MYANMAR ECONOMIC MONITOR

JUNE 2023

A FRAGILE RECOVERY

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP
East Asia & Pacific

MYANMAR ECONOMIC MONITOR:

A fragile recovery

Special focus on employment, incomes and coping mechanisms

June 2023

Preface and Acknowledgements

The Myanmar Economic Monitor (MEM) is published semiannually and produced by the World Bank's Myanmar office. This edition was prepared by a team comprising Kim Alan Edwards (Program Leader and Senior Economist, Task Team Leader), Kemoh Mansaray (Senior Economist, Task Team Leader), Thi Da Myint (Country Economist), Faya Hayati (Senior Economist), and Aka Kyaw Min Maw (Consultant). The MEM was developed under the guidance of Sebastian Eckardt (Practice Manager, Macroeconomics, Trade, and Investment) and Mariam J. Sherman (Country Director).

The team is grateful for the close collaboration and inputs provided by Ildrim Valley (Public Sector Specialist), Pike Pike Aye (Public Sector Management Specialist), Sutirtha Sinha Roy (Economist), Smita Wagh (Senior Financial Sector Specialist), Nang Htay Htay (Financial Sector Specialist), Valens Mwumvaneza (Senior Agriculture Economist), Mateo Ambrosio Albala (Consultant), Myoe Myint (Senior Energy Specialist), Joonkyung Seong (Senior Energy Specialist), Myint Kyaw (Operations Officer), Sadig Aliyev (Program Leader), Win Htein Lin (Consultant), Patrick Barron (Adviser), Khin Thida Maw (Country Officer, IFC) and Daisuke Fukuzawa (Economist).

During the preparation of the MEM, the team discussed recent economic developments with several business associations and private firms and greatly appreciates their time and insights. The team benefitted from data shared by the Retailers' Association.

The Myanmar Economic Monitor also received support from the World Bank Data Lab regarding alternative data sources for monitoring economic activity in Myanmar (https://datapartnership.org/myanmar-economic-monitor/notebooks/nighttime-lights/README.html). The Data Lab team included Holly Krambeck (Project Lead), Benny Istanto, Sahiti Sarva, and Robert Andrew Marty.

The team would like to thank Aiden Benedict Glendinning, Kyaw Soe Lynn, Mark Felsenthal, and the ECR team for their support and guidance on publication and outreach; Aye Me Me Tun, May Oo Mon, and May Zun Thiri Aung for excellent administrative support; Sai Nay Lin for data assistance; and Ryan Zahrai for excellent assistance in editing and finalizing the report.

The views expressed in the MEM are those of the authors and do not necessarily reflect the views of the World Bank Group, its Executive Directors, or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Cover and chapter photographs are the copyright of the World Bank. All rights reserved. Cover image provided by Zaw Winn Naing.

For information about the World Bank and its activities in Myanmar, please visit https://www.worldbank.org/en/country/myanmar

To be included on an email distribution list for the MEM series and related publications, please visit https://www.worldbank.org/en/country/myanmar/brief/monitoring or email myanmarmonitoring@worldbank.org. For questions and comments relating to this publication, please contact tyu@worldbank.org.

Table of Contents

Preface and Acknowledgements ii

Abbreviations vii

Executive Summary 1

I. Recent Economic Developments 7

- A. A constrained and uneven recovery 7
- B. Economic activity has picked up from a low base 11
- C. Inflation rose sharply in 2022 and prices remain at high levels 22
- D. Exports have declined while FDI remains very weak 25
- E. Market exchange rates stabilized 29
- F. Financial sector developments have been mixed, with MFIs facing challenges 31
- G. The fiscal deficit remains wide and reliant on CBM financing 33

II. Outlook and Risks 37

III. Employment, incomes and coping mechanisms 41

LIST OF FIGURES

Figure ES 1: Exchange Rate 5
Figure ES 2: CPI inflation 5
Figure ES 3: Manufacturing Purchasing Managers (< 50 indicates contraction, > 50 indicates expansion) 5
Figure ES 4: Firms' average operating capacity 5
Figure ES 5: Merchandise exports (USD values, 2019 = 100) 6
Figure ES 6: Reported changes in income over the past year (share of households, MSPS 2022/23) 6
Figure ES 7: Labor market indicators (% of the working age population) 6
Figure ES 8: Real GDP 6
Figure 1: Conflict Intensity 8
Figure 2: Electricity outages per day (hours) 9
Figure 3: Electricity generation and imports from China (kWh million) 9
Figure 4: Reported drivers of increased transport prices and delays 11
Figure 5: Firms' operating capacity, sales, and profits 12
Figure 6: Challenges to firms' operations (share of firms reporting) 12
Figure 7: Challenges faced by crop-producing households (share of households reporting) 13
Figure 8: Myanmar Manufacturing Purchasing Managers' Indices (>50 indicates expansion, < 50 indicates contraction) 15
Figure 9: Regional Manufacturing Purchasing Managers' Indices (>50 indicates expansion, < 50 indicates contraction) 15
Figure 10: Manufacturing production index (December quarter 2020 = 100) 16
Figure 11: Number of vehicles produced and sold (October – April) 16
Figure 12: Total number of construction permits issued (number) 17
Figure 13: Construction permits (number) and imports and production of construction materials (Ton) 17
Figure 14: China's natural resources imports from Myanmar (USD millions) 18
Figure 15: Natural gas export volume (MMSCF) 18
Figure 16: NTL Intensity in Selected Industrial Zones (2012 – 2022) 19
Figure 17: Change in nightlights above Yangon, 2020-2022 20
Figure 18: International tourist arrival index 21
Figure 19: Freight transport (ton miles) 21
Figure 20: Passenger transport (passenger miles) 21
Figure 21: CPI inflation 22
Figure 22: CPI inflation (YoY) vs changes in USD/kyat exchange rate (YoY) 22
Figure 23: CPI inflation (annual average) by component 23
Figure 24: Contribution to CPI inflation (annual average) 23
Figure 25: Recent food price changes (MoM) 23
Figure 26: Fuel price and key drivers (January 2021 = 100) 23
Figure 27: Money supply and Net claim on government (Kyat billions) 25
Figure 28: Trade trends 26
Figure 29: Good export trends of EAP countries 26
Figure 30: Manufacturing and agriculture export trends 27
Figure 31: Major Agriculture export trend 27
Figure 32: Myanmar garment exports and demand from Myanmar's major garment export destinations 27

Figure 33: Garment exports via Yangon seaport (in TEUs) 27
Figure 34: Major import trends 28
Figure 35: FDI commitments and company registrations 29
Figure 36: Exchange rate trends – official rates versus parallel market rate 30
Figure 37: Quarterly US dollar transactions 31
Figure 38: Digital payments (volume-millions/value-kyat billions) 32
Figure 39: Microfinance loans outstanding and number of borrowers 33
Figure 40: Fiscal Trends 34
Figure 41: Tax Revenue Composition (% of GDP) 34
Figure 42: Expenditure Composition (% of GDP) 34
Figure 43: Budget Outturn Spending and revenue as % of the budget estimate 35
Figure 44: Sources of financing – FY2022 and FY2023 MMK billion 36
Figure 45: Sales of government securities 36
Figure 46: Real GDP growth and contributions to real growth by sector (percent, percentage points) 37
Figure 47: Real GDP estimates and projections 37
Figure 48: Inflation forecast 38
Figure 49: Current account (percent of GDP) 39
Figure 50: Changes in Myanmar labor market indicators % of the total working-age (15+) population 42
Figure 51: Employment rates by state and region % of working age (15+) population 42
Figure 52: NEET rates by state and region % of working age (15+) population 42
Figure 53: Employment shares by sector and education level 44
Figure 54: Changes in wage earnings between 2017 and 2022/23 by sector of employment and percentile rank of wage levels 44
Figure 55: Real wages by state and region 2022 constant kyat prices 45
Figure 56: Reported changes in income over the past year Share of households, MSPS 2022/23 46
Figure 57: Farm households that consumed nutritious food in the last seven days (percent) 47
Figure 58: Coping strategies across states 49

LIST OF TABLES

Table ES 1 Economic data and projections 3
Table 1: Selected Macroeconomic Indicators (annual percent change unless indicated otherwise) 39
Table 2: Employment shares by sector (percent) 43

LIST OF BOXES

Box 1: Early evidence from a survey of trucking companies 10
Box 2: Qualitative evidence on agriculture from community surveys 14
Box 3: Nighttime lights in industrial zones 18
Box 4: Determinants of Inflation in Myanmar – An Empirical Analysis 24
Box 5: Threats to food security from high inflation and income losses 46
Box 6: Evidence on migration as a coping strategy 49

Abbreviations

ACLED	Armed Conflict Location and Event Data Project
ASEAN	Association of Southeast Nations
ATM	Automated Teller Machine
bbl	Barrel of Crude Oil
CBM	Central Bank of Myanmar
CDM	Civil Disobedience Movement
CMP	Cut-Make-Pack
CPI	Consumer Price Index
DIEM	Data in Emergencies Monitoring
IDP	Internally Displaced People
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FRD	Financial Regulatory Department
FX	Foreign Exchange
FY	Fiscal Year
GDP	Gross Domestic Product
IFPRI	International Food Policy Research Institute
MEM	Myanmar Economic Monitor
MFI	Micro Finance Institution
MMK	Myanmar Kyat
MoM	Month-on-Month
MOE	Ministry of Energy
MOEP	Ministry of Electric Power
MOPF	Ministry of Planning and Finance
MHWS	Myanmar Household Welfare Survey
MLCS	Myanmar Living Conditions Survey
MSME	Micro, Small and Medium Enterprises
NEET	Not in employment, education or training
NPL	Non-Performing Loans
NTL	Nighttime lights
PMI	Purchasing Managers' Index
POS	Point of Sale
Q1	First Quarter
Q2	Second Quarter
SD	Standard Deviation
SEE	State-owned Economic Enterprise

MSPS	Myanmar Subnational Phone Survey
UNHCR	United Nations High Commissioner for Refugees
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
USD	US dollar
USAID	United States Agency for International Development
VAR	Vector Autoregression
VIIRS	Visible Infrared Imaging Radiometer Suite
WFP	World Food Programme
YBS	Yangon Bus Services
yoy	year-on-year

Executive Summary

Following the significant volatility that characterized much of 2022, economic conditions in Myanmar have shown tentative signs of stabilization in the first half of 2023. The parallel market exchange rate remained broadly stable between January and May, albeit 27 percent lower against the US dollar than in June 2022 and depreciation pressures appear to have reemerged in recent weeks (Figure ES 1). The official rate has remained unchanged, but a 25-30 percent gap with the market exchange rate persists. After spiking in the second half of 2022 (Figure ES 2), inflation in food and fuel prices appears to have eased more recently, although the level of prices remains very high. Most economic indicators over the last six months suggest that economic activity is continuing to slowly trend upwards, though from a very low base and with uneven performance across different sectors and firms. Manufacturing output and new orders have risen quickly since the beginning of the year, after a long period of contraction (Figure ES 3). In the April 2023 round of the World Bank Firm Survey, firms on average reported operating at 75 percent capacity, a markedly higher rate than in previous quarters (Figure ES 4).

But several factors continue to constrain the recovery. Amid high prices and import restrictions, many businesses are finding it difficult to source the inputs they need to operate. With the exception of the agriculture sector, reported profits have declined from their levels a year ago, with the price of imported inputs rising sharply over that period. Power outages have become an even more pronounced challenge since early 2023, with 42 percent of all firms and over half of manufacturing firms reporting power outages as the most significant constraint to their operations in March. Conflict and logistics constraints continue to raise costs and cause disruption in large parts of the country. Indicators of investment remain very weak: as of May 2023, capital imports were about half their pre-pandemic levels, FDI commitments have remained negligible, and new business registrations between October 2022 and January 2023 were 43 percent lower than in 2019. The business environment remains challenging and many firms are finding it difficult to access foreign exchange, obtain trade licenses, import raw materials, and adapt to logistics constraints.

In addition, exporters are facing challenges from a combination of waning external demand, an overvalued official exchange rate, and foreign exchange conversion requirements. Goods exports declined by 16 percent in the first five months of 2023 compared to the same period last year, driven by a decline in manufactured exports, largely garments and natural gas (Figure ES 5). Despite higher prices, agricultural exports have also declined, reflecting weaker domestic production as well as the imposition of foreign exchange surrender requirements and the suspension of export licenses for rice. With exports declining and imports remaining broadly stable, Myanmar returned to a trade deficit in the six months to March 2023.

Amid the weak recovery, labor market conditions remain precarious. As analyzed in detail in Part III of this report, labor market pressures persist. Estimates based on the Myanmar Subnational Phone Survey (MSPS) conducted at the end of 2022 and early 2023, suggest that around 9 million people were added to Myanmar's working-age population between 2017 and 2022/23. But employment only grew by 2 million over this period, and as a result the number of people not in employment, education or training (NEET) increased by almost 6 million, now comprising nearly 40 percent of the total working age population (Figure ES 7). The combination of lower rates of employment, fewer hours worked, and increasing incidence of casual work and self-employment has reduced the income-earning capacity of many households. Reduced labor productivity and a lack of labor demand – combined with faster inflation – have seen workers' wages fall by 15 percent in real terms over the five years to end-2022.

Recent shocks have exacerbated existing inequalities in household welfare, with poorer and more conflict-affected states, regions and townships being more severely affected. Almost half of Myanmar households reported a decrease in incomes over the past year, while only 15 percent reported an increase (Figure ES 6). This – together with high inflation – has translated into significant impacts on food security: according to a May 2023 survey, 48 percent of farming households worry about not having enough food to eat, up from about 26 percent in May 2022. Reported income losses have been particularly severe in areas more affected by recent conflict – including Kayah, Kayin, Tanintharyi and Sagaing – and in more remote states which are known to suffer from particularly high poverty rates and significant transport constraints, including Chin, Rakhine, and Kachin.

Meanwhile, fiscal space remains constrained, with a widening deficit in large part financed directly by the central bank. The fiscal deficit is estimated to have widened to 5.4 percent of GDP in the year-ended March 2023, reflecting a modest increase in overall spending. But within that larger spending envelope, spending on education and health has fallen further to below 2 percent of GDP. Total public debt has stabilized above 60 percent of GDP, with the impact of recent budget deficits on the debt-to-GDP ratio broadly offset by the recent spike in inflation. Central bank financing is estimated to have covered around two thirds of gross public financing needs in the year to March 2023.

Changes in the policy environment continue to create uncertainty and obstacles to doing business. Over the six months to June, there has been a further expansion of export and import license requirements, increased regulation of fuel imports, and additional administrative restrictions on outbound financial transfers. The authorities have announced that imports will be subject to additional scrutiny, with the intent to promote import substitution with domestically produced goods. At the same time, access to foreign exchange continues to constrain the ability of firms to import necessary inputs, despite measures introduced to reduce dependence on the US dollar in favor of other foreign currencies.

At the same time, the shift away from a rules- and market-based system toward one which is opaque and more discretionary has catalyzed a range of rent-seeking activities that distort resource allocation. Some businesses have benefitted from privileged access to import licenses, foreign exchange, and state contracts, limiting the ability of other potentially more productive firms to compete. Others engaged in mining and logging activities are capitalizing on looser enforcement of social and environmental controls, at the risk of severe environmental degradation and loss of natural capital. Import-competing firms are beginning to benefit from a rebalancing of demand toward domestically produced goods due to the imposition of trade restrictions on a range of imported products. Measures to encourage domestic production of edible oils, iron and steel, and other raw materials have been promoted despite having failed in the past. While some individual businesses and vested interests are benefitting from these shifts, they act to undermine the efficiency of resource allocation and overall productivity across the economy.

Looking ahead, GDP is projected to increase by 3 percent in the year to September 2023 (in line with the projection in the January 2023 MEM), continuing the weak recovery in overall economic activity that began the previous year (Table ES 1). The absence of a more pronounced rebound – with GDP still around 10 percent lower than in 2019 – is indicative of the persistent supply- and demand-side constraints on production (Figure ES 8). Compared with our sectoral projections in January, we now expect moderately stronger growth in the industrial and services sectors this year, based on firm surveys and other recent data, but a further contraction in the agriculture sector, given recent data on yields and cultivated area, as well as the impacts of Cyclone Mocha. Over the remainder of the projection period, the baseline expectation is for the economy to continue to expand slowly but underlying growth drivers are expected to rotate. The combination of higher farmgate prices and easing pressure on input prices are expected to trigger a supply-side response in the agriculture sector. Meanwhile, growth in the manufacturing sector is expected to ease in response to more subdued export demand and as electricity shortages and supply chain constraints continue to limit production.[1]

Table ES 1 Economic data and projections

	FY18/19	FY19/20	FY20/21e	FY21/22e	FY22/23f	FY23/24f
Real GDP growth, at constant factor prices	6.8%	3.2%	-18%	3%	3%	3%
Agriculture	1.6%	1.7%	-12.5%	-3.0%	-2.0%	5.0%
Industry	8.4%	3.8%	-20.6%	8.6%	5.5%	2.0%
Services	8.4%	3.4%	-18.4%	1.6%	3.5%	3.0 %
CPI inflation, year average	8.5%	5.8%	3.6%	18.3%	14.0%	6.0%
Current account balance (% of GDP)	-0.2%	-2.0%	-1.4%	-3.3%	-5.9%	-4.7%
Fiscal balance (% of GDP)	-3.1%	-7.0%	-9.2%	-4.7%	-5.4%	-5.8%
Public debt (% of GDP)	38.7%	42.2%	60.0%	61.5%	63.1%	62.1%

While inflation is projected to ease from recent peaks, price pressures are expected to persist. The impacts of the sharp exchange rate depreciation in July and August 2022 appear to have mostly passed through, and local food and fuel prices have stabilized or declined in the first half of 2023. Absent a further shock to the exchange rate or global prices, year average inflation is projected to ease to 14 percent in the twelve months ended September 2023 and decline further in the following year. However, ongoing supply shortages induced by trade and foreign exchange restrictions and an increased reliance on central bank financing of budget deficits will likely put upward pressure on inflation over the medium term. Due to the localized impacts of conflict and transport disruptions, some of Myanmar's states and regions (particularly those in the northwest) will be more susceptible to bouts of inflation than others.

The current account deficit is expected to widen to almost 6 percent of GDP in the year ending September 2023, up from 3.6 percent in the previous year. Export receipts have declined in the year to date while overall imports have remained relatively resilient. Exports are projected to remain subdued through September 2024, with global demand remaining tepid, though an increase in international remittances is expected to provide some support.

The fiscal deficit is projected to widen in the year ended March 2024. A large decline in spending is expected to be offset by an even larger fall in revenues, with the deficit increasing to 5.8 percent of GDP. Although overall spending is projected to decline by 3.4 percentage points of GDP, defense spending is expected to increase from 2.8 percent of GDP in FY 2023 to 4.2 percent of GDP in FY 2024, almost double the allocation to health and education combined. Public investment is expected to decline from 9 percent of

[1] The latest World Bank forecasts indicate a substantial slowing in the global economy in 2023 and 2024, with tighter global financial conditions weighing on demand from major trading partners. See World Bank, Global Economic Prospects, June 2023.

GDP in FY2020 to 5 percent in FY2024. After accounting for inflation and exchange rate valuation effects, total public debt is projected to remain just above 60 percent of GDP. Reliance on central bank borrowing to meet public financing needs is expected to continue, given limited access to domestic and international sources of funds.

These projections are subject to significant near-term risks. A worsening of conflict, an additional slump in electricity generation, greater-than-expected persistence of inflationary pressure, or further deterioration in the trade and business environment could result in even lower growth. The destruction caused by Cyclone Mocha in May was an unwelcome reminder of Myanmar's ongoing vulnerability to natural disasters. The cyclone caused significant damage in states and regions where humanitarian needs were already substantial, including Rakhine, Chin, Sagaing, Magway, and Kachin. If realized, many of the other risks to the outlook will also tend to have particularly severe impacts on the poorest and most vulnerable.

In the medium-term, the deep contraction in 2021, the ensuring weak and uneven recovery, and increasing policy distortions will leave the economy permanently scarred. Many of the trends observed at household, firm and industry levels are likely to damage the productive capacity of the economy, in addition to their direct impacts on welfare and inequality. Increased reliance on coping mechanisms such as asset sales and reduced spending on health, education and agricultural inputs will curtail the longer-term earnings capacity of households. There has been little evidence of productivity-enhancing structural transformation in recent years; instead, more highly educated workers have moved into agriculture and away from higher productivity activities. Migration in recent years has been mostly forced, lowering the potential for income and productivity gains with recent migrants across states and regions within Myanmar tending to be worse off across various welfare indicators (as discussed in Part III). And while interventionist measures to promote import substitution and self-sufficiency can generate employment and activity in the short term, in the long run, growth is likely to suffer as resources move toward activities that are less compatible with local factor endowments, and as the scope for productivity gains from specialization and exposure to international competition diminishes. Increased out-migration of more skilled workers and the sharp slowdown of foreign investment inflows will further constrain Myanmar's prospects for development over the longer term.

