second-largest employer, now producing over 50% of the economy's output. However, productivity in both the industrial and service sectors remain low, hindering overall economic growth. Despite some progress in agricultural productivity through modern farming techniques, rural areas remain highly dependent on agriculture, with limited access to economic opportunities. This has led to a widening rural-urban divide, with urban areas benefitting from better employment prospects while rural regions face higher poverty and lower standards of living.

Social progress in Bhutan has been mixed. While poverty levels are gradually declining, significant disparities remain between urban and rural areas. Urban areas benefit from greater access to employment and economic resources, while rural communities face challenges such as inadequate infrastructure and limited market access. This disparity is mirrored in educational outcomes, with urban areas showing higher literacy rates and income levels. Additionally, with a declining fertility rate and increasing life expectancy, Bhutan could face an aging society, posing long-term economic challenges. A disparity between rural and urban calls for targeted government interventions rather than blanket government spending that is resulting in low productivity and economic opportunities.

5.2 Structural Transformation of Labor Market

Structural transformation of a growing economy is marked by the transition from a low-productivity, labor-intensive sector to a higher-productivity, skill-intensive sector. Such shifts will enhance the labor output ratio, thus, enhancing their income and improving their standard of living. Although Bhutan's labor market has experienced notable structural shifts over the past few decades, it has not kept up with the structural changes in the goods market.

Figure 31 illustrates that the goods market has undergone a structural transformation in Bhutan, with an agricultural-dependent economy in the 1990s gradually shifting towards industry and services, with a more significant shift towards the latter. On the other hand, the labor market has not seen a proportionate shift with over 41 percent of the labor market still dependent on agriculture, while contributing only 13 percent to the GDP. However, the gradual adoption of modern farming techniques, improved seed varieties and machinery has led to gradual increases in labor productivity. Despite these improvements, the sector's relatively low share of total GDP means its overall impact on the broader economy remains limited.

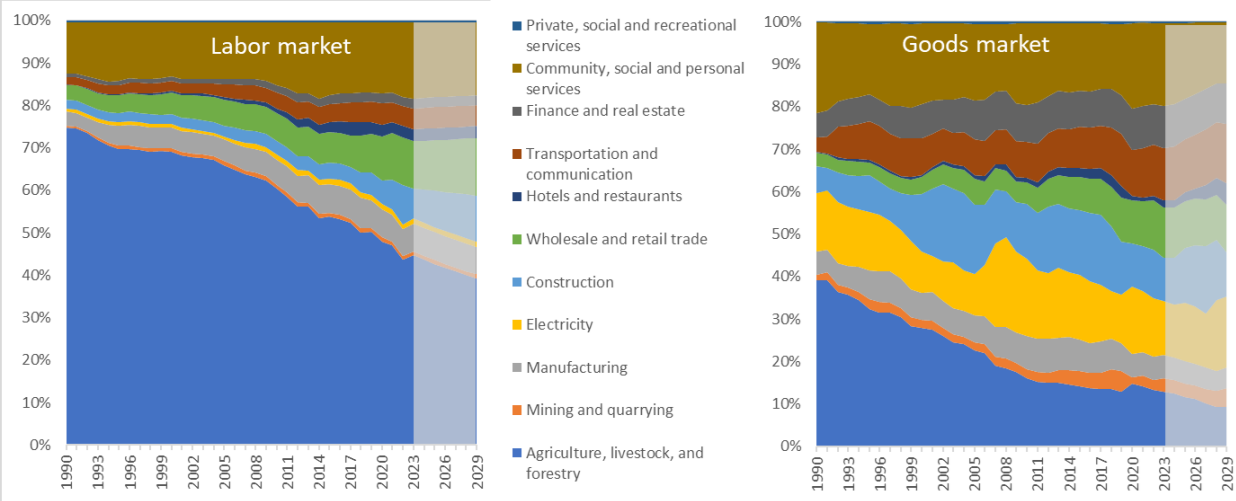

Figure 31: Structural Transformation of the Economy

Laborers who moved away from the agriculture sector, were absorbed into the transportation, wholesale and retail, construction and community services. While such a sector initially fosters labor mobility and boosts productivity, jobs in such sectors may be less stable and offer lower wages, especially in developing economies like Bhutan. This will ultimately lead to a halt in productivity gains, resulting in stagnation of the overall economy.

Unlike typical economic structural transformation paths of industrialized countries, whereby the economy transitions from an agrarian to an industrial economy and then to services, in Bhutan's case, the services sector has attracted much of the labor that has moved away from the agriculture sector. From employing just about 20 percent of the total labor force in 1990, the services sector is now the second largest employer producing over 50 percent of the total output. The output per labor in the service sector has increased gradually since 2010, offering more productive employment. However, it is observed that the output per labor in the industry sector has been declining since 2010, as industrialization has not fully taken root in the economy. Given the industry sector's potential to provide productive employment, the lack of progress in this sector is a key reason for persistently high youth unemployment in Bhutan.

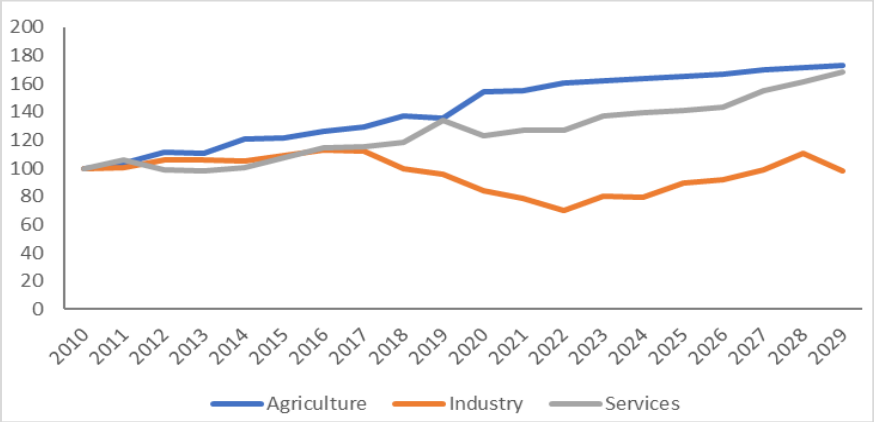

Figure 32: Output per Labor (Index = 2010)

Bhutan's structural transformation illustrates a disconnect between the evolution of the labor market and the changes occurring in the goods market. Considering the deindustrialization of the economy and the service sector stagnation due to the slow recovery of the tourism sector, the availability of productive employment in the economy still remains a challenge. This is one of the structural challenges for Bhutan which needs to be addressed within the 13th FYP.

5.3 Labor Market Dynamics

5.3.1 Employment

The employment rate in 2024 remained stable, averaging 96.5 percent, same as the previous year. Statistics show that rural areas have higher employment as compared to urban areas given that much of the subsistence form of agricultural practices are rural-based, where a majority of the labor force is concentrated. Although various initiatives were undertaken to transition from subsistence farming to commercial agriculture, the lack of proper logistics, supply and value chain, and market integration has resulted in failure of such programs. On the other hand, urban areas have a higher concentration of employment in managerial and professional services.

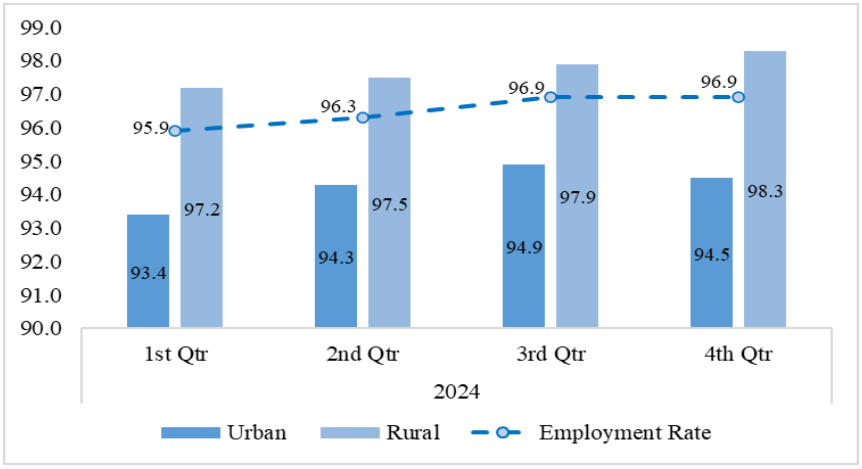

Figure 33: Employment Rate (%)

5.3.2 Sectoral Labor Share

In 2024, the total employment across all sectors was recorded at 369,298. Agriculture and forestry had the highest share, accounting for nearly 41 percent of total employment, followed by public administration and defense, which comprised 18 percent. Over the coming years, total employment is projected to increase steadily, reaching 393,532 by 2028, as shown in Figure 34.

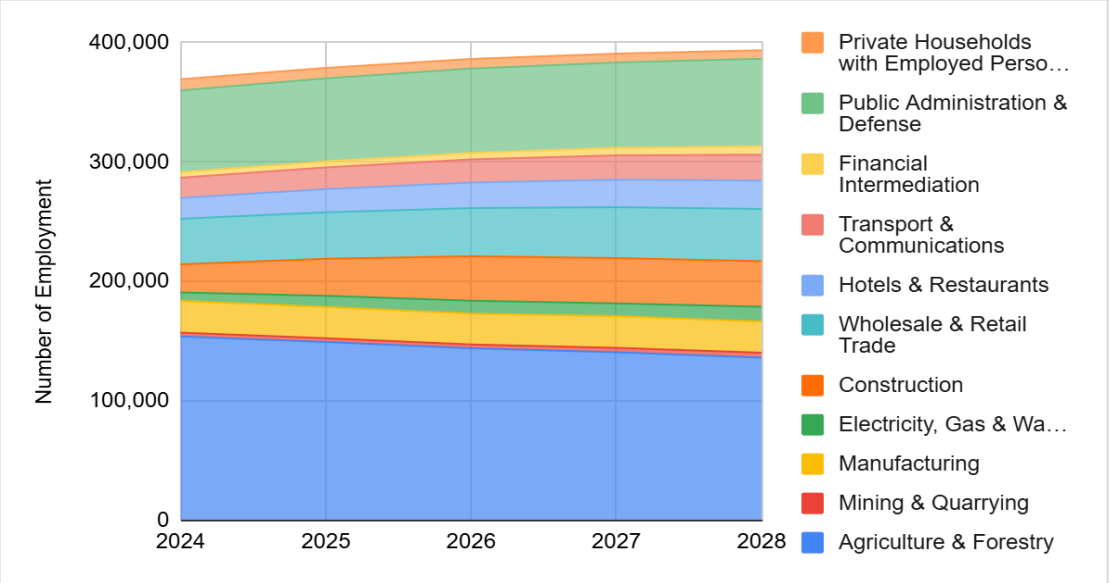

Figure 34: Employment by Sectors

The projected sectoral shifts in employment indicate further transformation of the labor market. The share of employment in agriculture and forestry is expected to decline by 11.55 percent from 2024-2028, reflecting a gradual move away from the agricultural sectors, a trend observed globally (L. Tupy & Bailey, 2023). Similarly, private household employment is projected to decrease by 23.64 percent. On the other hand, the share of employment in construction is expected to increase by 61.57 percent, financial intermediation by 52.99 percent, transport and communications by 26.99 percent, and electricity, gas and water supply by 78.42 percent, reflecting a shift toward high-productivity industries.

While the agriculture sector will remain a key component of the Bhutanese economy, a gradual shift towards industry and services is expected to lead to higher household incomes and improved living standards. However, this shift is likely to drive continued youth migration from rural to urban areas. To address this, prioritizing interventions that enhance the rural economy and bridge the rural-urban divide is crucial. This could include investments in agricultural technology, agribusiness, rural education, social infrastructure, and modern farming practices, creating lucrative and sustainable employment opportunities for youth in rural areas.

5.3.3 Unemployment

The unemployment rate in 2024 has steadily declined from the first quarter bringing the overall average unemployment rate to 3.5 percent. Unemployment remains higher in urban areas compared to rural areas, as people from rural areas migrate to cities in search of work.

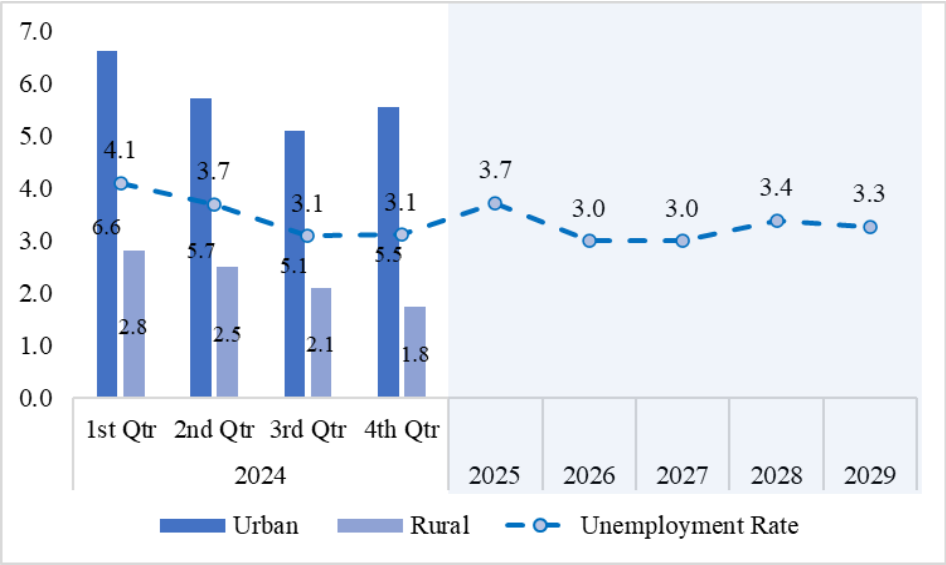

Figure 35: Unemployment Rate (%)

The unemployment rate for 2025 is projected to increase slightly to 3.7 percent, up from 3.5 percent in 2024. This increase is primarily due to an increase in the labor force base, driven by the expansion in the working-age population.[36] However, after 2025, unemployment is expected to decline to 3.0 percent down from 3.7 percent in the previous year. This can be attributed to sectoral employment growth due to improved economic activities as 13th FYP spending peaks in the mid of the plan period.

5.3.4 Youth Unemployment Rate

The average youth unemployment rate for 2024 stands at 19.1 percent, with the highest recorded in the first quarter at 22.9 percent which showed a gradual decline in the subsequent quarters. Urban youth unemployment is higher than rural youth unemployment, reflecting the concentration of jobseekers in the urban areas.

[36] Over 70,000 youths will enter the job market in 13th FYP.

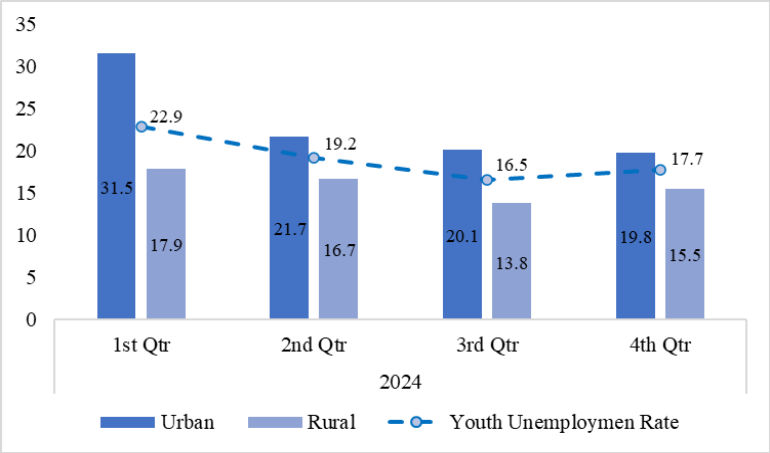

Figure 36: Youth Unemployment Rate (%)

Consistent high youth unemployment can cause major issues in an economy. First, the longer the youth remain unemployed during their productive age, their skills become obsolete thus making them uncompetitive in the job market and leading to productivity loss for the entire society. Second, socially, having high youth unemployment indicates a lack of a dynamic economy that is unable to absorb the growing youth population. As a result, this could dampen future expectation and consequently hamper long-term human capital accumulation. Third, higher youth unemployment will increase dependency ratio for the working population, whereby a smaller working population has to support a larger non-working population. Finally, a more recent and direct consequence of consistent youth unemployment within Bhutan is the increasing number of youth seeking opportunities abroad, leading to loss of skilled and educated work force. This loss of talent weakens the nation's workforce and undermines its potential for sustainable economic development.

The persistent high youth unemployment, due to significant growth in youth entering the labor market since 2009, remains a major challenge facing Bhutan This is a symptom of an underlying problem of a lack of dynamic economy. Additionally, the adoption of a capital-intensive growth model with an underdeveloped private sector as a result of cumbersome regulation, has resulted in a single sector driven growth – namely hydropower. It is pertinent that economic diversification be prioritized and the growth is led by the private sector.

5.4 Household Financial Status and Debt

Household income and expenditure are the key indicators of economic well-being, indicating living standards, and shaping broader economic trends. In 2022, the monthly average household expenditure was Nu. 52,813 while the monthly average household income was Nu. 33,845; highlighting the disparity between household income and expenditure (NSB, 2022). A large portion of the household's income is allocated for food and non-food consumption.

From 2023, the average monthly household income is expected to increase by about 10.41 percent over the next few years. This is expected as a result of the labor market transition, which indicates a decline in employment in the agricultural sector by 11.55 percent and a corresponding employment increase in the industry and service sectors which are deemed more productive and have higher income opportunities.

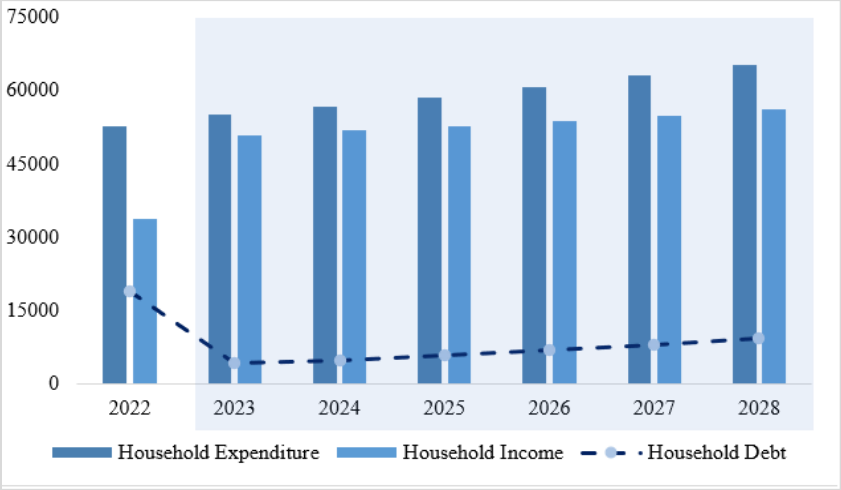

Figure 37: Household Expenditure, Income and Debt

The significant rise in the household income during the year 2023 can be attributed to the substantial pay hike for the civil servants, SOEs and corporate organizations. Additionally, the revision of the National Workforce Wage Rates, which saw an increase of approximately 85 percent, has also contributed to the spike in household income.

While such revisions boosted the household income, if the increase does not come with increased productivity, it will either exert inflationary pressure or external imbalance. Further, while this increase in earnings strengthens financial stability for those in the formal sector, rural households – which largely depend on agriculture may not have experienced the same level of income growth. Similarly, household expenditure is also expected to increase over the years. The average monthly household expenditure is expected to increase by 23.67 percent by 2028. This can be attributed to growing demand for goods and services which may drive up prices and the cost of living.

As seen in Figure 37, in 2023, the household debt decreased significantly compared to the previous year, primarily due to the major pay hike and the revision of the national wage rate, which boosted the household income. However, going ahead, household debt is projected to increase over the years, indicating that the households are spending more than what they earn. This rise in debt reflects an increasing gap between the household income and expenditure, likely driven by inflation, higher consumption needs and change in lifestyle choices. With the growing gap, households are more likely to borrow as their income growth may not keep pace with the rising expenditures. At moderate levels, debt can boost welfare and stimulate growth, but excessive debt

can be harmful. Thus, it will be imperative to monitor the sources and level of debt availed by households to bridge the gap.

