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# EGYPT ECONOMIC MONITOR

Strengthening Resilience through Fiscal & Education Sector Reforms

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# **Egypt Economic Monitor – 2022**

# Contents

Acknowledgments	i
Acronyms	ii
Executive Summary	iii
Chapter 1 – Recent Economic Developments and Outlook	1
The rebound in economic activity is dampened by the adverse global developments	1
The overlapping global shocks intensified the pre-existing pressures on external accounts and	l
triggered an exchange rate adjustment	3
Inflation is accelerating due to soaring international food and energy prices, the exchange rate	e
depreciation, supply bottlenecks and domestic structural challenges	5
Monetary policy has been tightened, but liquidity conditions remain relatively eased	7
Fiscal consolidation remains crucial, notably through bringing down interest payments,	
streamlining primary expenditures and enhancing revenue mobilization	9
Outlook	.13
Chapter 2 – Education: Reforming the Four Walls Carrying Tomorrow	.16
Inequitable Access in Pre-Primary and Secondary Education	
Low Public Spending on Education and the Salaries Paradox	.19
An Uneven Distribution of Resources Across Education Levels and Governorates, and a	
Widening Public/Private School Gap	.20
The Budget Process Is Not Efficient in Supporting Learning Goals	.22
Reforming Education from a Holistic Perspective	.23
References	.25
Annex 1 – Taylor Rule: Assessing Egypt's Monetary Policy Stance	.30
Annex 2 – Previous Editions of the Egypt Economic Monitor	.32

## **List of Figures**

Figure 1. 1. Growth Decomposition, Demand Side2
Figure 1. 2. Growth Decomposition, Sectoral Side
Figure 1. 3. Unemployment Rates
Figure 1. 4. LFP and Employment Rates
Figure 1.5. Egypt 5-year CDS and EMBI Spreads
Figure 1.6. Official Reserves and Other Foreign Currency Assets
Figure 1. 7. Net Foreign Assets of Banking System
Figure 1. 8. Oil and Non-Oil Trade Balance
Figure 1. 9. Tourism and Suez Canal Receipts
Figure 1. 10. Real Effective Exchange Rate
Figure 1. 11. Headline and Core Inflation Rates
Figure 1. 12. Contributions to Headline Inflation
Figure 1. 13. Domestic and International Food Inflation
Figure 1. 14. Domestic and International Wheat Prices

Figure 1. 15. Global Energy Prices	6
Figure 1. 16. Energy Prices in Egypt	
Figure 1. 17. CBE policy rates	
Figure 1. 18. Real interest rate (lending rate loans $\leq 1$ yr)	7
Figure 1. 19. Domestic credit by sector	8
Figure 1. 20. Public and Private Sector Credit	8
Figure 1. 21. Banks Foreign Assets and securities and holdings of T-bills	8
Figure 1. 22. Overall Budget and Primary Balances	9
Figure 1. 23. Total Revenues and Expenditures	9
Figure 1. 24. Total Expenditures, Economic Classification	11
Figure 1. 25. Selected Expenditures, Functional Classification	11
Figure 1. 26. Total budget sector debt (Domestic and external); percent of GDP	11
Figure 1. 27. Breakdown of Total Government Debt (By Currency Denomination)	14
Figure 2. 1. NER by Education Level, 2021	17
Figure 2. 2. Enrolment in Schools	
Figure 2. 3. NER by education level and SES	18
Figure 2. 4. Share of Enrollment by Provider Type and SES, 2018	18
Figure 2. 5. Labor Market Returns by Level of Education (Percent)	19
Figure 2. 6. Government Expenditure on Education (Percent of GDP)	20
Figure 2. 7. Benchmarking Government Expenditure on Education (Percent of GDP, latest	
available year)	20
Figure 2. 8. STR and SCR across Governorates and Education Levels, 2021	21
Figure 2. 9. Public and Private Primary STR and SCR Growth, 2017-2021	21
Figure 2. 10. Scenario Simulation of Classrooms and Teachers, 2022-2026	22
Figure 2. 11. Main Steps to Analyze ECE Provision in Egypt	24

## List of Tables

Table 1. 1. Global Outlook	1
Table 1. 2. Breakdown of Total Revenues	
Table 1. 3. Drivers of Egypt's Government Debt Accumulation (On-Budget vs. Extr	a-Budget)12
Table 1. 4. Main Economic Indicators	

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# Acronyms

BPS	Basis Points	mmBtu	Metric Million British Thermal Unit
CAPMAS	Central Agency for Public Mobilization and Statistics	MOETE	Ministry of Education and Technical Education
CBE	Central Bank of Egypt	MPC	Monetary Policy Committee
CDS	Credit Default Swap	MPED	Ministry of Planning and Economic Development
COVID-19	Corona Virus Disease 2019	NAFA	Net Acquisition of Financial Assets
CPI	Consumer Price Index	NER	Net Enrollment Rate
ECE	Early Childhood Education	NFA	Net Foreign Assets
EGPC	Egyptian General Petroleum Corporation	NIR	Net International Reserves
EMBI	Emerging Market Bond Index	OECD	Organization for Economic Cooperation and Development
EMIS	Education Management Information System	PMI	Purchasing Managers' Index
FAO	Food and Agriculture Organization	PPT	Percentage Points
FDI	Foreign Direct Investment	SCR	Student-classrooms Ratio
GAEB	General Authority for Education Buildings	SES	Socioeconomic Status
GCC	Gulf Cooperation Council	SIF	Social Insurance Fund
GDP	Gross Domestic Product	STR	Student-teacher Ratio
GOE	Government of Egypt	TIMSS	Trends in International Mathematics and Science
HIECS	Household Income, Expenditure and Consumption Survey	ТКР	Takaful & Karama Programs
HP	Hodrick-Prescott	TSA	Treasury Single Account
HRW	Hard Red Winter	TV	Television
IMF	International Monetary Fund	UAE	United Arab Emirates
IPI	Industrial Production Index	UHIS	Universal Health Insurance System
KG	Kindergarten	US	United States
LE	Egyptian Pound	VAT	Value Added Tax
LFP	Labor Force Participation	WB	World Bank
MENA	Middle East and North Africa		

## **Executive Summary**

Amidst precarious global economic conditions, Egypt —among many emerging markets— is facing headwinds that are aggravating pressures on external and fiscal accounts. The waning global recovery as well as persistent supply bottlenecks from the pandemic have been severely exacerbated by the Russia-Ukraine conflict. Compounded by aggressive monetary tightening (notably in advanced countries), the global economy is facing the possible threat of stagflation (a combination of high inflation and low growth)<sup>1</sup> as well as rising food insecurity, in the absence of a rapid boost in the supply of energy, food and key commodities. For Egypt, a net commodity importer, these global headwinds are translating into higher domestic prices, and pressures on the budget. The Russia-Ukraine conflict also triggered abrupt and large-scale portfolio investment outflows and underscored the pre-existing challenges facing Egypt's external balances. While the oil trade balance turned into a net surplus and non-oil exports accelerated, the trade deficit continued to widen during FY2021/22 (according to the *Central Bank of Egypt (CBE)*).<sup>2</sup> Similarly, despite the substantial rebound in foreign direct investments (FDIs), they remain below the country's potential.<sup>3</sup>

Macroeconomic and structural reforms undertaken by Egypt to start addressing entrenched economic and social problems are supporting the country in navigating the current difficult landscape. Reforms since 2014 to ease macroeconomic imbalances, enhance the performance of the energy sector, and mobilize financing enabled the country to enter the successive crises with relatively improved fiscal accounts and ample foreign reserves. Important institutional reforms were undertaken to improve the business environment, including on the trade facilitation and the business exit/restructuring fronts. Further, steps were taken toward increasing private sector participation and private capital mobilization in certain sectors (such as Solid Waste Management), and the government has announced plans to begin reforming the role of the State in the economy, as part of the efforts to boost private sector activity and job creation. In tandem, social protection and human development initiatives providing targeted support, such as the Takaful and Karama cash transfer programs, are now being scaled up gradually to partially shield the most vulnerable groups from the impact of rising prices.

**Egypt's renewed commitment to macroeconomic stabilization and structural reforms is crucial to address the long-standing challenges that recent global shocks have highlighted.** Egypt's economy has shifted over the past two decades towards non-tradable, lower productivity sectors<sup>4</sup> (such as transport, construction and wholesale and retail trade) with limited export penetration and sophistication; which in turn rendered the country prone to the overlapping exogenous shocks that are further undermining foreign sources of income. Despite the steady growth rates that averaged 5 percent in the three years that preceded the pandemic, the non-oil private sector activity remained slow. Furthermore, government debt remains high (at 87.9 percent of Gross Domestic Product (GDP) at end-FY2020/21)<sup>5</sup> notwithstanding the significant fiscal consolidation since FY2015/16. Egypt is facing high financing requirements (with the budget deficit and maturing debt together estimated at around 42 percent of GDP<sup>6</sup> at end-FY2020/21) at a time when global financial conditions are tightening at a significant pace. In light of the pressing global and domestic challenges, Egyptian authorities and the International Monetary Fund (IMF) reached, in October 2022, a staff-level agreement that was approved by the IMF Executive Board on December 16, 2022. The program supports comprehensive economic policies and reforms under a 46-month Extended Fund Facility (EFF) Arrangement

<sup>&</sup>lt;sup>1</sup> The World Bank forecasts that global growth will decline during 2022 to 2.9 percent (compared to 4.1 percent estimate for the same year during January 2022) down from an estimate of 5.7 percent in 2021 (World Bank, 2022b, Global Economic Prospects, June).

<sup>&</sup>lt;sup>2</sup> Non-oil exports increased by 29.1 percent during FY2021/22, however this was not sufficient to bring down the non-oil (and total) trade deficit. The non-oil trade deficit has widened also in percent of GDP during FY2021/22.

<sup>&</sup>lt;sup>3</sup> FDI in Egypt increased by 71.4 percent during FY2021/22, but the full year figure remains well below the country's potential and the historical levels, notably when considered in percent of GDP (See Table 1.4).

<sup>&</sup>lt;sup>4</sup> See the <u>World Bank Egypt Economic Monitor 2020</u>.

<sup>&</sup>lt;sup>5</sup> The ratios to GDP are calculated using the new GDP series published on October 27, 2022 by the Ministry of Planning and Economic Development. Thus, fiscal ratios may differ slightly from figures recently announced by the Ministry of Finance.

<sup>&</sup>lt;sup>6</sup> Fiscal financing requirements for a given year are estimated by the World Bank team as the sum of the annual budget deficit, domestic and foreign debt repayments maturing within the year, and the stock of T-bills at the end of the previous fiscal year.

of US\$3 billion. The program also identifies a potential US\$1 billion financing from the IMF's Resilience and Sustainability Facility (RSF) and also projects an additional US\$5 billion multi-year financing package of regional and international support.

**Continuing to pursue an exchange rate policy that reflects market dynamics, as well as pushing ahead with economic reforms will be key to redress imbalances in external accounts**. Amid pressures on external accounts, the CBE renewed its commitment to an exchange rate regime that reflects the forces of demand and supply. As of end-October 2022, the exchange rate had depreciated to LE24/US\$ (weakening by 53.5 percent cumulatively compared to its value prior to the depreciation that took place in March 2022). The exchange rate policy adjustments were triggered by the sharp drop in Egypt's total foreign exchange buffers—namely, 'official reserves' and 'other foreign currency assets'<sup>7</sup>—which declined from US\$54.5 billion at end-February 2022 to US\$38.6 billion by end-November (latest available month), in addition to the steep decline in banks' net foreign assets that was ongoing since July 2021. The adjustments and flexibility in exchange rate supported by monetary and fiscal tightening going forward should help stem the widening external imbalances. But enhancing stable sources of foreign income activities (exports and FDI) requires continuing to push ahead with reforms, including enhanced trade policy and facilitation as well as broader business environment reforms.

**Inflationary pressures are persisting due to the global price shock, exchange rate depreciation as well as domestic supply bottlenecks**. In tandem with the exchange rate depreciation, the CBE raised key policy rates in March, May, and October 2022 by 500 basis points cumulatively in order to curb inflationary pressures—this has, however, not yet pushed real policy rates into positive territory. Furthermore, the CBE has recently increased the required reserve ratio for the first time since October 2017 to 18 percent, up from 14 percent. Meanwhile, actual inflation has exceeded the CBE's current inflation target (7 +/-2 percent), with headline urban inflation recorded at 18.7 percent, and core inflation (excluding volatile food and regulated prices) at 21.5 percent in November 2022. The recent acceleration in inflation was driven by the global price spikes and currency depreciation (both affecting the cost of production), but also by the supply bottlenecks. The ample liquidity and pickup in domestic economic activity (prior to the Ukraine shock) may also have contributed to demand-side inflationary pressures.