Figure ES 1: Exchange Rate

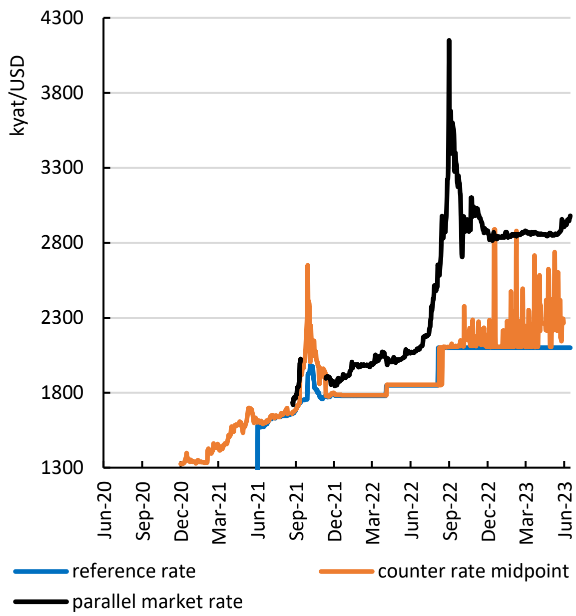


Figure ES 2: CPI inflation

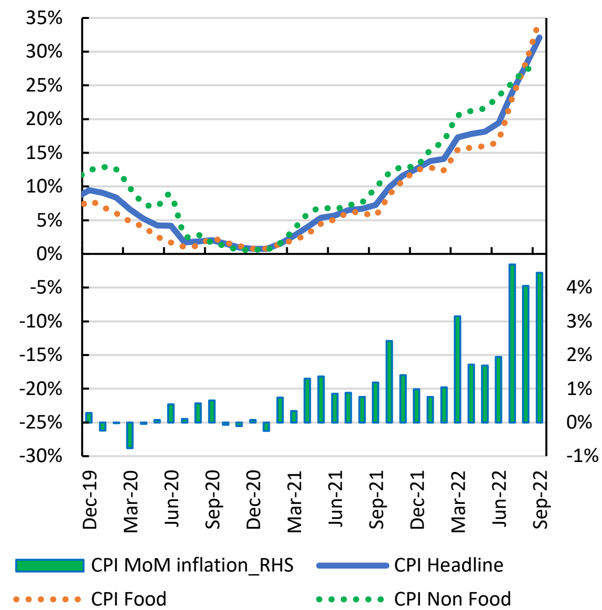


Figure ES 3: Manufacturing Purchasing Managers' Index (< 50 indicates contraction, > 50 indicates expansion)

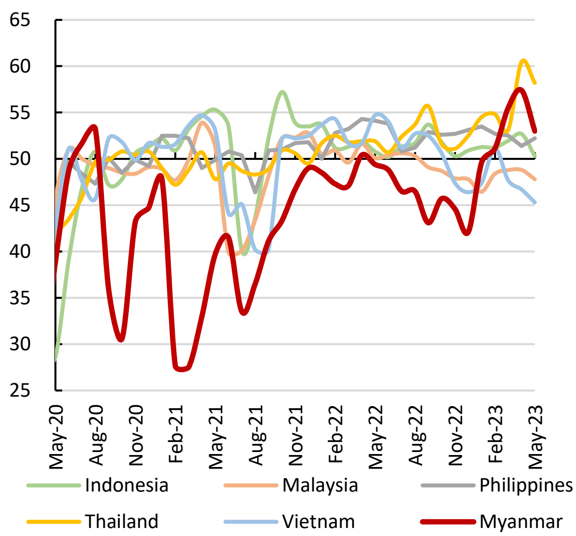


Figure ES 4: Firms' average operating capacity

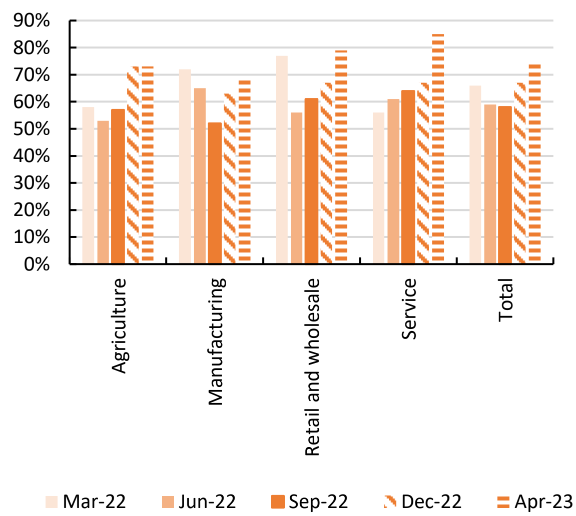


Figure ES 5: Merchandise exports (USD values, 2019 = 100)

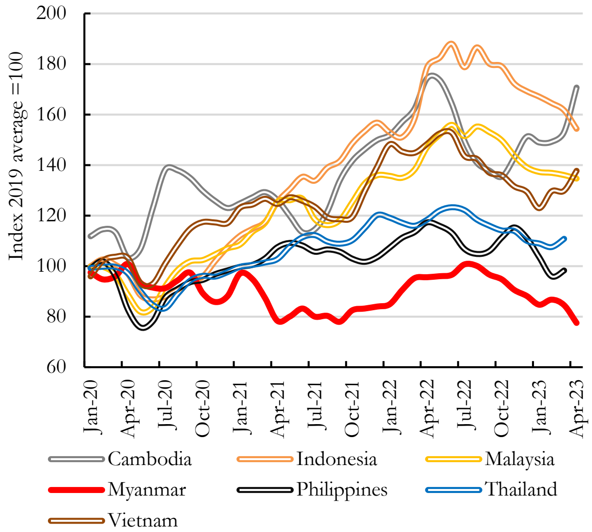


Figure ES 6: Reported changes in income over the past year (share of households, MSPS 2022/23)

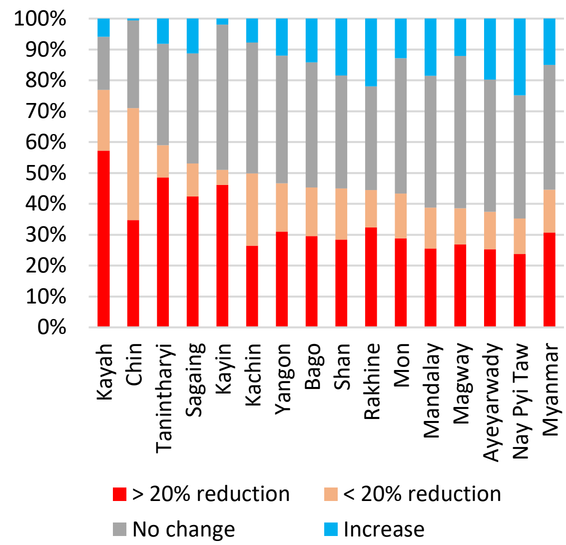


Figure ES 7: Labor market indicators (% of the working age population)

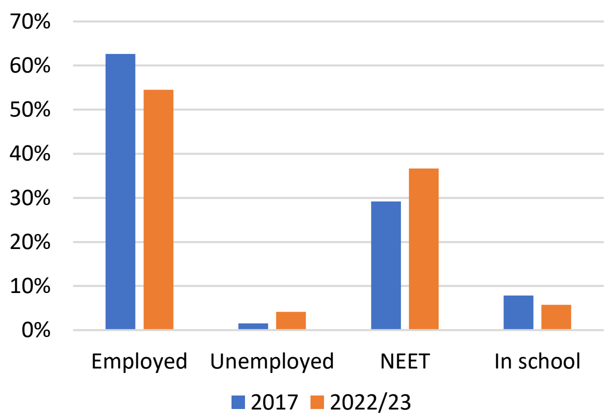
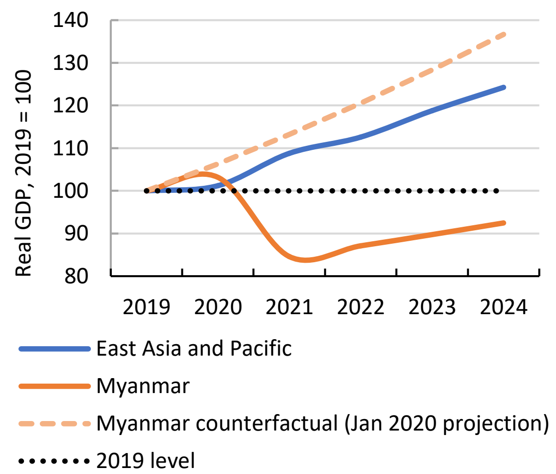


Figure ES 8: Real GDP estimates and projections



I. Recent Economic Developments

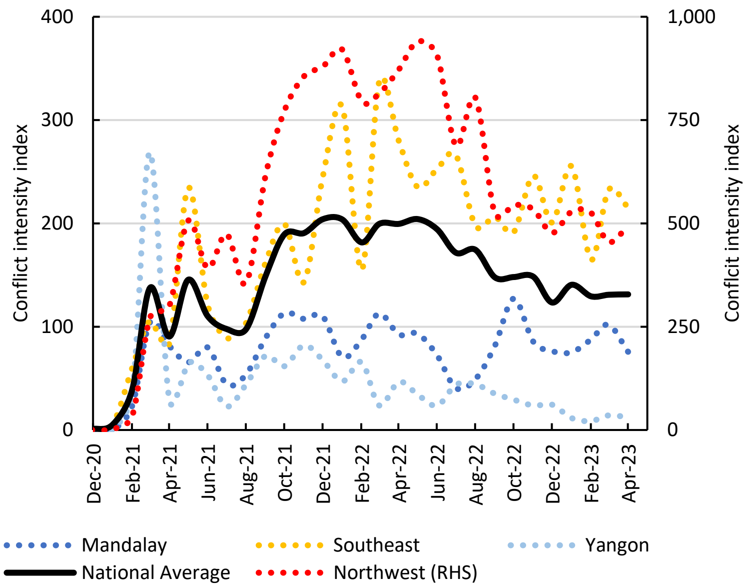
A. A constrained and uneven recovery

Following the significant macroeconomic volatility that characterized much of 2022, economic conditions in Myanmar appear to have stabilized in the first half of 2023. While kyat depreciation pressures appear to have re-emerged in recent weeks, the parallel market exchange rate remained broadly stable between January and May, albeit 27 percent lower against the US dollar than in June 2022. Inflation in food and fuel prices has eased although prices remain very high in levels terms. Surveys indicate that firms across all sectors are operating at a higher proportion of their capacity than in mid-2022 amid signs of stabilization in sales. After a long period of contraction, manufacturing output and new orders have risen quickly since the beginning of the year. Retailers report that sales of domestically produced food and non-food items have picked up over the past year, while passenger and freight transport measures are trending higher. Although agricultural production estimates have weakened, profitability is improving as farmgate prices rise and input costs ease, which will likely lead to higher production in coming seasons. Nevertheless, ongoing disruptions from conflict, electricity outages, logistics constraints, and shifts in policy and governance continue to constrain the pace of recovery. High prices in combination with shortages resulting from import restrictions means that many businesses are finding it difficult to source the inputs they need to operate. As at the end of 2022/early 2023, almost half of Myanmar households reported decreased incomes over the past year. Overall, real-time activity indicators suggest that the economy is still operating well below pre-pandemic levels, in sharp contrast to the rest of the region.

The destruction caused by Cyclone Mocha in May underscores Myanmar's vulnerability to natural disasters. After striking the Rakhine coastline on May 14, the cyclone continued inland, causing significant damage to property, Internally Displaced Persons (IDP) camps, public infrastructure, and agricultural areas, with severe impacts on lives and livelihoods. The available information indicates that the cyclone caused significant damage in states and regions where humanitarian needs were already substantial, including Rakhine, Chin, Sagaing, Magway, and Kachin. UN OCHA has estimated that 1.6 million people have been affected by the cyclone, with large numbers left without shelter at the onset of the monsoon season. The Food and Agriculture Organization's Data in Emergencies Monitoring (DIEM) Hub's immediate post-storm assessment as of May 16 indicated a maximum flood extent covering 670,000 hectares of land and potentially impacted cropland area exceeding 325,000 hectares, both along the coast and inland. Cropland in Rakhine and Sagaing accounts for 89 percent of the affected area. A large share of the summer crops in the field (and soon due to be harvested) in these most heavily affected areas—including paddy rice, mung beans, black gram, and sesame—may be lost. Damage to croplands and farming and fishing assets has been reported as well as loss of inputs such as seeds and fertilizer. The cyclone will affect both the harvest of summer crops and farmers' ability to plant monsoon crops. In contrast to the substantial impacts on lives and livelihoods in affected regions, impacts on overall GDP are expected to be relatively contained.

Conflict has remained persistently high in much of the country since the beginning of the year, though measures of conflict intensity have declined since their peaks in 2022. Armed clashes continued in the Northwest (Sagaing, Magway, Chin, and Kachin) and the Southeast (Kayah, Kayin, Mon and Tanintharyi), with the level of conflict in these parts of the country remaining well above the national average (Figure 1). UN OCHA estimates that about 1.8 million people are internally displaced across Myanmar (as of early June 2023), up by around 20 percent from six months ago. The continued high level of conflict in the northwest has disrupted economic activities and inhibited the ability of those affected by Cyclone Mocha to recover and receive humanitarian assistance. At the same time, restrictions imposed by the authorities—including a travel ban on international aid organizations to cyclone-affected areas—have further complicated the humanitarian response. Across the country, high levels of conflict are associated with lower levels of economic activity (as proxied by night lights), weaker labor market outcomes, and declines in household incomes (see Part III).

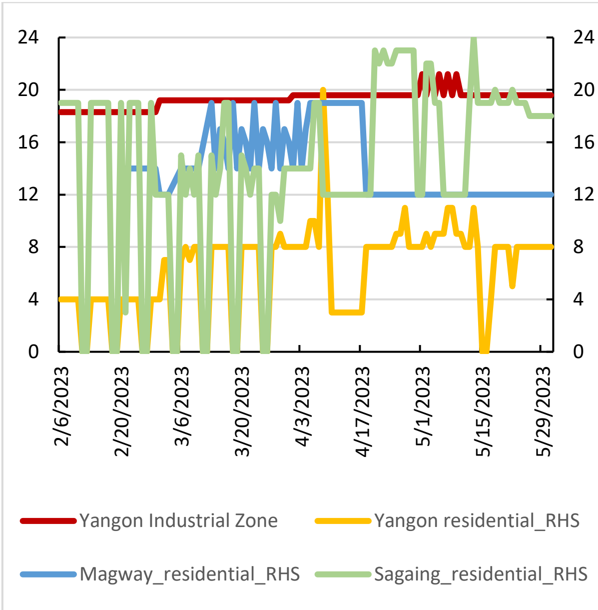
Figure 1: Conflict Intensity



Source: WB staff calculations using data (ACLED)

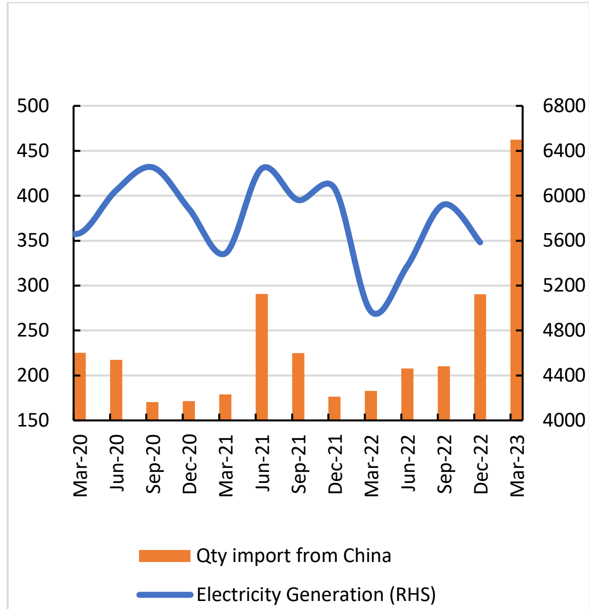
Electricity provision has been affected by a seasonal decline in hydropower generation, high prices and reduced supply from gas-fired power plants, degraded and poorly maintained infrastructure, and conflict-related disruptions to the power network. Electricity generation declined by 8 percent between September and December 2022, and there have been regular, prolonged power outages since the beginning of 2023 as the water levels in several hydro reservoirs have declined. On average, residential townships in Yangon experienced around 8 hours of blackout per day between March and May 2023 (Figure 2). Blackout periods in other regions of the country were significantly more extended, depending in part on the region's geography and level of conflict. To cope with unmet energy demand, the quantity and value of electricity imports from China have proliferated since the start of the year (Figure 3). Energy demand still exceeds supply despite increased imports reflective of the slump of domestic generation capacity due to the lack of new investments, aging transmission and distribution networks, poor maintenance of existing infrastructure, and supply disruptions caused by armed attacks on strategic power infrastructure. Lack of access to electricity from the grid has imposed substantial costs on businesses and households, forcing them to invest in alternatives such as backup generators (which are costly) and solar power energy.

Figure 2: Electricity outages per day (hours)



Source: FMR

Figure 3: Electricity generation and imports from China (kWh million)



Source: CSO, China customs department

Domestic cargo transport operators continue to face significant challenges, disrupting supply chains and increasing logistics costs (Box 1). Over the past two years, kyat depreciation combined with higher global prices has led to significant increases in local fuel and vehicle parts prices, which have flowed on to transport prices and overall CPI inflation. The costs of road tolls and checkpoint fees, including unofficial payments, have increased, particularly along routes passing through unstable regions. Due to import restrictions, truck companies face persistent difficulties purchasing new vehicles and parts. However, diesel prices have eased since late 2022, while gasoline prices have stabilized, reducing the pressure on cargo transportation prices in recent months. Transport service providers have employed various strategies to cope with ongoing safety, cost, and demand constraints. The most common strategy to maintain profitability has been to increase trucking fees and reduce the number of routes served or the frequency of service on operated routes, with ripple effects throughout supply chains.

Evidence suggests that the weak economic recovery from recent shocks has also been highly uneven, with shifts in policy and governance creating winners and losers. Over the six months to June, there has been a further expansion of export and import license requirements, increased regulation of fuel imports, additional administrative restrictions on outbound financial transfers, and the imposition of foreign exchange conversion requirements on rice exporters (other exporters were already subject to these conversion requirements). The authorities have announced that imports will be subject to additional scrutiny, with the intention of reducing imports of goods that might instead be produced in Myanmar. While there is little clarity on how this announcement will be applied in practice, there are reports that fewer imported goods are available in grocery stores and that obtaining import licenses has become more challenging. While businesses producing previously imported goods are beginning to benefit from less international competition, exporters have suffered from the combination of overvalued official exchange rates, compulsory foreign exchange conversion requirements, and the higher cost and reduced availability of imported inputs. Moreover, the broader shift from a rule- and market-based system toward more opaque and discretionary policies have created incentives for various rent-seeking activities. These tend to distort the allocation of resources and can lead to significant negative externalities. Some businesses have benefitted from privileged access to import licenses foreign exchange, and state contracts, reducing the ability of other potentially more productive firms to compete. Others engaged in mining and logging activities are capitalizing on looser enforcement of social and environmental controls, at the risk of environmental degradation and loss of natural capital. Such trends are likely to curtail the sustainability and productive capacity of the economy over the longer term.

