

ERF

Policy Research Report

Accelerating the Progress of Egypt Towards the Sustainable Development Goals

Chahir Zaki

The work has benefited from the comments of the Technical Experts Editorial Board (TEEB) of the Arab Development Portal (ADP) and from a financial grant provided by the AFESD and ADP partnership. The contents and recommendations do not necessarily reflect the views of the AFESD (on behalf of the Arab Coordination Group) nor the ERF.

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Summary

This report analyzes the different characteristics of the Egyptian economy to investigate its progress towards the Sustainable Development Goals (SDG). Thus, it proceeds in three steps: first, it provides a macroeconomic analysis of its economic growth, its sources and its evolution. Second, it analyzes the different macroeconomic (fiscal and monetary) policies, with the aim of seeing how such policies contributed to Egypt's sustainable development. Third, the report presents the different development dimensions including health, education, institutions, environment, and infrastructure. The main findings show that, while macroeconomic policies helped the economy stabilize in the short term, development was not mainstreamed within such policies. This is why Egypt's progress in SDGs is rather modest, compared to other economies from the region or belonging to the same income level. Deeper and more structural reforms are needed to make the private sector more dynamic and to streamline development in macroeconomic policies.

1. Introduction

Egypt is a moderately diversified economy, belonging to the lower middle-income countries and has witnessed several waves of external and internal shocks. In fact, since 1952, it went through wars (1967-1973), debt crisis (1980s), the financial crisis (2007-2008), political instability (2011-2013), COVID (2020) and the war in Ukraine (since 2022). At the same time, it implemented several reform programs either alone or under an agreement with the International Monetary Fund (IMF) in 1990, 2016, 2020 and 2023. With all these changes in mind, whereas the macroeconomic aggregates and outcomes were performing relatively well, development ones were modest.

More precisely, since 2014, the Government of Egypt has been focusing on macroeconomic stabilization. In November 2016, it concluded an agreement with the International Monetary Fund (IMF) and implemented a reform program that includes sharp reductions in energy subsidies, a floatation of the Egyptian pound and a freeze in public sector hires. These reforms improved macroeconomic aggregates as, in 2019, before the pandemic and the war in Ukraine, GDP growth reached 5.6%, the inflation rate decreased to 9.4%, the unemployment rate declined to 7.9%, the overall fiscal deficit dropped to 8.0% – after having peaked at 16.5% in 2014 – and international reserves increased to reach US\$44 billion after plummeting to \$14.9 billion in 2013.

However, this period was also characterized by an increase in public expenditure to finance different mega-projects, leading to a rapid rise in public debt (both external and domestic). In addition, with an investment climate characterized by a lack of competition, complicated business procedures, and a scarcity of foreign currency, the domestic private investment decreased from 9% of GDP in 2016/17 to 2.2% in 2021/22) and foreign direct investment decreased from 2.4% of GDP to 1.2% over the same period, reflecting the shrinking role of the private sector in the Egyptian economy (Zaki, 2023). At the same time, social outcomes deteriorated as poverty increased from 27.8% in 2015 to 29.7% in 2019. In addition, the living standard of the middle class has deteriorated and education and health outcomes did not significantly improve (Amer et al., 2021).

Yet, despite the different macroeconomic reforms that led to a relative resilience during the pandemic, the war in Ukraine revealed the structural vulnerabilities of

the economy, leading to several currency devaluations, another IMF loan (in 2023), and a surge in external debt. It is worthy to note that Egypt has obtained a second loan from the IMF under the “Stand-by Arrangement”, amounting to 5.2 billion dollars to curb the negative effects of the pandemic. In December 2022, with the war in Ukraine and the large investments in mega-projects, Egypt faced additional pressure and concluded a third loan from the IMF amounting to 3 billion USD with a 46-month arrangement under the Extended Fund Facility (EFF). However, in March 2024, with further pressure implied by the war in Gaza and domestic economic policies, the board of the IMF approved an augmentation of the original program by about 5 billion USD.

Against this background, this report analyzes the different characteristics of the Egyptian economy to investigate its progress towards the Sustainable Development Goals (SDG). Its aim is threefold. First, it provides a macroeconomic analysis of its economic growth, its sources and its evolution. Second, it analyzes the different macroeconomic (fiscal and monetary) policies, with the aim of seeing how such policies contributed to Egypt’s sustainable development. Third, the report presents the different development dimensions. Throughout the report, Egypt’s is compared to three comparator economies from the region (Jordan, Morocco and Tunisia) and to two categories which are the Middle East and North African (MENA) and Lower-Middle Income (LMI) countries. The main findings show that, while macroeconomic policies helped the economy stabilize in the short term, development was not mainstreamed within such policies. This is why Egypt’s progress in SDGs is rather modest, compared to other economies from the region or belonging to the same income level. Deeper and more structural reforms are needed to make the private sector more dynamic and to streamline development in macroeconomic policies.

The remainder of the report is organized as follows. Section 2 analyses the performance of Egypt’s economic growth by focusing on its growth sources, productivity and the status of SDGs. Section 3 analyzes the main economic policies, especially fiscal, monetary and exchange rate ones. Section 4 explores the development outcomes with a special focus on health, education, institutions, environment, financial development, energy and infrastructure. Section 5 provides some policy recommendations to accelerate the implementation of SDGs in Egypt.



2. Analysis of the economic development performance

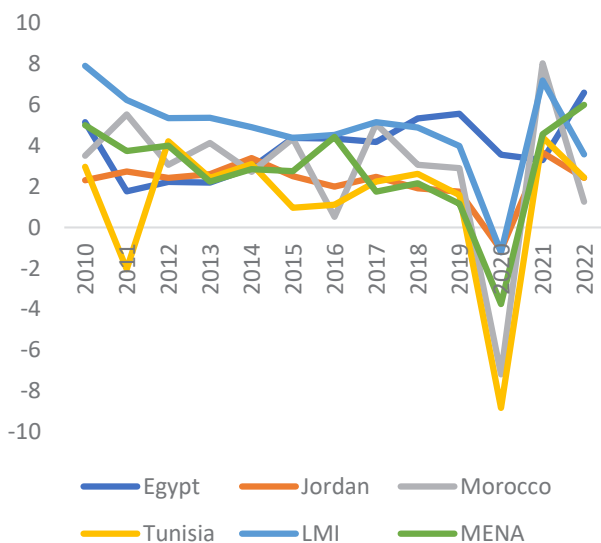
The objective of this section is twofold. First, it presents the evolution and sources of economic growth. Second, it shows how different economic policies help understand the dynamics behind this growth and its development implications.

2.1. Growth analysis

The determinants of economics growth have been studied extensively in the literature. While the traditional theories highlight the role of technology and capital accumulation (Solow, 1956), endogenous theories show that human capital (Lucas, 1988), innovation (Romer, 1990) and public investments (Barro, 1990) matter for growth. Otani and Villanueva (1990) argue that domestic savings ratio, budgetary allocations to improve human capital, and export performance are key determinants of long-term growth in developing economies. This section analyzes the main growth components at the income, expenditure and sector levels.

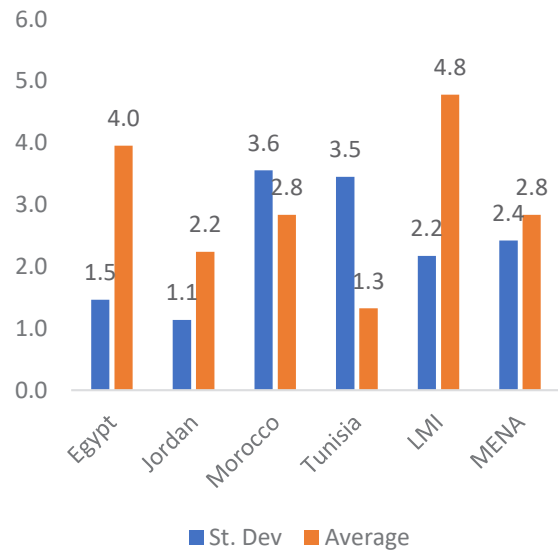
Figure 1 shows that economic growth in Egypt was rather stable despite several external and internal shocks. Before the revolution of 2011, growth rate reached 4.9%, which is higher than other MENA countries (Jordan, Tunisia and Morocco) but lower than lower middle-income ones. It reached the highest level (5.5%) in 2019 before decreasing to 3.5% in 2020 with the pandemic. Despite this decrease, Egypt was the only economy having a positive growth rate. This was mainly due to a large government spending and a growth primarily driven by

Figure 1. Real GDP growth (annual percent change)



Source: Author's own elaboration using the World Development Indicators.

Figure 2. Growth level and volatility



Source: Author's own elaboration using the World Development Indicators.

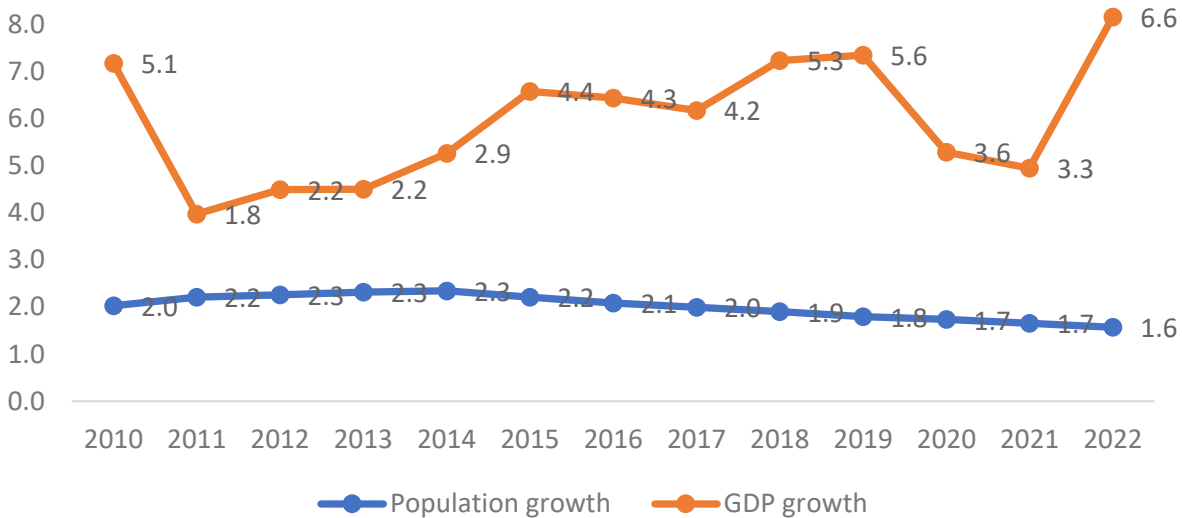
capital intensive sectors (Amer et al., 2021). Thus, Egypt has the second least volatile economic growth measured by the growth rate standard deviation (after Jordan, see Figure 2). In addition, while its average growth rate was higher than MENA countries' one, it was lower than LMI countries. Despite this macroeconomic performance, and with a high but slightly declining population growth rate (averaging 2%), GDP per capita did not significantly increase over the same time horizon given the high population growth (Figure 3). El-Saharty et al. (2022) show that this population growth was primarily due to an increasing fertility that put further pressure on the economy.

2.2. Growth composition

As per the sources of growth in Egypt, three approaches are examined. First, it is clear that at the sectoral level, services contributed by more than 50% to Egypt's GDP, similar to other countries (Figure 4). Yet, while the share of the industrial sector is higher (34%) than other countries, it is primarily due to an expanding construction sector that is capital intensive. This is why growth was rather jobless (Caballero and Hammour, 1998). Jobless growth refers to the case where employment outcomes does not cope with economic growth. Second, at the expenditure level (Figure 5), the share of investment and exports in Egypt is substantially lower than other comparator countries at they stand account for 15% and 15.5% respectively, while in Morocco, these figures are almost the double (27.7% and 32.6, respectively). These low shares in Egypt are primarily due to a declining role of the private sector because of a deteriorating investment climate and uncompetitive markets (Zaki, 2021).

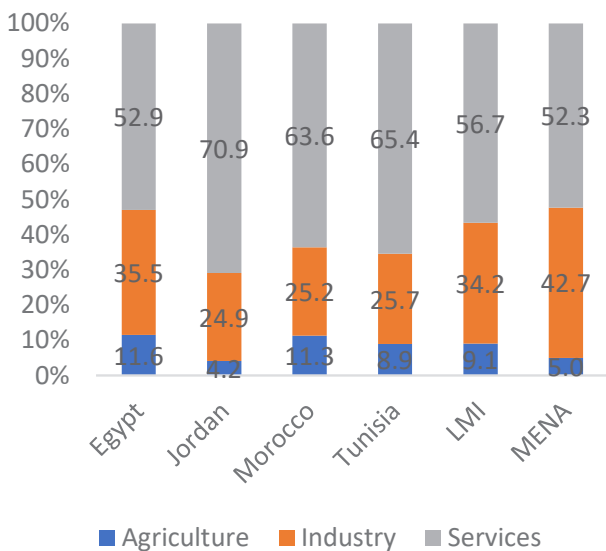


Figure 3. Evolution of GDP and population growth (%)



Source: Author's own elaboration using the World Development Indicators.

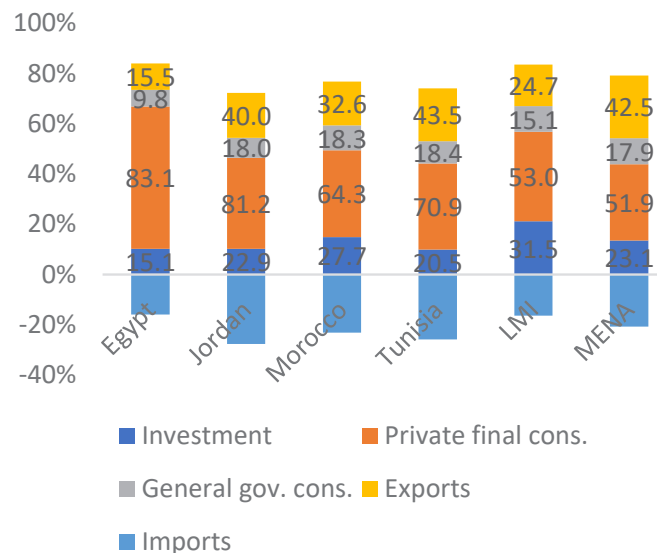
Figure 4. GDP composition – by economic activity



Source: Author's own elaboration using the World Development Indicators. Note: Figures represent the average over the period 2000-2022.