**Growth bounced back prior to the war in Ukraine but economic activity and real incomes are expected to be adversely impacted by the overlapping global crises in the near-term**. Growth has averaged 6.6 percent in FY2021/22, up from 3.3 percent a year earlier on the back of rebounding sectoral activity during the first three quarters of the year, when growth reached 7.8 percent during July 2021-March 2022, before declining to 3.3 percent during April-June 2022. While key sectors are continuing to thrive, especially gas extractives (benefitting from the higher global prices), as well as the communications, agriculture, and construction sectors, other activities are performing below-potential, including manufacturing. As such, growth is expected to slow down to 4.5 percent in FY2022/23 (*See World Bank forecasts presented in Outlook section below*). Growth is, nevertheless, forecast to inch-up thereafter, as the country continues to push ahead with macroeconomic stabilization and structural reforms. Meanwhile, the social measures announced in March, July, and October 2022 are expected to provide partial mitigation , but the poverty rate (last recorded at 29.7 percent during October 2019-March 2020) may increase, due to the impact of inflation on real incomes.

While fiscal consolidation is set to resume, sustained effort is needed in streamlining on- and off-budget expenditures and increasing revenues to create fiscal space. The government debt-to-GDP ratio increased to 88.3 percent by end-FY2021/22 (0.4 percentage points higher than the previous year),<sup>8</sup> mainly on the back of the adverse valuation effect of the exchange rate depreciation. Further, the government social mitigation

<sup>&</sup>lt;sup>7</sup> The total foreign exchange buffers refer to the 'official reserves' and the 'other foreign currency' assets reported by the CBE <u>under the SDDS template</u> for <u>International Reserves</u>. Additionally, the CBE publishes the 'Net International Reserves' (NIR) which are close to the size of the 'official reserves', but follow a slightly different definition. The NIR stood at US\$33.5 billion at end-November 2022.

According to the CBE, "other foreign currency assets" are liquid assets denominated in foreign currencies that are readily available to monetary authorities and are not included in official reserve assets. These other foreign currency assets are mainly held in the form of foreign currency deposits in local banks, and (unlike official reserves) they can be claims on 'residents'.

<sup>&</sup>lt;sup>8</sup> Debt ratios are based on official budget sector debt figures from the Ministry of Finance, divided by the GDP figures published by the Ministry of Planning and Economic Development.

package<sup>9</sup> (crucial for partially alleviating the impact of the rising prices), together with the interest rate hikes will cause a slowdown in fiscal consolidation through FY2022/23. Fiscal space is thus expected to remain constrained by the large needs to service debt (interest payments stood at 32 percent of total spending; 59 percent of tax revenues during FY2021/22). While the continued fiscal consolidation over the medium-term is expected to restore the downward trajectory of government debt, further fiscal and debt transparency can help support proactive steps to contain public financing requirements (including maturing debt obligations for both the central government as well as the wider public sector). Furthermore, sustained economic growth and broader structural reforms that can improve the governance of the public sector can also contribute to boosting the fiscal stance and securing resources for more productive areas, especially those that are crucial for human development. Given the criticality of human development for long-term growth, poverty reduction, and overall shared prosperity, creating fiscal space is imperative to raise allocations to the education sector, improve spending efficiency on the sector, and translating it into better learning outcomes.

Among the key reforms to drive long-term growth in Egypt is the need to improve learning outcomes; thus the associated reforms of the education sector are analyzed in a 'Special Focus'. While only one component of the overall learning process, spending on the education sector continues to be inadequate. Despite substantial increases in nominal terms in recent years, the budgeted figures for the education sector remain at 2.0 percent of GDP for FY2022/23; lower than the level in FY2021/22. The analysis in this Special Focus draws on a detailed analysis in the World Bank report <u>"Egypt Public Expenditure Review for Human Development Sectors</u>" and addresses education as an indispensable prerequisite for better-equipped human capital, higher potential output, more productive labor market entrants, and more rapid poverty reduction.

A key message is that education spending, its efficiency, and learning outcomes remain lower than needed for robust human development, poverty reduction, improved equity, and long-term growth. In September 2018, the government embarked on a major education reform program (EDU 2.0) aiming at transitioning the education system away from a traditional emphasis on rote learning, and towards acquiring higher-order critical thinking, creativity, communication, and digital skills. The reform agenda promotes the foundations of learning starting in early grades, introduces a modernized curriculum driven by alternative television and digital learning resources, and adopts a new student assessment system. Indeed, Egypt's rank in the human development index improved from 116<sup>th</sup> out of 189 countries in 2019 to 97<sup>th</sup> out of 191 countries in 2021 (Human Development Reports 2020 and 2021/2022). As the 'Special Focus' documents, however, these efforts and achievements are yet to translate into better spending and education outcomes, especially for the poor and vulnerable.

<sup>&</sup>lt;sup>9</sup> These include hikes to pensions and public sector wages, tax relief measures, expanding the coverage of the Takaful and Karama cash transfer programs, among other measures.

## **Chapter 1 – Recent Economic Developments and Outlook**

### The rebound in economic activity is dampened by the adverse global developments

**Global growth slowed significantly in 2022 due to the war in Ukraine, inflation from commodity market shocks and supply chain disruptions, in addition to tightening financial markets conditions.** The geopolitical developments sent energy prices soaring, causing major energy shocks to most economies with some exception in energy exporting countries. Relatedly, food price inflation has worsened food insecurity and poverty in many developing economies. The advanced economies are going through a period of increasing interest rates and tightening financial conditions with attendant pressures in capital flow reversal, interest rates, and currencies around the world. The global conditions, therefore, resemble those of stagflation of the 1970s with high inflation and slow growth. In this difficult global environment, the importance of sound macroeconomic policies, especially in countries affected by these shocks, cannot be overemphasized<sup>10</sup> (Table 1.1).

Table 1. 1. Global Outlook								
	2019	2020	2021	2022f	2023f	2024f		
Real Output growth								
World	2.6	-3.3	5.7	2.9	3.0	3.0		
<b>Commodity prices (nominal, US\$)</b>								
Crude oil, Brent (\$/barrel)	64.0	42.3	70.4	100.0	92.0	80.0		
Natural gas, Europe (\$/mmbtu)	4.8	3.2	16.1	34.0	25.0	22.3		
Natural gas, U.S. (\$/mmbtu)	2.6	2.0	3.9	5.2	4.8	4.7		
Wheat, U.S., Hard Red Winter (\$/mt)	201.7	232.0	315.0	450.0	380.0	370.0		
Consumer Prices								
World	3.5	3.2	4.7	<i>8.3</i>	5.7			
Long term interest rate								
USA	2.1	0.9	1.4	2.9	3.7			
Euro Area	0.4	0.0	0.0	1.4	2.0			

Source: World Bank's *Global Economic Prospects* (June 2022) and *Commodity Markets Outlook* (June 2022); International Monetary Fund (IMF)'s *World Economic Outlook (April 2022)* and Organization for Economic Cooperation and Development

(OECD)'s data for long-term interest rates forecast. Note: f = forecast.

**These adverse global developments disrupted the rebound in Egypt's growth in early-FY2021/22**. Growth rebounded to 6.6 percent in FY2021/22, compared to a modest rate of 3.3 percent a year earlier (Figure 1.1). Growth was buoyed by the rebound during the first nine months of the year in the export-oriented sectors (that had contracted at the outset of the pandemic), including the non-oil manufacturing sector, tourism, gas extractives and the Suez Canal, as they benefitted from the resumption of international travel and trade, and the global pent-up demand as the world economy was emerging from the downturn caused by the COVID-shock. Resilient sectors, such as communications, agriculture, construction and wholesale and retail trade have also been supporting headline growth during the pandemic and through early-FY2021/22 (Figure 1.2). However, growth during the last quarter of the fiscal year declined sharply to 3.3 percent (from 7.7 percent a year earlier), as the favorable base effects and pent-up global demand started decreasing. This has also been compounded by the severe shock that the Russia-Ukraine conflict has caused since the end of February 2022.

**Leading indicators are similarly reflecting early signs of a slowdown in Egypt's economic activity.** The Industrial Production Index contracted in April 2022 by 8.7 percent and 0.1 percent respectively on a monthly and annual basis, before rebounding in May and June 2022 (albeit at a slower pace compared to the same period a year earlier), according to Central Agency for Public Mobilization and Statistics (CAPMAS). Despite

<sup>&</sup>lt;sup>10</sup> Global Economic Prospects, World Bank, June 2022.

the slight pick-up in Egypt's Purchasing Managers' Index (PMI) recording 47.6 during September 2022, up from 45.2 (a two-year low) in June 2022, it remains in the contraction territory. More generally, the PMI has already been showing signs of sluggish non-oil private sector activity even prior to the intensification of the adverse global developments (with the PMI averaging 48.8 during July-February 2021/22), but more recently during the last quarter of FY2021/22, surveyed firms reported further declines in output, new orders and rising costs of domestic inputs as well as imports (especially energy and food) reflecting the consequences of the war in Ukraine, the impact of the exchange rate depreciation and the delays in imports (in part due to the new requirements related to imports and sourcing foreign currency).

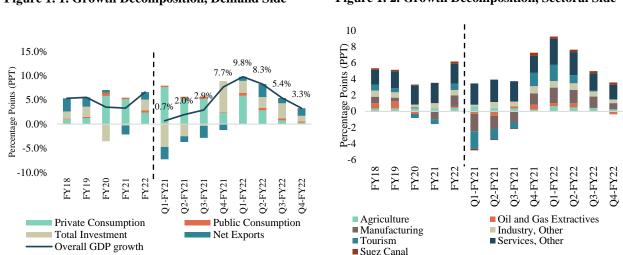


Figure 1. 1. Growth Decomposition, Demand Side

Figure 1. 2. Growth Decomposition, Sectoral Side

Source: World Bank staff estimates based on Ministry of Planning and Economic Development (MPED)

While unemployment has largely reverted to its pre-pandemic levels, the low labor force participation and employment rates point to the persistence of challenges related to job-creation. The impact of the initial COVID19 shock on unemployment is unwinding, with the unemployment rate declining to 7.2 percent in O4-FY2021/22 (April—June 2022), after spiking to 9.6 percent at the outset of the pandemic. Nevertheless, pre-COVID19 labor market challenges continue to persist, notably the sluggish (formal sector) employmentcreation. As of Q4-FY2021/22, labor force participation and employment rates remain below potential at 42.6 percent and 39.6 percent of the working-age population, respectively (Figures 1.3 and 1.4). This is well below the country's potential, and compares to average Labor Force Participation (LFP) and employment rates that have averaged 53.0 percent and 49.9 percent, respectively in Lower Middle-Income countries, and 45.4 percent and 40.6 percent, respectively in the MENA region.<sup>11</sup> Most jobs created over the past two decades were in relatively lower productivity sectors, and were largely informal (See World Bank, Egypt Economic Monitor, 2020 and Assaad, 2019). The pandemic has also undermined labor market conditions and led to an uptick in informality: the percentage of workers who reported having a contract declined through the pandemic, reaching only 38.0 percent of total employment in O4-FY2021/22. Women have generally faced greater challenges in terms of employment and overall labor market outcomes, with the female labor force participation declining over the years from 23.0 percent in 2009 to 18.3 percent in 2018,<sup>12</sup> and then further to 15.2 percent in 2021 (CAPMAS, Quarterly Labor Force Survey).

<sup>&</sup>lt;sup>11</sup> The labor force participation rates and employment rates were obtained from the World Bank's World Development Indicators (WDI) online database. Data refer to 2021 for MENA countries and Lower Middle-Income countries (latest data points available as of mid-June 2022).

<sup>&</sup>lt;sup>12</sup> Female employment has historically been predominantly represented in private sector agriculture and public sector social services; which together were responsible for employing 76.4 percent of total female employment on average during FY2003/04—18. The shares of these two sectors however have been gradually declining in both total GDP and total employment. Female employment continued to suffer as limited opportunities were made available in other expanding sectors, including private sector construction, transport and information and communications technology (ICT).

