

# 7th Ghana Economic Update

Price Surge:
Unraveling Inflation's Toll on
Poverty and Food Securityt



# **AFRICA REGION**

# **7<sup>TH</sup> GHANA ECONOMIC UPDATE**

PRICE SURGE: Unraveling Inflation's Toll on Poverty and Food Security

June 2023

MTI

Kwabena Gyan Kwakye, Paul Andres Corral Rodas, David Elmaleh and Ashwini Rekha Sebastian

AFRICA REGION



# TABLE OF CONTENTS

| AC | CKNOWLEDGEMENTS   |    |
|----|---|----|
| AB | BBREVIATIONS AND ACRONYMS   | vi |
|    | ŒCUTIVE SUMMARY   |    |
|    | art I: Global Economic Context, Recent Economic Developments, and Outlook |    |
| 1  | GLOBAL ECONOMIC CONTEXT   | 9  |
| 2  | RECENT ECONOMIC DEVELOPMENTS  |    |
|    | Real Sector   | 17 |
|    | Fiscal Sector   | 18 |
|    | Debt Sustainability Debt Management                                       | 21 |
|    | Monetary Policy and Financial Sector Developments                         | 24 |
|    | External Sector   | 26 |
| 3  | MACROECONOMIC OUTLOOK AND RISKS   | 31 |
| 4  | POLICY PRIORITIES   | 37 |
| Pa | art II: Special Focus: Inflation, Poverty, and Food Insecurity            |    |
| 1  | BACKGROUND  |    |
| 2  | DISAGGREGATING INFLATION-POVERTY IMPACT CHANNELS DURING 2022              | 47 |
| 3  | SIMULATING PRICE IMPACTS ON POVERTY                                       | 53 |
| 4  | THE IMPACTS OF FOOD PRICES ON FOOD INSECURITY                             | 61 |
| 5  | CONCLUSIONS   | 67 |
| RE | EFERENCES   | 71 |
| ΔN | INEX  | 72 |

# **ACKNOWLEDGEMENTS**

his report was prepared by Kwabena Gyan Kwakye (Economist and Task Team Leader), Paul Andres Corral Rodas (Senior Economist), David Elmaleh (Senior Economist) and Ashwini Rekha Sebastian (Senior Agriculture Economist). It benefitted from inputs from Samuel Kofi Tetteh (Consultant), Tharcisse Guedegbe (Consultant), Carlos Leonardo Vincente (Senior Financial Sector Economist), Anna Twum (Young Professional, EAWM2) and Theo Braimah Awanzam (Consultant). Kennedy Fosu (External Affairs Officer) provided guidance on public outreach. Abebe Adugna (Regional Director for Africa West and Central), Pierre Laporte (Country Director for Ghana), Sandeep Mahajan (Practice Manager, Macroeconomics, Trade & Investment Global Practice), Johan A. Mistiaen (Practice Manager, Poverty GP),

Chakib Jenane (Practice Manager, Agriculture and Food GP), Aurélien Kruse (Lead Economist), and Agata Pawlowska (Operations Manager for Ghana), provided overall guidance. The report benefitted from administrative support from Pinar Baydar (Operations Analyst), Gregoria Dawson-Amoah and (Program Assistant), Irene Sitienei (Program Assistant). The peer reviewers were Alexandru Cojocaru (Senior Economist, EPVGE), Kishan Weditha Namanayaka Abeygunawardana (Senior Economist, ESAC1) and Florian Michael Blum (Senior Economist, EECM2).

A special thanks to Ghana Statistical Service for assistance with the Annual Household Income and Expenditure Survey data. Without the team's assistance the special section of this report would not have been possible.

# ABBREVIATIONS AND ACRONYMS

| AfDB    | African Development Bank                  | FSSF    | Financial Sector Stability Fund        |
|---------|---|---------|--|
| AHIES   | Annual Household Income and               | FSNMS   | Food Security and Nutrition System     |
|         | Expenditure Survey                        | FX      | Foreign Exchange                       |
| BoG     | Bank of Ghana                             | GDP     | Gross Domestic Product                 |
| BoP     | Balance of Payment                        | GEP     | Global Economic Prospects              |
| BOP     | Balance of Payment                        | GFN     | Gross Financing Needs                  |
| CAD     | Current Account Deficit                   | GHIPSS  | Ghana Interbank Payment and Settlement |
| CAPEX   | Capital Expenditures                      |         | Systems Limited                        |
| CAR     | Capital Adequacy Ratio                    | GIFMIS  | Ghana Integrated Financial Management  |
| CCDR    | Country Climate and Development Report    |         | Information System                     |
| CH      | Cadre Harmonise                           | GIPC    | Ghana Investment Promotion Centre      |
| COCOBOD | Cocoa Marketing Board                     | GP      | Global Practice                        |
| COICOP  | Classification of Individual Consumption  | GLSS    | Ghana Living Standards Survey          |
|         | According to Purpose                      | GoG     | Government of Ghana                    |
| CPIA    | Country Policy and Institutional          | GRA     | Ghana Revenue Authority                |
|         | Assessment                                | GSS     | Ghana Statistical Service              |
| CPI     | Consumer Price Index                      | IDA     | International Development Agency       |
| CST     | Communications Service Tax                | IFPRI   | International Food Policy Research     |
| DDEP    | Domestic Debt Exchange Programme          |         | Institute                              |
| DPO     | <b>Development Policy Operation</b>       | IMF     | International Monetary Fund            |
| DSA     | Debt Sustainability Analysis              | IPC     | Integrated Food Security Phase         |
| EA      | Environmental assessment                  |         | Classification                         |
| EAP     | East Asia and Pacific                     | ITAS    | Integrated Tax Administration          |
| ECA     | Europe and Central Asia                   | LIC DSF | Low-Income Countries Debt              |
| ECF     | Extended Credit Facility                  |         | Sustainability Framework               |
| ECOWAS  | <b>Economic Community of West African</b> | LEAP    | Livelihood Empowerment Against Poverty |
|         | States                                    | MDAs    | Ministries, Departments and Agencies   |
| EMDE    | <b>Emerging Market and Developing</b>     | MNA     | Middle East and North Africa           |
|         | Economies'                                | MPR     | Monetary Policy Rate                   |
| ESRP    | Energy Sector Recovery Program            | MTDS    | Medium Term Debt Strategy              |
| FAO     | Food and Agriculture Organization         | NDA     | Net Domestic Assets                    |
| FDI     | Foreign Direct Investment                 | NFA     | Net Foreign Assets                     |
| FRS     | Fiscal Risk Statement                     | NFSL    | National Fiscal Stabilization Levy     |
|         |   |         |  |

# **EXECUTIVE SUMMARY**

## Part I: Recent Economic Developments and Outlook

Ghana's economy entered a full-blown crisis in 2022, after having rebounded from the COVID-19 slowdown in 2021. The year 2022 was marked by a negative feedback loop of currency depreciation, rising inflation, and tumbling domestic investor confidence. Pre-existing fiscal vulnerabilities (a mounting debt burden, a rigid budget marred by high energy sector costs, COVID-related spending pressures, and chronically low public revenues) were compounded by difficult global conditions. Faced with these challenges, the authorities failed to implement significant and sustainable reforms that would have been required to restore debt and fiscal sustainability. Overall growth for 2022 came in at 3.1 percent, down significantly from the 5.4 percent recorded in 2021 (and below our 2022 Annual Meetings projection of 3.5 percent). In 2022, currency depreciation and high inflation drove up the cost of living, putting considerable stress on household budgets, particularly for the poor who devote more than half of their budget to food. Headline inflation accelerated to 54.1 percent (y-o-y) in December 2022, up from 12.6 percent the year before, reaching a 20 year high. In early 2023, y-o-y inflation slowed down for four consecutive months, reaching 41.1 percent in April 2023, before rising again modestly in May to 42.2 percent.

In response to the macroeconomic challenges, the authorities enacted some fiscal adjustment in 2022 but fell short of their consolidation targets; the 2023Q1 fiscal deficit (cash) was within target. The fiscal deficit (commitment basis) for 2022 reached 11 percent of GDP, well above the target of 6.3 percent. The slippage is attributable to revenue underperformance and higher expenditures. Without access to international capital markets, the authorities had to rely heavily on monetary financing and a considerable accumulation of payables in 2022. Monetary financing through the Bank of Ghana (BoG) overdraft facility reached over 7.2 percent of GDP in 2022. Provisional BoG data for 2023Q1 shows that fiscal deficit (cash basis) was 0.8 percent of GDP below the target of 2.3 percent, attributed to a delayed release of "expenditure allotments" which led to delays in spending (notably goods and services, and capital). The cash deficit was financed mainly from domestic sources. The corresponding primary balance (on cash basis) for the period was a deficit of 0.1 percent of GDP, lower than the target deficit 0.6 percent of GDP.

Expenditure consolidation and revenue mobilization continued to be hampered by structural constraints. The government continued to face elevated mandatory expenditures, leaving little room for discretionary spending and limiting the scope for consolidation. The government was unable to enforce large across-the-board expenditure cuts as ministries, departments, and agencies (MDAs) made expenditure commitments beyond their budgetary allocations. Meanwhile, public financial management (PFM) weaknesses and financing constraints contributed to arrears accumulation, even as the government attempted to clear existing ones. Domestic revenue mobilization remained low, hindered by widespread tax exemptions and weak compliance, resulting in Ghana having one of the lowest tax-to-GDP ratios among its peers, at an estimated 13 percent in 2022, compared to an SSA average of 17.5 percent. The budget's

<sup>&</sup>lt;sup>1</sup> The government had attempted to circumvent budget rigidities by passing the Earmarked Funds Capping and Realignment Act in 2017, which imposed a ceiling (of 25 percent of tax revenue) on statutory funds transfers, but gains have fallen short of estimates. The authorities have announced that they would further lower the ceiling to 17.5 percent.

flagship revenue measure – the electronic levy (e-levy) – fell short of its target by over 90 percent due to an impractical design and implementation delays. Recently, the authorities have ramped up efforts in revenue mobilization by passing the Tax Exemptions Bill which provides a framework for overseeing tax exemptions.

To address these unsustainable domestic and external imbalances, the authorities embarked on a comprehensive debt restructuring operation. On February 21, 2022, the government completed its Domestic Debt Exchange Program (DDEP) with the swap of outstanding medium- and long-term domestic bonds. 85 percent of the face value of bonds held by investors other than pension funds was exchanged in the DDE, equivalent to 28 percent of all outstanding domestic debt (which includes, among others, nonmarketable debt, verified arrears, and Cocobills), for lower-coupon and longer maturity bonds. The government has, further, reached an agreement with banks to exchange domestic debt denominated in US dollars and Cocobills issued by Cocobod. Further, the government is embarking on external debt restructuring following an announcement of moratorium on all official bilateral and commercial debt repayments and requested debt treatment under the G20 Common Framework to the Paris Club

Ghana negotiated a three-year arrangement under an IMF-supported Extended Credit Facility (ECF) program of about US\$3 billion, which was approved by the IMF board on May 17, 2023. The Fund program is expected to help restore macroeconomic stability and debt sustainability² while protecting the vulnerable, preserving financial stability, and laying the foundation for a strong and inclusive recovery. The authorities have demonstrated their commitment to reform by adopting an ambitious 2023 budget, including significant energy and water tariff adjustments. They have also embarked on a comprehensive (external and domestic) debt restructuring program. This includes a moratorium on external debt repayments, an application to the G20 Common Framework, and the completion (in February 2023) of the Domestic Debt Exchange Program (DDEP) that resulted in the extension of the maturities and the reduction in the cost of the bulk of domestic bonds.

Against the backdrop, growth is projected to decelerate further in 2023–24, before picking up in the medium-term. Growth is expected to slow further to 1.5 percent in 2023 and remain muted in 2024 at 2.8 percent. Macroeconomic instability, deleveraging in the financial sector and corrective fiscal and monetary policies are expected to dampen aggregate demand and slow down non-extractive GDP growth. High inflation, elevated interest rates, and macroeconomic uncertainties will keep private consumption and investment growth below pre-pandemic levels, leading to muted non-extractive growth. Extractives will be relatively resilient and support growth, with the opening of large new gold mines and a recovery in small scale gold mining activities, as well as a planned expansion in oil and gas production. On the supply side, agricultural growth will remain modest because of high input prices and a disease outbreak affecting cocoa output, while services growth will be impacted by the erosion in the purchasing power of consumers. Growth will begin to recover to its potential by 2025 as the drag from fiscal consolidation fades out, the macroeconomy stabilizes, structural reforms start bearing fruit and consumer and business confidence recovers.

The government has embarked on an ambitious fiscal consolidation plan: however, delivering on it will require addressing long-standing revenue mobilization and budget control weaknesses. The government's 2023 budget, with the overarching goal of "resetting the economy and restoring macroeconomic stability,", sets forth an ambitious medium term fiscal consolidation plan comprising both expenditure and revenue measures. The 2023 budget contains tax measures expected to yield 1 percent of GDP in additional revenues in 2023. In addition, the authorities aim

<sup>&</sup>lt;sup>2</sup> The latest IMF/World Bank Joint DSA published in May 2023 concluded that Ghana is in "debt distress, and debt is assessed as unsustainable" with large, protracted breaches to the DSA thresholds. According to the baseline projections, the ratios of present values of public debt and external debt to GDP, and the ratios of external debt service to revenues and exports, are and would remain above their thresholds over the medium and long term. Debt service-to-revenue stood at 117.6 percent in 2022 as Eurobond spreads were well over 3,500 bps.

to tackle structural PFM challenges and rationalize public expenditures, leading to a potential reduction of expenditures by about 2 percent of GDP in 2023. By 2025, the authorities are aiming for a 1.5 percent of GDP primary surplus (on a commitment basis), through an increase in revenues from an estimated 16.8 percent of GDP in 2023 to 17.8 percent in 2025, while keeping expenditures at an average of 24.7 percent of GDP.

In 2023, the authorities intend to finance the fiscal deficit from multilateral (and other official) sources, in the context of the IMF-supported program, and from the domestic treasury bills (T-bills) market. The local bond market (securities with maturity beyond 1 year) is closed, following the domestic debt exchange program, and Ghana has lost access to the international capital market since 2021. It is assumed that the country will not regain access to the market within the medium term. Gross financing needs are estimated at 17.6 percent of GDP. The disbursements under the IMF-supported program and other multilaterals would partly substitute for funds from domestic T-bills market.

Ghana's balance of payment is expected to further deteriorate in 2023, on the back of continued capital outflows and a growing current account deficit, before recovering in the-medium term. In 2022, the current account deficit declined on the back of higher commodity exports. The deficit, along with large portfolio outflows and large external debt-service, put pressure on reserves, as Ghana lost access to the international market while FDI dwindled. Improvements in the trade balance will primarily come from higher oil production. The current account deficit is projected to average 2.7 percent of GDP over the next five years. In 2023, FDI will remain relatively low at 2 percent GDP, while net outflows in portfolio will also be low at 0.5 percent of GDP (due to the comprehensive debt restructuring). Beyond 2023 (i.e., 2024–2027), the capital and financial account is expected to record a net inflow of 1.4 percent of GDP per year on average, as FDI increases on account of reforms aimed at improving the business sentiment.<sup>3</sup> External disbursements over the medium term are likely to be limited to the World Bank, the IMF, and AfDB. The BOP deficit is expected to peak at 5.7 percent of GDP in 2023, before declining to and average deficit of 1.2 percent in 2024–2027.

Spillovers from a prolonged war in Ukraine, a more pronounced slowdown and/or a sharper-than-expected monetary policy tightening in the advanced economies, or a slower recovery in China could cause negative external demand shocks, worsening of trade value-chains, financial disruptions, and commodity price volatility. The domestic debt restructuring has deteriorated financial institutions' capital positions, and, combined with increasing non-performing loans (NPLs), could adversely affect banks' capacity to lend, dampening credit to the private sector and slowing economic activity. Additional contingent liabilities in the energy and financial sectors could result in additional financing needs and undermine the fiscal consolidation program. Finally, public discontent and social tensions could delay reform implementation and the 2024 elections could cause domestic policy inertia.

In addition to managing the immediate macroeconomic crisis, the authorities would be well served by enacting structural reforms to tackle its root causes, boost economic growth, and build economic resilience:

- First, Ghana needs to **sustainably collect more domestic revenue**, notably by streamlining tax incentive regimes and improving revenue administration. The 2022 Tax Exemption Bill would need to be steadfastly implemented, and the report on tax expenditure presented to Parliament as soon as possible. Also, GRA needs to accelerate efforts to make better use of taxpayer information through the on-going data warehouse and business intelligence initiative to improve analytical reporting, tax-auditing, and compliance.
- Ghana could implement tighter expenditure controls to improve budget execution accuracy and prevent new arrears accumulation. Implementation of the arrears clearance plan and reinforcement of expenditure controls in entities

<sup>&</sup>lt;sup>3</sup> This is also in the context that there will be no portfolio inflows due to the continued loss of international market access and freeze in the domestic bond market.

- already fully implementing the GIFMIS would be important, as would extensive rollout of the GIFMIS infrastructure (both institutionally and geographically) to generalize adequate expenditure controls.
- The government needs to fully **address the energy sector's revenue shortfall**. Financial shortfalls in the energy sector continue to jeopardize fiscal sustainability. The government would have to extend, expand, and thoroughly implement the Energy Sector Recovery Programme. The government should also make provisions in the budget to ensure full payment of power consumption by MDAs.
- Improving the **management and monitoring of SOEs** would help improve their financial viability thus minimizing fiscal risks to the government. The State Interest and Government Authority (SIGA) would need to be empowered to monitor the key performance indicators (KPIs) adopted by SOEs and evaluate their operational and financial risks. Going forward, Authorities must promote transparency and ensure that power is procured through competitive procedures: this can be achieved through the issuance of implementing guidelines by the Authorities.
- Rebuilding **financial sector capital buffers** will promote financial stability and development. Based on recently published audited financial statements, the DDEP has eroded banks' capital buffers and some banks are undercapitalized or insolvent. In this context, the authorities could expedite the implementation of their Financial Stability Fund (FSF) announced in December 2022, focusing on the provision of solvency support. The Fund could be anchored on a comprehensive Costed Financial Sector Stability Plan, which sets a uniform and forward-looking baseline of DDEP losses that have materialized or are likely to materialize, defines the criteria for the prioritization of government support, and articulates sound governance arrangements for government support.
- Government will have to boost the inflow of FDI by enhancing the investment climate through improvements in transparency, accessibility and quality of business regulation and regulatory governance. The government could encourage private investments, by eliminating impediments to FDI inflows such as the minimum capital requirements to foreign investors through the amendment of the GIPC Act [865, 2013]. Furthermore, the Authorities could support better corporate governance practices and a more efficient regulatory environment for companies by through the adopting the implementation regulations of the Companies Act [Act 1078].
- On climate change adaptability, the authorities could draw on the recommendations of the World Bank's new core diagnostic tool, the Country Climate and Development Report (CCDR) to prioritize investments starting from no-regret actions that maximize resilience benefits at an affordable cost. The implement actions to foster climate change adaptation and mitigation, including expediting actions to amend the existing Environmental Assessment (EA) Regulations. The Authorities should also enhance the existing legal framework through the passage of a dedicated framework law on climate change to consider i) measures for the operationalization of carbon markets (ownership of carbon rights, their trading, benefit sharing etc.); (ii) measures and institutional arrangements to ensure the coherent planning and implementation (MRV systems) of Ghana's climate change goals and policies.

# Part II: Special Focus: Impact of Inflation on Food Security

High inflation has had devastating effects on food security and poverty in Ghana. Average prices for all Classification of Individual Consumption According to Purpose (COICOP) categories experienced a stark increase in 2022 compared to 2021. While non-food inflation was very high (29 percent on average in 2022), food prices increased even more (by 34 percent on average in 2022). The poor, who are at near subsistence levels, devote a larger share of their budget to food, and are thus, affected proportionally more than the non-poor by higher food prices.

The inflation experienced by Ghanaian households has eroded their purchasing power, leading to deterioration in living standards. The minimum wage in Ghana increased by 10 percent in 2022, causing real incomes of minimum-wage workers to drop by nearly 44 percent and their average purchasing power by 15.7 percent over the year.<sup>4</sup> As is expected, but with limited variability across quintiles, the poorest 20 percent of the population lost 16.1 percent of their purchasing power to inflation in 2022, while the richest 20 percent lost 15.5 percent of their purchasing power to inflation in 2022.<sup>5</sup> The rich lost more purchasing power in absolute terms but less as a share of their total expenditure, which implies inflation being less burdensome on better-off households.

Ultimately, increased prices exacerbated poverty and food insecurity in Ghana. Simulations suggest that in 2022 nearly 850 thousand Ghanaians were pushed into poverty due to rising prices and the loss in purchasing power. Simultaneously, the food security situation in the country is believed to have worsened considerably. Compared to the last quarter of 2021, the number of food insecure<sup>6</sup> Ghanaians jumped from 560,000 to 823,000 individuals in the last quarter of 2022. As food prices climbed, many Ghanaians struggled to procure food that meets their dietary needs and food preferences for an active and healthy life – in terms of food access, availability, and utilization.<sup>7</sup> This heightened food insecurity: by the last quarter of 2022, one quarter of the population was deemed food insecure,<sup>8</sup> and the rate is expected to persist well into 2023.

To mitigate the impact of inflation on food security, policymakers must enable farmers to adjust to global demand and take advantage of market opportunities. Policies should be evidence based and aimed at alleviating the different constraints farmers face. Policies and programs may seek to address market failures in agricultural value chains and improve agricultural productivity as well as enhance market access for farmers to help improve domestic food security, reduce import dependency for staples, increase commercialization, and reduce inputs costs. Specifically, the following policy options are recommended:

- Channel high investments in agriculture, including research, development, and technology transfer, to help increase productivity, reduce production costs, and improve the quality and safety of food.
- Promote access to credit which can help farmers and food producers invest in their activities, expand their businesses, and increase their competitiveness.
- Promote diversification of income sources which is essential to better cope with shocks, while improvement in connectivity and access to markets can help households take advantage of a greater number of opportunities.
- Foster trade to improve the availability and affordability of food by reducing barriers to trade, promoting regional integration, and increasing market transparency.
- Reduce market distortions such as subsidies, taxes, and price controls can improve market efficiency and reduce food waste.
- As the effects of climate change becomes more salient, it is also essential that the government invests in climate smart agriculture initiatives which can help farmers adapt to changing weather patterns. Promoting a sustainable agriculture, which is resilient to climate change, can help farmers withstand future shocks that could affect food prices.

<sup>&</sup>lt;sup>4</sup> The impact of inflation on welfare is simulated by relying on the first quarter of the Annual Household Income and Expenditure Survey (AHIES) of 2022, collected by Ghana's Statistical Service.

<sup>&</sup>lt;sup>5</sup> This assumes nominal income remains constant. In the short-run this is plausible as incomes may rise with a lag.

<sup>&</sup>lt;sup>6</sup> In phase 3 (crisis) or phase 4 (emergency).

A definition of food security and its dimensions: https://www.fao.org/fileadmin/templates/faoitaly/documents/pdf/pdf\_Food\_Security\_Cocept\_Note.pdf

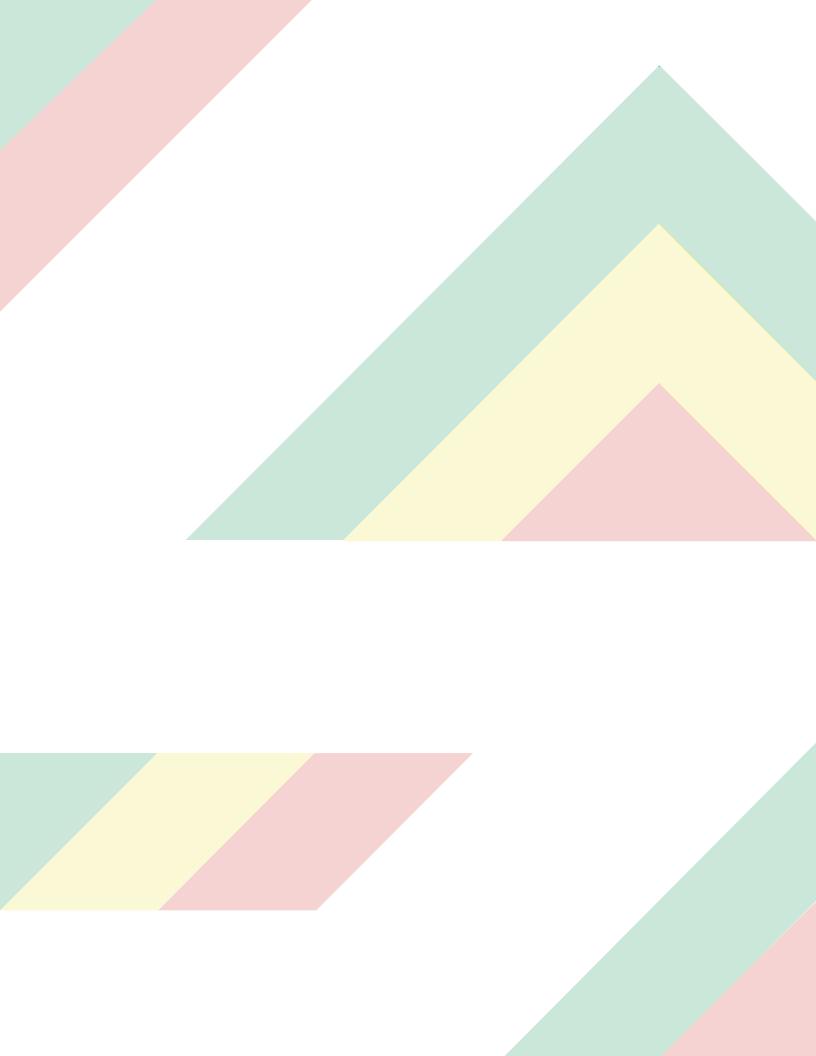
 $<sup>^{\</sup>rm 8}\,$  Cadre Harmonisé, December 2022.