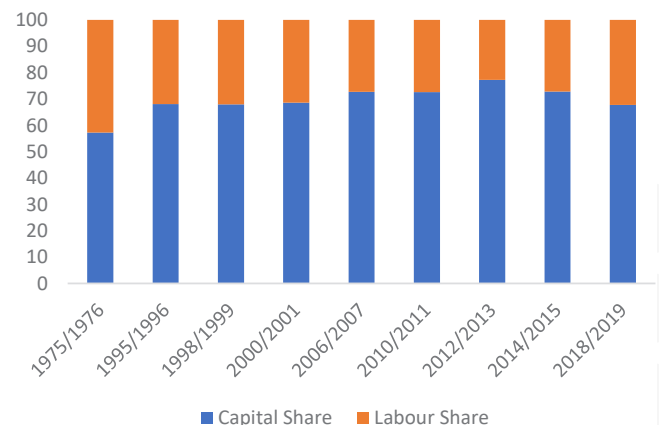
When GDP is analyzed from the income perspective, Figure 6 shows that the capital share to GDP dominates the labor one, with a slightly declining trend in recent years (down to 68% in 2018/2019 from 77% in 2012/2013). This high share of capital in Egypt is well documented in the literature (Kheir-El-Din and Moursi, 2006 and Haq and Zaki, 2015), who argue that capital accumulation was the main driving force behind economic growth between 1960 and 1998. One of the main reasons behind this trend is the prevailing employment laws that foster the adoption of capital-intensive production techniques in sectors like mining, cement, iron and steel.

Figure 5. GDP composition – by expenditure



Source: Author's own elaboration using the World Development Indicators. Note: Figures represent the average over the period 2000-2022.

Figure 6. GDP composition – by income



Source: Author's own elaboration using different social accounting matrices.



2.3. Productivity

After examining the GDP composition, it is important to analyze the pattern of productivity in Egypt and compared to other countries. Table 1 shows that, on average, Egypt's productivity is higher than that of Tunisia but lower than Morocco. This is primarily due to sector that are capital intensive such as mining. In addition, among services, real estate and finance are doing much better compared to other economic activities. Nonetheless, both agriculture and manufacturing are less productive than Morocco (which is almost six times more productive than Egypt) and Tunisia, for the same reasons mentioned above regarding the decline of investment and exports. Bearing in mind that these sectors are not labor-intensive, it is not surprising that job creation was weak as the most productive ones are capital-intensive.

In a nutshell, while growth in Egypt was positive and relatively resilient in crisis times, exports and investments were weak, growth was primarily driven by capital intensive sectors that were more productive. The next section analyzes how macroeconomic policies contributed to these patterns.

Table 1. Productivity – by economic activity

	Egypt	Morocco	Tunisia
Agriculture	1.2	2.7	3.9
Business	3.5	22.7	3.1
Construction	0.7	1.8	1.1
Real estate	63.4	94.9	52.3
Finance	18.5	72.6	26.3
Manufacturing	1.6	8.7	2.1
Mining	202.7	318.8	84.3
Other services	1.9	6.2	1.3
Utilities	4.5	75.5	25.3
Government	0.2	2.2	0.5
Trade	0.9	10.4	5.8
Transport	1.4	1.1	2.9
Total	25.0	51.5	17.4

Source: Author's own calculation using the Penn World Tables
Note: Data for Jordan are not available.

3. Macroeconomic policies

The objective of this section is to analyze the structure and evolution of different macroeconomic policies (especially fiscal, monetary and exchange rate policies) and how they help explain the patterns of growth and development in Egypt.

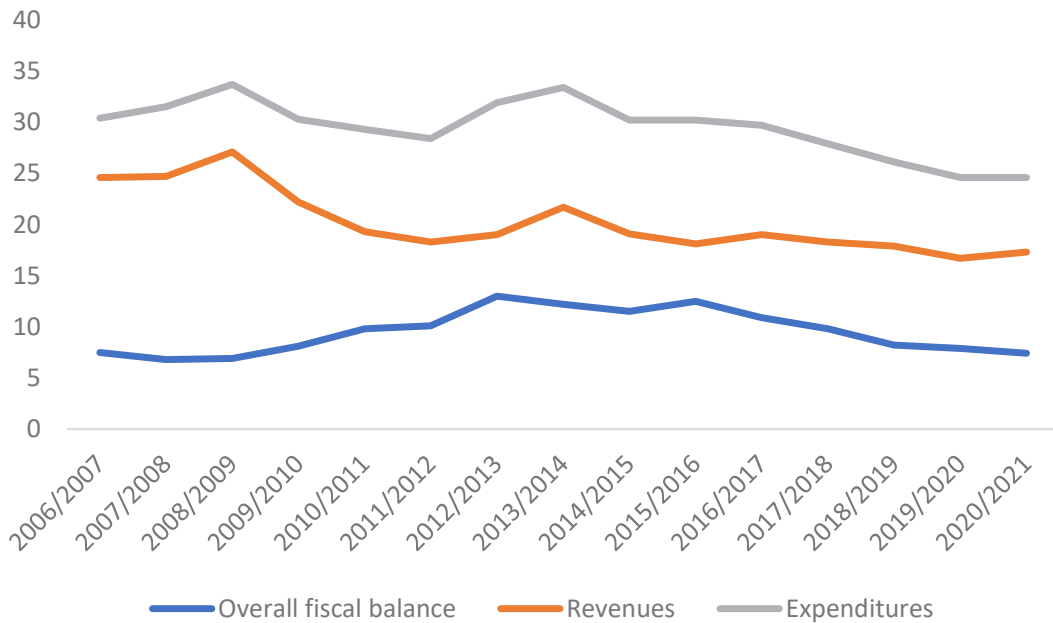
3.1. Fiscal situation

Since 2014, fiscal policy has been restrictive due to several reforms, especially the gradual removal of oil and other subsidies and freezing hiring in the public sector. Thus, expenditure to GDP declined to 24.6% in 2020/2021 down from 33.4 in 2013/2014. A similar pattern has been observed for revenues that decreased from 21.7% to 17.3% over the same period (Figure 7). As a result, the fiscal deficit decreased from around 12% to 7% of GDP, while generating a primary surplus in the economy. To better understand these developments, it is important to analyze the composition of both revenues and expenditure.

Figure 8 presents the structure of public spending in Egypt. Before analyzing this, it is important to distinguish between different types of spending, especially current (or non-productive) and productive spending. Kneller et al. (1999) show that while productive spending makes the economy more productive with a higher investment in physical and human capital and hence has a direct impact on growth, non-productive expenditure affects citizens through subsidies, wages and compensation of employees and is likely to have a zero or negative impact on growth since it is immediately spent and consumed in the short term (Osman et al., 2021). Figure 8 shows that the current spending represents around 80% of total spending with the share of wage declining from 25% to 20% between 2014 and 2021, interest payments increasing from 25% to 36%, subsidies decreasing from 33% to 17% and government consumption almost doubled. In contrast, the share productive spending (including purchase of non-financial assets and other expenditure) represents around 20%. Clearly, such a structure distorts economic growth in the medium term as almost one third of the budget is allocated to interest payments.

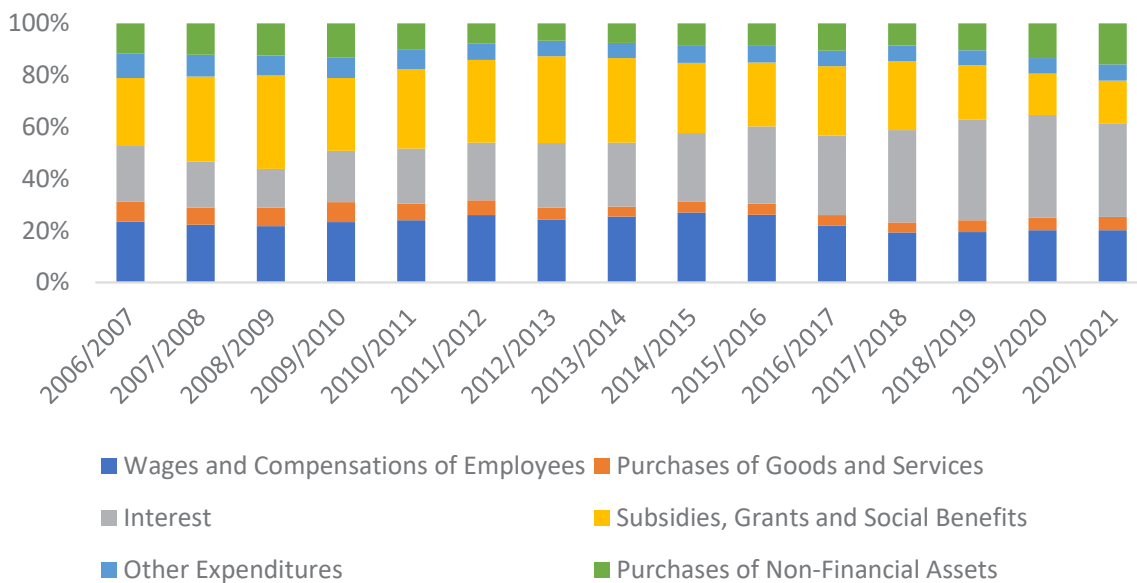


Figure 7. Expenditure, revenues and fiscal deficit (% of GDP)



Source: Ministry of Finance.

Figure 8. Expenditure composition (% of total expenditure)



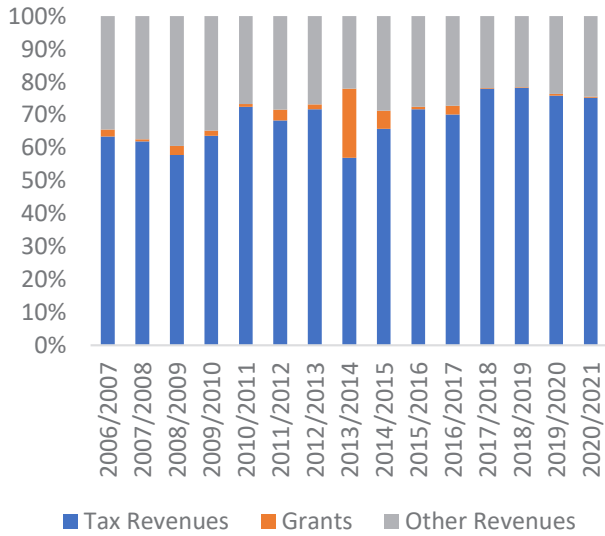
Source: Ministry of Finance.

As per revenues, the lion share comes from taxes (see Figure 9) that increased from 57% in 2013/14 to 75% in 2020/21. The latter is primarily originating from taxes on goods and services (46% after the implementation of the value added tax in 2016) followed by taxes on income (39% down from 46% in 2014) and finally taxes on property and custom duties (Figure 10). It is important to note that most of these developments took place after 2016 when the government of Egypt signed an IMF agreement according to which the government would reduce energy subsidies, implement the value-added tax and freeze public hiring. This made fiscal consolidation one of the most important objectives of the government.

To finance the deficit, the government relied mainly on banking financing (see Figure 11) with high interest rates (that reached 26% for 10-year bonds in 2024), leading to a decrease in domestic credit to the private sector. These trends have two implications. On the one hand, the decline in credit to the private sector is clearly associated with less investments, lower levels of job creation and economic growth. On the other hand, future interest payments will increase leading to a further decrease in productive spending, which negatively affects medium term growth.

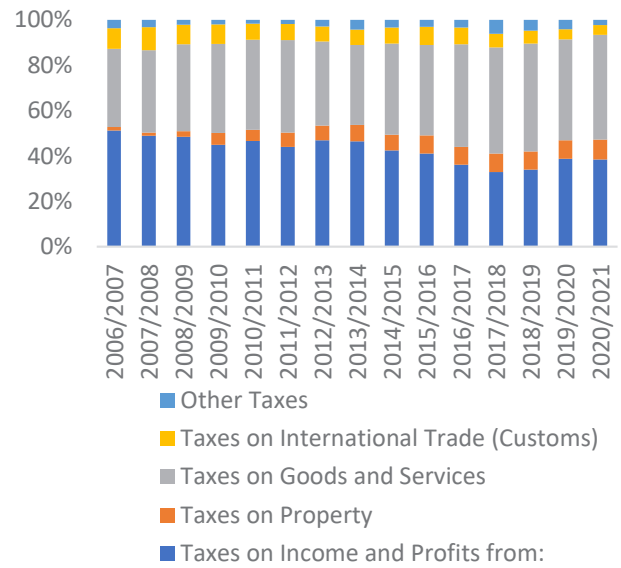


Figure 9. Revenue composition (% of total revenues)



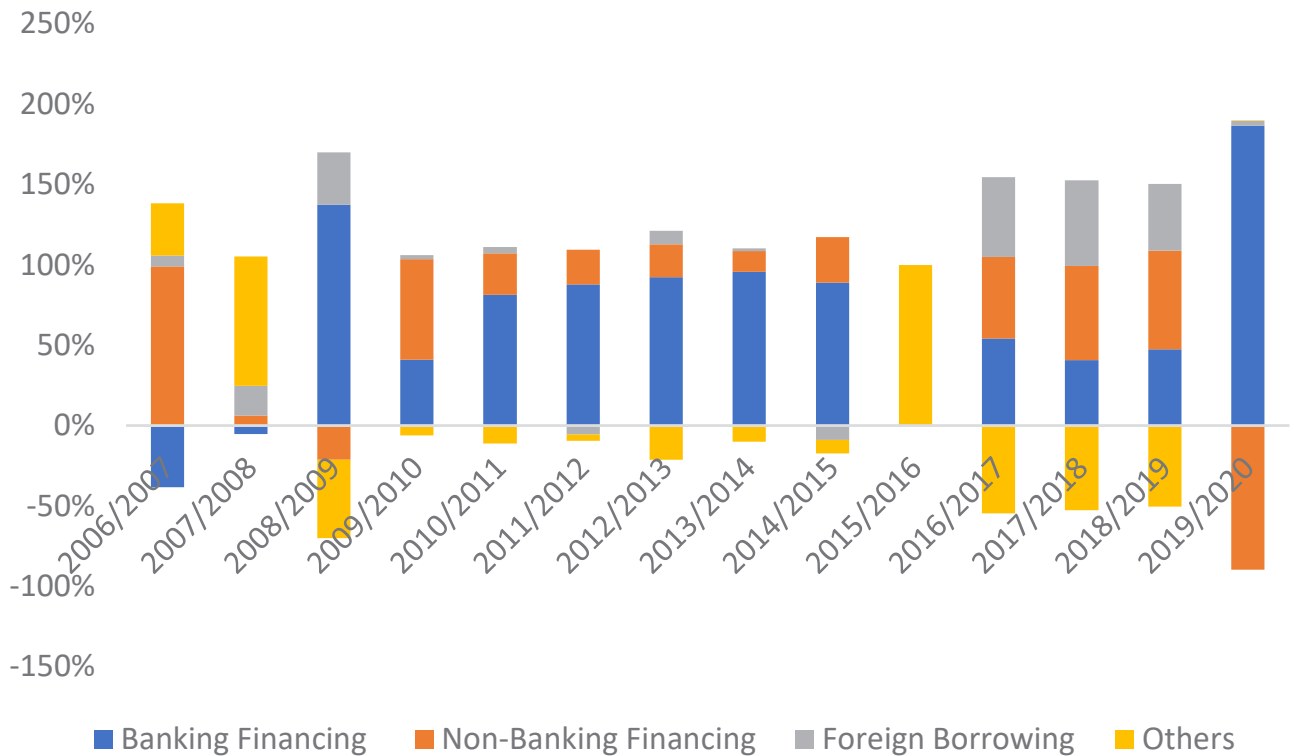
Source: Ministry of Finance.

Figure 10. Tax revenues composition (% of total taxes)



Source: Ministry of Finance.