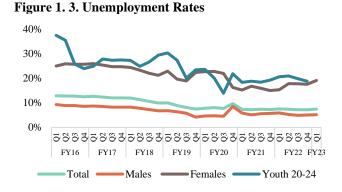
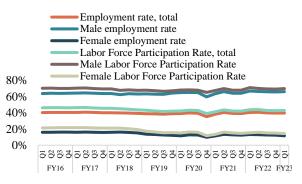


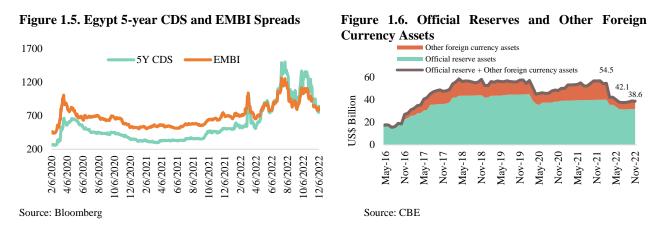
Figure 1. 4. LFP and Employment Rates



Source: Central Agency for Public Mobilization and Statistics (CAPMAS)

# The overlapping global shocks intensified the pre-existing pressures on external accounts and triggered an exchange rate adjustment

**Foreign reserves declined sharply in March 2022 as the war in Ukraine triggered large portfolio outflows; aggravating the pressures on external accounts that had started since early-2021**. The severe shock that the Russia-Ukraine conflict imparted to the Egyptian economy, compounded by the ongoing global monetary tightening (led by the United States Federal Reserve and other central banks of advanced economies)<sup>13</sup> contributed to an increase in the risk premia placed by foreign portfolio investors on Egypt's sovereign securities (as captured by the 5-year Credit Default Swap (CDS) and Emerging Markets Bond Index (EMBI) spreads— Figure 1.5). The ensuing, large-scale portfolio outflows (equivalent to US\$21.0 billion during FY2021/22) led to a sudden drop in reserves (Figure 1.6). Total foreign exchange resources (including 'official reserves' and 'other foreign currency assets'<sup>14</sup>) decreased to US\$42.1 billion at end-March; US\$12.4 billion lower than its level a month earlier (a loss of 22.7 percent), despite the swift and substantial support from the GCC that was received during March as well as the Samurai bond issuance. Total foreign exchange resources continued to witness downticks as milestone debt repayments fell due, in addition to an uptick in the non-oil trade deficit. They started inching up in October 2022 but remain at US\$38.8 billion.

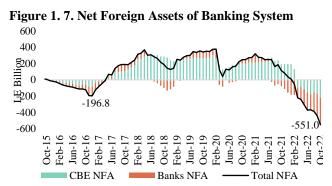


<sup>&</sup>lt;sup>13</sup> The US Federal Reserve announced the plan to raise the Fed funds rate, and curtail asset purchases in early-2022. In March ,May and June 2022, the Federal funds target rate was raised by 0.25, 0.5 and 0.75 percentage points (PPT) respectively; the latter being the biggest hike since 1994. Federal funds rates are still expected to rise further to at least 3 percent by the end of 2022. In contrast, the last time the Federal initiated a tightening cycle was in 2015, when it moved a lot more gradually to increase rates by 2.5 PPT over a period of three years. The European Central Bank has been signaling an imminent interest rate hike; which would be the first in more than ten years.

<sup>&</sup>lt;sup>14</sup> According to the CBE, other foreign assets are liquid assets denominated in foreign currencies that are readily available to monetary authorities and are not included in official reserve assets. In contrast to official reserve assets, these assets are not necessarily external assets as they can be claims on residents.

**Prior to the global shocks, mounting pressures on external accounts stemmed from the widening nonoil trade deficit and capital outflows (outweighing the recovery in the oil trade and services balances)**. Despite the stability of foreign reserves at relatively comfortable levels until end-February 2022, the Net Foreign Assets (NFA) position of banks had turned negative since July 2021 (Figure 1.7) indicating that the domestic banks were liquidating foreign currency assets before the escalation of the war in Ukraine. The pressures on the Balance of Payments were mainly due to portfolio outflows, an uptick in net errors and omissions, as well as the widened non-oil merchandise trade deficit<sup>15</sup> (Figure 1.8). Partial mitigation came from the recovery in the oil trade balance (which turned into a surplus on the back of higher value and volume of gas exports), in addition to the improvement in the services balance, notably with rebounds in tourism and (to a lesser extent) Suez Canal receipts (Figure 1.9).

As pressures on foreign currency intensified, the CBE has been undertaking exchange rate and monetary policy adjustments since March 2022. On March 21, 2022, the CBE allowed the exchange rate to depreciate by 16 percent, followed by gradual fluctuations. But as pressures persisted, on October 27, 2022, the CBE renewed its commitment to a flexible exchange rate regime, which was followed by an additional depreciation of the exchange rate to LE24/US\$ (bringing the cumulative depreciation to 53.5 percent compared to its value prior to March 2022). These policy adjustments ended over two years of relative stability in the nominal exchange rate vis-à-vis the US dollar; but a marked appreciation of the real exchange rate<sup>16</sup> (Figure 1.10). In tandem, the CBE raised key policy rates (details below in Monetary Section) in order to curb inflationary pressures and anchor expectations. Depending on global financial market conditions, these changes may help restore the attractiveness of Egypt's securities for foreign portfolio investors.



Source: CBE



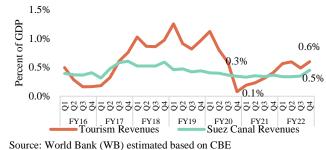
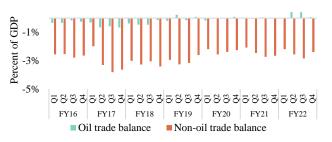
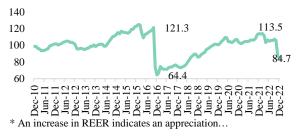


Figure 1. 8. Oil and Non-Oil Trade Balance



Source: World Bank (WB) estimated based on CBE





World Bank Global Economic Monitoring data.

<sup>&</sup>lt;sup>15</sup> Notwithstanding the rebound in exports during FY2021/22, and Egypt's shift to a net exporter of gas, the overall merchandise trade deficit still widened. This was partly due to accelerating global commodity prices (which inflated the import bill), and also because of the steady and marked real exchange rate appreciation over the previous years.

<sup>&</sup>lt;sup>16</sup> Following the liberalization of the exchange rate in November 2016, the nominal exchange rate initially overshot to an average of LE18.5/US\$ in January 2017 (weakening by 109 percent compared to its level prior to the liberalization). However, the nominal exchange rate strengthened gradually thereafter, and stabilized at around LE15.7/US\$ since January 2020 and up until the CBE allowed the exchange rate to depreciate on March 21, 2022. The gradual strengthening of the nominal exchange rate, combined with the inflation differential in Egypt versus the main trading partners caused an appreciation in Egypt's Real Effective Exchange Rate (REER) by 76.4 percent by March 2022, just above 5 years following the liberalization of the exchange rate (based on the World Bank Global Economic Monitoring data).

Authorities introduced measures to contain demand on foreign currency, but the CBE announced the gradual lifting of most of these measures due to their impact on production and supply chains. In February 2022, new trade finance regulations were mandated; suspending documentary collection for importation and requiring importers to issue letters of credit for their purchases (As per CBE Circular no. 49 issued on February 13, 2022). In April 2022, banks were directed to only accept foreign currency that is generated from the business's main activity (thereby refusing any hard currency deposits/provision that are of unknown origin and thus reducing foreign currency demand from dealers and limiting the possibility of importation). In May 2022, the President issued a *decision* amending CBE circular no. 49, exempting production inputs and raw materials from the use of letters of credit. Regulations related to the foreign currency provision continue to persist. While these administrative decisions can, indeed, reduce imports in the nearterm, they may also contribute to a disruption of supply and production, potentially causing a decline in exports as well (especially that about three quarters of imports are raw materials, intermediate and investment goods). Therefore, in October 2022, the CBE announced that it will begin to gradually dismantle the mandates of circular No. 49 to abolish these procedures by December 2022.<sup>17</sup>

# Inflation is accelerating due to soaring international food and energy prices, the exchange rate depreciation, supply bottlenecks and domestic structural challenges

**Inflation started accelerating, following a period of broadly contained rates during FY2019/20—21**. Urban inflation picked up to an average of 6.4 percent during July 2021—February 2022, and increased further to the double-digits, reaching an average of 14.3 percent in March—November 2022; thereby surpassing the CBE's target inflation range of 7 (+/- 2) percent. Core inflation similarly breached the double-digits threshold and has been accelerating since March 2022, reaching 21.5 percent in November 2022 (Figure 1.11).

The global food and energy price shock–aggravated by the war in Ukraine—is fueling domestic inflation. The main driver of the headline rate during July 2021—November 2022 is 'food and beverages' (Figure 1.12). This in part reflects the severe food price shock that has been building over the previous year, and was aggravated further by the Russia-Ukraine war (as captured by the Food and Agriculture Organization (FAO) world food price inflation—Figure 1.13), including for 'wheat'<sup>18</sup> (Figure 1.14) and other food staples (such as edible oils) for which Egypt remains a net importer.<sup>19</sup> Other important contributors to headline inflation include 'housing and utilities', and 'transportation'; in part affected by the upward adjustments to electricity tariffs and fuel prices;<sup>20</sup> which in turn were necessitated by the soaring international energy prices (Figures 1.15 and 1.16) in order to partially contain the impact on the energy subsidy bill. Global oil prices were already on the rise since April 2020 and had reached US\$83.54/barrel in October 2021, up by 108 percent compared to a year earlier.<sup>21</sup> The Russia-Ukraine war in end-February 2022 fueled further inflationary pressures, causing global oil prices to spike to an average of US\$114.5/barrel during the period March—June 2022 (surpassing US\$100/barrel for the first time since 2014).<sup>22</sup>

<sup>&</sup>lt;sup>17</sup> During FY2015/16, import restrictions – arising from pressures on the Egyptian pound prior to the liberalization of the exchange rate in November 2016 – caused a decline in exports as well by 15.9 percent (besides the decline in imports which amounted to 6.4 percent during the same year).
<sup>18</sup> In 2021, Russia and Ukraine controlled 25 percent of the wheat's global market share and with the supply shock triggered by the war towards the end of February, international wheat prices spiked, exceeding US\$500 per ton during May 2022 (significantly higher than the historical peak of

US\$439.7 during March 2008).

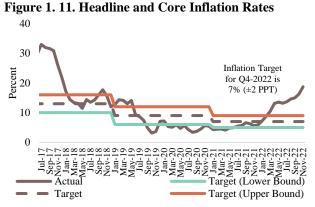
<sup>&</sup>lt;sup>19</sup> Egypt's food inflation is characterized by volatility and has historically been higher than international food prices (for example, during 2011—2019, as depicted in Figure 1.13). More recently, especially starting FY2019/20, international food inflation has been generally higher than domestic food inflation, although the international and domestic inflation series continue to move together.

<sup>&</sup>lt;sup>20</sup> During the period July 2021—April 2022, electricity tariffs were raised by 13.3 percent compared to the same period a year earlier. Meanwhile, fuel product prices were increased cumulatively by an average 17.9 percent in four successive adjustments undertaken in October 2021, February, April and July 2022.

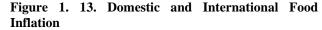
<sup>&</sup>lt;sup>21</sup> Please see World Bank, GEP, June 2021 and World Bank, Commodity Markets Outlook, October 2021 for coverage of the pre-Ukraine-war surge in international prices. And see *World Bank, Egypt Economic Monitor, 2021* for implications of the price surge on the Egyptian economy.

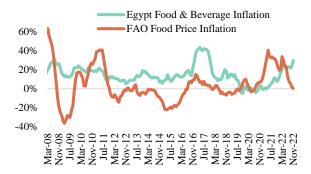
<sup>&</sup>lt;sup>22</sup> World Bank Commodities Price Data (The Pink Sheet), June 2022

Several factors have also compounded the impact of the international commodity price shocks on domestic inflation. These include the exchange rate depreciation that took place towards end-March 2021, which led to a rise in the cost of imported products, and the unfavorable base effects (as inflation during the previous year was rather subdued, compared to Egypt's historical averages). In addition, the surge in growth as well as relatively eased liquidity conditions (as detailed below in the following section), especially during the months that preceded the Ukraine war shock, had also contributed to demand-side inflationary pressures.



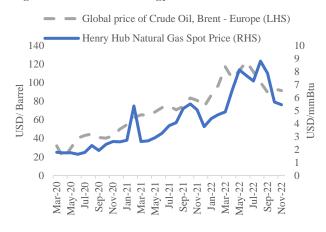
Source: WB staff estimates and CBE.

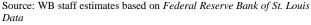


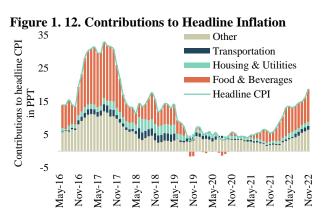


Source: WB staff estimates based on CBE and FAO.