Box 1: Early evidence from a survey of trucking companies

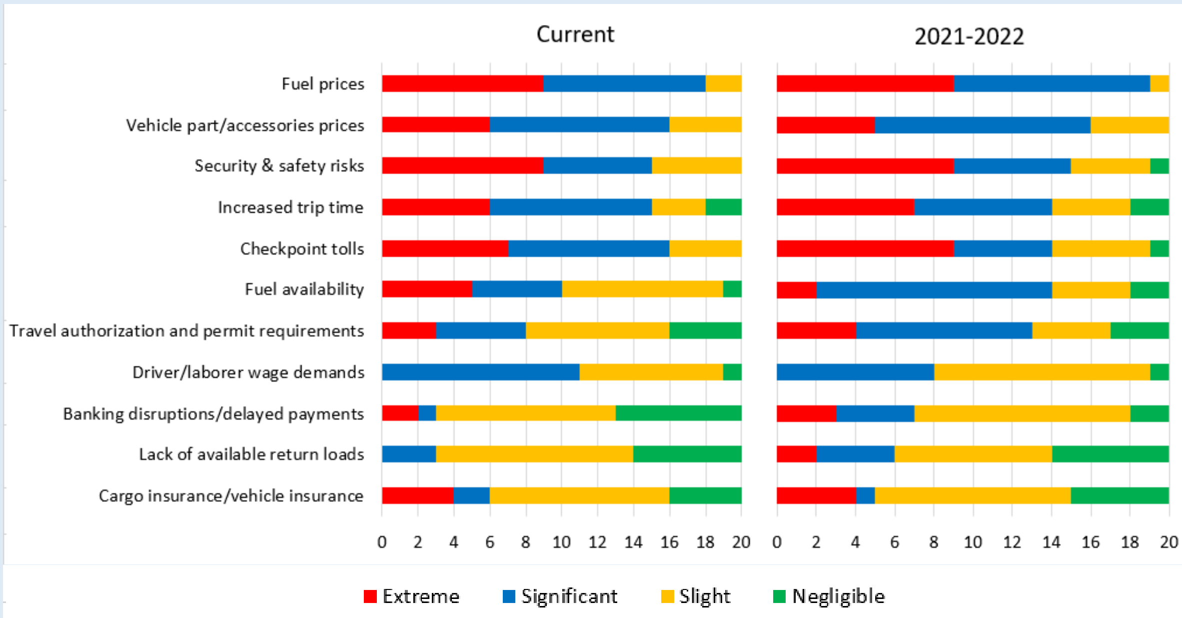
The trucking sector is central to supply chain and logistics challenges in Myanmar. A survey of 20 trucking companies operating cargo transportation services in Myanmar was conducted in April-May 2023. Survey participants were asked to provide pricing, load, and toll fee data for their routes, and respond to questions about factors that impact their operations, profitability, and pricing, as well as strategies they have employed to deal with these challenges.

Trucking companies have been struggling with high operating costs, with transport fees increasing by 60-80 percent in nominal kyat terms between 2021 and 2022. Almost all surveyed companies have continued to cite high fuel prices as causing extreme or significant pressure on cargo transportation rates, despite the easing of diesel prices since late 2022. Vehicle parts and accessories prices were also identified as a significant driver of costs: vehicle tire prices are reported to have increased threefold since 2021. Travel authorizations, permit requirements, and checkpoint tolls added further to the cost of trips (Figure 4). Due to import restrictions, truck companies also face difficulties purchasing new trucks, particularly heavy-duty ones. Perceptions of overall operating conditions in the trucking sector remain negative.

Highway checkpoints were identified as having the most significant impact on transportation delays, followed by road closures. The latter had been a particular concern during 2021 and 2022 for trucking companies operating in insecure regions such as the Myawaddy border crossing with Thailand in Kayin state and the Muse crossing with China in northern Shan state. The companies operating in these areas have faced severe delays from border gate congestion and customs clearances. However, border gate congestion is reported to have eased during Q1 2023, with several border gates with Thailand and China recently reopening.

Trucking companies have employed various strategies to cope with safety, costs, and demand challenges. The most common strategy to maintain profitability has been to increase trucking fees, which was cited in the top three responses for more than 70 percent of those surveyed. Half of the respondents said they had reduced the number of routes served or the frequency with which they operated on those routes. Around 57 percent of respondents had also paused planned investments, including purchasing new trucks.

Figure 4: Reported drivers of increased transport prices and delays



Source: World Bank trucking sector survey

B. Economic activity has picked up from a low base

While conditions remain mixed across and within sectors, recent economic indicators and survey results suggest economic activity is continuing to slowly trend upwards from a very low base. In the March 2023 round of the World Bank Firm Survey, on average, firms reported operating at 75 percent of their capacity in March 2023, 9 percentage points higher than a year earlier, and a marked improvement when compared to the weaker results reported in the June, September and December rounds (Figure 5). Firms in the non-retail services sector – which is generally less exposed to international trade – performed particularly strongly, operating at 85 percent of their capacity on average. Retail sector performance also improved, with fewer firms reporting challenges from a lack of sales, firms utilizing more of their capacity, and some evidence that firms have shifted to sourcing a larger proportion of their goods locally (see below). This is consistent with the broader theme of import-competing firms beginning to benefit from import substitution as a result of the high costs of imports and the imposition of trade restrictions on a range of imported products. There are also signs that sales are beginning to stabilize: across all industries, average sales declined by 6 percent over the year to March 2023, a much smaller decline than what had been reported in previous quarters, while sales in agriculture and non-retail services were broadly unchanged (Figure 5).

However, several factors are constraining the pace of this recovery. Weakness in household incomes has persisted, limiting domestic demand. Power outages have become a much more prominent challenge since early 2023, with 42 percent of all firms and over half of manufacturing firms reporting power outages as the most significant constraint to their operations in March (Figure 6). Indicators of investment remain very weak: as of May 2023, capital imports were about half of their pre-pandemic levels, FDI has remained negligible, and new business registrations between October 2022 and January 2023 were 43 percent lower than in the equivalent period to January 2020. Except for the agriculture sector, reported profits have declined sharply, with the price of imported inputs remaining high and the need to adapt to electricity shortages, conflict, and logistics constraints further driving up business costs. As an example, compared with grid-sourced power, diesel-fueled generators have been estimated to raise operational costs for some manufacturers by 50 percent or more (Myanmar Energy Monitor, 10 May 2023).

Figure 5: Firms' operating capacity, sales, and profits

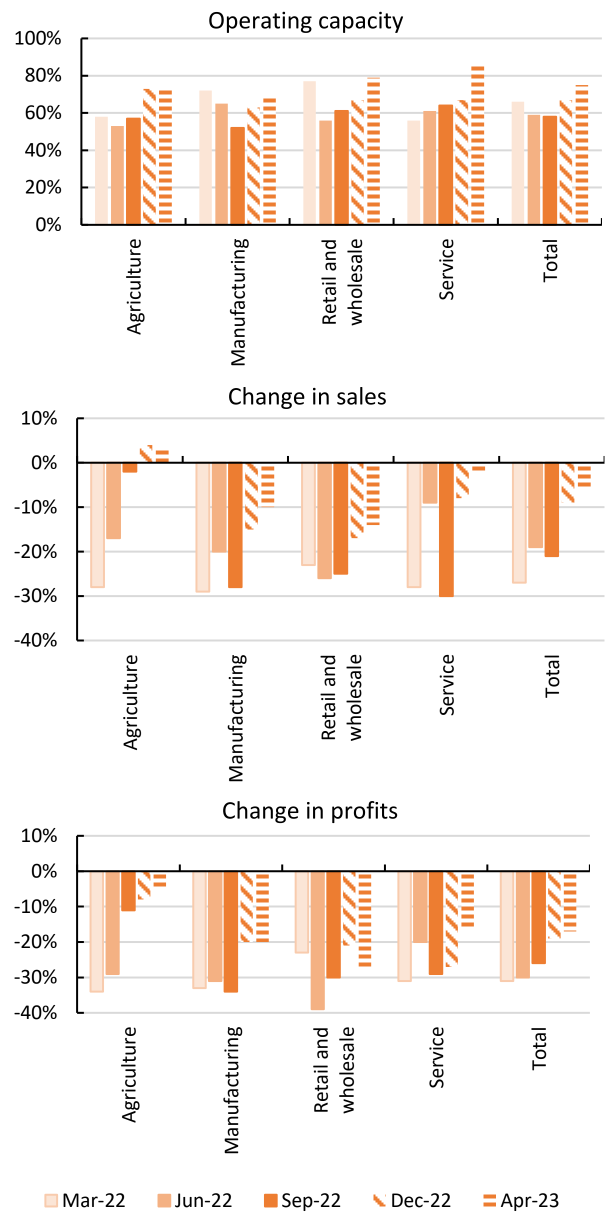
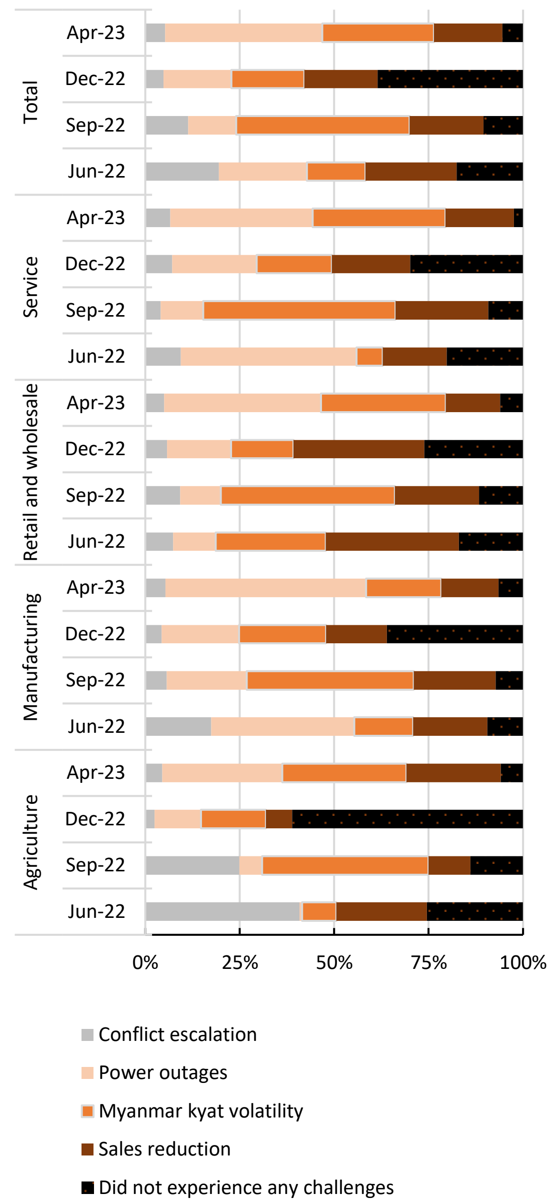


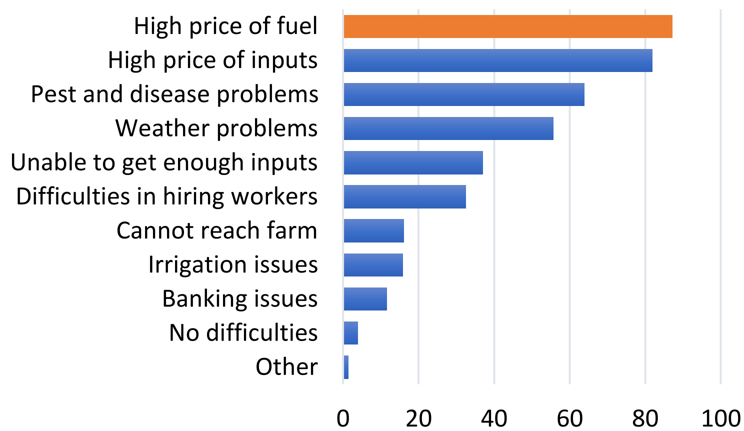
Figure 6: Challenges to firms' operations (share of firms reporting)



Source: World Bank firm monitoring surveys
Note: Firms were asked to report on the last completed month. Changes in sales and profits are from a year earlier. "Service" refers to non-retail and wholesale services.

The performance of the agriculture sector continues to be dampened by high input prices and conflict. Prices of fuel and other inputs have stabilized or eased in recent months but remain at high levels and pose a significant constraint for farming households. Conflict, labor shortages, weather shocks (including cyclones and drought), pests, and disease pose further challenges (Figure 7). Recent qualitative evidence from community welfare surveys shows how farming households have responded to these challenges (Box 2).

Figure 7: Challenges faced by crop-producing households (share of households reporting)



Source: Round 1 of the Myanmar Subnational Phone Survey

Sluggish planting activity and the limited application of inputs such as fertilizer have constrained agricultural production. According to USAID, the total cultivated area for rice paddy declined by 7 percent in the 2022 monsoon season, which—combined with a decline in yields—resulted in a 13 percent year-on-year (yoy) decrease in total rice production when compared to the 2021 monsoon.[2] Typically more than 80 percent of total rice production for the year comes from the monsoon rice harvest (rains in May through October are followed by the monsoon rice harvest which runs into the early months of the following year). The most recent Myanmar Household Welfare Survey (MHWS) by the International Food Policy Research Institute (IFPRI) indicated a broadly consistent 7.5 percent (yoy) decline in rice yields during the 2022 monsoon.[3]

Weak agricultural production is confirmed by satellite and remote sensing data, indicating a significant decline in planted and harvested crop areas in early 2023. Using high-resolution satellite imagery collected in early 2023, World Bank analysis of Myanmar's vegetation conditions and phenology within cropland areas suggests that the cumulative area of planted cropland and harvested cropland over the four months to April 2023 was 27 percent and 32 percent below the 2019-2022 average respectively. The data also

[2] USAID (2023) Rice Area and Production Estimates for the 2022 Monsoon Season, February
[3] IFPRI (2023) Rice productivity and profitability in Myanmar: Assessment of the 2022 monsoon season, SSP WP 36 (forthcoming)

suggest that the condition of vegetation was slightly poorer.[4] Cyclone Mocha in May has caused further disruptions in the ability of farmers to harvest summer crops and plant for the monsoon season.

On the other hand, rising rice prices have seen farmers' margins increase. According to IFPRI, paddy prices at the farmgate level increased by 81 percent in the 2022 monsoon season, reflecting increases in international rice prices, kyat depreciation, and domestic supply constraints. For farmers able to take advantage, this has led to a substantial increase in profitability and income. In real terms, based on the cost of an average food basket, IFPRI estimates that profits from rice farming during the monsoon of 2022 increased by an estimated 26 percent relative to monsoon 2021 and 10 percent relative to monsoon 2020.

Box 2: Qualitative evidence on agriculture from community surveys

World Bank community welfare monitoring surveys have followed 17 rural communities across eight states and regions since 2020. The most recent round in March-April 2023 provides insights on the experience and welfare of agricultural workers. Interviews with farmers confirm that increases in the costs of agricultural inputs (including fertilizers and petroleum) have led farmers in some areas to reduce farmed areas. Others have switched from high-input crops like paddy to lower-input crops such as beans and pulses, used family labor (including out-of-school children) to save on labor costs, or in some cases, left farming altogether. Pests in Sagaing and floods in Chin State led to crop loss during the latest harvest season. Closures of border markets have affected export sales and market prices in some cases (e.g., of livestock in Magway).

Students and civil servants participating in the civil disobedience movement (CDM) have increasingly been involved in agriculture. They work in the sector either as subsistence farmers or casual laborers, consistent with MSPS findings that the share of educated workers in agriculture has increased. CDM participants have described using farming as a coping strategy for their loss of civil service salary and their limited freedom of movement.

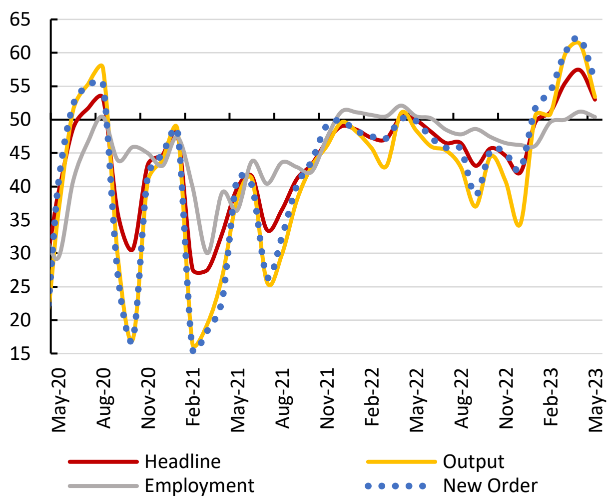
Restrictions on travel and an increased presence of military checkpoints, particularly in conflict areas, have reduced the ability of casual agricultural laborers to move to areas with higher labor demand. The threat of forced displacement has also prompted a range of negative behaviors. For instance, farmers in Sagaing reported that they were immediately selling crops after harvest, even if at low prices, as they could not wait for higher prices for fear of future attacks destroying stored crops or of being forced to abandon their harvest.

After a long period of contraction, manufacturing activity improved during the first half of 2023. The manufacturing Purchasers' Managers Index (PMI) expanded for four months in a row between February and May (Figure 8). Both manufacturing production and factory orders grew at the strongest pace on record since the beginning of the PMI survey in December 2015, due to a pick-up in demand especially for locally produced construction materials and processed food items. The increase in demand put pressure on inventories, raised

[4] The World Bank analyzed vegetation condition using two variables – difference anomaly (DA) and vegetation condition index (VCI). The DA measures the absolute difference between the current vegetation condition and its long-term average while VCI accounts for variations in the mean and standard deviation of the time series data, allowing for a more robust comparison of anomalies across different time periods. VCI is a reliable proxy indicator for crop yield (https://datapartnership.org/myanmar-economic-monitor/notebooks/nighttime-lights/README.html).

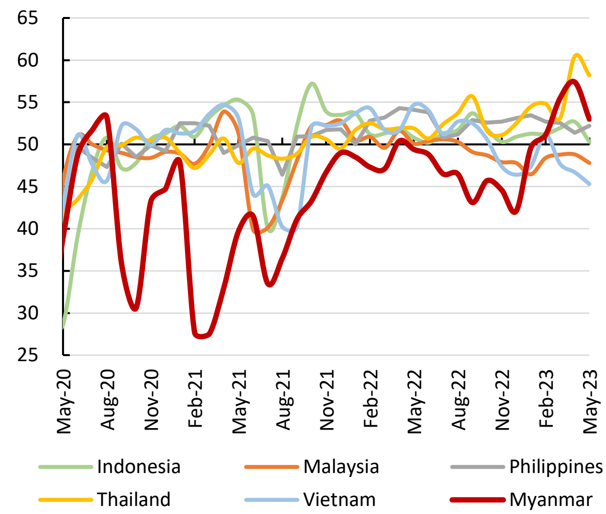
suppliers' delivery times, and led to rapid growth in unfinished work. Firms increased employment for the first time in ten months to keep up with new factory orders and business requirements. The improvement of Myanmar's manufacturing PMI has come after a long period of underperformance compared with regional peers (Figure 9).

Figure 8: Myanmar Manufacturing Purchasing Managers' Indices (>50 indicates expansion, < 50 indicates contraction)



Source: S&P Global Market Intelligence

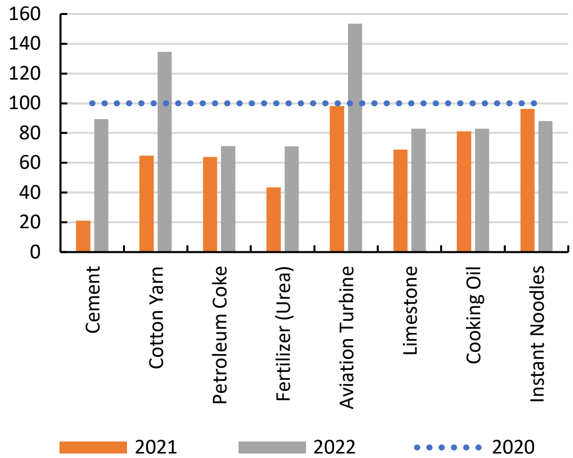
Figure 9: Regional Manufacturing Purchasing Managers' Indices (>50 indicates expansion, < 50 indicates contraction)



Source: S&P Global Market Intelligence

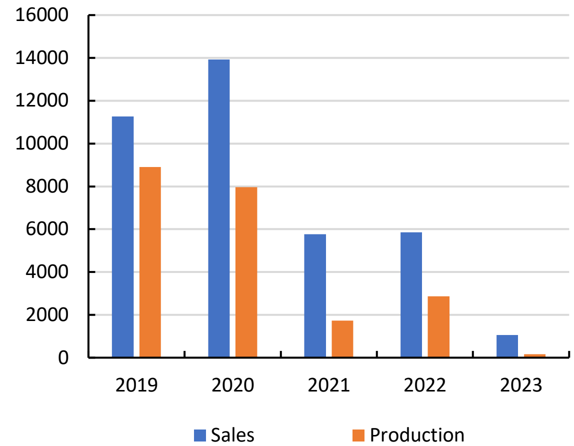
Nevertheless, the manufacturing sector continues to face challenges including frequent power outages, high input prices, and shortages of intermediate inputs. The input price PMI remains in expansionary territory, driven by increased transport costs and higher prices of raw materials. The recent closure of two garment factories and announcements of more foreign firms planning to exit reflect some of these challenges. Across a range of products, manufacturing production has picked up in 2022 but generally remains below 2020 levels (Figure 10). Although it accounts for a relatively small share of total manufacturing, motor vehicle production declined sharply in the first half of 2023 (Figure 11), partly reflecting reduced demand, supply-side constraints, and the deteriorating business environment.