Figure 11. Financing the deficit (% of total)



Source: Ministry of Finance.

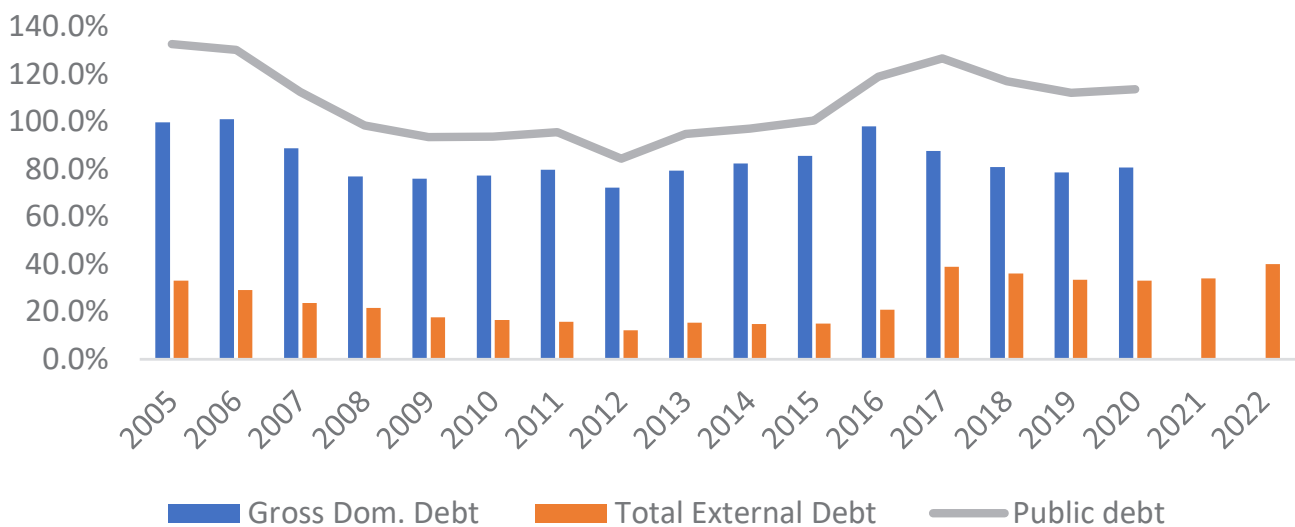


3.2. External and domestic debt

After examining the fiscal stance, it is important to analyze the implications on domestic and external debt. Figure 12 shows that the decline of total public debt as a percentage of GDP has been driven by a drop in domestic debt percentage of GDP. Until 2015/2016, domestic debt was increasing with a rather stable external debt. However, with the IMF program in 2016, this trend changed as the former decreased (from 95% of GDP in 2015/2016 to 68%

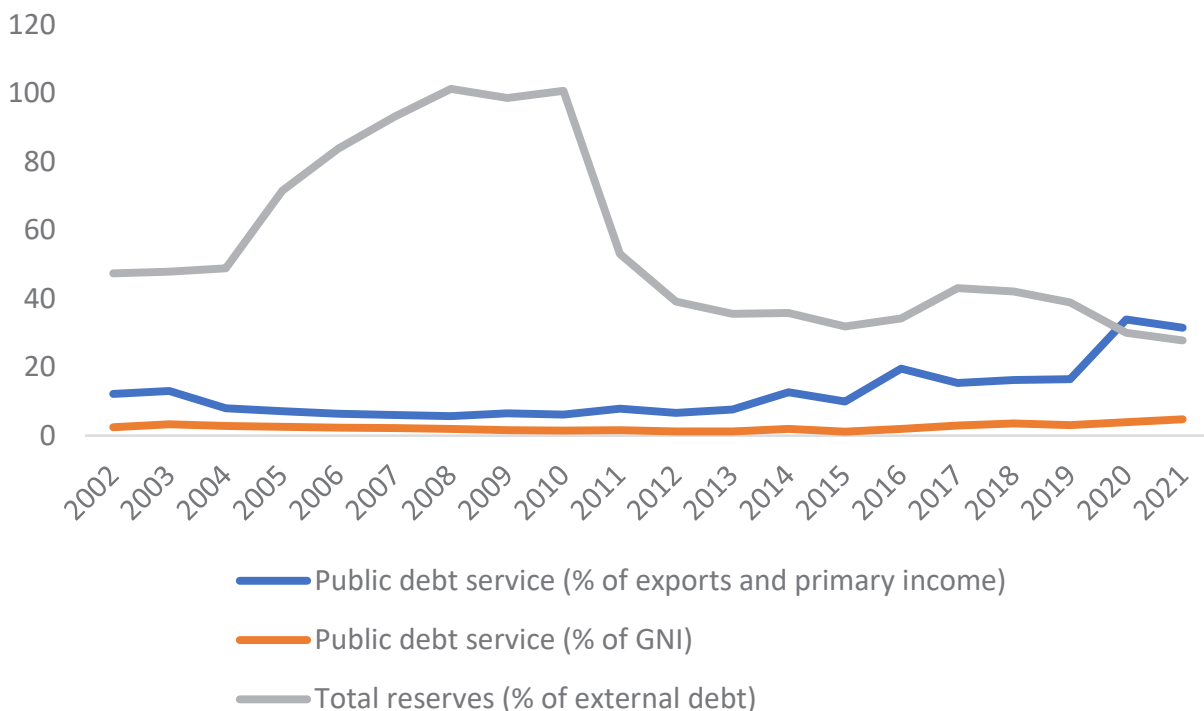
in 2021/2022) and the latter has been increasing to reach historical levels, reaching around 37% of GDP in 2021. This tendency has also been associated with a deterioration of several external variables such as the ratio of total reserves to external debt service and the ratio of debt service to exports and primary income (Figure 13), noting that the interest payments of external debt is more constraining on the balance of payments and has been increasing, along with the principal reimbursement.

Figure 12. Gross public debt (domestic and external) - share to GDP (2005-2022)



Source: Author's own elaboration using the Central Bank of Egypt online dataset.
 Note: Figures of gross domestic debt are missing for 2021 and 2022.

Figure 13. Egypt's public debt indicators (%)



Source: Author's own elaboration using the World Development Indicators.

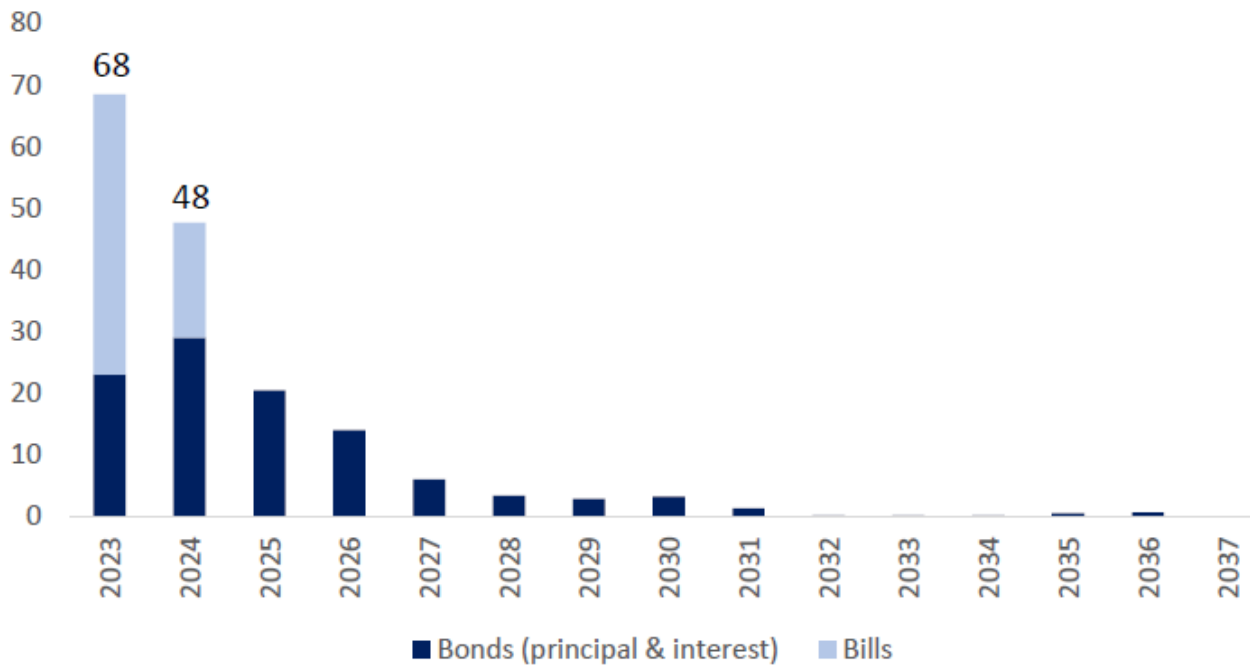


In terms of external debt (principal and services) reimbursement, Egypt had to reimburse 22.8 USD billion in 2023 and 28 USD billion in 2024 (Central Bank of Egypt (CBE) External Position July/December 2022/2023 report). In addition, a significant share of the bonds and bills are due in 2023 (68 USD billion) and 2024 (48 USD billion)) as it is shown in Figure 14, making Egypt the country with the highest debt redemption in 2023/2024 compared to similar economies like South Africa, Hungary, Romania, and Türkiye. Thus,

Egypt’s outstanding debt is heavily skewed towards short maturities. To meet its obligations, Egypt had to sign another Extended Fund Facility (EFF) with the IMF amounting to 5 billion USD in March 2024, leading a sort of a vicious circle of external debt.

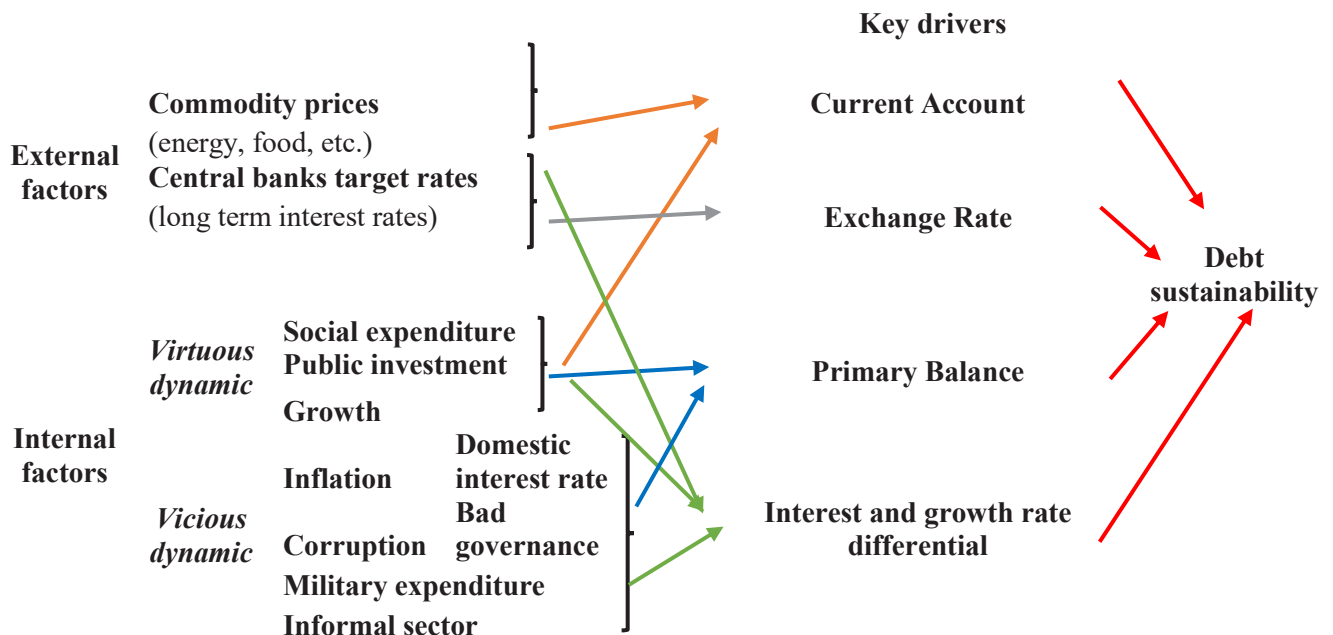
Figure 15 shows the main drivers of debt sustainability (UNESCWA, 2022). Indeed, the latter is affected by both external (commodity prices, central bank target rates) and internal factors (structure of social spending, economic

Figure 14. Maturity profile: local bonds + bills (shown in USD bn)



Source: Deutsche Bank, Bloomberg Finance LP

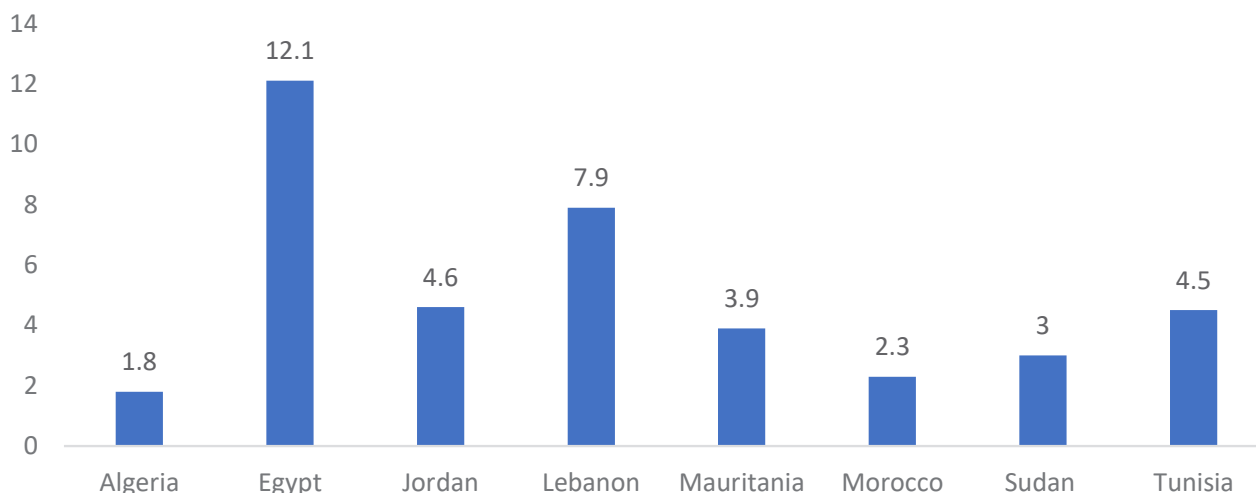
Figure 15. Key drivers of debt sustainability



Source: UNESCWA (2022).