- Allocate more resources towards developing infrastructure in rural areas, such as building better roads, irrigation channels, and improving primary education. These improvements can aid in the adoption of more profitable crops and higher yielding varieties.
- Finally, government should enhance social protection programs such as food vouchers, cash transfers, and school feeding programs to help vulnerable households access sufficient and nutritious food during times of high food prices.

In addition, leveraging government programs to build up resilience against vulnerability is an imperative and should not be suspended during the crisis. Beefing up the government's payments through the Livelihood Empowerment Against Poverty would be critical. Second, support for food self-sufficiency is needed in Ghana (a goal for many countries now due to the global food crisis), while opening the country to generate more export revenues. The Ghana Food Systems Resilience Program can contribute to supporting the objectives of building economic and climate resilience, increasing food production, and reducing food insecurity. The program is also intended to support some of the objectives of the government's flagship Planting for Food and Jobs (PFJ) through provision of critical inputs like fertilizer that are currently at unaffordable levels. The Ghana Tree Crops Diversification Project can serve as a critical puzzle piece of the country's current challenges. The project would support poverty alleviation while setting the country up to generate more foreign revenues in the medium to long-term.

# **PART I**

# GLOBAL ECONOMIC CONTEXT, RECENT ECONOMIC DEVELOPMENTS, AND OUTLOOK



# GLOBAL ECONOMIC CONTEXT

# Global and Regional Context9

The world economy is at a very difficult juncture and there are fears that it risks falling into a recession. This has been the result of overlapping negative shocks of the pandemic, the Russian Federation's invasion of Ukraine as well as the rapid and synchronous monetary policy tightening around the world, including across advanced economies (figure 1.1). Although necessary for price stability, it has contributed to a significant tightening of global financial conditions, and a substantial drag on economic activity. This is compounding the long-term effects of the adverse shocks of the past three years that have led to substantial losses, particularly for Emerging Market and Developing Economies' (EMDE) investment and output. These losses could grow larger if downside scenarios materialize. In many EMDEs, inflation is either accelerating once again or has stabilized at high levels, but a protracted period of high inflation could be especially challenging for EMDEs, where inflation expectations are generally less stable than in advanced economies and more influenced by current inflation rates (figure 1.2).

Soaring food prices have worsened food insecurity and increased the number of people affected by hunger (figure 1.3-4). Russia's invasion of Ukraine led to disruptions in exports of key food commodities, which exacerbated food price inflation in many poor and vulnerable countries, with exchange rate depreciation adding pressure on domestic prices. High food prices have increased food insecurity, including for children, which could lower long-term productivity as malnutrition early in life can permanently impair learning abilities. In

The pandemic-related deterioration in fiscal positions lingered in 2022, with government debt remaining above 60 percent of GDP in almost half of economies in Sub-Saharan Africa (SSA). Fiscal space has narrowed considerably, and concerns over debt sustainability in many countries have risen. This is because global financial conditions have made it more difficult to service debt burdens that have accumulated rapidly in recent years, particularly during the pandemic. Fiscal challenges in EMDEs have become more acute, as reflected in a drop in bond issuances. However, rising global prices of energy and metals have led to varying fiscal dynamics across the region. On average, among SSA's oil-producing countries,

addition to trade disruption, rising violence and adverse weather events have led to more disruptions, especially in farming, deepening food insecurity and heightening famine risks in several Low-Income Countries. Climate change may further increase food insecurity in regions with large numbers of subsistence farmers that lack the resources to adjust production. In the case of Ghana, food production is directly affected by climate change while food supply from the northern borders is threatened by conflicts in the Sahel region. Rising food prices, even if temporary, can cause long term damage to education, health, and income. 10 In the SSA, elevated costs of living across—partly reflecting the effects of last year's rise in global food and energy prices—have severely worsened the economic hardship of the poor and sharply increased food insecurity. Moreover, in several countries, prolonged droughts (East Africa) and armed conflicts have compounded these effects. As a result, the region entered this year with nearly 180 million people in acute food insecurity—35 million more than at the start of 2022.11

<sup>&</sup>lt;sup>9</sup> This section is adapted from the World Bank Global Economic Prospects (GEP) January 2023 and June 2023 versions, World Bank Commodity Markets Outlook April 2023 and the IMF World Economic Outlook, April 2023.

<sup>10</sup> World Bank, 2023a.

<sup>11</sup> World Food Program, 2023.

government debt fell by nearly 10 percent of GDP, thanks to fiscal surpluses and stronger exchange rates. In contrast, debt sustainability and investor sentiment deteriorated further in many other countries. Credit spreads widened markedly in several countries, including Ghana and Zambia (figure 1.2), with capital outflows, credit rating downgrades, and large currency depreciations in Ghana and Nigeria. Financing deficits also became increasingly challenging, with international bond issuance by some governments in the region stalling in the second half of last year.

Global growth is projected to decelerate to 2.1 percent in 2023 from 3.1 percent in 2022 amid continued monetary policy tightening to rein in high inflation, before a tepid recovery in 2024, to 2.4 percent. The pace of growth would be the third weakest in nearly three decades, only next to the episodes of global recessions caused by the pandemic in 2020 and the global financial crisis in 2009 (figure 1.7). Growth in advanced economies is set to decelerate substantially for 2023, to 0.7 percent, and to remain feeble in 2024, due to monetary tightening, less favorable credit conditions, softening labor markets, and still-high energy prices. In EMDEs, aggregate growth is projected to edge up to 4 percent in 2023, almost entirely due to a rebound in China following the removal of strict pandemic-related mobility restrictions. Excluding China, growth in EMDEs is set to slow substantially to 2.9 percent this year. Projections for 2023 growth in countries with more pronounced macroeconomic policy vulnerabilities, as reflected by lower credit ratings, have fallen by more than half over the past year (figure 1.8). The Euro area GDP grew by 0.3 percent at an annualized rate, reflecting lower energy prices, easing supply bottlenecks, and fiscal policy support for firms and households. Reversing the impact of the negative shocks experienced in recent past and better preparing vulnerable groups for future crises will require structural reforms that bolster long term growth prospects. This will involve policies that boost investment and human capital development, as well as those that buttress resilience and crisis preparedness, especially in agriculture and food systems. Global trade is also expected to slow sharply alongside global growth, despite support from a continued recovery in services trade. Downgrades to growth projections mean that global activity is now expected to fall even further below its pre-pandemic trend over the forecast horizon, with EMDEs accounting for most of the shortfall from trend (figure 1.9-10).

In Sub-Saharan Africa (SSA), growth will further slow to 3.2 percent in 2023 from an estimated 3.4 percent in 2022, reflecting various country-specific challenges and heightened external economic headwinds. While many economies across the region are still coping with repercussions of earlier adverse economic and climate shocks, recoveries have slowed due to weaker external demand, further tightening of global financial conditions and domestic policy tightening. Food price increases, which accounted for more than half of overall inflation, pushed average inflation in SSA to 13 percent—almost three times above its pre-pandemic rate. 12 Pandemic-related deteriorations in fiscal positions lingered in 2022, with government debt remaining above 60 percent of GDP in almost half of SSA economies as diverging global prices of energy and metals led to varying fiscal dynamics across the region. Debt sustainability and investor sentiment deteriorated further in many SSA countries, leading to rising borrowing costs as credit spreads widened markedly in several countries, such as in Ghana and Zambia. Over 60 percent of countries in SSA are already in, or at high risk of, debt distress. Capital flows to SSA are expected to remain weak amid sharply increased credit risks.

The slowing growth, persisting high inflation and tightening financial conditions amid high levels of debt increase the risk of stagflation, financial strains,

Annual inflation in some countries surpassed 30 percent (Ghana, Rwanda) with food price inflation exceeding 20 percent in over a quarter of all SSA economies. Currency depreciation resulting from unfavorable terms-of-trade shocks, the loss of foreign exchange reserves, capital outflows, and elevated debt levels exacerbated inflationary pressures (Ethiopia, Ghana, Malawi).

continued fiscal pressures, and weak investment in many countries. In addition to the risks around monetary tightening and global financial conditions, several other developments could worsen the trajectory of the global economy. First, the collapse of multiple banks this year highlights the possibility of more disorderly failures, which could lead to systemic banking crises and protracted economic losses. <sup>13</sup> In addition, higher or more persistent inflation—especially, more persistent core inflation—could trigger further monetary tightening. In the longer term, the slowdown in the fundamental drivers of growth may be exacerbated by trade fragmentation and climate change.

Ghana benefited from high export commodities prices for most of 2022, but prices declined at the end of the year and have remained weak in the first half of 2023; this may lead to revision of benchmark oil prices as for the 2023 Budget. The prices of crude oil, <sup>14</sup> gold, and cocoa remained elevated in 2022, helping lift the trade balance. However, commodity prices have declined sharply over the past six months. The World Bank commodity price index declined by 32 percent from its historic peak in June 2022, the sharpest drop since the COVID-19 pandemic started. As a result, the price surges

that followed the Russian Federation's invasion of Ukraine have largely been unwound due to a combination of slowing global economic activity, favorable winter weather, and the redirection of trade of key commodity exports from Russia and Ukraine. The Brent Crude oil price is 35 percent below its recent record high in June 2022, despite experiencing volatility in March 2023 and are projected to average \$80/ bbl in 2023, a \$8/bbl downward revision from the January forecast,15 and to edge up to \$82/bbl in 2024, reflecting a modest pickup in demand.16 The average price of gold remained at its all-time high at 2,000 (\$/troy oz) in 2022 as global demand for gold increased in the context of high inflation (Figure 1.6).17 The price of gold increased by 9 percent in 2023Q1 because of a weakening dollar, continued geopolitical uncertainty related to the war in Ukraine, and persistently high inflation.<sup>18</sup> Going forward, after rising by 45 percent in 2022, commodity prices are expected to fall by 21 percent in 2023 and remain stable in 2024. The expected price decline in 2023 would be the steepest since the pandemic. Gold prices are expected to average \$1,900 per troy ounce in 2023—6 percent higher than in 2022 but could decline in 2024 as the global economy begins to recover gradually and inflationary pressures recede.

<sup>13</sup> These failures could be triggered by rising non-performing loans, lower asset values impairing balance sheets, and losses from the heavily leveraged commercial real estate sector.

<sup>&</sup>lt;sup>14</sup> Ghana is a marginal net exporter of oil and gas: 2022 BoG data indicates that oil and gas imports amounted to US\$4.63 billion compared to crude oil exports of US\$5.43 billion, resulting in a net export of US\$0.8 billion for in 2022.

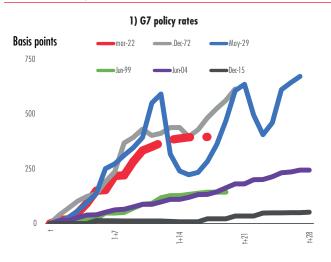
<sup>15</sup> This may result in lower revenue receipts from corporate income tax and participation interests from oil as the benchmark prices projections used in the 2023 fiscal framework was U\$\$88.55/bbl.

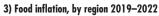
<sup>&</sup>lt;sup>16</sup> World Bank 2023b and World Bank 2023c.

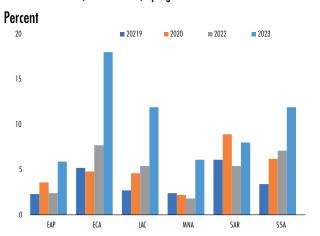
<sup>17</sup> Gold acts as a hedge against inflation. A rise in inflation or inflationary expectations increases investors' interest in purchasing gold and, therefore, drives up its price.

<sup>18</sup> The price of Gold peaked at 2,000 (\$/troy oz ) in April and marginally declined to 1,992 (\$/troy oz ) in May 2023 (still higher than prices in the past two-and-half years ago – since September 2020).

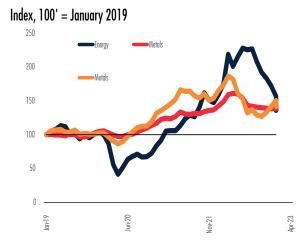
FIGURE 1: Developments in the Real Sector (Global Context)



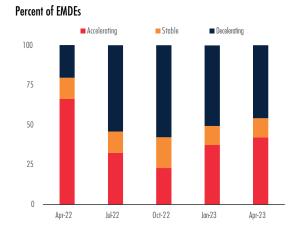




5) Commodity Prices 2019-2022

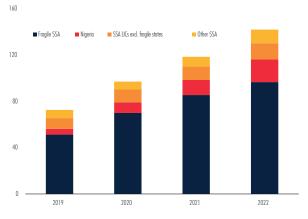


2) Inflation momentum in EMDEs (Apr 2022–Apr 2023)



4) Food insecurity in SSA 2019–2022





6) Monthly precious metals prices Jan 22-Mar 23

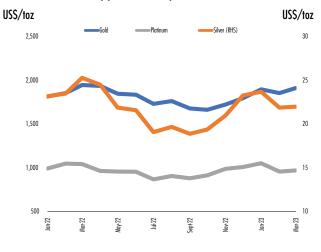
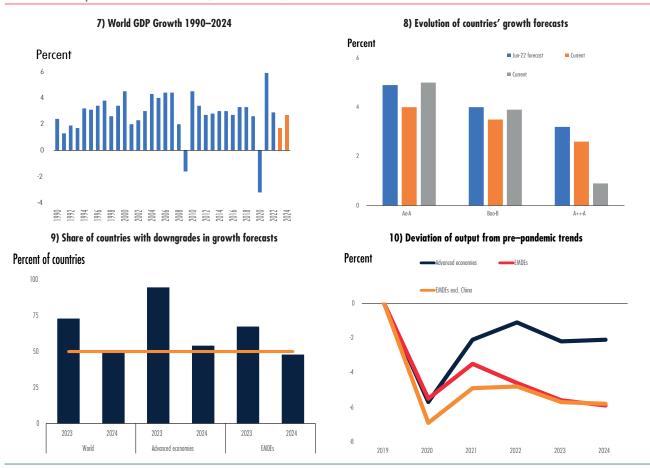


FIGURE 1: Developments in the Real Sector (Global Context) (continued)

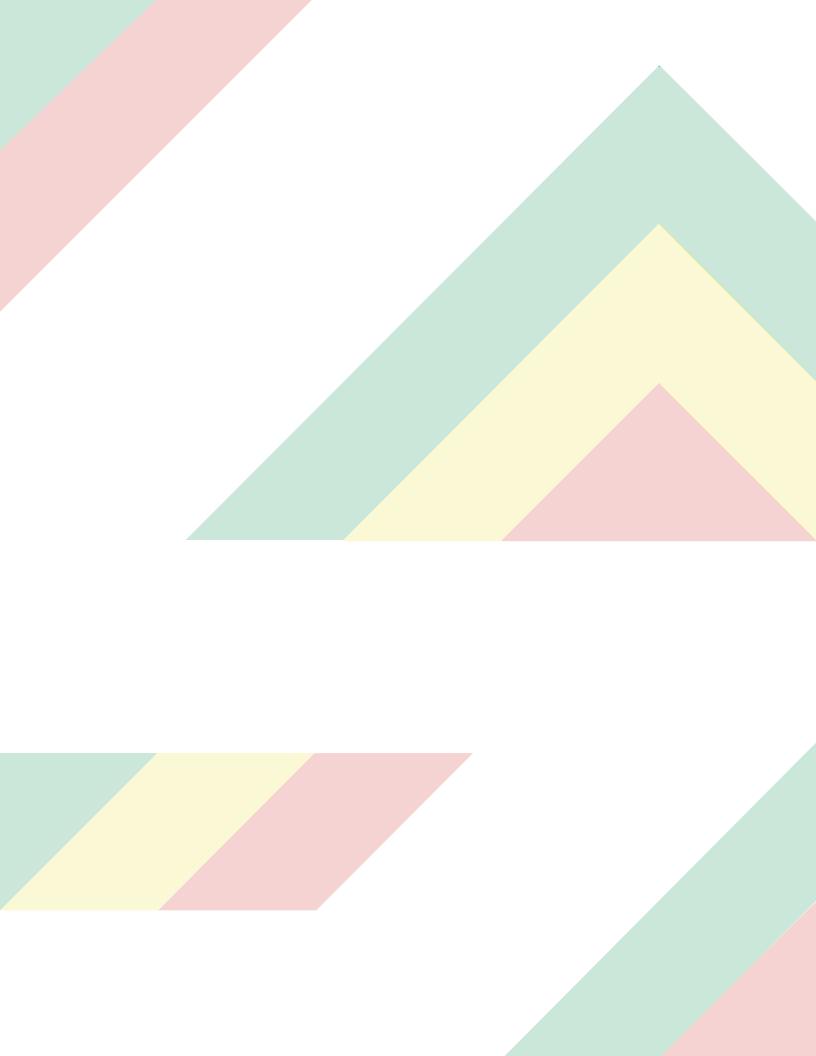


Source: 1.1-1.11: World Bank, Global Economic Prospects, January 2023 and June 2023.

Notes

Note: 1.1 G7 = Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. Short—term policy rate weighted by nominal GDP in current U.S. dollars. "t" is the month before the U.S. policy rate increases. Cycle ends when the G7—weighted policy rate peaks. Judgement used to define "double—peak" cycles. March 2022 cycle extended using market—implied interest rate expectations from January 2023 onward, observed on December 16, 2022.

- 1.2: Haver Analytics; World Bank. EMDEs = emerging market and developing economies. Accelerating (decelerating) is defined as annualized 3—month inflation 1 percentage point or more above (below) its level in the preceding quarter. Sample includes 83 EMDEs.
- 1.3: EMDEs = emerging market and developing economies; EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub—Saharan Africa. Figure shows annual averages of food price inflation. Sample includes 46 EMDEs. Regional inflation rates are based on median across countries.
- 1.4:) Fragile SSA = SSA countries with fragile and conflict affected situations; LICs = low—income countries; SSA = Sub—Saharan Africa. Bars show the number of people in food crisis as classified by the Integrated Food Security Phase Classification (IPC/CH) Phase 3, that is, in acute food insecurity crisis or worse. Data for 2022 are estimates as of September 2022.
- 1.5: Source, World Bank; Monthly data, last observation is April 2023.
- 1.6: Bloomberg; Federal Reserve Bank of St. Louis; World Bank. Monthly series. Last observation is March 2023 (World Bank. 2023a.)
- 1.7: Data for 2023 and onward are forecasts. Sample includes up to 37 advanced economies and 144 EMDEs. Aggregate growth rates are calculated using real U.S. dollar GDP weights at average 2010—19 prices and market exchange rates.
- 1.8: Moody's Analytics; World Bank. EMDEs = emerging market and developing economies. Comparison of GDP—weighted growth across editions of the Global Economic Prospects report, by credit ratings. Sample includes 9 Aa—A, 62 Baa—B, and 25 Caa—C EMDEs.
- 1.9: EMDEs = emerging market and developing economies. Figure shows share of countries with forecast downgrades since the June 2022 Global Economic Prospects. EMDEs = emerging market and developing economies. Comparison of GDP—weighted growth across editions of the Global Economic Prospects report, by credit ratings. Sample includes 9 Aa—A, 62 Baa—B, and 25 Caa—C EMDEs.
- 1.10: EMDEs = emerging market and developing economies. Aggregate growth rates are calculated using real U.S. dollar GDP weights at average 2010–19 prices and market exchange rates. Data for 2023 and onward are forecasts. Figure shows deviation between current forecasts and January 2020 Global Economic Prospects. January 2020 baseline extended into 2023 and 2024 using projected growth for 2022.



# RECENT ECONOMIC DEVELOPMENTS

Ghana's growth performance has been strong over the past decades, but the quality of growth has not improved, and recent macroeconomic hardships have taken a toll on the growth momentum. Pre-COVID, real GDP grew at an annual average of 6.1 percent (2017–19), thanks to robust expansion in the oil and gas sector. Following a period of economic turbulence after the discovery of oil and gas in 2007, Ghana implemented a series of effective macroeconomic reforms (between 2015 and 2018) such as fiscal consolidation program, consistently tight monetary policy stance that helped narrow the headline fiscal deficit to below 5 percent of GDP while inflation fell from 14.1 percent in 2015 to 7.1 percent in 2019. On the external sector, robust export growth (of gold, cocoa, and oil) put the merchandise trade balance into surplus and contributed to reducing the current account deficit from 5.8 percent of GDP in 2015 to 2.7 percent in 2019, while service exports and FDI inflows grew rapidly during this period. However, the momentum behind these reforms started to wane after 2018, and macroeconomic management became less effective. Fiscal pressures arose from a costly financial sector clean-up over 2018–2020, and the start of the Energy Sector Recovery Program (ESRP) in 2019, through which Government committed to finance the annual energy sector financial shortfall and to ultimately bring the sector back to financial sustainability. The overall fiscal deficit, including the energy and financial sector costs, was already elevated in 2019 at 7.5 percent of GDP (of which financial sector costs were 1.7 percent of GDP, and energy sector costs were 1.1 percent of GDP). 19 These large fiscal imbalances and an elevated public debt put Ghana at high risk of debt distress.

Subsequently, the COVID-19 pandemic interrupted Ghana's strong growth trend and amplified fiscal risks. Economic growth slowed sharply to 0.5 percent in 2020, from 6.5 percent in 2019, as external demand weakened, commodity prices (particularly of oil) plummeted and FDI also fell, while average inflation rose to 9.9 in 2020, just shy of the Central Bank's upper limit. The overall fiscal deficit (including energy and financial sector costs) more than doubled to 15.2 percent in 2020, as revenues declined, and the Government increased spending to support households and businesses.

Ghana was slow to unwind the COVID-19 support, exacerbating pre-existing fiscal vulnerabilities resulting in deep economic and financial crisis. Ghana's economy rebounded from the COVID-19 slowdown in 2021, but economic and financial conditions severely deteriorated in 2022 (see Table 1) notably as a result of the high fiscal cost of the COVID-19 crisis response combined with worsening conditions. The year was marked by a negative feedback loop of currency depreciation, rising inflation, and tumbling domestic investor confidence, as pre-existing fiscal vulnerabilities (a mounting debt burden, a rigid budget marred by high energy sector costs, and chronically low public revenues) were compounded by difficult global conditions (high inflation, monetary policy tightening in advanced economies, and the war in Ukraine). Public debt sustainability came into question, and Ghana's sovereign debt ratings were downgraded and the country lost access to international capital markets in 2021.

To help cope with these pressures, Ghana negotiated a three-year arrangement under an IMF-supported Extended Credit Facility (ECF) program of about US\$3 billion, which was approved by the IMF board on May 17, 2023. The main targets of the proposed program include achieving moderate risk of debt distress

<sup>&</sup>lt;sup>19</sup> Shortfalls in the energy sector have been significant due to below-cost-recovery tariffs, large distribution losses, and excess capacity amid take-or-pay contracts. This has cost the central government some 2 percent of GDP in transfers per year since 2019 and has also led to accumulation of payables to IPPs and fuel suppliers.

over the medium term and rebuilding the Bank of Ghana's (BoG) foreign exchange reserves. Authorities have also embarked on a comprehensive (external and domestic) debt restructuring program. This includes a moratorium on external debt repayments, an application to the G20 Common Framework, and the completion (in February 2023) of the Domestic Debt Exchange Program (DDEP) that resulted in the extension of the maturities and the reduction in the cost of the bulk of domestic bonds. Going forward, it will be key for Ghana to pursue deep policy reforms.

Toward this, the authorities adopted an ambitious 2023 budget focusing on fiscal and debt sustainability. Revenue reforms are expected to increase revenue-to-GDP from 16.4 percent in 2022 to 17.4 percent in 2023. Significant energy and water tariff adjustments have been made to contain expenditures. Other expenditure measures include public sector wage bill growth kept below inflation, reduction of capital expenditures, lower cap on transfers to statutory funds, upfront energy tariff adjustments, and reforms to strengthen expenditure controls.