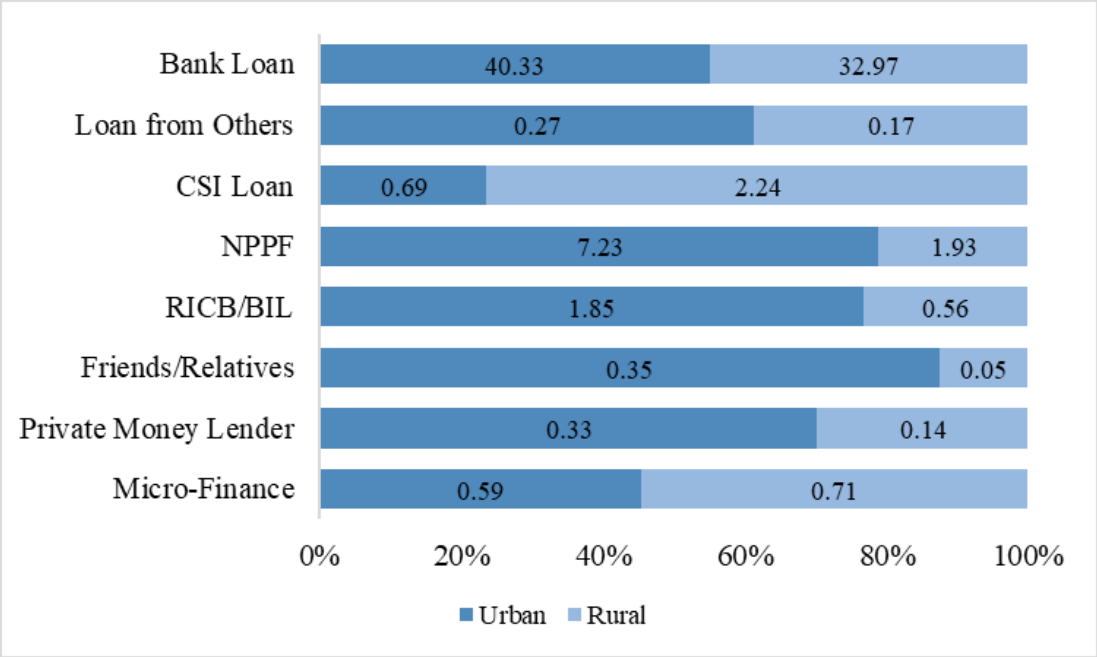

Figure 38: Sources of Loans for Households; Rural and Urban

Of the total households in the country, 42 percent of households availed loans, among which, bank loans (loans from deposit taking financial institutions) are the most common source (35.9 percent of all loans). The distribution of loan sources between rural and urban households in Bhutan during the year 2022, presented in Figure 38 shows that urban areas tend to have better access to a diverse range of financial institutions with higher levels of loans from sources such as NPPF and insurance companies. On the other hand, rural households show a heavier reliance on microfinance loans (0.71 percent), and CSI loans (2.24 percent) compared to urban households. This implies a rural-urban difference in financial service accessibility, with urban areas having more diverse financing options while rural areas rely more on specialized lending programs such as micro-finance and CSI loans targeted at small businesses and agricultural activities.

5.5 Social Progress

5.5.1 Poverty

The poverty rate which had been declining has seen a slight disruption due to the pandemic. However, it is expected to gradually decline to 8.09 percent by 2028. Considering the time lag of the impact of 13th FYP spending to trickle down to the grassroot level, the rate of decline will initially be slow but is expected to accelerate towards the end of the plan.

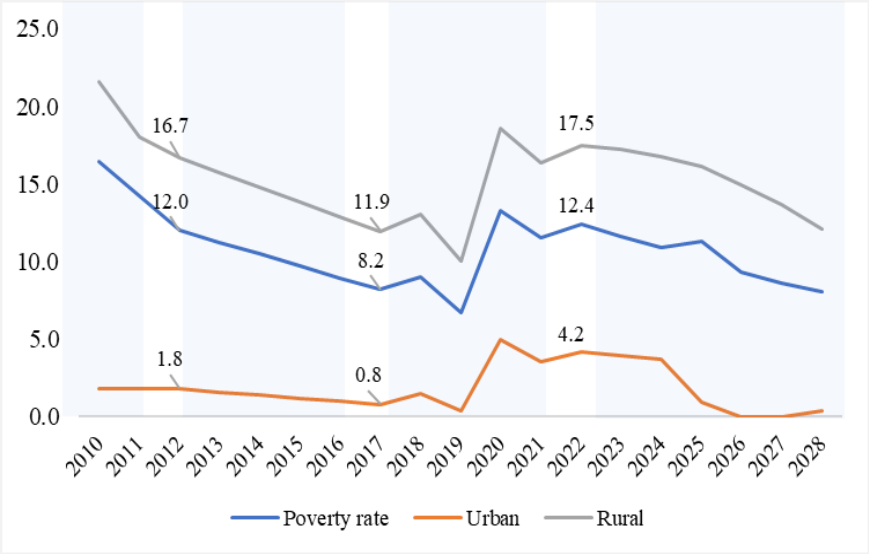

Figure 39: Poverty Rate

Poverty levels in Bhutan reveal a huge disparity between urban and rural areas. Urban areas have significantly lower poverty rates, which can be attributed largely to better access to employment and economic opportunities. Urban households benefit from proximity to the market, better knowledge and information, along with convenient logistics and infrastructure, which collectively contribute to improved living standards and economic stability.

In contrast, rural poverty remains consistently higher throughout the projection period, higher than 12 percentage points on average as compared to urban poverty. This can be attributed to the concentration of agriculture farming as the dominant occupation in rural areas and limited economic opportunities. Dependence on farming exposes rural households to vulnerabilities such as climate shocks, human-wild life conflicts, limited market accesses and lower productivity, all of which contribute to higher poverty levels. Boosting agricultural productivity, which can be achieved through investment in modern farming techniques, logistic, supply and value chain development, and market conforming interventions, could not only reduce rural poverty but also substantially increase living standards.

5.5.2 Literacy and Life Expectancy

Bhutan has made significant progress in enhancing its human capital, evident through the increase seen in the literacy rate and life expectancy. Over the past two decades, the literacy rate has increased from 70.42 percent in urban and 36.50 percent in rural areas to 82.7 percent and 63.1 percent, respectively, by 2022. This trend is expected to continue, with literacy rates projected to rise to 85 percent in urban areas and 66 percent in rural areas by 2028.

With the increase in literacy rate, individuals are more likely to access better health information, adopt healthier lifestyles, and make informed decisions about their well-being contributing to better health outcomes and enhancing their life expectancy. As a result, Bhutan's life expectancy

at birth has reached 71.3 years, with male life expectancy at 69.9 years and female life expectancy at 72.8 years (UNFPA, 2022).

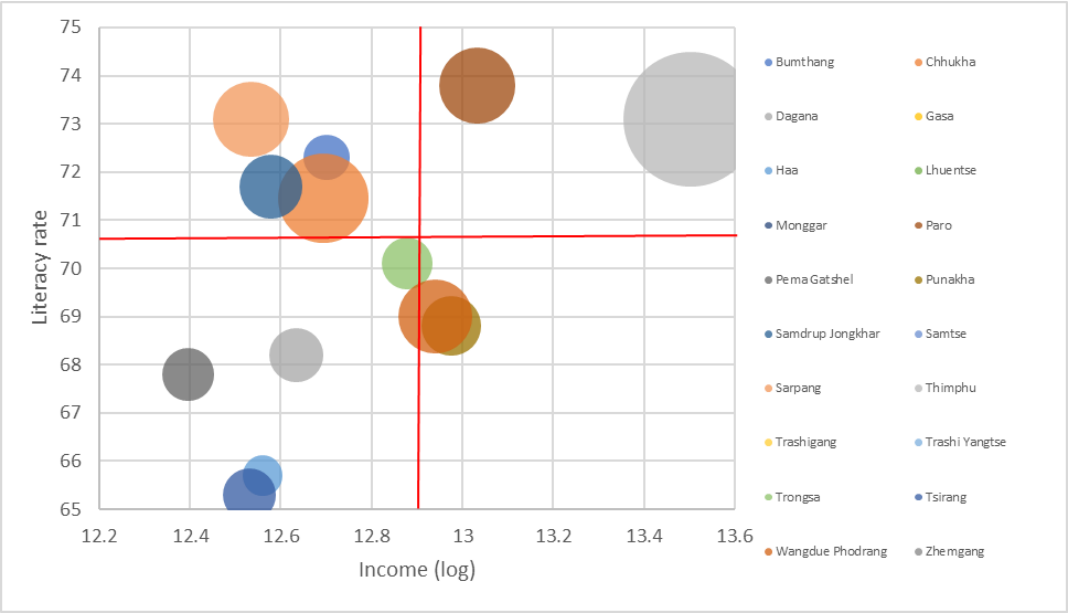

Figure 40: Size of Population w.r.t Income and Literacy Rate

Figure 40 shows the size of population in various *Dzongkhags* plotted with respect to its income and literacy rate. As expected, Thimphu has the largest population with the highest level of income and one of the highest literacy rates in the country, which is followed by Paro. Contrary to Thimphu, Tsirang has one of the lowest incomes with lowest level of literacy rate in the country, followed by Haa, Pema Gatshel and Dagana. While the causality between literacy rate and income is not evident, a certain degree of correlation can be observed between the two in the graph, which is also widely supported by the literature (Wadhwa & Palakkandy, 2024).

5.5.3 Replacement Rate - Birth Rate and TFR

It is a common phenomenon across the world to observe that as the household income increases, the Total Fertility Rate (TFR) – birth per woman – declines, as a result it is common to see an aging society. This relationship is illustrated in the chart below, whereby the countries are graphed with respect to their fertility rate and human development index. Bhutan can be found amongst a low fertility rate while having a much lower human development index.[37]

[37] See Fertility Rate - Our World in Data

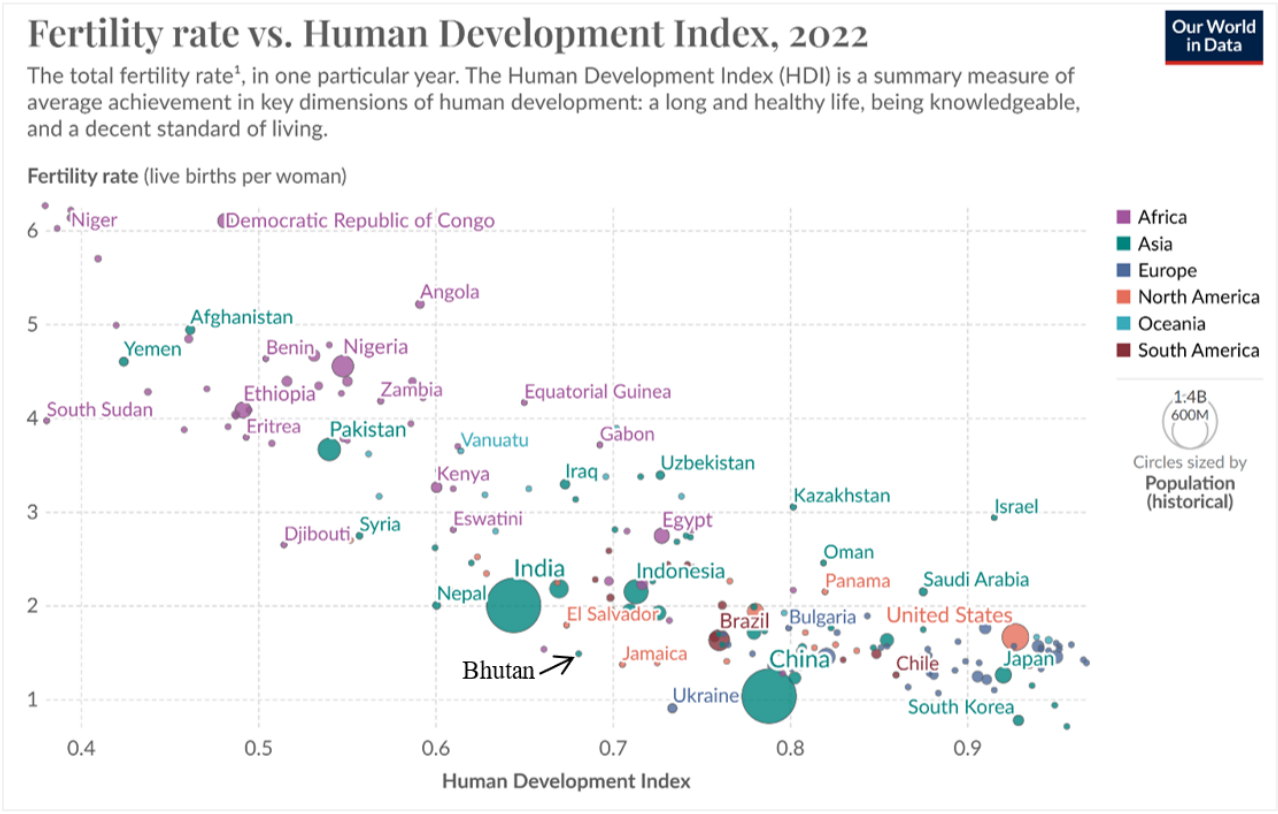

Figure 41: Fertility Rate Vs. Human Development Index, 2022

Source: Our World in Data

Bhutan faces a unique phenomenon of low fertility rate while still being a lower middle-income country. Combining this with increased life expectancy, Bhutan faces the risk of an aging society with a relatively low living standard country unlike other aging societies, which have high living standards. As the current working age group retires, the burden on the future working generation will be higher to support the social programs associated with the retired population. By 2032, the TFR is projected to decline to 1.7 births per woman, from 4.7 in 2000. The poor aging society will be a constraint for future growth prospects and will impose considerable social challenges.

5.6 Conclusion

While over 41 percent of the labor force is still dependent on agriculture, the labor market is expected to see a shift towards the industrial and service sectors. Despite this, labor absorption into more productive sectors still remains a challenge due to the lack of productive industrial development and economic diversification. The projected decline in agricultural employment reflects a slow structural shift, while sectors such as construction, financial intermediaries, transport and communication are expected to experience growth. While urban areas continue to experience higher unemployment, the overall unemployment is projected to increase slightly to

3.7 percent in 2025, before stabilizing at 3 percent in the following years; with total employment projected to reach 393,532 by 2028.

Household income and expenditure trends highlight disparities between urban and rural areas. Rural households remain heavily dependent on agriculture with lower and less stable incomes, while urban households benefit from higher and more reliable incomes from formal employment. With the shift to higher paying sectors in the medium term, household income is expected to increase, and at the same time expenditure will also grow due to inflation and higher consumption.

Bhutan has made progress in reducing poverty, with the rate expected to return to 8 percent by 2028, while rural poverty continues to be a persistent challenge. Literacy rates have improved, with urban areas reaching 82 percent in 2022, compared to 63 percent in rural areas. Life expectancy also shows a positive trend reaching 71.3 years in 2022. However, Bhutan faces demographic challenges including an aging population and declining fertility rate, which could strain future economic growth. Thus, Bhutan's economic trajectory requires efforts to foster productive job creation, support sectoral diversification, and address the long-term challenges.

Chapter 6:
Industrial Development

6.1 Introduction

Bhutan's industrial sector has seen a lopsided development, primarily driven by hydropower, and mining and quarrying. These resource-based industries have experienced substantial growth, with the electricity sector growing at an average rate of 48 percent between 1981-2023. However, private sector participation remains limited and contributes marginally to economic growth with only a few large industries and the dominance of CSI. Thus, the manufacturing industry remains underdeveloped and consistently lags behind in comparison to neighboring economies.

Competition within Bhutan's industrial sector is uneven, with large-scale industries dominating market share while CSIs face high competition and scaling challenges. Competition is measured by using the Herfindahl-Hirschman Index (HHI) to investigate the competitiveness of the domestic market. HHI indicates that smaller firms operate in highly competitive environments, particularly in segments with low market entry barriers. Meanwhile, industries requiring significant investment and technical expertise, such as mining and large-scale manufacturing, exhibit higher market concentration and limited competition.

While different market segments display moderate to high competition, enhancing industrial diversification and promoting innovation will be paramount for Bhutan to integrate into global value chains. Lessons from industrial transformation in East and South Asia underscore the potential of manufacturing and technology-driven growth. Countries like South Korea, China, and Bangladesh have successfully leveraged industrialization for economic transformation. Bhutan can adopt similar strategies by strengthening its manufacturing base, integrating into global value chains, and fostering technological advancement.

6.2 Regional Industrial Development

6.2.1 Regional Development - East Asia

Transformation in the economic structure has been observed across all nations undergoing economic growth and Asia, as a continent, has experienced rapid economic growth in the second half of the 20th century. East Asian economies such as South Korea, Japan and China experienced rapid growth in the manufacturing sector. These economies displayed similar changes in the composition of their output and employment structures, as illustrated in Figure 42, where the share of manufacturing value added in GDP increased significantly. The share of manufacturing value added in GDP for Korea increased from around 17.3 percent in the 1960s to more than double, at 37 percent in 1991. Since the 1980s, the Korean manufacturing sector has steadily contributed

around 30 percent to GDP.[38] The growth also led to a structural shift, whereby, share of manufacturing employment to the total employment increased significantly (25 percent of total employment in 1990). This is also seen in the Chinese economy, which benefitted from export-led industrialization. From 1980 to 2002, the contribution of East Asia to the world market rose from 13 percent to 23 percent, mainly on account of exports originating in China (CEPII, 2005). However, the dynamic has now shifted from manufacturing output to more technology and scale-intensive subsectors such as semiconductors, electronics and automotive. While Japan has the lowest manufacturing share to GDP among the three countries, the nation experienced structural and economic shifts as the first Asian country to industrialize. Japan's economic strategy centered around high savings and investment, thereby fostering a positive cycle of investment, exports, and manufacturing improvements (ADB, 2018).

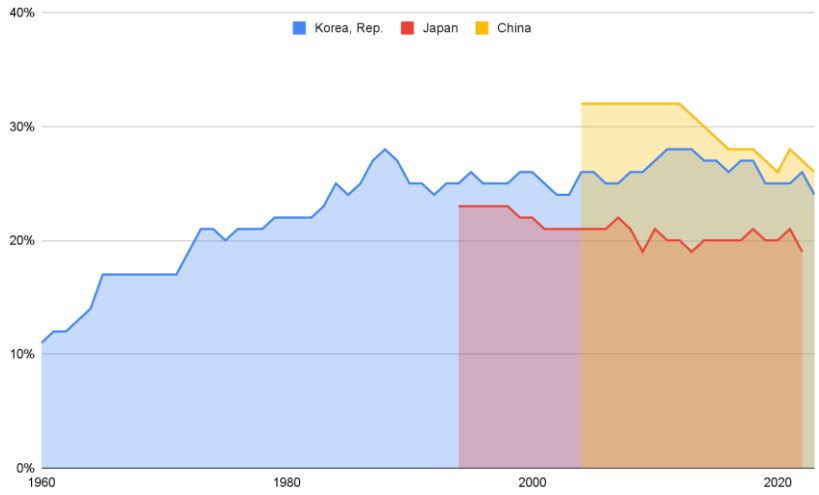

Figure 42: Manufacturing Value Added in Korea, Japan, and China (% of GDP)

Source: Data from World Development Indicators

6.2.2 Industrial Development in South Asia and Bhutan

Similarly, South Asian nations, though relatively late to industrialize, have shown significant development over the recent decades. These nations recognized the need for industrialization, specifically, manufacturing for high growth rates and mass employment creation. In Bangladesh, the share of manufacturing value added has increased by more than fourfold, from around 5 percent in the 1960s to 22 percent in 2023 (WDI, 2025). Bangladesh has been propelled into global export markets by its garment industry, contributing 57 percent to GDP and 72 percent to employment in 2023 (Akinrebiyo, 2024). Policies like "Make in India" and investments have supported India's industrial growth and led it to diversify into high-value manufacturing, IT services, and automobile

[38] World Development Indicators, World Bank Group

production. The sector is expected to reach US$ 1 trillion by FY 2025/26 (India Brand Equity Foundation, 2025).

Bhutan's industrial sector has similarly experienced fast-paced growth, with the industry sector's contribution to GDP consistently exceeding 30 percent since the late 1990s. However, the composition of this growth is heavily skewed towards resource-rich industries, such as hydropower and mining, while manufacturing value-added remains relatively low compared to other South Asian nations. As illustrated in Figure 43, manufacturing value added in Bhutan is one of the lowest, contributing around 8.72 percent in 2022 and around 8.05 percent in 2023 (NSB, 2024).