Figure 16. Effective interest rate in 2020 (in %)



Source: UNESCWA (2022).

growth, inflation dynamics, corruption, domestic interest rates). These factors affect several aggregates that in turn affect debt sustainability. More specifically, commodity prices and economic growth affect the current account through imports. Central banks targets affect the exchange rate as they influence inflow and outflow of foreign capital, which affects the currency depreciation and appreciation. The primary balance is affected by the structure of public spending (productive vs. current vs. military spending), governance and inflation dynamics as they can influence the fiscal deficit and debt financing. Finally, most of these variables affect the differential of interest and growth rate, which is an important indicator of debt sustainability (see Figure 16).¹

Applying those indicators to the case of Egypt shows that the situation is rather challenging, as Egypt is highly dependent on food imports, is a net importer of oil (commodity prices channel). In addition, while Egypt has high interest rates, investment climate is not friendly enough to attract capital from other markets (central banks' target rates channel). Third, as it was shown before, productive spending is lagging behind current spending, which affects long term growth (structure of public spending channel). UNESCWA (2022) shows that, in some periods, the average effective interest rate of Egypt's debt far exceeds its economic growth, pointing out its situation of over-indebtedness (see Figure 16). Moreover, Figure 17 shows that, while in some years real

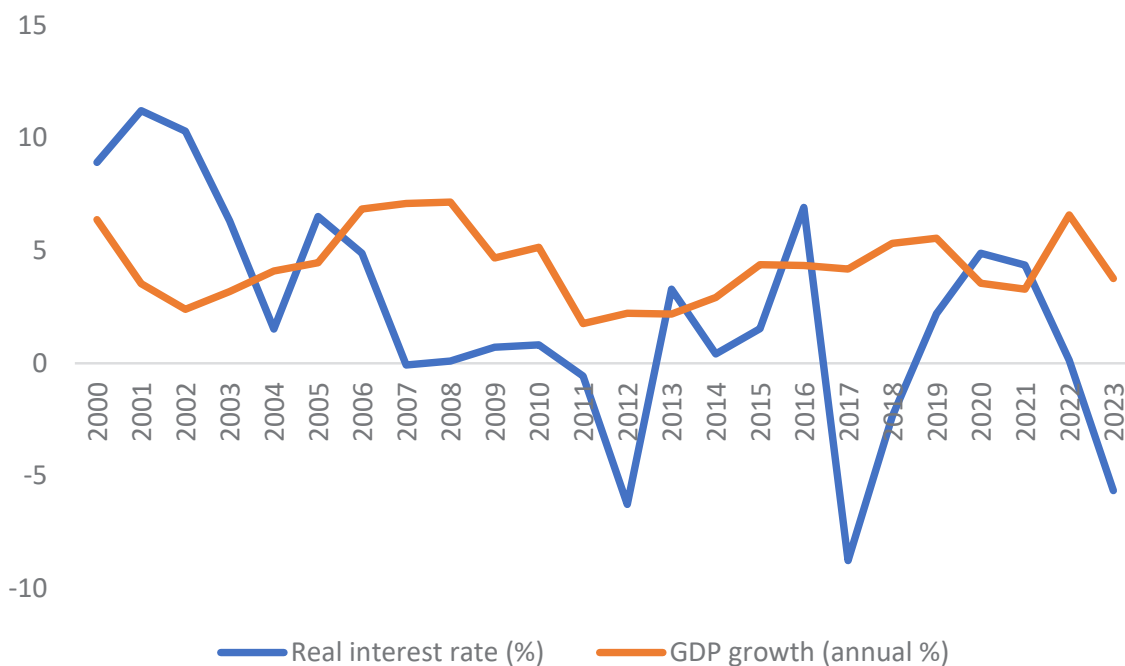
interest rate was higher than economic growth, in other periods, the real interest rate was negative with the surge in inflation, which has two main implications. First, these negative real rates affect bank profitability (as the lending spread can become negative) and undermine financial system stability. Second, negative real interest rates give savers an incentive to switch out of deposits into holding cash, which again affects the financial system liquidity and stability. Finally, Egypt's debt carrying capacity (defined as the extent of the ability to pay debts) is relatively high in the short term as the government sold several assets to Gulf countries. This includes for instance the Ras al-Hikma deal, which guaranteed new inflows to the government estimated at \$24 billion, in addition to the UAE's waiver of \$11 billion of its deposits in the CBE. However, such a policy is not sustainable in the long term and, as it was mentioned before, deeper reforms will be needed.

In 2016 and 2020, according to the IMF country report, debt was assessed as sustainable but not with a high probability (IMF, 2016 and 2021). Since then, rather than improving, debt sustainability deteriorated. Thus, access to new external debt is likely to become more difficult, creating a large external shock given that it has short maturity and large repayments are due in the near future, which also disturbs access to domestic debt. To avoid a financial crisis, some stabilization and structural reforms are needed to improve the external position of Egypt, break this vicious circle of debt, and make the Egyptian economy more resilient to external shocks. It is worth mentioning that even if the choices of stabilization policies are painful in the short run, they should initiate credible signals that the causes of the structural weaknesses will be tackled, which would ease the challenge of stabilization.

¹ The rule of thumb compares the real interest rate to the economic growth rate. If the former is greater than the latter, the government has to generate a primary surplus to reduce the share of debt to GDP.



Figure 17. Real interest rate and GDP growth in Egypt



Source: Author's own elaboration using the World Development Indicators.

3.3. Monetary policy and exchange rate policy

With the developments aforementioned regarding domestic and external debt, the stock of net international reserves (NIR) decreased from 44.3 USD billion in 2018 to 33.4 USD billion in 2022 (see Figure 18). This becomes even more alarming if deposits are excluded from NIR as the latter decreased from 26.9 USD billion to 18.4 USD billion over the same period. This decrease is attributed to several reasons such as the increase in external debt and its services; the high import bills that includes necessary (price inelastic) imported products (such wheat and capital goods); the decrease in tourism receipts (with the pandemic); and more recently the closing of the Eurobond market (which means that the principal due will have to be paid out of reserves) and the capital flight that started in March 2022 and that reached 22 billion USD in 2023. Thus, Egypt's net foreign asset position reached negative 27 USD billion in June 2023 (according to the CBE data).² This tendency has been amplified by the managed exchange rate regime that was adopted by the Central Bank of Egypt, which led to an increasing gap between the official and the parallel market rates and a series of currency devaluations (Figure 19) as of March 2022.

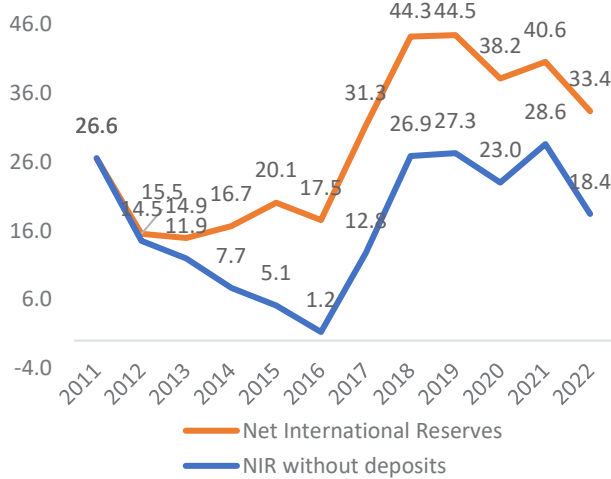
² <https://www.cbe.org.eg/-/media/project/cbe/listing/sdds/sdds-files/foreign-assets-and-liabilities-june-2023.xlsx>

With the surge in imports bill (due to the war and the increase in wheat prices) and the currency devaluation, inflation also increased significantly (Figure 20) to reach a peak in 2017-8 with the first currency devaluation (that took place in November 2016). This shows to what extent, compared to other economies, Egypt has on average, a five-time higher inflation rate (Figure 21). It is important to note that the situation worsened in 2022 and 2023, with the war in Ukraine, both headline and core inflations increased to reach around 32% and 40% in February 2023 due to higher import prices, several currency devaluations where the USD reached around 50 EGP in April 2024.

From a structural perspective, it is important to note that the source of foreign currency in Egypt did not improve over time. Figure 22 shows the share of different components of foreign currency to GDP. While exports decreased from 12% in 2010 to 7.1% of GDP in 2021, FDI decreased from 3.3% to 1.3%, tourism receipts decreased from 4.8% to 1.2% and revenues from the Suez Canal from 2.2% to 1.5% over the same period. Only remittances increased from 4.8% to 7.8% between 2010 and 2021. Obviously, these trends are alarming at a time when external debt was rising fast. In addition, while tourism, remittances and Suez Canal depend on external factors (tourists' income in origin countries, international trade activity, etc.), exports did not increase despite the significant devaluation that took place in 2016. In addition, FDI decreased. These two developments reflect primarily the deterioration of the investment climate that negatively affected both domestic and foreign investors (lack of competition, corruption,

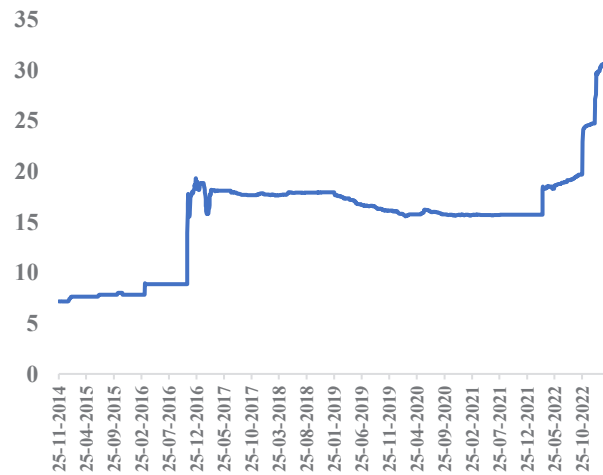


Figure 18. Net international reserves (in billion USD) including and excluding deposits, 2011-2022



Source: CBE, Egypt External Position Report.

Figure 19. Evolution of the exchange rate in Egypt (USD/EGP)



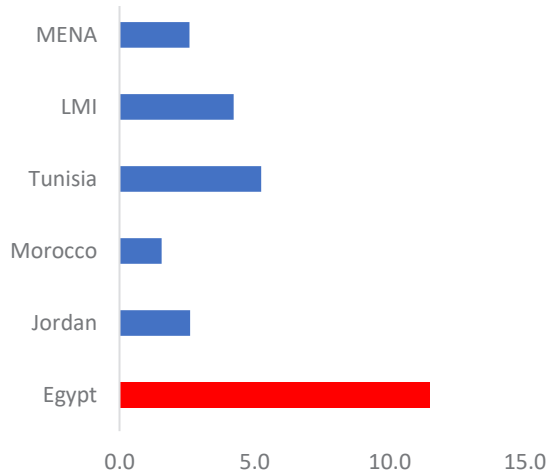
Source: CBE

Figure 20. Evolution of Inflation rates (%)



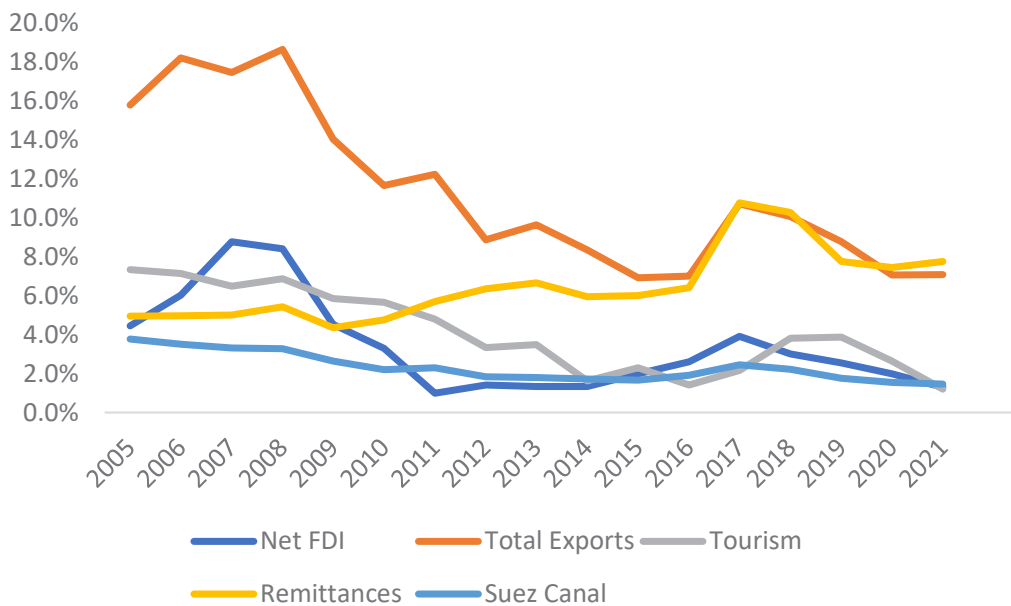
Source: Authors own elaboration using the World Development Indicators.

Figure 21. Inflation rates (% of consumer price index)



Source: Central Bank of Egypt.

Figure 22. Sources of foreign currency (% GDP)



Source: Central Bank of Egypt



tax administration, tax rates and customs and trade regulations), leading to a decrease in the contribution of the private sector to the economy, and in particular to investment and exports.

To conclude, while the official objective of the monetary policy in Egypt is to “achieve price stability by minimizing deviations of inflation from the level considered consistent with price stability (inflation gap) and minimizing volatility of real economic activity with respect to its full capacity utilization (output gap)”, both two objectives have been modestly achieved as growth was high but not inclusive and inflation has been significantly increasing and volatile. Obviously, the main reason behind this is due to the fact that the overarching objective was to achieve a stable parity between the Egyptian pound and the US dollar at the expense of other macroeconomic aggregates and objectives. In other words, the real sector has been bearing the cost of achieving a stable currency that finished by being devaluated.

4. Diagnosing the drivers of development

4.1. Economic components

The objective of this section is to investigate the economic dimensions of developments related to trade, infrastructure, and financial development. We focus on these dimensions given their importance of developing countries, especially Egypt. Indeed, exports can change the structure of the production of the economy, job creation and thus development. Similarly, the investment climate (Aboushady and Zaki, 2019) can play a crucial role in promoting the private sector, its competitiveness, and thus production and employment.

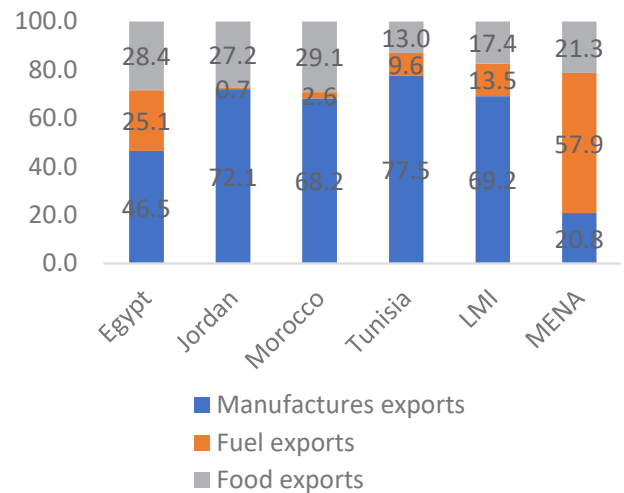
4.1.1. Exports

Over several decades, Egypt has liberalized its external trade, which led to an increase in both exports and imports. However, their structure did not change significantly over time. Zaki (2021) attributes this to several reasons. First, the investment climate does not draw in investors, and there is no clear national vision for an effective industrial policy. Second, traditional products with little value added dominate exports, and these products heavily rely on imported raw materials. The same logic holds true for foreign direct investment (FDI) that is concentrated in the oil industry but has not succeeded in creating global value chains or jobs. Third, a negligible rise in exports results from the majority of Egypt’s shallow agreements Egypt signed. In fact, the literature distinguishes between shallow and deep agreements where the former refer to agreements

that are limited to tariff removal and the latter go beyond that by including non-tariff measures, services and other non-trade provisions (Matoo et al., 2020 and Hoekman et al., 2023). Fourth, non-tariff measures still impede both imports and exports.