TABLE 1: Selected Macroeconomic Indicators, 2018–2021

|   | 2021                                       | 2022   | 2023           | 2024                | 2025         | 2026  | 2027  |
|---|--|--|----------------|---------------------|--------------|-------|-------|
|   | Actual                                     | Est.   | Proj.          | Proj.               | Proj.        | Proj. | Proj. |
| National accounts and prices (Annual percentage change, unless otherwise indicated) |  |  |                |                     |              |       |       |
| GDP at constant prices  | 5.4  | 3.1  | 1.5            | 2.8                 | 4.7          | 5.0   | 5.0   |
| Non-extractive GDP  | 8.4  | 2.4  | 0.7            | 2.2                 | 4.4          | 4.8   | 5.0   |
| Extractive GDP  | 12.1                                       | 8.1  | 6.1            | 6.4                 | 6.5          | 5.9   | 5.0   |
| Real GDP per capita   | 3.3  | 1.0  | -1.1           | 0.2                 | 2.1          | 2.3   | 2.4   |
| GDP deflator  | 11.2                                       | 28.2   | 39.5           | 20.1                | 10.9         | 7.6   | 7.6   |
| Consumer price index (end of period)  | 12.6                                       | 54.1   | 29.4           | 15.0                | 8.0          | 8.0   | 8.0   |
| Consumer price index (annual average)   | 10.0                                       | 31.9   | 44.0           | 22.2                | 11.5         | 8.0   | 8.0   |
| Central government budget   |  |  | (Percent of GD | P, unless otherwise | e indicated) |       |       |
| Revenue   | 15.3                                       | 15.7   | 16.8           | 17.3                | 17.8         | 18.7  | 18.7  |
| Expenditure (commitment basis) <sup>1</sup>   | 27.4                                       | 26.7   | 24.3           | 25.3                | 24.5         | 23.9  | 23.3  |
| Overall balance (commitment basis) <sup>1</sup>                                     | -12.1                                      | -11.0  | <b>-</b> 7.5   | -8.0                | -6.7         | -5.2  | -4.6  |
| Primary balance (commitment basis) <sup>1</sup>                                     | -4.8                                       | -3.6   | -0.5           | 0.5                 | 1.5          | 1.5   | 1.5   |
| Public debt (gross)   | 79.6                                       | 88.1   | 98.1           | 92                  | 90.2         | 88.4  | 86.1  |
| Domestic debt   | 36.2                                       | 45.7   | 40.6           | 38.7                | 38.2         | 37    | 35.6  |
| External debt   | 43.4                                       | 42.4   | 57.5           | 53.3                | 52           | 51.4  | 50.5  |
| Money and credit  |  | (Annual percentage change, unless otherwise indicated) |                |                     |              |       |       |
| Credit to the private sector (commercial banks)                                     | 11.1                                       | 31.8   | 24.4           | 17                  | 13           | 15.5  | 15.5  |
| Broad money (M2+)   | 12.5                                       | 32.9   | 31.9           | 20.8                | 15.5         | 11.5  | 11.5  |
| Velocity (GDP/M2+, end of period)   | 3.4  | 3.4  | 3.7            | 3.7                 | 3.8          | 3.8   | 3.9   |
| Base money  | 19.9                                       | 57.3   | 19             | 17.5                | 13           | 11.1  | 13.5  |
| Policy rate (in percent, end of period)   | 14.5                                       | 27   | _              | _                   | _            | _     | _     |
| External sector   | (US\$ million, unless otherwise indicated) |  |                |                     |              |       |       |
| Current account balance (percent of GDP)  | -3.2                                       | -2.1   | -2.8           | -2.3                | -2.4         | -3    | -3    |
| BOP financing gap²  | _  | _  | 4,212          | 3,301               | 4,264        | 3,282 | 1,743 |
| IMF   | _  | _  | 1,200          | 720                 | 720          | 360   | 0     |
| World Bank  | _  | _  | 530            | 420                 | 350          | 250   | 0     |

(continued on next page)

TABLE 1: Selected Macroeconomic Indicators, 2018–2021 (continued)

|  | 2021<br>Actual | 2022<br>Est. | 2023<br>Proj. | 2024<br>Proj. | 2025<br>Proj. | 2026<br>Proj. | 2027<br>Proj. |
|--|----------------|--------------|---------------|---------------|---------------|---------------|---------------|
| Residual gap <sup>3</sup>  |                |              | 2,482         | 2,161         | 3,194         | 2,672         | 1,743         |
| Gross international reserves (if financing gap is closed, IMF program definition) <sup>4</sup> | 5,200          | 1,441        | 1,733         | 3,270         | 5,524         | 7,824         | 9,833         |
| in months of prospective imports of goods and services   | 2.4            | 0.7          | 0.8           | 1.4           | 2.2           | 3.0           | 3.6           |
| Gross international reserves (BoG definition) <sup>5</sup>                                     | 9,695          | 6,238        |               |               |               |               |               |
| Memorandum items:  |                |              |               |               |               |               |               |
| Nominal GDP (millions of GH¢)  | 459,131        | 610,222      | 872,333       | 1,076,707     | 1,249,069     | 1,417,537     | 1,609,106     |
| National Currency per U.S. Dollar (period average)   | 5.8            | 8.4          |               |               |               |               |               |
| National Currency per U.S. Dollar (end of period)  | 6              | 8.6          |               |               |               |               |               |
| Nominal GDP (millions of USD)  | 79,157.00      | 72,839.10    |               |               |               |               |               |

Source: Ghanaian Authorities, IMF and World Bank estimates and projections.

Note: 1. The fiscal deficit on a commitment basis includes all expenditure commitments within a fiscal year, whilst the fiscal deficit on cash basis includes actual financed expenditures

- 3. The DSA is still based on a yet—to—be—completed comprehensive debt restructuring; the residual gap will be covered under the envisaged debt restructuring. We will put a footnote to this effect
- 4. Program definition excludes oil funds, encumbered and pledged assets.
- 5. BoG definition includes oil funds, encumbered, and pledged assets.

#### **Real Sector**

#### Economic recovery slowed down in 2022

GDP growth slowed down in 2022 after having rebounded from the COVID-19 slowdown in 2021. GDP growth declined to 3.1 percent year-on-year in 2022 from 5.1 percent (figure 2.1-3). The slowdown was particularly significant in the non-extractives sectors as business and consumer confidence declined back to levels observed at the height of the COVID-19 pandemic in 2020 (figure 2.4). The industrial sector, which contracted in 2021 by 0.5 percent, expanded by 1 percent in the 2022 thanks to a recovery in gold output. Furthermore, the weight of the industrial sector in overall nominal GDP increased in 2022 (from 30.4 percent in 2021 to 34.2 percent), reflecting the strong growth of extractive activities and price increases (figure 1.5). Agricultural growth was at its lowest since 2016, growing by 4.2 percent in 2022 (compared to 8.5 percent in 2021), as cocoa yields continued to be depressed by the swollen shoot disease and most crop

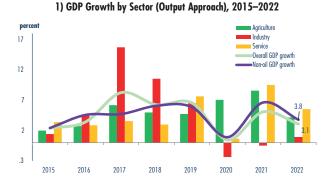
yields were hampered by a lack of access to (and the elevated price of) fertilizer, as the war in Ukraine disrupted global supply. Services sector growth also declined to 5.5 percent in 2022, from 9.4 percent over in 2022, as economic activity contracted in hotel and restaurants, real estate, professional, administration and support services. The 2022 overall growth was just below the World Bank's 2023 Spring estimate of 3.2 percent, and below its 2022 Fall projection of 3.5 percent.

On the expenditure side, a slowdown in domestic demand drove the overall deceleration of GDP growth. All the demand-side components of GDP experienced a slowdown. Domestic demand growth slowed to 3.2 percent, from 7.2 percent in 2021 driven by government consumption (zero growth), while investment growth almost came to a halt at 0.7 percent (compared to 6.2 percent in 2021). On the external side export growth (0.2 percent following a 1.1 percent contraction in 2021) was complemented by a significant deceleration in imports growth (to 1.5 percent in 2022 from 6 percent in 2021 – See Figure 4.6 and Annex Table 2).

<sup>2.</sup> Additional financing needed to gradually bring reserves to at least 3 months. The DSA is still based on a yet—to—be—completed comprehensive debt restructuring: The DSA is still based on a yet—to—be—completed comprehensive debt restructuring: Residual gap to be filled under comprehensive debt restructuring through cash debt relief and savings on the interest bill on the relief amount that has to be borrowed in this pre—restructuring scenario.

#### FIGURE 2: Developments in the Real Sector





3) Q4 GDP Growth by Sector, 2015-2022



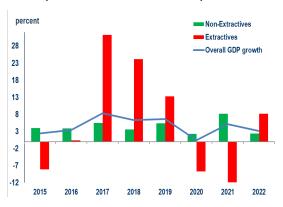
5) Sectoral Contribution to GDP, 2015-2022



Source: 2.1-2.8: World Bank (Macro Poverty Outlook) and Ghana Statistical Service (GSS).

# 2) Q1-Q3 GDP Growth by Sector: 2015-2022 percent 16 11 6 2015(0143) 2016(0143) 2017(0143) 2018(0143) 2019(0143) 2020(0143) 2021(0143) 2022(0143)

4) Extractive and Non-extractive Growth, 2015-2022



6) Contribution to Growth Sector (Expenditure Approach), 2015–2022



# **Fiscal Sector**

Despite some adjustment, significant revenue underperformance and weak enforcement of expenditure rationalization caused Ghana to fall short of its 2022 fiscal target

**Ghana's fiscal deficit remained elevated in 2022.** Even though some fiscal adjustment happened in 2022, it fell

short of the authorities' consolidation targets. The budget's flagship revenue measure — the electronic levy (e-levy) — missed targets by over 90 percent due to inadequate design and implementation delays. Furthermore, the government was unable to enforce large across-the-board expenditure cuts, while ministries, departments, and agencies (MDAs) undertook larger expenditure commitments than allowed within their budgetary allocations and allotments. Total

### BOX 1: Implications of recording the fiscal deficit on a commitment basis

The fiscal deficit on a commitment basis includes all expenditure commitments within a fiscal year, whilst the fiscal deficit on cash basis includes actual financed expenditures. If the government finances exactly what it commits to in a given year, the deficit on commitment basis would be equal the deficit on a cash basis, but this seldom happens. Expenditures on a commitment basis usually differ from those on cash basis for various reasons:

- Due to liquidity challenges or other cash management constraints, the government may fail to clear all expenditures it committed in the year: this drives the cash deficit to be lower than the commitment deficit.
- When arrears from previous fiscal years are paid (whilst the financing of the current year commitments are the same or lower than programed): this drives the cash deficit to be higher than the commitment deficit.
- Due to structural challenges, government may finance off-budget expenditures (in addition to financing all that it committed to in the fiscal year): this drives both the cash deficit and the commitment deficit to be higher. However, depending on how these expenditures are classified, the deficit on commitment basis (or cash basis) may be higher (lower).

revenue and grants reached 15.7 percent of GDP, below the revised target of 16.4 percent. Meanwhile total expenditure (on a commitment basis) reached 26.7percent of GDP, well above the revised target of 22.6 percent of GDP due to combined slippages in goods and services, interest payments, compensations and one-off payment of legal settlements. The fiscal deficit (commitment basis) for 2022 reached 11 percent of GDP; well above the revised (mid-year budget) target of 6.3 percent.<sup>20</sup> On a cash basis, the fiscal deficit reached 8.2 percent of GDP (see Box 1 for the different fiscal deficit definitions: commitment or cash basis).21 The corresponding primary balance on commitment basis was -3.8 percent of GDP (against the target of 0.8 percent), and -0.8 percent on a cash basis (compared with the 1.4 target).

The larger-than-expected fiscal deficit was compounded by acute financing constraints. Without access to the international market, and following several uncovered domestic debt auctions, the authorities had to rely heavily on monetary financing and a considerable accumulation of payables in 2022. Monetary financing through the BoG overdraft reached over 7.2 percent of GDP for 2022. Furthermore, large amounts of payables accumulated to an estimated total stock of over 7 percent of GDP<sup>22</sup> by end-2022 due to the lack of effective expenditure commitment control, liquidity constraints and insufficient budgetary allocation to cover the energy sector shortfall.

The energy sector continues to require significant **budgetary support**. A combination of electricity underpricing, poor performance of distribution companies, excess power generation capacity and excess gas supply contracts has resulted in the accumulation of sectoral arrears (legacy arrears) totaling about US\$2.3 billion as at the end of 2022, equivalent to about 3.2 percent of GDP. Without corrective action, these arrears could reach over US\$8 billion by the end of 2025. In 2019, the GoG launched the Energy Sector Recovery Program (ESRP), a roadmap to enhance the governance and restore the financial viability of the energy sector. As the ESRP's implementation has faced several delays, the plan has been unable to prevent the yearly accumulation of liabilities. Even though the government managed to increase electricity tariffs by 27.15 percent in September 2022 and 29.96 percent in February 2023, exchange rate depreciation eroded the gains from higher tariff as a substantial portion of generation costs is incurred in US dollars. In 2022, a transfer of close to 1 percent of GDP was made to the power sector by the government; in addition to this, new payables from the sector amounted to 1.5 percent of GDP.<sup>23</sup> In May 2023, the Public Utilities Regulatory Commission (PURC) announced a further 18.36 percent increase in electricity and natural gas tariffs (from June 1, 2023) for all consumer groups, following its review of the second quarter of 2023.24

<sup>&</sup>lt;sup>20</sup> During the 2022 mid-year Budget Review, the government revised the 2022 fiscal targets to account for a higher nominal GDP. On a commitment basis, the budget deficit was revised from 7 percent of GDP to 6.3 percent. On a cash basis, the deficit was revised from 7.4 percent of GDP to 6.6 percent.

 $<sup>^{21}</sup>$  For the first time in 2022, MoF used the commitment basis to record all outstanding claims on the government. The fiscal deficit on a commitment basis hence includes the spending that has been committed but remained unpaid, leading to accumulation of payables to domestic suppliers and to IPPs.

<sup>&</sup>lt;sup>22</sup> Total stock of arrears.

<sup>&</sup>lt;sup>23</sup> between 2020-2022, the government has been transferring an average of 2.4 percent of GDP per year to the energy sector.

<sup>&</sup>lt;sup>24</sup> The PURC has been conducting Quarterly Tariff Reviews to factor changes in the key factors affecting electricity and natural gas prices. This mechanism is one of various measures enacted to contain the sector persistent financing gaps, caused by a combination of electricity underpricing, poor performance of distribution companies, excess power generation capacity and excess gas supply contract.

Expenditure consolidation and revenue mobilization continued to be hampered by structural constraints

Fiscal consolidation efforts were hampered by budget rigidities and inadequate expenditure controls, leading to recurring arrears accumulation. The government continued to face elevated spending pressures from interest payments (7.1 percent of GDP), compensations of employees (6.2 percent of GDP) and statutory transfers (4.6 percent of GDP) leaving little room for discretionary expenditure and limiting the scope for consolidation. The government had attempted to circumvent these rigidities by passing the Earmarked Funds Capping and Realignment Act in 2017, which imposed a ceiling of 25 percent of tax revenue on statutory fund transfers, but this failed to generate sufficient savings. As a result, the authorities announced, in the 2023 Budget, a lower the ceiling of 17.5 percent of tax revenue. Meanwhile, public financial management (PFM) weaknesses have contributed to the accumulation of new arrears, even as the government attempted to clear existing ones. Ghana's PFM systems is associated with weak budget formulation and implementation, lack of sufficient monitoring and comprehensive control systems in the public sector, as well as inadequate quality and timely data on government finances. Finally, the budgetary allocation for capital spending is often insufficient, resulting in large extra budgetary capital spending (in turn causing arrears accumulation): indeed, in 2022 MDAs committed 1.5 percent of GDP in extra-budgetary capital spending.

Domestic revenue mobilization continues to be low, hindered by widespread tax exemptions, weak compliance, and by the disappointing yield of tax measures. Ghana has one of the lowest tax-to-GDP ratios among its peers, at an estimated 13.1 percent in 2022 compared to an SSA average of 17.5 percent. VAT exemptions is currently estimated at around 2 percent of GDP.<sup>25</sup> Ghana passed a Tax Exemptions Act in 2022 providing the framework for overseeing tax exemptions. The Act introduces reporting requirements on the amount

and nature of exemptions granted to promote transparency, and the establishment of periodical reviews of all exemption provisions to ensure the timely revision and removal of irrelevant exemptions. It also requires the government to submit a report on tax exemptions to Parliament every year. However, while the Act effectively brings together existing tax exemptions provided under different laws, 26 it falls short of effectively rationalizing existing exemptions, instead introducing a framework to do so. Furthermore, the Electronic Transfer Act 2022 (Act 1075), commonly known as the E-Levy, became law on March 31, 2022, with the aim to: (i) increase the tax base, (ii) raise revenue to support entrepreneurship, youth employment, provision of digital infrastructure and cyber security, and provision of road infrastructure, and (iii) help increase Ghana's taxto-GDP ratio from approximately 12.5 percent in 2021 to 20 percent in 2024. The government originally hoped to raise approximately 1.5 to 2 percent of GDP from the E-Levy, but only collected an estimated 0.14 percent of GDP in 2022 (See Box 2 for details on the performance of the e-levy).

Provisional 2023Q1 fiscal data released by the Bank of Ghana in May 2023 show a fiscal deficit lower than target - a deficit achieved on account of lower expenditures (2.4 pp below the target of 6.5 percent of GDP) against low revenue outturns (0.9 pp below the target of 4.2 percent of GDP). The 2023Q1 fiscal deficit (cash basis) was equivalent to 0.8 percent of GDP below the target of 2.3 percent, also compares favorably to the 2.7 percent of GDP deficit recorded in 2022Q1. The low deficit is mainly attributed to lower debt service payments following the restructuring of domestic and the suspension of interest payments on external debt. Also in the first quarter of 2023, the ministry of finance delayed the release of "expenditure allotments" leading to postponements of goods and services and capital spendings.<sup>27</sup> The cash deficit was financed mainly from domestic sources. The

<sup>&</sup>lt;sup>26</sup> Including the Income Tax Act, the Free Zone Act and the Investment Promotion

It is expected that these delayed spendings will "catch up" in subsequent quarters. In the 2023 Budget Statement, the Authorities committed that MDAs budget allocation for Goods and Services, or Domestic CAPEX would be strictly controlled by the quarterly budget allotment system. However, the 2023Q1 allotments were only released in March 2023 implying that some MDAs spending for the quarter were postponed.

#### BOX 2: The Implementation of the Electronic Transfer Act 2022 (Act 1075), the E-Levy

The Electronic Transfer Act 2022 (Act 1075), commonly known as the E-Levy, was passed into law on March 31, 2022. After some delays in the passage of the law and subsequent delays in its inception, the E-Levy was implemented in May 2022 with a modified phased approach where charging entities temporarily used their own systems to assess and charge the levy. In July, the second phase saw the introduction of the GRA Common Platform for the assessment of the levy. As defined by the law, the E-Levy applies to only electronic money issues (mobile money), payment service providers, bank, and similar service providers. However, unlike the CST, the e-Levy applies not to the service purchased by the consumer, but it applies to the amount of money transferred by those services. The e-Levy rate was originally 1.5 percent of the money transferred, and later revised in 2023 to 1 percent.

The primary justification for the E-Levy was revenue generation but this was not achieved in 2022. The government originally hoped to obtain approximately 1.5 to 2 percent of GDP from the E-Levy. The 1.5 percent target translated into roughly GHC 6.9 billion per year, but actual collections in 2022 were described as "disappointing" averaging GHC 70 million per month, or approximately GHC 840 million annually. This is only about 12 percent of the original expectations. While the e-levy failed to meet its revenue target, the tax seems to have the characteristics of an excise tax (even though the government does not describe it that way). The excise—like nature of the e-levy may tend to go against the social benefits related to electronic transfers.

To this end, in the 2023 budget, the authorities put forth a revenue enhancing package which included the review of the e—levy. In addition to the review of e—levy, the government sought to increase revenue by implementing a 2.5 percentage point increase in the VAT rate, complete removal of discount on benchmark values and revision of income—based taxes. Further, the authorities would continue with the tax administration and compliance efforts with the implementation of the E—VAT system.

corresponding primary balance (on cash basis) for the period was a deficit of 0.1 percent of GDP, lower than the target deficit 0.6 percent of GDP.

# **Debt Sustainability Debt Management**

Ghana has embarked on a comprehensive debt exchange program to restore debt sustainability

The latest IMF/World Bank Joint DSA published in May 2023 concluded that Ghana is in "debt distress, and debt is assessed as unsustainable" with large, protracted breaches to the DSA thresholds (figure 3.7-8). With the baseline projections which do not consider the possible outcome of the ongoing debt restructuring, the ratios of present values of public debt and external debt to GDP, and ratios of external debt service to revenues and exports are and would remain above their LIC-DSF thresholds over the medium and long term. Debt service-torevenue stood at 117.6 percent in 2022 as Eurobond spreads were well over 3,500 bps. Gross financing needs (GFN) reached 22.7 percent of GDP in 2021 and are expected to remain above the DSA market financing benchmark of 14 percent in the medium term. Public debt rose from 79.6 percent in 2021 to 88.1 percent of GDP in 2022, because of slower growth, an unsustainable fiscal stance, and exchange rate depreciation.28 The nominal growth in the public debt stock was partly due to significant exchange rate depreciation as well as continued large (overall and primary) fiscal deficits. External debt was estimated at 42.4 percent of GDP in end 2022, compared to the 2021 level of 43.4 percent, while domestic debt increased to 45.7 percent of GDP, from 36.2 percent in 2021, as the country lost access to the international market, thereby shifting to domestic financing sources.

To restore public debt sustainability, the authorities have launched a comprehensive debt operation targeting domestic and external debt. On February 10, 2022, the government completed its Domestic Debt Exchange Program (DDEP) with the swap of outstanding medium- and long-term domestic bonds for lower-coupon and longer maturity bonds. 85 percent of the face value of bonds held by investors other than pension funds was exchanged in the DDE, equivalent to 28 percent of all outstanding domestic debt (which includes, among others, nonmarketable debt, verified arrears, and

These debt ratios differ from the government's ratios, as they include guarantees to other entities in the public and private sector (including SOEs and certain non-guaranteed SOE debt such as the Energy Sector Levy Act Bond and Cocobod debt). For 2022, the government's debt-to-GDP ratio was estimated at 71.2percent of GDP (according to BoG publications), while the augmented definition used here leads to 89.1 percent in 2022 (Figure 3.4).

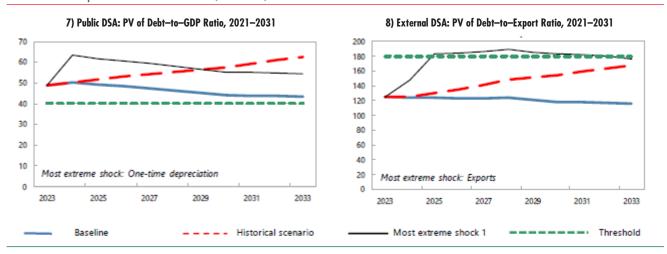
Cocobills), for lower-coupon and longer maturity bonds. The new bonds offered to investors will mature each year starting in 2027 and until January 2038. Interests will start accruing at 5 percent on the anniversary of the Settlement Date in 2024 and subsequent "settlement"

dates" at various rates. At a 16–18 percent discount rate, the final terms of the DDE imply an average NPV reduction of about 30 percent for these bondholders. Consequently, the completed DDE has also produced very large cash debt relief for the government of almost

FIGURE 3: Developments in the Fiscal Sector



FIGURE 3: Developments in the Fiscal Sector (continued)



Source: 3.1-5: Ghanaian Ministry of Finance, IMF and World Bank; 3.6: IMF WEO; Joint IMF-World Bank DSA (May 2023).

Note: 7-8: The most extreme stress test is the test that yields the highest ratio in or before 2033. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one—off breach happens to be the most extreme shock even after disregarding the one—off breach, only that stress test (with a one—off breach) would be presented. The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

GHS 50 billion in 2023.29 The government has, further, reached an agreement with banks to exchange domestic debt denominated in US dollars and Cocobills issued by Cocobod. While these two types of debt account for only about 5 percent of total domestic debt, they represent about GHS15 billion in debt service in 2023. The new bonds offered to investors will mature each year starting in 2027 and until January 2038.

The bulk of the domestic debt restructuring process has been completed and the government is embarking on external debt restructuring. The combination of the authorities' debt restructuring strategy and reforms is expected to deliver debt sustainability as it eliminates all threshold breaches under the LIC-DSF by 2028 and restores a moderate risk of debt distress. The authorities also intend to restructure external debt. On December 19, 2022, Ghana announced a moratorium on all official bilateral and commercial debt repayments and has requested debt treatment under the G20 Common Framework to the Paris Club. Some 46 percent of the external debt is composed of high coupon Eurobonds, whose restructuring will be key to restoring debt sustainability.

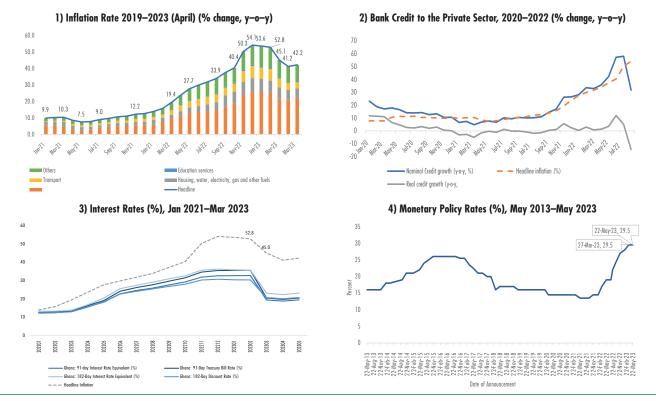
Ghana has an adequate institutional framework and sufficient capacity for debt management. This is reflected in the 2021 CPIA, where Ghana scored 3.5 on "Debt Policy and Management" (2021 overall average score for Sub-Saharan Africa's IDA-eligible countries was 3.1). Ghana has a well-established Debt Management Unit with robust systems, and the capacity to provide analytical support for the preparation of the Government borrowing plan as well as the publication and submission to Parliament of timely and comprehensive debt reports.