#### Figure 1. 15. Global Energy Prices

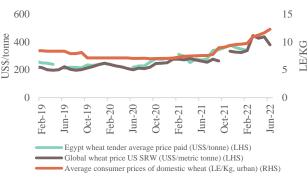






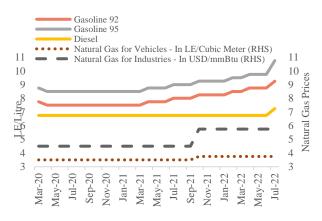
Source: WB staff estimates based on CBE





Source: Bloomberg, CAPMAS and WB Commodity Price Data

**Figure 1. 16. Energy Prices in Egypt** 



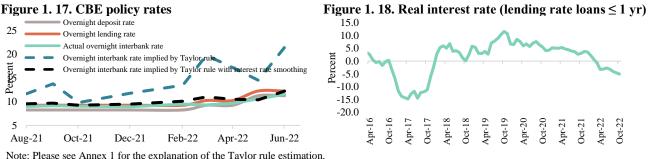
Source: Ministry of Petroleum and Mineral Resources and Gas Regulatory Authority

The government announced various mitigation packages to partially alleviate the impact of the higher prices on the vulnerable. In March 2022, the government announced LE130 billion worth of measures (1.4 percent of FY23 GDP) to mitigate the social impact of rising domestic prices. These included hikes to pensions and public sector wages, tax relief measures, expansion of the coverage of the Takaful and Karama cash transfer programs, and an increase in the minimum threshold of the income tax, among other measures. In July 2022, as domestic prices continued to increase, additional social mitigation measures were announced, including a further expansion of the Takaful and Karama programs to cover almost 20 million individuals, and exceptional cash transfers for a period of 6 months targeting 9 million families of pensioners and government workers whose monthly payout/salary is less than certain thresholds, on their Meeza (pre-paid) or ration (food subsidy) cards. In October 2022, the government announced an additional set of measures, including: (i) new measures, such as the revision of the minimum wage, additional lump-sum bonus to government and public-sector employees and pensioners and (ii) the extension of the time span of previously announced measures, especially on exceptional cash transfers and delays in the electricity price adjustments.

**Social conditions however remain difficult.** Poverty is elevated in Egypt; last reported at 29.7 percent (during the period October 2019—March 2020) as per the most recent figures reported by CAPMAS. Thus, in the context of the global commodity price shock, social conditions remain difficult. In Egypt, "food items" make up 44 percent of the consumption expenditure of the bottom quintile (as compared to 30 percent for the top quintile), according to the 2017/18 Household Income, Expenditures and Consumption Survey (HIECS) conducted by CAPMAS. The World Bank team estimates that the recently announced social measures will have a *partial* mitigation effect (through containing the uptick in the poverty rate), given the pro-poor nature of the cash transfer programs, and the wide coverage of the food subsidy program (covers around 71 million individuals). Continuing the efforts to improve social protection and improve targeting will be crucial to further strengthen the impact of these programs.

#### Monetary policy has been tightened, but liquidity conditions remain relatively eased

**In response to the pressures on external accounts and rising inflation, the CBE embarked on a tightening cycle, gradually reversing the expansionary policy stance in the months following the onset of COVID19**. The CBE raised key policy rates in March, May and October 2022 by 500 basis points (bps) cumulatively to curb inflationary pressures and anchor expectations. This could also restore the attractiveness of the sovereign debt instruments amidst the tightening global financial conditions.<sup>23</sup> As of October 2022, policy rates stand at 13.25 percent and 14.25 percent for the overnight deposit and lending transactions (Figure 1.17), but real interest rates turned negative since March 2022 (Figure 1.18).



Note: Please see Annex 1 for the explanation of the Taylor rule estimation. Source: WB staff estimated based on CBE and CAPMAS.

<sup>&</sup>lt;sup>23</sup> The two largest Egyptian banks, National Bank of Egypt and Banque Misr, offered one-year savings certificates at a deposit rate of 18 percent (7 percentage points higher than the rates offered in private banks) for 10 weeks (ending their sale on May 30, 2022) and collected LE750 billion. This initiative by the two state-owned banks, which is arguably not profit-driven, may have helped contain dollarization and support the local currency. On the other hand, this action may adversely affect their balance sheets and potentially entail indirect pressures on the Treasury. Furthermore, following the liberalization of the foreign exchange regime in October 2022, the National Bank of Egypt and Banque Misr have issued 3-year certificates with an annual rate of return of 17.25 percent.

Liquidity conditions remained relatively eased despite the policy rate hike and the upward revision of the required reserve ratio. Liquidity conditions are relatively expansionary in June 2022 with domestic liquidity (M2) increased annually at 23.4 percent, compared to 18 percent a year earlier and an average of 19.7 percent during FY2021/22. 'Credit extended to the government' continue to absorb the largest portion of total domestic credit (58.8 percent in June 2022) and remain the main contributor to liquidity growth, followed by the credit extended to the private sector and to a lesser extent to public economic authorities. Despite its increase over the past two years, private sector credit remains rather subdued at 32.2 percent of total domestic credit as of June 2022, and 27.8 percent of GDP as of end-FY2021/22, still below its historical levels (Figure 1.19 and 1.20).



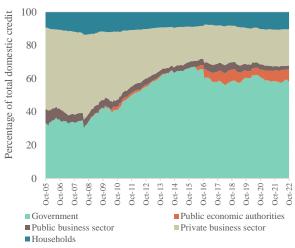
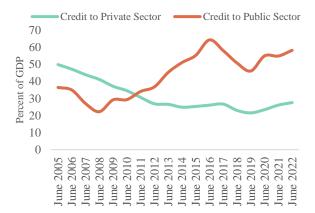
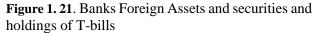


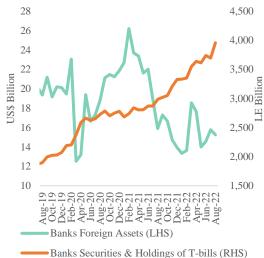
Figure 1. 20. Public and Private Sector Credit



Source: World Bank estimates based on CBE and MPED.

Egypt's banking sector remains resilient, although this partly reflects the banking system's large holdings of sovereign debt. As of June 2022, the capital base to risk-weighted assets was last reported at 20.9 percent. The share of the non-performing loans in total loans gradually declined to 3.2 percent, after reaching 4.2 percent at end-2019. Loan provisioning coverage stood at 92.1 percent. The sector has a low loan to deposit ratio of 48.6 percent, which indicates ample liquidity. The financial soundness indicators partly reflect the large holdings of treasury securities (as of end-June 2022, commercial banks alone held 55 percent of the total outstanding stock of Treasury bills), as well as the low level of credit intermediation (notably to the private sector). Nevertheless, the banking sector's large exposure to sovereign debt (as depicted in Figure 1.21) entails only limited financial stability risks. The CBE introduced new regulations in August 2021 requesting banks to conduct recovery plans every two years (annually for domestic systemically important banks).



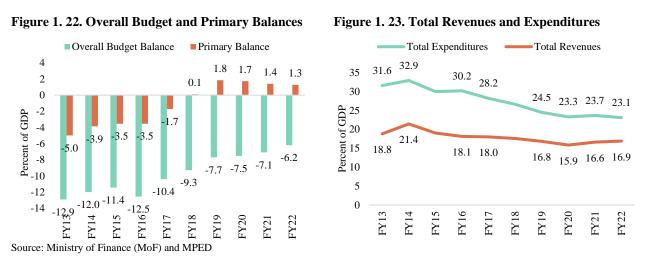


Source: WB estimates based on CBE

Source: World Bank estimates based on CBE.

## Fiscal consolidation remains crucial, notably through bringing down interest payments, streamlining primary expenditures and enhancing revenue mobilization

**Egypt continues to push ahead with fiscal consolidation, mainly through an up-tick in tax and non-tax revenues and expenditure containment**. The budget deficit-to-GDP ratio decreased during FY2021/22 to 6.2 percent<sup>24</sup> down from 7.1 percent in FY2020/21. The narrowing deficit ratio was driven by the increase in total revenues and containment of expenditures, in percent of GDP. Meanwhile, the primary surplus has slightly declined from 1.4 percent of GDP to 1.3 percent of GDP (Figures 1.22 and 1.23).



**Pressures on expenditures emanate from the soaring international prices, thereby partially diluting the expenditure-savings achieved earlier in FY2021/22**. Total government expenditures decreased slightly during FY2021/22 to reach 23.1 percent of GDP down from 23.7 percent of GDP during FY2020/21, mainly driven by a downtick in the interest bill (as share of GDP)<sup>25</sup>, and a slight decline in the wage bill. On the other hand, investments witnessed an increase as percent of GDP reaching 4.1 percent up from 3.7 percent, with a slightly higher contribution of self-financed investments as opposed to deficit-financed investments. Meanwhile, the accelerating domestic and international inflation, compounded by the additional spike in food and energy prices caused by the Russia-Ukraine war have had implications for key expenditure items, including energy and food subsidies.<sup>26</sup>

**The fiscal (social mitigation) package that the government announced in tandem with the monetary adjustments in March and October 2022 are crucial for partially alleviating the impact of higher prices.** It had a limited impact on the fiscal outturns of the last three months of FY2021/22 (estimated at around 0.4 percent of GDP), whereas the rest of its fiscal implications will be reflected in FY2022/23 (*as discussed in the following section*). Partial mitigation of the impact of the global shock on the budget came from: (i) the automatic indexation mechanism which passes on part of the international oil price increases to domestic retail fuel prices; (ii) the ongoing efforts to diversify sources of wheat imports and boost domestic harvest, in addition to the drawdown on the strategic reserves of wheat (around 6 months, *as of mid-June 2022 according to the press release published by the Ministry of Supply and Internal Trade*).

<sup>&</sup>lt;sup>24</sup> The ratios to GDP are expressed using the new GDP series recently published by the Ministry of Planning and Economic Development. Thus, fiscal ratios may differ slightly from figures recently announced by the Ministry of Finance.

<sup>&</sup>lt;sup>25</sup> Official preliminary data indicate that the effective interest rate declined to 10.0 percent in FY2021/22 down from 11.1 percent during FY2020/21.
<sup>26</sup> The World Bank team estimates indicate that for every US\$10 increase in the international price of wheat, the food subsidy (and hence the budget deficit) increases by LE1.3 billion (equivalent to 0.01 percent of GDP).

Similarly, for every US\$10 increase in international crude oil prices, the budget deficit deteriorates by LE10 billion (0.1 percent of GDP).

**The improvement in government revenues was driven by the improvement in the performance of taxes as well as an uptick in self-financing investments**. The improvement was attributed to income tax receipts, taxes on T-bills and T-bonds (*benefiting from the amendments to Law 182/2020 which removed exemptions from taxes on interest paid on government securities, effective as of March 2021*), as well as the uptick in Value Added Tax (VAT) receipts.<sup>27</sup> Non-tax revenues also increased due to the uptick in capital revenues related to self-financing government investments (Table 1.2). It is however worth noting that government revenues remain rather subdued (at 16.6 percent and 16.9 percent of GDP in FY2020/21—22). More broadly, long-standing informality problems, and tax policy and administration challenges continue to hamper revenue-mobilization. *Please see Egypt Economic Monitor 2021 for a discussion of the structural problems facing revenue-mobilization as well as recent reform efforts to digitalize tax and customs administration.* 

(Percent of GDP)	FY21	FY22	Difference
(rercent of GD1)	Actual	Pre-Actual	(approx)
Total Revenues, of which	16.6	16.9	0.3
Tax Revenues	12.5	12.6	0.1
Income Tax	4.8	4.9	0.1
Property Taxes <sup>a/</sup>	1.1	1.1	0.1
Value Added Taxes	5.8	5.8	0.0
Taxes on International Trade	0.5	0.6	0.0
Other Taxes	0.3	0.2	-0.1
Other Revenues, of which	4.1	4.2	0.2
Property Income	1.2	1.2	0.0
Proceeds from Sales of Goods and Services	0.9	1.0	0.1
Miscellaneous Revenues <sup>b/</sup>	1.9	2.1	0.2

a/ Include taxes on T-bills and T-bonds.

b/ Include revenues from "self-financed" government investment.

Note: The ratios to GDP are expressed using the new GDP series recently published by the Ministry of Planning and Economic Development. Thus, fiscal ratios may differ slightly from figures recently announced by the Ministry of Finance.

Source: MoF and MPED

**Despite the fiscal consolidation and the relatively improved budget structure, fiscal space remains limited, and so sustained budgetary reforms going forward are needed**. Egypt undertook fiscal consolidation measures since FY2015/16 that focused on the streamlining of energy subsidies, containment of the wage bill, and the shift from a sales tax to a Value-Added Tax (VAT). These measures brought down the overall budget deficit to GDP ratio. Also, interest payments (as a share of GDP) have been decreasing since FY2018/19. However, they remain the single largest expenditure item, standing at 7.5 percent of GDP during FY2021/22 (Figure 1.24); taking up 59 percent of tax revenues. This crowds out other productive spending that is crucial for human development (*Please see more detailed analysis in the Focus Chapter of this report*). Indeed, allocations to the health and education sectors have increased in nominal terms in FY2021/22 by 102.2 percent and 75.3 percent, respectively, compared to their levels in FY2017/18. But these increases are quite marginal if measured in real terms, or as a share of GDP (Figure 1.25). The budgeted figures for FY2022/23 show that spending on health and education is expected to decline to 1.3 percent and 2.0 percent of GDP, respectively.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> VAT receipts are benefitting from amendments to the law which now covers digital commercial activities with potential revenues of LE2-3 billion.
<sup>28</sup> The constitutional mandate for spending on health and education is 3 percent and 6 percent of Gross National Product, respectively. The figures quoted here reflect the government allocations according to the definition of the functional classification of the budget.