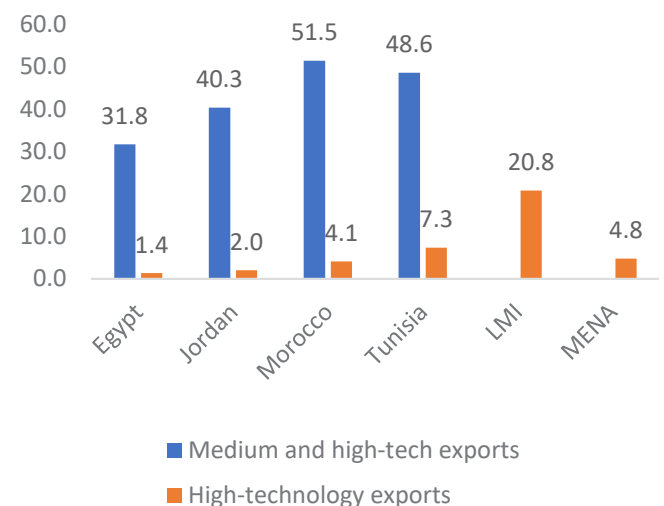
Egypt’s exports characteristics can be summarized in three main points. First, Figure 23 shows that Egypt’s merchandise exports are less diversified than Morocco, Jordan, and Tunisia as fuel represents 25% of total merchandise exports even if it declined over time (33% in early 2000s). While manufactures exports are lower than all comparator economies and LMI countries (46.5%), its food exports are relatively high (28%). Second, manufacturing exports are relatively traditional and mainly concentrated in processed food, chemicals and textiles. Figure 24 that shows the share of medium and high exports confirms this.

Figure 23. Structure of exports (% of merchandise exports)



Source: Author’s own elaboration using the World Development Indicators.

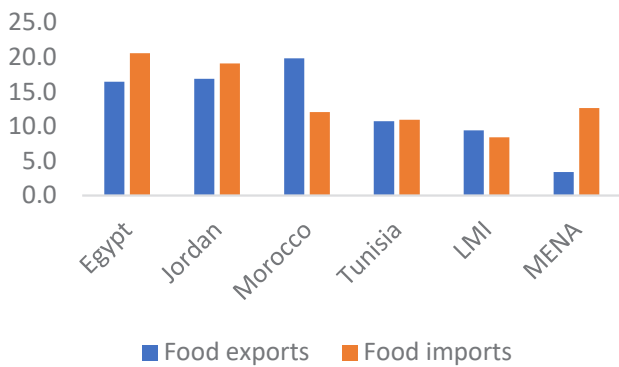
Figure 24. Medium and high-tech exports (% of manufactured exports)



Source: Author’s own elaboration using the World Development Indicators.



Figure 25. Food exports and imports (% of merchandise exports and imports)



Source: Author's own elaboration using the World Development Indicators.

Both are much lower than other diversified economies of the MENA region. Finally, Egypt, being a net importer of food products (Figure 25), is also the most dependent on the rest of the world, which negatively affects its food security. This was observed especially with the Russian war in Ukraine that led to a high inflation and a significant decrease in imports wheat (Zaki et al., 2023).

This analysis points out that Egypt failed to upgrade its exports' structure. Three main reasons can explain this. First, the lack of efficient institutions (especially a disincentivizing investment climate and lack of competition policy) that are essential for complex products help explain these developments. Second, despite the abundance of blue-collar workers that are required for most of the industries in Egypt, they remain unskilled. This is why more investments in technical

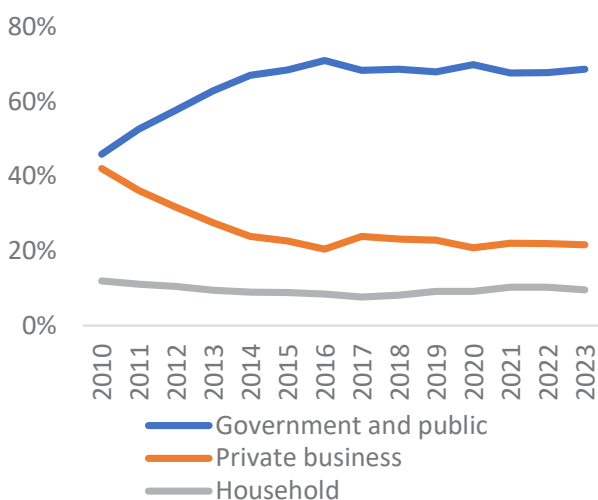
and vocational education to help such workers acquire the needed skills should be a top priority from a development perspective. Finally, the specialization into capital-intensive sectors helps understand why exports did not upgrade and failed to generate many jobs.

4.1.2. Financial sector development

A second dimension that is important to development is access to finance (Beck et al., 2009 and Karlan et al., 2010). The latter is essential for SMEs expansion (Beck et al., 2006), exports (El-Said et al., 2015), the development of the private sector, and recovery from external and internal shocks. However, access to finance cannot be studied in a disconnection from the overall strategy of monetary policy. Indeed, as it was mentioned before, Egypt's monetary policy has been mainly characterized by high interest rates and increasing lending to the government to finance its deficit (Figures 26a and b). This is why, compared to other economies, Egypt has the lowest share of credit going to the private sector (28%) while this share in LMI is almost four times higher than in Egypt (Figure 27a). The same result is confirmed from the World Bank Enterprise Surveys where only 11.3% of firms use banks to finance investments (Figure 27b). This figure is four times in Jordan, three times higher in Morocco and Tunisia. Clearly, this affects firms' expansion, innovation, and exports. This is why monetary policy needs to streamline development outcomes to increase the credit going to the private sector and thus boost investment, production, exports and employment.

Figure 26. Monetary policy and access to finance

(a) Structure of credit

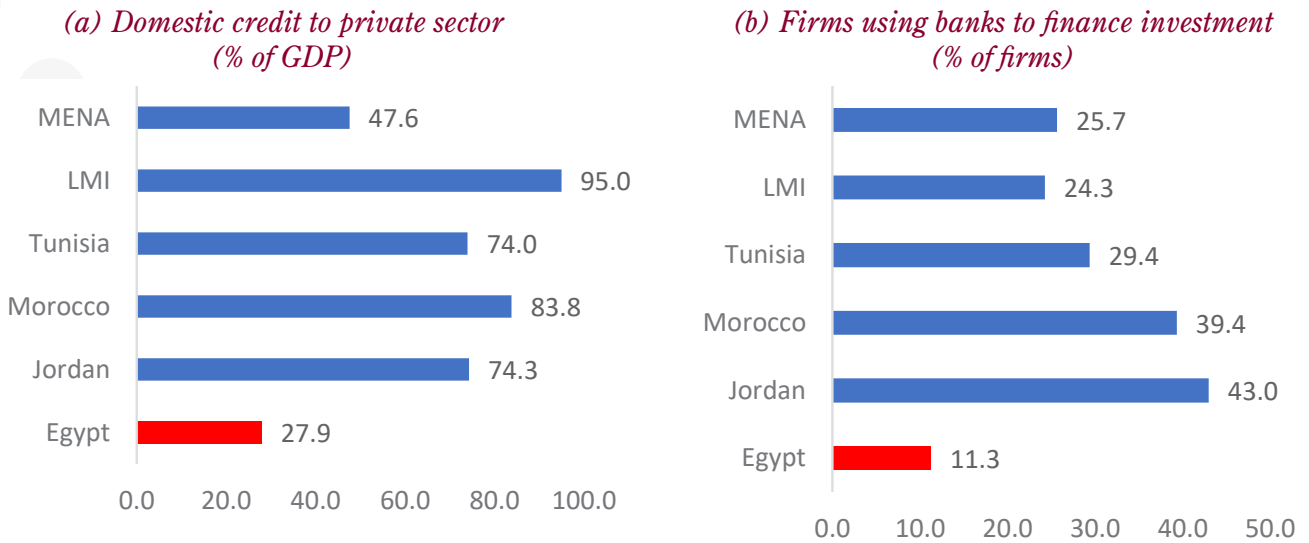


Source: Author's own elaboration using the CBE online dataset.

(b) Evolution of policy rates



Figure 27. Access to finance



Source: Author's own elaboration using the World Development Indicators.

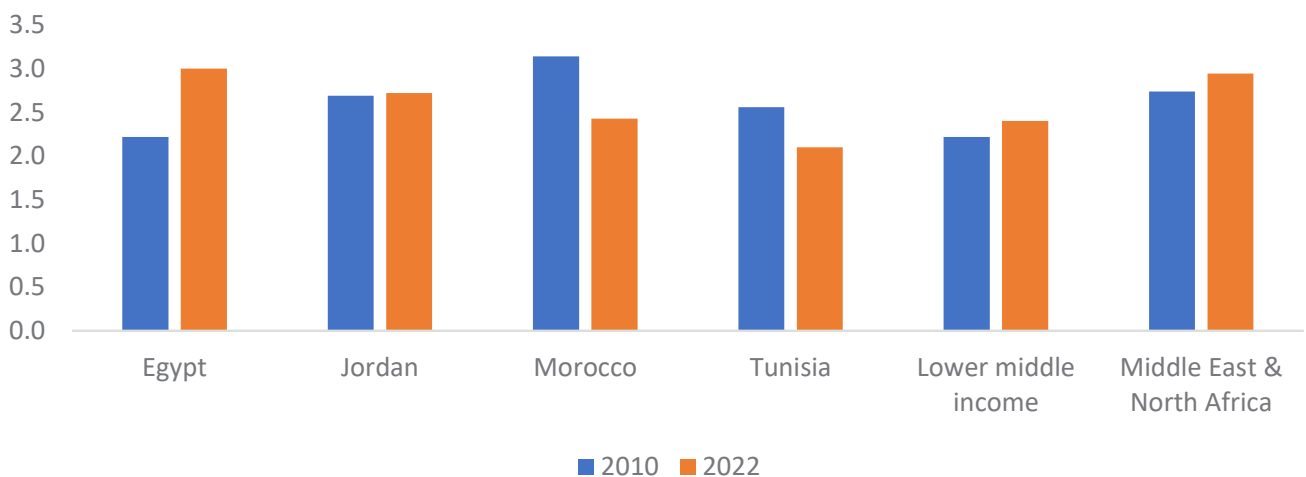
4.1.3. Infrastructure Development

Infrastructure is essential to growth and development (Gramlich, 1994 and Valila, 2020). This literature was pioneered by Barro (1990) who argues that infrastructure capital is an input into aggregate production, thus there is an optimal level of infrastructure, which maximizes the growth rate. In Egypt, significant investment has been made in this field, especially transportation, telecommunication, power generation, and water and sanitation. This is why, as it is shown in Figure 28, between 2010 and 2022 the quality of trade and transport-related infrastructure has significantly improved and surpassed the level of MENA and LMI countries. While this is necessary to help the private sector expand and benefit from externalities, it is not sufficient if other policies are not implemented to accompany such investments. Thus,

despite this significant increase, the private sector did not become more dynamic.

In addition to physical infrastructure, digital infrastructure is also essential for three reasons. First, it helps firms increase their e-commerce, thus their expansion and their operating performance (DeStefano et al., 2018). Second, it helps workers become more productive if they have the relevant skills. Third, it helps the government streamline its bureaucratic procedures. In the case of Egypt, while significant investments have been done in the telecommunication sector, the share of individuals using the internet in the total population is lower than other countries but higher than LMI countries. The same observation applies to monthly mobile broadband traffic per capita (gigabytes) and the share of those made or received a digital payment (% of population ages 15+). This

Figure 28. Logistics performance index



Source: Author's own elaboration using the World Development Indicators.
 Note: Quality of trade and transport-related infrastructure (1=low to 5=high)



Table 2. Digital adoption

	Adoption by people					Adoption by governments	
	Individuals using the internet (% of population)	Fixed broadband subscriptions (per 100 inhabitants)	Unique mobile internet subscriptions (% of population)	Monthly mobile broadband traffic per capita (gigabytes)	Made or received a digital payment (% of population ages 15+), 2021	ID ownership (% of population ages 15+), 2021	UN e-government index
Egypt	72	10	49	1.6	20	97	0.59
Jordan	86	7	57	3.6	36	97	0.61
Morocco	88	6	50	9.6	30	94	0.59
Tunisia	79	14	60	5.5	28	99	0.65
LMI	56	4	42	6	38	88	0.56
MENA	77	14	51	9	41	94	0.61

Source: Digital Progress and Trends Report 2023.

is primarily due to unequal investments in urban and rural areas that lead to unequal use of different digital tools across the country. As per the government, the differences across countries are less pronounced, with Egypt having a UN e-government index that is not far from the MENA average and higher than LMI countries.

4.1.4. Institutions

North (1990) defines institutions as “*the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction*”. The literature on the role of institutions in development is abundant³ (North, 1990 and Acemoglu et al., 2005). It highlighted several channels through which economic growth can increase with good institutions. First, political institutions determine the constraints on and the incentives of the key actors in the political sphere (Zaki, 2017). These institutions depend on the form of government, democracy versus dictatorship or autocracy, presidential vs. parliamentary regime, etc., which affects political power and the allocation of resources. Second, economic institutions affect economic incentives, allocation of resources, the structure of property rights and the perfection of markets. This is why, when institutions are deficient, growth and development outcomes might not improve.