Figure 10: Manufacturing production index
(December quarter 2020 = 100)



Source: CSO

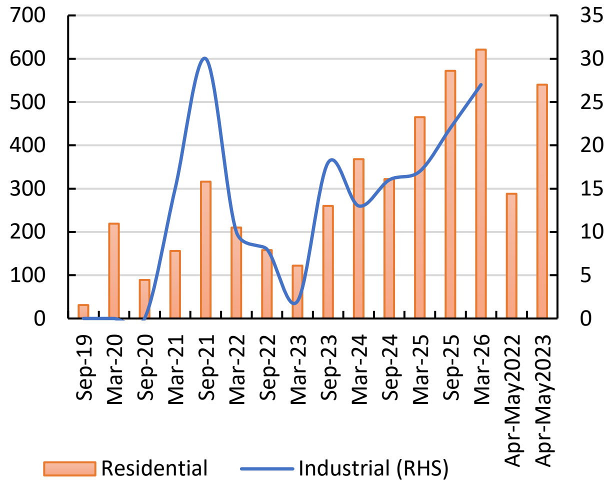
Figure 11: Number of vehicles produced and sold
(October – April)



Source: ASEAN Automotive Federation

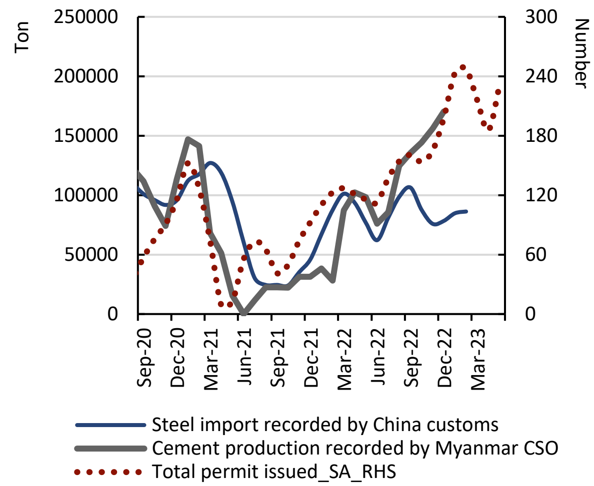
Indicators of construction activity have risen as public investment projects are revived and issuance of building permits continues to trend upwards. Public construction activities have increased since October 2022 with the resumption of several major public investment projects, such as the Paletwa-Zormpu road (after a two-year pause), the Yangon-Dala bridge, and the China border railway project. Construction permits for residential buildings and commercial buildings in Yangon industrial zones increased by a monthly average of 8 percent since the start of the year (Figure 12). Permits are generally correlated with other indicators of construction activity such as steel and cement demand (Figure 13). Demand for residential housing has increased, partly due to households searching for alternative investment vehicles to hedge against macro-financial risks as access to foreign currency and gold has tightened. The price of cement and steel bars increased by 35 and 16 percent respectively between December 2022 and April 2023, indicative of both increased demand for construction materials and supply constraints resulting from restrictive trade policies such as mandatory import licensing requirements. Although construction appears to be recovering, several mega-projects including high-end condos remained stalled due to the departure of foreign companies, the consequent slump in foreign investment, and the impact of trade restrictions.

Figure 12: Total number of construction permits issued (number)



Source: Yangon City Development Committee and China custom data

Figure 13: Construction permits (number) and imports and production of construction materials (Ton)

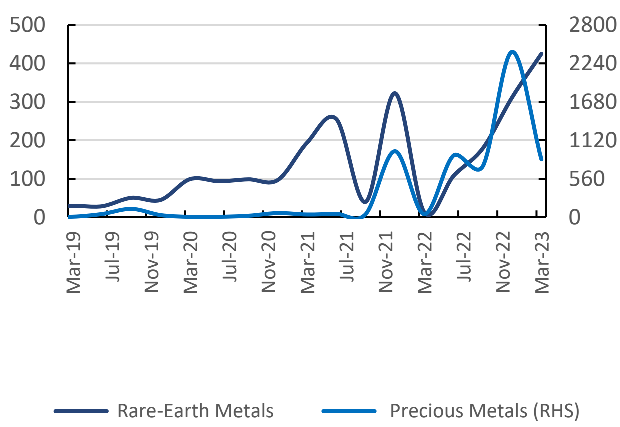


Source: Yangon City Development Committee, CSO and China custom data

Mining and quarrying activities have increased in 2022 and through the first half of 2023. This has been driven partly by the entrance of companies mining precious metals, alongside a pick-up in informal and illicit mining activities. Since late 2021 there has been a significant increase in Chinese imports of precious metals and rare earths from Myanmar (Figure 14). A large part of the rise in mining activity appears to be unregulated and/or illegal, posing serious social and environmental concerns.

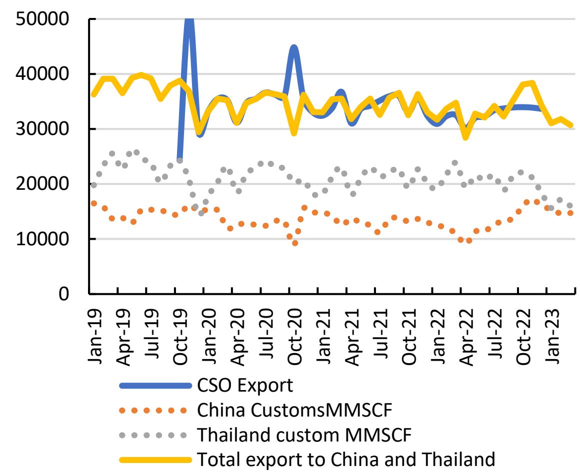
Natural gas production has plateaued as gas reserves declined and foreign firms divested their shareholdings, reducing the pace of exploration and extraction of new fields. Natural gas exports to China and Thailand have continued to trend lower in the first half of 2023, reflecting technical constraints and sluggish demand (Figure 15). Since December 2022, production has remained broadly stable at the Zawtika and Yadana gas fields, but it has declined at the Yetagun offshore field as reserves near depletion. Exploration activities at the offshore Block A-1 connected to the Korean Posco project have progressed slowly due to technical challenges, while PTTEP's Zawtika offshore gas project is gradually entering its development phase.

Figure 14: China's natural resources imports from Myanmar (USD millions)



Source: CSO, China Customs and Ministry of Energy Thailand

Figure 15: Natural gas export volume (MMSCF)



Source: China Customs

While the industrial sector has been an important driver of overall economic activity since 2021, the intensity of nightlights in several industrial zones in Yangon is well below pre-pandemic levels. This likely reflects the increased incidence of electricity outages and a still-subdued level of production in these areas, with the recovery since 2021 coming off a very low base (Box 3).[5]

Box 3: Nighttime lights in industrial zones

Nighttime lights (NTL) have become a commonly used resource to estimate changes in aggregate economic activity at national and subnational levels. Changes in NTL are known to be correlated to changes in economic activity. We obtain NTL data from the VIIRS[1] Black Marble dataset, which applies advanced algorithms to correct raw NTL which can be affected by cloud cover and stray light, such as lunar light.

Analysis of nighttime lights across major industrial zones of Myanmar, especially those in Yangon, suggests that manufacturing sector activity remains below pre-pandemic levels (Figure 16 and Figure 17). Focusing on industrial zones means that confounding factors such as illegal activity and explosions are less likely to be influential. The NTL trends of major industrial zones including Hlaingtharya,

[5] Given the potential to help track changes in economic activity, the World Bank has launched a dedicated webpage on big data and NTL analysis in Myanmar.
See https://datapartnership.org/myanmar-economic-monitor/notebooks/nighttime-lights/README.html

Shwepyithar, Mingaladon, and Thilawa special economic zone show that intensity has dipped since 2019/20. Nighttime light trends mirror electricity supply trends: the declines in 2022 are consistent with the regular power outages experienced last year and more recently. They also suggest that manufacturing sector activity in these areas remains relatively weak compared to pre-pandemic levels, partly because of power outages and the various other constraints affecting the manufacturing sector.

Figure 16: NTL Intensity in Selected Industrial Zones (2012 – 2022)

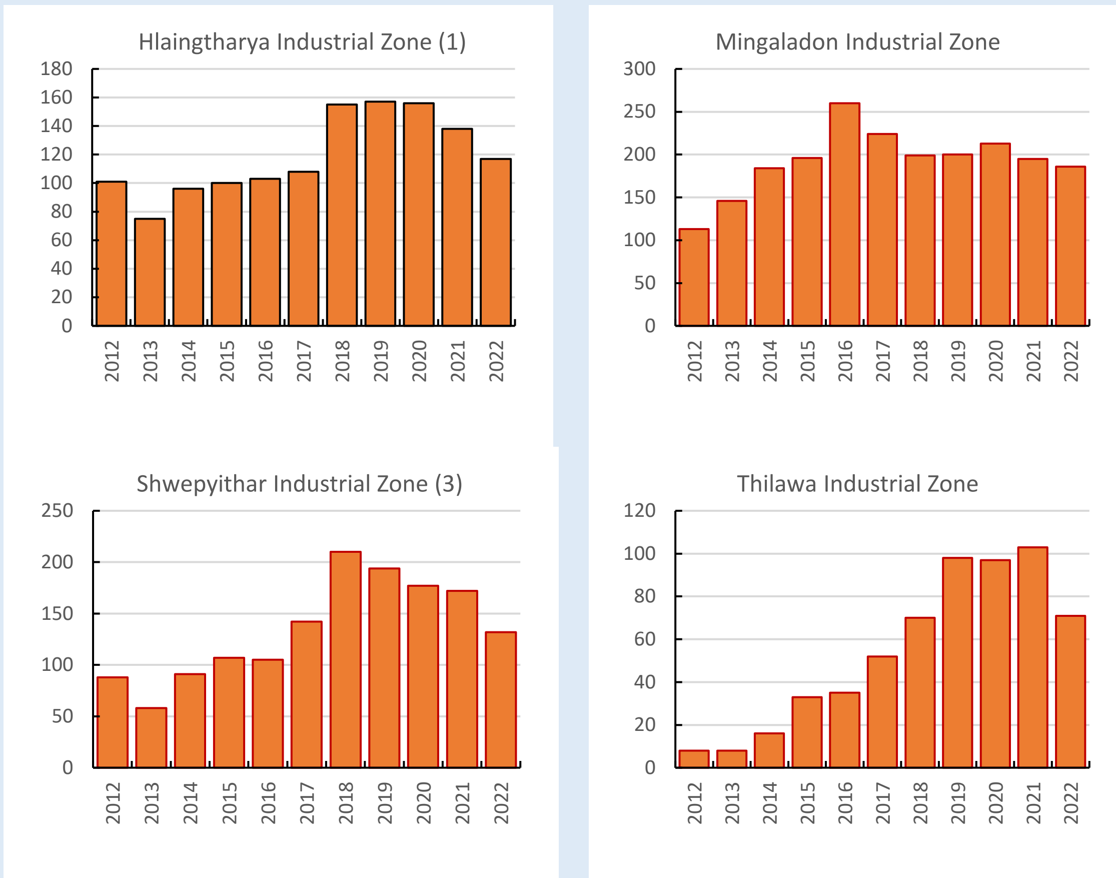
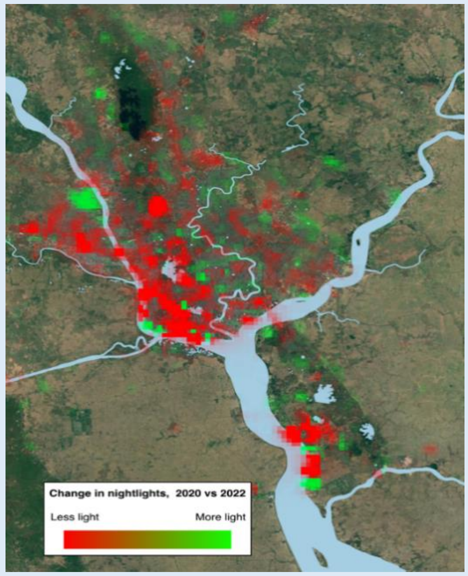


Figure 17: Change in nightlights above Yangon, 2020-2022



Source: WB staff calculation using data from the VIIRS Black Marble dataset

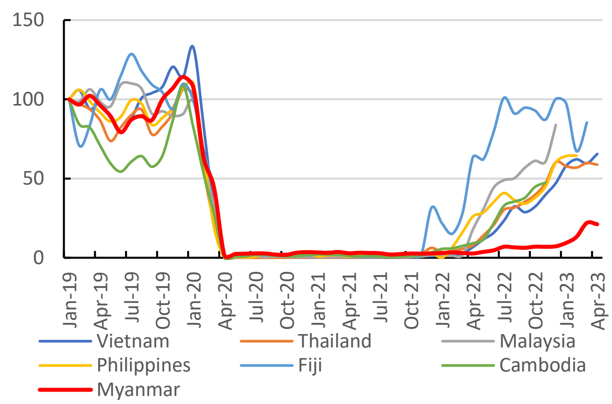
Retail and wholesale trade has grown steadily since the start of 2023, helped by a gradual increase in consumer demand. The retail sales volume for domestically produced goods increased between January and April. Data from the Retailers' Association indicates that sales of food products remained stable while nonfood sales increased by about 4 percent compared to the same period in 2022, driven mainly by consumption of personal hygiene and home appliances. Food sales also benefited from holiday festivities during March and April. Despite improvement, the retail and wholesale services sector has been adversely impacted by higher prices, import shortages caused by trade restrictions, and the slow recovery of consumer demand.

Prevailing weaknesses in the transportation, tourism, and trade sectors have kept service sector growth below its pre-pandemic trend. Transportation services witnessed mixed trends as air and freight transport grew steadily during the past year while land and inland water transport were affected by the high fuel cost, conflict, logistic barriers, and regulatory changes[6]. In 2022, total air traffic movement increased by 61 and 91 percent at the Yangon and Mandalay International Airports, respectively. Passenger traffic at domestic airports also increased significantly in 2022, driven mainly by the top five destinations including Mandalay, Sittwe, Tachilek, Myitkyina, and Lashio. International tourist arrivals increased fourfold in the first half of 2023 compared to the same period of last year (Figure 18). Visitors from China and Thailand account for about 56 percent of total arrivals, partly explained by the relaxation of land border restrictions, particularly the reopening of the China-Myanmar land border. Despite the recent hike, international tourist arrivals amount to only about 20 percent of its pre-pandemic level in sharp contrast to the rest of the ASEAN region (Figure 18). Low international tourist arrivals are explained largely by the high level of conflict and political uncertainties and

[6] New license requirements and vessel monitoring system for cross-border trucks

prevent the recovery of many downstream tourism-related sectors such as travel, hotels, and hospitality. About 25 percent of hotels and tourism-related businesses have remained closed since 2021, while several foreign firms have announced their exit from the tourism sector due to security concerns, slow pace of recovery and business regulatory barriers.

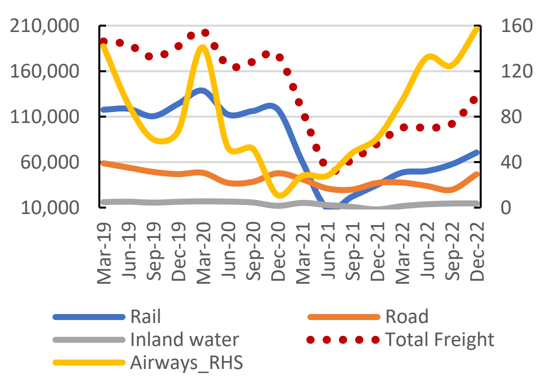
Figure 18: International tourist arrival index



Source: Haver Analytics

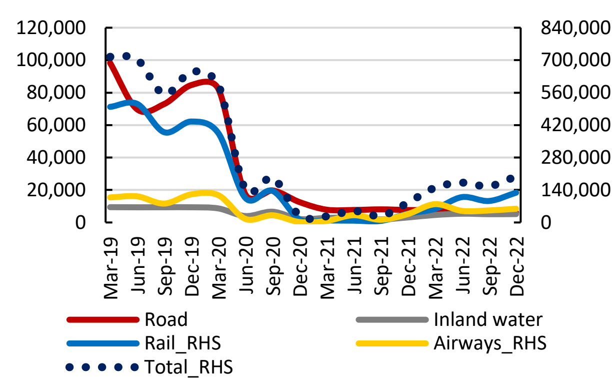
Road transport was dampened by high fuel prices, logistics constraints and roadblocks due to conflict, particularly in Sagaing, Magway, Kayin and Chin (Figure 19 and Figure 20). Trucking companies faced increased costs along conflict-prone routes due to higher road tolls and checkpoint fees, including unofficial payments (Box 1). On the other hand, passenger transport has picked up. For instance, the average daily Yangon Bus Services (YBS) passenger numbers increased to 1.4 million between November 2022 and April 2023, while remaining below its pre-pandemic level of 2.5 million in 2019. There has also been a resurgence in rail transportation following the resumption of railway services. Rail freight and passenger transport were twice as high in December 2022 compared to the same period in 2021.

Figure 19: Freight transport (ton miles)



Source: CSO

Figure 20: Passenger transport (passenger miles)

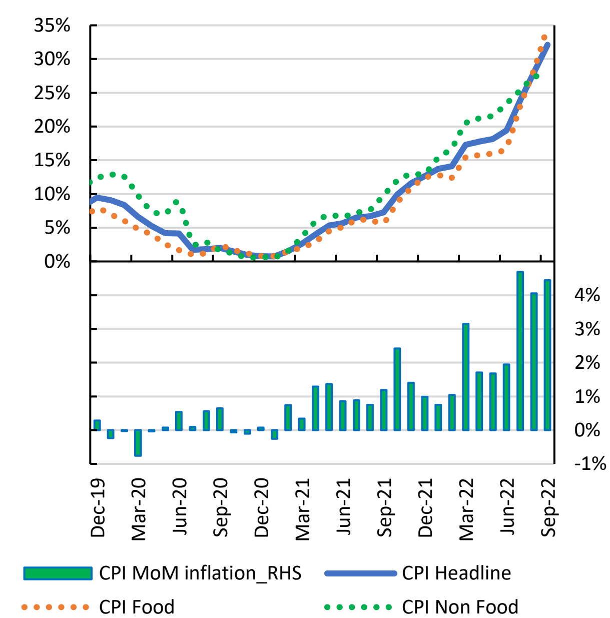


Source: CSO

C. Inflation rose sharply in 2022 and prices remain at high levels

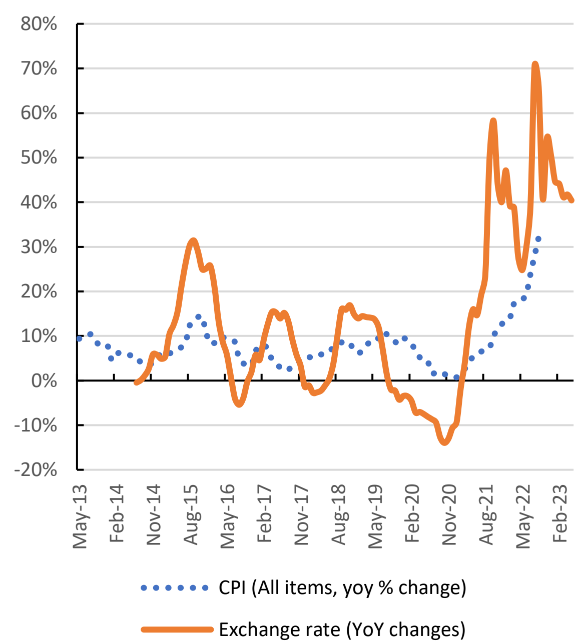
Consumer price inflation accelerated in 2022 due to the sharp exchange rate depreciation in July and August and increases in global fuel and food prices (Figure 21 and Figure 22**)**. Official data indicates that headline inflation rose to 32 percent (yoy) at end-September 2022 from 7.5 percent (yoy) at end-September 2021. Empirical analysis indicates that the exchange rate, money supply and global commodity prices are important determinants of inflation in Myanmar (see Box 4). Food price inflation rose to 35 percent (yoy) in September 2022 from 8.8 percent one year earlier, reflecting pass-through from higher global food prices and constraints on domestic agricultural production and processing, in addition to kyat depreciation. With food items accounting for about 40 percent of the CPI basket, food price inflation contributed over half of the overall increase in consumer prices in the year ended September 2022 (Figure 25). Non-food inflation increased to 27.7 percent (yoy) from 12 percent in September 2021, driven mainly by a sharp rise in transport prices, though inflationary pressures passed through across the various items in the CPI basket in 2022 (Figure 23 and Figure 24). The rise in domestic fuel prices and transportation costs reflected increased global crude oil prices, kyat depreciation, and conflict-related logistics constraints (Figure 25).