As per the Ministry of Finance's *press release* on June 19, 2022, the constitutional mandates for the health and education budgets are met, according to a wider definition of public expenditures.

Figure 1. 24. Total Expenditures, Economic Classification

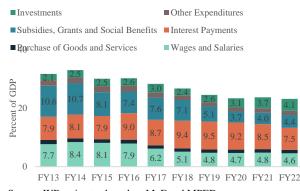
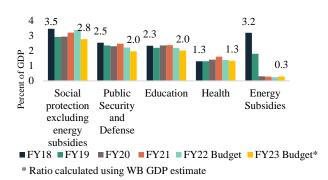


Figure 1. 25. Selected Expenditures, Functional Classification



Source: WB estimates based on MoF and MPED.

**Government debt remains high, despite the significant fiscal consolidation over the previous years because of the cumulative effects of deficits, currency depreciation, and off-budget transactions**. The government debt-to-GDP ratio declined from 102.5 percent at the end of FY2016/17 to 82.8 percent at the end of FY2019/20 (Figure 1.26). However, government debt started increasing again to reach 87.9 percent at end-FY2020/21, and 88.3 percent at end-FY2021/22, mainly due to the adverse valuation effect associated with the exchange rate depreciation.

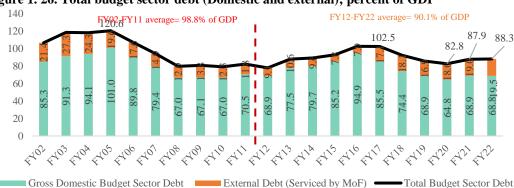


Figure 1. 26. Total budget sector debt (Domestic and external); percent of GDP

Source: Ministry of Finance

Note: The ratios to GDP are expressed using the new GDP series recently published by the Ministry of Planning and Economic Development. Thus, fiscal ratios may differ slightly from figures recently announced by the Ministry of Finance.

Moreover, enhanced reporting on public expenditure arrears, and the off-budget drivers of government debt accumulation can enhance proactive means to contain public financing requirements. Debt decomposition shows that deficit-financing is not the only driver of government debt accumulation. Off-budget borrowing, arising from extra-budgetary units such as public economic authorities and the public business sector<sup>29</sup> is another important contributor to the accumulation of debt. During FY2020/21, approximately 56.4 percent of the change in the total government debt stock stemmed from financing the budget deficit and favorable exchange rate revaluation impact, whereas the remaining 43.6 percent was driven by extra-budgetary (below-the-line) items including potential on-lending to government entities, transfers to the Social Insurance Funds (SIF),<sup>30</sup> discrepancy due to accrual versus cash

<sup>&</sup>lt;sup>29</sup> Reported fiscal accounts and debt refer to the "budget sector" definition of the government which includes: The Central Administration, Local Governments and Public Service Authorities. Thus, Public Economic Authorities and State-Owned Enterprises or the Public Business Sector are not included, and are considered extra-budgetary units. More details are included in Table 1.3. at the end of the Public Finance section.

<sup>&</sup>lt;sup>30</sup> This debt cancellation followed the enactment of Law 148/2019, which included an article stipulating that the debt cancellation is made in return for annual government payments to the SIF that increase every year at a compounded interest rate for the duration of 50 years.

accounting, borrowing from the Treasury Single Account and the revaluation bonds issuances to the CBE.<sup>31</sup> Other extra-budgetary debt issuance also reflects important settlements of legacy financial obligations that exist in between off-budget entities (for example, the Egyptian General Petroleum Corporation (EGPC) and the Electricity Holding Company) in order to improve their financial positions. Regular publication of official debt figures, with broader and more comprehensive data coverage, is underway (*Please see World Bank, 2021b*, Development Policy Financing Program Document). In addition, efforts are underway to clear up fiscal liabilities stemming from the economic authorities and State-Owned Enterprises (SOEs).

		× *	8		8 /		
In 1	Billion LE, Unless Otherwise Indicated	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20	Jun-21
1	Stock of Domestic and External Government Debt <sup>a/</sup>	2784.6	3748.7	4315.5	4801.8	5094.2	5859.3
2	Change in Debt Stock	510.3	964.2	566.8	486.3	292.4	765.1
3	Primary deficit	95.9	63.0	-4.9	-103.1	-105.6	-93.4
4	Interest payments	243.6	316.6	437.4	533.0	568.4	565.5
5	Valuation effect due to exchange rate	47.2	425.3	-11.8	-83.9	-43.6	-40.9
6	On-Budget Items that contribute to debt accumulation	386.7	804.9	420.7	346.0	419.2	431.2
7	Extra-budgetary (below-the-line) items that contribute to debt accumulation $^{\mbox{\sc b}\prime}$	123.6	159.2	146.0	140.3	-126.8*	333.9
8	Lending to other entities <sup>c/</sup>	N.A.	78	N.A.	N.A.	N.A.	N.A.
9	Difference between T-bills face value and present value $d^{\prime}$	N.A.	47.0	43.1	35.7	-9.9	N.A.
10	Social Insurance Funds (SIF) bonds e/	44.1	24.5	22.2	23.8	-371.1	0.0
11	Revaluation bonds <sup>f/</sup>	1.5	1.5	1.5	2.7	0.0	16.0
12	Unexplained extra-budgetary items that contribute to debt accumulation	78.0	8.3	79.2	78.2	254.2	317.9
Me	Memorandum Items:						
Doi	mestic and External Government Debt (in percent of GDP)	102.8%	102.5%	92.5%	85.8%	82.8%	87.9%
	explained extra-budgetary items that contribute to debt umulation (in percent of GDP)	2.9%	0.2%	1.7%	1.4%	4.1%	4.8%
Ove	erdraft facility (TSA stock) <sup>g/</sup>	203.1	0.0	4.5	53.1	85.4	5.9

Table 1. 3. Drivers of Egypt's Government Debt Accumulation (Or	n-Budget vs. Extra-Budget)
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*Notes:* <u>*Row* 6</u> = 3 + 4 + 5, <u>*Row* 7</u> = 2 - 6, <u>*Row* 12</u> = 7 - 8 - 9 - 10 - 11

Source: World Bank (WB) staff calculations based on data from Ministry of Finance (MoF), Central Bank of Egypt (CBE), and IMF (2018) page 8.

a' Domestic and external debt due on central government of Egypt including central administration, local governments, and public service authorities.

<sup>b'</sup> Below the line items that contribute to debt accumulation is the change in debt arising from obligations other than financing the fiscal deficit.

<sup>e'</sup> Public authorities' borrowing from Treasury Single Account (TSA) at CBE, in addition to borrowing by the central government to onlend economic authorities and to the public business sector (IMF, 2018).

<sup>d'</sup>T-bills are issued at a discount from their face value, however at maturity the government pays the holders of these securities their face value.

e' Treasury bonds annually issued to recognize government's liabilities towards SIFs.

<sup>f/</sup>Bonds issued to CBE to offset the change in the value of bonds resulting from exchange rate revaluation.

g/ Data source for 'overdraft facility' is the CBE financial statements.

\* Reflects the one-off cancellation of the debt owed by the government to the Social Insurance Funds (SIF) worth LE371 billion. This debt cancellation followed the enactment of Law 148/2019, which included an article stipulating that the debt cancellation is made in return for annual government payments to the SIF that increase every year at a compounded rate for the duration of 50 years.

<sup>&</sup>lt;sup>31</sup> This was part of a signed protocol between the MoF and the CBE via which annual bond issuances will take place for 15 years (with a 10-year maturity and a 7 percent interest rate). This was to recognize cross-debts amounting to LE 209 billion. The first recognized securitization of this debt took place in July 2020 amounting to LE 13 billion.

## **Outlook**

**Egypt's economic activity and domestic inflation in the near-term are expected to be adversely impacted by the repercussions of the Russia-Ukraine conflict.** Growth is expected to slow down to 4.5 percent in FY2022/23 from 6.6 percent in FY2021/22 (Table 1.4), affected by the repercussions of the war in Ukraine that overlap with persisting COVID19-related disruptions. While key sectors are continuing to thrive, especially gas extractives (benefitting from the higher global prices), as well as the resilient communications, agriculture, and construction sectors, other activities are expected to continue performing below-potential, including manufacturing. Inflation is forecast to surpass the CBE's inflation target range (7 (+/-2) percent) and remain in double digits through FY2022/23 due to the impact of the depreciation, imported inflation, supply bottlenecks, along with the potential continuation of adjustments to fuel prices.

External accounts are expected to be supported by the enhanced competitiveness gains and potential international financing. Further reforms to enhance export potential remain important. The deterioration in external accounts in FY2021/22 is due to the widening of the non-oil merchandise trade deficit, in addition to the large-scale portfolio outflows that took place during March 2022. The impact of the rising imports costs on external accounts was partially mitigated by the surge in gas exports, the largescale inflows from the GCC, the Samurai bond issuance, in addition to the impact of the depreciation, which together with the new administrative measures related to importation,<sup>32</sup> have helped contain imports growth. For FY2022/23, potential improvement in external balances can arise from the boost that higher international prices can provide to remittances from the GCC.<sup>33</sup> and FDI inflows to oil and gas extractives, in addition to potential financial flows from the GCC. Sovereign issuances are expected to continue, including innovative Green Bonds and Sukuk. Also, in December 2022, the IMF Executive Board approved a 46-month arrangement under the Extended Fund Facility (EFF) for Egypt in an amount of about US\$3 billion. The IMF's program identifies US\$1 billion financing from the Resilience and Sustainability Facility (RSF). It also projects financing of US\$5 billion multi-year financing package of regional and international support (this includes the World Bank's potential financing). For sustained improvements in external accounts, trade facilitation reforms as well as broader business environment reforms are important.<sup>34</sup>

**External debt**<sup>35</sup> **servicing obligations are rather substantial.**<sup>36</sup> Egypt's external debt has increased to US\$155.7 billion (37.2 percent of FY2021/22 GDP) at the end of June 2022 from US\$137.9 billion (32.3 percent of GDP) at the end of June 2021. External debt is mainly owed to multilaterals and broadly maintains a favorable maturity structure, mostly medium-to-long term. However short-term external debt has increased to 17.1 percent of total external debt at end-June 2022 up from 9.9 percent at end-June 2021. The increase in short-term external debt was mainly driven by newly received short-term GCC deposits that amount to US\$13.0 billion (US\$5.0 billion from Saudi Arabia, US\$5.0 billion from United Arab Emirates (UAE) and US\$3.0 billion from Qatar) by end-March 2022. Total external debt figures also include long-term deposits in the CBE from Saudi Arabia, Kuwait and the UAE (last reported at US\$15.0 billion as of end-June 2022). Debt service payments (principal and interest) thus increased during FY2021/2022 reaching US\$26.3 billion up from US\$15.9 billion during FY2020/2021. External debt servicing remains rather large, as the obligations that are confirmed to be paid in FY2022/23 amount to

between private and public sector actors in the economy, improved commercial justice and contract enforcement, and facilitating business exit. <sup>35</sup> Data on repayment schedules published by the CBE refer to total external debt, which includes government and non-government external debt.

<sup>&</sup>lt;sup>32</sup> Authorities have introduced administrative measures to limit imports growth and reduce demand on foreign currency both inside and outside the banking system. These measures started end-February when FX pressures were intensifying. They include: (i) mandating Letters of Credit for importation; (ii) banks can only accept foreign currency that is generated from the business's main activity (thereby refusing any hard currency deposits that are of unknown origin and thus reducing FX demand from dealers).

 <sup>&</sup>lt;sup>33</sup> Please see the <u>World Bank's Migration and Development Brief, May 2022</u> for more information on remittances, as well as its forecast for 2022.
 <sup>34</sup> Key business environment reforms include streamlined tax and customs administration, enhanced competition, leveling-the-playing field

<sup>&</sup>lt;sup>36</sup> The ratio of 'external debt service' to 'exports of goods and services' increased to 34.7 and 33.3 percent in Q3-FY2021/22 and Q4-FY2021/22 respectively, compared to 22.8 percent in Q2-FY2021/22. On a positive note, the ratio has significantly moderated compared to the 62.8 percent recorded during Q1-FY2021/22 (according to the CBE monthly statistical bulletins).

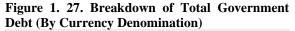
US\$42.2 billion.<sup>37</sup> Financing from the IMF under an Extended Fund Facility, and the accompanying foreign financing from multilaterals, already-pledged foreign investments and GCC deposits could cover the country's external debt obligations. Over the medium term, sustained fiscal consolidation is crucial to help reduce external financing requirements and the burden of debt and debt service payments as well as create fiscal space needed for increased social spending (health, education, and social protection), and productive public investments.