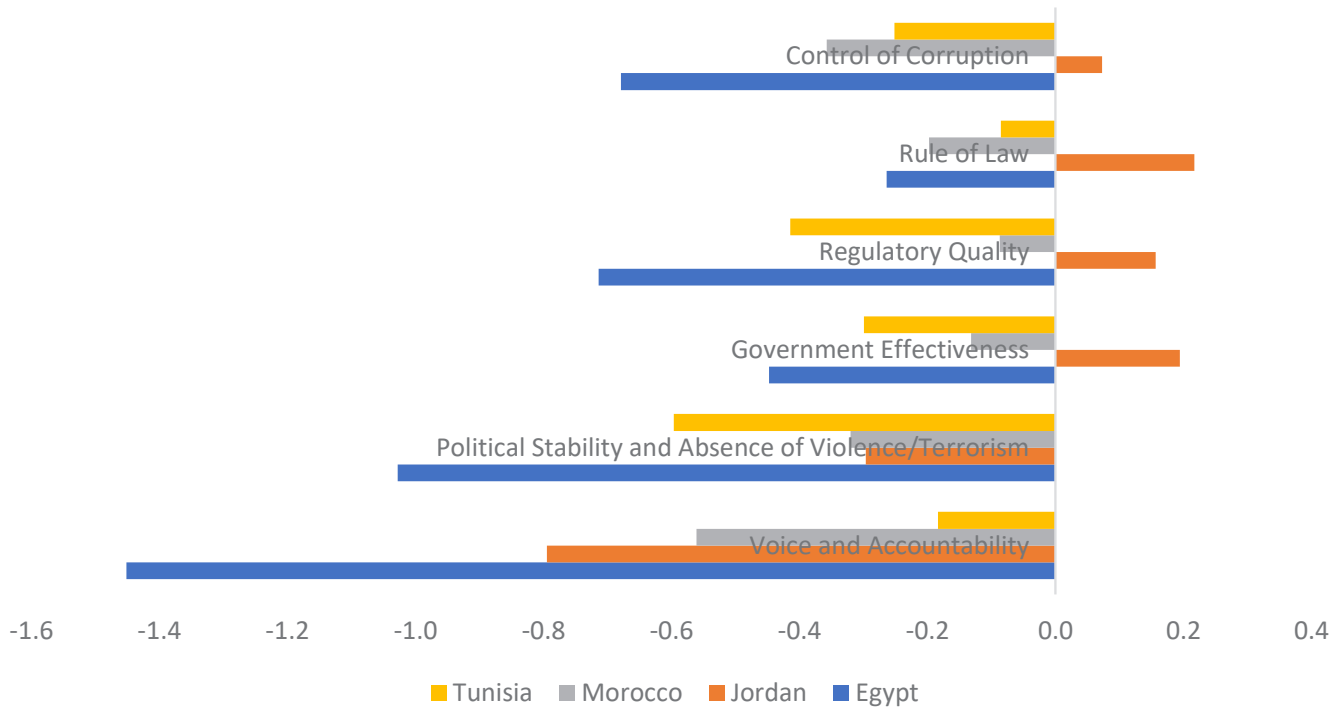
³ See Jütting (2003) for a critical review.

Figure 29 compares Egypt’s World Governance Indicators with other MENA countries and show that it performs worse than all of them. This applies specially to voice and accountability, political stability and absence of violence, regulatory quality and control of corruption. This can help explain why Egypt failed to attract more FDI in the manufacturing sector and that most of the latter is concentrated in extractive industries that are not sensitive to the quality of institutions. Second, it can also explain why exports are concentrated in traditional products and did not upgrade over time (like Morocco). Indeed, good governance conditions enhance the enforcement of contract that are essential for products that are intensive in high-technology. In the same vein, Karam and Zaki (2019) argue that the institutional gap between MENA countries and their trading partners is considered as fixed export costs that help explain the zero probability of trade for some MENA countries.

After examining the role of trade, institutions, infrastructure, and financial development that help achieve SDG9 pertaining to build resilient infrastructure, promote sustainable industrialization and foster innovation, it is important to look at the social dimension, especially education, health and the labor market.



Figure 29. World governance indicators - 2022



Source: Author's own elaboration using the World Governance Indicators.
 Note: Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).

4.2. Social components

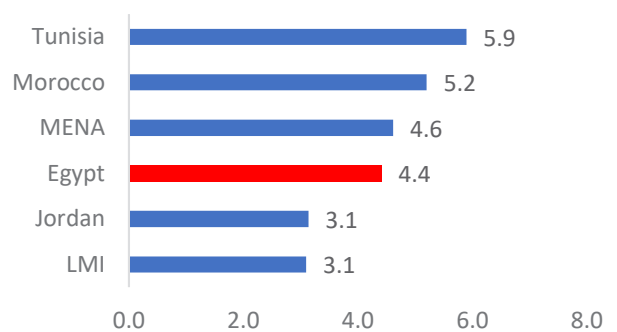
This section analyzes the development of social dimensions related to health, education and the labor market. .

4.2.1. Education

As it was shown before, fiscal policy in Egypt was primarily dominated by interest payments, which exerted a negative impact on human capital spending, thus adopting a neoliberal approach. This is reflected in Figures 30 and 31 that highlight two important facts. First, education spending decreased from 3.8% in 2013/14 to 1.9 in 2023/24. Second, when compared to other countries, Egypt is lower than MENA countries (except Jordan) but higher than LMI. Given that human capital is a key determinant of long-term growth (Lucas, 1990), such a pattern might have two main implications. First, it affects labor quality and the education system outcome. Second, it does not increase the country's stock of human capital. This is why improving the education system must start with fiscal reforms to generate the required fiscal space needed to finance education. Yet, when measured by the gross secondary enrollment, Egypt performs better than many countries in the MENA region and LMI ones (Figure 32). Despite this, the quality of education is still a

development challenge. It is also worthy to note that, with the State investing less in education, private education emerged significantly at both the school and universities level. This led to a system where public education is of poor quality and private one is not accessible for everyone. With higher poverty level in Egypt, several households opt for dropping out their children from primary and lower secondary education. For instance, UNICEF (2015) shows that almost 60% of the pre-primary age children do not participate in pre-primary or primary education. This also explains to what extent child labor is still an issue in Egypt with 1.3 million children, or 4.9% of the child population are engaged in child labor activities (Egypt Family Health Survey, 2021).

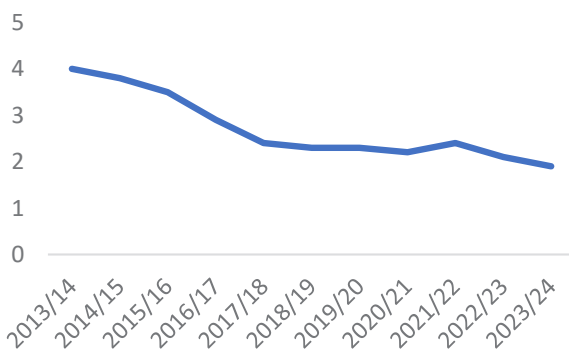
Figure 30. Education expenditure (% of GNI)



Source: World Development Indicators.



Figure 31. Evolution of education spending (% GDP)



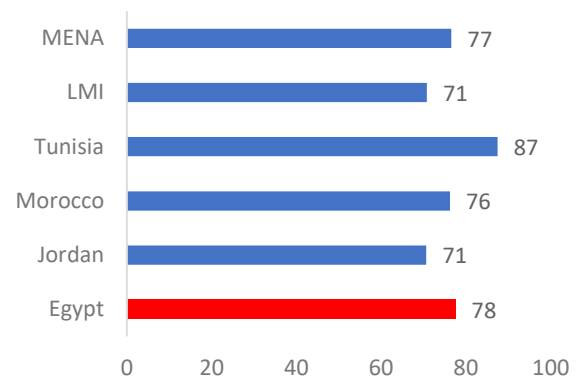
Source: Ministry of Finance.

4.2.2. Health

As per health, similar patterns are observed as the health sector in Egypt is characterized by a decrease in the public spending and an increase in the out-of-pocket spending over time. When Egypt is compared to other countries, one can notice that it has the lowest current health expenditure as share to GDP (Figure 33a), the lowest health expenditure per capita (Figure 33b), the highest out-of-pocket expenditure as share of current health expenditure (Figure 33c) and the highest domestic private health expenditure as share of current health expenditure (Figure 30d). In addition to these characteristics, the system faces the burden of fighting illnesses associated with poverty and lack of education, which makes the problem multidimensional. Moreover, and as a consequence of these points, public healthcare services are of low quality and health policies are fragmented. In contrast, it is important to mention two recent positive developments. First, in 2018, the “100 Million Healthy Lives” campaign was launched which enabled Egypt to achieve the World Health Organization (WHO) golden certificate on the path to eliminate Hepatitis C. Second, in 2017, the parliament passed a bill to ensure Universal Health Insurance (UHI) for all Egyptians. This system started to be implemented in some pilot governorates and, obviously, it will help improve the health sector in Egypt.

In a nutshell, low spending on health and education can help understand why Egypt growth performance is low. This fact is confirmed by Beraldo et al. (2009) who show that countries that devote a larger amount of resources to the consumption of health and educational services experience higher growth rates.

Figure 32. Secondary school enrollment (% gross)



Source: World Development Indicators.

4.2.3. Labor force

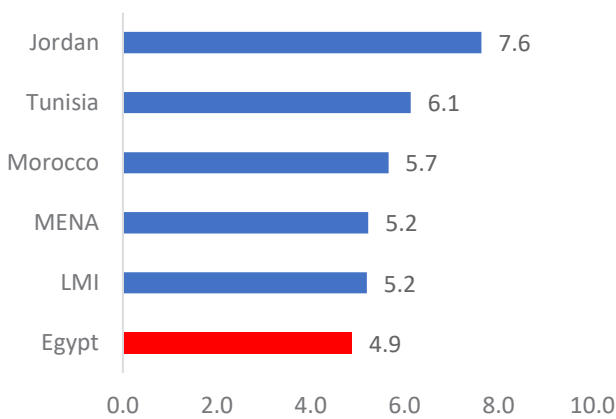
The low investment in health and education can certainly affect the quality of human capital, which represents the main input of the labor market (among other determinants). In Egypt, the latter is characterized by four main characteristics. First, unemployment rates are decreasing and are lower than other economies, but high especially among women and those having a high level of education (Figure 34). Second, employment rates that have been recently declining along with the decrease in unemployment show an increase in the number of discouraged workers (referring to persons of working-age who do not work, want to work but are not searching for a job because they do not believe they can find one). Third, female labor force participation is among the lowest in the MENA region (Figure 35) despite a significant increase in their education over time (Assaad et al., 2020). Finally, informal employment has been increasing, especially for women and post-secondary and university graduates (Amer et al., 2021). Private informal employment reached 39 percent of total employment in 2018 (Assaad et al., 2019).

All these characteristics increase the vulnerability of these groups (women, informal workers, unemployed) to any shocks, such as the pandemic, the war in Ukraine, the currency devaluation and the skyrocketing inflation, especially with 32.5 percent of the population living below the poverty line (CAPMAS, 2020).

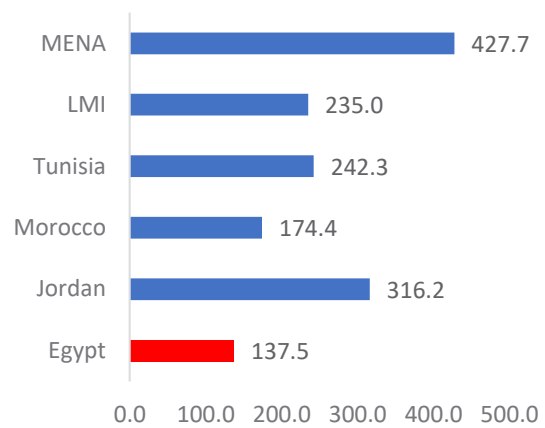


Figure 33. Health indicators

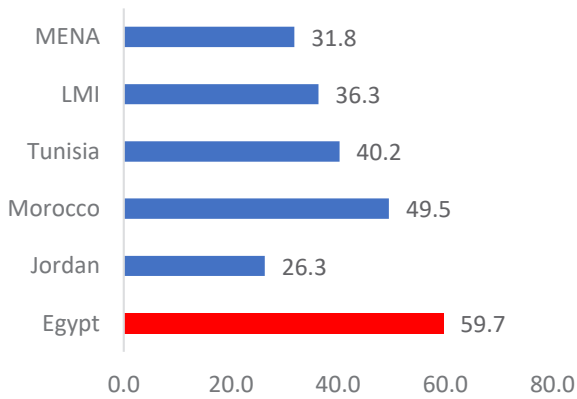
(a) Current health expenditure (% of GDP)



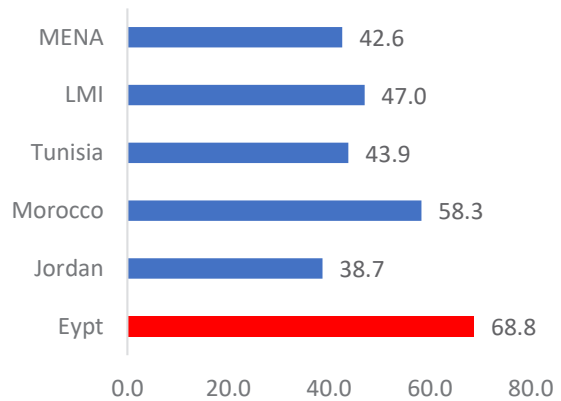
(b) Current health expenditure per capita (current US\$)



(c) Out-of-pocket expenditure (% of current health expenditure)

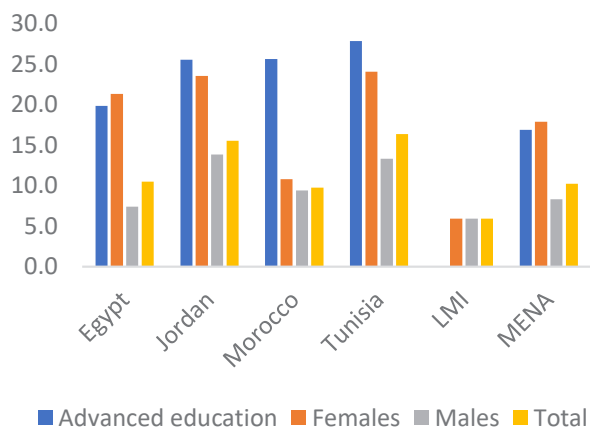


(d) Domestic private health expenditure (% of current health expenditure)



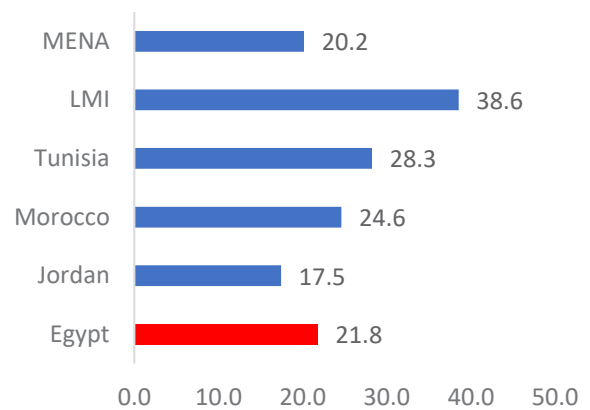
Source: Author's own elaboration using the World Development Indicators.

Figure 34. Unemployment rates



Source: Author's own elaboration using the World Development Indicators.

Figure 35. Female labor force



Source: Author's own elaboration using the World Development Indicators.



4.3. Environmental components

After examining the economic and social components of development, it is important to analyze the environmental characteristics of Egypt to have a more complete assessment of Egypt’s performance in SDGs. Thus, this section examines both energy and the environment then we provide an overall assessment of Egypt’s efforts in accelerating the progress towards the SDG agenda.