Figure 21: CPI inflation



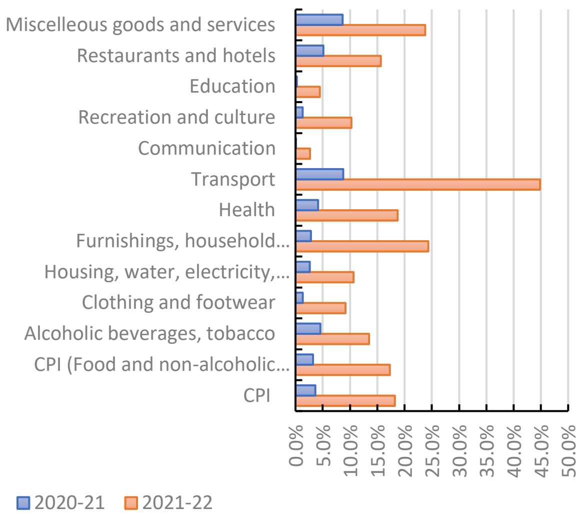
Source: CSO

Figure 22: CPI inflation (YoY) vs changes in USD/kyat exchange rate (YoY)



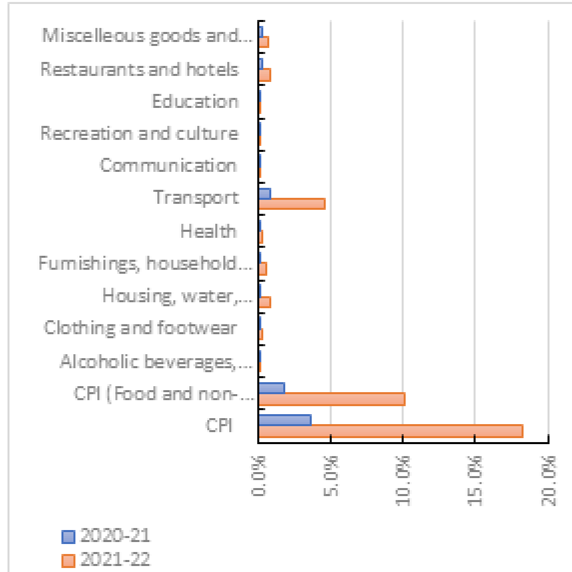
Source: CSO and money changers

Figure 23: CPI inflation (annual average) by component



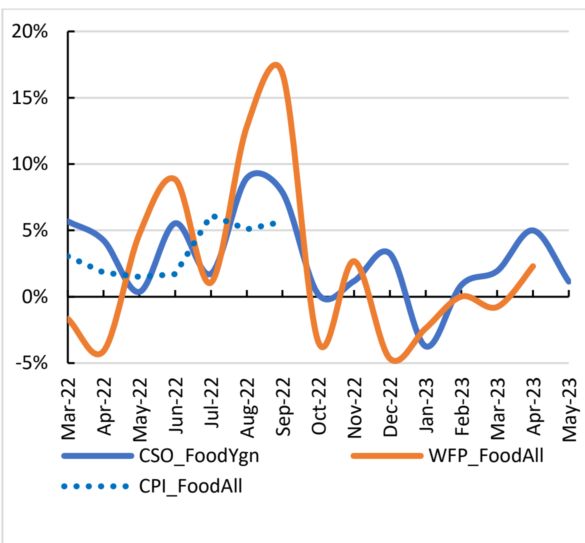
Source: CSO

Figure 24: Contribution to CPI inflation (annual average)



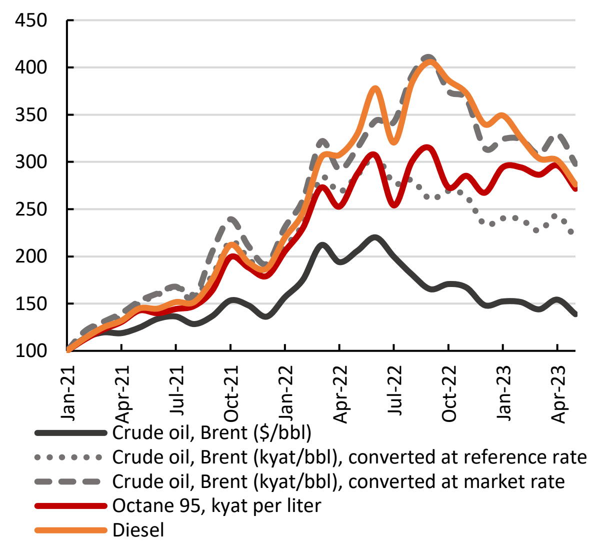
Source: CSO

Figure 25: Recent food price changes (MoM)



Source: WFP, CSO

Figure 26: Fuel price and key drivers (January 2021 = 100)



Source: World Bank commodity price, Denko

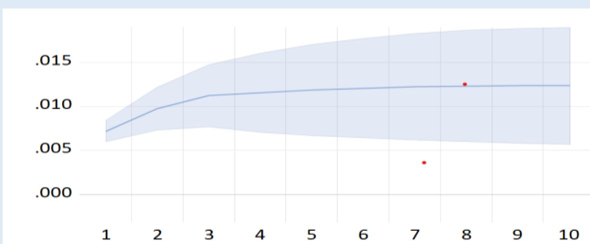
Prices remained high in 2023, though inflationary pressures have eased due to the stability in the exchange rate and declining global oil prices. The World Food Program (WFP) indicates that local prices of most staple food commodities such as rice, beans and pulses, vegetable oils and fish have stabilized since late 2022 (Figure 25). Diesel prices have declined since the middle of last year while gasoline prices have remained relatively stable after a sharp run-up in 2021 and much of 2022 (Figure 26). Nevertheless, the prices of major staple food items have remained high due to lower yields, high farm input costs, export price increases, and trade and foreign exchange constraints that have hindered the import of some food items. The Yangon Food Price Index indicated that some pressure on food prices re-emerged in the first half of 2023.

Box 4: Determinants of Inflation in Myanmar – An Empirical Analysis

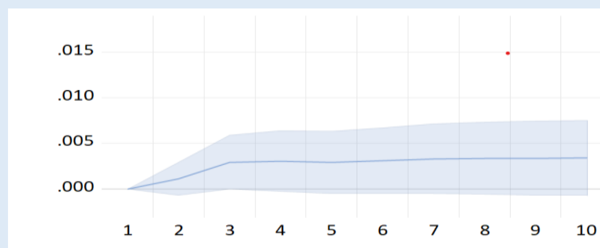
Inflation has increased sharply over the past year and a half, eroding households' purchasing power and weighed on business investment decisions. The analysis presented here is focused on answering three relevant questions for understanding the drivers of inflation in Myanmar: (i) do monetary policy decisions influence the price level? (ii) how do exchange rate movements pass through to inflation? and (iii) Is inflation demand-driven or supply-driven?

We developed a standard econometric model to answer these questions. The model assumes that the price level is determined by money supply, output (GDP), and the exchange rate. The model also includes global food and fuel prices. The model was estimated using official monthly CPI data from March 2014 to April 2021. The relationship between the price level, money supply, output, exchange rate, and import prices were investigated using vector autoregression (VAR). The VAR estimation was used to compute impulse response functions and forecast error variance decomposition. The main findings are summarized below.

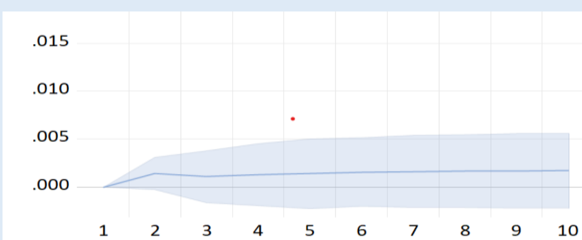
A.1 Accumulated Response of Inflation to one S.D Inflation Shock



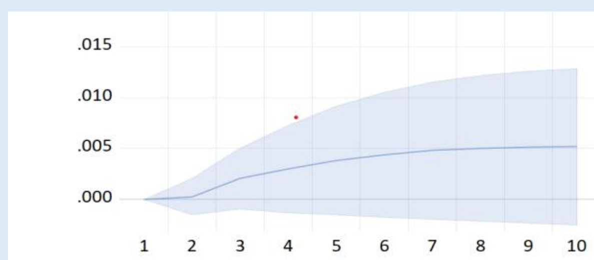
A.2 Accumulated Response of Inflation to one S.D money supply shock



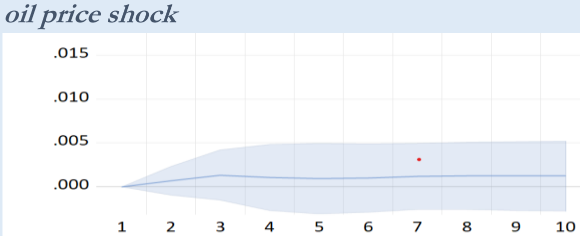
A.3 Accumulated Response of Inflation to one S.D GDP shock



A.4 Accumulated Response of Inflation to one S.D nominal exchange rate shock



A.5 Accumulated Response of Inflation to one S.D oil price shock



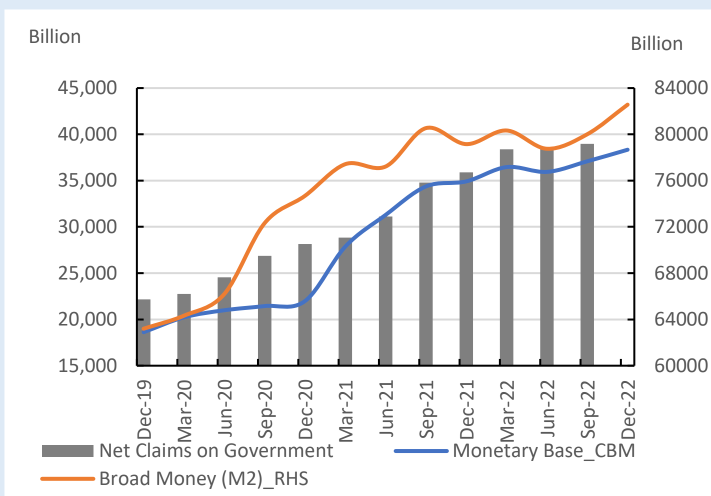
Monetary policy decisions affect the price level, suggesting that loose monetary policy could fuel price pressures. For instance, one standard deviation (SD) shock (or unit increase) to money supply increases inflation gradually and peaks at 0.30 percentage points in the third month (Figure A.2).

A strong significant passthrough from the exchange rate to inflation indicates that exchange rate depreciation contributes to higher domestic inflation. We found that a one SD shock to the exchange rate increases inflation gradually to peak at 0.50 percentage points in the fifth month (Figure A.4). Exchange rate depreciation contributes to inflation directly through its impact on the costs of imported consumer goods or indirectly through its impact on the costs of intermediate goods.

Inflation rises in response to negative oil or food price shocks. We found that a one SD shock (a unit increase in crude oil price) induces a 0.19 percentage point rise in inflation by the second month. We obtained similar results when we replaced the global crude price with the global food price.

The findings indicate that monetary policy, aggregate demand, exchange rate and global commodity prices (especially crude oil and food) play a crucial role in explaining price movements in Myanmar. The results point to an easing inflation outlook in the short to medium term given the recent exchange rate stability, flattening of global commodity prices, and weak consumption and investment. However, recent monetary financing of government budget deficits has the potential to increase inflationary pressure (Figure 27).

Figure 27: Money supply and Net claim on government (Kyat billions)



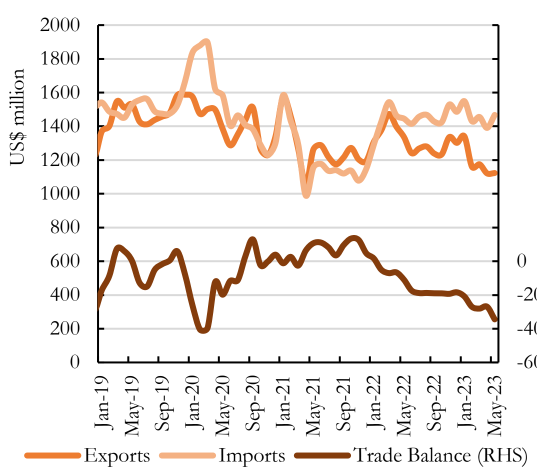
Source: CBM

D. Exports have declined while FDI remains very weak

Reflecting weaker global and regional demand, goods exports declined by 16 percent in the first five months of 2023 compared to the same period last year (Figure 28). Several other East Asia and Pacific regional peers have also experienced export declines in the first five months of 2023, indicating waning global demand (Figure 29). The decline in goods exports has been driven by a fall in manufacturing exports, which account for more than half of Myanmar exports. Compared to the same period last year, manufacturing exports declined by 11 percent in the first five months of 2023 as both garments and natural gas exports fell (Figure 30). Garments and natural gas account for about 33 percent and 23 percent of total exports, respectively. Natural gas exports to China and Thailand have declined since late 2022 (Figure 15). Although Myanmar data is only available to mid-2022, garments exports are also likely to have declined over the same period, given the reduction in import demand for garments from Myanmar's major trading partners (Figure 32). Historically, demand from major trading partners (as proxied by their total garment imports) explains about half of the variation in Myanmar's garment exports. In addition, some global brands have announced that they will stop sourcing from Myanmar.[7] Seaport data also indicates a reduction in garment exports since the peak in late 2022 (Figure 33).

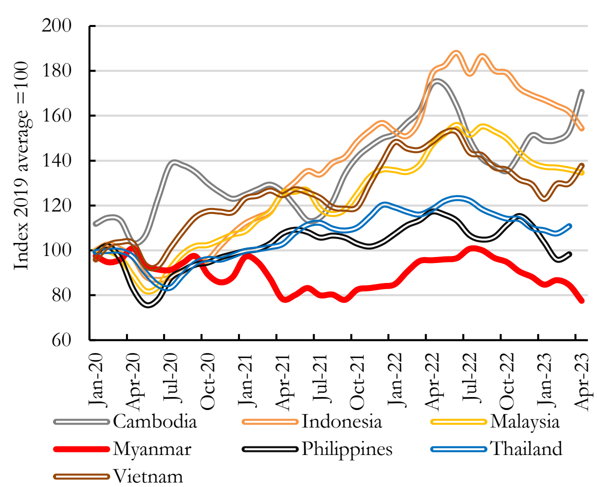
In value terms, agricultural exports also declined and were 7 percent lower in the first five months of 2023 compared to the same period last year (Figure 30). Partly due to seasonality, Myanmar rice exports increased between October 2022 and January 2023 (Figure 31) and then have trended downwards since February 2023. Reports suggest that foreign exchange surrender requirements for rice exports through the land border (effective from March 2023) and the suspension of export licenses for rice in February 2023 almost resulted in a virtual halt in rice exports to China through the land border in March 2023.

Figure 28: Trade trends



Source: Ministry of Commerce and CEIC
Note: Data reflects a 3-month moving average.

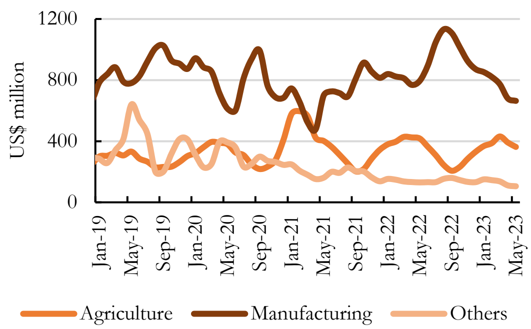
Figure 29: Good export trends of EAP countries



Source: Ministry of Commerce and CEIC
Note: Original units are in USD values. Data reflects a 3-month moving average and is seasonally adjusted.

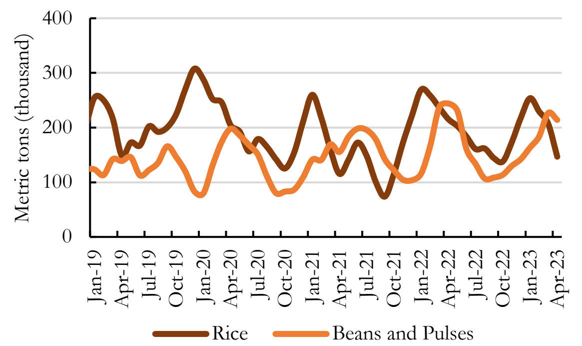
[7] Primark, Fast Retailing (owner of Uniqlo and GU brands), Ryohin Keikaku (owner of Japanese brand Muji), and Marks & Spencer have all announce that they will exit Myanmar. Fast retailing and Ryohin Keikaku will halt sourcing from Myanmar in the September 2023 quarter, which marks the end of orders for fall-winter products, while Marks & Spencer already halted sourcing in March 2023.

Figure 30: Manufacturing and agriculture export trends



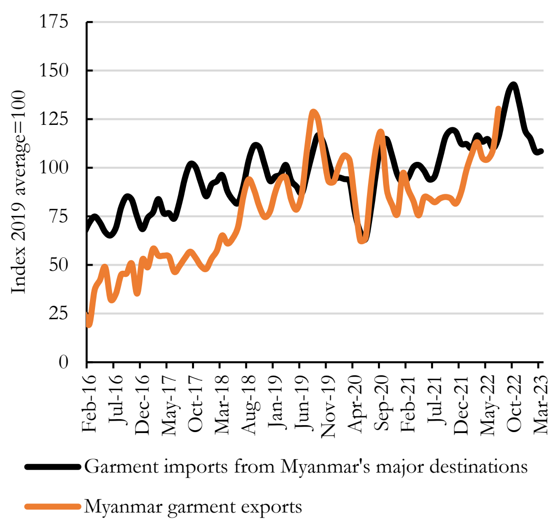
Source: CEIC and Ministry of Commerce
Note: Data reflects a 3-month moving average.

Figure 31: Major Agriculture export trend



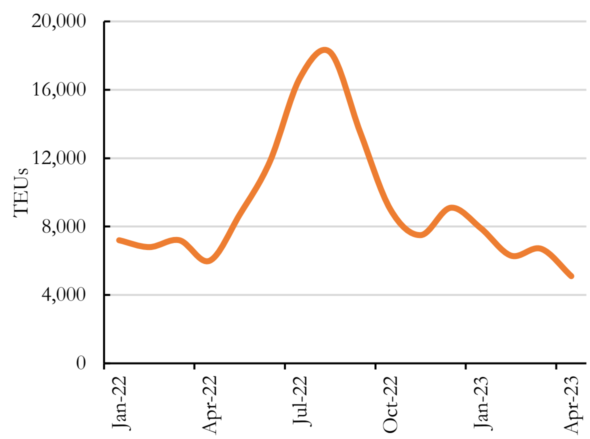
Sources: Central Statistical Organization, Ministry of Commerce, and Myanmar Rice Federation.
Note: Data reflects a 3-month moving average.