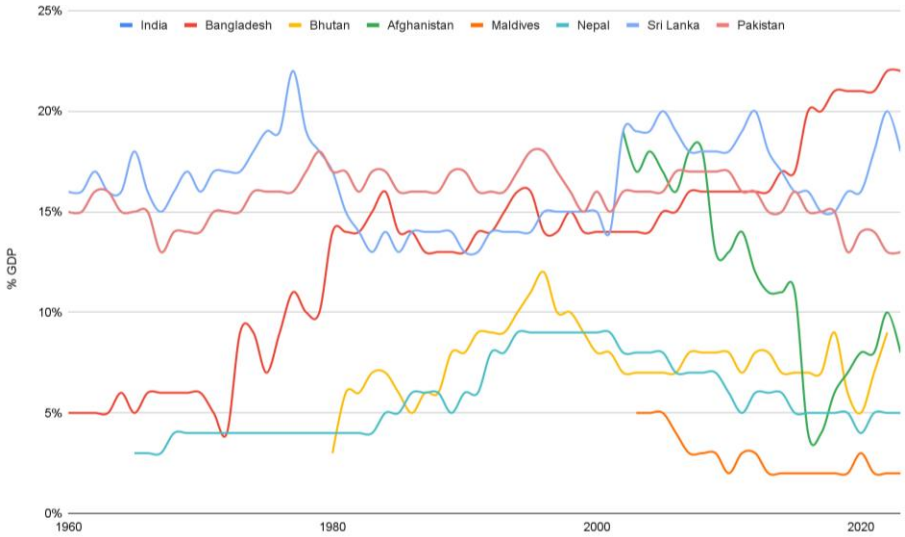

Figure 43: Manufacturing, Value Added (% GDP) in South Asian Nations (% of GDP)

Source: Data from World Development Indicators

With globalization, economies are now rapidly shifting from the primary sectors to tertiary sector-oriented growth. The Productivity Databook 2024 finds that Bhutan's industrial growth is largely fueled by the service sector, followed by the transport, storage and communication sector while contribution from the manufacturing sector pales starkly (APO, 2024). On the other hand, industry origins of economic growth in developing nations such as Bangladesh show a large contribution of the manufacturing sector towards growth. The report also makes evident that many developing nations, including Bhutan, are experiencing the simultaneous development of both the service (tertiary) and manufacturing (secondary) sectors.

The concerning trend in developing industries is where economies experience a decline in the share of manufacturing output, a phenomenon that is typically observed later in the development trajectory of advanced economies. This premature shift, i.e. premature deindustrialization, shrinks the nation's ability to add value in global value chains and tradable sectors as the manufacturing industry often serves as an entry point into global markets. Particularly, Bhutan has started premature deindustrialization since 1996, before even graduating from the low-income country

category (APO, 2024). However, the rate of deindustrialization is slow suggesting that the trend could be reversed with focused effort of developing industries.

6.3 Overview of Industry in Bhutan

Bhutanese industries are categorized by scale and by function (activity). By scale, industries are segregated into Cottage (Micro), Small, Medium, and Large industries depending on investment and employment strength. In terms of functionality, the Bhutan Standard Industrial Classification of 2020 (BSIC 2020) has grouped 21 industries based on economic activities, broadly classified into Service, Production and Manufacturing, and Contractors. The industrial landscape is mostly small-scale followed by cottage and medium industries while large-scale industries account for less than 2 percent of the total industrial strength. This is reminiscent of the global economy where despite the variance in the classification of industries based on scale; Medium, Small and Medium Enterprises (MSME) dominate the number of firms. In Asia, MSMEs accounted for 98.7 percent of all enterprises in 2023 and employed 61.1 percent of the total workforce (ADB, 2024).

Sectoral turnover analysis indicates significant growth across the manufacturing and service sectors.[39] Turnover for the large-scale manufacturing sector has increased by 70.09 percent between 2016 and 2023. Similar trends are seen across all scales, especially in the cottage (micro) industries. Micro and small industries have experienced strong turnover growth over the years (225.39 percent and 67.78 percent, respectively), showing strong and increased competition in those sections. This trend is mirrored by the service sector, which accounts for 84.81 percent of total licenses, and experienced an increase in turnover by 42.35 percent during the same period. Large-scale enterprises remain the primary contributors to industrial turnover while smaller firms make marginal contributions despite having strength in the number of establishments. This is further supported by the strong presence of large-scale industries in the production and manufacturing sectors, such as minerals, which are export-oriented and drive much of the country's industrial growth. On the other hand, smaller industries rely on traditional, low-productivity technologies and serve a limited domestic market (MoICE, 2024).

6.4 Market Concentration and Competition

To evaluate the competitiveness in the Bhutanese market, analysis has been prepared on two levels: the scale of business and activity, i.e., service, and manufacturing[40] using the HHI. The index is a widely used measure of market concentration and industry competitiveness, and has been computed to review the degree of competition within select markets and the manufacturing industry by calculating the sum of the squared market shares of all enterprises in an industry.

[39] Due to the unavailability of disaggregated output data, analysis in this chapter is conducted on the sectorial turnover obtained from corporate and business income tax data since 2016.

[40] For the purpose of this report, analysis has been performed on Services and Manufacturing sectors based on annual turnover data obtained from the Department of Revenue and Custom.

Table 12: Herfindahl-Hirschman Index Interpretation Matrix

HHI Value	Market Concentration	Level of Competition
10,000	Monopoly	Very Low
1500 - 10,000	High	Low
1500 - 1000	Moderate	Medium
0 - 1000	Low	High

Source: Matrix built on interpretation of HHI by the U.S. Department of Justice

Analysis of the manufacturing sector reveals that large-scale establishments hold most of the market share (in terms of turnover), showing that this sector has consistently dominated the market at high levels, accounting for more than 90 percent of total turnover across 2016 to 2023. MSMEs hold less than a tenth of the total market but display higher levels of competition as observed in Figure 44. In comparison, Japanese MSMEs dominated the number of enterprises at 99.7 percent of the total number of enterprises in 2016 and accounted for around 55 percent of total value added (METI, 2016). Similarly, as of 2023, MSMEs in South Korea accounted for around 99 percent of total enterprises and contributed slightly lower at around 46.78 percent to output.[41] While Bhutan and these nations show similarities in terms of composition by scale, Japanese and Korean MSMEs show a vast difference in their contribution to GDP as compared to the marginal contribution by Bhutanese MSMEs.

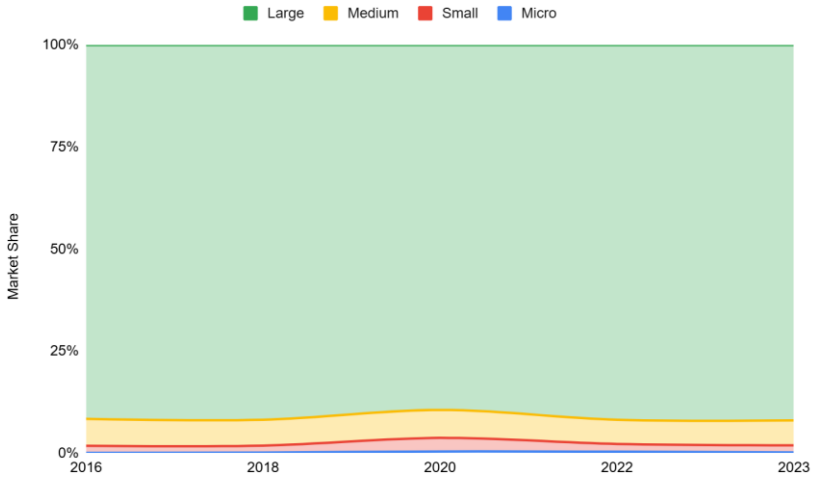

Figure 44: Market Share in Manufacturing by Scale (% Turnover)

The high market concentration among large-scale manufacturers, which account for over 90 percent of total turnover in Bhutan, represents a high barrier to entry. In contrast, MSMEs face intense competition, which is further reflected in the HHI, as shown in Figure 45, where small

[41] Ministry of SME and StartUps, https://www.mss.go.kr/site/eng/02/2020200000000020191106l0.jsp

industries exhibit a high competitiveness level with HHI of 61 in 2023 and micro industries with HHI of 35. Micro and small industries represent the largest share of industrial licenses accounting for 70.59 percent (MoICE, 2024). However, within this, industries involved in niche activities such as manufacturing of mechano-therapy appliances exhibit greater market concentration (few players) and lower competition due to specialized barriers to entry as the market requires large investment, subject knowledge, and research and development. High competition faced by small industries exacerbates the challenges in scaling up.

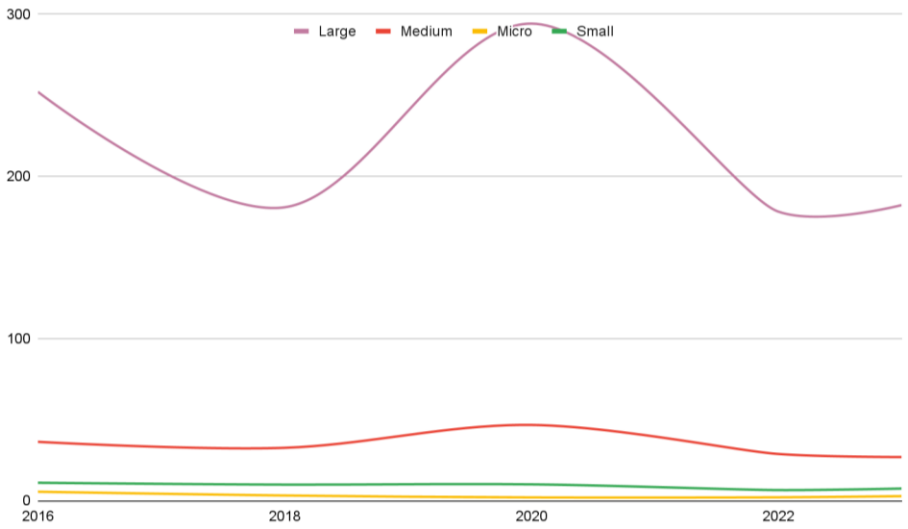

Figure 45: Time Series of HHI for Manufacturing Industries by Scale

The intense competition among small industries, as reflected in the HHI trends, also extends to value-added industries in agriculture. As illustrated in Figure 46, the market for value-added industries in agriculture initially exhibited high market concentration with HHI of 2,500 in 2016 but saw increased competition following the implementation of the CSI Policy 2019 and investments made in start-up centers. However, since 2022, either market consolidation has re-emerged or few firms have gone out of business as a result of the pandemic, with the number of tax-paying manufacturing enterprises declining from 292 in 2022 to 202 in 2023. The Industrial Census 2024, found that the agricultural value addition and forest-based industries are primarily rural-based, with a strong reliance on domestic raw materials. The mining sector, which operates under a highly regulated environment creating significant barriers to entry, displays moderate market concentration. As illustrated in Figure 47, the sector shows relatively stable competition over the years. The increase in HHI for 2020 may be linked to the cancellation of mining rights[42] during that year.

[42]Auction of mining rights to Chunaikhola dolomite mine, which was previously held by a private firm was cancelled and taken over by SMCL.

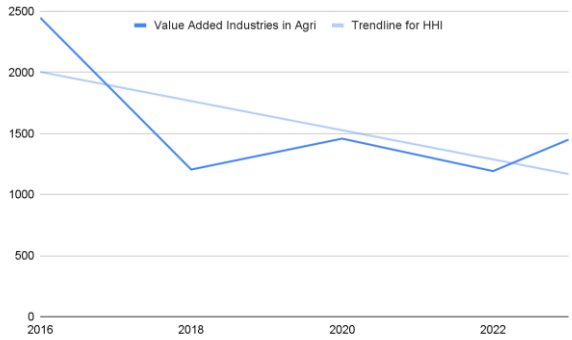

Figure 46: HHI for Value Added Industries in Agriculture

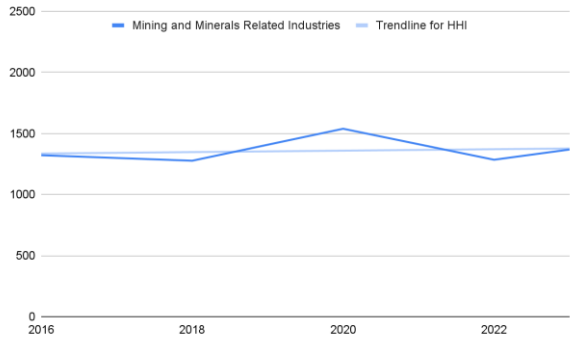

Figure 47: HHI for Industries in Minerals and Mining

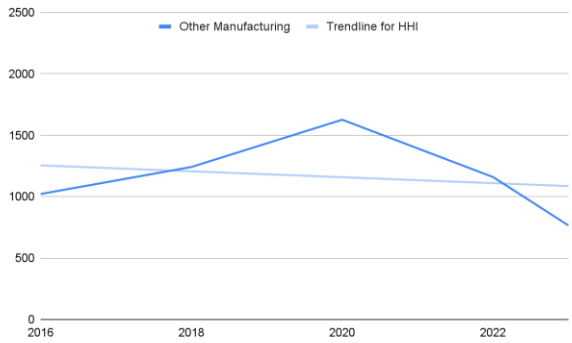

Figure 48: HHI Index for Other Manufacturing

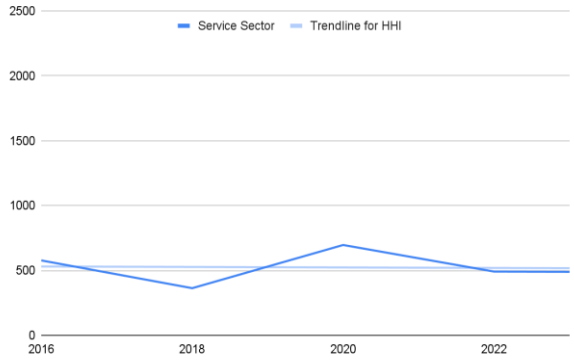

Figure 49: HHI for Service Sectors

The HHI of other manufacturing industries show a gradual increase in market concentration, peaking in 2020. However, the market segment shows increased competition and market diversification post COVID-19, with a steeper decline in HHI from 2022, as shown in Figure 48. In contrast, the service sector demonstrates the low market concentration and high levels of competition. The sector, depicted in Figure 49, is characterized by a large number of market participants as the sector is easier to enter, especially in the areas such as hotel and restaurants, transportation, and wholesale and retail trade. Thus, the analysis reveals that the manufacturing sector displays moderate to high levels of market concentration, while the service sector has low market concentration and is highly competitive with a more fragmented market structure. The small domestic market, coupled with high production costs due to factors like logistics and infrastructure limitations, hinders the development of competitive manufacturing industries.

6.5 The Bhutanese Industrial Landscape

6.5.1 Current Industrial Situation: Premature Deindustrialization

Bhutan faces limited economies of scale due to its small domestic market,[43] which restricts large-scale industrial production and increases cost. Terrain is another factor that adds to this, increasing transportation costs with poor logistical facilities. The industrial base is largely fragmented, with most enterprises being CSIs that lack the technology and capacity for bulk production, specialization or automation. Additionally, enablers such as industrial parks, roads, and digital connectivity are still in development, making it difficult for businesses to scale up (MoICE, 2024). As a result, Bhutan has been facing premature deindustrialization since 1996, where manufacturing share to value added peaked and has been on a decline since.

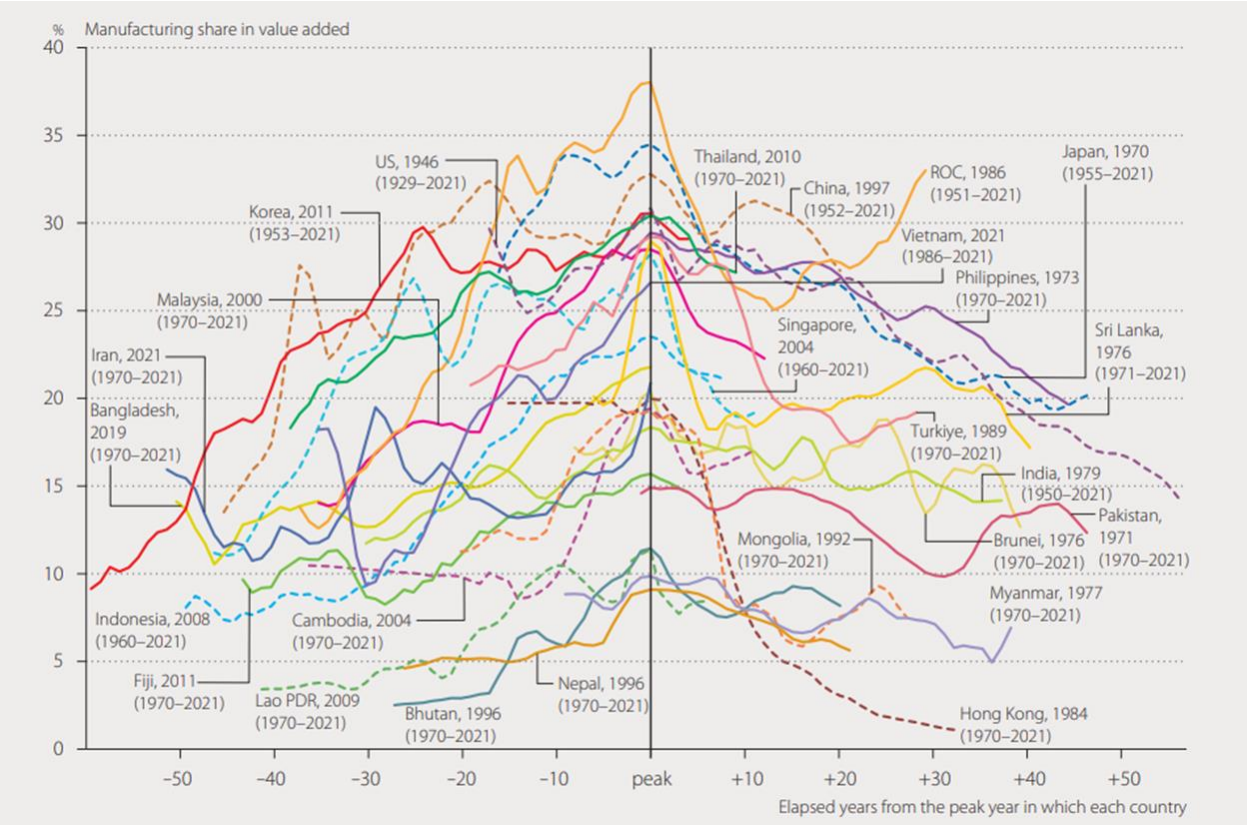

Figure 50: Manufacturing Share of Value Added

Source: APO Databook 2024

Premature deindustrialization has several negative consequences. First, it limits Bhutan's ability to participate effectively in global value chains, as it contributes insignificantly to total exports in

[43]The size of the market is not only constrained by the low population, but also hindered by the declining population growth estimates and low fertility rates (1.4% in 2022) which do not support significant growth.

the global market (World Trade Organization, 2022). Manufacturing often serves as a crucial entry point for developing countries into global markets, allowing them to acquire new technologies, skills and knowledge. The decline of manufacturing weakens this pathway and restricts Bhutan's integration into the global economy, leading to slower productivity growth. Second, manufacturing industries tend to have higher productivity growth rates compared to other sectors, resulting in higher income for laborers. Third, to support a productive service sector that is reliant on domestic consumers, it is essential to have a few highly specialized manufacturing industries to support the sector. Premature deindustrialization can therefore dampen overall economic growth potential.

The diminishing contribution of the manufacturing sector to economic growth is also observed in the growth accounting framework built for Bhutan, and discussed in detail in Chapter 8. The sector's share-to-economic growth has almost halved to 8.7 percent during 2008-2022, when it was previously 15.2 percent (1990-2008). Lower contribution from the manufacturing sector results in higher concentration of employment in the agriculture and service sectors. Technological development and entrepreneurship are also hindered by premature deindustrialization as the sector is characterized by both low levels of technological adoption and employment share.

6.5.2 Industrial Gross Output and Value Added

While certain industrial sectors such as manufacturing, mining and quarrying exhibit growth in value-added and gross-output, the economy as a whole is experiencing deindustrialization with the share of industry in total value-added stagnating over time. This trend is seen in tandem with the rapid expansion of the service sector, particularly in areas like tourism and transportation, which have outpaced the industries in their contribution to GDP and value added, as evidenced by Figure 51. Several factors contribute to this trend. Bhutan's industrial sector is heavily reliant on resource-based industries like hydropower. Although these industries generate substantial gross output, their limited downstream linkages do not translate into broader industrial development. As a result, manufacturing remains underdeveloped, limiting industrial and economic diversification.