However, the authorities had not published their 2022 debt strategy. Since 2015, Ghana has regularly updated and published a Medium-Term Debt Management Strategy (MTDS) in line with the Financial Management Act 2016 (Act 921).<sup>30</sup> However, in 2022, the Government has not published its full MTDS but only a summarized version included in the 2021 debt report. Even though the abridged 2022 MTDS rightly called for fiscal consolidation, it rested on unrealistic assumptions such as continued access to international capital markets, when it had already

<sup>&</sup>lt;sup>29</sup> The first phase of the DDE program did not include Bonds held by pension funds (to protect pensioners' savings), cocobills and US dollar-denominated Bonds.

<sup>&</sup>lt;sup>30</sup> The Financial Management Act 2016 (Act 921) requires the Minister for Finance to submit to Cabinet a fiscal strategy document which includes the medium-term debt strategy, the expenditure framework, and a comprehensive fiscal risks statement (FRS).

FIGURE 4: Inflation and Bank Credit Growth



Source: 1) GSS; 2-3) BoG.

become clear that Ghana was losing market access. The methodology for setting non-concessional borrowing limits in the medium-term budget framework was also unclear.

# Monetary Policy and Financial Sector Developments

Inflation reached a two-decade high in 2022, caused by monetary financing of the deficit, exchange rate depreciation, and a spike in global commodity prices

Headline inflation accelerated to 54.1 percent (y-o-y) in December 2022, up from 12.6 percent the year before, reaching a 20 year high. In 2022, inflation averaged 31.5 percent, significantly more than in 2021 when it averaged 10 percent. This increase was driven by both food and non-food items, on the back of global food price pressures stemming from the war in Ukraine and a rapid exchange rate depreciation, as well as monetary financing

of the deficit. Food inflation surged to 59.7 percent in December 2022, from 13.7 percent in January 2022, while non-food inflation rose to 49.9 percent, from 14.1 percent. Underlying inflationary pressures similarly remained elevated as the BoG's core inflation measure, which excludes energy and utility, accelerated to 53.2 percent in December 2022, from 11.8 percent a year earlier. Inflation only began decelerating gradually in 2023, following the conclusion of the staff-level agreement with the IMF. It declined for four consecutive months to 41.2 percent in April, before rising again modestly in May (42.2 percent). (figure 4.1).

Fiscal dominance and the associated significant monetary financing of the deficit undermined monetary policy responses to curb inflation. The BoG increased the policy rate by 1,250 bps (from 14.5 percent to 27 percent) between February and November 2022 and increased it further to 28 percent in January 2023. However, the broad tightening of the monetary policy stance on the

one hand has been undermined by monetary financing of the deficit one the other, with the latter reaching over 6 percent of GDP over 2022. To this end, going forward, the Bank of Ghana has resolved to step up sterilization to absorb excess liquidity, while considering potential financial stability risks. Furthermore, to mitigate fiscal dominance and enhance central bank independence, the authorities plan to revise the Bank of Ghana Act 2002 (Act 612), with a view to lower the overdraft limits, enhance compliance, and clearly specify the extent of permissible breaches under emergency situations. As an immediate measure, the BoG and the Ministry of Finance have signed an MoU in May 2023 to eliminate monetary financing of the government deficit. The BoG expects inflation to return to its  $8 \pm 2$ percent target band by 2025.

#### Inflation significantly impacted food security and poverty

In 2022, currency depreciation and high inflation drove up cost of living in Ghana, putting considerable stress on household budgets and particularly for the poor who devote more than half of their budget to **food.** There is compelling evidence that high inflation leads to food insecurity.<sup>31</sup> As defined by FAO, a person is food insecure when she/he lacks regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of financial resources to obtain food. High inflation rates lead to a decrease in the purchasing power of consumers, making it more difficult for households with limited incomes to access sufficient and nutritious food. In 2022, farmers were affected by increases in the prices of fertilizer and other inputs. This affected the incomes of rural farming households, notably the poorest ones. As a result of this and diminished purchasing power of the poor due to inflation, the poverty reduction slowed down: the international poverty rate is estimated to have decreased by only 0.5 percentage point to 20.5 percent in 2022).

The Special Focus section of this Ghana Economic Update explores the impact of inflation **on food security in Ghana.** Part 2 reviews how inflation impacted households via food security in 2022and how households coped. It presents a regional and sub-regional perspective as well as urban-rural comparisons. Finally, the analysis also shows the shift in households budget composition for food and other essentials, for different income quintiles.

Real credit growth slowed to a pace below its long-term trend

Bank credit to the private sector contracted in real terms as the economy slowed down, inflation rose sharply, and banks shifted their portfolios away from government securities. In 2022, real private sector credit contracted by 14.5 percent compared with a 1.3 percent contraction in 2021 (figure 4.2). In nominal terms, it increased by 31.8 percent in 2022, slower than overall inflation. Credit flow to the private sector remained concentrated in five sectors - services, commerce and finance, electricity, water and gas, manufacturing, and construction. In 2023, real private sector credit continued to contract y-o-y, including by 15.2 percent in April.

In 2022, interest rates in the money market went up across the yield curve, in line with the increases in the policy rate. At end December 2022, the 91-day T-bill rates rose to 35.5 percent from 12.5 percent a year before (while 182-day and 364-day T-bill rates experienced similar increases). On the secondary market, yields on all bonds, from 2-year through to 20-year, almost doubled over the one-year period. The interbank weighted average rate increased to 25.5 percent in December 2022, from 12.7 percent in December 2021, consistent with the increases in the policy rate and the incremental hikes in the primary reserve requirements from 12 percent in August 2022 to 14 percent in October. As a result, the average lending rates of banks rose to 35.6 percent in December 2022 from 20 percent in at the end of 2021. Developments in the first four months of 2023 indicates that while T-bill rates reduced significantly in 2023Q1 due to high demand for the instruments, rates have increased in April. The recent increase in rates is attributed Higher borrowing appetite by the Ministry of Finance; (ii) the 150-bps increase of the

<sup>31</sup> Adeoti and Avinde (2018).

Monetary Policy Rate (MPR); and (iii) decreasing market liquidity.

The pace of expansion in monetary aggregates accelerated in 2022, as the central bank provided significant fiscal financing. Increases in net domestic assets (NDA) more than offset the sharp decline in net foreign assets (NFA). Broad money supply, including foreign currency deposits (M2+) grew by 27.8 percent year-on-year at the end of 2022, compared with 12 percent in the in 2021. The increase in the contribution of the NDA in the growth of M2+ was mainly driven by growth in net claims on Government as the BoG financed the fiscal deficit via the overdraft facility. Looking at the components on the liability side, the growth of M2+ reflected increased growth in currency, demand deposits, savings and time deposits, as well as foreign deposits in December, relative to same period in 2021. Reserve Money recorded an annual growth of 57.5 percent in December 2022, compared to 19.9 in 2021. In contrast, the NFA of the Central Bank contracted significantly, reflecting mainly lower foreign currency inflows and FX auctions in 2022. The contribution of NFA to the growth in reserve money was negative 63.7 percent in December 2022, relative to negative 16.6 percent recorded in the corresponding period of 2021. In the first four months of 2023, broad money supply recorded strong growth, driven by an expansion in Net Domestic Assets of the depository corporation sector, mainly due to high net claims on government. Net Foreign Assets, on the other hand, contracted. Annual growth in broad money supply was 45.6 percent in April 2023, compared with 19.9 percent growth in April 2022. Reserve money also grew by 46.5 percent year-on-year in April 2023, compared with 33.8 percent annual growth, a year earlier.

Banking sector vulnerabilities have increased with the impact of the Domestic Debt Exchange Program and sluggish economic growth

Banking sector vulnerabilities have increased, reflecting the cedi depreciation, the impact of the DDEP, and legacy issues in the Special Deposit-Taking **Institutions (SDIs) subsector**.<sup>32</sup> The DDEP significantly

eroded the capital buffers of financial institutions. Recently published 2022 audited financial statements show a reduction in banks' capital net worth as result of the recognition of impairments of their domestic bond holdings and some other exposures to the government. As a result, at least six banks are currently undercapitalized (including two insolvent), with net worth less than the GHS400 million minimum required by Bank of Ghana. Additional losses as likely as the government continues to restructure its remaining debt, and loan portfolio deteriorate amid sluggish growth and high inflation. Bank of Ghana has issued regulatory reliefs for banks, including a fouryear period to recognize DDEP losses for the purpose of capital adequacy ratio (CAR) computation. With only 25 percent of the DDEP-related losses accounted for, the average industry-wide CAR stood at 14.8 percent in December 2022 and 18 percent in April 2023, compared to 19.6 percent in December 2021 and 14.3 percent in April 2022. The CAR without regulatory reliefs – a realist measure of the soundness of the banking sector post-DDEP – is not publicly available. The NPL ratio has increased to 18 percent in April 2023, from 14.3 percent a year ago and 14.8 percent in December 2022 (3.2 percentage points increase in only four months). The banking system is liquid, with the ratio of core liquid assets to short-term liabilities at 29.3 percent in April 2023, from 21.7 percent in April 2022. Average after-tax profitability—measured by the return on equity—fell significantly to 3.1 in December 2022 (from 4.5 percent in December 2021), reflecting DDE-related losses and high operational cost due to inflation. However, it has rebounded to 5.5 percent in April 2023. The Specialized Deposit-Taking Institutions (SDI) sector continues to face solvency challenges pending the completion of the planned completion of the sector's cleanup.

#### **External Sector**

The balance of payment went into a large deficit in 2022 as the capital account was affected by rising fiscal and debt vulnerabilities

In 2022, net outflows from the financial account depressed the balance of payments (BoP). The current account deficit (CAD) narrowed markedly in 2022 to 2.1 percent of GDP, from 3.2 percent in 2021, thanks to

<sup>32</sup> This includes Savings and Loans, Finance House, Microfinance Institutions, and Rural and Community Banks.

resilient commodity prices and higher export volumes and a moderation in import growth. However, as Ghana lost access to the Eurobond market, net capital inflows turned into outflows (from foreign portfolio investors as well as domestic agents). At the same time, foreign direct investment fell to US\$1.5 billion in 2022, from US\$2.4 billion in 2021.33 Net outflows under the capital and financial account amounted to 2.9 percent of GDP, compared with net inflows of 4.2 percent in 2021, and the overall BoP recorded a deficit of 5 percent of GDP (compared with a surplus of 1 percent in 2021).<sup>34</sup> As the BoG simultaneously attempted to dampen the depreciation of the currency, international reserves fell to US\$6.2 billion (2.7 months of import cover) in December 2022, from US\$9.7 billion (4.4 months of import cover) a year earlier. Netting out non-useable reserves,<sup>35</sup> reserves fell to barely one month of import cover.<sup>36</sup>

The balance of payments deficit improved in the first quarter of 2023, compared to 2022, thanks to the debt service suspension but reserve levels remain low. Provisional 2023Q1 data released by BoG indicates that the BOP deficit was US\$354 million in 2023Q1, compared with US\$934 million deficit recorded in 2022Q1. The current account recorded a surplus of US\$661 million in 2023Q1, compared with a deficit of US\$554 million in 2022Q1, on account of the larger trade surplus, lower services, and income payments due to the external debt service suspension and higher remittance flows. The capital and financial accounts, however, recorded a net outflow of US\$956 million, compared with a net outflow of US\$451 million in the corresponding period of 2022. This was due to lower foreign direct investment inflows, continued portfolio reversals and other investment outflows. As a result, Gross International Reserves at the end of March 2023 stood at US\$5.1 billion, equivalent to 2.4 months of import cover, compared with the end-December 2022 stock position of US\$6.2 billion, equivalent to 2.7 months of import cover.<sup>37</sup>

The cedi came under intense pressure in 2022 and interventions by the BoG were insufficient to prevent its sharp depreciation

In 2022, the cedi came under intense pressures, depreciating between January and November (its lowest point) by 55 percent against the US dollar, after having remained stable in 2021. The Cedi depreciated by 30.0 percent against the US dollar in 2022 following a depreciation of 4.1 percent in 2021. The slide of the currency reflects the tightening global financing conditions, sovereign credit downgrades, the continued lack of market access, as well as increased demand for foreign exchange. The BoG intervened through regular FX auctions in the foreign exchange market throughout 2022 to smooth out exchange rate fluctuations, meet sovereign obligations, and satisfy FX demand for essential imports (such as oil) in the face of higher global energy and food prices. Monthly FX interventions averaged \$274 million in 2022 (around 0.4 percent of GDP) but were insufficient to prevent the large exchange rate depreciation.<sup>38</sup> The cedi recovered some of its value vis-a-vis the US dollar in December 2022, right after a Staff Level Agreement with the IMF (for a US\$3 billion program) was announced, (appreciating by 29.1 percent in the 30 days to January 8, 2023).

<sup>&</sup>lt;sup>33</sup> Over the past five years the capital and financial account averaged 2.2 percent of GDP, thanks to strong FDI and portfolio inflows. FDI averaged 2.5 percent of GDP while net positive portfolio flows averaged 1.8 percent of GDP, thanks notably to Eurobond issuances and non-resident purchases of local currency-denominated debt.

<sup>&</sup>lt;sup>34</sup> Over the past five years the capital and financial account averaged 2.2 percent of GDP, thanks to strong FDI and portfolio inflows. FDI averaged 2.5 percent of GDP while net positive portfolio flows averaged 1.8 percent of GDP, thanks notably to Eurobond issuances and non-resident purchases of local currency-denominated debt.

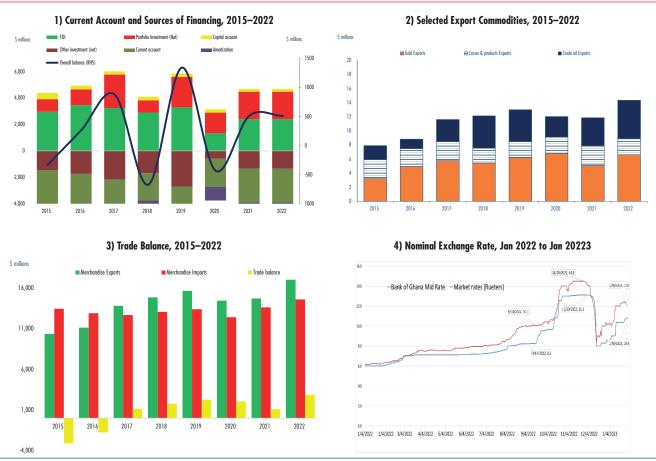
<sup>35</sup> pledged assets and other encumbered assets including Petroleum and Stabilization Funds.

Gross international reserves reported by the BoG include non-useable reserves (such as [i] Pledged assets and [ii] Other encumbered assets including Petroleum Funds and Stabilization Funds) which, when netted out, would result in less than 1 month of import cover.

<sup>&</sup>lt;sup>37</sup> However, gross International Reserves, excluding oil funds, encumbered and pledged assets, stood at US\$1.4 billion (about 1 months of imports cover).

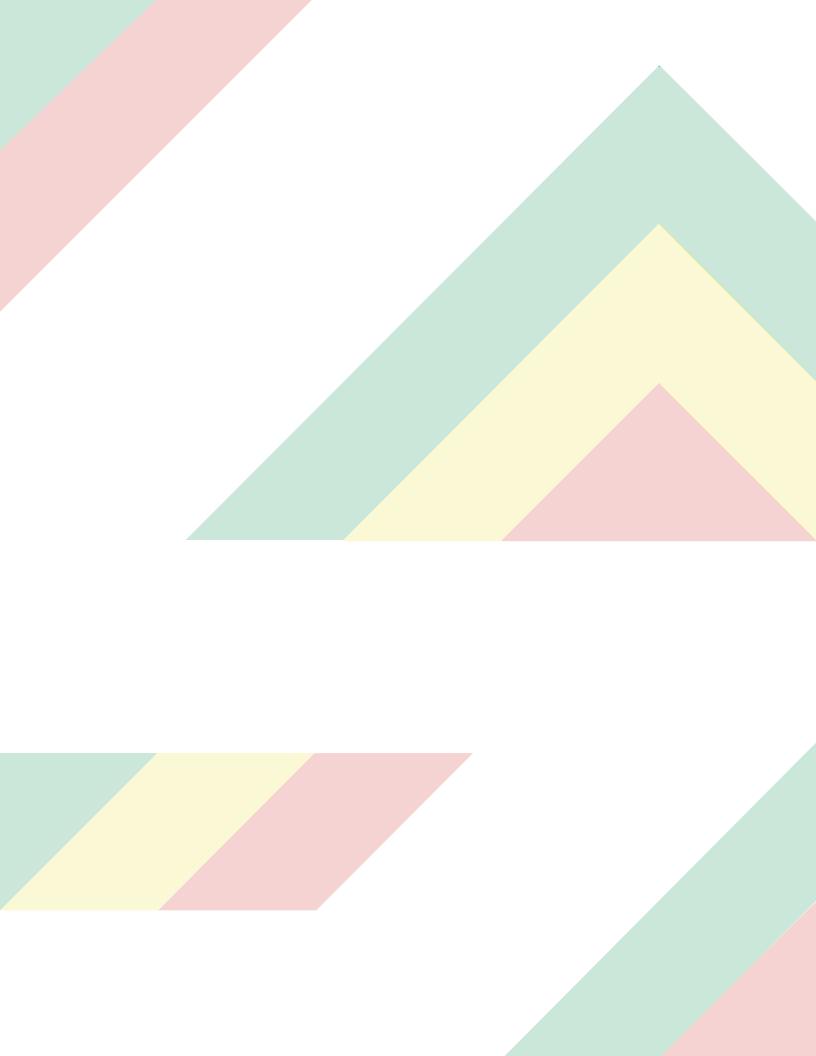
<sup>38</sup> The foreign exchange (FX) auction is a monetary policy instrument through which the Central Bank sells or buys foreign currency on the interbank FX market. The main objectives are typically to (i) manage international reserves levels, (ii) eliminate pressure on the exchange rate, and/or (iii) balance the private and government gap which is to provide the needs to the private sector while keeping in mind what the government needs for debt service. The BoG has been conducting forward auctions since 2020 and argues that it helped to shift demand away from the spot market. Indeed, the cedi depreciated by "only" 3.9 percent against the US dollar in 2020, (much less than in 2019) and remained stable in 2021, as portfolio inflows resumed. However, in 2022 the pace of depreciation of the cedi could not be halted despite the FX interventions. The BoG argues that through the auction activities, they are working to improve predictability and transparency in the market while, at the same time, not negatively impacted gross reserves unduly.

FIGURE 5: Developments in the External Sector



Source: 5.1-4: World Bank, IMF, and BoG; 5.5: World Bank (Global Economic Monitor).

However, the cedi depreciated again by 1.9 percent in March. It appreciated marginally in April 2023 (by 0.6 percent) thanks to positive sentiments from the successful conclusion of the DDEP, the progress made on Ghana's external debt restructuring, a weakening US dollar, and muted demand.



# MACROECONOMIC OUTLOOK AND RISKS

Growth will further decelerate in the short term (2023–24) as aggregate demand falls and non-extractive GDP growth slows before returning to its potential after 2025

Growth is expected to decelerate further in 2023 and 2024 as macroeconomic instability, deleveraging in the financial sector, and tighter fiscal and monetary policies dampen aggregate demand and slow down **non-extractive GDP growth.** In the short-term, growth is expected to slow further to 1.5 percent in 2023 and remain muted in 2024 at 2.8 percent (Table 1). High inflation, general macroeconomic uncertainty, and elevated interest rates will keep private consumption and investment growth below pre-pandemic levels, leading to a suppressed nonextractive growth.<sup>39</sup> However, extractives will be relatively resilient and offer counterbalancing support to growth with the opening of large new gold mines and a recovery in small scale gold mines, as well as a planned expansion in oil and gas production. Agriculture growth is projected to remain modest because of high input prices and a disease affecting cocoa trees, while services growth will be impacted by the erosion in the purchasing power of consumers. Growth will begin to recover to its potential after 2025, as the drag from fiscal consolidation fades out, the macroeconomy stabilizes, structural reforms start bearing fruit and consumer and business confidence recovers (figure 6.1-2).

Risks related to inflation are tilted to the upside and are significantly affected by global petroleum prices (and transportation costs) as well as exchange rate dynamics. The latest BoG forecast suggests that inflation is likely to peak in the first quarter of 2023 and gradually ease thereafter. However, headline inflation is projected to remain above the upper band of  $8\pm 2$  percent until the second half of 2025. It is expected that successful implementation of the IMF-supported program and the resultant financing will help stabilize the currency and allow inflation to return to single digits in the medium-term.

The government has set forth an ambitious fiscal consolidation plan: delivering on it will require addressing long-standing revenue mobilization and budget control weaknesses

The government's 2023 budget sets forth an ambitious fiscal consolidation plan, combining both expenditure and revenue measures. The 2023 Budget Statement set the overarching goal of "resetting the economy and restoring macroeconomic stability". The fiscal deficit (on a commitment basis) is projected at 7.5 percent of GDP in 2023 (this remains above the level mandated under Ghana's fiscal rule -5 percent of GDP - which will only be achieved in 2027 in the absence of debt restructuring- see **Annex Table 1**). They also aim to generate a 1.5 percent primary surplus (on commitment basis) by 2025, by increasing revenues from an estimated 16.8 percent of GDP in 2023 to 17.8 in 2025, while keeping expenditures at an average of 24.7 percent of GDP. The 2023 budget supported tax measures expected to yield 1 percent of GDP in extra non- oil revenue in 2023. The budget included: (i) an increase in the VAT rate from 12.5 to 15 percent (to yield an additional revenue of 0.3 percent of GDP); (ii) the removal of the discount system, which lowers customs revenues; and (iii) the strengthening of income taxation and increases in excise taxation (notably: the upper limits for vehicle benefits will be reviewed and an additional income tax bracket of 35 percent will be introduced). In addition to this, the Government has committed to improving tax compliance and strengthening revenue administration. Removing

<sup>&</sup>lt;sup>39</sup> The growth projections for 2023 assume a much smaller non-extractive sectors growth of 0.6 percent – because of the impact of the domestic debt restructuring and the proposed fiscal tightening.

### BOX 3: Key Revenue and Expenditure Measures from the 2023 Budget

#### **Revenue measures**

Income tax reforms:

- Review of the upper limits for vehicle benefits.
- Introduction of an additional income tax bracket of 35 percent,
- An increase in income tax rate from 1 percent to 5 percent while making provisions for the implementation of a minimum chargeable income system.
- Unification of the loss carried forward provisions in the Income Tax Act while restricting the treatment of foreign exchange losses to actual losses.

Excise Tax reform:

- Revision of the taxation of cigarettes and tobacco products to align with ECOWAS protocols.
- Increase in the excise rate for spirits above that of beers.
- Taxation of products such as electronic smoking devices and liquids which are not currently taxed.

VAT Reforms:

- Increase in the Value Added Tax (VAT) rate by two and a half percentage points from 12.5 percent to 15 percent.
- Review of the VAT threshold and major reforms undertaken with respect to VAT exemptions.

Other Tax reforms:

- Full phase out of the benchmark discount policy in 2023.
- Amendment of the Customs Regulations, 2016 (LI 2248) to allow for self—clearing of goods by importers at the ports of entry without recourse to a customs house Agent.
- Conversion of the National Fiscal Stabilisation Levy (NFSL) into a Growth and Sustainability Levy (GSL) to cover all entities (n the spirit of burden—sharing).

The Electronic Transfer Levy (e-Levy):

Reduction of the headline rate of the e-Levy to one percent of the transaction value alongside the removal of the daily threshold pending further reforms.

#### **Expenditure measures**

- Migration of all earmarked funds onto the GIFMIS platforms and ensure they use the GIFMIS platform to process all their revenue and expenditures transactions.
- Continuing with 30% cut in the salaries of the President, Vice President, Ministers, Deputy Ministers, MMDCEs, and political office holders including those in State—Owned Enterprises
- Placement of a cap on salary adjustment of SOEs to be lower than negotiated base pay increase on Single Spine Salary Structure for each year
- Negotiation of public sector wage adjustments within the context of burden sharing productivity, and ability to pay
- Management of public sector hiring within budgetary constraints.

Source: Ministry of Finance.

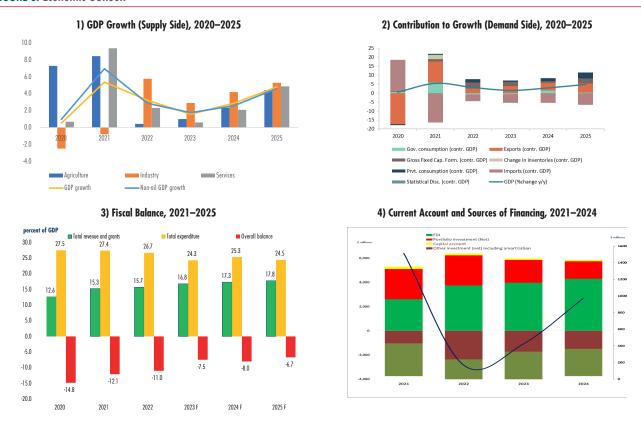
tax exemptions (VAT in particular) will be important for meeting the fiscal consolidation objectives.