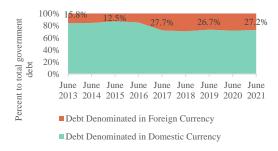
**The social mitigation packages will mainly affect the FY2022/23 fiscal outturns.** The overall budget deficit-to-GDP ratio declined in FY2021/22 (to 6.2 percent from 7.1 percent in FY2020/21). The bulk of the government's announced mitigation package (LE130 billion or 1.4 percent of FY2022/23 GDP worth of measures) to help alleviate the social impact of the rising domestic prices will be reflected in the FY2022/23 budget. As such, higher wages and pensions, food subsidies, along with interest payments are expected to cause a slowdown in fiscal consolidation, with partial mitigation coming from the contained net fiscal flows between the Treasury and EGPC (due to the incremental increases in the retail fuel prices as well as the increase in revenues from activities associated with gas extractions).

**Following increases in FY2020/21-23, the government debt-to-GDP ratio is expected to resume its downward trajectory over the medium term with continued fiscal consolidation.** The government debt ratio increased to 88.3 percent at end-June 2022 (up from 87.9 percent a year earlier). The debt-to-GDP ratio is expected to benefit from favorable debt dynamics, as real GDP growth is expected to surpass real interest rates during FY2022/23. However, valuation effects from the exchange rate as well as extrabudgetary transactions that result in additional debt accumulation (as reported for the previous years in Table 1.3) are expected to lead to an uptick in the debt ratio. Fiscal consolidation is expected to pick up pace over the medium term putting the debt-to-GDP ratio on a sustainable downward path.

**Government debt management reforms have achieved material improvements in the debt profile, but the maturity structure and currency composition continue to pose challenges**. Egypt is gradually diversifying the financing sources through introducing new instruments and tapping new markets (such as the Green and Samurai bonds). Better debt management practices have successfully prolonged the average time-to-maturity of the budget sector debt to 3.1 years in June 2022 (up from 2.8 years in June 2018, 2.1 years in June 2016, and an even shorter maturity of 1.3 years in 2013). Nevertheless, the domestic portion of government debt remains mostly short-term.<sup>38</sup> This entails interest rate and rollover risks. Further, the rise in the foreign-currency denominated portion (27 percent of government debt—Figure 1.27) entails exchange rate risks.

Going forward, restoring the downward trajectory of the government debt-to-GDP ratio will require simultaneous reforms on several front: (i) sustained fiscal consolidation combining streamlining of expenditures, and increasing revenues; (ii) fiscal and debt transparency to support proactive steps to better monitor, report, and contain public sector financing requirements (beyond the central government); (iii) growth to help ensure favorable debt dynamics; and (iv) broader structural reforms that can improve the governance of the public sector and reduce its fiscal constraints.





Source: WB estimates based on MoF and CBE.

<sup>&</sup>lt;sup>37</sup>Based on CBE's External Position of the Egyptian Economy Publication, FY2021/22 Volume no. 78. This includes US\$26.6 billion in short-term debt by original maturity, as well as US\$15.6 billion in long-term debt maturing within one year.

<sup>&</sup>lt;sup>38</sup> Indeed, more than half of tradable debt was still issued on a short-term basis (of maturity up to one year) in FY2019/20.

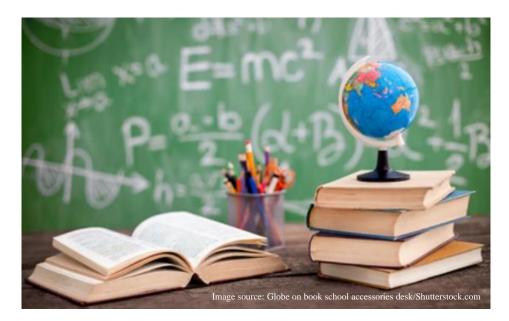
#### **Table 1. 4. Main Economic Indicators**

	FY2018/19 FY2019/20 FY2020/21		FY2021/22	FY2022/23	FY2023/24	
	Actual	Actual	Actual	Pre-Actual	Forecast	Forecast
Real Sector and Prices						
GDP at market prices (Current prices, LE bn)	5,596.0	6,152.6	6,663.1	7,842.5	9,567.9	11,194.4
GDP growth rate (Constant prices)	5.6	3.6	3.3	6.6	4.5	4.8
GDP deflator growth	13.6	6.2	4.8	10.4	16.7	11.6
Population (in millions)	98.9	100.6	102.1	103.4	105.3	107.2
Unemployment rate (last quarter in fiscal year)	7.5	9.6	7.3	7.2	7.2	7.0
CPI inflation, (Urban, Period average)	13.9	5.7	4.5	8.5	16.7	10.8
GDP per capita (Current prices, US\$)	3,222.2	3,815.1	4,161.0	4,610.7	N.A.	N.A.
Public Finance (Percent of GDP)						
Total Revenues	16.8	15.9	16.6	16.9	16.3	16.1
Tax revenues	13.2	12.0	12.5	12.6	12.1	12.3
Grants	0.0	0.1	0.0	0.0	0.0	0.0
Other non-tax revenues	3.6	3.7	4.1	4.2	4.2	3.8
Total Expenditures (excl. NAFA)	24.5	23.3	23.7	23.1	22.6	22.2
Current expenditures	21.9	20.2	20.0	19.0	18.6	18.2
Capital expenditures	2.6	3.1	3.7	4.1	4.0	4.0
Net Acquisition of Financial Assets (NAFA)	0.0	0.1	0.0	0.0	0.0	0.0
Overall Budget Balance	-7.7	-7.5	-7.1	-6.2	-6.3	-6.1
Primary Balance	1.8	1.7	1.4	1.3	1.5	2.1
Gross Domestic Budget Sector Debt	68.9	64.8	68.9	68.8	68.2	65.7
Gross Budget Sector Debt (Domestic + External)	85.8	82.8	87.9	88.3	93.2	88.5
External Sector (Percent of GDP unless otherwise stated)						
Trade Balance	-11.9	-9.5	-9.9	-9.1	-9.2	-9.0
Current Account Balance	-3.4	-2.9	-4.3	-3.5	-3.0	-2.9
Net Foreign Direct Investment Inflows	2.6	1.9	1.2	1.9	2.4	2.4
Capital and Financial Account Balance (excludes errors & omissions)	3.4	1.4	5.5	2.5	5.6	5.4
Overall Balance of Payments	0.0	-2.2	0.4	-2.2	0.9	0.7
Net International Reserves (end-period, US\$ bn)	44.5	38.2	40.6	33.4	36.6	39.1
External Debt	32.3	32.3	32.3	37.2	47.3	42.1
External Government Debt (serviced by MoF)	16.9	18.0	19.0	19.5	25.0	22.8
Monetary Sector						
Domestic Liquidity (M2) annual growth rate	11.8	17.5	18.0	23.4	23.0	18.0
Private Sector Credit annual growth rate	12.4	19.5	20.5	24.3	23.0	18.0
Private Sector Credit annual real growth rate	-1.5	13.8	16.0	15.8	6.3	7.2

Source: Historical data (until FY2021/22) are based on official data from the Ministry of Planning and Economic Development, Ministry of Finance, CBE, and CAPMAS. The years FY2022/23—24 reflect World Bank staff projections.

Note: The ratios to GDP are expressed using the new GDP series published by the Ministry of Planning and Economic Development. Thus, fiscal ratios may differ slightly from figures recently announced by the Ministry of Finance.

## **Chapter 2 – Education: Reforming the Four Walls Carrying Tomorrow**



Education is a key pillar of human capital, with investment in better, more inclusive education being a crucial prerequisite for a better tomorrow. Egypt's Constitution of 2014 commits to universalizing twelve years of schooling and stipulates a minimal spending on education in support of that goal<sup>39</sup>. In September 2018, the Government of Egypt (GOE) embarked on a major education reform program aimed at transitioning the education system away from a traditional emphasis on rote learning, and towards acquiring higher-order critical thinking, creativity, communication, and digital skills. The reform agenda, also known as EDU 2.0, promotes the foundations of learning starting in early grades, introduces a modernized curriculum driven by alternative television and digital learning resources, and adopts a new student assessment system. Despite this important shift, large challenges remain including on the quality of learning offered and the mobilized financing.<sup>40</sup>

Egypt has the largest education system in the MENA region, with 25 million students enrolled in basic education. More than half the students are in primary education, and another 23 percent are in preparatory, reflecting a nearly universal net enrollment rate  $(NER)^{41}$  for this age group (Figure 2.1). At the same time, a significant share of children does not enroll in secondary education, and the pre-primary NER of 21 percent is one of the lowest in MENA (World Bank, 2021). The public sector provides for 90 percent of student enrollments, yet this share is lower for pre-primary and secondary education where the private sector is rapidly increasing provision (Figure 2.2). The education sector employs over one million teachers, while non-teaching staff<sup>42</sup> account for another 500 thousand employees.

**Despite improvements in international assessments capturing the quality of education, learning outcomes remain well below the country's needs, reflecting the challenges facing the education system.** The Learning Poverty report estimates that 70 percent of students are not able to read and understand an age-

<sup>40</sup> This focus piece draws on the World Bank report "Egypt Public Expenditure Review for the Human Development Sectors", published in September 2022.

<sup>&</sup>lt;sup>39</sup> The Constitution stipulates a minimum spending of 4 and 2 percent of Gross National Product on basic and tertiary education, respectively.

<sup>&</sup>lt;sup>41</sup> NER is the total number of enrolled students, expressed as a percentage of the total population in that age group.

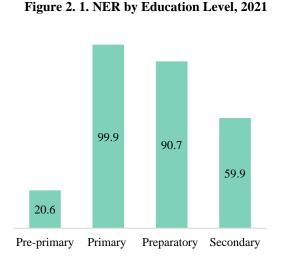
<sup>&</sup>lt;sup>42</sup> Includes school management, supervisors and maintenance crews.

appropriate text at age 10 (World Bank, 2019). In addition, Egypt ranks in the bottom decile of countries in the Trends in International Mathematics and Science (TIMSS) 2019 scoring scale (https://timss2019.org/reports/wp-content/themes/timssandpirls/download-center/TIMSS-2019-

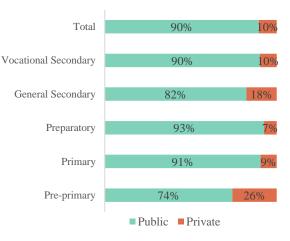
*Highlights.pdf*). Nearly one in two students only reach the low international benchmark in Mathematics and Science, and about a quarter reach the intermediate level. Despite this, there is a 7-percentage point increase in those reaching the low benchmark for both 8th grade math and science from the 2015 assessment, and a similar improvement in reaching the intermediate benchmark.

**Considerable progress has been achieved in implementing the EDU 2.0 reform agenda.** The reform targets 25 million students, 1.3 million teachers and non-teaching staff, and 50,000 public schools (comprising 90 percent of public schools). Key milestones include: (i) rolling-out the new curriculum and teacher training for Kindergarten (KG) and grades 1-4 (being rolled to grade 5 in 2022/2023); (ii) conducting a KG Diagnostic Study to identify strengths and opportunities to further strengthen KG teaching practices in the classroom; (iii) developing digital and educational TV learning resources for grades 4-12; (iv) developing the grade 4 national assessment framework that guided the baseline administration in December 2021, and (v) designing and administering secondary education examinations in grades 10-12 focusing on higher order thinking skills.

To complement the achieved progress, GoE can unleash a huge potential through addressing standing challenges, particularly from a shortage in the number of teachers and classrooms in public primary education. The Ministry of Education and Technical Education (MOETE) estimates that there is a shortage of over 320,000 teachers, resulting from long hiring freeze during a period of sustained growth in the primary student population. Similarly, the construction of classrooms is not keeping up with the demand for education. To manage this shortage ahead of the 2021/2022 school year, MOETE resorted to hiring temporary teachers and distributing students across multiple shifts during the day. More recently in 2022, the GOE decided to allow for the recruitment of 30,000 per year – a total of 150,000 teachers over 5 years – while prioritizing early grades. It is unclear if they would be contract/temporary hires or civil servants.<sup>43</sup>



#### Figure 2. 2. Enrolment in Schools Public vs. Private, 2021



Source: WB staff calculations based on MOETE Education Management Information System (EMIS)

<sup>&</sup>lt;sup>43</sup> The impact of part-time teachers on learning outcomes is unknown, but recent research provides insights on the overall risk of burnout in systems that employ part-time teachers (Seibt and Kreuzfeld 2021). Other studies point to the discrimination endured by part-time teachers, who often find themselves locked into a cycle of never-ending contracts without a clear pathway to a status change (Leigh 2014; Cau-Bareille, Teiger, and Volkoff 2019).