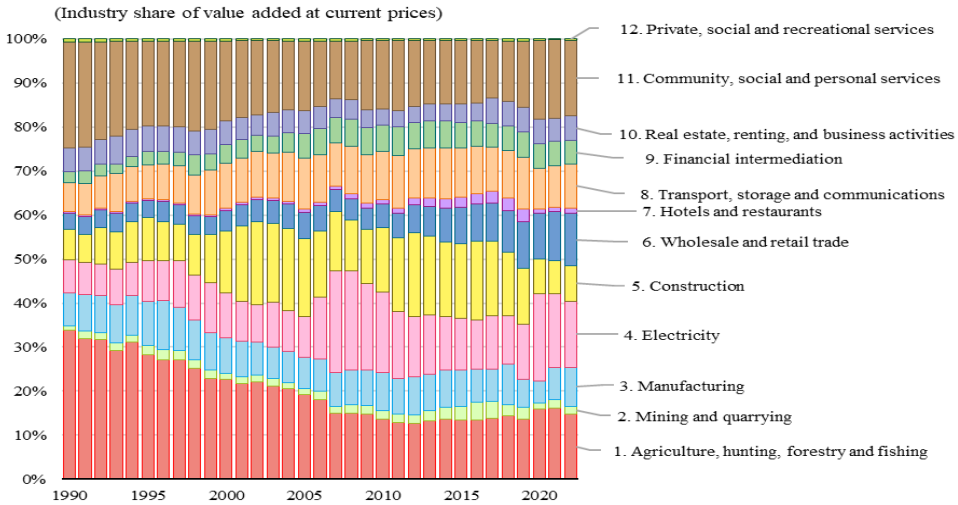

Figure 51: Industry Value Added, 1990-2022

As illustrated in Figure 52, Manufacturing share of value added has remained low, averaging around 8 percent between 1990-2022, peaking at 11 percent in 1996 and has stagnated around 7-9 percent since. In contrast, the Electricity and Construction sectors maintain higher shares to value added averaging 12 percent and 13 percent, respectively. Despite the large contribution of the mining sector in terms of export, share to value added averages at 2% for the time period.

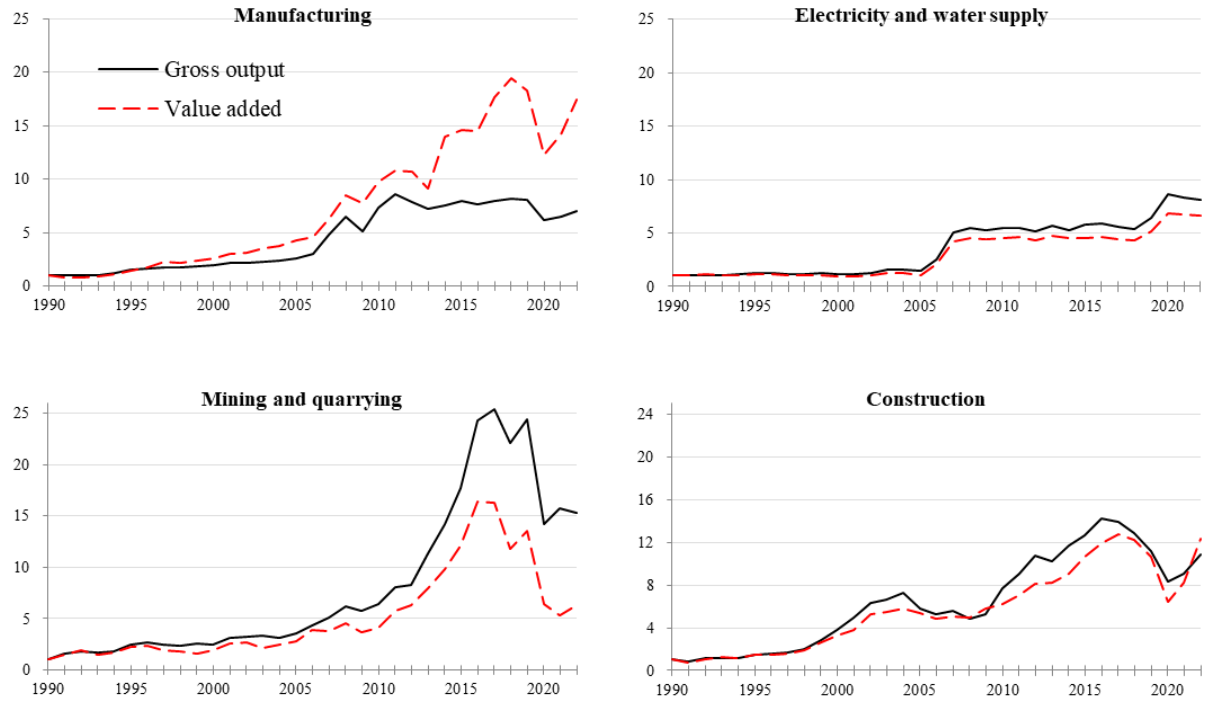

Figure 52: Growth in Industry Gross Output and Value Added, 1990 - 2022

Despite the low levels of contribution to total value added by the manufacturing and mining sectors, the growth trend of value added indicates promising potential. Steady growth is observed in gross output of the manufacturing sector, which contrasts the steeper and more erratic growth of value added. Mining and quarrying show a sharper growth in gross output post-2012 and value added by the sector mimics this growth, but growth remains concentrated in raw materials exports rather than fostering high-value industries. A similar growth trend can be observed in the construction sector, however erratic spikes are linked to hydropower projects, reinforcing the sector's dependence on infrastructure development as a key growth driver.

In contrast, the electricity sector demonstrates marginal growth in both output and value-added, with level growth occurring only during the commissioning of new hydropower projects. This suggests that while the sector plays a crucial role in the economy, its expansion remains tied to project cycles rather than sustained, organic growth. Overall, while the manufacturing, mining, and construction sectors exhibit strong growth potential, their trajectories vary in stability and key

driving factors. Nevertheless, although the manufacturing sector shows growth, this does not indicate industrialization as the share of the service sector is far more significant.

6.5.3 Role of Supply Chain and Value Chain in Industrial Development

Although the government has undertaken targeted interventions to improve industrial growth and diversification, it has not yielded the desired results. The sluggish growth of the manufacturing sector is mainly on account of the inadequate supply and value chain linkages in the country. While the objective of the establishment of the industrial parks was to cluster similar industries to optimize supply and value chains, the progress in establishing these parks has been slow and ineffective. Further, the entire network of activities, organizations and resource allocation in producing and delivering products from raw materials to the final consumer has not been standardized. In particular, a manufacturing unit dependent on raw material supplied domestically faces greater cost and uncertainty of the supply chain within the country. Therefore, most manufacturing industries are reliant on imported raw materials. As a result, there is little to no linkages between producers within the country.

The lack of linkages between the producers has resulted in a lower value-addition in the value chain at each stage of production within the country. Since each industry is independent of the other, the process of converting raw materials to higher-value goods is very limited. For a manufacturing unit to be able to convert raw materials to higher-value goods it requires sound logistics (inbound and outbound), modern processing, advanced inventory management, and assembly system (Porter, M., 1985). This production process needs to be supported by technological development, infrastructure and skilled human resources (Porter, M., 1985). Lack of value chain has resulted in direct export of raw materials and at best, very little value addition. Further, concentration of industries in MSME can also be attributed to lack of supply chain and value chain resulting in a weak industrial base.

Higher value-addition represents higher utilization of factors of production such as labor and capital, thereby benefiting the economy. Value chain development at a wider level is not possible without efficient supply chain development. It is imperative to resolve the issues of limited infrastructure, logistic bottlenecks, and a lack of coordination among fragmented stakeholders, especially government agencies who are key players in supply and value chain development. Strengthening both the supply and value chain in key industries through value-based production and marketing while developing efficient supply chains around the industry is one of the ways to expedite the industrialization process. Additionally, it is also important that Bhutan develop an industrial development policy focused on nurturing highly specialized industries in which Bhutan holds a comparative advantage.

6.6 Conclusion

Bhutan's industrial sector remains a critical driver of economic growth, yet it faces structural challenges that limit its expansion and competitiveness. The sector is heavily reliant on hydropower, mining, and small-scale manufacturing, with large enterprises dominating market share while MSMEs struggle with high competition and scaling barriers. The analysis of market concentration reveals varying levels of competition across industries, with small industries facing intense competition, while capital-intensive sectors such as mining and large-scale manufacturing exhibit higher market concentration. Despite policy interventions such as the CSI Policy 2019, manufacturing remains underdeveloped, and Bhutan's participation in global value chains is insignificant due to limited value-addition in exports.

The growing reliance on the service sector and the declining contribution of manufacturing highlights the exacerbation of premature deindustrialization, where economic growth shifts toward services before achieving full industrial development. Bhutan's small domestic market, high production costs, and infrastructure gaps further constrain industrial growth. While targeted policies have led to some diversification, particularly in agricultural value-added industries; scaling up remains a challenge due to regulatory constraints, skill shortages, and logistical barriers.

To achieve sustainable industrialization, Bhutan must focus on production know-how, infrastructure development, and supply and value chain while fostering a supportive business environment for industrial growth. An industrial development policy focused on nurturing highly specialized industries will be key to strengthening regional and global trade linkages, promoting investment in high-value manufacturing, and addressing bottlenecks in industrial development.

Chapter 7:
State Owned Enterprises

7.1 Introduction

State-Owned Enterprises (SOEs) play a vital role in bridging the market gap given the current state of the economy. With a relatively nascent private sector with significant public sector presence, SOEs becomes an economic agent that functions under market principles yet ventures into areas where the private sector would not. Therefore, SOEs can play a crucial role in accelerating growth in Bhutanese economy. However, their performance is often scrutinized due to concerns about inefficiency, bureaucratic interference, and lack of competition (OECD, 2023). The SOEs in Bhutan, with a combined asset of Nu. 371,868.974 million in 2024, play a pivotal role in providing essential services and infrastructure in the market.[44]

In advanced economies, where private sector involvement is more pronounced, the role of SOEs has shifted towards facilitating infrastructure development and addressing market failures. While SOEs in countries like China and Russia continue to play a dominant role, European nations, such as the United Kingdom and Germany, have significantly reduced state ownership in favor of privatization (World Bank, 2024). Even though SOEs play a significant role in economic development, their impact on economic growth and overall productivity is contingent upon the quality of a country's institutions (Faccio & Lang, 2002).

7.2 Overview

The primary mandate of SOEs in Bhutan is to enhance productivity and accelerate economic growth. Historically, as a result of a lack of economic agents such as entrepreneurs, industrial manufacturers and traders in the market, the government has maintained a strong role in the economy, particularly through SOEs in sectors such as energy, transport, and telecommunications. Over the years, as market capabilities have improved, the government privatized some SOEs through selling shares to the public, for example Royal Insurance Corporation of Bhutan Ltd, Bhutan Tourism Corporation Ltd, and others, distributing wealth from the government to the households. However, since 2008, while the number of SOEs has increased, the efficiency of SOEs have not met expectations.

The MoF is the primary shareholder of all the SOEs in the country and Druk Holding and Investments (DHI) holds a centralized ownership over its portfolio of SOEs on behalf of the Royal Government of Bhutan with MoF owning 100 percent of shares in DHI. Most SOEs in Bhutan were established within the past two decades. This report covers the 24 SOEs directly owned by the MoF and DHI owned and controlled companies with a shareholding of more than 50 percent.

[44] The total combined asset accounts only for SOEs with shareholding greater than 50%.

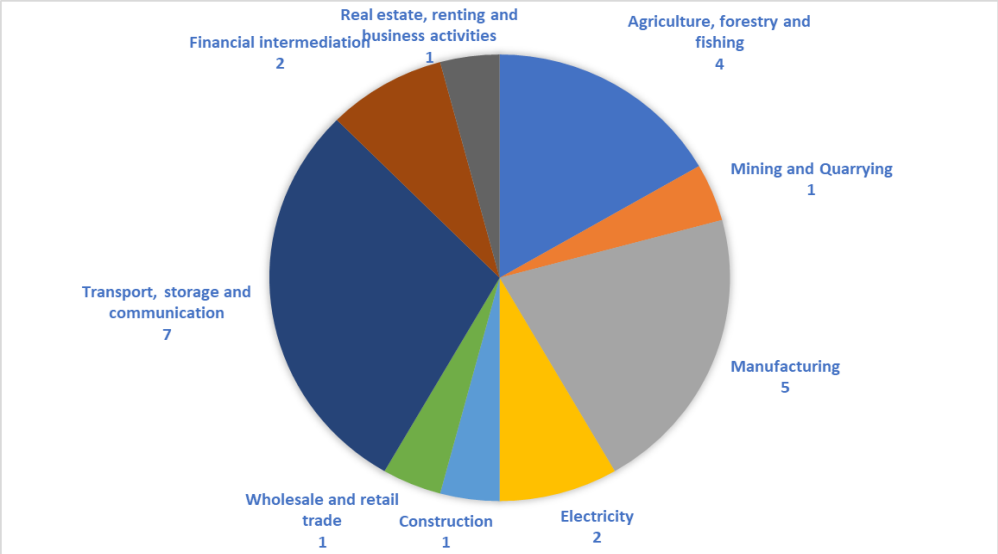

Figure 53: Number of State Enterprises (SOEs with major shareholding)

7.3 Sectoral Performance of SOEs: Trend and Outlook

7.3.1 Past Performance

The SOEs operating in the industrial, services, and primary sectors have experienced notable developments between 2022 and 2024. In the industrial sector, the manufacturing segment showed steady improvement, with the fixed asset turnover ratio increasing from 1.52 to 1.80, reflecting enhanced capital utilization. However, profitability remained volatile, as the net profit ratio fluctuated between 0.55 and 6.15 percent, indicating that structural adjustments were still ongoing. In contrast, the mining and quarrying sector exhibited a trend towards consolidation, with its fixed asset turnover ratio declining from 8.94 in 2022 to 8.01 in 2024. Despite this operational adjustment, the sector maintained robust profitability, with net profit ratios consistently above 34 percent, demonstrating strong market fundamentals.

In the services sector, financial intermediation saw significant strengthening, with the net profit ratio improving from 4.04 to 13.33 percent and the fixed asset turnover ratio increasing from 7.72 to 10.51, indicating improved operational efficiency and successful business model adaptation. Additionally, the wholesale and retail trade sector displayed a remarkable recovery, moving from a net loss position of 3.14 percent in 2022 to profitability of 1.66 percent by 2024, while maintaining high asset turnover ratios. In the primary sector, agriculture showed volatile performance, with persistent loss ranging from -20.35 to -9.18 percent. Overall, operational metrics indicated gradual improvement, suggesting that structural reforms were beginning to take effect.

7.3.2 Outlook for 2025

The manufacturing sector is expected to improve, with a fixed asset turnover ratio of 2.11 and a stabilized net profit ratio of 5.64 percent, reflecting improved capital efficiency. In mining and quarrying, a slight decrease in fixed asset turnover to 7.30 is anticipated, but strong profitability of 32.70 percent is expected to persist. In services, financial intermediation will experience consolidation, with profitability strengthening to 17.08 percent despite a moderation in fixed asset turnover to 6.35, while the wholesale and retail trade sector maintains its recovery with a projected net profit ratio of 1.17 percent. The primary sector, particularly agriculture, is poised for a breakthrough with a positive net profit ratio of 1.63 percent and improved fixed asset turnover to 2.13, indicating progress made through improved corporate governance and business process re-engineering. Enhanced productivity metrics further suggest operational efficiency gains in the sector.

Table 13: Financial Indicators of SOEs (SOEs with major shareholding) by Sector[45]

Sector	Year	Efficiency		Productivity			Profitability		
		Fixed Asset Turnover Ratio	Total Assets Turnover Ratio	Gross Income per employee (Nu. in mil)	Gross Profit per employee	Labor's Share of Gross Profit (%)	Gross Profit Ratio (%)	Employee Cost / Gross Income (%)	Net Profit Ratio (%)
Agriculture, Forestry and Fishing	2022	1.36	0.57	1.08	0.48	83.23	50.80	35.05	-20.35
	2023	1.30	0.43	1.12	0.64	53.29	84.39	33.67	-8.84
	2024	1.03	0.46	1.18	0.81	99.63	965.14	33.88	-9.18
	2025	2.13	1.10	3.36	0.98	45.49	45.47	16.97	1.63
Mining and Quarrying	2022	8.94	1.66	14.38	10.68	4.33	85.90	3.22	35.80
	2023	12.49	1.62	15.62	11.20	4.50	77.61	3.23	35.17
	2024	8.01	1.33	12.95	9.33	6.60	72.62	4.76	34.85
	2025	7.30	1.43	12.73	8.86	7.34	69.62	5.11	32.70
Manufacturing	2022	1.52	0.66	2.81	1.20	47.89	44.07	19.66	0.55
	2023	1.84	0.73	2.94	1.29	41.14	47.10	18.98	6.15
	2024	1.80	0.72	2.96	1.55	45.27	54.36	24.28	0.43
	2025	2.11	0.86	3.61	1.86	43.53	53.77	23.74	5.64
Electricity	2022	0.37	0.28	7.23	5.91	9.67	80.75	6.56	22.02
	2023	0.46	0.34	8.48	5.93	10.12	73.96	5.79	20.06
	2024	11.48	0.36	11.92	8.02	14.29	65.88	6.61	21.92
	2025	11.42	0.42	13.75	8.06	13.00	64.08	6.22	21.33
Construction	2022	1.36	0.53	3.49	1.18	56.54	35.26	19.16	1.94
	2023	1.59	0.61	4.28	1.30	56.05	31.56	17.11	0.26
	2024	2.09	0.88	5.06	1.75	46.75	37.58	16.20	3.70
	2025	2.01	1.14	4.86	1.62	50.67	34.79	16.92	3.11
	2022	11.76	1.53	4.63	0.54	62.34	11.68	7.24	-3.14

[45] Financial data for 2022-2023 is sourced from the audited report, while data for 2024 is unaudited and for 2025 is derived from the business plan submitted

Wholesale and Retail Trade	2023	6.89	1.52	7.84	0.95	47.49	12.47	5.77	1.04
	2024	9.93	2.14	11.31	1.00	44.59	9.06	3.94	1.66
	2025	6.93	2.09	11.24	0.81	60.46	7.33	4.35	1.17
Transport, Storage and Communication	2022	2.28	0.69	4.65	2.16	60.24	148.51	36.31	-3.41
	2023	2.99	0.81	5.98	3.34	36.29	149.68	25.68	14.89
	2024	3.03	1.02	6.74	2.94	49.59	69.12	31.63	10.53
	2025	3.27	1.16	6.74	3.13	44.91	73.32	31.56	10.36
Financial Intermediation	2022	7.72	0.06	5.54	1.65	58.78	28.34	13.66	4.04
	2023	10.70	0.07	7.80	3.71	27.82	50.82	10.31	17.14
	2024	10.51	0.07	8.03	3.80	27.99	48.93	10.60	13.33
	2025	6.35	0.07	8.14	3.87	29.78	48.76	11.44	17.08
Real Estate and Renting	2022	1.00	0.08	1.48	1.42	33.75	159.62	32.41	0.65
	2023	1.10	0.06	1.62	1.50	32.88	146.07	30.37	-10.48
	2024	1.27	0.06	1.71	1.61	37.90	134.13	35.70	14.12
	2025	1.44	0.06	1.72	1.66	38.31	136.87	37.08	11.53

However, across industries, the labor's share to gross profit is either declining or remains fairly stable at low levels. This indicates that much of the output is being value added as a result of capital injection or capital-intensive activities. As can be seen in Chapter 8, the capital productivity in the economy has been declining at the rate of 3.4 percent, as a result, SOEs' productivity in the economy is also declining. For Bhutan's economy to be productive the SOEs' labor's share of gross profit has to be at least 70 percent. Unlike the private sectors, the primary mandate of SOEs is to enhance productivity and accelerate economic growth. While there has been notable progress, there is still potential for improvement and growth.

7.4 Leverage Risks and Counter-cyclical Investments in SOEs

SOEs in Bhutan, particularly those involved in large infrastructure projects like hydropower, face significant leverage risks and contingent liabilities, which can be a source of macroeconomic volatility. Many of these enterprises are highly leveraged, relying on substantial debt financing, and the government bears the risk if projects fail to meet expected returns. This fiscal exposure could undermine long-term economic growth and fiscal sustainability. Reducing debt levels and improving the operational efficiency of SOEs are key to mitigating these risks, potentially reducing the government's fiscal burden and improving investor confidence.

In parallel, counter-cyclical investments, particularly in supply and value chain development, play a crucial role in stabilizing Bhutan's economy during periods of downturn. These investments, which align with the country's Gross National Happiness (GNH) framework, not only stimulates economic growth but also enhance social well-being and environmental sustainability. Well-managed SOEs, especially in supply chain and value chain development, and energy, are essential for ensuring that counter-cyclical investments are effective, generating sustainable returns while fostering long-term economic stability.

7.5 Conclusion

SOEs play a crucial role in Bhutan's economy to boost productivity and accelerate economic growth by bridging market gaps. However, despite their significance, concerns about low-productivity, bureaucratic interference and weak competition persists. While some SOEs have improved profitability and operational efficiency in recent years, many remain underperforming, particularly in the primary sector. Addressing these inefficiencies through corporate governance reforms and productivity enhancement is essential for ensuring their long-term sustainability and contributing meaningfully to the economy rather than functioning like a government agency.