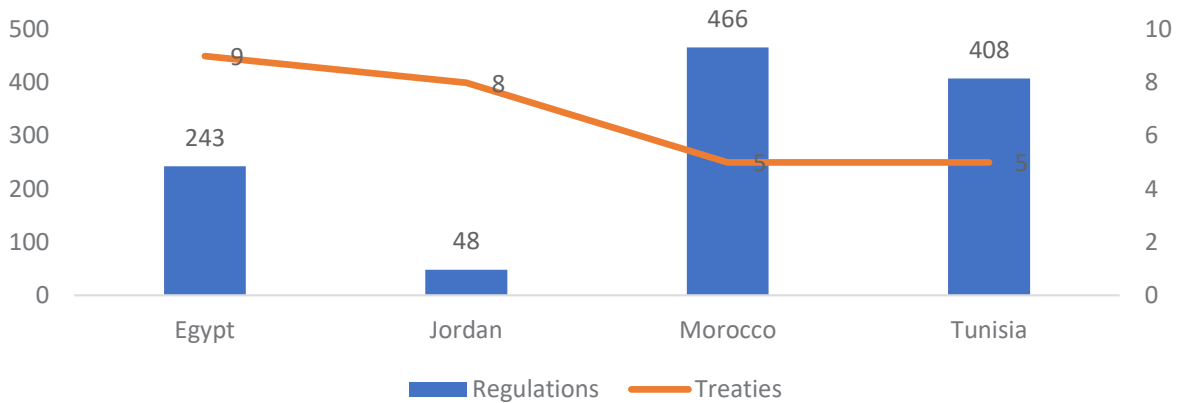
4.3.1. Environmental and climate risks

The constitution of Egypt, drafted in 2014, pays special attention to the environment (such as articles 45 and 46). In addition, the most recent law that touches directly on climate change is law No. 15 of 2017 on the facilitation of granting licenses to industrial facilities based on their emissions. However, it is important to note that Egypt does not impose an explicit carbon price. In terms of the number of laws and treaties, the Ecolex dataset shows that

Egypt has a lower number of laws compared to Tunisia and Morocco, but a higher number of environmental treaties (see Figure 36). As per environmental performance, Figure 37a shows that, while Egypt has the highest total greenhouse gas emissions, it is among the lowest when measured per capita (2.3 tons per capita compared to Morocco with 1.7 tons per capita, see Figure 37b).

Climate risk can be decomposed into physical risk and transition risk (Fodah et al., 2021). While the former refers to the direct effect of climate change on assets and productivity due to extreme weather events and hazards, the latter refers to climate risk resulting from mitigation policies as economies move towards a greener, less polluting society. This is why serious adaptation and mitigation policies are needed to address climate risk. Generally, adaptation policies address the impacts of climate change and mitigation policies address its roots (Ferrazzi et al., 2021). Recently, Egypt developed its National Strategy for Adaptation to Climate Change and Disaster Risk Reduction. Whereas this step was needed to

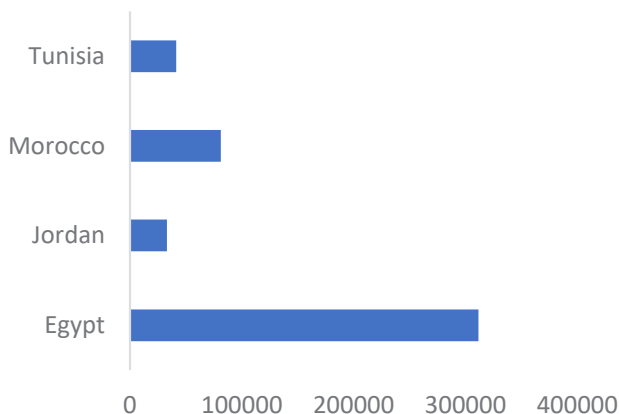
Figure 36. Number of environmental regulations and treaties



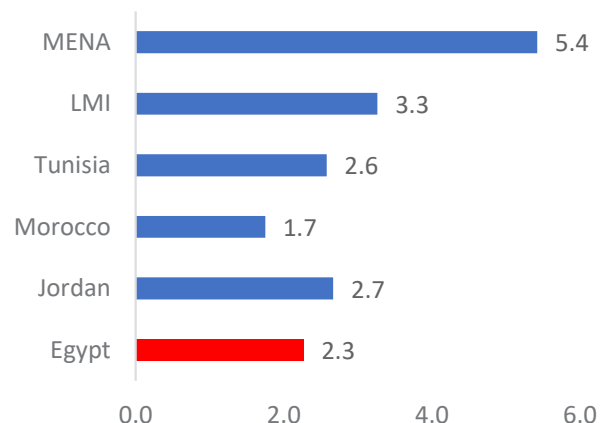
Source: Author’s own elaboration using Ecolex.
 Note: Treaties are measured on the secondary axis.

Figure 37. Environmental performance

(a) Total greenhouse gas emissions



(b) CO2 emissions (metric tons per capita)



Source: Author’s own elaboration using the World Development Indicators.



have an institutional framework for climate change, a lot of concrete measures are needed to make this strategy effective and tangible, especially by imposing a carbon tax and reducing the oil implicit subsidy.

4.3.2. Energy

The environment cannot be examined without energy as the latter significantly affects the former. Indeed, the emission of air pollutants from fossil fuel combustion is the main cause of air pollution. Figure 38 shows that natural gas followed by oil are the main source of energy supply in Egypt (55% of total supply). The second source of energy supply is oil (37% of total supply) with a trivial share attributed to coal (2%), hydro (1%), biofuels and waste (4%) and other renewables (1%). While natural gas emits 50 to 60% less carbon dioxide (CO2) than regular oil or coal-fired power plants, this is rather good news for Egypt. Yet, more efforts are needed to reduce emissions by decreasing the use of oil and increasing the use of renewable energy.

As per demand, transport (31% of total demand), industry (24%) and residential (23%) usage represent the top three sectors that consume energy (Figure 39). Thus, increasing the use of natural gas in these three sectors will have a significantly positive environmental impact to further reduce emissions. This is why Farag and Zaki (2021) show that, being a clean fuel, the government tried to substitute natural gas for other fossil fuels in different

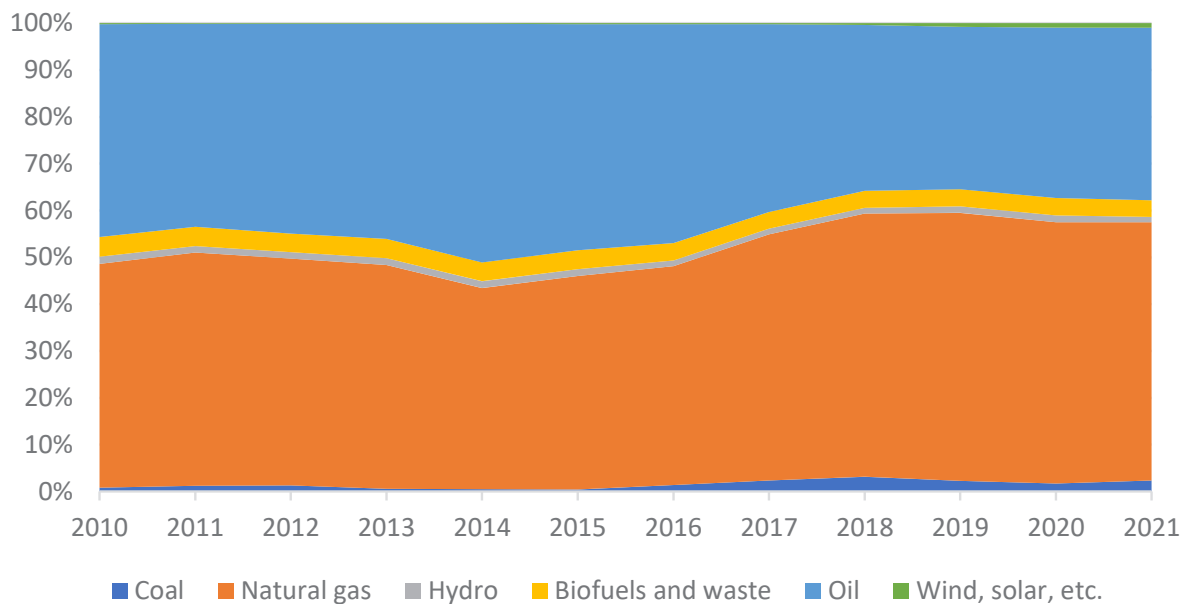
sectors in Egypt to reduce carbon emissions. For instance, it started to convert and build its power plants to run on natural gas and promote the utilization of Compressed Natural Gas (CNG) in the transportation sector.

However, several challenges face the transition to cleaner energy. On the natural gas front, Egypt’s imports are on the rise with an exponentially increasing demand and lower domestic supply. This increases the country’s dependency on the rest of the world, which recently created power outages. On the renewables front, IRENA (2018) shows that Egypt has the potential to supply 53% of its electricity mix from renewables by 2030. Yet, this will require significant investments in renewable energy projects and guarantee their long-term financial viability.

4.4. Accelerating the progress towards the SDGs

After presenting the different components of development, it is important to have a global assessment of the progress towards SDGs. First, sustainable development can be defined as an approach to growth and human development that aims to meet the needs of the present without compromising the ability of future generations to meet their own needs at the economic, social, and environmental levels. Its assessments is complicated and relies on a host of indicators. Table 4 presents the main indicators for the 17 goals in the Egyptian case.

Figure 38. Total energy supply by source (% of total energy)

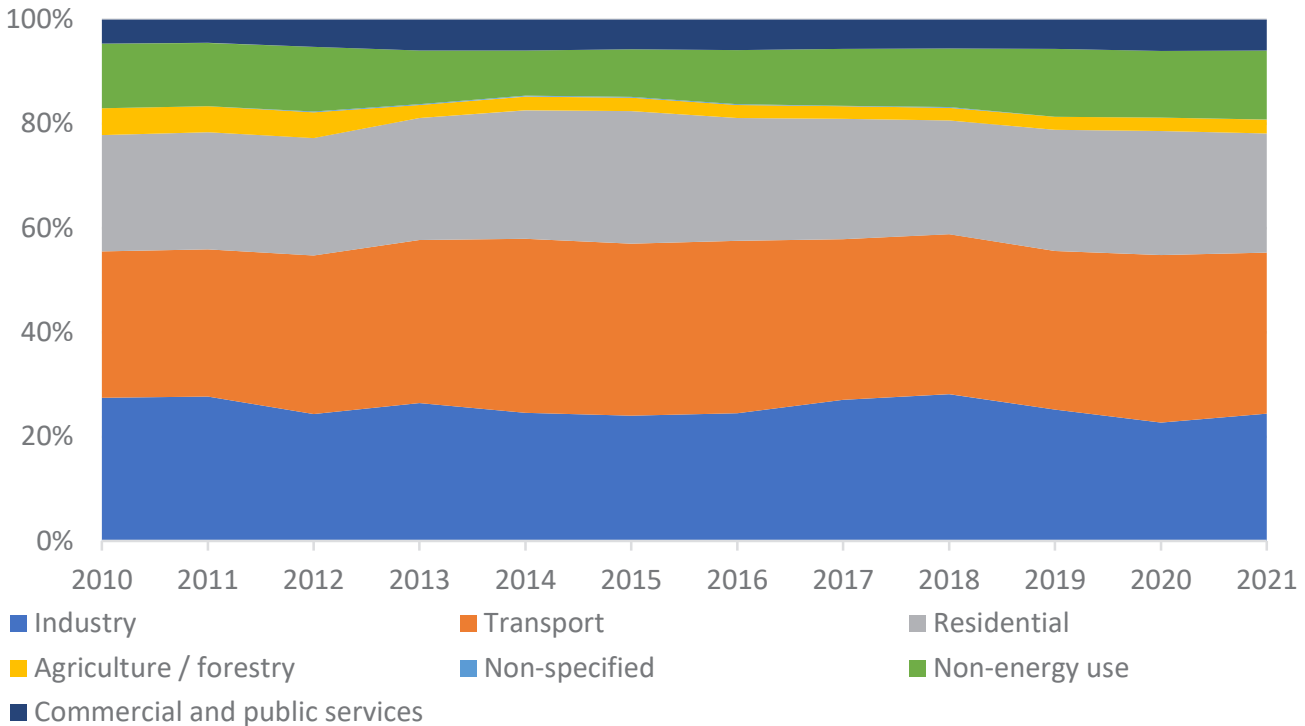


Source: International Energy Agency.

Note: Total energy supply excludes electricity and heat trade. Coal also includes peat and oil shale where relevant.



Figure 39. Total energy demand by source (% of total energy)



Source: International Energy Agency.

Regarding SDG1, poverty indicators are generally stagnating. Indeed, while the headcount ratio at 2.15USD/day is 2.1%, that at 3.65USD/day is almost five times higher. In addition, while this measure focuses on monetary poverty, non-monetary poverty is even more challenging as the multidimensional poverty indicator (Alkire et al., 2024) in Egypt is around the median value compared to other countries (Figure 40). Addressing this SDG is of top priority in the short term to protect vulnerable people through more inclusive social policies that providing the universal basic services and financing the appropriate social safety nets. The zero hunger goal (SDG2) is more challenging as the prevalence of stunting in children under 5 years and the prevalence of obesity are still high. Clearly, while most of the quantitative targets have been achieved, more efforts are needed to make children and the Egyptian population in general healthier with a more diversified diet. However, this is highly correlated with poverty that can affect both hunger and the quality of food. In addition to poverty, inequality is also a serious issue in Egypt (SDG10) as the Gini index is stagnating and the middle class is declining.

On health and education, SDG3 that is related to good health and well-being is, globally, much better than the previous goals with the exception of two indicators which are the Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years and the subjective wellbeing

that is low and decreasing. As per SDG4, more policies are needed to focus on education as the participation rate in pre-primary organized learning represents only 32.5% of children aged 4 to 6. In addition, the literacy rate is high and the completion of lower secondary education is low.

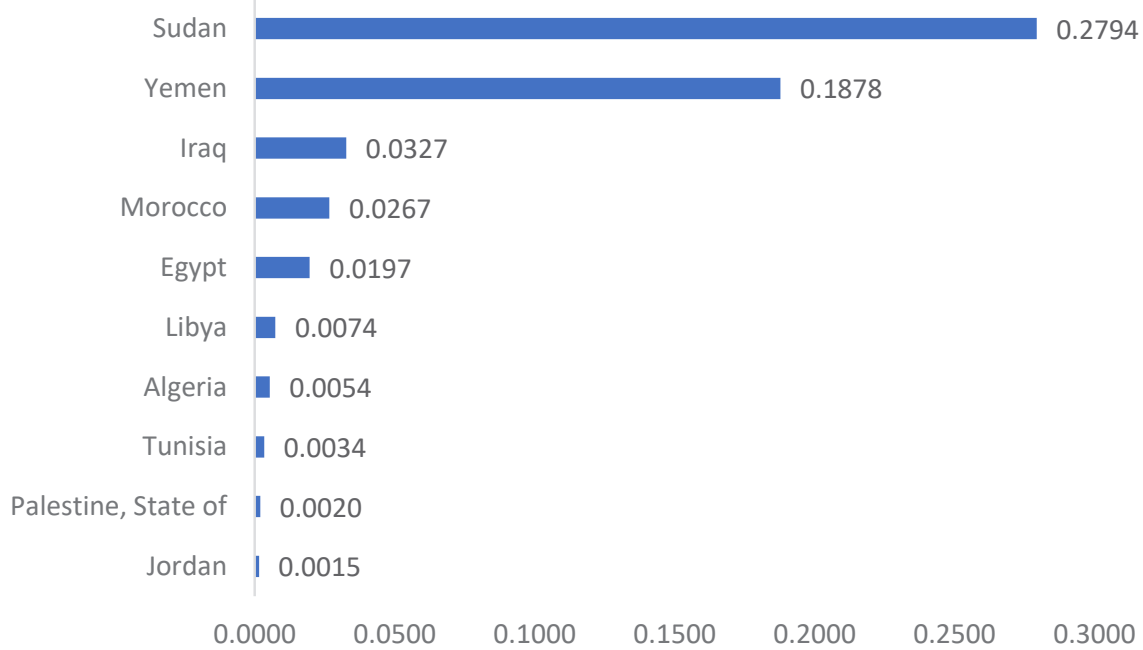
In SDG5 on gender equality, the main challenge remains in the low ratio of female-to-male labor force participation rate. As it was mentioned before, there is a large disconnect between females' education and labor force participation. This will need more gender friendly labor policies that encourage female participation.