Figure 32: Myanmar garment exports and demand from Myanmar's major garment export destinations



Source: WB staff calculation using data from CEIC and the World Integrated Trade Solution (WITS)
Note: Data reflects a 3-month moving average and represents the total clothing/apparel imports of the EU, Japan, South Korea, the United Kingdom, and the United States, which account for 90 percent of Myanmar's garment exports

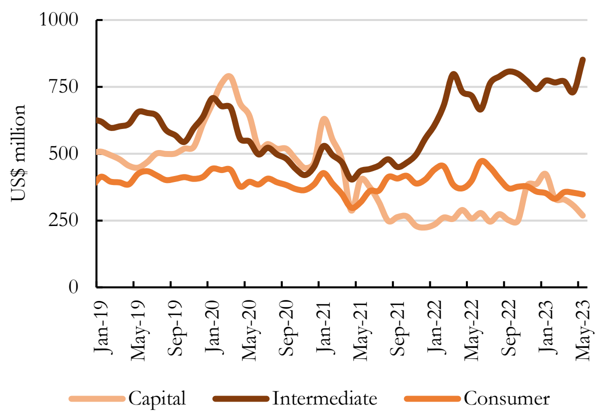
Figure 33: Garment exports via Yangon seaport (in TEUs)



Source: Shipping Operators

Despite additional import license requirements and quotas, goods imports remained stable in the first five months of 2023 (Figure 34). Intermediate imports remained relatively high due mainly to increased petroleum imports, with fuel demand increasing to offset the shortfall in electricity supply to commercial and residential units. However, cut-make-pack (CMP) imports declined reflecting the fall in garments exports due to weak global demand. After declining sharply in 2021, capital imports grew between October 2022 and January 2023 but have returned to low levels in recent months. Consumer imports remained weak, reflecting the impact of import restrictions and weak demand for consumer products. Starting June 1, 2023, all import items are subject to import licenses. In addition, importers must acquire foreign exchange through export earnings or other incomes (such as salary and remittances of Myanmar nationals working abroad) via banks to pay for the imports, while only bank transactions are allowed for imports through land borders.

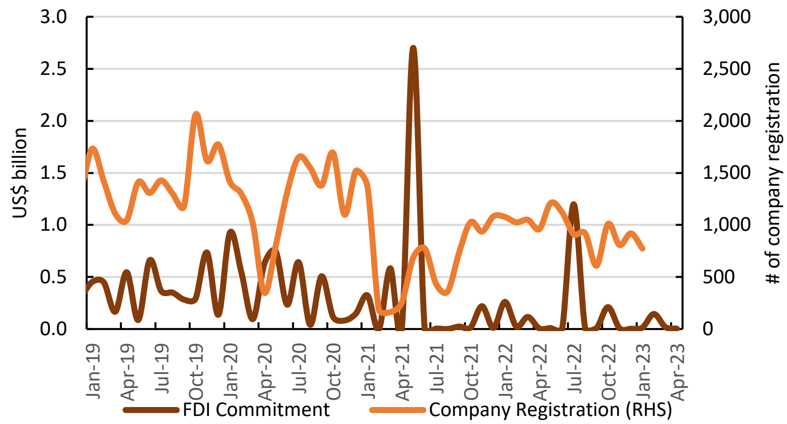
Figure 34: Major import trends



Sources: Central Statistical Organization and Ministry of Commerce
Note: Data reflects a 3-month moving average.

Foreign direct investment (FDI) commitments remained low at US$182 million in the first four months of 2023 (Figure 35), as international firms continued to exit. The service industry dominated the total FDI commitments with 50 percent (or US$91 million across three projects), followed by manufacturing (47 percent across 23 projects). Thailand was the top investor in the first four months of 2022, with 51 percent (or about US$92 million) of the total FDI commitments across two projects, followed by South Korea (with 26 percent). International firms announcing exits from Myanmar in the first four months of 2023 include American energy giant Chevron, Swiss food company Nestle, and Singaporean urban developer Keppel Land. In addition, India's Adani Group completed the sales of its port business in Myanmar in May 2023 after announcing its intention to exit from Myanmar in October 2021. Along with a downward trend of FDI commitments, the number of company registrations has remained at low levels relative to 2019 and 2020**.**

Figure 35: FDI commitments and company registrations



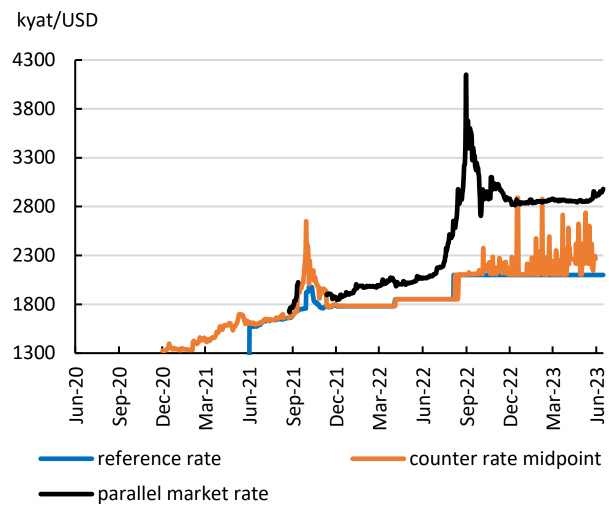
Source: Directorate of Investment and Company Administration (DICA)
Note: The number of company registration data was available only up to January 2023.

E. Market exchange rates stabilized

The parallel market rate remained stable at around MMK2,850 per US dollar between December 2022 and May 2023 (Figure 36). Despite restrictive trade policies aimed at suppressing demand for foreign currency, foreign exchange shortages have persisted. The unusual stability in the kyat/USD exchange rate suggests stringent enforcement of foreign exchange controls, with the Central Bank of Myanmar (CBM) revoking the licenses of 20 money changers (foreign exchange bureaus) due to alleged noncompliance. Since March 1, 2023, rice exporters have been required to convert 65 percent of their export earnings to kyat at the official exchange rate (other exporters were already subject to these requirements), which has remained fixed at MMK2,100 per US dollar since September 2022.

The kyat has depreciated against the US dollar in the parallel market since the beginning of June, reflecting greater demand for foreign currency to finance imports and make foreign payments. The announcement in late June of US sanctions against Myanmar Foreign Trade Bank (MFTB) and the Myanmar Investment and Commercial Bank (MICB) may contribute further to depreciation pressures to the extent that these sanctions act to limit US dollar inflows.

Figure 36: Exchange rate trends – official rates versus parallel market rate



Source: CBM and Money changers

The authorities have recently taken various steps to reduce dependence on the US dollar. On June 1, the Foreign Exchange Supervisory Committee issued a directive mandating the use of yuan for cross-border trade with China. Under the directive, traders must provide a bank statement proving they have yuan in their bank account when applying for an import license for border trade with China. The CBM is also negotiating with the Reserve Bank of India to create rupee-kyat payment and settlement mechanisms after establishing similar trading arrangements with China and Thailand. However, many traders face similar difficulties in accessing regional currencies such as the Yuan and Baht, suggesting that the effectiveness of recent measures aimed at promoting the use of these alternative currencies could be limited.

Foreign exchange transactions have grown rapidly over the past six months, reflecting the partial relaxation of forex restrictions on banks. Forex transactions increased by an average of 11 percent per month between December and May 2023 after CBM allowed banks to trade foreign exchange between each other without prior approval (Figure 37). Interbank forex transactions increased substantially, driven mainly by increased currency demand to import petroleum products. Forex transactions by bank customers declined as individuals and businesses sought alternative sources of foreign currency, including on parallel markets.

Figure 37: Quarterly US dollar transactions

Source: CBM

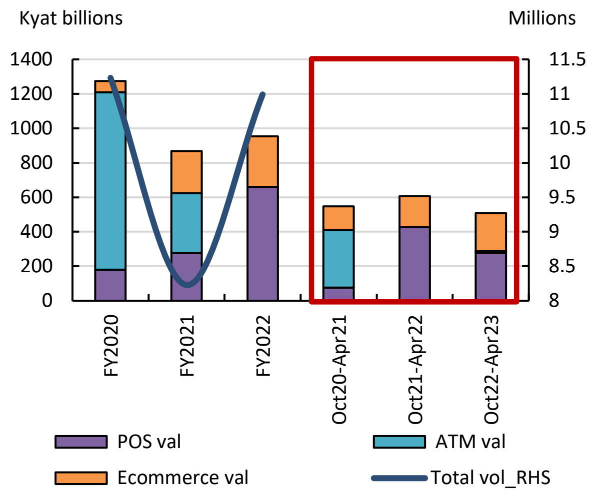
F. Financial sector developments have been mixed, with MFIs facing challenges

Monetary policy was tightened in the first half of 2023. The CBM raised the Required Reserve Ratio by 50 basis points to 3.5 percent in April while lending rates remained fixed at 10 percent. The interest rate on excess cash reserves was raised from 3.5 to 3.6 percent, while the eligible threshold for cash reserves to receive interest payments was lowered to MMK 7 billion from MMK 10 billion. The tightening of the CBM's policy stance is in line with improving kyat liquidity conditions since 2021.

Liaison with banks indicates that both private-sector credit and deposits have trended upwards. Mortgage loans have increased in line with a gradual pickup in demand for property, as access to other stores of value (such as foreign currency and gold) has been subject to restrictions. There has also been a renewed emphasis on providing credit to Micro, Small, and Medium-sized Enterprises (MSMEs). Reports from credit bureaus also suggest that bank lending has picked up gradually. Credit bureaus sold about 2000 monthly credit reports between January and March 2023, with about 40 percent of these credit reports linked to inquiries for new loans.

Digital payments declined. The value of total digital payment transactions declined by 16 percent to MMK 508 billion in the seven months to April 2023 (compared with levels a year earlier). This was due largely to a substantial decrease in point-of-sale (POS) transactions, which account for about 70 percent of total digital payments. After surging in the year ended September 2022, POS transactions fell by 35 percent in the seven months to April 2023 due in part to easing liquidity constraints and cash shortages (Figure 38). The fall in POS transactions may also indicate reduced discretionary spending by households and businesses.

Figure 38: Digital payments (volume-millions/value-kyat billions)

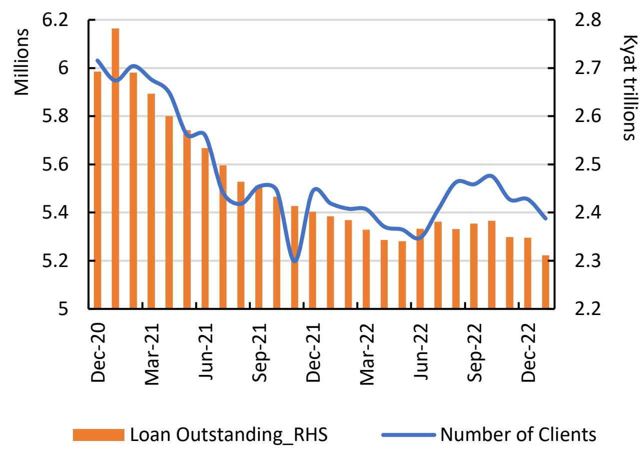


Source: Digital Financial Sector

The microfinance sector continued to face significant challenges. The total number of microfinance institutions (MFIs) fell to 180 as of end-May 2023 from 184 in May 2022. About 14 MFIs have ceased or discontinued operations since the military coup (February 2021) due to significant operational and policy challenges. At the same time, six new licenses were granted over the same period. MFIs have been adversely affected by the challenging macroeconomic environment, foreign currency conversion requirements, and the prohibition of foreign currency loans. Recent macroeconomic challenges have disproportionately impacted clients of MFIs, who often lack the financial resources to navigate and respond to shocks. The customer base and outstanding loans of MFIs have continued trending downwards since FY2021. At the end of January 2023, the total number of clients had dropped by 11 percent compared to January 2021, while total outstanding loans decreased by 17 percent over the same period. Nonperforming loans (NPLs) increased from about 9.6 percent in December 2020 to about 28 percent as of end-June 2022.[8] High NPLs have eroded the capital base of MFIs, pushing some into insolvency and further worsening the challenges in the sector.

[8] See Myanmar Microfinance Sector Evolution: MFI Health Check Survey Results, Phase II, November 2022.

Figure 39: Microfinance loans outstanding and number of borrowers



Source: Financial Regulation Department (FRD), MOPF

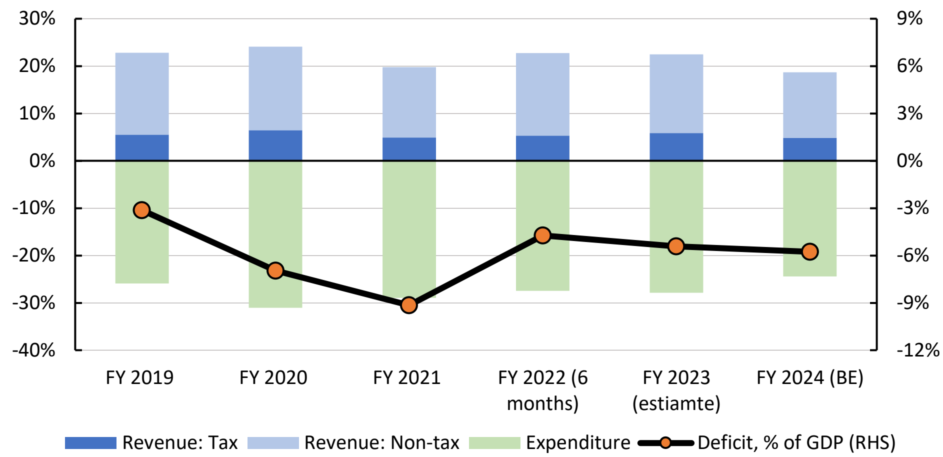
G. The fiscal deficit remains wide and reliant on CBM financing

Total revenues are expected to have remained broadly stable at 22.5 percent of GDP in FY 2023, with increased energy and tax revenues offsetting decreases in other non-tax receipts. Tax revenue is estimated to have increased to 5.8 percent of GDP in FY 2023 (year ended March), up from 5.3 percent in the six months from October 2021 to March 2022.[9] Actual data for the first three-quarters of FY2023 shows tax revenue collection equivalent to 85 percent of the budget target. This suggests that revenue for the full year will likely surpass the budgeted amount. This is largely attributed to the improved collection of commercial and income taxes. The share of firms reporting non-payment of taxes decreased to 57 percent in April 2023 from 73 percent in December 2022, likely reflecting the introduction of more stringent tax enforcement measures.[10] Increased energy revenues are partly attributable to increased prices of exported natural gas: the increased value of natural gas exports to China alone is estimated to have generated additional public revenue of as much as 1.3 percent of GDP in FY 2023.

[9] FY2022 was a six-month period from October 2022 to March 2022 following a change in the fiscal year from end-September to end-March

[10] Companies making foreign transfers or seeking import license are required to show proof of tax payment.

Figure 40: Fiscal Trends



Source: MOPF -https://www.mopf.gov.mm/; WB staff estimates.
Note: Figures are actuals (provisional or temporary) unless specified as annualized or budget estimates (BE). The FY2023 estimate is based on the actual spending and revenue reported by the authorities for the six months from April to September.

Figure 41: Tax Revenue Composition (% of GDP)

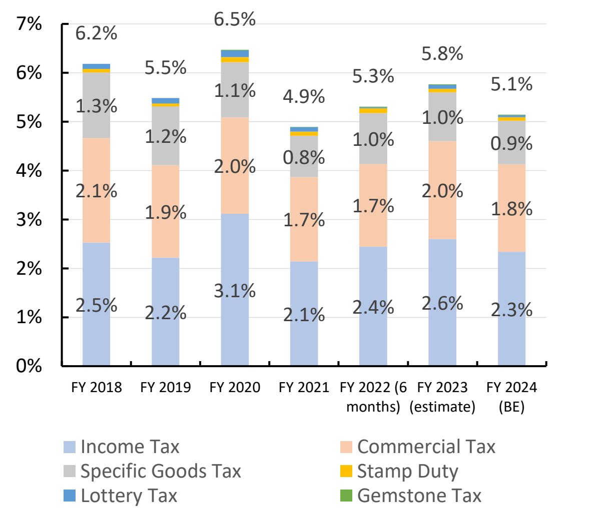
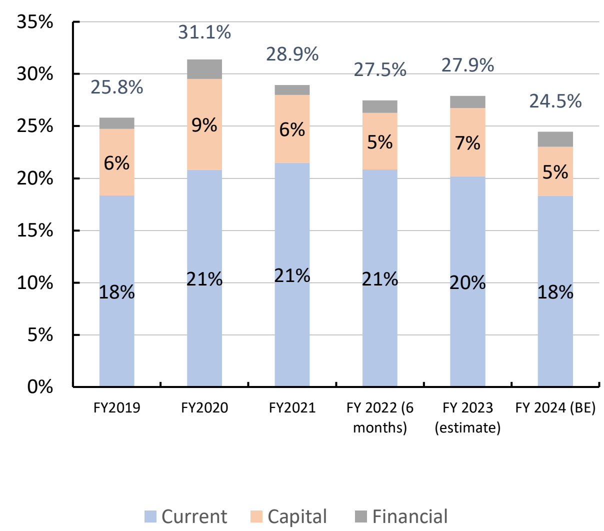


Figure 42: Expenditure Composition (% of GDP)

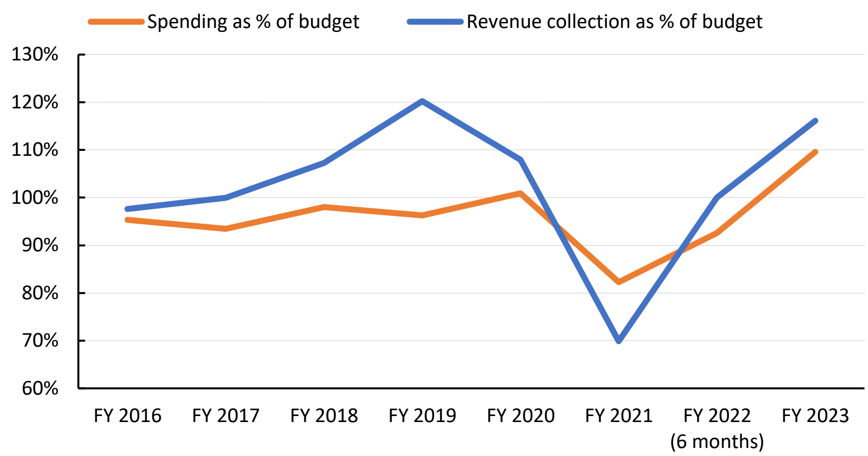


Source: CSO; MOPF -https://www.mopf.gov.mm/; WB staff estimates. Financial expenditure predominantly consists of repayment of loans (domestic and external).

Total spending increased modestly by 0.4 percentage points to 27.9 percent of GDP in FY2023. At about 9 percent of GDP, spending by SEEs remained high, with energy spending estimated to have increased due to higher international prices. Combined spending on education and health has decreased from 3.6 to about 1.8 percent of GDP between FYs 2020 and 2023, indicating a notable shift in spending priorities away from essential public services. Capital spending has declined to 21 percent of total spending from about 29 percent in FY2020 due to the pause or cancellation of several public investment projects (Figure 42).

Budget execution improved in FY2023. The available data on actuals for the first half of FY2023 shows improvement in spending and revenue execution (Figure 43). Spending is on track to exceed the FY2023 budget by about 10 percent compared to an under-spend of 7 percent in FY2022. Similarly, revenue collection is expected to exceed the budget by 16 percent, supported by improved tax collection and non-tax energy sector revenues.

Figure 43: Budget Outturn
Spending and revenue as % of the budget estimate



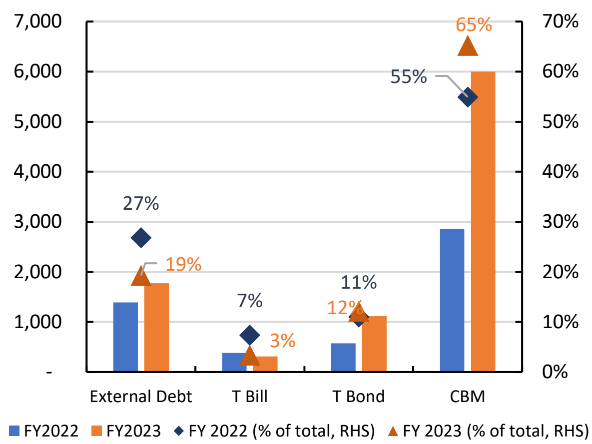
Source: https://www.mopf.gov.mm/; WB staff estimates.
Note: FY2023 are estimates based on the six-month actuals. The analysis assumes that expenditure and revenue collection in the first six months of the fiscal year is comparable to the historical average half-yearly spending and collection.

The budget deficit in FY2023 is expected to be financed largely by borrowing from the Central Bank of Myanmar (CBM). With a slight increase in spending, the deficit is estimated to have widened to 5.4 percent of GDP in FY2023 from 4.7 percent of GDP in the six months ended March 2022. In FY2023, the CBM is estimated to have financed an increased share of gross financing needs, which amount to 7.6 percent of GDP (fiscal deficit plus debt amortization and non-debt financing needs). Projections published by the authorities indicate CBM financing has risen to 65 percent of total financing, up from 55 percent in FY2022.[11] Commercial banks and non-bank public financing via government securities (T-bills and T-bonds) is projected to have decreased by about three percentage points over the same period, to 15 percent of the total. Nevertheless,

[11] Total available financing relates to the financing sources published by the CBM that include external debt, government securities and the central bank itself. The sum from these sources appears to approximate the total gross financing needs that include budget deficit and debt amortization.