The sectoral performance of SOEs highlights mixed trends, with notable improvements in financial intermediation and manufacturing, while agriculture and some service sectors continue to underperform. Another concern is the low labor share in gross profit indicating capital-intensive operations, raising concerns about declining productivity and inefficient resource allocation. To sustain economic growth, SOEs must prioritize better workforce engagement, high-value addition, and efficient capital utilization; aligning their objective with broader national economic goals.

Managing leverage risks and enhancing counter-cyclical investments are also key in ensuring SOEs' financial sustainability and resilience. High debt levels pose fiscal risks that require strategic interventions to minimize government liabilities. Counter-cyclical investments in supply and value chain development, and energy can mitigate economic downturns while aligning with Bhutan's GNH principles. Developing upstream and downstream networks of subcontractors to develop the entire industry and engaging the private sector should be prioritized. Strengthening governance, improving efficiency, reducing dependency on government for capital injections and subsidies, and fostering innovation will be critical to maximizing SOEs' contribution to national goals.

Chapter 8:
Sources of Economic Growth: Productivity

8.1 Introduction

Growth accounting framework/productivity account decomposes sources of economic growth into contributions from labor, capital and Total Factor Productivity (TFP). This framework quantifies the extent to which output growth stems from two factors of production - capital and labor inputs. When these factors are used efficiently, the economy accumulates a certain degree of technical efficiency commonly referred to as the TFP or Solow residual. It captures the efficiency gains that are critical for sustaining long-run growth. Bhutan's industry-level productivity account database (1990-2022) provides insights into the sources of growth to understand the productivity dynamics to identify growth drivers and areas requiring intervention for enhanced economic performance.[46]

Investigating the sources of Bhutanese growth reveal a stagnating TFP over the past 3 decades which stems from a unique dynamic of gradual increase in labor productivity and declining capital productivity. The economic growth, largely driven by hydropower development, is characterized by a high level of investment ratio, with capital input growth exceeding the output growth. Consequently, the growth model is driven by high levels of capital accumulation rather than capital assimilation. This is evident in declining capital productivity across all sectors except the finance and insurance implying the inefficiency in capital resource utilization. On the other hand, while most of the sectors exhibit increasing labor productivity, this growth is contributed by capital deepening, whereby each worker has more capital to work with, rather than the TFP improvements which signifies the lack of capital assimilation.

The TFP growth, a measure of efficiency gains, is critical for long-term sustainable growth but the lack of it highlights the structural weakness in Bhutanese economy. This is of further concern, particularly when Bhutan's TFP growth is the lowest among its regional peers and showing a diverging trend with that of India's, implying that Bhutan is being outcompeted. Therefore, this diagnosis from a growth accounting perspective calls for a prudence in investment and optimal utilization of the factors of production, particularly in the 13th FYP and going forward towards a productivity-led growth to achieve the objective of a high-income country.

[46] In 2024, Bhutan's productivity account database was developed, with a focus on industry-level productivity from 1990-2022 (Building upon the work done in 2016). The DMDF, Ministry of Finance in collaboration with Professor Koji Nomura of Keio University with support of Joint SDG-Fund of the UNDP constructed a comprehensive productivity account to evaluate Bhutan's growth dynamics. This involved developing a detailed industry-level account that measured the contributions of labor, capital, and TFP. A detailed time-series database on QALI, investment and capital stock database was developed to enable this analysis in absence of data unavailability.

8.2 Growth Drivers

Bhutan's economy has a long-run average growth rate of about 7-8 percent per annum. Of the three main drivers of economic growth, the Average Labor Productivity (ALP) has been growing at 5 percent on average between 1990-2022. However, both Average Capital Productivity (AKP) and TFP growth declined over the same period as shown in Figure 54. In particular, AKP has been declining at 3.4 percent on average. This decline in AKP due to capital intensive growth overshadowed the growth in ALP, resulting in TFP stagnation. It can be seen that Bhutan's long term economic growth rate has dropped to 4-5 percent during the period 2008-2023. The TFP growth in Bhutan stagnated between 1990-2022, declining at 0.7 percent annually, suggesting that Bhutan's capital-intensive driven growth has not translated into TFP improvements.

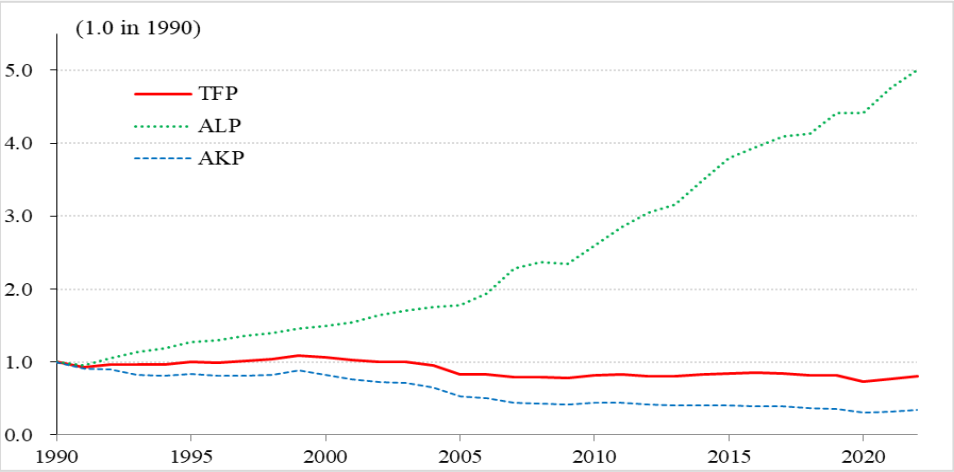

Figure 54: Aggregate Productivities, 1990-2022

Similar trends are observed when investigating the sources of growth across different sectors within the economy, as illustrated in Figure 55. It can be observed that the ALP has been increasing between 1990-2022 for all sectors except for the hotel and restaurant. The hotels and restaurants, closely associated with tourism, have a high level of oscillations in ALP and AKP relative to other sectors as a result of the capital cycle. Despite the oscillations, there was an upward trend in capital and labor productivity until around 2008 which highlights the returns to early adopters in the tourism industry. However, post-2008s, there were new hotels being built without proportional increase in tourists arrivals leading to the decline in both capital and labor productivity.

Mining and quarrying, and wholesale and retail trade where most of the labor movement from the agriculture sector happens, has one of the highest ALP growth among the different sectors. The agriculture sector, despite the significant importance accorded by the government as the largest employer in the economy, still struggles with one of the lowest labor productivity growth at 2.64 percent on average.

Unlike the ALP, the TFP and AKP have consistently declined in most sectors. The TFP growth lies between -2.4 and 0.8 percent while the AKP growth lies between -5.3 and 0.5 percent on

average. As Bhutan's economy has been largely driven by capital accumulation, more capital investment into the economy with inefficient allocation of resources has resulted in decline in the capital productivity over the period. Further, this has led to the stagnation of TFP despite the gradual increase in labor productivity.

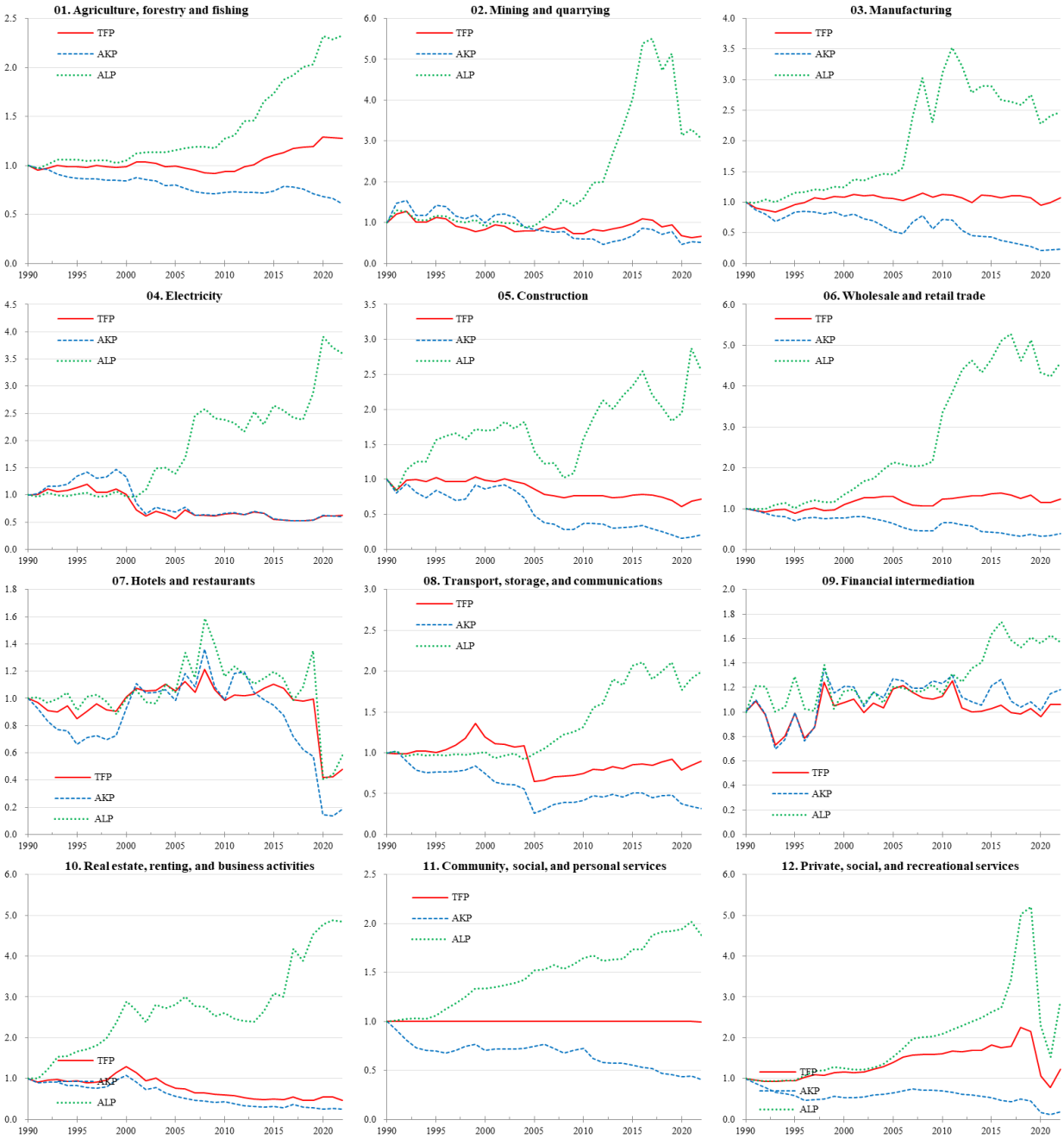

Figure 55: Industry Level Productivities, 1990-2022

8.3 Labor Productivity

Labor productivity growth is defined as the amount of real production (GDP) per hour worked. Labor productivity grew at 5 percent annually between 1990-2022. Within an economy, labor productivity mainly grows due to 3 main factors - human capital accumulation, economies of scale and technological factors.

Table 14: Labor Productivity Growth by Sector[47]

Unit: Percent (Average annual growth rate based on natural logarithm)	1990-2000	2000-2008	2009-2019	2020-2022	1990-2022 (Entire Period)
1 Agriculture, livestock, and forestry	0.50	1.67	4.86	4.48	2.64
2 Mining and quarrying	-1.02	4.12	10.85	-17.45	3.48
3 Manufacturing	2.15	9.78	-0.87	-3.62	2.82
4 Electricity	-0.28	9.83	0.96	7.63	4.01
5 Construction	5.28	-5.73	5.26	11.04	2.92
6 Wholesale and retail trade	2.96	6.33	8.38	-3.90	4.75
7 Hotels and restaurants	0.03	6.52	-1.47	-27.87	-1.68
8 Transportation and communication	0.11	2.30	4.97	-1.93	2.15
9 Finance and insurance	1.56	1.46	2.88	-0.72	1.42
10 Real estate, renting, and business activities	10.60	1.70	4.49	2.23	4.93
11 Community, social, and personal services	2.89	1.56	2.06	-0.72	1.98
12 Private, social, and recreational services	2.28	4.92	8.68	-20.09	3.28

In the electricity sector, labor productivity grew at 4.01 percent annually on average between 1990 and 2022. In the non-electricity sector, as illustrated in Table 14, the strongest labor productivity growth was observed in real estate (4.93 percent), wholesale and retail trade (4.75 percent) and mining and quarrying (3.48 percent). On the other hand, decline in labor productivity on average was only observed in hotels and restaurants (-1.68 percent) which was further exacerbated by the pandemic which observed a decline of -27.87 after 2020. The public sector labor productivity has also been consistently low due to the fact that the public sector, in general, does not produce any tradable goods and services, while it remains one of the largest employers in the economy with 18 percent share of market employment.

Decomposing the sources of labor productivity growth reveal that the labor productivity is mainly driven by capital deepening across all sectors, while labor quality's contribution is positive but remains small and TFP's contribution is limited. The capital deepening driven ALP growth implies that there is more accumulated capital that each labor can use. The limited contribution from TFP growth highlights that the labor productivity is driven more by capital accumulation than capital assimilation - "the ability to effectively integrate and utilize new capital within the existing production" (Nomura, 2024, p.169).

The industry level analysis shows that the labor productivity growth in mining and quarrying, electricity, wholesale and retail trade, and real estate is mainly a result of capital deepening. During

[47] The industry-level ALP is defined as constant-price gross output per hour worked

the period 2008-2019, the labor productivity growth in the wholesale and retail trade, transportation and communication and private, social and recreational services was bolstered by TFP growth, as shown in Figure 56. The labor productivity growth in the public sector is consistently driven by labor quality as it is one of the few sectors that can absorb a highly educated workforce within the Bhutanese economy.

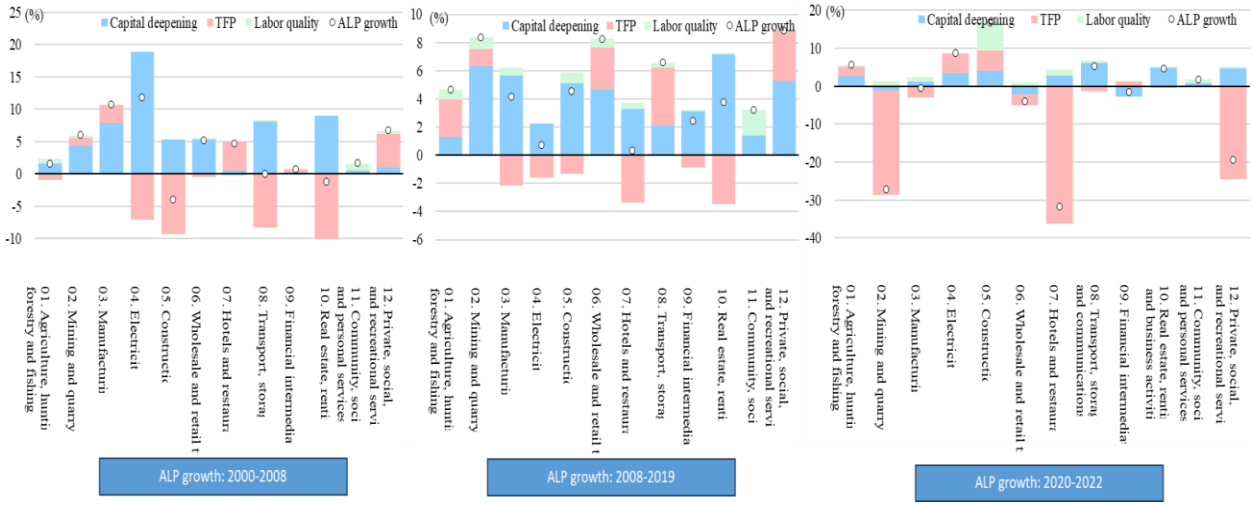

Figure 56: Sources of labor productivity growth by industry

Further, an analysis of the labor market dynamics through the quality-adjusted labor input database across industries reveals that Bhutan's labor share to GDP declined from close to 60 percent in 1990 to a low of 33.30 percent in 2007 before rising 49.30 percent in 2022.[48] Moreover, Bhutan's labor market share remains below that of India of more than 60 percent in 2022. This indicates the capital-intensive nature of Bhutan's economy, such as the hydropower sector where employment has been stagnant around 4,000, limiting the contribution of labor. This raises concern in terms of sluggish income growth and lower share of income.

Additionally, the growth in total hours worked showed a modest growth of 1.14 percent as a result of increased number of employment (1.51 percent) while average hours worked decreased by 0.37 percent between 1990-2022. There is also an increase in the labor quality improvement rate from 1.61 percent between 1990-2008 to 2.99 percent in 2008-2022 where educational attainment was the primary driver. This highlights the important role of education in improving labor productivity and human capital accumulation.

[48] A comprehensive quality-adjusted labor input data for Bhutan, 1990-2022 was developed as part of the Bhutan productivity account in absences of time-series estimates for compensation of employees in the national accounts.

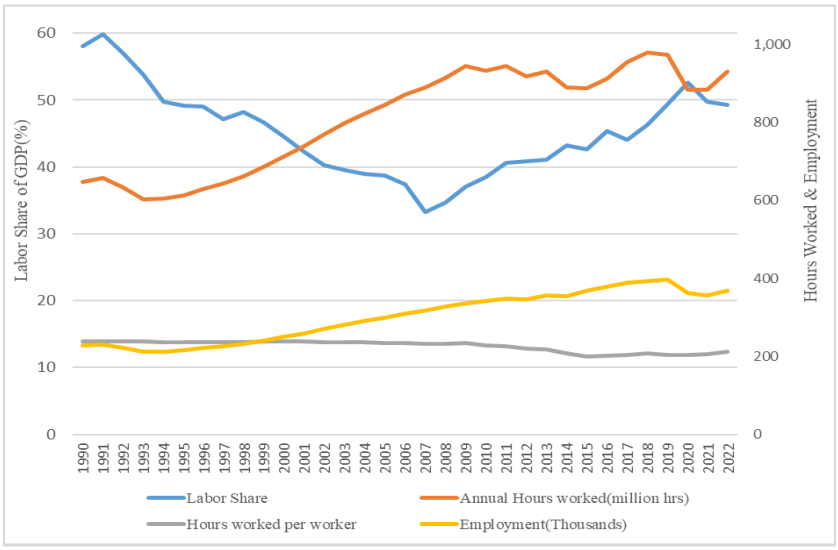

Figure 57: Labor Market Dynamics, 1990-2022

Overall, the labor productivity growth across most sectors is driven by increased capital investment rather than efficiency gains. Therefore, while capital investment is increasing, the effectiveness in driving long-run productivity growth may be limited. Additionally, the labor share of GDP remains relatively low compared to India, which could have implications for income growth and overall economic inclusivity.

8.4 Capital Productivity

Improvement in capital productivity for Bhutan has been a challenge which has been declining at 3.4 percent annually between 1990-2022. Historically, Bhutan's economic growth has mainly been driven by capital accumulation. With more investment into capital without the efficient allocation of resources and lack of capital assimilation, the resulting impact is the decline in capital productivity. During the same period, the capital input growth of 9.5 percent exceeded the output growth of 6.2 percent. Capital accumulation accounted for 5.4 percentage points of this growth, representing 88 percent of the total economic growth.

The decline in AKP also stems from high Capital Output Ratio (COR). The investment and capital stock matrices estimate Bhutan's nominal capital stock at Nu. 16,313.517 million in 1990, Nu. 59,617.224 million in 2001 and Nu. 904,897.953 million in 2022 as detailed in Annexure IV.[49] The nominal capital stock in 2022 is equivalent to four times the GDP at current prices resulting in a COR of 4:1, a rise from 3.1 in 1990 and 3.8 in 2007. This implies that 4 units of capital investment is required to generate an output of 1 unit. This ratio is higher than that of other South Asian countries. For instance, Sri Lanka's COR stood at 3.6, Nepal's at 3.2, Bangladesh's at 2.4, and Pakistan's at 1.5 (Nomura, 2024). Bhutan's relatively high COR reflects increased

[49] A comprehensive capital stock account was developed in absence of it in Bhutan's System of National Accounts.

inefficiencies in resource allocation and low capital productivity, suggesting that public-sector driven investments in Bhutan are not being optimally utilized.