### **Inequitable Access in Pre-Primary and Secondary Education**

At both the preprimary and secondary levels of education, children from the wealthiest households enroll at twice the rate of children from the poorest households.<sup>44</sup> Pre-primary education is not compulsory in Egypt, and as such only 22 percent of children from the lowest socioeconomic status households enroll, compared to 55 for the highest. This is in contrast with primary education, in which children from all socioeconomic statuses (SES)<sup>45</sup> enroll at near universal levels. The drop in enrollment is again stark at the secondary level, as only one in every two children from the lowest SES households remain in the education system, compared to nearly 90 percent of children from the highest SES households (Figure 2.3).

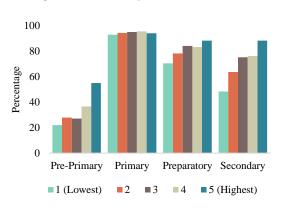
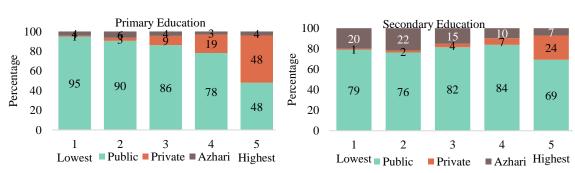
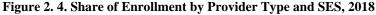


Figure 2. 3. NER by education level and SES

**Children from wealthier families sidestep overcrowded primary classrooms by enrolling in the private system, and spend significantly more on private tutoring.** Nearly half of children from the highest SES households avoid under-resourced schools in primary education by enrolling in the private system, compared to only 1 percent in the poorest SES group (Figure 2.4). At the secondary level however, Al-Azhar track takes on a much more prominent role for children from the poorest households who enroll 5 times the rate of primary education. Also, whereas children from the wealthiest SES group continue to utilize the private sector, the rate of private enrollment drops at the secondary level by half to 24 percent. Less crowded classrooms and more available teaching resources in the public system due to lower secondary enrollment is likely a major driver of this shift. Resources allocated to private tutoring also rise linearly with socioeconomic status, as children from the highest SES spend 45 percent more than the children from the next highest status group, and nearly fivefold the amount of the lowest status group.





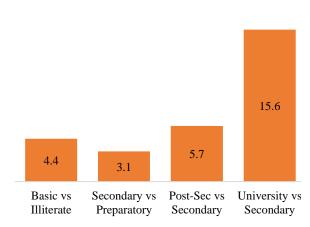
Source: WB staff calculations based on HIECS 2018

Source: WB staff calculations based on HIECS 2018

<sup>&</sup>lt;sup>44</sup> This section utilizes the Household Income, Expenditure and Consumption Survey (HIECS 2018), which collects data covering geographic areas, household composition, enrollment dynamics and disaggregated household expenditure on a sample of 26,000 households. To fill in some gaps, the section also refers to analyses from the Egypt Labor Market Panel Survey (ELMPS 2018), now its fourth edition of producing longitudinal data, covering over 15,000 households and 61,000 individuals.

<sup>&</sup>lt;sup>45</sup> Socioeconomic status is proxied by dividing families into total expenditure quintiles (SES1 to SES5). Throughout the analysis, the reference to the highest income groups should be understood in a context where household surveys are unlikely to capture the highest quintiles in the income distribution. This group should therefore be rather interpreted as the middle-class or the high middle-class.

The opportunity cost of forgone income and low labor market returns to education likely causes children from poorer households to drop out of the education system prior to secondary education. A combined 83 percent of children from the lowest socioeconomic status households cite lack of interest or financial necessity as the main reasons for dropping out of the system. One reason for this is that labor market returns (in the form of earnings) are constrained prior to obtaining a 'university' degree. The returns to completing secondary education is only 3.1 percent higher than for those who drop out after completing the preparatory level. The marginal returns for a postsecondary certificate are similarly low, but rise to 15.6 percent for obtaining a graduate degree (Figure 2.5). As demonstrated by NER calculations earlier, benefits children this likely from higher socioeconomic status households at much higher rates.



#### Figure 2. 5. Labor Market Returns by Level of Education (Percent)

Source: WB staff calculations based on HIECS 2018

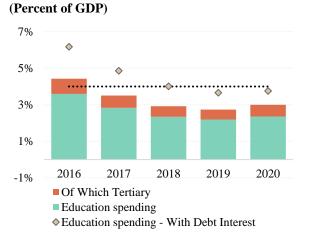
### Low Public Spending on Education and the Salaries Paradox

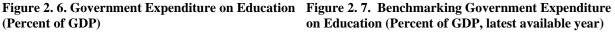
**Spending on education is low, and budget increases were insufficient to translate into higher real spending, notably in light of student-population growth.** This is evident when compared to both the evolving needs and to the spending levels in peer countries, despite the country's aspirations as spelled-out in its constitutional mandates. Real spending on education has been gradually falling over years, and financial allocations are weakly responsive to population growth. Education spending as percentage of GDP declined from a high of 2.8 percent in FY2015/16 to 1.7 percent in FY2019/20.<sup>46</sup> The decline in spending is also evidenced by the fall in real spending on education when calculated using constant 2010 prices: while nominal spending grew at an annual average of 11 percent between 2016 and 2020, real spending declined by an annual average of 3 percent over the same period. In 2020, spending on education was between 1 and 3 percentage points lower than aggregate regional and high-performing country groupings, and persists when compared to other MENA countries. This gap has widened over the years, with the decline in real spending (Figure 2.6).

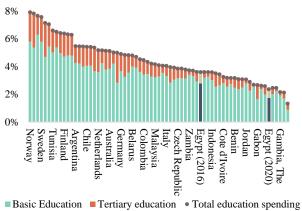
Aggregate staff salaries absorb the majority of financial resources allocated to the sector while remaining low and insufficient on the individual staff level. In FY2021, wages, which include teacher salaries and spending on nonteaching staff, are the largest spending item in the education budget (92 percent). Of the remaining 8 percent, 6 percent is allocated to non-personnel recurrent expenditures, of which the largest share is goods and services (5.6 percent), and grants and social benefits (0.1 percent). Around 2 percent of the budget is allocated to capital spending, which is administered and implemented by the General Authority for Education Buildings (GAEB). The share of spending on staff salaries in total education in Egypt is 22 percentage points higher than the median of the top 10 TIMSS performers in 8<sup>th</sup> grade mathematics, and 10 percentage points higher than the MENA median (World Bank, 2022, Egypt Public Expenditure Review for Human Development Sectors). A common feature of high-performing countries is that spending on staff salaries does not crowd out other educational expenditures (OECD 2021).

<sup>&</sup>lt;sup>46</sup> The functional classification of education expenditures as reported in the State budget is not comprehensive, leaving out some education sector expenditures due to their institutional affiliations. As such, the Ministry of Finance publishes a wider definition of education spending, but that also includes other items that are not in line with global practices (such as adding the sector's share of interest payments—calculated as 14.6 percent of total interest payments based on the pre-university education share to total budget expenditures in FY2020/21). Regardless of the different accounting methods, it is indisputable that nominal/monetary increases in spending allocations to priority sectors (such as education) did not translate into higher *real* spending.

The large share of staff salary is not caused by high pay for teachers but is rather a reflection of insufficient overall spending (Figure 2.7). For instance, international comparisons show that teacher salaries as a multiple of GDP per capita is 1.1, lower than in peer countries such as Turkey (1.5) and Jordan (2.5). Low salaries have for long been a challenge to attract and retain the right skills, thereby also affecting motivation or forcing many to seek second jobs in private tutoring. In addition, as discussed below, high student-teacher ratios indicate that teacher numbers are not excessive.







Source: WB staff calculations based on MOF data; World Bank Education Statistics

## An Uneven Distribution of Resources Across Education Levels and Governorates, and a Widening Public/Private School Gap

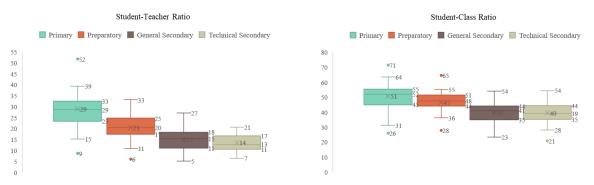
**Student-teacher ratios (STRs) and students-classroom ratios (SCRs) across governorates differ considerably between levels, most remarkably when comparing the primary and secondary levels**. While the average primary STR<sup>47</sup> is 29, it drops to 15 at the general secondary level. The discrepancy across governorates is also much wider at the primary level, as the STR can reach up to 52 in primary versus 27 in general secondary (Figure 2.8). The ratio of students to classrooms (SCR) follows a similar pattern, albeit with slightly smaller differences across education levels.<sup>48</sup> Average SCR at the primary level is 51, dropping to an average SCR of 40 in secondary education, while the maximum SCR is 71 in primary versus 54 in secondary education.

**The gap between public and private education is also widening**. Over the 5-year period between 2017-2021, the STR in primary public schools increased by 21 percent, while that of private schools decreased (improved) by 7 percent. The pattern is repeated in SCRs, with the caveat that while STRs for public and private schools were similar in 2017, the public primary SCR was already 44 percent higher than the private sector ratio. Over the 2017-2021 period, private primary SCR marginally declined by 2 percent to 32, while the public sector SCR grew by 15 percent to reach 56. This means the gap between public and private providers exceeds 70 percent in 2021.

<sup>&</sup>lt;sup>47</sup> STR is a ratio calculated by dividing the total number of enrolled students by the total number of teachers, by governorate and by education level.

<sup>&</sup>lt;sup>48</sup> SCR is a ratio calculated by dividing the total number of students by the total number of usable classrooms, by governorate and education level.



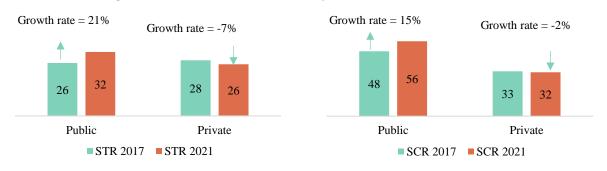


Note: The box plots above display the five-number summary of STRs and SCRs across Egypt's governorates for different levels of education. This includes; the maximum (highest datapoint excluding outliers), the minimum (lowest datapoint excluding outliers), the 1<sup>st</sup> quartile (represented by the lower border of each box marking the datapoint below which 25 percent of the data lie), the 2<sup>nd</sup> quartile/median (the line passing through each box marking the datapoint below/above which 50 percent of the data lie), the 3<sup>rd</sup> quartile (represented by the upper border of each box marking the datapoint above which 25 percent of the data lie). Meanwhile, outliers are plotted as individual points and the mean is presented by the symbol "×". Source: Authors' calculations based on MOETE EMIS.

The teaching and classroom shortage in public primary schools is likely to widen without urgent corrective action. Three scenarios are considered under the conservative assumption that the annual average growth rate in the student population over the 2017-2021 period is sustained until 2026:

- i. *No Action*': classroom and teacher growth continue at the 2017-2021 rate and only 10,000 classrooms are added by 2026 and SCR rises to 65 from a baseline of 56
- ii. *'Maintenance'*: STR and SCR in 2026 are preserved at 2021 levels and 50,000 classrooms are constructed to preserve the national SCR at 56
- iii. *'Targeted Reform'*: GOE targets a 20 percent reduction in STR and SCR by 2026 and 117,000 classrooms are added in 5 years to alleviate pressure on public spaces and bring the national SCR down to 45.

**Bringing down SCR and STR closer to international comparators will require the addition of 120,000 classrooms and 200,000 teachers in the next five years.** The simulations suggest that the *No Action* will add mounting pressure on human resources and will likely require the additional use of multiple shifts and short-term contract teachers as the national STR rises to 38, from a baseline of 32. Under the *Reform* scenario, roughly two-thirds of the MOETE estimated 300,000 teacher shortage is addressed, bringing the national primary STR down to 25. These simulations suggest that the investment-heavy task of 'catching up' to the rising student population can be mitigated by progressive actions taken today. Similarly, the reform scenario suggests that the addition of 25,000 classrooms per year over a five-year period will bring the national SCR down from 56 to 45 (Figure 2.9 and 2.10).





Source: WB staff calculations based on MOETE EMIS

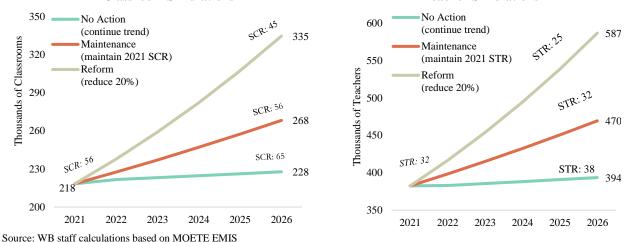


Figure 2. 10. Scenario Simulation of Classrooms and Teachers, 2022-2026 Classroom Simulations Teacher Simulations

## The Budget Process Is Not Efficient in Supporting Learning Goals

The budget process in Egypt is based on historical allocations and excludes defined learning and input metrics for allocating funds. Annual budgets are strongly influenced by actual spending over the previous three years and thus result in allocations that are primarily determined by historical staff numbers in directorates. Hence, key factors like the number of students, learning outcomes and the advancement of specific education strategies are weakly factored into how much financing schools ultimately receive. One obstacle to this is the lack of integrated financial and learning data to be utilized in the budget planning process<sup>49</sup>. Integrated data would allow policy makers to track learning outcomes against financial inputs at subnational levels of education, and thus would provide a platform to designing effective policy and enhance accountability.