The 2023 budget also aims to tackle existing PFM challenges and rationalize public expenditures in order to reduce expenditures by about 2 percent of GDP in 2023. Primary expenditures is expected to be reduced by 2 percentage points of GDP through measure including: (i) slower increases in public sector real wages (and extending the 30 percent cut in the salaries of political office holders, as well as in SOEs); (ii) integrating public procurement approval processes with the GIFMIS; (iii) reviewing and rationalizing key government program (flagship programs) and goods and service; (iv) reducing the cap on Statutory Funds from the current 25 percent of tax revenue to 17.5 percent while also reviewing the efficiency of these funds; and, (v) migrating all earmarked funds onto the GIFMIS

platform. These measures are expected to be reinforced by strict expenditure commitment controls. On the other hand, social protection will be expanded: with a significant increase in the generosity of social protection programs such as LEAP, the School Feeding program, and the NHIS aimed at protecting the most vulnerable from the impact of the macroeconomic crisis and fiscal consolidation (*See Box 3* for details of revenue and expenditure measures).

In 2023, the authorities intend to finance the fiscal deficit from multilateral and other official sources, in the context of the IMF-supported program, and from the domestic T-bills market. The local bond market remains closed for securities with maturity beyond 1 year, following the domestic debt exchange program, and Ghana has lost access to the international capital market since 2021. It is assumed that the country will not regain

#### FIGURE 6: Economic Outlook



Source: 6.1: GSS and World Bank; 6.2: GSS and World Bank; 6.3: World Bank; 6.4: Ministry of Finance and World Bank; 6.5: GSS; 6.5-7: World Bank Staff Estimates.

access to the market within the medium term. In the 2023 Budget, gross financing needs are estimated at 17.6 percent of GDP. Disbursements under the IMF-supported program and a potential World Bank Development Policy Operation (DPO), will be augmented by weekly proceeds from the government sale of T-bills for cash and liquidity management.

#### Ghana's fragile external position is projected to gradually improve

Ghana's balance of payment is expected to continue deteriorating in 2023, due to continued capital outflows and a growing current account deficit, before recovering in the medium term. The current account deficit is expected to narrow further over the mediumterm, averaging 2.7 percent of GDP over the next five years

(2023–2027), as the trade balance continues to improve thanks to the increasing oil production. In 2023, FDI will remain relatively low at 2 percent GDP, while net outflows in portfolio investment will also be low at 0.5 percent of GDP (due to the comprehensive debt restructuring). Net outflow of 'other' investments remain high at 4.6 of GDP leading to a high capital and financial account outflow of 2.4 percent of GDP. Beyond 2023 (i.e., 2024–2027), the capital and financial account is expected to record a net inflow of 1.4 percent of GDP per year on average, as FDI recovers thanks to reforms aimed at improving the business sentiment and stabilizing the economy. 40 External debt disbursements over the medium term are likely to be limited to multilateral and other official bilateral development partners. The BOP deficit is expected to

<sup>&</sup>lt;sup>40</sup> This is also in the context that there will be no portfolio inflows due to the continued loss of international market access and freeze in the domestic bond market.

be as high as 5.7 percent of GDP in 2023 but will decline to an average of a deficit of 1.2 percent per annum in 2024–2027.

Ghana's macroeconomic outlook is subject to significant downside risks from debt sustainability concerns, lack of fiscal space, and a heightened global uncertainty

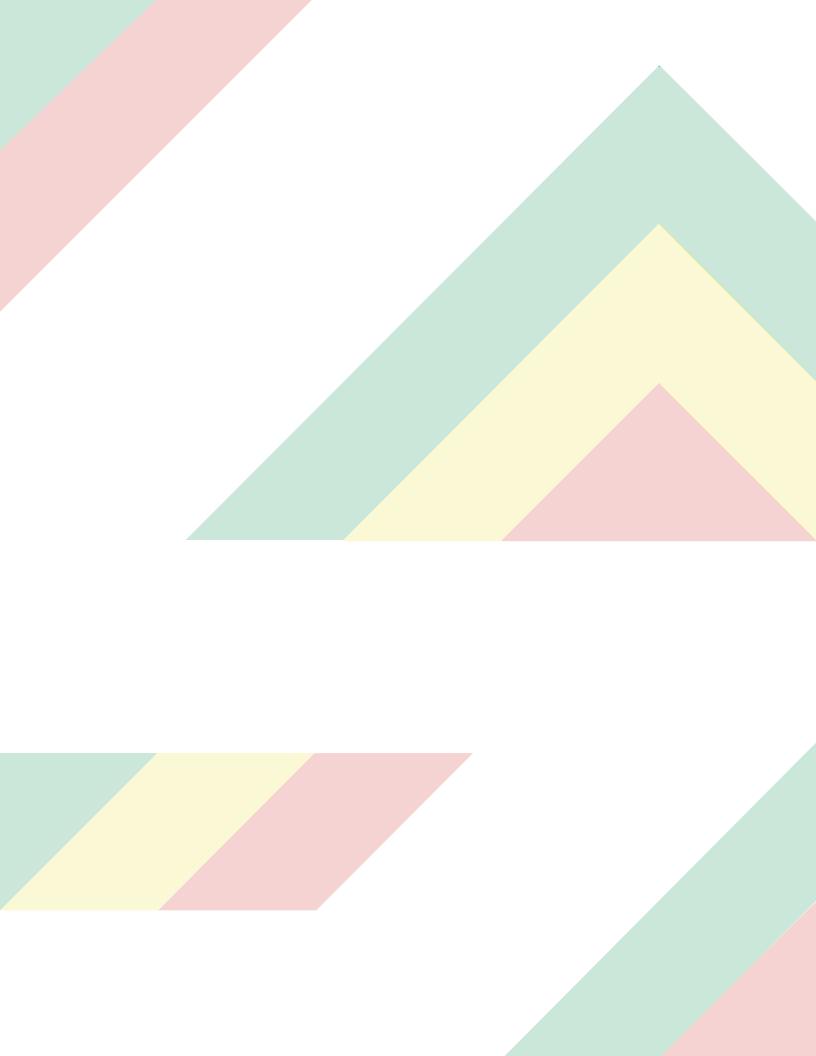
Ghana faces an extremely challenging outlook, and the economic situation is likely to deteriorate further before it rebounds. Key risks to the outlook include:

- Financial instability caused by the ongoing domestic debt restructuring: Applying large haircuts to banks holdings of sovereign claims could deteriorate their capital adequacy and adversely affect their capacity to lend, dampening credit to the private sector and slowing economic activity.
- Additional contingent liabilities in the energy and financial sectors: The need to additional support to the financial sector or delays in the implementation of the ESRP in the energy sector could result in additional financing needs and undermine the fiscal consolidation program, drawing out the current crisis.
- Public discontent which can be fueled by soaring inflation, exchange rate depreciation, fiscal consolidation measures, and the domestic debt restructuring could fuel opposition to the ongoing reforms. This can raise social tensions in an already difficult economic situation and could slow down and/or delay reforms needed to restore sustainability.

- Domestic policy slippages due to the political cycle: Pre-election (in 2024) pressures may put offtrack government's resolve of fiscal discipline and macroeconomic recovery.
- The impact of the war in Ukraine: Intensifying spillovers from the war in Ukraine through further sanctions, negative demand shocks and related uncertainties could worsen value-chain trade and financial disruptions and commodity price volatility. This may also result in imported inflation, as happened in 2022. Further, the uncertain environment and heightened investor risk aversion may depress financial inflows, including FDI.
- Other global risks, such as lower global growth (including in Advanced Economies) and faster monetary policy tightening: Global growth is forecast at 3.0 percent in 2023—the lowest medium-term growth forecast published in all WEO reports since 1990.<sup>41</sup> If the financial sector stress in advanced economies amplifies, it could trickle down to EMDEs like Ghana, and slow down FDI recovery. On the exports side, a slower recovery of China would result in lower demand for Ghana's export commodities.<sup>42</sup>

<sup>41</sup> IMF, April 2023.

<sup>&</sup>lt;sup>42</sup> Ghana's exports to China primarily consist of raw materials and commodities. Gold is one of the significant exports, with China being the largest consumer of Ghanaian gold. Other major exports include oil, cocoa, timber, and minerals. Ghana's exports to China are crucial for generating foreign exchange earnings and supporting its economy.



## POLICY PRIORITIES

In addition to managing the immediate impacts of the crisis, the authorities will need to enact structural reforms to tackle its root causes and build economic resilience

Ghana needs to collect more domestic revenues, notably by streamlining tax incentive regimes and improving revenue administration. The 2022 Tax Exemption Bill should be steadfastly implemented, and the report on tax expenditure presented to Parliament. 43 A comprehensive stock-taking exercise of existing tax exemption regimes and an exhaustive estimation of the tax expenditure would serve as a useful basis for the system's overhaul. The Ghana Revenue Authority (GRA) could accelerate efforts to improve compliance by making better use of taxpayer information. The ongoing data warehouse and business intelligence initiative should help improve analytical reporting, tax-auditing, and compliance; its actual impact will depend on implementation.44 The GRA should accelerate the procurement of the Integrated Tax Administration System (ITAS) and fully operationalize the system as soon as operationally feasible. 45

Ghana could implement tighter expenditure controls to improve budget execution accuracy and prevent new arrears accumulation. In 2022, the amount of accumulated payables (new arrears) totaled 10.6 percent of GDP, reflecting weaknesses in expenditure commitments controls as well as unrealistic budgeting (for instance insufficient budgetary allocation to cover the energy sector shortfall). Going forward, the authorities should implement their arrears clearance plan for the

Fully addressing the energy sector's revenue shortfall will be a pressing concern. Under a business-as-usual scenario the sector's cumulative deficit is expected to reach over \$8 billion by 2025. Financial shortfalls in the energy sector continue to jeopardize fiscal sustainability. The Energy Sector Recovery Program (ESRP), approved by GoG in 2019, has fallen short of its ambitions due to the fiscal crisis (limiting available resources) and to delays in utilities' financial and operational restructuring. The government could look to extend, expand, and more thoroughly implement the ESRP, including actions to: (i) reduce the power sector revenue shortfall by, implementing necessary tariff adjustments; (ii) improve performance and reduce

large stock of accumulated payables in the context of the tight fiscal space, which will require proactive budgeting and budgetary arbitrages. In addition to reinforcing expenditure controls in entities which are already fully implementing the GIFMIS, the authorities should complete the extensive rollout of the GIFMIS infrastructure (both institutionally and geographically) to generalize adequate expenditure controls. This will involve integrating GIFMIS with other systems, including Hyperion, <sup>46</sup> E-procurement and the bank clearing system — the Ghana Interbank Payment and Settlement Systems Limited (GHIPPs) <sup>47</sup> to ensure real time data exchanges and avoid overcommitments.

<sup>43</sup> The Tax Exemptions Bill was supported by the World Bank's Sustainable Development Financing Policy (SDFP).

<sup>44</sup> The Datawarehouse and Business intelligence was supported by the World Bank's Ghana Economic Management Strengthening (TA) Projected.

<sup>45</sup> This should involve data migration from existing portals, the verification and implementation of all the modules of the system.

Ministry under the GIFMIS project introduced in 2015 a new Budget Preparation and Management System (Oracle Hyperion) to replace the Activate software which hitherto was used in the preparation of MDAs Budget. Financial information contained in the Budget Estimates are thus generated from the Budget Module. The new Budget Module which integrates with the Oracle Financials (GIFMIS) has helped to improve the quality of budget information as well as significantly reduced the time for budget preparation and implementation.

<sup>&</sup>lt;sup>47</sup> The Ghana Interbank Payment and Settlement Systems Limited (GHIPSS) is a wholly owned subsidiary of the Bank of Ghana incorporated in May 2007 with a mandate to implement and manage interoperable payment system infrastructures for banks and non-bank financial institutions in Ghana.

the ECG's technical losses (26 percent in 2020); (iii) conclude contract re-negotiations with IPPs to reduce the fiscal burden on the budget; and (iv) introduce a transparent and predictable financial mechanism that ensures tariff shortfalls are financed by the budget until cost-recovery is reached. The government should also make provisions in the budget to ensure full payment of power consumption by MDAs.

Improving the management and monitoring of SOEs would help improve their financial viability thus minimizing fiscal risks to the government. The State Interest and Government Authority (SIGA) should be empowered to monitor all the key performance indicators (KPIs) adopted by SOEs and evaluate their operational and financial risks. Currently, the Ministry of Finance conducts credit risk assessments (CRAs) for SOEs seeking guarantees from government and onlending facilities; going forward, these CRAs should be conducted periodically. To further enhance SOEs performance, the Authorities should adopt a framework for the appointment of board members and the selection of executive management based on technical capacity and sectoral expertise. Going forward, to ensure that power purchase agreements offer the best value for money, the Authorities should ensure transparency in power procurement through the strict adherence to competitive procedures.

Rebuilding financial sector buffers and promoting financial sector development are important medium- and long-term priorities. In this context, timely operationalization of the Financial Sector Stability Fund (FSSF) to mitigate the impact of the DDEP remains a priority. 48 The Fund could focus on the provision of solvency support to financial institutions impacted by the DDEP. It could be anchored on a comprehensive Costed Financial Sector Stability Plan, which sets a uniform and forward-looking baseline

of DDEP losses that have materialized or are likely to materialize, defines the criteria for the prioritization of government support, and articulates sound governance arrangements for government support.

Government will have to boost the inflow of FDI by enhancing the investment climate through improvements in transparency, accessibility and quality of business regulation and regulatory governance. The government could encourage private investments, by eliminating impediments to FDI inflows such as the minimum capital requirements to foreign investors through the amendment of the GIPC Act [865, 2013]. Furthermore, the Authorities could support better corporate governance practices and a more efficient regulatory environment for companies by through the adopting the implementation regulations of the Companies Act [Act 1078]. Specifically, reviewing the local content laws could help encourage FDI. Further reducing trade barriers – including through the implementation of the African Continental Free Trade Area agreement – could promote export competitiveness. Currently, free entry of prospective investors into the country is hampered by the cumbersome procedures associated with the current mode of applying for visas in Ghana. The government can improve this by fully rolling out an e-visa system in which all would-be visitors could apply for, make payments, and obtain approvals through an online portal. The government could expedite actions to adopt of various implementing regulations.

The current crisis also presents opportunities for the authorities to catalyze long-term growth (and job creation) and prepare for climate change.

While addressing the current crisis and restoring macroeconomic stability, Ghana needs to preserve its long-term growth prospects and ensure sufficient job creation. Ghana's longer-term challenges have been aggravated by the pandemic, the war in Ukraine, and the sharp deterioration of global economic conditions, which are weighing on investment growth prospects. These shocks

<sup>48</sup> The fiscal authorities will be responsible for funding the FSSF. The World Bank is working with the government to specify the modalities of the FSSF: a World Bank Investment Project Finance could support Ghana on this.

have **contributed** to the slowdown of poverty reduction in Ghana (World Bank, April 2023)<sup>49</sup>. Bolstering long-term growth prospects will require policies supporting investment and human capital development, as well as buttressing resilience and crisis preparedness, especially in agriculture and food systems. Ghana should support well-targeted investments to create jobs, lower income inequality, and boost productivity. These include well-targeted investments in agricultural R&D, green innovations, measures that improve the uptake of new technology, and diversification of food sources and food supply chain systems (Gautam et al. 2022; World Bank 2022c). Finally, human capital investment came under pressure during the pandemic and should be prioritized to bolster capacity and better harness technology for improved productivity and job quality (Bashir et al. 2021; World Bank and UNESCO 2022).

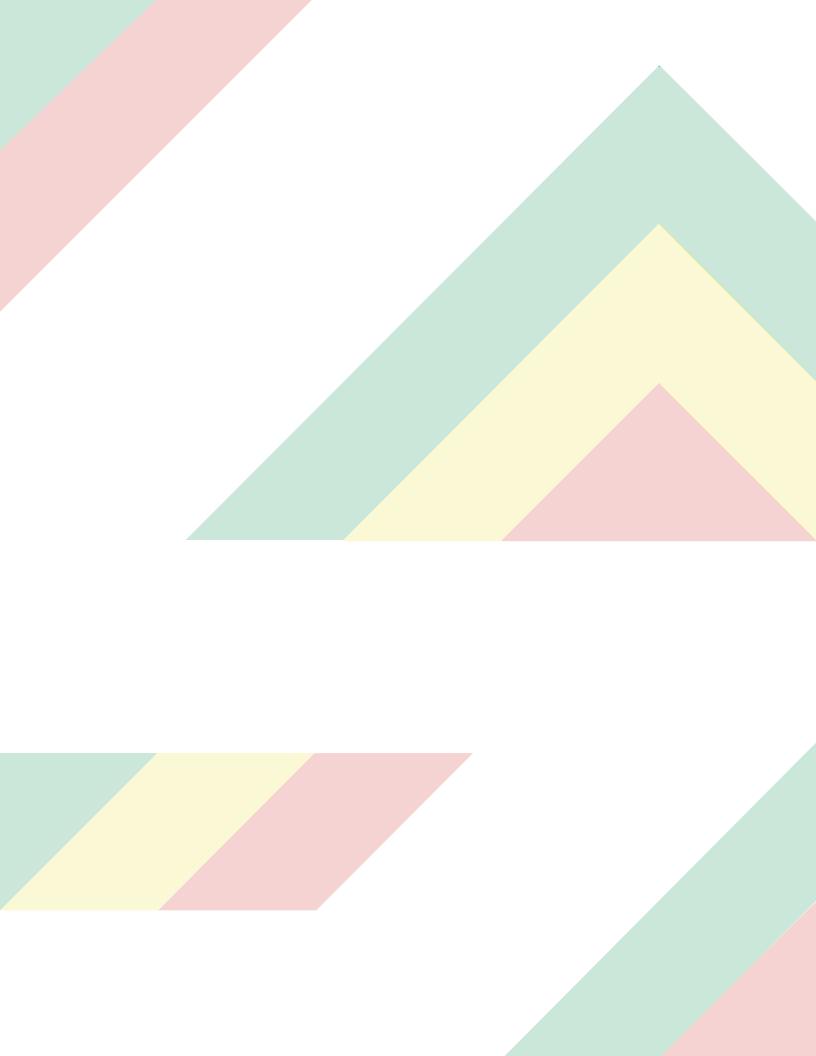
The authorities need to aim at strengthening policies to adapt to and mitigate climate change. Investment in resilient public infrastructure (particularly in agriculture, urban development, and coastal protection) and the development of a social protection system that is more responsive to climate shocks are key to prepare Ghana for the negative consequences of climate change. Mitigation of climate change also calls for investments in low-carbon energy production and preservation of the country's natural carbon sinks. As a starter, the authorities could draw on the recommendations of the World Bank's new core diagnostic tool, the Country Climate and Development Report (CCDR) to prioritize investments starting from no-regret actions that maximize resilience benefits at an affordable cost. Specifically, the CCDR recommends that Ghana should:

- adopt an integrated approach to agriculture and environmental management by fostering integrated landscape management, promoting climate-smart agriculture, and supporting adaptation of coastal communities.
- build sustainable cities and resilient infrastructure through better urban development, enhancements in resilient mobility infrastructure and services, and improved waste management.
- boost disaster risk preparedness through early warning systems, better national financial preparedness against climate shocks, and adaptive health and social protection systems.
- take advantage of new opportunities for managing forest resource as an asset for climate resilience, including for carbon sinks focusing on reversing deforestation and promoting cleaner cooking.
- promote a transition to clean energy by scaling up renewable energy sources and strengthening regional energy markets; and
- modernize transport systems by, among others, improving public transportation and updating vehicle standards.

<sup>49</sup> Macro Poverty Outlook, April 2023.

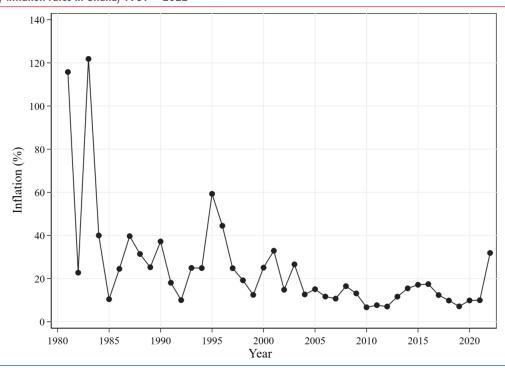
PART II

SPECIAL FOCUS: INFLATION, POVERTY, AND FOOD INSECURITY



## BACKGROUND

FIGURE 7: Yearly inflation rates in Ghana, 1981 - 2022



Source: Based on data from Ghana Statistical Service (GSS) and World Economic Outlook (WEO), October 2022.

High inflation in 2022 had catastrophic effects on food security and poverty in Ghana

The high and persistent inflation Ghanaians experienced throughout 2022 had catastrophic effects on food security and poverty. Between January and December of 2022, year-on-year inflation rose from 14 to 54 percent, with food prices rising much faster than non-food prices. Average inflation in 2022 rose to a level unseen since the early 2000s (see Figure 7). With high inflation came a considerable loss in real purchasing power for Ghanaians. Because the incomes of the poor typically are less responsive to inflation and the poor devote a

larger share of their budget to food (relative to better off households) and have fewer coping mechanisms, they are disproportionately affected by inflation.

**High inflation has exacerbated poverty and food insecurity.** At the height of the of the COVID pandemic nearly 3 out of 4 Ghanaian households experienced a decrease in their incomes. To cope with the shock, many households reported that they reduced food and non-food consumption, while many had to rely on savings, borrowing, and the sale of assets. The inflation shock further aggravated these pressures, increasing the likelihood that

<sup>&</sup>lt;sup>50</sup> Ghana Statistical Service (2021).

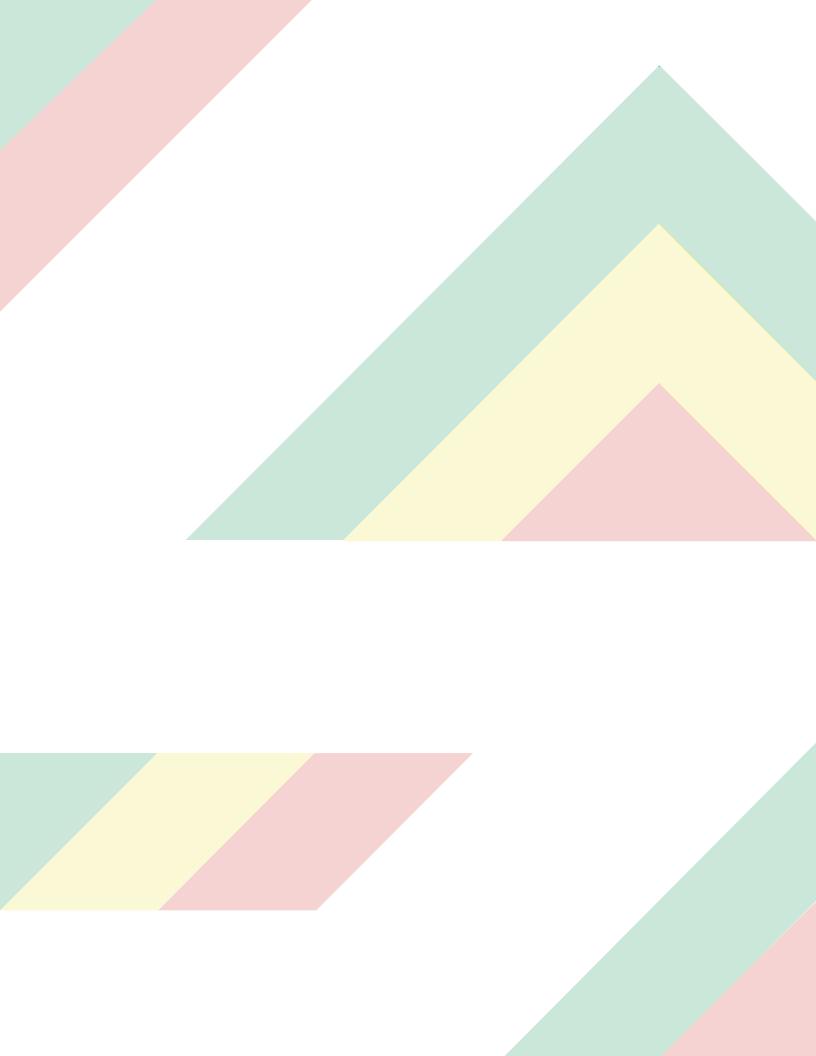
temporary declines in incomes and consumption become entrenched or permanent. Simulations show that nearly 850,000 Ghanaians were pushed into poverty due to rising prices in 2022. Simultaneously, the food security situation in the country is believed to have worsened considerably. Between the last quarter of 2021 and the same period of 2022, the number of food insecure<sup>51</sup> Ghanaians jumped from 560,000 to 823,000. As food prices climbed, many Ghanaians struggled to procure food to meet their dietary

needs and/or to satisfy their food preferences for an active and healthy life. As a result, by the last quarter of 2022, a quarter of the population was deemed food insecure,<sup>52</sup> and the rate is expected to persist well into 2023. This is due to muted economic growth, minimum wage adjustments that have been insufficient to cover inflation, and continued levels of high inflation in 2023 leading to erosion of living standards for the population as a whole but especially the poor.<sup>53</sup>

<sup>&</sup>lt;sup>51</sup> Food security as defined by the United Nation's Committee on World Food Security means that all people, always, have physical, social, and economic access to sufficient, safe, and nutritious food that meets people's food preferences and dietary needs for an active and healthy lifestyle.