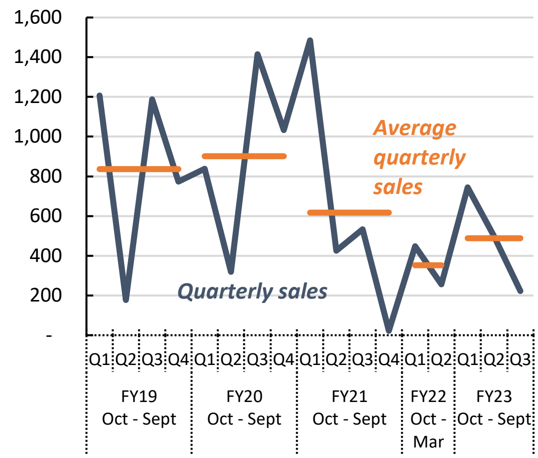
average quarterly sales of T-bonds increased to MMK488 billion in FY2023, 11 percent higher than in FY2022 (***Figure 45***).

Figure 44: Sources of financing – FY2022 and FY2023
MMK billion



Source: MOPF - https://www.mopfi.gov.mm/; Citizen's Budgets; World Bank Staff estimate

Figure 45: Sales of government securities
MMK billion



Source: CBM

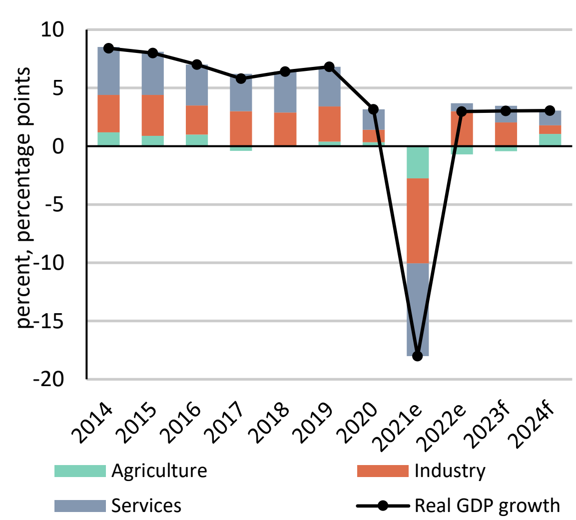
Public debt has increased since FY2019 and is estimated at 63 percent of GDP in FY2023. Total public debt to GDP is estimated to have increased by more than 20 percentage points since FY2019, driven by relatively high fiscal deficits, a significant contraction in GDP in FY2021, and exchange rate valuation effects. Nevertheless, high domestic inflation has offset the impact of FY2022 and FY 2023 budget deficits on the debt-to-GDP ratio. Domestic debt has almost doubled as a proportion of GDP over the last five years, increasing from 22 percent of GDP in FY2017 to 40 percent in FY2023, in large part reflecting the recent reliance on CBM financing. The total external debt stock stood at 23.1 percent of GDP in FY2023, 71 percent of which was held by bilateral and the remainder by multilateral creditors.

II. Outlook and Risks

GDP is projected to grow by 3 percent in the year ending in September 2023, remaining well below 2019 levels. The economic recovery continues to be weak and uneven due to persistent challenges including conflict, power outages, logistics constraints, and restrictive trade and financial policies. The aggregate forecast is in line with the projection in the January 2023 MEM, although the expected sectoral composition of growth has changed (Figure 46). We now expect a further contraction in the agriculture sector, given recent data on yields and cultivated area, as well as the impacts of Cyclone Mocha, but moderately stronger growth in the industrial and services sectors, based on firm surveys and other recent information. The absence of a more substantial rebound from the shocks hitting the economy over the past few years – with GDP still around 10 percent lower than in 2019 – is indicative of the severe supply- and demand-side constraints that continue to impede economic activity and set Myanmar apart from the rest of the region (Figure 47).

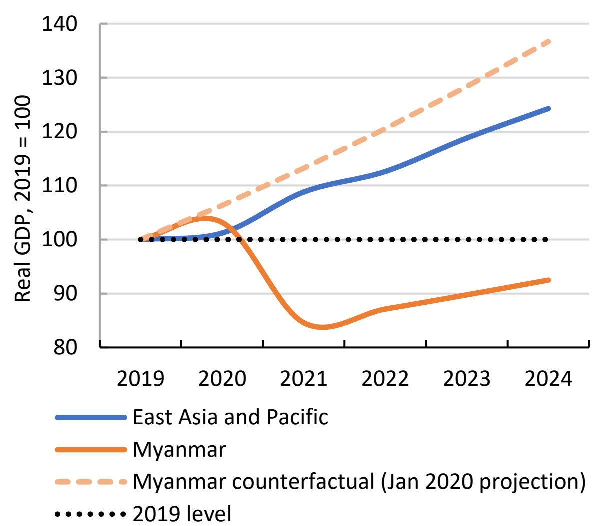
Over the next one to two years, the baseline projection is for the economy to continue expanding, but much more slowly than in the years before the pandemic. The baseline forecast assumes that the exchange rate remains broadly stable, while restrictive trade policies, electricity outages and conflict continue to constrain economic activity without worsening further. Under these circumstances, the composition of growth is likely to become more balanced across the different sectors. In agriculture, higher farmgate prices and easing pressure on input prices are expected to trigger a supply-side response in the upcoming 2023 monsoon season. Increased use of agricultural inputs—including fertilizer—will likely help reverse recent reductions in farm productivity. On the other hand, growth in the manufacturing sector is expected to ease as export demand softens and electricity shortages and supply chain constraints continue to limit production. The impact of these challenges will be partially offset by an increase in the domestic production of goods that were previously largely imported, including cement, iron rods, and cooking oil. Wholesale and retail trade is expected to gradually trend upward as consumer price inflation eases and household incomes stabilize.

Figure 46: Real GDP growth and contributions to real growth by sector (percent, percentage points)



Source: World Bank Staff

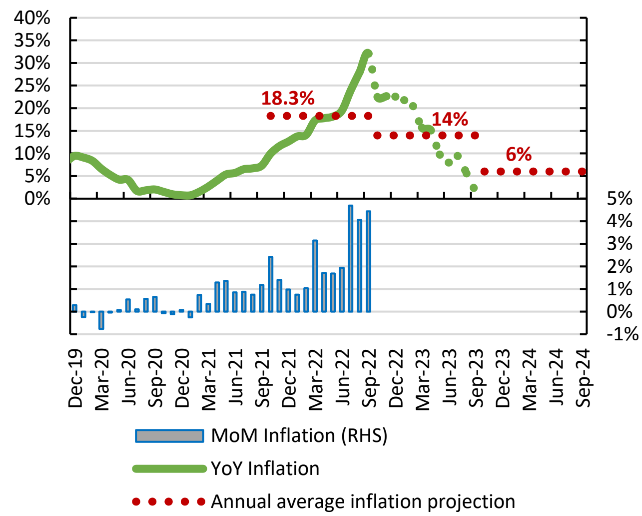
Figure 47: Real GDP estimates and projections



Source: World Bank Staff, GEP

Inflation is projected to decline. Inflationary pressures appear to have eased in early 2023 with the impacts of the sharp exchange rate depreciation in the September quarter of 2022 having mostly passed through and local food and fuel prices stabilizing or declining reflecting similar trends in global commodity prices. Absent a further shock to the exchange rate or global prices (Figure 48), year average inflation is projected to ease to 14 percent in the twelve months ending in September 2023 and decline further in the following year. But domestic supply shortages induced by trade and foreign exchange restrictions and the increased reliance on central bank financing of budget deficits are likely to keep inflation higher than it would be over the medium term. Due to the localized impacts of conflict and transport disruptions, some of Myanmar's states and regions (particularly those in the northwest) are likely to continue to be more susceptible to bouts of inflation than others.

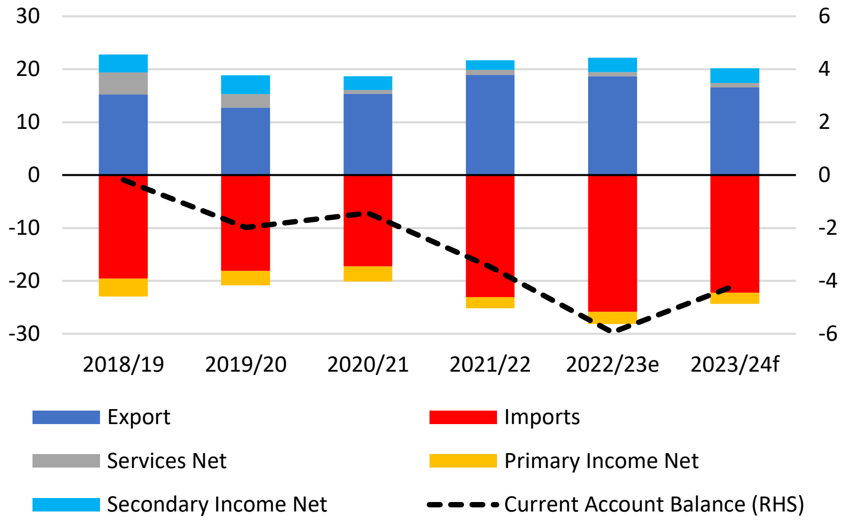
Figure 48: Inflation forecast



Source: CSO and World Bank Staff

Myanmar's current account deficit is expected to widen to almost 6 percent of GDP in the year to September 2023, up from 3.6 percent in the previous year. This is primarily due to an expansion of the merchandise trade deficit, with export receipts declining while overall imports have remained resilient. Exports are projected to remain subdued through the year ended September 2024, with global demand tepid and natural gas exports declining as production capacity falls at some fields. Services receipts will continue to be constrained by weak international tourism and transport flows, remaining well below their pre-pandemic trends. On the other hand, remittances appear to have picked up with increased outflows of people leaving Myanmar for work in other countries. Remittances have been incentivized as they are converted at a close-to-market exchange rate rather than the less favorable official rate. It is unclear how the current account deficit will be financed given weak FDI inflows, and the level and accessibility of foreign exchange reserves remains uncertain.

Figure 49: Current account
(percent of GDP)



The overall budget deficit is projected to remain high at 5.8 percent of GDP in the year to March 2024, with public debt remaining above 60 percent of GDP. The FY2024 budget projects a large reduction in expenditure and revenues. Total revenue is budgeted to drop to 18.7 percent of GDP compared to an estimated 22.5 percent in the previous year, reflecting lower tax collection and a decline in nontax revenues from SEEs. Total spending is projected to decline by 3.4 percentage points to 24.5 percent of GDP, reflecting declines in current and capital spending. Public investment is expected to decline from a peak of 9 percent of GDP in FY2020 to 5 percent of GDP in the year to March 2024, contributing to the broader weakness in capital investment. Spending on education and health combined is expected to be just 2.2 percent of GDP, equivalent to just over half of the increased allocation to defense. Total public debt is expected to remain above 60 percent of GDP after increasing rapidly from about 40 percent in FY2020 due to weaker economic activity and large fiscal deficits.

Table 1: Selected Macroeconomic Indicators (annual percent change unless indicated otherwise)

	FY18/19	FY19/20	FY20/21e	FY21/22e	FY22/23f	FY23/24f
Real GDP growth, at constant factor prices	6.8%	3.2%	-18%	3%	3%	3%
Agriculture	1.6%	1.7%	-12.5%	-3.0%	-2.0%	5.0%
Industry	8.4%	3.8%	-20.6%	8.6%	5.5%	2.0%
Services	8.4%	3.4%	-18.4%	1.6%	3.5%	3.0 %
CPI inflation, year average	8.5%	5.8%	3.6%	18.3%	14.0%	6.0%
Current account balance (% of GDP)	-0.2%	-2.0%	-1.4%	-3.3%	-5.9%	-4.7%
Fiscal balance (% of GDP)	-3.1%	-7.0%	-9.2%	-4.7%	-5.4%	-5.8%
Public debt (% of GDP)	38.7%	42.2%	60.0%	61.5%	63.1%	62.1%

The near-term economic outlook is subject to significant downside risks and uncertainties. A worsening of conflict, an additional slump in electricity generation, greater-than-expected persistence of inflationary pressure, or further deterioration in the trade and business environment could result in even lower growth. The destruction caused by Cyclone Mocha in May was an unwelcome reminder of Myanmar's ongoing vulnerability to natural disasters. Financial sector risks have increased following the Financial Action Task Force's (FATF) designation of Myanmar as a high-risk jurisdiction, the termination of US dollar clearing services for transactions from Myanmar, and the recent imposition of sanctions on two state-owned banks. These developments could potentially increase foreign currency constraints and raise the costs of trade and foreign investment, though to date banks have shown an ability to adapt to the changing environment.

Over the longer term, Myanmar's potential for strong and faster inclusive growth remains severely constrained. A continuation of growth at the current weak pace would imply that Myanmar will not return to pre-pandemic output levels until later in the decade. This would imply ongoing pressure on household incomes, which are already severely strained by the high prices of imported goods and the weak labor market, which has limited the potential for gains in employment and wages (see Part III). Lost months of education, increased unemployment, and significant emigration and internal displacement are expected to reduce already low levels of human capital and harm productive capacity over the longer term. Investment in physical capital has remained very weak over the past two years and will also drag on economic growth. And the business environment is unlikely to improve materially while electricity shortages, logistics disruptions, trade and foreign exchange restrictions and regulatory uncertainty persist.

III. Employment, incomes and coping mechanisms

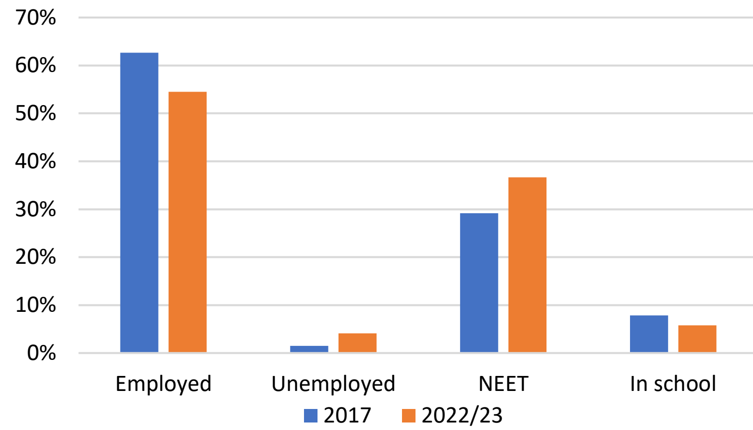
Recent shocks have significantly impacted Myanmar's employment, income levels and household welfare. The economy has been affected by multiple shocks since 2020, including the COVID-19 pandemic, the February 2021 military coup, and a sharp rise in the global prices of many commodities. This section examines the impact of these shocks on labor market outcomes (employment and earnings) and household incomes drawing on data from the first round of the Myanmar Subnational Phone Survey (MSPS), conducted between November 2022 and March 2023.[12] It begins by analyzing changes in employment at the national, subnational and sectoral levels, outlines the implied developments in labor productivity, and then turns to the effects of recent labor market weakness (coupled with sharply higher prices) on real wages and incomes. It concludes with a brief analysis of the coping mechanisms that have been deployed by households to respond to these shocks, including both internal and international migration. Much of the material is based on "*A Growing Crisis: Work, Workers and Wellbeing in Myanmar*" (Sinha Roy, Demarchi and Rhoads, 2023), which contains a more detailed analysis of changes in labor market outcomes since 2017, variation across states and regions, and key township level characteristics that have influenced workers, employment prospects, and household welfare.[13]

Employment growth has been very weak over the entire 2017 to 2022/23 period, with the dual shocks of COVID-19 and the February 2021 military coup likely to have partially reversed faster job creation in the years prior to the pandemic. While the MSPS and MLCS indicate that around 9 million people were added to Myanmar's working age (15+) population between 2017 and 2022, employment only grew by 2 million over this period, while the number of people not in employment, education or training (NEET) increased by almost 6 million (Figure 50). The employment rate fell by around nine percentage points. At the same time, the share of the NEET category increased by a similar amount to comprise nearly 40 percent of the total working-age population. The growth in employment was about 3 million jobs less than would have been the case if the employment rate had been stable over the full period.

---

[12] The MSPS is a new series of household surveys that was launched by the World Bank in November 2022 to collect household level information on household demographics, education and learning outcomes, employment and wages, prices, incomes and consumption, exposure to shocks (including conflict and electricity outages) and coping strategies. The MSPS is representative at both the national and subnational levels: the sample size exceeds 8500 households, drawn from all fifteen states and regions, and covers approximately 95 percent of Myanmar's population, ensuring that almost every demographic group in the country is proportionally represented in MSPS.12 The MSPS is comparable with other sub-nationally representative surveys in Myanmar, such as the Myanmar Living Conditions Survey (MLCS) – conducted in 2017 and the Myanmar Household Welfare Survey (MHWS) conducted by IFPRI since 2022. This means that the MSPS can facilitate analysis of changes in key household-level indicators over time, at the national and subnational levels. For more details see "*Myanmar Subnational Phone Surveys (MSPS) of the World Bank: Coverage, Reliability and Representativeness*".
[13] This report and others referenced in this special topic are available on the World Bank Myanmar Monitoring Platform: https://www.worldbank.org/en/country/myanmar/brief/monitoring. Other related reports include Bhatta, et al (2023) which uses education and learning indicators from the first and second rounds of the MSPS to take stock of learning outcomes in Myanmar. A new round of the community welfare monitoring survey, which has been following a sample of 17 rural communities across eight states and regions since 2020, was implemented in March-April 2023 to provide additional insights.

Figure 50: Changes in Myanmar labor market indicators
% of the total working-age (15+) population



While there has been significant variation in employment outcomes across states and regions, almost all have experienced a pronounced decline in the employment rate and a sharp increase in the working-age population not engaged in employment, education or training. Declines in employment rates and increases in NEET rates have been particularly marked in those states and regions known to have experienced more severe conflict and internal displacement, including Kayah, Kayin, Sagaing, and Tanintharyi (Figure 51 and Figure 52).