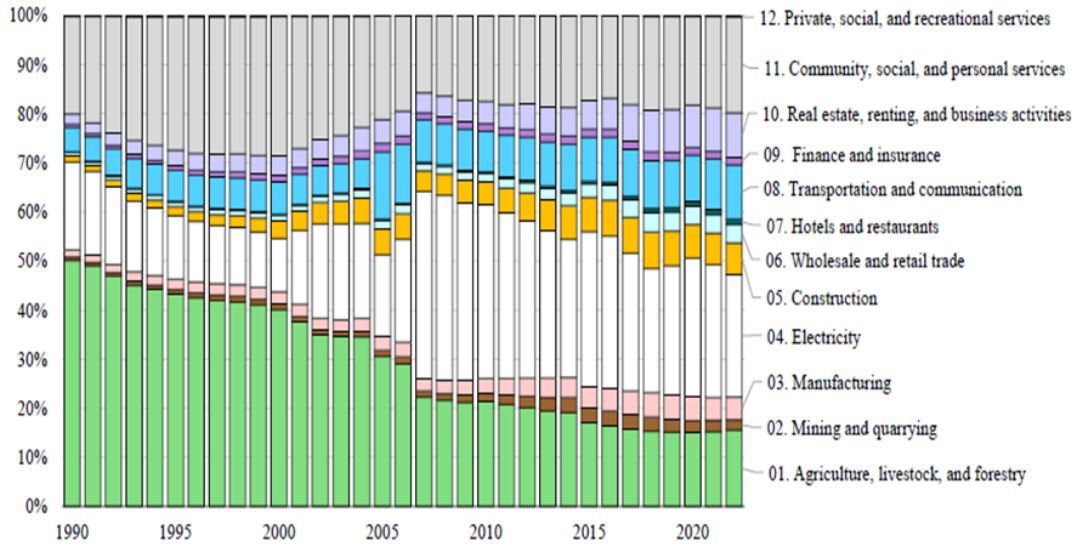

Figure 58: Share of Capital Stock by Sector

Over the past three decades, there is a decreasing trend in the agriculture sector's share of the total capital stock and an increasing trend in the electricity sector's share. This highlights the shift from low to high productivity sector but the structural transformation has not resulted in increase in productivity as illustrated by Table 15 showing the decline in capital productivity across various sectors of the economy.

Table 15: Capital Productivity Growth by Sectors[50]

Unit: Percent (Average annual growth rate based on natural logarithm)	1990-2000	2000-2008	2009-2019	2020-2022	1990-2022 (Entire Period)
1 Agriculture, livestock, and forestry	-1.75	-1.92	-0.03	-5.47	-1.57
2 Mining and quarrying	-0.02	-4.63	-0.05	-13.36	-2.03
3 Manufacturing	-2.53	-0.70	-9.43	-6.82	-4.63
4 Electricity	2.88	-9.15	-1.59	3.85	-1.56
5 Construction	-1.49	-13.17	-2.63	-0.98	-4.94
6 Wholesale and retail trade	-2.60	-6.09	-1.88	1.85	-2.98
7 Hotels and restaurants	-0.76	6.99	-7.88	-37.82	-5.29
8 Transportation and communication	-2.95	-8.46	1.93	-13.96	-3.58
9 Finance and insurance	1.93	0.32	-0.85	2.85	0.52
10 Real estate, renting, and business activities	0.72	-8.32	-4.24	-3.34	-4.24
11 Community, social, and personal services	-3.50	-1.39	-3.59	-3.94	-2.82
12 Private, social, and recreational services	-6.29	2.73	-4.20	-29.51	-5.23

Capital productivity declined in all sectors in the economy, except for finance and insurance. Finance and insurance is the only sector where a modest AKP growth of 0.52 percent was observed

[50] Industry-level AKP is defined as real gross output per capital service

between 1990 to 2022. The highest decline in capital productivity is seen in hotels and restaurants, private and recreational services, construction and manufacturing by 5.29 percent, 5.23 percent, 4.94 percent and 4.63 percent, respectively. A look at capital productivity in the manufacturing sector shows a decline of 4.63 percent between 1990-2022, with a faster rate of decline observed post-2008. This is of concern as manufacturing has the highest growth potential for productive spillover considering its forward and backward linkages with other sectors. The overall decline in AKP observed across sectors, shows a diminishing return to capital, with additional capital investment leading to a decline in the capital productivity. Only efficient utilization of all factors of production using optimal input combination will be able to generate growth driving investments.

Despite the electricity sector being the main driver of the economy, it has experienced a decline in capital productivity of 1.56 percent on average. In recent times, this is due to large investments in hydropower projects, which has been exacerbated by cost escalations and completion delays without proportionate increase in returns. The revenue generation is constrained by installed generation limits and export prices that are not market driven (while the operation cost is at market rate), which are determined through bilateral agreements and revisited only periodically. This has resulted in decline in capital productivity on average, with a notable sharp decline observed between 2000 and 2020. On the other hand, the sector being capital-intensive, has seen a relatively high labor productivity growth of 4.01 percent on average. Consequently, the TFP growth has declined by 1.48 percent.

Going forward, resource allocation within the economy must be carefully planned. Capital investments that do not enhance domestic production capacity will further reduce capital productivity, ultimately hindering economic progress. Such prudence in investment should be made, particularly, for the government investment projects.

8.5 Total Factor Productivity

TFP, typically calculated as a ratio of aggregate output to aggregate input, measures the efficiency in the economy. TFP growth, estimated as a residual, is output growth that is not explained by growth in labor and capital inputs. Its growth implies efficiency gains in the economy and improved resource allocation, while stagnation signifies inefficiencies/reliance on input-driven growth.

Industry level analysis of TFP contributions reveals stagnation in both the electricity and non-electricity sector. Agriculture is one of the only sectors, whose growth in recent times has seen a growth in TFP, which can be attributed to the introduction of improved seed varieties and farming techniques. Few sectors – manufacturing, wholesale and retail trade, finance and insurance and private, social and recreational services – have observed positive TFP growth over the period, but have seen a decline in TFP in the recent years, particularly from 2009. The manufacturing sector on average has observed a modest growth of 0.20 on average, but it has seen a decline in TFP of 0.50 percent on average since 2009 compared to a positive albeit small growth of 0.75 percent

during 1990-2008. Similarly, the wholesale and retail trade observed a decline in the TFP growth of 2.39 percent during the pandemic (2020-2022).

Table 16: TFP growth by sectors

Unit: Percent (Average annual growth rate based on natural logarithm)	1990-2000	2001-2008	2009-2019	2020-2022	1990-2022 (Entire Period)
1 Agriculture, livestock, and forestry	-0.15	-0.79	1.02	2.10	0.75
2 Mining and quarrying	-1.95	0.73	0.72	-11.80	-1.29
3 Manufacturing	0.79	0.70	-0.06	-0.14	0.20
4 Electricity	0.16	-5.96	-3.28	4.47	-1.48
5 Construction	-0.09	-3.64	-1.84	1.02	-1.03
6 Wholesale and retail trade	0.95	-0.34	0.98	-2.39	0.65
7 Hotels and restaurants	0.09	2.33	-0.06	-24.39	-2.30
8 Transportation and communication	1.80	-6.52	-1.38	-0.78	-0.33
9 Finance and insurance	0.74	0.48	-0.23	1.00	0.19
10 Real estate, renting, and business activities	2.56	-8.75	-5.32	-0.45	-2.40
11 Community, social, and personal services	0.00	0.00	-0.00	-0.02	-0.00
12 Private, social, and recreational services	1.47	4.04	3.28	-18.76	0.65

The electricity sector's TFP growth has been close to 5 percent between 2020-2022, but has suffered a major decline in its TFP between 2000-2019 averaging 3.57 percent. The construction sector also exhibits a similar trend with TFP improvements observed between 2020-2022 (1.02 percent) but had negative TFP growth historically, with a -1.95 percent growth observed between 2000-2019. These sectors have the ability to boost labor productivity and offer higher quality employment. Nevertheless, as a result of decline in the TFP, the quality of growth in this sector is declining, raising concerns about its ability to drive economic growth.

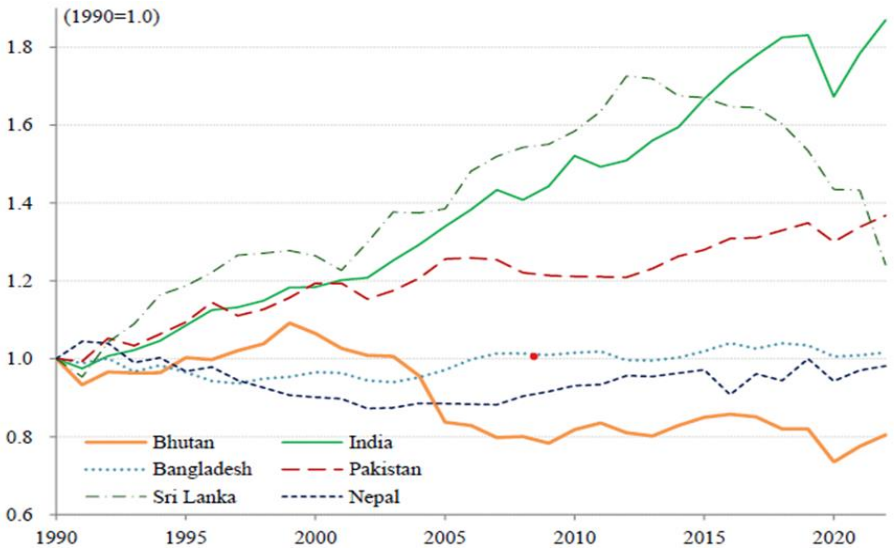

Figure 59: TFP in South Asian Economies

Source: Nomura (2024)

The declining TFP growth in Bhutan is even more of a concern when compared to that of the neighbors. Regional comparison highlights that Bhutan has the lowest TFP compared to its South Asian counterparts, particularly post-2005, as illustrated in Figure 59. Even more alarming is the widening gap between Bhutan and India, with Bhutan's productivity behind by 2.7 percentage points annually between 1990-2022. This productivity gap raises concern about Bhutan's competitiveness, especially given Bhutan's close economic ties with India including the pegged exchange rate and as its primary trading partner. The widening TFP gap with India suggests potential challenges for Bhutan's manufacturing and agriculture sectors in global markets. To sustain long-term economic growth and competitiveness, it is critical for Bhutan to close this productivity gap, focusing on improving capital efficiencies across all sectors.

8.6 Conclusion

Over the past three decades, Bhutan has experienced a decline in capital productivity and stagnant TFP growth, while the labor productivity increased gradually. The growth accounting framework reveals critical insights into the sources of economic growth for Bhutan, suggesting that while labor productivity has shown consistent improvements, the capital-intensive driven growth has crossed its limits. The decline in capital productivity and stagnant TFP, particularly in sectors such as construction, electricity, hotels and restaurants, reflects the challenges of inefficient capital allocation calling the need for more strategic investments. The rise of COR over time, further highlights the inefficiencies in investments.

Manufacturing and other tradable sectors, which are crucial for Bhutan's economic diversification from hydropower-led growth, face declining capital productivity. Further analysis of the RER between India and Bhutan reveals that Bhutan is becoming less competitive. Combining this factor with lower productivity as compared to the neighboring countries, it reduces Bhutan's export competitiveness. This is a worrying trend because Bhutan has historically been dependent on imports, while at the same time the youth unemployment has remained consistently high due to the lack of these sectors' ability to generate employment.

To ensure long-term sustainable and competitive economic growth, Bhutan must shift its focus from capital-intensive driven growth to improving capital allocation and efficient utilization to foster productivity-driven growth. This requires strategic resource allocation, a more vibrant and dynamic financial market, better public investment management and domestic market deregulation. Addressing these structural challenges will be critical for Bhutan to enhance its competitiveness, economic sustainability and support the development of GMC.

Chapter 9:
Challenges and Opportunities: A Double-Edged Economic Frontier

9.1 Introduction

Over the last few decades, Bhutan has made significant strides in economic development and social progress. This is evident in the enhanced access to education and healthcare, increase in life expectancy, poverty reduction, infrastructure development, and the transition to a successful constitutional democratic monarchy. The recent graduation from Least Developed Countries (LDC) in 2023 reinforces these achievements. Despite such progress, Bhutan's economy is still grappling with several critical macroeconomic and social challenges that must be addressed to secure a sustainable development path.

While the country has experienced rapid growth, this has not translated into substantial improvements in household income or overall economic conditions. The per capita GDP remains at only US$ 3,919, one-third of the global average, highlighting the disconnect between growth and real economic benefit for households. A key factor behind this disparity is the lack of economic diversification beyond the hydropower sector, which does not generate sufficient employment opportunities for an expanding workforce and contribute to productivity gains. As such this has resulted in the recent trend of exodus among skilled professionals and the productive youth, who would have contributed to the economic development.

The government's fiscal position remains highly vulnerable, with persistent fiscal deficits, as much of the capital investment is financed through external grants and borrowings. Furthermore, the country's reliance on exporting raw renewable energy, without any value-addition due to a lack of industrial development and production know-how, has led to domestic supply constraints and a growing trade deficit. Private sector credit is heavily concentrated in a few sectors, such as housing and tradable services, which has increased imports and placed additional pressure on foreign exchange reserves. These factors collectively hinder the realization of more substantial economic growth and improvements in household well-being, contributing to the ongoing challenges in Bhutan's development.

As the nation aspires to achieve "*high-income GNH economy*" status by 2034, there is a need to pursue policy reforms and interventions aimed at fostering economic diversification, industrial development, public sector reforms, deregulations and private sector development.

9.2 Challenges

9.2.1 Capital-intensive growth model

The current assessment suggests that the economy is growing below its potential level and historical averages, reflecting room for further growth opportunities. A persistent negative output gap suggests that labor and capital are not being employed at optimal levels, with high unemployment and lower productivity. While much of this is attributed to the weak aggregate demand and sluggish investment post-pandemic, it is closely linked to the lack of economic diversification, inefficient allocation and utilization of resources while relying significantly on hydropower and tourism sectors. This is evident from the growth estimates doubling in 2025 from 2024 with the commissioning of the PHP-II.

While it is important to continue to develop the hydropower sector as a foundation of the economy, it is also essential that economic diversification is given priority. Dependency on hydropower-led growth models is a concern, especially at a time when the impact of climate-change is felt quickly. As the Himalayan glaciers erode rapidly, Bhutan's development model of relying singularly on hydropower is unsustainable. The continued reliance on government-led investments has not yielded the required diversification in the economy. Moreover, the continued interventions of government agencies, not just as financiers but also as producers in the market along with various regulations have led to a weak private sector. Reforms are also necessary in the private sector, alongside a shift from rent-seeking behavior that depends on public resources to sustain their operations. This calls for change in the business process of government agencies to move away from the market as a producer and regulator to a more productive role as facilitator to boost the domestic economy through private sector-led growth.

9.2.2 Structural twin deficit

The persistent fiscal deficit combined with CAD represents a structural challenge for Bhutan. Irrespective of the economic circumstances, the fiscal policy has been consistently expansionary rather than counter-cyclical. As a small developing economy, Bhutan's economy heavily relies on government expenditure. Given such a high level of spending, the effectiveness of that spending is a primary concern. Excluding hydropower, the widening trade deficit indicates that government spending has not led to increased production or productivity but has instead fueled consumption. This imbalance contributes to the ongoing CAD.

The continued expansionary fiscal policy has led to a rising fiscal deficit, accompanied by growing debt servicing costs. The growth in expenditure continues to outpace income, leading to a heightened reliance on external grants for deficit financing. Additionally, much of the capital expenditure in recent years has been marked by underutilization, resulting in sunk costs, as reflected in a low fiscal multiplier. Poor expenditure planning has further exacerbated the issue, with capital utilization reaching only 16.75 percent of the revised estimates for FY 2024/25, as of

31st December. This low utilization will likely lead to last-minute procurement towards the end of the FY, compromising the quality of infrastructure projects and procurement.

9.2.3 High interest rate spread and NPL

The financial market in Bhutan is confronted with various challenges primarily rooted in limited monetary policy autonomy as a result of a pegged exchange rate regime. The limited monetary autonomy has weakened the transmission of monetary policy, rendering the MLR ineffective in influencing market interest rates. Due to this, the interest rate spread between the deposit and lending rate has been one of the highest in the region. The high interest rate spread makes it difficult for entrepreneurs to access credit despite the government's continued interventions to improve credit access. Nevertheless, a host of government interventions create moral hazard combined with a small domestic market resulting in entrepreneurs defaulting on the loan.

A high interest rate spread also indicates inefficiencies in the banking sector, leading to increased financial sector instability. Further, Bhutan's economy has been growing at an average rate of 4-5 percent since 2008, mainly driven by hydropower. In line with the economic growth rate, entrepreneurs expect similar returns on investments, however, given the high level of competition in the market along with limited opportunities for expansion and narrow economic base, entrepreneurs are unable to pay-off their loans. This, ultimately, has resulted in high NPL. Further, in sectors with high return, the capital cycle dampens the investment resulting in NPL, which is evident from high NPL in the housing and tourism sector. Higher the NPL, the more risk-averse the banks become, resulting in higher interest rates. High interest rate spread coupled with high NPL and continued loan deferment could cause systemic risks. While the government through ESP provided reinvigoration funds mainly to reduce the risks, the loan disbursement rate by the banks has been slow.

9.2.4 Massive investments could cause excess liquidity

A challenge in the monetary and financial sector is the increase in liquidity in the market, expected as a result of 13th FYP and ESP implementation gaining momentum along with increase in hydropower and other investments. As the supply-side adjustment takes time to meet the rising demand, there potentially could be excessive liquidity. As a result, the increased demand, causing an increase in imports could result in drainage of reserves as previously observed in 2012-2013. Under such circumstances, administrative measures such as moratorium have been used due to the ineffectiveness of monetary policy tools. This results in the contraction of the economy, undoing the growth progress made through expansionary fiscal policy. Therefore, it is important to implement effective liquidity management and other tools that could sweep liquidity out of the market, without having to resort to administrative measures.

9.2.5 Persistent external imbalance - the main source of vulnerabilities

The major macroeconomic shock stems from the external imbalance. In the past 2 decades, external imbalance caused about 3 episodes of macroeconomic shocks during which, administrative measures were implemented. Still, Bhutan continues to face a high CAD, about 11.81 percent of GDP in FY 2024/25, primarily due to supply-side weaknesses. The weak supply-side makes the economy dependent on imports with a narrow export base mainly constituting electricity and low value-added raw materials exports. As a result, the trade deficit has been growing, especially with India. Further, the overvaluation of the ngultrum worsens competitiveness with India. With imports from India projected to rise, particularly due to new hydropower development, Bhutan's trade position will further worsen.

The persistent structural CAD has been financed through external grants and borrowings. The twin deficits – fiscal and current – financed through external sources, especially external borrowings is a concern as both public and private sectors are living beyond their productive capacity. With sluggish economic growth, the inefficient resource allocation continues to be financed through the twin deficits, which is a concerning trend. In this regard, FDI can play a crucial role by bringing in production know-how, technology and productivity. However, FDI inflows remain weak and are concentrated in well-established sectors like tourism, rather than emerging industries such as manufacturing and agriculture. Regulatory hurdles, bureaucratic inefficiencies and capital controls continue to restrict investment opportunities for both domestic and FDI companies, making it difficult to achieve the 13th FYP's ambitious FDI target of Nu. 500 billion.

9.2.6 Bhutan's labor market inefficiencies: From agriculture to brain drain

Bhutan's labor market is heavily reliant on the agricultural sector with about 41 percent of the total employment. While the economy has been transitioning from agriculture to industry and services, the labor market has not kept pace. The agriculture contribution to GDP has declined by almost 50 percent since the 1980s, to about 15 percent. This has resulted in under-employment and productivity stagnation in agriculture. Furthermore, a growing threat from wildlife and rapidly-evolving impact of climate change poses a threat to sustainability of agricultural practices, and thus, the rural economy.

While the industry and service sectors have been absorbing the labor moving away from agriculture, it has not been able to generate adequate jobs due to the narrow base and low manufacturing productivity and capital cycle in the tourism sector. The public sector has been one of the sectors absorbing labor but it does not produce goods and services that are tradable in the market by adding value, therefore it cannot absorb labor without straining the fiscal sustainability. On the other hand, the private sector has been weak and reliant on government handouts. As a result of the lack of industry that provides gainful employment, youth unemployment has been persistent. This has various consequences, one of which is the brain drain whereby skilled workers are seeking jobs abroad. Essentially, if such a trend continues, Bhutan will become a factor of

producing highly educated youths whose benefits are being reaped by other nations with greater productivity.

9.2.7 Premature deindustrialization

With an economic growth centered around hydropower and tourism, the economy faces substantial risks especially at the face of weak industrial growth in manufacturing. Premature deindustrialization has become an urgent concern as the economy is shifting from agriculture to services, without the proper development of the manufacturing sector. This lack of industrial growth and diversification, combined with an overreliance on a few sectors limits the economy's capacity to absorb the labor force effectively. Additionally, the absence of a robust manufacturing sector hampers the economy's ability to produce value-added goods, thereby limiting avenues to bolster the supply-side and build industrial resilience.