<sup>52</sup> Cadre Harmonisé, December 2022.

<sup>53</sup> The Public Utilities Regulatory Commission has announced two major hikes in the price of electricity for 2023. The first is an increase of 30 percent across the board announced for January, and second is an increase of 18.4 percent announced for June 2023. In total an increase in the price of electricity of 54 percent.



# DISAGGREGATING INFLATION-POVERTY IMPACT CHANNELS DURING 2022

Inflation does not affect all goods or services equally: so its impact on households depends on which prices rise relatively more and how important they are for specific households. During 2022 all prices rose, implying that most households became worse-off. On average, between 2021 and 2022, the prices of goods and services increased by 32 percent and average prices for all classification of individual consumption by purpose (COICOP) categories experienced a stark price increase (see Figure 8).54 While non-food inflation was very high (29 percent on average in 2022 see Figure 9), food prices increased even more (by 34 percent). Food is a special category of goods in that it is not substitutable; moreover, since poor households devote a larger share of their budget to food, they are also relatively more affected by increases in food prices.

Russia's invasion of Ukraine exacerbated preexisting pressures on food prices. Prior to the COVID-19 pandemic a massive locust swarm affected the cultivation of crops and livestock-feed across Africa.<sup>55</sup> The pandemic exacerbated the impact of this via labor shortages (linked to restriction of movement) and a shift in food demand.<sup>56</sup> The war in Ukraine further exacerbated these pressures as Russia and Ukraine are large exporters of foodstuffs, fertilizer and fuel.<sup>57</sup> Between June 2021 and July 2022, palm oil and wheat prices rose by over 60 percent. During the same period, fertilizer prices, which are an essential input to agriculture, more than doubled. **Fertilizer prices in Ghana have risen even more rapidly than at the global level.** Most of the fertilizer used in Ghana (close to 99 percent in 2019) is imported. <sup>58</sup> Nearly 3 out of 4 households interviewed in the Food Security and Nutrition Monitoring System (FSNMS) survey indicated that the prohibitive cost of fertilizers was one of the main problems faced by farm households in the 2022 planting season. <sup>59</sup> Up to June 2021, fertilizer prices in Ghana were aligned to international prices; however, in the second half of the year fertilizer price in Ghana rose even more rapidly, or continued to rise while global prices were stabilizing (Figure 10).

The food production situation in Ghana during 2022 was mixed: some crops experienced a drop in while others saw an uptick. On the one hand, overall cereal production was depressed by lower production of high-output maize and millet. On the other hand, the production of starchy staples like yam and cassava, as well as of legume, increased. Many small farming households had to purchase food on the market because their production was reportedly impacted by dry spells (31 percent according to the FSNMS survey), crop pests and diseases (22 percent), civil insecurity (21 percent), effects of COVID-19 (21 percent) and floods (12 percent).60 Additionally, the country's dependence on food imports for certain items (e.g., rice, wheat, and poultry) contributed to inflationary pressures, particularly as the price of these items increased on the international market and the cedi depreciated.

<sup>&</sup>lt;sup>54</sup> COICOP is a reference classification used to classify and analyze consumption expenditures done by households. It was developed by the United Nation's Statistical Division.

<sup>55</sup> Ebrahim et al. (2020).

<sup>56</sup> Laborde et al. (2020). In essence, because of consumption patterns and where these were realized during the pandemic changed, it led to supply chain issues as suppliers had to adapt to a quick change in demand.

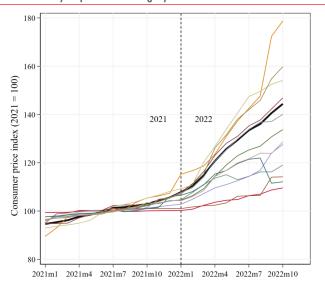
<sup>&</sup>lt;sup>57</sup> Arndt et al. (2022).

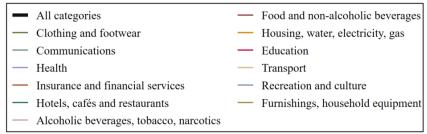
<sup>58</sup> Food Security Update in Ghana. November 2022 Cadre Harmonisé Findings. WFP Ghana.

<sup>&</sup>lt;sup>59</sup> Reported by Cadre Harmonisé.

<sup>&</sup>lt;sup>60</sup> Food Security and Nutrition Monitoring System – Ghana (2022).

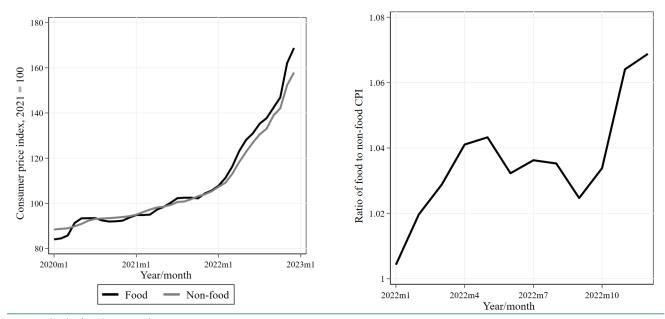
FIGURE 8: Changes in prices in 2021 and 2022 by expenditure category





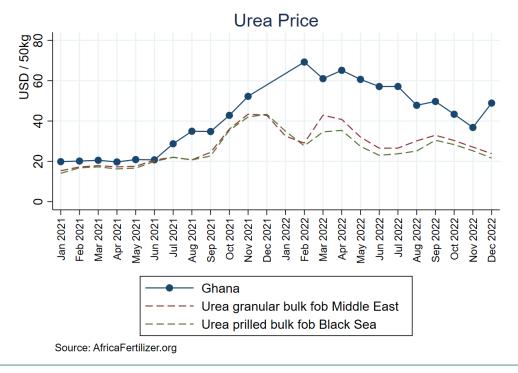
Source: Based on data from Ghana Statistical Service (GSS).

FIGURE 9: CPI of food and non-food items (left) and food to non-food ratio (right)



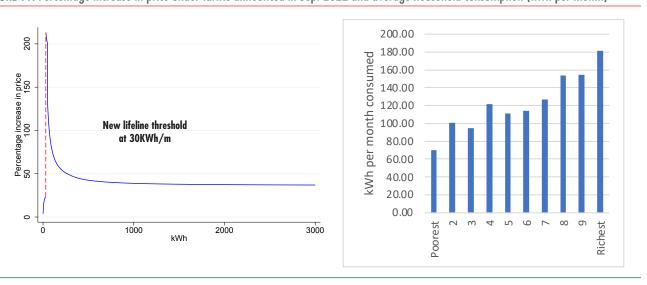
Source: Based on data from Ghana Statistical Service (GSS).

FIGURE 10: Urea price in Ghana and the international market



Source: AfricaFertilizer.org.

FIGURE 11: Percentage increase in price under tariffs announced in Sept 2022 and average household consumption (kWh per month)



Source: Own estimates based on announced tariffs, and Staff Estimates based on GLSS7.

Note: The blue line is the change in price corresponding to the tariff revision according to the kWh consumed. The redline indicates the lifeline tariff cutoff at 30 kWh. The elimination of the lifeline tariff as soon as consumption is above 30kWh creates a discontinuity in prices. As soon as consumption goes above 30kWh, prices more than double and fall from there.

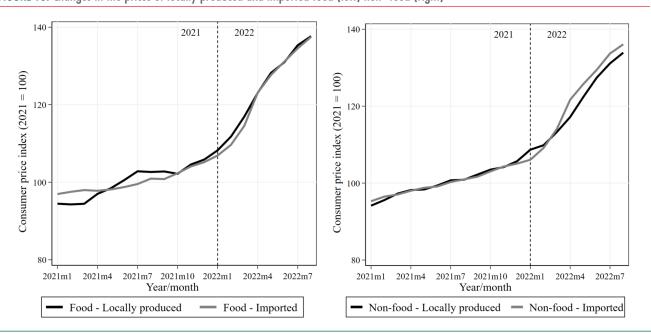
FIGURE 12: Concentration of electricity subsidies before and after increase



Source: Own estimates based on simulations conducted on GLSS-7.

Note: Figure illustrates the percentage of the total subsidy that is received by different types of households classified by their welfare deciles. The poorest have experienced a slight decrease in the subsidy received, while the richest households experienced a slight increase. Overall, the concentration of the subsidy became more regressive.

FIGURE 13: Changes in the prices of locally produced and imported food (left) non-food (right)



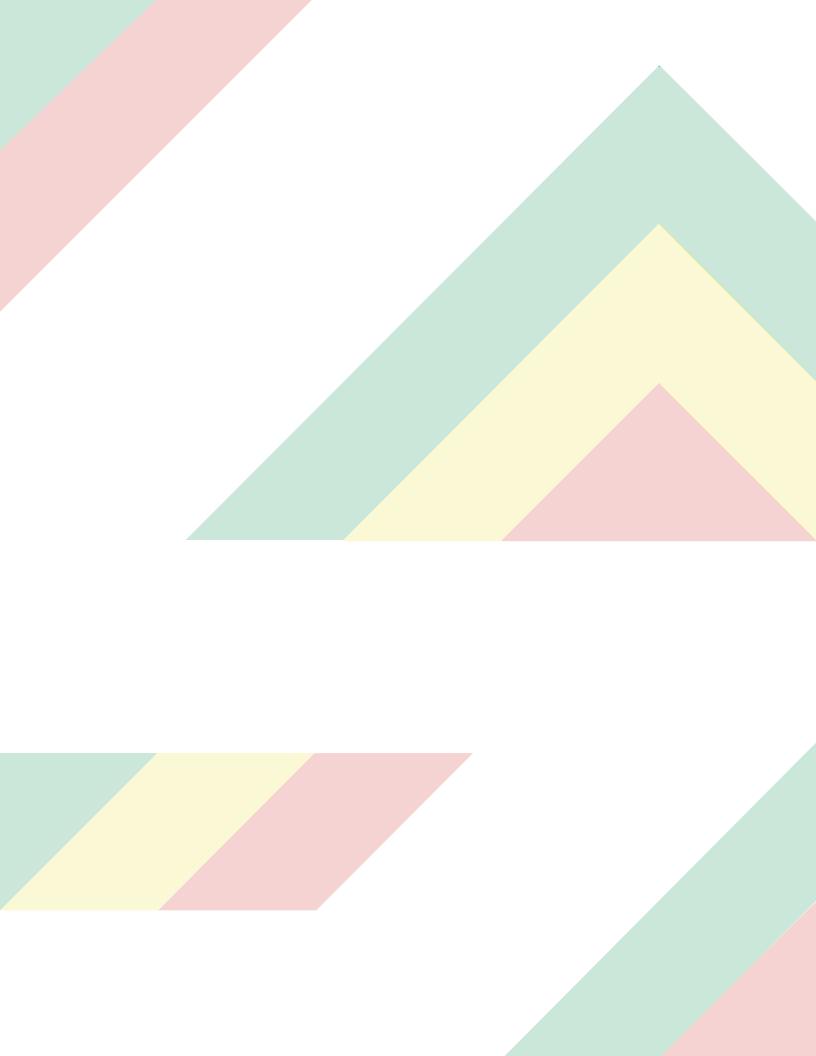
Source: Based on data from Ghana Statistical Service (GSS).

**Domestic policy channels -and specific policy design choices- also played a role.** Significant increases in electricity tariffs since September 2022,<sup>61</sup> while necessary for fiscal sustainability, were particularly regressive (it affected the poor more than the rich) in their design. Average electricity consumption among the poorest households is nearly 70 kWh per month and the revised tariffs particularly affected this group (Figure 11, right). The main change in the tariff was the lowering of the lifeline tariff, from 50 to 30 kWh, and the elimination of the lifeline tariff (for the full consumption) as soon as a consumer's electricity consumption exceeded 30 kWh

per month. Consequently, the real increase (combining the impact of changes to pricing and application of the lifeline) was highest for those consuming between 30 and 200 kWh per month (>50%, see Figure 11 left). As a result, the implicit subsidy fell but became even more regressive (Figure 12).

The depreciation of the cedi has also contributed to inflation by driving up the prices of imported goods and services, and also putting pressure on prices of domestic substitutes. Indeed, there were similar inflation rates for both imported and locally produced food (see Figure 13, left) as well as imported and locally produced non-food items (see Figure 13, right). In sum, the exchange rate depreciation led to increases in prices of imports and passed through to domestic production.

<sup>&</sup>lt;sup>61</sup> Between September 2022 and June 2023, Public Utilities and Regulatory Commission (PURC) conducted three quarterly adjustment of electricity tariffs by 27.15 percent in September 2022, 29.96 percent in March 2022 and 18.36 percent in June.



# SIMULATING PRICE IMPACTS ON POVERTY

## **BOX 1:** Inflation and poverty

Inflation affects both rich and poor, albeit in different ways. The relatively richer spend a large share of their disposable income on non—food consumption. The relatively poorer spend most of their income on food and are, thus, more vulnerable to rising food prices (Shrestha and Chaudhary, 2013). Food inflation puts pressure on the already strained wallets of the poor forcing them to cut back on other essential consumption. Additionally, the poor are likely to depend on income that is not indexed to inflation, while the rich are able to hedge against inflation risks (e.g., holding wealth in stocks and bonds).

International prices and currency depreciation also affect the poor more. Inflation that is induced by a currency's depreciation tends to have a larger impact on the poor since their consumption is inclined toward food, which is a tradeable good, as opposed to that of the rich who spend a larger share of their budget on services which are non—tradeable (Cravino and Levchenko 2015). Hence, the poor are likely to be more affected by depreciation and inflation since it is likely to affect non—tradeable goods more and these are a larger share of their expenditure.

Wage stickiness, particularly for those on minimum wage, can generate increased poverty (Erosa and Ventura 2002). In many countries, including the United States, minimum wage is not indexed to inflation (Elwell 2013). Ghana's daily minimum wage increased by only 10 percent between January 2022 and January 2023. The adjustment was insufficient to keep up with the country's rising prices, leaving minimum wage workers worse off. Pensions, on the other hand, increased by 25 percent, which is significantly higher, even if still not enough to keep up with inflation.

Theoretically, inflation can benefit poverty reduction in the short term when it is the product of expansionary monetary policy. Expansionary monetary policy can stimulate economic growth and increase demand, leading to higher output and inflation; known as demand—pull inflation. Rising demand can result in higher prices, leading to increased demand for labor and a reduction in unemployment (Romer and Romer 1998). As a result, those just below the poverty line could be lifted out of poverty if all incomes rise. This is unlikely to have occurred in Ghana.

Inflation in Ghana has been mainly driven by high food and energy prices, leading to increased poverty. This type of inflation is called cost—push inflation and is unlikely to increase employment (Branson 1989). In fact, higher input prices are more likely to cause a decrease in supply, leading to excess demand, which, in turn drives up prices. The rise in prices is expected to exacerbate poverty as there are no accompanying improvements in employment prospects.

Not all the poor are affected in the same way and rising food prices are typically less detrimental to those who rely primarily on agriculture (Ivanic and Martin 2008). All else equal, an increase in prices implies a reduction in real incomes for net consumers. For farmers, an increase in crop prices leads to higher incomes. At the same time they may need to substitute relatively more expensive/preferred commodities for cheaper/less desired ones. The impact of increased food prices on households thus depends on the interaction between the income effect (resulting from higher prices) and the substitution effect (whereby households reduce consumption of items with higher prices and replace them with lower priced items). While consumers adjust by reducing their consumption of higher—priced items, producers adapt by shifting production to more profitable commodities in the medium—term (Janvry and Sadoulet 2010). Self—sufficient households may be unaffected, while households that sell some of their crops may benefit if the income effect from higher prices overrides the substitution effect.

The general inflation experienced by Ghanaian households during 2022 eroded their purchasing power. Wages and salaries among the poorest often do not keep pace with movements in the prices of goods and services (Box 1).<sup>62</sup> Consistent with this, minimum wages in Ghana increased by 10 percent in 2022 even as general price levels rose by over 53 percent, implying that workers' real incomes dropped by over 43 percent. A drop in real incomes means purchasing less preferred food stuffs and delaying the purchase of non-necessary items. Overall, household budget shares towards non-food items such as clothing and entertainment are expected to have fallen, with

The typical Ghanaian household allocates nearly 43 percent of its expenditures toward food. The next expenditure categories in terms of importance are "housing rents, water, electricity, gas, and fuel" (10.2 percent), transportation (10.1 percent), and "clothing and footwear" (8.1 percent). Households typically allocate the remaining share (28.6 percent) to communication, education, health, recreation, and culture among others. There is, however, considerable heterogeneity in these shares across welfare quintiles, particularly with respect to food.

In Ghana, the poorest spend relatively more on food and thus they were hit harder by the relatively

households increasingly having to rely on savings and on selling assets to support their needs.

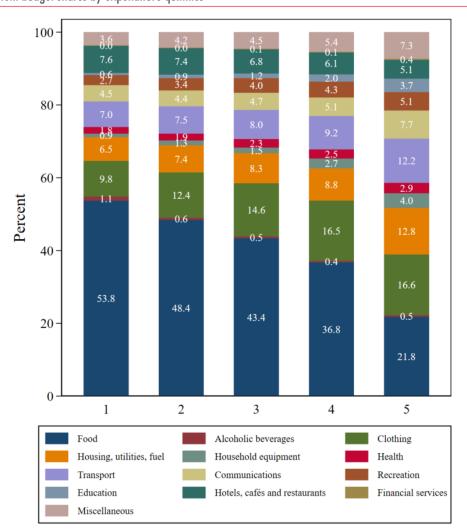
<sup>&</sup>lt;sup>62</sup> For example, in the United States minimum wage is not indexed to inflation. Additionally, wage stickiness among unskilled labor was found to be detrimental to poverty reduction in India (Ravallion and Datt 2002).

<sup>63</sup> Based on quarter 1 data from AHIES (2022) see appendix on data used.

higher increase in prices for food. The poorest 20 percent of Ghanaians devote nearly 54 percent of their budget to food, more than double the share for households in the uppermost quintile (Figure 14). Thus, any increase in food prices affects them to a greater extent. Additionally, because poorer households are consuming nearly at subsistence levels, their food consumption is "inelastic" (it cannot be reduced) and instead other expenditure items have to be scaled back just so that the same level of food consumption can be maintained. Poorer households may also switch from preferred food items to less preferred – for example, consuming less protein and more carbohydrates.

Increased food prices are expected to have minimally benefitted small farming households since most still depend on the market for the majority of their needs. Among the poorest in the country, only 6 percent of their food needs are satisfied by own consumption. Even for the poorest in rural areas the share of food consumption that is satisfied from their own production is rather low at 18 percent (Figure 15). This information coupled with the fact that agricultural inputs have risen considerably and that prices for all other goods have risen by a considerable amount (Table 2) suggest that even producers of their own food needs have been heavily impacted by inflation.

FIGURE 14: COICOP item budget shares by expenditure quintiles



20.0 Percentage of food consumption from 18.0 16.0 14.0 own production 12.0 10.0 8.0 6.0 4.0 2.0 0.0 2 3 Poore st Richest ■ Urban ■ Rural ■ National

FIGURE 15: Share of own food consumption in total food expenditures

Source: Own estimates based on GLSS-7.

### BOX 2: Simulating the impact of inflation on poverty

The Annual Household Income and Expenditure Survey of 2022 (AHIES) collected detailed regionally representative household expenditure data for the first quarter of 2022. Since household expenditure data for the AHIES is only available for the first quarter of the year, the expenditure is annualized by applying nominal GDP growth rates to obtain an expenditure that corresponds to each quarter of the year. This data serves as the baseline for simulating the impact of inflation on poverty.

The first step in the process entailed determining the baseline poverty rate for the country in 2022. A process like the one followed for the poverty projections in the Macro Poverty Outlook is done. Expenditures in the 2016/17 GLSS are shifted by real GDP growth rates with a pass—through rate of 0.87 to arrive at a welfare aggregate for 2022. The share of the population who are projected to be poor in 2022 is 21.7 percent.

The projected poverty rate is applied to the expenditure aggregate of the AHIES to determine the threshold that yields the same poverty rate. With this, the 1st quarter expenditures from the AHIES are adjusted by nominal GDP growth using a pass—through rate of 0.87 to arrive at nominal expenditures for the 4th quarter of 2022. Projected expenditures for the 4th quarter of 2022 are deflated using the COICOP category specific inflation experienced in 2022 and the share of the population falling under the previously estimated threshold is calculated. Because the goal is to estimate the impact of inflation experienced in 2022, the inflation experienced in 2021 is used to calculate the counterfactual poverty rate that would have resulted if inflation would have been the one observed in 2021.

The impact of inflation on Ghana's international poverty rate is then calculated by taking the difference between the counterfactual and the poverty rate resulting from the 2022 inflation. Due to the higher inflation experienced in 2022, poverty increases by 2.6 percentage points. This suggests that nearly 850 thousand Ghanaians were pushed into poverty due to inflation experienced during 2022.

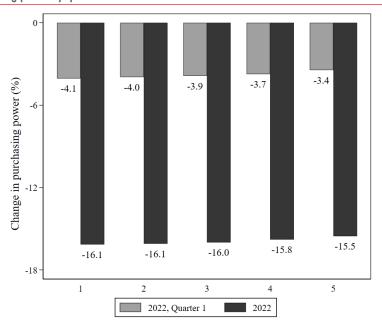
Close to 850 thousand individuals are estimated to have been pushed into poverty during 2022 on account of larger-than-expected<sup>64</sup> rise in prices. Most Ghanaian households are estimated to have experienced a deterioration in living standards, particularly toward the end of 2022. The impact on welfare is simulated by relying on the first quarter of the Annual Household Income and Expenditure Survey (AHIES) of 2022, collected by Ghana's Statistical Service (see Box 2). Results suggest that the increase in prices between January 2022 to December 2022, all other things equal, led to an average purchasing power loss of 15.7 percent. The poorest 20 percent of the population lost 16.1 percent of their purchasing power to inflation in 2022, while the richest 20 percent lost 15.5 percent 2022 (Figure 16).65

Household purchasing power losses became more pronounced toward the end of the calendar year as inflation heightened at the end of 2022.

 $<sup>^{64}</sup>$  Relative to what it would have been if inflation in 2022 had been equal to inflation in 2021.

 $<sup>^{65}\,</sup>$  This assumes nominal income remain constant. In the short-run this is plausible as incomes may rise with a lag.

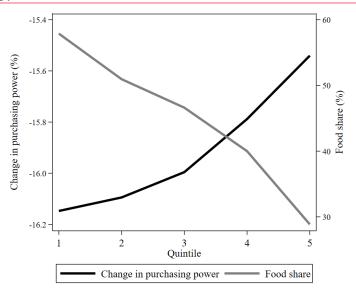
FIGURE 16: Change in purchasing power by quintile



Source: Ghana Statistical Service.

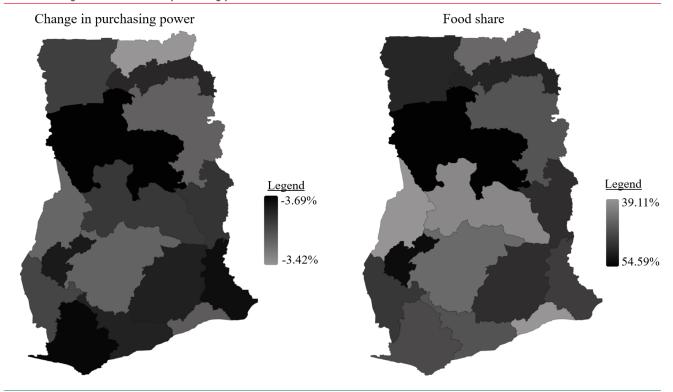
Notes: This chart combines AHIES data for 2022, quarter 1 with monthly inflation data from Ghana Statistical Service (GSS). The purchasing power loss for 2022, Quarter 1 is estimated based on the AHIES data and quarter—to—quarter inflation. Daily consumption per person is deflated with quarterly inflation for 2022, quarter 1 to obtain actual daily consumption per person in real terms. For comparison, the quarterly inflation for 2021, quarter 1 is applied to daily consumption per person to obtained expected daily consumption per person in real terms. The relative difference between the actual and expected daily consumption per person is shown in this chart as the change in purchasing power in 2022, quarter 1. AHIES data are available for only the first quarter of AHIES, however monthly inflation data are more readily available covering the whole year. To get a sense of the impact of inflation, we annualize the AHIES data for quarter 1 and estimate daily consumption per person. Yearly inflation data instead of quarterly inflation data are used to deflate daily consumption per person. All else remains the same.