Figure 51: Employment rates by state and region
% of working age (15+) population

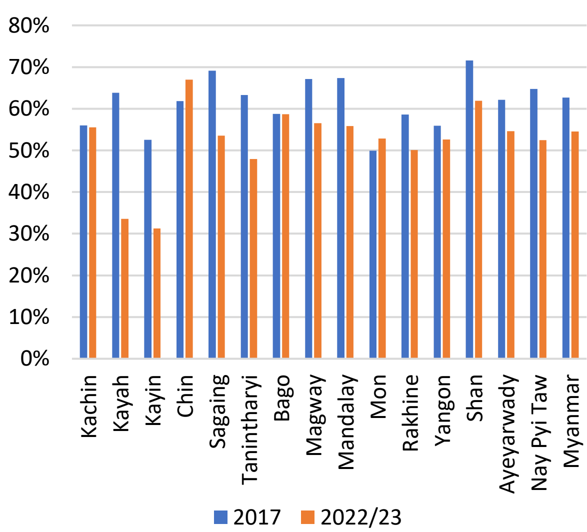
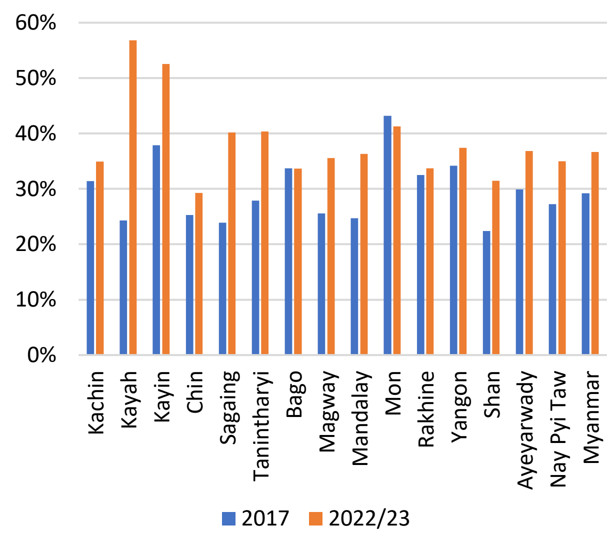


Figure 52: NEET rates by state and region
% of working age (15+) population

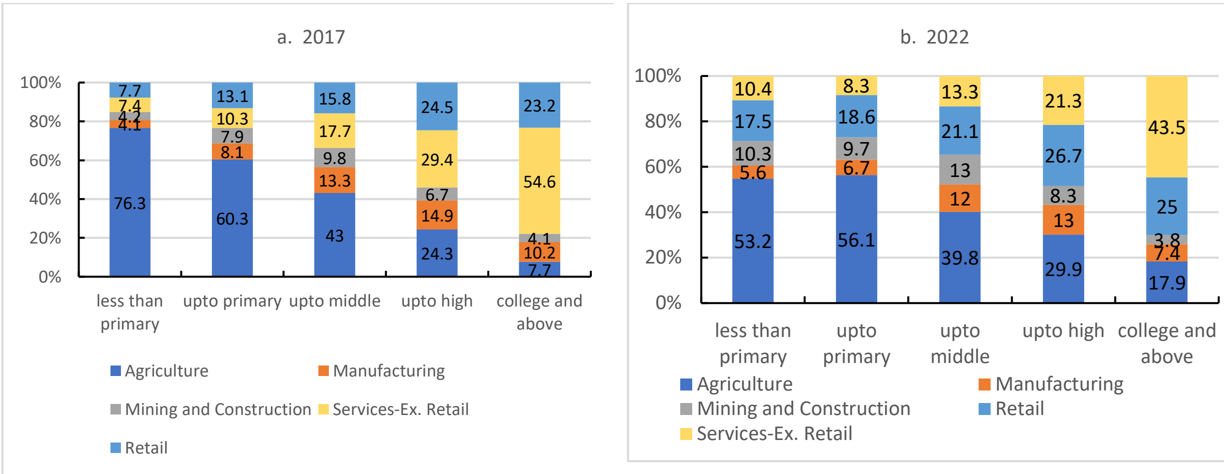


The survey data suggests that the estimated contraction in Myanmar's GDP since 2020 has been driven by a combination of weaker employment and lower labor productivity. Labor productivity has taken a hit from the issues facing workers and businesses in Myanmar, including trade, logistics, and financial sector constraints, disruptions to the business environment, elevated levels of conflict, electricity outages, and weak capital investment. But the MSPS also shows little evidence of productivity-enhancing structural transformation over the period between 2017 to 2022/23. While the share of employed workers in lower-productivity agriculture has declined by six percentage points, this has been largely offset by a shift into retail and wholesale trade, which also tend to be characterized by lower value addition (Table *2*). The share of other business services, which tend to be higher productivity, has declined. These trends are also reflected in declining shares of salaried employment, increased shares of self-employment and casual work, and a decline in the number of hours worked per week. The MSPS data also shows that more highly educated workers have been reallocated toward less productive activities over this period: the share of high school- or college-educated workers employed in agriculture increased while the share employed in non-retail services declined (Figure 53).

Table 2: Employment shares by sector (percent)

	2017	2022/23
Agriculture	49	43
Manufacturing	10	9
Construction and mining	7	10
Retail and wholesale	15	21
Other services	18	16

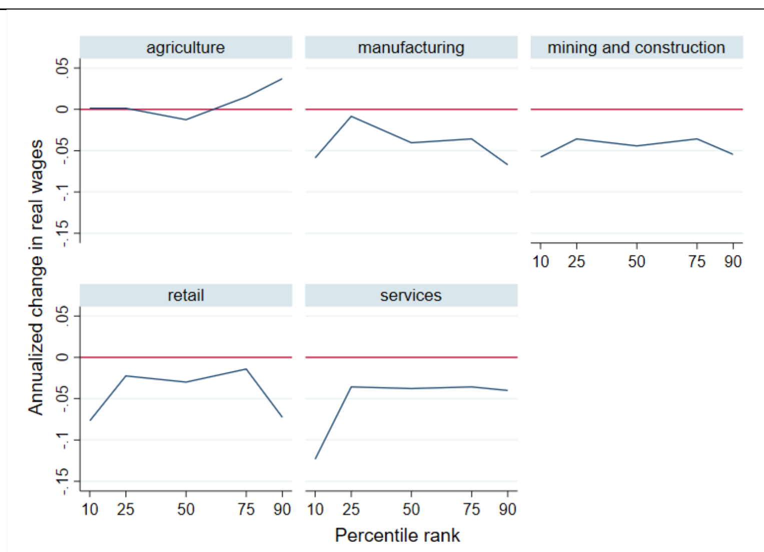
Figure 53: Employment shares by sector and education level



Source: Sinha Roy, Demarchi and Rhoads (2023)

Declining productivity and weakness in labor demand have put significant downward pressure on workers' wages. Average weekly wages for salaried workers have dropped by 15 percent in real terms between 2017 and 2022. Wages in the manufacturing, mining, construction, retail, and other services sectors have seen pronounced declines, while agriculture wages have remained more stable, potentially reflecting higher farmgate prices and profitability during the period in which the 2022/23 data were collected (Figure 54).

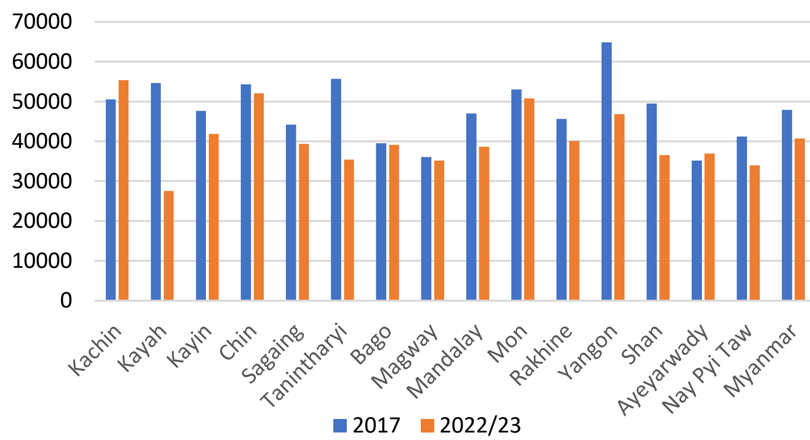
Figure 54: Changes in wage earnings between 2017 and 2022/23 by sector of employment and percentile rank of wage levels



Source: Sinha Roy, Demarchi and Rhoads (2023)

Wages have fallen in almost all states and regions, with workers' location becoming a more important determinant of how much they earn. There has been a large decline in wages for salaried workers in Yangon, while wages in Tanintharyi and Kayah have also fallen sharply. All states and regions have recorded real wage declines over the five years to 2022, with the exception of Ayeyarwady, where agriculture dominates, and the incidence of conflict has been comparatively muted (Figure 55). Analysis of the MSPS data also shows that within given states, the specific township in which workers reside became a much more important determinant of their wage in 2022 than it was previously. This reflects the increased importance of such township-level constraints to both supply and demand over the past two to three years.

Figure 55: Real wages by state and region
2022 constant kyat prices

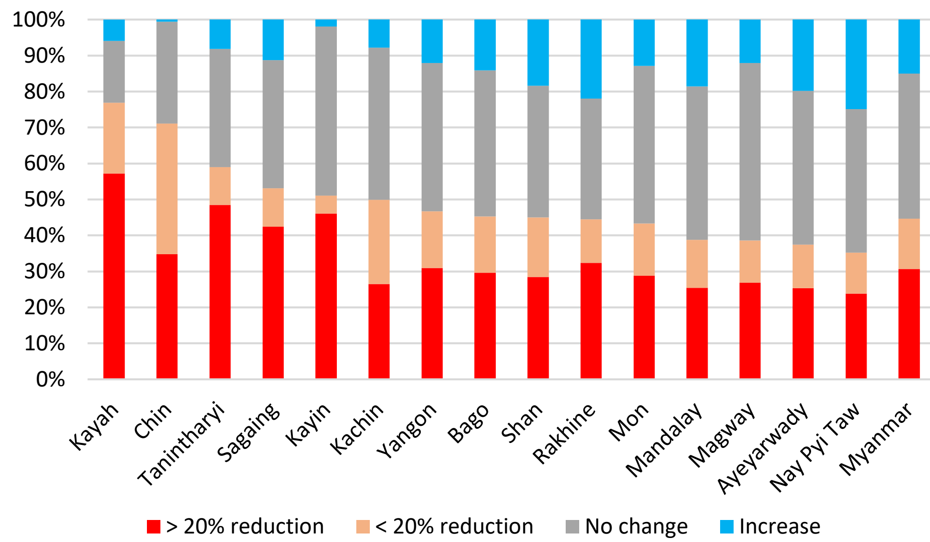


Soaring inflation since 2021 has also contributed to the lower real wages recorded by the MSPS in late 2022. Food prices – which account for about 40 percent of the overall CPI basket – rose by 34 percent over the year to September 2022, reflecting domestic food supply constraints, pass-through from high global food prices and a large depreciation of the exchange rate. Data from IFPRI's latest MHWS (December 2022) indicates even sharper increases in prices: the costs of a common and healthy diet increased by about 50 percent (yoy) at end-December 2022, while rice prices increased by 62 percent between March 2022 and February 2023.

Weaker labor market conditions – combined with the sharp rise in inflation – has translated into significant pressure on household incomes. The combination of lower employment rates, fewer hours worked, and increasing incidence of casual work and self-employment has reduced the income-earning capacity of many households. Moreover, workers who have managed to retain a more stable salaried position have received lower real wages on average for salaried workers, partly reflecting weak labor demand and lower labor productivity. The spike in prices of food, fuel and other consumer goods observed in 2022 has affected all income earners, even those who have been able to maintain or even increase their income in nominal kyat terms, but especially those households which have suffered from unemployment and/or significant reductions in nominal incomes.

Reflecting this ongoing pressure, almost half of Myanmar households as of the end of 2022/early 2023 reported a decrease in incomes over the past year, while only 15 percent reported an increase (Figure 56). This suggests that a large share of the Myanmar population has not benefitted from the modest recovery in economic activity that is estimated to have followed the sharp contraction in the year ended September 2021. While reported changes in income have varied across the country, the proportion of households experiencing decreased incomes significantly exceeds the proportion experiencing increased incomes in every state and region. The incidence of income reductions has been particularly severe in areas known to be more affected by recent conflict – including Kayah, Kayin, Tanintharyi and Sagaing – and in more remote states which are known to suffer from particularly high poverty rates and significant logistics constraints, including Chin, Rakhine, and Kachin. Existing inequalities in household welfare are likely to have been exacerbated in recent years, with many of the poorest and most vulnerable suffering the most. Regression analysis indicates that township-level factors including exposure to conflict, power outages and high fuel prices again have had a large influence on the proportion of households reporting large income losses.

Figure 56: Reported changes in income over the past year
Share of households, MSPS 2022/23



Box 5: Threats to food security from high inflation and income losses[14]

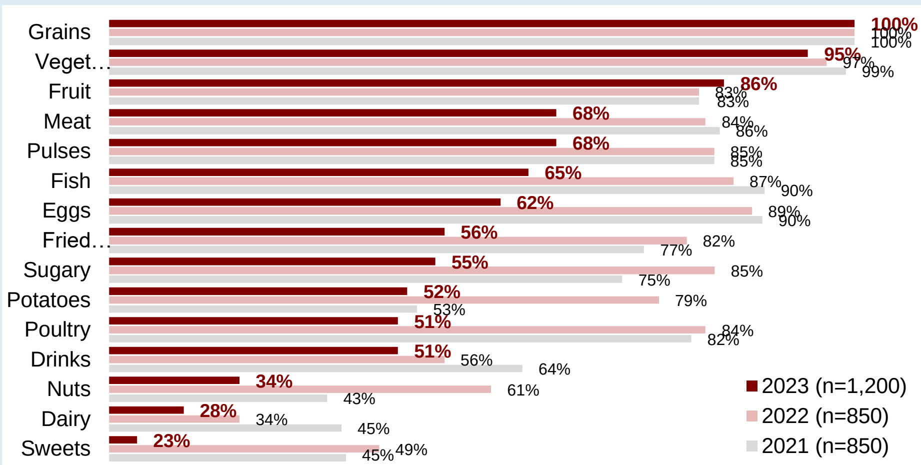
After deteriorating in 2022, food security and nutrition worsened further during the first half of 2023. According to the latest World Bank Survey of Farming Households (May 2023),[15] 48 percent of households worry about not having enough food to eat, up from about 26 percent in May 2022. Also, the latest food security and livelihood assessment report (January 2023) by FAO and WFP estimates that 27 percent of

[14] IFPRI (2023) The State of Food Security and Nutrition in Myanmar: Findings from the Myanmar Household Welfare Survey 2022, SSP Research Note 93, April.
[15] World Bank, 2023; Myanmar Food Security and Markey Survey, Round 3 by MSR (Draft).

households are food insecure while 29 percent are moderately or severely food insecure.[16] IFPRI's latest food and nutrition report (April 2023) further indicates that about 4 percent of households experienced moderate or severe hunger during October – December 2022.[17]

The quality of food consumption and diet diversity has also declined. According to IFPRI (April 2023),[18] inadequate diet diversity among adults increased from 20.6 percent in December 2021 to 25.1 percent in December 2022 with rates higher for women, especially in rural areas. The proportion of households with a low food consumption score increased from 9.4 percent to 15.7 percent over the same period.[19] Evidence from the World Bank Farm Survey also shows a remarkable drop in the consumption of nutritious food driven mainly by a decline in the consumption of milk and dairy products as well as meat, fish, and eggs (Figure 57).

Figure 57: Farm households that consumed nutritious food in the last seven days (percent)



Source: World Bank Staff estimates using data collected from the survey of farming households conducted in December 2021 (round 1), May 2022 (round 2) and May 2023 (round 3).

The deterioration of food security and nutrition could be primarily explained by high food inflation and a sharp reduction in household incomes. Official data indicates that food inflation reached 34 percent (year-on-year (yoy)) at end-September 2022 reflecting high prices of key staples including rice,

[16] FAO and WFP. 2023. Myanmar: DIEM – Data in Emergencies Monitoring brief, round 4 – Results and recommendations, January 2023. Rome, FAO. https://doi.org/10.4060/cc4015en.
[17] IFPRI (2022) The State of Food Security and Nutrition in Myanmar: Findings from the Myanmar Household Welfare Survey 2021-2022, SSP Research Note 88, December.
[18] IFPRI (2023) Dietary quality and nutrition in Myanmar: Past progress, current and future challenges, SSP Working Paper 29, February.
[19] IFPRI (2023) Monitoring the Agri-food System in Myanmar: The rising costs of diets and declining purchasing power of casual wage laborers: June 2020 – February 2023, SSP Research Note 92, April.

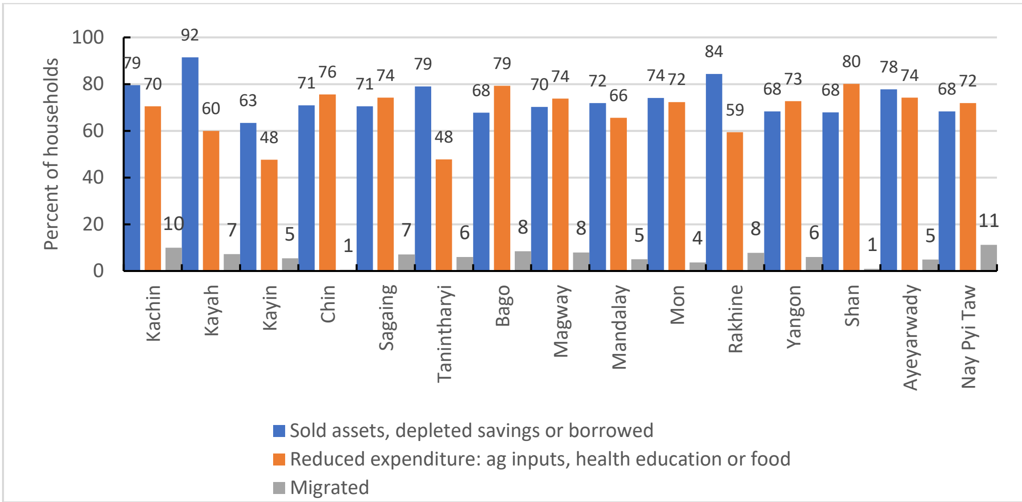
vegetables, and proteins. Data from IFPRI's latest MHWS (December 2022)[20] also show that the costs of a common and healthy diet increased by about 50 percent (yoy) at end-December 2022 while the prices for rice – the major staple – increased by 62 percent between March 2022 and February 2023. High dietary costs were disproportionately affecting households in rural areas and conflict-affected states such as those in the Dry Zone according to IFPRI. Analysis by World Bank staff also shows that food insecurity was highest for households with lower asset wealth and those that experienced deep income losses. IFPRI's Agri-food System Report (April 2023) indicates that the value of daily wages for construction and agricultural laborers declined by about 25 and 28 percent relative to the cost of common and healthy diet costs in 2022. Overall, high food prices have contributed to a reduction in real wages with many workers unable to afford the basic food bundle required for a healthy diet while households experiencing income losses and lower assets were most vulnerable to food insecurity, indicative of a deterioration of household wellbeing.

Household coping mechanisms have been stretched by the cumulative impact of these shocks on incomes, employment and prices. Across Myanmar, more than half of households have been forced to reduce their assets, increase their borrowings, and/or reduce their spending (Figure 58). Long-term migration (measured as the absence of a member for more than six months from the household unit) as a coping strategy was employed by a smaller but still significant share of households (5.8 percent across Myanmar).[21] Most migration occurred within Myanmar with fewer households reporting a member that migrated to Thailand or Malaysia. Households that migrated within Myanmar since 2021 were less likely to own assets, experienced deeper income losses and were more likely to be working than other households within the same township (Box 6).

[20] IFPRI (2023) The State of Food Security and Nutrition in Myanmar: Findings from the Myanmar Household Welfare Survey 2022, SSP Research Note 93, April.

[21] This excludes the frequent and repeated displacement that has been reported by people living in villages in states such as Magway, Sagaing, and Kayin, where villages have reported keeping bags packed with essentials in case they need to flee at a moment's notice. Displacements have been reported to last up to 30 days, with villagers often returning to the village or the fields during the day but spending the night in the forest.

Figure 58: Coping strategies across states



Source: Sinha Roy, Demarchi and Rhoads (2023)

Box 6: Evidence on migration as a coping strategy

Thirty percent of households that resorted to migration as a coping strategy had a member that relocated to another rural area within Myanmar, while 56 percent of such households had a member migrate to urban regions. International migration as a coping strategy was limited: only 7 and 4.3 percent of these households reported a member having relocated to Thailand and Malaysia, respectively. MSPS also allows us to identify households that have relocated across townships since 2021. According to UNHCR, 1.499 million people were internally displaced between February 2021 and May 2023, representing 2.6 percent of Myanmar's population and adding to the more than 300,000 people internally displaced prior to February 2021 who remain displaced. In comparison, MSPS finds that 4.1 percent of the population moved across townships in the past two years and 2.5 percent changed townships across state and regional boundaries. The share of migrants in MSPS is higher because it likely includes internally displaced populations registered with UNHCR and other migrant families.

Sinha Roy (2023) identifies considerable differences in migration patterns across states. Up to 4 percent of Mandalay, Mon and Yangon's population is observed to be migrant households that have moved townships across state/region boundaries. In contrast, states like Kayah and Kayin have limited migrants from other states/regions. Compared to others that reside in the same township and have been living in the area for more than two years, migrant households from other states/regions are less likely to own assets, tend to have experienced deeper income losses in the past year, are more likely to be undereducated, and are more likely to be employed in casual sector work.

Several of these employment and income trends are likely to damage the productive capacity of the economy, in addition to their direct impacts on welfare and inequality. Increased reliance on coping mechanisms will curtail longer-term earnings capacity to the extent that children are withdrawn from school, investments in health or agricultural inputs suffer, or productive assets are sold. The forced nature of recent migration lowers the potential for associated income and productivity gains. Moreover, there has been little evidence of productivity-enhancing structural transformation over the past few years; instead, more highly educated workers have been reallocated toward agriculture and away from higher productivity activities. More generally, the weakness in employment and increase in the number of people dropping out of the labor market altogether is likely to have a corrosive impact on human capital and labor productivity in the years ahead.

REFERENCES

Sinha Roy, S., Demarchi, G., & Rhoads, E. (2023). A Growing Crisis: Work, Workers, and Wellbeing in Myanmar.

Sinha Roy, S. (2023). Myanmar Subnational Phone Surveys (MSPS) of the World Bank: Coverage, Reliability, and Representativeness.

MYANMAR ECONOMIC MONITOR | JUNE 2023

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP
East Asia & Pacific