Without the capacity to produce goods domestically, the economy remains highly dependent on imports and in a vicious cycle where manufacturing capacity is weakened, limiting the economy's overall competitiveness. Moreover, the fragmentation of the industrial base and small domestic market leaves little room for scaling up and economies of scale. Similarly, the lack of a coordinated and well-established supply chain, and weak value chain linkages hinders the organic development of industries. Thus, the culmination of these factors exacerbates the declining share of manufacturing, thereby pushing Bhutan to deindustrialize prematurely.

9.2.8 Struggling SOEs: Inefficiency and government dependence

SOE's were established mainly to bridge the market failure in Bhutan, particularly on account of supporting market integration, logistics development, supply and value chain, and improving overall productivity. However, many SOEs have suffered from low productivity and weak competition, reducing their overall contribution to economic growth. Rather than contributing meaningfully as intended, most SOEs are reliant on the government for financial support including their operations. Particularly, the labor share to gross profit remains below 50 percent, while most of the growth is driven by capital injection, thereby signifying their inefficiencies and ineffectiveness. Since 2023, SOEs have gone under major review due to their weak financial position and lack of contribution to the economy. While there are noticeable improvements, as the commercial arm of the government, most are still performing below expectations.

9.2.9 Stagnant TFP due to inefficient capital allocation and utilization

Bhutan's growth dynamics highlight a key structural challenge of a capital-intensive growth that is not efficient. A gradual growth in labor productivity but a decline in capital productivity has resulted in stagnant TFP. Capital productivity has declined consistently across all sectors, leading to stagnation in TFP, indicating that resources are allocated inefficiently and are not optimally utilized. These raise concerns on the effectiveness of public sector driven investment and the need

for prudence going forward. On other hand, while labor productivity growth has been observed, it has been mainly driven by capital available per worker (economies of scale) rather than capital assimilation as the contribution from TFP remains limited. The labor share of GDP remains low at close to 50 percent, as compared to India (60 percent) while the long-term labor contribution to GDP should be about 70 percent as per the literature. These have resulted in the stagnation of TFP. As a result, the gap between Bhutan and the neighboring countries' TFP has been growing, particularly a diverging trend with India's TFP, thus, Bhutan is being outcompeted.

Bhutan is situated in a region where most of the nations and its citizens are producing similar products, which compete against each other, especially the agriculture and livestock products. Yet, the productivity level of our neighbors is higher than that of Bhutan, making us uncompetitive. Thus, it is essential to improve productivity through targeted interventions, effective allocation of resources and efficient utilization of capital investments.

9.3 Opportunities

9.3.1 Leveraging South Asian economic expansion

The development of GMC reflects His Majesty's pioneering vision and bold move towards creating an economic hub that will serve as an investment gateway connecting South Asian and South East Asian regions. It will enhance regional connectivity, trade and integration. The GMC is designed to blend modern infrastructure with traditional values to harmonize mental well-being, sustainable living, technology, knowledge and innovation.

Every Bhutanese, both home and abroad, sees GMC as a beacon of hope for Bhutan's economic future. His Majesty has highlighted three priority areas: Energy, Connectivity, and Skills; which every Bhutanese must embody in their thought and action for the successful development of the GMC. The government as an economic agent must strive towards realizing the nation's energy capability and enhance connectivity infrastructure, through prudent investment and adoption of digital technology.

South Asian economies are expected to expand at 6.2 percent in 2025, mainly driven by India's increasing share in the global economy and its emerging role in the global trade network. This provides Bhutan access to a growing middle-income population and a diverse market, given its Free Trade Agreement with India. Thus, providing opportunities for businesses operating in Bhutan to leverage on Indian and other South Asian markets expansion. Therefore, Bhutanese, as an individual, must seek to acquire 21st century job skills to compete at the global scale. A market-ready skilled workforce is essential to attract investment in the GMC and the rest of the country.

9.3.2 Fiscal reforms for long-term sustainability

The ongoing fiscal reforms and pending implementation of the GST will broaden the tax base and enhance efficiency in tax administration by subsuming multiple tax rates into a single rate. Further,

it will lower production cost by removing the cascading effect through input tax credit. This will improve the ease of doing business with a simplified tax structure and improve efficiencies leading to higher revenue as compared to the current regime. As a result, the revenue stream is expected to shift from a dependency on seasonal income tax to regular consumption-based tax to finance public expenditure, improving the government cash-flow.

Additionally, reforms in income tax are becoming increasingly relevant in light of shifting demographic trends. With changing population dynamics, it may be important to consider reforms that eases the tax burden and enhance overall competitiveness. Prioritizing measures that support both businesses and individuals could be beneficial.

9.3.3 Unlocking the financial market potential

The financial market plays a very important role in fostering the development of a country. Throughout history, most industrialized countries – Singapore, Japan, Hongkong, Switzerland, US, and UK – have relied on strong financial markets to support their developmental efforts. In Bhutan, the financial market is dominated by banking industries with very limited instruments. There is an opportunity to address the high interest spreads and NPLs through policy and institutional reforms. Interventions can come through the development of an Asset Management Company (AMC), commodity market and diversification of the capital market.

An AMC is established as an entity to manage and enhance recoveries of distressed assets removed from the financial system. It can either be tasked with resolving failed FIs and liquidating their assets, or as an entity that purchases assets from performing FIs. In the second case, the assets purchased from banks must meet certain criteria defined by the legislation or AMC. Usually, the AMC issues government guaranteed bonds to pay for purchase. In a number of countries, AMCs have been a part of the crisis resolution framework either as a bank resolution entity (to restructure, sell and liquidate failed banks) or as an entity purchasing NPLs in exchange for securities. Furthermore, with the AMC, banks could still recover a portion of their money on the NPL or ideal assets, and as a result, it will help reduce the lending rate at a more appropriate level.

9.3.4 Enhancing global competitiveness

Bhutan could leverage its proximity to India, who is emerging as a major global player, and enhance export diversification, while the increased inward remittances can continue to play an important role as a source of external financing and foreign reserves. Moreover, given the low level of FDI inflows, there is an untapped potential in FDI across various sectors. Consequently, the FDI inflows could facilitate knowledge transfer and productivity improvements given the declining capital productivity and premature deindustrialization observed in the Bhutanese economy.

In this regard, there is an opportunity to attract FDI through deregulation, easing capital control and removing bureaucratic red tape. Further, to keep the level playing field the same for FDI and

domestic industries, it is important to eliminate fiscal incentives. Rather, focus should be on creating a business-friendly tax regime and other regulations to reduce the compliance cost. This entails making income tax and other taxes, and immigration policies globally competitive especially with those economies – Singapore, Maldives and Switzerland – with similar characteristics to Bhutan. Additionally, the cross-border labor and capital mobility infrastructure should also be improved.

9.3.5 Improving labor productivity for inclusive growth

Bhutan, through its education program, has a highly educated workforce. As the nation aspires to attain a high-income economy in the next decade, a broader structural transformation is anticipated towards more dynamic and growth oriented-sectors. A readily available workforce, with appropriate upskilling, can be employed in more productive sectors to address existing labor market inefficiencies. However, the success of such transition hinges on the private sector's role in diversification to lead the growth, and accommodative regulatory environment.

Additionally, privatizing government-financed and produced market-related goods and services along with other market-driven interventions, can create opportunities to boost the private sector and therefore, enhance productivity. Market-conforming interventions such as the price guarantee scheme under the ESP is expected to boost agricultural production while lowering the price for consumers. Other programs to develop the arts and craft industries, developing tourism products, integrated roadside stations and entrepreneurial development programs are expected to create a conducive environment for the private sector to thrive, facilitated by deregulation. These interventions will collectively boost labor productivity and stimulate private sector growth.

9.3.6 Industrial development policy

Although Bhutan has been prematurely deindustrializing since 1996, the economy still has significant potential to rebound. This demands a critical re-evaluation of past development strategies and a renewed commitment to strategic intervention. The sector possesses resilience and thus, presents an opportunity to reverse this trend through the formulation and adoption of a dynamic industrial development policy. A proactive approach is required to shift from stifling regulations and general support measures to a targeted focus on developing specialized, high-value industries. A well-designed policy would target key sectors, fostering an enabling environment that builds and strengthens backward and forward linkages within the supply and value chain.

It is important to align the country's strengths with targeted interventions to create an industrial ecosystem capable of driving sustainable growth and reducing dependency on hydropower and tourism. Additionally, leveraging private industry participation would be key to incentivize local firms to invest, scale and compete. Targeted interventions in 13th FYP to improve binding logistic and infrastructural constraints would complement industrial development through lowered production costs. Further, Bhutan's growing pool of skilled labor, bolstered by programs such as *Gyalsung* and *De-suung*, offers a strong foundation for reinvigorating the manufacturing sector

while addressing the persistently high level of youth unemployment. Thus, an industrial development policy would be able to foster targeted growth in key industries – such as foodtech, biotech, health and wellness, IT and high-skill services – through the development of supply and value chains, production know-how and infrastructure, addressing the logistical constraints and creating an enabling environment with targeted interventions.

9.3.7 SOE as the growth accelerator through *kaizen* implementation

Since the review of SOEs began, their profitability and operational efficiency have improved significantly. Notably, SOEs in finance and manufacturing have demonstrated higher profitability and better capital utilization. Given their strong upstream and downstream linkages in the supply chain, well-performing SOEs have contributed by providing reliable goods and services to both producers and consumers, aligning with their core mandate. Further, *kaizen* – also known as Toyota production system – has been introduced in SOEs with the support from Japan International Cooperation Agency. Implemented in a phased manner, this initiative focuses on eliminating redundant business processes, wastage and inefficiency, and fostering a culture of continuous improvement. While systemic institutionalization of this approach will take time, it is expected to enhance the overall effectiveness and efficiency of SOEs. Moreover, with the right corporate governance reforms, similar improvements can be extended to underperforming sectors such as agriculture and services.

Beyond their direct economic contributions, SOEs have a broader impact on society by strengthening market infrastructure and facilitating connections between producers and consumers across both rural and urban areas. In this regard, implementing any counter-cyclical investments policy and targeted interventions in the market could be made through SOE and will have greater impact. For instance, the government's price guarantee scheme is market-conforming interventions designed to incentivize production by offering higher prices to producers while simultaneously reducing the cost of living for consumers through lower prices. Furthermore, in line with the privatization efforts initiated in the 1990s, a well-timed privatization of selected SOEs could help redistribute wealth from the state to households, fostering inclusive economic growth.

9.3.8 Towards productivity-led growth

Despite several challenges, various opportunities exist for productivity improvement and economic growth in Bhutan. There is a potential to transition from capital-intensive growth to productivity-led growth by enhancing capital assimilation (capital deepening). Significant potential for improvement also lies in strategic resource allocation and prudence in public investment to optimize resource utilization. Private sector development is another critical element to improve productivity, as market efficiency will help the private sector allocate resources more efficiently. Outsourcing market-based activities currently carried out by the government is another aspect of enhancing productivity. This would boost TFP and ensure long-term economic sustainability.

Years of investment into health and education have resulted in a well-educated workforce in Bhutan. Consequently, labor quality has been improving across most sectors. Leveraging this accumulated human capital, improving capital utilization and creating market-led investment plans could further boost productivity. Identifying key industries with unique selling propositions for Bhutan, such as arts and crafts, health and mindfulness, biotechnology and food-technology, and developing the supply and value chains around these industries will help improve the primary and secondary sectors, and diversify the economy. Finally, the government's plan of attracting FDI worth Nu. 500 billion is another key initiative to boost productivity. While foreign investments are important, FDI is particularly valuable for importing technologies and production know-how, thereby enhancing efficiency. To achieve this target, it is crucial to position Bhutan as an investor-friendly destination with access to the South Asian market by adopting fiscal and monetary policies similar to those of Singapore and Switzerland.

9.4 Conclusion

Bhutan has achieved remarkable economic and social progress over the past few decades, marked by significant advancements in education and healthcare, poverty reduction, connectivity and infrastructure development. The progress is evident with the graduation from the LDC category in 2023. However, Bhutan continues to face critical structural challenges such as inefficient capital-intensive growth model, structural twin deficits, low productivity especially the capital and limited economic diversification. Heavy reliance on hydropower and tourism, coupled with weak private sector development, has constrained job creation and productivity growth. The financial sector also faces high-interest rate spreads combined with high NPL, and weak monetary policy transmission due to the pegged exchange rate regime. Additionally, supply-side weakness could cause inflationary pressures and external imbalances as the investments grow in the economy.

Premature deindustrialization and stagnant TFP further weakens Bhutan's competitiveness. Many SOEs remain dependent on government support as a result of inefficient operations and expenditures. The private sector is also inefficient with the market dominated by few industrialists as a result of high barriers to entry, while MSMEs are unable to upscale due to the small domestic market and lack of production know-how to compete in the export market. Thus the manufacturing sector remains underdeveloped and unable to generate meaningful employment. Addressing these structural issues requires a shift towards private sector-led growth supported by the SOEs, efficient utilization of capital and enhanced productivity. Diversifying production, fostering innovation and optimizing capital allocation will be essential for long-term economic growth.

Despite these challenges, Bhutan has significant growth opportunities. The GMC aims to position Bhutan as a regional economic and financial hub, strengthening energy, connectivity and skills development. The positive expectation created by visionary GMC initiatives is evident in significant reduction in exodus and increased inward remittances. Further, fiscal reforms, particularly GST and income tax reforms, will broaden the tax base and increase compliance. There

is also an opportunity to reform the financial market, which can improve investment conditions, reduce interest rate spread and market inefficiencies. Additionally, Bhutan can leverage its proximity to India by enhancing FDI inflows, promoting export diversification and creating the most investor-friendly regulatory environment.

Boosting labor productivity and private sector restructuring is also crucial. The government is prioritizing workforce upskilling and fostering entrepreneurship to improve efficiency. There is also an opportunity for privatization of market-based services provided by the government. Reforms in SOEs have already shown progress, and with further corporate governance improvements and the adoption of *kaizen*, it has the opportunity to be the growth accelerator in the 13th FYP. Encouraging private investments, optimizing public expenditure, and supporting high potential industries – such as arts and crafts, biotech, foodtech, health and wellbeing, IT and high-skill services – will help transition Bhutan towards a productivity-driven economy. Bhutan's ambitious growth target further underscores its commitment to becoming a competitive and investor-friendly destination.

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Annexure I: Social Accounting Matrix (SAM)

	L	K	H	FIRM	TOUR	GVT	TD	TM	TI	ROW	J	I	MARGIN	INV	VSTK	TOTAL
L										134	70,739					**70,872**
K											88,828					**88,828**
H	68,419			14,164		474				6,608						**89,665**
FIRM		64,888				461				2,234						**67,582**
TOUR										11,762						**11,762**
GVT		2,414		2,421	1,397		11,433	5,828	2,259	3,485	1,100					**30,338**
TD			1,342	10,091												**11,433**
TM												5,828				**5,828**
TI												2,259				**2,259**
ROW	2,453		1,072	11,228		2,341						81,574				**98,669**
J												263,920				**263,920**
I			80,230		10,364	30,688				37,635	103,253		23,200	91,573	1,522	**378,465**
MARGIN												23,200				**23,200**
INV		21,526	7,021	29,678		-3,626				36,812						**91,410**
VSTK												1,685		-163		**1,522**
TOTAL	**70,872**	**88,828**	**89,665**	**67,582**	**11,762**	**30,338**	**11,433**	**5,828**	**2,259**	**98,669**	**263,920**	**378,465**	**23,200**	**91,410**	**1,522**	

Annexure II: CGE Model (PEP model)

1. Equation definition

EQUATIONS

X1	Value added demand in industry j (Leontief)
X2	Total intermediate consumption demand in industry j (Leontief)
X3	CES between of composite labor and capital
X4	Relative demand for composite labor and capital by industry j(CES)
X5	CES between labor categories
X6	Demand for type l labor by industry j (CES)
X7	Intermediate consumption of commodity i by industry j (Leontief)

2. Production

```
X1(j,t)..      VA(j,t) =e= v(j)*XST(j,t);

X2(j,t)..      CI(j,t) =e= io(j)*XST(j,t);

X3(j,t)..      VA(j,t) =e= TFP(t)*B_VA(j)*{
                    [beta_VA(j)*LDC(j,t)**(-rho_VA(j))]$LDCO(j)
                   +[(1-beta_VA(j))*KD(j,t)**(-rho_VA(j))]$KDO(j)
                       }**(-1/rho_VA(j));

X4(j,t)$[LDCO(j) and KDO(j)]..
            LDC(j,t) =e= {[beta_VA(j)/(1-beta_VA(j))]
                    *[R(j,t)/WC(j,t)]}
                    **sigma_VA(j)*KD(j,t);

X5(j,t)$LDCO(j)..
            LDC(j,t) =e= B_LD(j)*SUM[l$LDO(l,j),beta_LD(l,j)*LD(l,j,t)
                  **(-rho_LD(j))]**(-1/rho_LD(j));
X6(l,j,t)$LDO(l,j)..
            LD(l,j,t) =e= [beta_LD(l,j)*WC(j,t)/W(l,t)]**sigma_LD(j)
                    *B_LD(j)**(sigma_LD(j)-1)*LDC(j,t);

X7(i,j,t)..    DI(i,j,t) =e= aij(i,j)*CI(j,t);
```

3. Supply and international trade

EQUATIONS

IX1	CET between different commodities produced by industry j
IX2	Industry j production of commodity i (CET)
IX3	Total supply of product i
IX4	CET between exports and local commodity
IX5	Relative supply of exports and local commodity (CET)
IX6	Export supply of electricity
IX7	CES between imports and local production
IX8	Demand for imports (CES)

```
IX1(j,t)..      XST(j,t) =e= B_XT(j)*SUM[i$XSO(j,i),beta_XT(j,i)*XS(j,i,t)
                    **rho_XT(j)]**(1/rho_XT(j));

IX2(j,i,t)$XSO(j,i)..
            XS(j,i,t) =e= XST(j,t)/B_XT(j)**(1+sigma_XT(j))*
                    {P(i,t)/[beta_XT(j,i)*PT(j,t)]}**sigma_XT(j);

IX3(i,t)$XSIO(i)..
            XSI(i,t) =e= SUM[j$XSO(j,i),XS(j,i,t)]+VSTK_OUT(i,t);

IX4(i,t)$[XSIO(i) and FLAG(i)]..
            XSI(i,t) =e= B_X(i)*{[beta_X(i)*EX(i,t)**rho_X(i)]$EXO(i)
                    +[(1-beta_X(i))*DS(i,t)**rho_X(i)]$DSO(i)
                    }**(1/rho_X(i));

IX5(i,t)$[EXO(i) and DSO(i) and FLAG(i)]..
            EX(i,t) =e= {[(1-beta_X(i))/beta_X(i)]*[PE(i,t)/PL(i,t)]}
                **sigma_X(i)*DS(i,t);

IX6(t)..        XSI('12b-ELE_GAS',t)-DS('12b-ELE_GAS',t)
                  =e= EX('12b-ELE_GAS',t);

IX7(i,t)..      Q(i,t) =e= B_M(i)*{
                    [beta_M(i)*IM(i,t)**(-rho_M(i))]$IMO(i)
                    +[(1-beta_M(i))*DD(i,t)**(-rho_M(i))]$DDO(i)
                    }**(-1/rho_M(i));

IX8(i,t)$[IMO(i) and DDO(i)]..
            IM(i,t) =e= {[beta_M(i)/(1-beta_M(i))]*[PD(i,t)/PM(i,t)]}
                **sigma_M(i)*DD(i,t);
```

4. Demand

EQUATIONS

D1	Consumption of commodity i by type h households
D2	Gross fixed capital formation
D3	Final demand of commodity i for investment purposes (GFCF)
D4	Public final consumption of commodity i
D5	Total intermediate demand for commodity i
D6	Demand for commodity i as a trade or transport margin
D7	Demand from tourists (fixed budget shares)

```
D1(i,h,t)..     PC(i,t)*C(i,h,t) =e= PC(i,t)*CMIN(i,h,t)
                    +gamma_LES(i,h)*{CTH(h,t)-
                    SUM[ij,PC(ij,t)*CMIN(ij,h,t)]};

D2(t)..         GFCF(t) =e= IT(t)-SUM[i,PC(i,t)*VSTK_IN(i,t)]
                        +SUM[i,P(i,t)*VSTK_OUT(i,t)];

D3(i,t)..       PC(i,t)*INV(i,t) =e= gamma_INV(i)*GFCF(t);

D4(i,t)..       PC(i,t)*CG(i,t) =e= gamma_GVT(i)*G(t);
```

```
D5(i,t)..      DIT(i,t) =e= SUM[j,DI(i,j,t)];

D6(i,t)..      MRGN(i,t) =e= SUM[ij$DDO(ij),tmrg(i,ij)*DD(ij,t)]
                    +SUM[ij$IMO(ij),tmrg(i,ij)*IM(ij,t)];

D7(i,t)..      PC(i,t)*CT(i,t) =e= gamma_TOUR(i)*CTT(t);
```