FIGURE 17: Change in purchasing power and food share



Source: Ghana Statistical Service.

FIGURE 18: Regional distribution of purchasing power loss and food share



Source: Staff estimates based on AHIES (2022).

TABLE 2: Year—on—year inflation by COICOP group

| COICOP category   | Weight | Inflation (%) |
|---|--------|---------------|
| Housing, water, electricity, gas, fuel                                | 10.23  | 82.6          |
| Furnishings, household equipment                                      | 3.19   | 71.7          |
| Transport   | 10.14  | 71.1          |
| Personal care, social protection and miscellaneous goods and services | 2.43   | 61.0          |
| Food and alcoholic beverages  | 43.12  | 59.7          |
| Clothing and footwear   | 8.07   | 42.1          |
| Recreation and culture  | 3.47   | 42.0          |
| Alcoholic beverages, tobacco, narcotics                               | 3.71   | 38.9          |
| Health  | 0.74   | 33.9          |
| Communications  | 3.63   | 22.0          |
| Education   | 6.5    | 11.8          |
| Insurance and financial services                                      | 0.23   | 10.9          |
| Hotels, cafés and restaurants   | 4.56   | 9.4           |

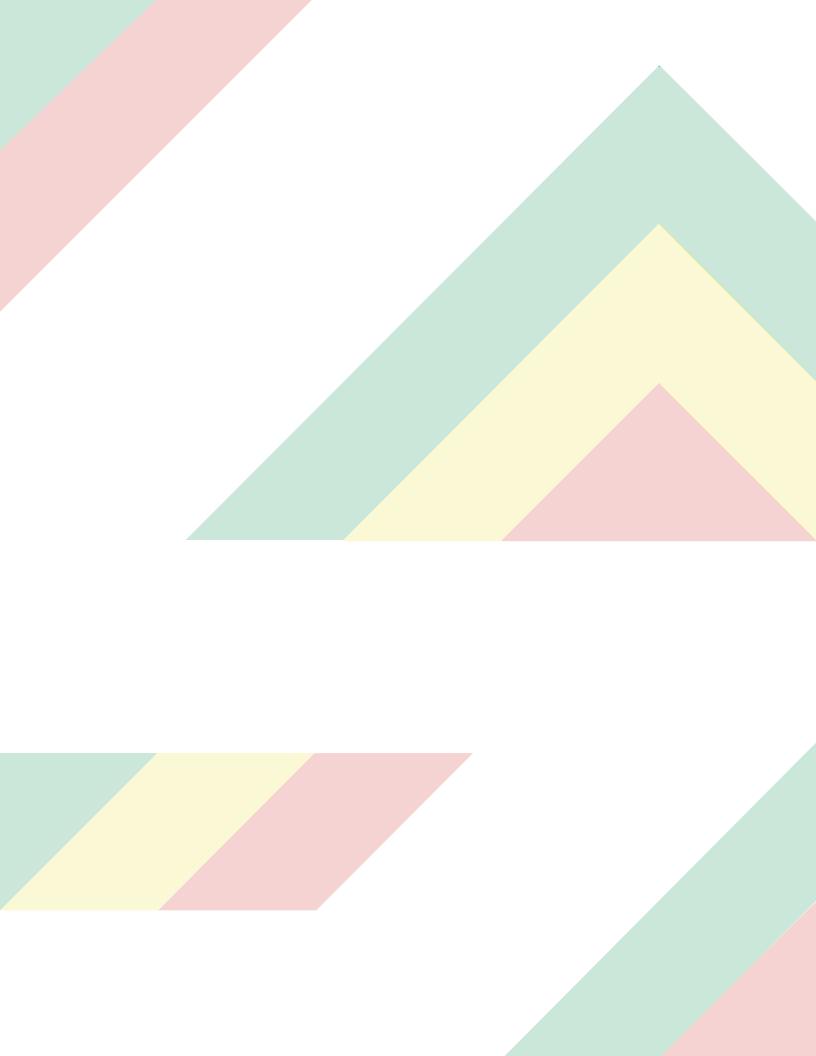
Source: Ghana Statistical Service

Accounting for inflation in the first quarter of 2022 alone, it is estimated that households in Ghana lost 3.7 percent of their purchasing power on average (see Figure 16). However, when accounting for inflation over the whole year, the estimated loss of purchasing power is as high as 15.7 percent. Quarterly inflation in the first quarter of 2022 was 6.5 percent, while yearly inflation in 2022 was 32 percent. The shock from inflation became worse during the course of the year and many households were likely to resort to dilapidated savings and assets which were already spent during the COVID-19 pandemic.

There are important regional differences in Ghana and, therefore inflation is expected to have had differential impacts across regions. Changes in purchasing power and food shares are correlated (Figure 17), implying

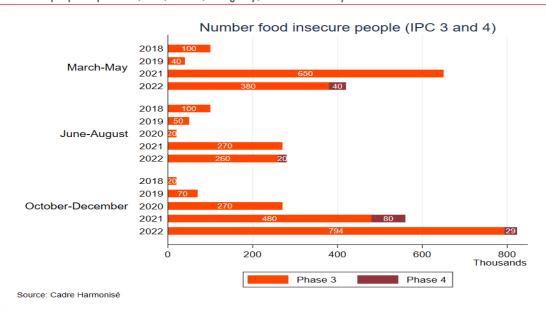
higher purchasing power losses in poorer regions where food shares are relatively high (e.g., Savannah and Ahafo) and lower purchasing power losses in richer regions where food shares are relatively low (e.g., Bono, Ashanti, Greater Accra, and Bono East). Within regions, rural areas are expected to have experienced larger purchasing power losses (Figure 18). Food shares are generally lower (higher) in urban (rural) areas, aligned to lower (higher) poverty in urban (rural) areas. The purchasing power loss is not always largest in rural areas, in Greater Accra the urban population was more affected by inflation than rural populations. The reason is because urban populations in Greater Accra devote a considerable share of their budget to non-food items with very high inflation rates, such as housing, electricity, water, and fuel — which experienced over 80 percent inflation (see Table 2).

<sup>66</sup> Note that the simulation ignores potential income effects that may benefit farming households, although the effect is expected to be low given the broad-based increase in prices.



# THE IMPACTS OF FOOD PRICES ON FOOD INSECURITY

FIGURE 19: Number of people in phase 3 (crisis) and 4 (emergency) of food insecurity



Source: Cadre Harmonisé.

Food insecurity became acute at the end of 2022 when household purchasing power was eroded most and is forecasted to remain elevated

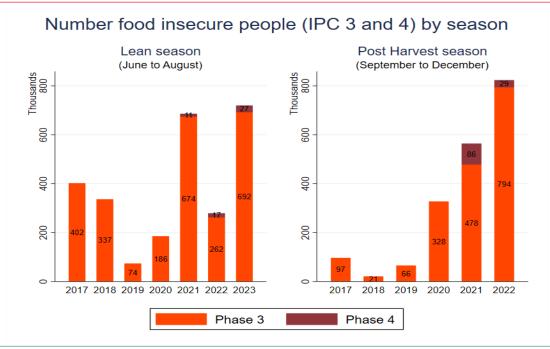
The exceptional rise in prices during 2022 worsened food insecurity significantly. Food insecurity (as measured by the number of households falling into "acute food insecurity" classification of the Cadre Harmonisé (CH),<sup>67</sup> increased significantly toward the end of the year (see Figure 19), a period also characterized by the highest inflation rates (see Figure 8). The number of people who were considered food insecure in phase 3 (crisis) or phase 4 (emergency) increased slightly in the June–August period (from 270,000 in 2021 to 280,000

in 2022) but substantially in the last quarter of the year (from 560,000 in October–December 2021 to 823,000 in October–December 2022). Although the seasonal nature of food insecurity is generally reflected in a higher number of food-insecure people in the lean season than in the post-harvest season, the number of food-insecure people in the post-harvest season of 2022 was significantly higher (Figure 20), providing further evidence of the negative effect of food inflation on food security by the end of 2022. Food insecurity at crisis and emergency levels are expected to remain elevated through mid-2023. CH forecasts predict 719,000 people will be at crisis or emergency levels of food insecurity, with 27,348 of these in emergency IPC4 in the June to August 2023 period.

<sup>&</sup>lt;sup>67</sup> The Cadre Harmonisé is a unified early warning tool that shares relevant, timely and reliable information on the risk of worsening food security situations across the globe. For more details see: https://www.ipcinfo.org/ch/

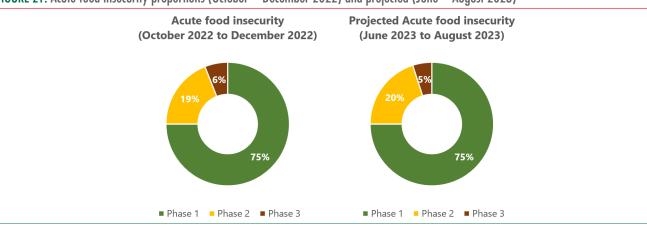
<sup>68</sup> The phases of food insecurity are: 1) minimal/none – Food secure, 2) Stressed – Food insecure, 3) Crisis – Acute food insecurity, 4) Emergency – Humanitarian emergency, 5) Catastrophe – Famine (IPC 2019).

FIGURE 20: Number of people in phase 3 (crisis) and 4 (emergency) of food insecurity by season



Source: Cadre Harmonisé.

FIGURE 21: Acute food insecurity proportions (October — December 2022) and projected (June — August 2023)

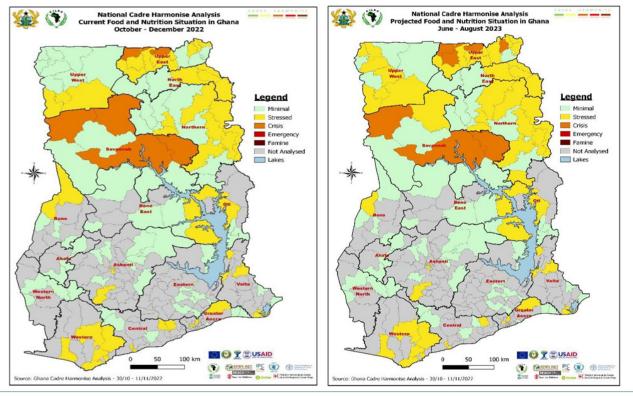


Source: Global Food and Nutrition Security Dashboard.

A quarter of the population in the last quarter of 2022 was at "stressed" levels of food insecurity, or worse, and this prevalence rate is expected to persist into 2023. The highest number of food-insecure people recorded in the last quarter of 2022 (October-December 2022) corresponds to a stressed or above food insecurity prevalence of 25 percent, split into 19 percent in stress (phase 2) and 6 percent in crisis (phase 3, Figure 21). This prevalence rate is projected to remain unchanged in

<sup>&</sup>lt;sup>69</sup> Stressed Households have minimally adequate food consumption but are unable to afford some essential non-food expenditures without engaging in stress coping strategies.

FIGURE 22: District—level acute food security measure



Source: Cadre Harmonisé.

TABLE 3: By land owning quintile, share of farming households who over the last 12 months reported that due to lack of money or resources someone in the household (GLSS7):

|                      | Skipped a meal | Ate less | Ran out of food | Hungry but did not eat | Went a whole day<br>without food |
|----------------------|----------------|----------|-----------------|------------------------|----------------------------------|
| Smallest<br>holdings | 54.5           | 58.3     | 50.7            | 37.9                   | 11.2                             |
| 2                    | 50.8           | 56.3     | 45.7            | 34.1                   | 11.4                             |
| 3                    | 51.7           | 54.7     | 43.1            | 34.5                   | 8.4                              |
| 4                    | 48.9           | 52.1     | 43.3            | 33.2                   | 8.4                              |
| Largest holdings     | 50.0           | 54.0     | 40.8            | 36.8                   | 9.8                              |
| Total                | 51.4           | 55.4     | 45.3            | 35.5                   | 10.1                             |

Source: GLSS7, data corresponds to 2016. Excludes households with 0 land holdings.

June-August 2023, with 20 percent projected by CH to be in stress and 5 percent in crisis. Current and projected food insecurity prevalence rates are highest in some districts in the Savannah and Upper East regions, where the highest levels of poverty are already concentrated (Figure 22). In the North of the country, with the highest concentration of poverty and rural agricultural households, 41 percent of the analyzed districts were classified as being under pressure (phase 2); 5 percent were classified in crisis (phase 3), namely Central Gonja, North East Gonja,

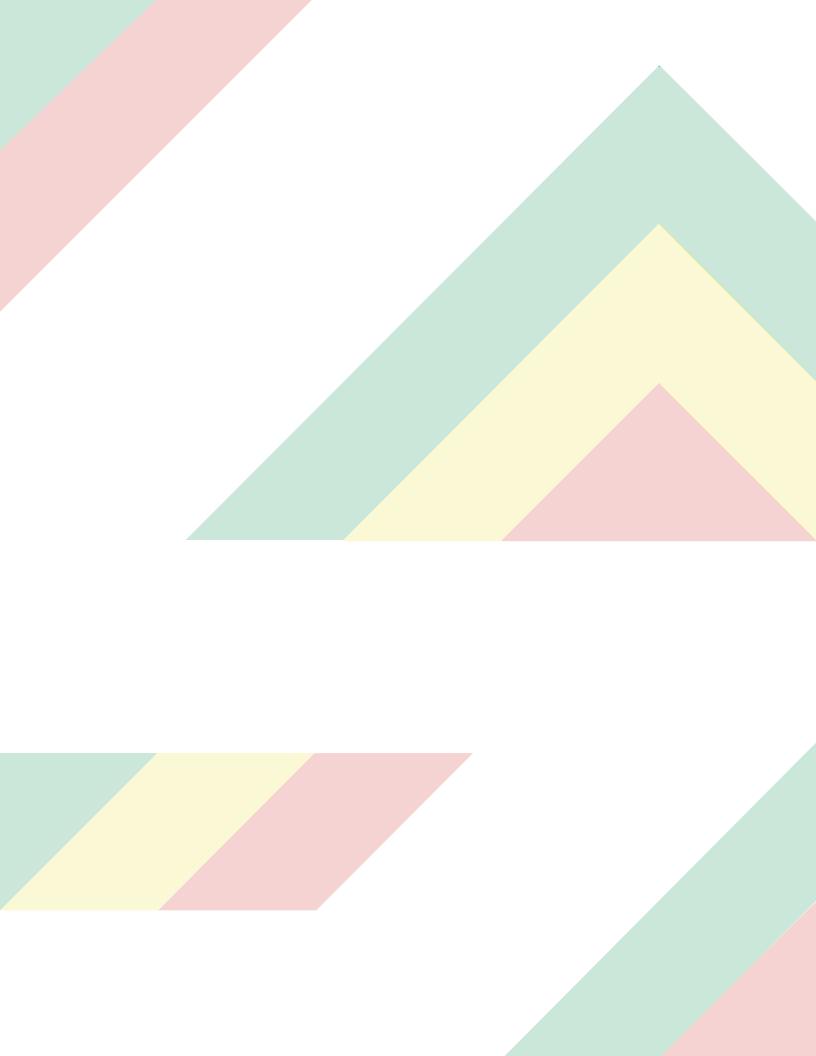
North Gonja & Sawla-Tuna-Kalba (Savannah), Bongo & Kassena-Nankana West (Upper East). As a result, at least one in one in twenty households has a significant food consumption deficit (crisis or emergency levels of consumption) and is marginally able to meet their minimum food needs by depleting livelihoods-related assets. No districts have, thus far, been classified in emergency (phase 4) or catastrophe/famine (phase 5). Food consumption is likely to worsen over the course of 2023 due to a possible reduction in household and market food stocks and still elevated food prices.<sup>70</sup>

In Ghana, poor farmers are unlikely to have benefitted from high food prices. Higher food prices tend to affect poor consumers (typically the urban poor) and may benefit producers (farmers). However, in Ghana, poor farmers mostly produce for own consumption and tend to have limited market engagement for their produce — for them the increase in prices would have been neutral in terms of income. Moreover, the increase in prices across all basket items, including farm inputs (see Figure 10) and other basic items suggest that farmers were likely worse off. Data from 2016/17 suggest a significantly higher share of households who produced some of their food reported that their household ran out of food over the previous year because of a lack of money or other resources than households who relied on the market entirely (48.5 vs. 30.4%). Moreover, food insecurity is also pronounced among households who possess larger landholdings, suggesting that food insecurity affects farming households to a higher extent (Table 3).

<sup>70</sup> Cadre Harmonize. Ghana. Results of the Current (October to December 2022) and Projected (June to August 2023) Acute Food Security and Nutrition Analysis.

 $<sup>^{71}\,</sup>$  Data obtained from GLSS7 of 2016.

<sup>&</sup>lt;sup>72</sup> Median landholdings for the five quintiles are: 0.4, 1.21, 2.02, 3.44, and 7.89 hectares.



## CONCLUSIONS

Worsening living conditions and a rise in food insecurity can be directly linked to the high inflation rates and even higher increases in food prices that Ghanaians experienced in 2022. Inflation in 2022 is estimated to have pushed 850,000 individuals into poverty, while contributing to putting nearly a quarter of all household at stressed levels of food insecurity and roughly 823,000 people at crisis or emergency levels of food insecurity. It is unclear when the global pressure on prices will abate and thus it is primarily incumbent upon the Government of Ghana to take measures to protect the poorest and vulnerable who have been heavily impacted from inflation. While some measures have been taken by the government, like increased minimum wage and expanded payment amounts of its cash transfer program (Livelihood Empowerment Against Poverty – LEAP), the adjustments to date are insufficient to offset the derelict effects of inflation. Additionally, the Government of Ghana must strive to implement sound macroeconomic and fiscal policies consistent with reducing inflationary pressures to stem the loss of its populations' purchasing power moving forward.

In the short term, the GoG should take rapid measures to protect the most vulnerable, particularly since inflation in 2023 could be higher. Enhanced and flexible social protection programs such as food vouchers, cash transfers, and school feeding programs to help vulnerable households access sufficient and nutritious food during times of high food prices are crucial. The Expanding and increasing transfers of the Livelihood Empowerment Against Poverty (LEAP) could ensure the poorest are able to cope with shocks and build up resilience to future shocks. Additionally, payments could add conditionality to ensure that parents continue to invest in the human capital of their children during the crisis, thus reducing the likelihood of

these children falling into a poverty trap. Finally, governments must also be prepared to cover imports in case there is a national crop production shortfall and should hold sufficient currency reserves in case these are needed. This buffer helps mitigate the impact of food shortages or price increases that may occur due to insufficient domestic production.

In the longer term, to mitigate the impact of inflation on food security, policymakers must enable farmers to adjust to global demand and take advantage of market opportunities. This is particularly relevant since many of the poor are farming households. Policies should be evidence based and aimed at alleviating the different constraints farmers face. Policy actions may include the channeling of investments in agriculture to research, development, and technology transfers to help increase productivity and reduce production costs, as well as improve the quality and safety of food.<sup>74</sup> Additionally, as the effects of climate change become more salient, it is also essential that the government invests in climate smart agriculture initiatives which can help farmers adapt to changing weather patterns. Promoting a sustainable agriculture, which is resilient to climate change, can help farmers withstand future shocks. With the scope of further promoting agricultural production and rural livelihoods, improved access to credit and crop insurance should be explored in order to allow farming households to invest and take risks to expand their businesses and increase their competitiveness.<sup>75</sup> Additionally, farming households benefit from diversified income sources, which can help them better cope with shocks. Income diversification, however, requires being able to access markets where opportunities to supply labor and goods are available, something that is not always the case in rural areas. Thus, government should

<sup>&</sup>lt;sup>73</sup> Barrett & Headey (2014).

<sup>&</sup>lt;sup>74</sup> IFPRI (2019).

<sup>75</sup> World Bank (2019).

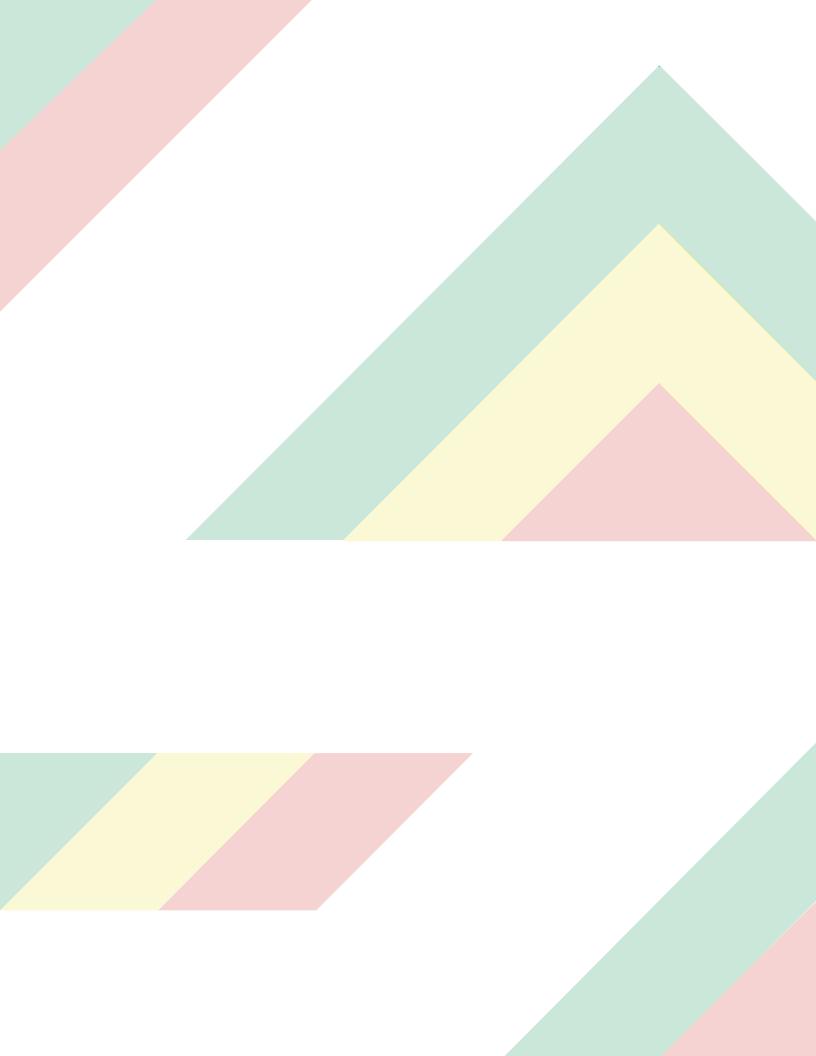
develop infrastructure in rural areas such as better roads, irrigation channels, and improved primary education. These investments can help farmers grow more profitable crops and use better seeds that produce more harvest. Better education and connectivity can also help people find jobs that are not related to farming, which can improve rural livelihoods.

In addition to supporting higher domestic food production, policies need to target opening the country more effective integration with global food supply chains. Programs may seek to foster regional and global trade to improve the availability and affordability of food by reducing barriers to trade, promoting regional integration, and increasing market transparency.<sup>76</sup> Also,

policies that seek to reduce of market distortions such as subsidies, taxes, and price controls can improve market efficiency and reduce food waste. The Ghana Food Systems Resilience Program can contribute to supporting the objectives of building economic and climate resilience, increasing food production, and reducing food insecurity. The program is also intended to support some of the objectives of the government's flagship Planting for Food and Jobs (PFJ) through provision of critical inputs like fertilizer that are currently at unaffordable levels. The Ghana Tree Crops Diversification Project can serve as a critical puzzle piece of the country's current challenges. The project would support poverty alleviation while setting the country up to generate more foreign revenues in the medium to long-term.

<sup>&</sup>lt;sup>76</sup> Shimeles & Verdier-Chouchane (2013).

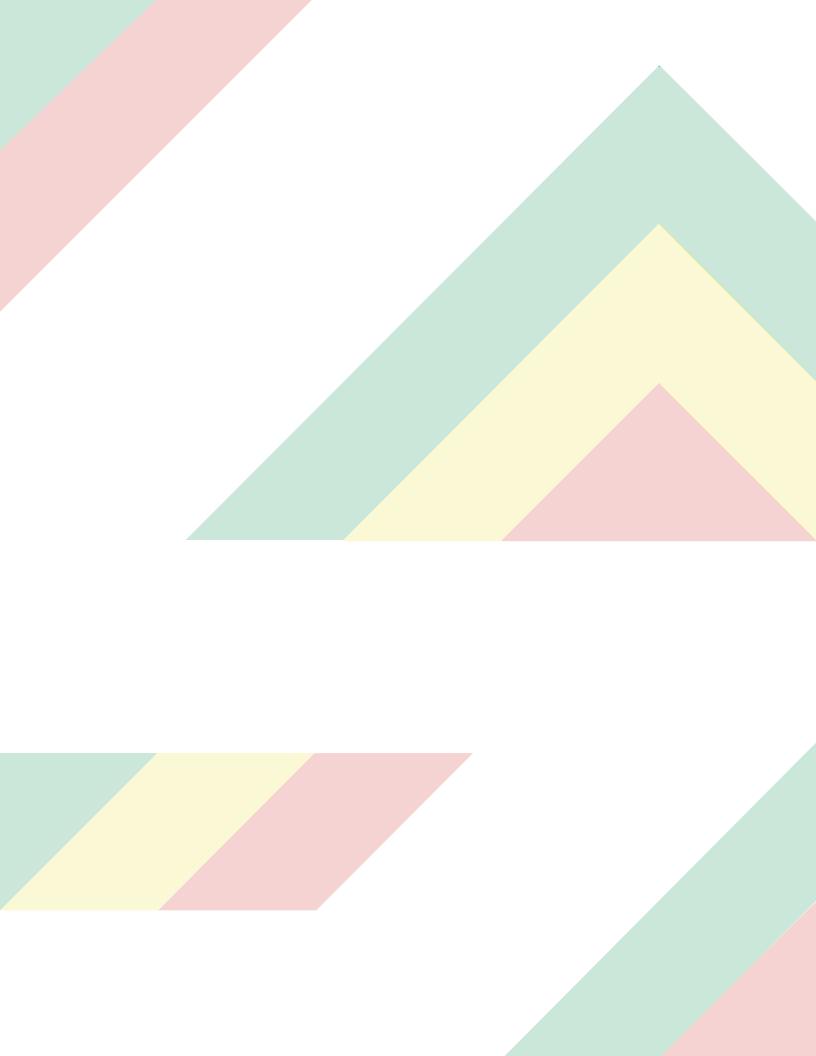
<sup>&</sup>lt;sup>77</sup> Arndt, Demery, & McKay (2012).