**Limited school autonomy contributes to the deteriorating environment in public schools.** With a highly centralized and rigid budget process, resources cannot be reallocated to the best use/need of individual schools. For instance, large-scale maintenance is the responsibility of the General Authority for Education Buildings (GAEB), but principals suffer from slow responses to their maintenance requests. Schools have limited autonomy as they receive financial allocations by line item which prevents principals from making independent allocation decisions.

A separate budget processes for capital versus recurrent spending results in weak responsiveness to population growth and school overcrowding. While the budgeting for capital spending is a joint responsibility of the Ministry of Planning and Economic Development and the Ministry of Finance, the timeline for capital budgeting decisions and the subsequent implications in terms of recurrent spending may not be well aligned. Schools without teachers, overcrowded classrooms, and unequipped labs are some examples of the issues resulting from that separation.

<sup>&</sup>lt;sup>49</sup> The education budget process involves numerous national and subnational entities including 35 budget entities for pre-tertiary education, in addition to a special entity for the Al-Azhar education track. The 35 entities are subdivided into the central administration of the MOETE, 27 education directorates and 7 education service authorities.

## **Reforming Education from a Holistic Perspective**

The interplay between different reforms can have a multiplicative impact on improving the efficiency and effectiveness of public spending on education. Important policy measures can build on the ongoing reforms that are underway at MOETE to provide complementary areas of support. Such policy measures can aim to:

**Expand resources to primary education in a manner that increases performance and equity.** As SCRs and STRs are considerably higher during the primary years, additional resources would have the greatest impact at lower levels of basic education. Given that NER is near universal in the primary years, children from lower income bracket households directly benefit from additional public resources and thus also guarantees the highest return on the distributional equity of resources across the population. Targeting additional resources to interventions that increase the performance of teachers (including through training) would also ensure the most efficacy potential from expanding resources to primary education.

Strengthen the alignment between strategic goals and budgetary processes, including by transitioning towards formula-based funding. Medium term planning and costing is an important precondition to ensuring that public resources support strategic goals in the education sector. It can allow progressive and incremental increases in resources where they are most needed. Another important tool to strengthen the impact of funding on learning is the use of formula-based funding. Transitioning to formula-based funding would involve (i) identifying some education functions to be delegated to determine the level of autonomy provided to local entities; (ii) designing the funding formula to ensure that resources are allocated according to objective criteria and achievable goals; and (iii) developing accountability arrangements that provide confidence that the resources provided are used efficiently in line with the objectives of the program.

**Expand access to KG, including through public and private provision.** This would better prepare children for primary education and increase their likelihood of staying longer in the education, particularly for children from lower income bracket groups who have less access to KG and are more likely to drop out of the system. Ensuring that children begin their interaction with the education system early can have lasting impacts, and would complement the reform currently underway. The private sector can play a key role in supporting the universalization of access to KG through the use of Third-Party Providers, albeit public funding remains essential especially for children from poor and vulnerable families. A necessary precondition of relying on Third-Party providers is the existence of a robust Quality Assurance System for early child education (ECE), which will standardize quality metrics to be used for licensing and accreditation of ECE providers (Figure 2.11).

#### Figure 2. 11. Main Steps to Analyze ECE Provision in Egypt



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## Annex 1 – Taylor Rule: Assessing Egypt's Monetary Policy Stance

The "Taylor rule" is one of the methodologies for assessing the monetary policy stance. Taylor (1993) suggested a simple formula that prescribes how the policy rate – the short-term nominal interest rate targeted by the monetary authority – should be adjusted in response to changes in inflation and economic activity.

#### **Methodology**

For the case of Egypt, the World Bank team applied a Taylor-type rule in order to compute the prescribed value of the short-term policy rate from June 2017 to October 2022, in light of the underlying developments in the Egyptian economy,<sup>50</sup> in particular with regards to (i) the equilibrium real interest rate; (ii) the deviation of actual inflation from its target; (iii) the output gap and (iv) the prevailing nominal interest rate. This benchmark rate is then compared to the actual policy rate over the same period. The Taylor-type rule considered here takes the following form:

 $\begin{aligned} \tilde{\iota}_t &= r_t^* + \pi_t + 0.5(\pi_t - \pi_t^*) + 0.5\tilde{y}_t & (1) \\ \hat{\iota}_t &= (1 - \rho)\tilde{\iota}_t + \rho i_{t-1} & ; \ \rho = 0.85 & (2) \end{aligned}$ 

Equation (1) reflects the original Taylor rule, as described in Taylor (1993), where  $\tilde{\iota}_t$  is the short-term nominal interest rate suggested/implied by the rule.  $r_t^*$  is the long-term equilibrium real interest rate,  $\pi_t$  is the inflation rate,  $\pi_t^*$  is the inflation target set by the central bank and,  $\tilde{y}_t$  is the output gap which reflects the deviation of actual output from its potential level. Equation (2), on the other hand, fits Taylor's rule into a "partial adjustment framework" (Gorter, Jacobs & De Haan, 2008).  $\hat{\iota}_t$  is the interest rate suggested/implied by the Taylor rule with the smoothing parameter ( $\rho$ ) which captures the degree of interest rate smoothing in the CBE's decision-making process<sup>51</sup> (Mehra 2002; Clarida, Gali & Gertler, 1998).

#### Data and sources

The actual policy stance is measured by the 'overnight interbank rate' in the money market (monthly averages of the daily overnight interbank rates on LE obtained from the CBE).<sup>52</sup> This is the short-term interest rate targeted by the monetary policy committee (MPC). Inflation is measured by the annual urban headline inflation rate which reflects the year-on-year percentage change in the CPI (2010=100), as published by the CBE. To compute the long-term equilibrium real interest rate, we used the fisher equation ( $r_t = i_t - \pi_t$ ) and then applied the Hodrick-Prescott filter (HP filter) to get the smoothed trend of the series. Finally, the output gap was constructed by applying the HP filter to the industrial production index (IPI) series (2012/2013=100), obtained from CAPMAS. The IPI, which excludes crude oil and petroleum products, is used to compute the percentage deviation of real output from its HP trend.<sup>53</sup>

#### **Results and Findings**

Using the Taylor rule given by equation (2), the CBE's policy rate is found to be largely in line with the prescribed policy rate from the Taylor rule, although there are significant deviations<sup>54</sup> during certain

<sup>&</sup>lt;sup>50</sup> This time period was chosen because Egypt started to officially announce an inflation target in May 2017.

<sup>&</sup>lt;sup>51</sup> Empirical studies estimating a Taylor-type monetary policy rule for Egypt have often found a high degree of interest rate smoothing with the coefficient on the lagged interest rate ( $\rho$ ) ranging from 0.8 to almost one; providing evidence for the presence of considerable monetary policy inertia in the CBE's decision making process. Al-shawarby and El Mossallamy (2019) reported a smoothing parameter estimate of 0.84 for the period 2004/2005-2015/2016, while Hosny (2014) reported a value of 0.91 for the 2005-2012 period. Selim (2012) and Moursi and El Mossallamy (2010) both covered a sample period ending in 2008 and found a significant smoothing coefficient of 0.98 and 0.8, respectively. Hence, an interest rate smoothing parameter of 0.85, on average, is assumed in equation (2).

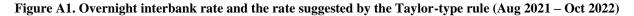
<sup>&</sup>lt;sup>52</sup> Evaluating the actual policy stance based on the policy rate obtained from the Taylor-type rule should be exercised with caution, since the economic data used to compute the prescribed rate are ex-post data that are often released with a lag and may be subject to revisions, and hence were not available to the policy makers at the time these policy decisions were made (Labonte, 2006).

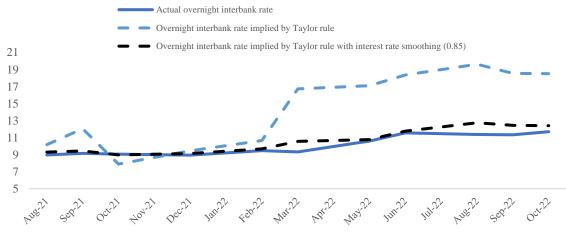
<sup>&</sup>lt;sup>53</sup> IPI data were available till August 2022. Therefore, the Autoregressive integrated moving average (ARIMA) forecasting procedure was

employed to forecast IPI for the 3 missing months (Sep, Oct, Nov 2022). <sup>54</sup> The deviations of the actual overnight rate from that implied by the Taylor rule are larger when the original Taylor rule (without the smoothing parameter) is considered.

exceptional periods. These include the period following the exchange rate depreciation (*July*— *December 2017*) during which the actual overnight rate was lower than that suggested by the Taylor rule by an average of 1.9 Percentage Points (PPTs); the deviation of the inflation from its target was very high (16.2 PPT, on average), and the output gap was mostly positive. By contrast, during the period that followed the COVID-shock (*May 2020*—*July 2021*), the monetary stance could be rather described as "tighter", as the actual overnight rate was broadly higher than that prescribed by the Taylor rule, actual inflation undershot the target, and the output gap turned negative due to the impact of the pandemic.

More recently, even prior to the war in Ukraine, the monetary policy stance became relatively more accommodative (particularly during *August 2021—March 2022*), as shown in Figure A1. The actual overnight rate was broadly lower than the rate prescribed by the Taylor rule, which later triggered the CBE's key policy rate hikes in March, May and October 2022.





Source: WB staff estimated, CBE and CAPMAS data.

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## **Annex 2 – Previous Editions of the Egypt Economic Monitor**

#### 2021 EEM: The Far-Reaching Impact of Government Digitalization

Egypt reached a relatively elevated level of government digital transformation, according to international indices, such as the United Nations E-Government Development Index, as well as the newly constructed World Bank GovTech Maturity Index. For recent digitalization efforts to realize their potential and enhance governance and public service delivery, priority areas for continued reforms include: (i) Simplification and streamlining of government processes and procedures—a crucial complement to the government digital transformation journey; (ii) Roll-out of "end-to-end" digital solutions, where digital transformation occurs at every step throughout a given governmental process, in order to depart from old inefficient (paper-based) procedures, in addition to ensuring the "inter-operability" of related government systems for data and information sharing; (iii) Strengthening the foundations of the Digital Economy, including through: (iii-a) continuous investments in digital infrastructure across the country to provide uninterrupted availability of essential digital government services and universal access to high quality internet, (iii-b) promoting digital skills, (iii-c) incentivizing the adoption and use of digital financial services, and (iii-d) supporting a legal and regulatory framework conducive to the digital transformation of the economy.

https://www.worldbank.org/en/country/egypt/publication/egypt-economic-monitor-december-2021 https://www.albankaldawli.org/ar/country/egypt/publication/egypt-economic-monitor-december-2021

#### 2020 EEM: From Crisis to Economic Transformation: Unlocking Egypt's Productivity and Job-Creation Potential

The economic transformation process has been progressing at a modest pace in Egypt, with employment shares increasing either in sectors characterized by low productivity (value-added per worker), or in sectors that have experienced a decline in productivity. Going forward, for businesses to expand and create sufficient and high-quality employment opportunities, a three-pronged approach will be crucial: (i) Sustaining macroeconomic stability and overall policy predictability whilst incentivizing domestic savings to finance investments. (ii) Getting the enabling environment right to create attractive opportunities for domestic and foreign investors. (iii) Upgrading human capital and firm capabilities to fast-track the economic transformation process in Egypt and to strengthen the country's resilience against such severe shocks.

https://www.worldbank.org/en/country/egypt/publication/egypt-economic-monitor-november-2020 https://www.albankaldawli.org/ar/country/egypt/publication/egypt-economic-monitor-november-2020

#### 2019 EEM: From Floating to Thriving: Taking Egypt's Exports to New Levels

The large depreciation of local currency was expected to reflect positively on exports performance and reinvigorate the exports-oriented private sector. Yet, the increase in non-oil exports remained modest, thereby suggesting that Egypt could not entirely benefit from such a large depreciation. The analysis identifies three main areas where historic lack of reforms has impeded Egypt's ability to fully exploit the recent competitiveness gains from currency depreciation and shift towards an exports-oriented model of growth where exporting firms can flourish and grow. These are the (i) concentration of exports in traditional areas of comparative advantage as opposed to goods that are subject to high global demand; (ii) significant trade (especially non-tariff) barriers; and (iii) connectivity and infrastructure challenges.

https://www.worldbank.org/en/country/egypt/publication/egypt-economic-monitor-july-2019