5. Income and savings

5.1 Households

EQUATIONS

H4 Total income of type h households
H5 Labor income of type h households
H1 CET between supply in Bhutan and outside
H2 Relative labor supply on each destination
H3 Unemployment (wage curve)
H6 Transfer income of type h households
H7 Disposable income of type h households
H8 Consumption budget of type h households
H9 Savings of type h households

```
H1(h,t)..      YH(h,t) =e= YHL(h,t)+YHTR(h,t);

H2(h,t)..      YHL(h,t) =e= SUM[l$LSWO(h,l),e(t)*WW(l,t)*LSW(h,l,t)]
                  +SUM[l$LSBO(h,l),W(l,t)*LSB(h,l,t)*(1-unr(h,l,t))];

H3(h,l,t)..    LS(h,l,t) =e= B_LS(h,l)*
                  {[beta_LS(h,l)*LSB(h,l,t)**rho_LS(h,l)]$LSBO(h,l)
                  +[(1-beta_LS(h,l))*LSW(h,l,t)**rho_LS(h,l)]$LSWO(h,l)
                       }**(1/rho_LS(h,l));

H4(h,l,t)$[LSBO(h,l) and LSWO(h,l)]..
            LSB(h,l,t) =e= {[(1-beta_LS(h,l))/beta_LS(h,l)]
                 *[W(l,t)*(1-unr(h,l,t))/(e(t)*WW(l,t))]}
                 **sigma_LS(h,l)*LSW(h,l,t);

H5(h,l,t)..    A_UN(h,l)*unr(h,l,t)**sigma_un(h,l) =e= W(l,t)/PIXCON(t);

H6(h,t)..      YHTR(h,t) =e= SUM[ag,TR(h,ag,t)];

H7(h,t)..      YDH(h,t) =e= YH(h,t)-TDH(h,t)-TR('gvt',h,t);

H8(h,t)..      CTH(h,t) =e= YDH(h,t)-SH(h,t)-SUM[agng,TR(agng,h,t)];

H9(h,t)..      SH(h,t) =e= PIXCON(t)*sh0(h,t)+sh1(h,t)*YDH(h,t);
```

5.2 Tourists

EQUATIONS

TO1 Tourists budget
TO2 Tourists budget net of SDF

```
TO1(t)..       YT(t) =e= TR('tour','row',t);
```

TO2(t).. CTT(t) =e= YT(t)-SDF(t);

5.3 Firms

EQUATIONS

F1 Total income of type f businesses
F2 Capital income of type f businesses
F3 Transfer income of type f businesses
F4 Disposable income of type f businesses
F5 Savings of type f businesses

F1(t).. YF(t) =e= YFK(t)+YFTR(t);

F2(t).. YFK(t) =e= SUM[j$KDO(j),R(j,t)*KD(j,t)-ROY(j,t)]-DEP(t);

F3(t).. YFTR(t) =e= SUM[ag,TR('FIRM',ag,t)];

F4(t).. YDF(t) =e= YF(t)-TDF(t);

F5(t).. SF(t) =e= YDF(t)-SUM[ag,TR(ag,'FIRM',t)];

5.4 Government

EQUATIONS

G1 Total government income
G2 Total government revenue from taxes on products and imports
G3 Total government receipts of indirect taxes on commodities
G4 Government revenue from indirect taxes on product i
G5 Total government revenue from import duties
G6 Government revenue from import duties on product i
G7 Total tax rate on imports
G8 Total government revenue from export taxes
G9 Government revenue from export taxes on product i
G10 Total government revenue from production taxes
G11 Government revenue from taxes on industry j production
G12 Total government revenue from household income taxes
G13 Income taxes of type h households
G14 Income taxes of type f businesses
G15 Computation of royalties
G16 Government capital income
G17 Government transfer income
G18 Government savings

G1(t).. YG(t) =e= TPRCTS(t)+TIPT(t)+TDHT(t)+TDF(t)+YGR(t)+YGTR(t);

G2(t).. TPRCTS(t) =e= TICT(t)+TIMT(t)+TIXT(t);

G3(t).. TICT(t) =e= SUM[i,TIC(i,t)];

G4(i,t).. TIC(i,t) =e= ttic(i,t)*{

```
            [(PL(i,t)+SUM[ij,PC(ij,t)*tmrg(ij,i)])*DD(i,t)]$DDO(i)
           +[((1+ttim(i,t))*e(t)*PWM(i,t)
            +SUM[ij,PC(ij,t)*tmrg(ij,i)])*IM(i,t)]$IMO(i)
                    };
G5(t)..      TIMT(t) =e= SUM[i$IMO(i),TIM(i,t)];

G6(i,t)$IMO(i).. TIM(i,t) =e= ttim(i,t)*e(t)*PWM(i,t)*IM(i,t);

*VR Disaggregation of import taxes in three categories:
G7(i,t)..    ttim(i,t) =e= cduty(i,t)+stax(i,t)+gtax(i,t);

G8(t)..      TIXT(t) =e= SUM[i$EXO(i),TIX(i,t)];

G9(i,t)$EXO(i).. TIX(i,t) =e= ttix(i,t)*PE(i,t)*EX(i,t);

G10(t)..     TIPT(t) =e= SUM[j,TIP(j,t)];

G11(j,t)..   TIP(j,t) =e= ttip(j,t)*PP(j,t)*XST(j,t);

G12(t)..     TDHT(t) =e= SUM[h,TDH(h,t)];

G13(h,t)..   TDH(h,t) =e= PIXCON(t)*ttdh0(h,t)+ttdh1(h,t)
                *W('sal',t)*LSB(h,'sal',t)*(1-unr(h,'sal',t));

G14(t)..     TDF(t) =e= PIXCON(t)*ttdf0(t)+ttdf1(t)*YFK(t);

G15(j,t)$KDO(j)..
          ROY(j,t) =e= lambda_RKG(j)*R(j,t)*KD(j,t);

G16(t)..     YGR(t) =e= SUM[j$ROYO(j),ROY(j,t)]+SDF(t);

G17(t)..     YGTR(t) =e= SUM[agng,TR('gvt',agng,t)];

G18(t)..     SG(t) =e= YG(t)-SUM[agng,TR(agng,'gvt',t)]-G(t);
```

5.5 Rest of the world

EQUATIONS

W1 Rest-of-the-world income
W2 Rest-of-the-world savings
W3 Equivalence between current account balance and ROW savings

```
W1(t)..      YROW(t) =e= e(t)*SUM[i$IMO(i),PWM(i,t)*IM(i,t)]
               +SUM[agd,TR('row',agd,t)]
               +SUM[l,W(l,t)*LSROW(l,t)];

W2(t)..      SROW(t) =e= YROW(t)-e(t)*SUM[i$EXO(i),EX(i,t)*PWX(i,t)]
             -SUM[agd,TR(agd,'row',t)]
             -SUM[(h,l)$LSWO(h,l),e(t)*WW(l,t)*LSW(h,l,t)];

W3(t)..      SROW(t) =e= -CAB(t);
```

5.6 Transfers

EQUATIONS

T1 Transfers from household h to agent agng
T2 Transfers from household h to government
T3 Transfers from businesses to agent ag
T4 Public transfers
T5 Transfers from abroad
T6 Transfers from tourists

```
T1(agng,h,t)..  TR(agng,h,t) =e= lambda_TR(agng,h)*YDH(h,t);

T2(h,t)..       TR('gvt',h,t) =e= PIXCON(t)*tr0(h,t)+tr1(h,t)*YH(h,t);

T3(ag,t)..      TR(ag,'firm',t) =e= lambda_TR(ag,'firm')*YDF(t);

T4(agng,t)..    TR(agng,'gvt',t) =e= PIXCON(t)*TRO(agng,'gvt')*X_GDP(t);

T5(agd,t)..     TR(agd,'row',t) =e= PIXCON(t)*TRO(agd,'row')*X_GDP(t);

T6(ag,t)..      TR(ag,'TOUR',t) =e= PIXCON(t)*TRO(ag,'TOUR')*X_GDP(t);
```

6. Prices

EQUATIONS

P1 Industry j unit cost
P2 Basic price of industry j's production of commodity i
P3 Intermediate consumption price index of industry j
P4 Price of industry j value added
P5 Basic price of industry j's production of commodity i
P6 Price received for exported commodity i (excluding export taxes)
P7 Price of local product i sold on the domestic market (including all taxes and margins)
P8 Price of imported product i (including all taxes and tariffs)
P9 Purchaser price of composite comodity i
P10 GDP deflator (Fischer index)
P11 Consumer price index (Laspeyres)
P12 Investment price index (derived from investment function)
P13 Public expenditures price index

```
P1(j,t)..       PP(j,t)*XST(j,t) =e= PVA(j,t)*VA(j,t)+PCI(j,t)*CI(j,t);

P2(j,t)..       PT(j,t) =e= (1+ttip(j,t))*PP(j,t);

P3(j,t)..       PCI(j,t)*CI(j,t) =e= SUM[i,PC(i,t)*DI(i,j,t)];

P4(j,t)..       PVA(j,t)*VA(j,t) =e= [WC(j,t)*LDC(j,t)]$LDCO(j)
                                   +[R(j,t)*KD(j,t)]$KDO(j);

P5(i,t)$XSIO(i).. P(i,t)*XSI(i,t) =e= [PE(i,t)*EX(i,t)]$EXO(i)
                                    +[PL(i,t)*DS(i,t)]$DSO(i);

P6(i,t)$EXO(i)..  e(t)*PWX(i,t) =e= PE(i,t)*(1+ttix(i,t));
```

```
P7(i,t)$DDO(i)..  PD(i,t) =e= (1+ttic(i,t))*{PL(i,t)
                    +SUM[ij,PC(ij,t)*tmrg(ij,i)]};

P8(i,t)$IMO(i)..  PM(i,t) =e= (1+ttic(i,t))*{(1+ttim(i,t))*
                  e(t)*PWM(i,t)+SUM[ij,PC(ij,t)*tmrg(ij,i)]};

P9(i,t)..       PC(i,t)*Q(i,t) =e=[PM(i,t)*IM(i,t)]$IMO(i)
                        +[PD(i,t)*DD(i,t)]$DDO(i);

P10(t)..        PIXGDP(t) =e= {SUM[j,{(PVA(j,t)*VA(j,t)+TIP(j,t))/VA(j,t)}*VAO(j)]
                     /SUM[j,{(PVAO(j)*VAO(j)+TIPO(j))/VAO(j)}*VAO(j)]
                     *SUM[j,{(PVA(j,t)*VA(j,t)+TIP(j,t))/VA(j,t)}*VA(j,t)]
                     /SUM[j,{(PVAO(j)*VAO(j)+TIPO(j))/VAO(j)}*VA(j,t)]}**0.5;

P11(t)..        PIXCON(t) =e= SUM[i,PC(i,t)*SUM[h,CO(i,h)]]
                    /SUM[i,PCO(i)*SUM[h,CO(i,h)]];

P12(t)..        PIXINV(t) =e= PROD[i$gamma_INV(i),(PC(i,t)/PCO(i))**gamma_INV(i)];

P13(t)..        PIXGVT(t) =e= PROD[i$gamma_GVT(i),(PC(i,t)/PCO(i))**gamma_GVT(i)];
```

7. Equilibrium

EQUATIONS

EQ1	Domestic absorbtion
EQ2	Labor supply equals labor demand
EQ3	Capital supply equals capital demand
EQ4	Total investment equals total savings
EQ5	Consumption of fixed capital (depreciation)
EQ6	Supply of domestic production equals local demand
EQW	Walras law verification

```
EQ1(i1,t)..     Q(i1,t) =e= SUM[h,C(i1,h,t)]+CG(i1,t)+INV(i1,t)+VSTK_IN(i1,t)
                   +DIT(i1,t)+MRGN(i1,t)+CT(i1,t);

EQ2(l,t)..      SUM[h,LSB(h,l,t)*(1-unr(h,l,t))]+LSROW(l,t)
                    =e= SUM[j$LDO(l,j),LD(l,j,t)];

EQ3(t)..        KS(t) =e= SUM[j$KDO(j),KD(j,t)];

EQ4(t)..        IT(t) =e= SUM[h,SH(h,t)]+SF(t)+SG(t)+SROW(t)+DEP(t);

EQ5(t)..        DEP(t) =e= SUM[j$KDO(j),delta(j)*KD(j,t)*PK(t)];

EQ6(i,t)$DDO(i).. DS(i,t) =e= DD(i,t);

EQW(t)..        LEON(t) =e= Q('1-CERE',t)-SUM[h,C('1-CERE',h,t)]-CG('1-CERE',t)
                  -INV('1-CERE',t)-VSTK_IN('1-CERE',t)-DIT('1-CERE',t)
                  -MRGN('1-CERE',t)-CT('1-CERE',t);
```

8. Gross domestic product and aggregates

EQUATIONS

A1 GDP at basic prices
A2 GDP at market prices
A3 Real consumption budget of type h households
A4 Real current government expenditures on goods and services
A5 Real gross fixed capital formation
A6 Real GDP at basic prices
A7 Real GDP at market prices
A8 Equivalent variation

```
A1(t)..      GDP_BP(t) =e= SUM[j,PVA(j,t)*VA(j,t)]+TIPT(t);

A2(t)..      GDP_MP(t) =e= GDP_BP(t)+TPRCTS(t);

A3(h,t)..    CTH_REAL(h,t) =e= CTH(h,t)/PIXCON(t);

A4(t)..      G_REAL(t) =e= G(t)/PIXGVT(t);

A5(t)..      GFCF_REAL(t) =e= GFCF(t)/PIXINV(t);

A6(t)..      GDP_BP_REAL(t) =e= GDP_BP(t)/PIXGDP(t);

A7(t)..      GDP_MP_REAL(t) =e= GDP_MP(t)/PIXCON(t);

A8(h,t)..    EV(h,t) =e= PROD[i,(PCO(i)/PC(i,t))**gamma_LES(i,h)]*
                 {CTH(h,t)-SUM[i,PC(i,t)*CMIN(i,h,t)]}-
                 {CTHO(h)*X_GDP(t)-SUM[i,PCO(i)*CMINO(i,h)*X_GDP(t)]};
```

Annexure III: SOE classification by sectors

Sectors	State Owned Enterprise
Agriculture, forestry and fishing	Bhutan Livestock and Development Corporation Limited
	Farm Machinery Corporation Limited
	Green Bhutan Corporation Limited
	Natural Resources Development Corporation Limited
Construction	Construction Development Corporation Limited
Electricity	Druk Green Power Corporation Limited
	Bhutan Power Corporation Limited
Financial intermediation	Bhutan Development Bank Limited
	Bank Of Bhutan Limited
Manufacturing	Kofuku International Limited
	Menjong Sorig Pharmaceuticals Corporation Limited
	Dungsam Cement Corporation Limited
	Dungsam Polymers Limited
	Bhutan Board Product Limited
Mining and quarrying	State Mining Corporation Limited
Real estate, renting and business activities	National Housing Development Corporation Limited
Transport, storage and communication	Bhutan Broadcasting Services Corporation Limited
	Kuensel Corporation Limited
	Bhutan Telecom Limited
	Bhutan Postal Corporation Limited
	Thimphu Teck Park Limited
	Druk Air Corporation Limited
	State Trading Corporation of Bhutan Limited
Wholesale and retail trade	Food Corporation of Bhutan Limited

Annexure IV: Nominal Capital Stock by Industry, 1990-2022

Nu. in Million	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1. Agriculture, forestry and fishing	8,180	10,034	10,289	11,224	13,373	13,829	15,579	16,921	17,834	18,390	19,899
2. Mining and quarrying	110	142	164	208	274	309	380	442	478	502	568
3. Manufacturing	237	298	364	466	597	683	818	948	1,010	1,070	1,233
4. Electricity	2,920	3,493	3,461	3,599	4,152	4,161	4,526	4,772	4,975	5,063	5,351
5. Construction	198	242	294	383	488	568	707	887	1,047	1,244	1,768
6. Wholesale and retail trade	115	143	171	217	271	303	355	409	443	478	581
7. Hotels and restaurants	24	32	37	47	60	65	78	89	97	102	117
8. Transport, storage and communications	808	1,018	1,203	1,517	1,875	2,024	2,309	2,587	2,755	2,894	3,260
9. Financial intermediation	112	136	158	199	247	287	372	451	501	543	654
10. Real estate, renting, and business activities	337	444	540	702	899	1,010	1,220	1,428	1,566	1,683	1,976
11. Community, social and personal services	3,242	4,434	5,201	6,281	7,950	8,712	10,244	11,290	11,966	12,670	14,072
12. Private, social and recreational services	31	40	44	53	65	69	81	89	91	93	100
Total	**16,314**	**20,457**	**21,928**	**24,895**	**30,251**	**32,020**	**36,669**	**40,312**	**42,763**	**44,734**	**49,580**

Nu. in Million	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1. Agriculture, forestry and fishing	22,458	23,406	25,555	29,460	32,820	37,981	43,365	45,926	48,154	54,452	62,292
2. Mining and quarrying	640	678	763	952	1,297	1,740	2,306	2,808	3,379	4,261	5,882
3. Manufacturing	1,421	1,590	1,801	2,296	3,014	3,857	4,846	5,747	6,780	7,879	10,042
4. Electricity	9,028	12,839	14,397	16,482	17,832	27,357	74,346	79,981	81,979	90,122	101,158
5. Construction	2,310	2,905	3,433	4,388	5,619	6,783	7,975	9,069	10,450	11,943	15,308
6. Wholesale and retail trade	710	869	1,060	1,416	1,897	2,396	2,928	3,363	3,822	4,360	5,564
7. Hotels and restaurants	136	151	176	226	315	413	523	610	710	873	1,159
8. Transport, storage and communications	3,653	3,975	4,406	5,240	14,670	15,648	16,827	17,740	19,203	21,161	25,259
9. Financial intermediation	787	932	1,097	1,406	1,807	2,252	2,729	3,089	3,422	3,764	4,632

10. Real estate, renting, and business activities	2,322	2,654	3,093	3,986	5,241	6,548	7,916	8,942	10,004	11,467	14,328
11. Community, social and personal services	16,044	16,800	17,956	19,300	22,572	25,217	30,361	34,605	38,818	44,393	53,986
12. Private, social and recreational services	108	111	117	131	153	172	194	208	223	247	292
Total	**59,617**	**66,910**	**73,855**	**85,283**	**107,237**	**130,366**	**194,317**	**212,087**	**226,945**	**254,924**	**299,901**

Nu. in Million	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
1. Agriculture, forestry and fishing	69,798	74,776	76,393	78,934	84,864	89,252	96,450	106,004	116,926	126,864	140,723
2. Mining and quarrying	8,187	10,603	12,323	13,884	15,755	17,053	17,984	18,362	18,678	19,064	19,569
3. Manufacturing	12,809	15,130	16,523	19,873	23,670	26,800	31,306	34,677	37,844	38,712	41,586
4. Electricity	110,846	115,110	112,360	146,175	160,695	159,326	158,811	184,355	218,590	224,788	225,446
5. Construction	19,944	24,116	27,463	32,347	37,593	41,389	46,700	49,431	52,488	53,727	58,710
6. Wholesale and retail trade	7,233	8,828	10,353	12,638	15,821	20,126	24,584	27,196	29,132	30,911	33,598
7. Hotels and restaurants	1,526	1,843	2,105	2,481	3,146	4,198	5,534	6,823	7,912	8,834	10,081
8. Transport, storage and communications	30,422	34,349	37,540	41,480	47,509	53,518	61,567	67,336	72,547	86,362	100,424
9. Financial intermediation	5,663	6,391	6,849	7,586	8,443	9,627	10,960	11,514	11,950	12,155	12,884
10. Real estate, renting, and business activities	17,933	20,977	23,177	26,864	32,802	42,078	53,227	60,764	67,091	73,366	82,709
11. Community, social and personal services	62,175	71,242	74,470	79,571	86,499	102,227	120,254	132,771	139,678	154,701	177,271
12. Private, social and recreational services	348	390	424	500	629	832	1,133	1,373	1,578	1,688	1,897
Total	**346,885**	**383,754**	**399,980**	**462,333**	**517,427**	**566,427**	**628,512**	**700,605**	**774,414**	**831,172**	**904,898**