## REFERENCES

- World Food Programme. 2023a. "WFP Afghanistan: Situation Report." March. World Food Programme, Rome.
- World Bank. 2023a. MENA Economic Update: Altered Destinies: The Long-Term Effect of Rising Prices and Food Insecurity in the Middle East and North Africa. Washington, DC: World Bank.
- World Bank. 2023b. Global Economic Prospects, June 2023. Washington, DC.
- World Bank. 2023c. Commodity Markets Outlook: Lower Prices, Little Relief, April 2023. World Bank, Washington, DC.
- Schady, N., A. Holla, S. Sabarwal, J. Silva, and A. Y. Chang. Forthcoming. Collapse and Recovery: How the COVID-19 Pandemic Eroded Human Capital and What to Do about It. Washington, DC: World Bank.
- Adeoti, A. I., & Ayinde, O. E. (2018). Inflation, Food Price and Food Security Nexus in Nigeria. Journal of Agricultural Economics and Development, 7(1), 1–12.
- International Monetary Fund. (2023). World Economic Outlook: A Rocky Recovery. Washington, DC. April.
- International Food Policy Research Institute (IFPRI). (2019). Global Food Policy Report 2019. Washington, DC.
- Akinleye, S. O., & Adejumo, A. V. (2020). Impact of inflation on food security: Evidence from selected African countries. Journal of African Business, 21(3), 380–395.
- Arndt, C., Demery, L., & McKay, A. (2012). The economics of food price volatility. Agricultural Economics, 43(2), 139–151.
- Barrett, C. B., & Headey, D. D. (2014). Measuring food insecurity. Science, 345(6202), 1275–1278.
- World Bank. (2022c). Social Protection for Recovery. Europe and Central Asia Economic Update October. Washington, DC: World Bank.

- Arndt, C., Demery, L., & McKay, A. (2012). The economics of food price volatility. Agricultural Economics, 43(2), 139–151.
- Barrett, C. B., & Headey, D. D. (2014). Measuring resilience in a volatile world: A proposal for a multicountry system of sentinel sites. In 2020 Conference papers (No. 1). International Food Policy Research Institute (IFPRI).
- Branson W. H. (1989). Macroeconomic theory and policy (3rd ed.). Addison-Wesley.
- Cravino, J., & Levchenko, A. A. (2017). The distributional consequences of large devaluations. American Economic Review, 107(11), 3477–3509.
- Elwell, C. K. (2013). Inflation and the real minimum wage: a fact sheet.
- Erosa, A., and G. Ventura (2002): "On inflation as a regressive consumption tax," Journal of Monetary Economics, 49(4), 761–795.
- Ivanic, M., & Martin, W. (2008). Implications of higher global food prices for poverty in low-income countries 1. Agricultural economics, 39, 405–416.
- De Janvry, A., & Sadoulet, E. (2010). The global food crisis and Guatemala: What crisis and for whom?. World Development, 38(9), 1328–1339.
- Ravallion, M., & Datt, G. (2002). Why has economic growth been more pro-poor in some states of India than others?. Journal of development economics, 68(2), 381–400.
- Romer, C. D., & Romer, D. (1999). Monetary policy and the well-being of the poor. Economic Review, 84(QI), 21–49.
- Shimeles, A., & Verdier-Chouchane, A. (2013). Food price volatility and domestic stabilization policies in developing countries. Journal of African Economies, 22(suppl\_1), i87–i107.



## **ANNEX**

TABLE 1: Ghana: Summary of Budgetary Central Government Operations, 2019—25 (GFS 2001, Cash Basis, Percent of GDP)1

|  | 2019   | 2020   | 2021   | 2022  | 2023  | 2024  | 2025  |
|--|--------|--------|--------|-------|-------|-------|-------|
|  | Actual | Actual | Actual | Est.  | Proj. | Proj. | Proj. |
| Revenue and grants                         | 14.0   | 12.6   | 15.3   | 15.7  | 16.8  | 17.3  | 17.8  |
| Taxes                                      | 12.4   | 11.7   | 13.2   | 13.1  | 14.0  | 14.7  | 15.3  |
| Direct taxes                               | 6.3    | 5.7    | 6.1    | 6.2   | 6.4   | 6.3   | 6.5   |
| Indirect taxes                             | 4.6    | 3.8    | 5.6    | 5.3   | 5.7   | 6.6   | 7.0   |
| Trade taxes                                | 1.5    | 2.3    | 1.5    | 1.6   | 1.8   | 1.8   | 1.8   |
| Social contributions                       | 0.0    | 0.0    | 0.1    | 0.1   | 0.1   | 0.1   | 0.1   |
| Nontax revenue                             | 1.2    | 0.2    | 1.7    | 2.4   | 2.5   | 2.3   | 2.2   |
| Grants                                     | 0.3    | 0.6    | 0.3    | 0.2   | 0.2   | 0.2   | 0.2   |
| Expenditure                                | 22.9   | 27.5   | 27.4   | 26.7  | 24.3  | 25.3  | 24.5  |
| Expense                                    | 21.1   | 24.9   | 23.7   | 22.5  | 21.0  | 22.0  | 21.2  |
| Compensation of employees                  | 6.2    | 7.2    | 7.1    | 6.4   | 5.9   | 6.0   | 6.0   |
| Purchases of goods and services            | 1.7    | 3.2    | 1.6    | 1.5   | 1.2   | 1.3   | 1.3   |
| Interest                                   | 5.5    | 6.3    | 7.3    | 7.4   | 7.0   | 8.5   | 8.2   |
| Domestic                                   | 4.3    | 4.7    | 5.8    | 5.5   | 4.7   | 6.2   | 5.9   |
| Foreign                                    | 1.3    | 1.6    | 1.5    | 1.9   | 2.3   | 2.3   | 2.2   |
| Subsidies and transfers                    | 2.6    | 2.6    | 2.2    | 2.3   | 2.7   | 2.1   | 1.9   |
| o/w cash transfers to IPPs (energy sector) | 0.0    | 0.0    | 1.5    | 0.9   | 2.7   | 2.1   | 1.8   |
| o/w buildup of payables to IPPs            |        |        |        | 1.4   |       |       |       |
| Social benefits                            | 0.0    | 0.0    | 0.0    | 0.0   | 0.1   | 0.2   | 0.3   |
| Grants to other government units           | 3.2    | 3.2    | 3.6    | 4.7   | 4.2   | 4.0   | 3.7   |
| Other expenses                             | 1.9    | 2.4    | 2.0    | 0.2   | 0.0   | 0.0   | 0.0   |
| Net acquisition of nonfinancial assets     | 1.7    | 2.6    | 3.7    | 4.2   | 3.3   | 3.3   | 3.3   |
| Domestic financed                          | 0.7    | 1.0    | 1.2    | 2.3   | 2.6   | 2.4   | 2.3   |
| Foreign financed                           | 1.0    | 1.6    | 2.5    | 1.9   | 0.7   | 0.9   | 1.0   |
| Primary balance (commitment basis)         | -3.4   | -8.6   | -4.8   | -3.6  | -0.5  | 0.5   | 1.5   |
| Overall balance (commitment basis)         | -8.9   | -14.8  | -12.1  | -11.0 | -7.5  | -8.0  | -6.7  |
| Payables (net change)                      | 0.0    | 0.0    | 2.9    | 2.8   | -0.7  | -0.7  | -0.6  |
| Primary balance (cash basis)               | -1.7   | -8.6   | -1.9   | -0.8  | -1.2  | -0.2  | 0.9   |
| Overall balance (cash basis)               | -8.9   | -14.8  | -9.2   | -8.2  | -8.2  | -8.7  | -7.3  |

(continued)

TABLE 1: Ghana: Summary of Budgetary Central Government Operations, 2019–25 (GFS 2001, Cash Basis, Percent of GDP)1 (continued)

|  |         |         |         |         |         | ,         | ,         |
|--|---------|---------|---------|---------|---------|-----------|-----------|
|  | 2019    | 2020    | 2021    | 2022    | 2023    | 2024      | 2025      |
|  | Actual  | Actual  | Actual  | Est.    | Proj.   | Proj.     | Proj.     |
| Memorandum items:                          |         |         |         |         |         |           |           |
| Oil revenue                                |         |         | 2.6     | 3.6     | 2.6     | 2.4       | 2.3       |
| Non-oil revenue (excl. Grants)             |         |         | 18.2    | 19.9    | 18.5    | 18.0      | 18.6      |
| Non-oil primary balance (commitment basis) |         |         | -5.7    | -5.6    | -3.1    | -1.7      | -0.5      |
| Nominal GDP (GHS, million)                 | 356,544 | 391,941 | 459,131 | 615,259 | 873,138 | 1,077,423 | 1,251,506 |

Source: Ghana Ministry of Finance, IMF and World Bank (staff estimates).

Note: The DSA is still based on a yet-to-be-completed comprehensive debt restructuring: Residual gap to be filled under comprehensive debt restructuring through cash debt relief and savings on the interest bill on the relief amount that has to be borrowed in this pre-restructuring scenario.

TABLE 2: Real GDP Growth by expenditure method, (%) 2015–2022

|  | 2015  | 2016  | 2017  | 2018   | 2019  | 2020  | 2021   | 2022   |
|--|-------|-------|-------|--------|-------|-------|--------|--------|
| Household final consumption expenditure          | 2.5   | -1.8  | 6.5   | 4.0    | 14.3  | 1.7   | 6.0    | 4.8    |
| General government final consumption expenditure | -8.0  | 6.3   | -10.9 | 3.5    | 5.6   | 10.7  | 12.6   | 0.0    |
| NPISH final consumption                          | 2.8   | -0.2  | 5.1   | 4.3    | 2.8   | 0.8   | 101.4  | 3.6    |
| Consumption                                      | 1.3   | -1.0  | 4.5   | 3.8    | 13.3  | 2.4   | 7.5    | 4.3    |
| Gross capital formation                          | -2.2  | 12.3  | 1.9   | 12.1   | -9.3  | 1.7   | 6.2    | 0.7    |
| Exports of goods and services                    | 17.7  | 3.0   | 24.4  | 6.9    | 13.0  | -12.8 | -1.1   | 0.2    |
| Imports of goods and services                    | 8.1   | -1.1  | 7.7   | 5.4    | 15.9  | -8.5  | 6.0    | 1.5    |
| Net Export                                       | -37.8 | -17.1 | 82.6  | -740.1 | -18.5 | -52.1 | -158.0 | -190.4 |
| Gross Domestic Expenditure                       | 2.4   | 3.4   | 8.2   | 6.3    | 6.6   | 0.5   | 5.1    | 3.1    |

Source: Ghana Statistical Service and World Bank (staff estimates).

TABLE 3: World GDP Growth, 2020-25

(Percent change from previous year unless indicated otherwise)

|       |  |      |      |       |       |       | Percentage po<br>from Janu<br>proje | ary 2023 |
|-------|--|------|------|-------|-------|-------|-------------------------------------|----------|
|       |  | 2020 | 2021 | 2022e | 2023f | 2024f | 2023f                               | 2024f    |
| World |  | -3.1 | 6.0  | 3.1   | 2.1   | 2.4   | 0.4                                 | -0.3     |
|       | Advanced economies                       | -4.3 | 5.4  | 2.6   | 0.7   | 1.2   | 0.2                                 | -0.4     |
|       | United States                            | -2.8 | 5.9  | 2.1   | 1.1   | 0.8   | 0.6                                 | -0.8     |
|       | Euro area                                | -6.1 | 5.4  | 3.5   | 0.4   | 1.3   | 0.4                                 | -0.3     |
|       | Japan                                    | -4.3 | 2.2  | 1.0   | 0.8   | 0.7   | -0.2                                | 0.0      |
|       | Emerging market and developing economies | -1.5 | 6.9  | 3.7   | 4.0   | 3.9   | 0.6                                 | -0.2     |
|       | East Asia and Pacific                    | 1.2  | 7.5  | 3.5   | 5.5   | 4.6   | 1.2                                 | -0.3     |
|       | China                                    | 2.2  | 8.4  | 3.0   | 5.6   | 4.6   | 1.3                                 | -0.4     |
|       | Indonesia                                | -2.1 | 3.7  | 5.3   | 4.9   | 4.9   | 0.1                                 | 0.0      |
|       | Thailand                                 | -6.1 | 1.5  | 2.6   | 3.9   | 3.6   | 0.3                                 | -0.1     |
|       | Europe and Central Asia                  | -1.7 | 7.1  | 1.2   | 1.4   | 2.7   | 1.3                                 | -0.1     |
|       | Russian Federation                       | -2.7 | 5.6  | -2.1  | -0.2  | 1.2   | 3.1                                 | -0.4     |
|       | Türkiye                                  | 1.9  | 11.4 | 5.6   | 3.2   | 4.3   | 0.5                                 | 0.3      |
|       | Poland                                   | -2.0 | 6.9  | 5.1   | 0.7   | 2.6   | 0.0                                 | 0.4      |
|       | Latin America and the Caribbean          | -6.2 | 6.9  | 3.7   | 1.5   | 2.0   | 0.2                                 | -0.4     |
|       | Brazil                                   | -3.3 | 5.0  | 2.9   | 1.2   | 1.4   | 0.4                                 | -0.6     |
|       | Mexico                                   | -8.0 | 4.7  | 3.0   | 2.5   | 1.9   | 1.6                                 | -0.4     |
|       | Argentina                                | -9.9 | 10.4 | 5.2   | -2.0  | 2.3   | -4.0                                | 0.3      |
|       | Middle East and North Africa             | -3.8 | 3.8  | 5.9   | 2.2   | 3.3   | -1.3                                | 0.6      |
|       | Saudi Arabia                             | -4.3 | 3.9  | 8.7   | 2.2   | 3.3   | -1.5                                | 1.0      |
|       | Iran, Islamic Rep. <sup>2</sup>          | 1.9  | 4.7  | 2.9   | 2.2   | 2.0   | 0.0                                 | 0.1      |
|       | Egypt, Arab Rep. <sup>2</sup>            | 3.6  | 3.3  | 6.6   | 4.0   | 4.0   | -0.5                                | -0.8     |
|       | South Asia                               | -4.1 | 8.3  | 6.0   | 5.9   | 5.1   | 0.4                                 | -0.7     |
|       | India <sup>2</sup>                       | -5.8 | 9.1  | 7.2   | 6.3   | 6.4   | -0.3                                | 0.3      |
|       | Pakistan <sup>2</sup>                    | -0.9 | 5.8  | 6.1   | 0.4   | 2.0   | -1.6                                | -1.2     |
|       | Bangladesh <sup>2</sup>                  | 3.4  | 6.9  | 7.1   | 5.2   | 6.2   | 0.0                                 | 0.0      |
|       | Sub-Saharan Africa                       | -2.0 | 4.4  | 3.7   | 3.2   | 3.9   | -0.4                                | 0.0      |
|       | Nigeria                                  | -1.8 | 3.6  | 3.3   | 2.8   | 3.0   | -0.1                                | 0.1      |
|       | South Africa                             | -6.3 | 4.9  | 2.0   | 0.3   | 1.5   | -1.1                                | -0.3     |
|       | Angola                                   | -5.6 | 1.1  | 3.5   | 2.6   | 3.3   | -0.2                                | 0.4      |

| Memorandum items:                         |      |       |       |       |       |                             |      |
|---|------|-------|-------|-------|-------|-----------------------------|------|
| Real GDP <sup>1</sup>                     |      |       |       |       |       |                             |      |
| High-income countries                     | -4.3 | 5.4   | 2.8   | 0.8   | 1.3   | 0.2                         | -0.3 |
| Middle-income countries                   | -1.2 | 7.1   | 3.4   | 4.2   | 4.0   | 0.8                         | -0.3 |
| Low-income countries                      | 1.4  | 4.2   | 4.8   | 5.1   | 5.9   | 0.1                         | 0.3  |
| EMDEs excluding China                     | -3.8 | 5.9   | 4.1   | 2.9   | 3.4   | 0.2                         | -0.2 |
| Commodity-exporting EMDEs                 | -3.7 | 5.1   | 3.2   | 1.9   | 2.8   | 0.0                         | 0.0  |
| Commodity-importing EMDEs                 | -0.3 | 7.9   | 3.9   | 5.0   | 4.4   | 0.9                         | -0.4 |
| Commodity-importing EMDEs excluding China | -4.0 | 7.0   | 5.3   | 4.2   | 4.2   | 0.4                         | -0.3 |
| EM7                                       | -0.4 | 7.7   | 3.3   | 4.7   | 4.1   | 1.2                         | -0.4 |
| World (PPP weights) <sup>3</sup>          | -2.8 | 6.3   | 3.3   | 2.7   | 2.9   | 0.5                         | -0.3 |
| World trade volume <sup>4</sup>           | -7.8 | 11.0  | 6.0   | 1.7   | 2.8   | 0.1                         | -0.6 |
| Commodity prices <sup>5</sup>             |      |       |       |       |       | Level differ<br>January 202 |      |
| WBG commodity price index                 | 63.1 | 101.0 | 143.3 | 110.1 | 109.2 | -14.9                       | -7.3 |
| Energy index                              | 52.7 | 95.4  | 152.6 | 108.9 | 109.1 | -21.6                       | -9.2 |
| Oil (US\$ per barrel)                     | 42.3 | 70.4  | 99.8  | 80.0  | 82.0  | -8.0                        | 2.0  |
| Non-energy index                          | 84.1 | 112.5 | 124.4 | 112.5 | 109.5 | -1.2                        | -3.5 |

Source: World Bank.

Note: e = estimate (actual data for commodity prices); f = forecast. WBG = World Bank Group. World Bank forecasts are frequently updated based on new information. Consequently, projections presented here may differ from those contained in other World Bank documents, even if basic assessments of countries' prospects do not differ at any given date. For the definition of EMDEs, developing countries, commodity exporters, and commodity importers, please refer to table 1.2. EM7 includes Brazil, China, India, Indonesia, Mexico, the Russian Federation, and Türkiye. The World Bank is currently not publishing economic output, income, or growth data for Turkmenistan and República Bolivariana de Venezuela owina to lack of reliable data of adeauate audity. Turkmenistan and República Bolivariana de Venezuela are excluded from cross-country macroeconomic aggregates.

- 1. Headline aggregate growth rates are calculated using GDP weights at average 2010—19 prices and market exchange rates.
- 2. GDP growth rates are on a fiscal year basis. Aggregates that include these countries are calculated using data compiled on a calendar year basis. For India and the Islamic Republic of Iran, the column labeled 2022 refers to FY2022/23. For Bangladesh, the Arab Republic of Egypt, and Pakistan, the column labeled 2022 refers to FY2021/22. Pakistan's growth rates are based on GDP at factor cost.
- 3. World growth rates are calculated using average 2010-19 purchasing power parity (PPP) weights, which attribute a greater share of global GDP to emerging market and developing economies (EMDEs) than market exchange rates.
- 4. World trade volume of goods and nonfactor services.
- 5. Indexes are expressed in nominal U.S. dollars (2010 = 100). Oil refers to the Brent crude oil benchmark. For weights and composition of indexes, see https://worldbank.org/commodities.

Public Sector Gross Financing Needs and Sources 2021–27 (Percent of GDP)

|  | (I     | Percent of GDP |       |        |        |        |        |
|--|--------|----------------|-------|--------|--------|--------|--------|
|  | 2021   | 2022           | 2023  | 2024   | 2025   | 2026   | 2027   |
|  | Actual | Est.           | Proj. | Proj.  | Proj.  | Proj.  | Proj.  |
| Gross financing needs (I)              | 21.3   | 20.4           | 23.4  | 25.0   | 30.0   | 28.3   | 19.0   |
| Primary deficit (cash basis)           | 1.9    | 0.8            | 1.2   | 0.2    | -0.9   | -0.9   | -1.0   |
| Financial sector recapitalization      | 0.0    | 0.0            | 2.5   | 0.1    | 0.0    | 0.0    | 0.0    |
| Debt service <sup>1</sup>              | 19.4   | 19.6           | 19.7  | 24.7   | 30.9   | 29.2   | 20.0   |
| External                               | 3.2    | 3.6            | 4.7   | 4.8    | 6.5    | 5.4    | 5.3    |
| Domestic                               | 16.2   | 16.0           | 15.0  | 19.9   | 24.4   | 23.8   | 14.7   |
| Gross financing sources (II)           | 20.8   | 19.8           | 8.2   | 8.1    | 9.8    | 10.3   | 10.3   |
| External                               | 5.5    | 3.2            | 0.4   | 0.7    | 0.7    | 1.7    | 3.1    |
| Multilateral                           | 0.5    | 0.9            | 0.4   | 0.6    | 0.7    | 0.7    | 0.9    |
| World Bank                             | 0.4    | 0.8            | 0.3   | 0.5    | 0.6    | 0.6    | 0.8    |
| Others                                 | 0.1    | 0.1            | 0.1   | 0.1    | 0.1    | 0.1    | 0.1    |
| IMF                                    | 0.0    | 0.0            | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    |
| Bilateral                              | 0.3    | 0.3            | 0.0   | 0.1    | 0.1    | 0.3    | 0.3    |
| Paris Club                             | 0.1    | 0.2            | 0.0   | 0.0    | 0.0    | 0.1    | 0.1    |
| Non-Paris Club                         | 0.1    | 0.2            | 0.0   | 0.0    | 0.0    | 0.1    | 0.1    |
| Private sector                         | 4.7    | 1.9            | 0.0   | 0.0    | 0.0    | 0.7    | 1.9    |
| Eurobonds                              | 3.8    | 0.0            | 0.0   | 0.0    | 0.0    | 0.0    | 1.2    |
| Other commercials                      | 0.9    | 1.9            | 0.0   | 0.0    | 0.0    | 0.7    | 0.7    |
| Domestic                               | 15.6   | 16.4           | 8.0   | 7.6    | 9.2    | 8.8    | 7.4    |
| Bank of Ghana                          | -0.6   | 7.2            | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    |
| Short term debt                        | 4.9    | 5.4            | 5.8   | 7.6    | 7.4    | 2.6    | 1.9    |
| Medium term debt                       | 11.3   | 3.8            | 0.0   | 0.0    | 1.8    | 6.2    | 5.5    |
| Financial sector recapitalization bond | 0.0    | 0.0            | 2.2   | 0.0    | 0.0    | 0.0    | 0.0    |
| Ghana Petroleum and Sinking Funds, net | -0.3   | 0.2            | -0.2  | -0.2   | -0.2   | -0.2   | -0.2   |
| Financing gap (II)-(I)                 | 0.0    | 0.0            | 15.2  | 16.9   | 20.2   | 18.0   | 8.7    |
| Exceptional financing                  | 0.0    | 0.0            | 2.6   | 1.7    | 1.5    | 0.8    | 0.0    |
| IMF                                    | 0.0    | 0.0            | 1.8   | 1.1    | 1.0    | 0.5    | 0.0    |
| Other financial partners               | 0.0    | 0.0            | 0.8   | 0.6    | 0.5    | 0.3    | 0.0    |
| Residual gap <sup>2</sup>              | 0.0    | 0.0            | 12.6  | 15.2   | 18.7   | 17.2   | 8.7    |
|  | 0.0    | 0.0            | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    |
| Discrepancy                            | 0.6    | 0.6            | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    |
| GDP (Billions GHS)                     | 459.1  | 615.3          | 873.1 | 1077.4 | 1251.5 | 1413.8 | 1597.1 |
| GoG and IMF                            |        |                |       |        |        |        |        |

Source: MOF, BOG, CSD and IMF staff calculations.

<sup>&</sup>lt;sup>1</sup> Includes debt service by ESLA, Daakye and Cocobills. Service on local currency debt held by non-residents is included in domestic debt service.

<sup>&</sup>lt;sup>2</sup> Residual gap to be filled under comprehensive debt restructuring through cash debt relief and savings on the interest bill on the relief amount that has to be borrowed in this pre-restructuring scenario.