For water and energy, SDG6 on clean water and sanitation is doing relatively well when it comes to the share of population using at least basic drinking water services and sanitation services. However, freshwater withdrawal as percentage of available freshwater resources is high and points out the water stress that Egypt is going to face in the medium and long run. A similar observation applies to SDG7 as all the population has access to electrify and to clean fuels for cooking. Yet, the share of renewable energy in total final energy consumption is still low (3.3% in 2020).

Regarding SDGs related to work and industry, SDG8 (decent work and economic growth) shows that the main challenges pertain to the adults with an account at a bank or other financial institutions as well the fundamental labor rights. Hence, an easier access to banking services



Figure 40. Multidimensional poverty indicator in Arab States



Source: Alkire et al. (2024)

is needed to increase the coverage for remote areas. SDG9 (industry, innovation and infrastructure) is overall performing relatively well compared to other SDGs. The main challenges are related to the low level of expenditure on research and development that affects innovation and thus the competitiveness of the industrial sector and the upgrade in global value chains.

As per SDG11 (sustainable cities and communities), investing in public transportation must be a top priority as the share of population with convenient access to public transport in cities is relatively low (24.1% in 2020). In addition, SDG12 shows that, overall, most of the indicators are doing relatively well when it comes to the responsible consumption and production as the production based nitrogen emissions, nitrogen emissions associated with imports and municipal solid waste are low. More efforts are needed to reduce the production based air pollution.

On the environment-related SDGs, SDG13 shows that CO2 emissions embodied in fossil fuel exports and from fossil fuel combustion are still characterized by some challenges. This is why improving the technology of production to make it more environment friendly is a must to reduce CO2 emissions. This can take place by imposing a carbon tax on polluting industries. Life below water (SDG14) is still facing many challenges, as the area that is protected in marine sites is low, the clean waters score is average, and fishing practices are not environment-friendly. Finally, the life on land (SDG15) target is mainly challenged by the low level of the mean

area that is protected in terrestrial sites (38.8%) and freshwater sites (26.1%). This is a key issue for biodiversity.

At the institutional level (SDG16 related to peace, justice and strong institutions), more efforts are needed to improve the quality of institutions, press freedom and streamlining administrative proceedings. Compared to other SDGs, this one is not performing well and will require deep reforms that aim at reforming the institutional setting that is a necessary condition for long term growth. At the international level, SDG17 (partnerships for the goals) shows that Egypt needs to improve its spending on health and education (which are key for all SDGs) and to better support the UN-based multilateralism.

In terms of evolution, we can now summarize these different dimensions based on the SDG tracker (see Table 4). Each goal is assessed based on two criteria: its evolution (improving, deteriorating, and stagnating) and the challenges it faces (major, significant, stagnant). First, three goals experienced an improvement while having significant challenges (quality education SDG4 and clean water and sanitation SDG6) or some challenges (responsible consumption and production, SDG12). On education, as has been shown before, fiscal policy needs deep reforms to increase public spending on education to improve its quality. Regarding SDG12, it is important to note that the main challenge is related to electronic waste management. On water and sanitation, the geographical coverage and equal public investments in poor areas in Upper Egypt still poses significant challenges.



Second, seven SDGs were moderately improving but face either major (good health and wellbeing SDG3; decent work and economic growth SDG8) or significant (gender equality SDG5; affordable and clean energy SDG 7; industry and innovation SDG 9; sustainable cities and communities SDG 11) or some challenges (climate action SDG13). Despite the improvement of some health outcomes, increasing public spending on health policies and enforcing the UHI will boost SDG3. Moreover, in terms of decent employment, addressing informality is a key issue. Some studies propose several recommendations such as reducing the cost of hiring formal workers, providing security to those who are outside the workplace and, at the firm level, adopt a formalization through promotion by giving informal firms incentives to formalize. SDG9 faces significant challenges related to the lack of a consistent industrial policy and deficient institutions that do not attract investors. Finally, SDG13 on climate change still faces some challenges related to the consumption of oil and the lack of investments in renewable energy.

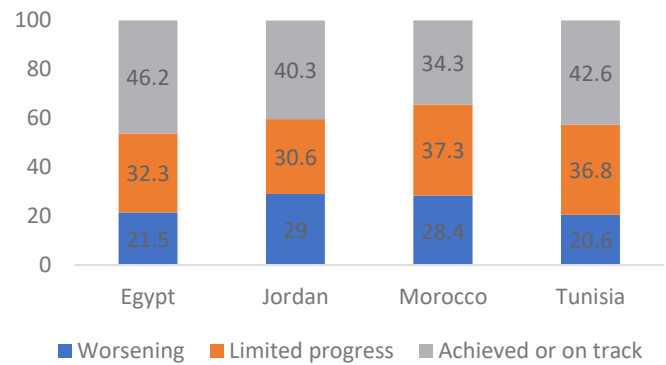
Third, poverty (SDG1) has been deteriorating with the recent developments at the macroeconomic level, especially food price inflation that reached 50.9% in February 2024 with the currency devaluation, the austerity measures related to the IMF reform program (such as subsidies removal).

Finally, five goals are stagnating but still face either major challenges (zero hunger SDG2, life below water SDG14, life on land SDG15, peace justice and strong institutions SDG16) or significant ones (partnerships for goals, SDG17).

As a result, around 46% of the SDGs are achieved or on track, whereas 21% are worsening and 32% are stagnating (see Figure 41). When compared to other countries, Egypt performs better than Jordan, Morocco and Tunisia as it has the highest share of achieved goals and the second lowest worsening ones (after Tunisia).

Against the previous background, and given the reduced fiscal space and the complex trade-offs facing the government, different SDGs should be prioritized considering their socioeconomic impacts (anchored on the SDG Gaps) and their feasibility from a financial perspective. Table 4 summarizes the urgency and the importance of each SDG over the short, medium, and long term. As it was mentioned before, in the short term, it is important and urgent to address SDG1, 2 and 10 as they directly affect people's life and their policies can

Figure 41. Comparing Egypt's progress towards SDGs



Source: Author's own elaboration using the online dashboard of SDG <https://dashboards.sdindex.org/>

address short term problems such as social safety nets, social protection and provision of universal basic services. SDG13 related to climate action is also urgent and important given that climate change challenges require immediate actions to avoid long term losses. In the short term as well, SDG3 and SDG4 are considered important but less urgent as Egypt is performing relatively well in most of the indicators. However, revisiting spending priorities (reducing investment in infrastructure and interest payments to increase health and education spending) must be a top priority. Finally, institutional reforms related to SDG16 are essential and will need more time than other SDGs but are a necessary condition to achieve all SDGs. This is why they are equally urgent and important.

In the medium term, there is a need for urgent and important reforms that improve the real sector to generate decent jobs (SDG8), improve innovation, and increase the competitiveness of the industrial sector (SDG9). Clearly, such reforms will need time and should become more concrete in the medium term. However, other SDGs are important but not as urgent as the previous group given that Egypt has already achieved a fairly accepted level in their implementation, namely gender equality (SDG5 except for female labor force participation), clean water and sanitation (SDG6), affordable and clean energy (SDG7), life below water (SDG14) and life on land (SDG15).

In the long term, some SDGs are important but not urgent as Egypt has almost attained an advanced level in their implementation especially sustainable cities and communities (SDG11) and responsible production and consumption (SDH12). Improving Egypt's role at the multilateral level to boost its partnerships for the goals is also needed but not as urgent as the domestic reforms aforementioned.



Table 3. Indicators assessing SDG progress

	Value	Year	Rating
SDG1 – No Poverty			
Poverty headcount ratio at \$2.15/day (2017 PPP, %)	2.1	2024	2
Poverty headcount ratio at \$3.65/day (2017 PPP, %)	9.2	2024	3
SDG2 – Zero Hunger			
Prevalence of undernourishment (%)	7.2	2021	1
Prevalence of stunting in children under 5 years of age (%)	22.3	2014	4
Prevalence of wasting in children under 5 years of age (%)	9.5	2014	3
Prevalence of obesity, BMI \geq 30 (% of adult population)	44.3	2022	4
Human Trophic Level (best 2–3 worst)	2.2	2021	1
Cereal yield (tons per hectare of harvested land)	7.4	2022	1
Sustainable Nitrogen Management Index (best 0–1.41 worst)	0.6	2018	3
Exports of hazardous pesticides (tons per million population)	0.1	2018	1
SDG3 – Good Health and Well-Being			
Maternal mortality ratio (per 100,000 live births)	16.8	2020	1
Neonatal mortality rate (per 1,000 live births)	9.5	2022	1
Mortality rate, under-5 (per 1,000 live births)	18.1	2022	1
Incidence of tuberculosis (per 100,000 population)	9.8	2022	1
New HIV infections (per 1,000 uninfected population)	0.1	2022	1
Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years (%)	28	2019	4
Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	106	2019	3
Traffic deaths (per 100,000 population)	9.4	2021	2
Life expectancy at birth (years)	70.2	2021	3
Adolescent fertility rate (births per 1,000 females aged 15 to 19)	50.0	2020	3
Births attended by skilled health personnel (%)	97.1	2021	2
Surviving infants who received 2 WHO-recommended vaccines (%)	96	2022	1
Universal health coverage (UHC) index of service coverage (worst 0–100 best)	70	2021	2
Subjective well-being (average ladder score, worst 0–10 best)	3.9	2023	4
SDG4 – Quality Education			
Participation rate in pre-primary organized learning (% of children aged 4 to 6)	32.5	2021	4
Net primary enrollment rate (%)	99.5	2021	1
Lower secondary completion rate (%)	86.1	2021	2
Literacy rate (% of population aged 15 to 24)	92.2	2022	2
SDG5 – Gender Equality			
Demand for family planning satisfied by modern methods (% of females aged 15 to 49)	81.0	2024	1
Ratio of female-to-male mean years of education received (%)	106.9	2022	1
Ratio of female-to-male labor force participation rate (%)	23.1	2023	4
Seats held by women in national parliament (%)	27.7	2024	3
SDG6 – Clean Water and Sanitation			
Population using at least basic drinking water services (%)	98.8	2022	1
Population using at least basic sanitation services (%)	97.5	2022	1
Freshwater withdrawal (% of available freshwater resources)	141.2	2021	4
Anthropogenic wastewater that receives treatment (%)	42.0	2020	2
Scarce water consumption embodied in imports (m ³ H ₂ O eq/capita)	1,146.7	2024	2



Table 3. Indicators assessing SDG progress (continued)

	Value	Year	Rating
SDG7 – Affordable and Clean Energy			
Population with access to electricity (%)	100.0	2021	1
Population with access to clean fuels and technology for cooking (%)	99.9	2021	1
CO2 emissions from fuel combustion per total electricity output (MtCO2/TWh)	1.2	2022	2
Renewable energy share in total final energy consumption (%)	3.3	2020	4
SDG8 – Decent Work and Economic Growth			
Adjusted GDP growth (%)	-0.1	2022	2
Victims of modern slavery (per 1,000 population)	4.3	2022	2
Adults with an account at a bank or other financial institution or with a mobile-money-service provider (% of population aged 15 or over)	27.4	2021	4
Unemployment rate (% of total labor force, ages 15+)	6.3	2024	2
Fundamental labor rights are effectively guaranteed (worst 0–1 best)	0.37	2022	4
Fatal work-related accidents embodied in imports (per million population)	0.1	2018	1
Victims of modern slavery embodied in imports (per 100,000 population)	3.5	2018	1
SDG9 – Industry, Innovation and Infrastructure			
Rural population with access to all-season roads (%)	96.2	2024	1
Population using the internet (%)	72.2	2022	2
Mobile broadband subscriptions (per 100 population)	64.8	2022	2
Logistics Performance Index: Infrastructure score (worst 1–5 best)	3.0	2023	1
The Times Higher Education Universities Ranking: Average score of top 3 universities (worst 0–100 best)	36.3	2024	
Articles published in academic journals (per 1,000 population)	0.4	2022	2
Expenditure on research and development (% of GDP)	1.0	202	3
SDG10 – Reduced Inequalities			
Gini coefficient	31.9	2019	2
Palma ratio	1.3	2019	3
SDG11 – Sustainable Cities and Communities			
Proportion of urban population living in slums (%)	0.9	2018	1
Annual mean concentration of PM2.5 ($\mu\text{g}/\text{m}^3$)	41.7	2022	4
Access to improved water source, piped (% of urban population)	98.7	2022	1
Population with convenient access to public transport in cities (%)	24.1	2020	4
SDG12 – Responsible Consumption and Production			
Municipal solid waste (kg/capita/day)	0.7	201	1
Electronic waste (kg/capita)	5.9	2019	2
Production-based air pollution (DALYs per 1,000 population)	5.4	2024	2
Air pollution associated with imports (DALYs per 1,000 population)	1.1	2024	1
Production-based nitrogen emissions (kg/capita)	15.1	2024	1
Nitrogen emissions associated with imports (kg/capita)	5.1	2024	1
Exports of plastic waste (kg/capita)	0.0	2023	1
SDG13 – Climate Action			
CO2 emissions from fossil fuel combustion and cement production (tCO2/capita)	2.4	2022	2
GHG emissions embodied in imports (tCO2/capita)	0.8	2021	1
CO2 emissions embodied in fossil fuel exports (kg/capita)	245.0	202	2



Table 3. Indicators assessing SDG progress (continued)

	Value	Year	Rating
SDG14 – Life Below Water			
Mean area that is protected in marine sites important to biodiversity (%)	44.4	2023	4
Ocean Health Index: Clean Waters score (worst 0–100 best)	52.1	2023	4
Fish caught from overexploited or collapsed stocks (% of total catch)	36.8	2018	2
Fish caught by trawling or dredging (%)	49.5	2019	3
Fish caught that are then discarded (%)	14.9	2019	3
Marine biodiversity threats embodied in imports (per million population)	0.0	2018	1
SDG15 – Life on Land			
Mean area that is protected in terrestrial sites important to biodiversity (%)	38.8	2023	4
Mean area that is protected in freshwater sites important to biodiversity (%)	26.1	2023	4
Red List Index of species survival (worst 0–1 best)	0.9	2024	1
Permanent deforestation (% of forest area, 3-year average)	0.0	2022	1
Imported deforestation (m ² /capita)	5.4	2022	1
SDG16 – Peace, Justice and Strong Institutions			
Homicides (per 100,000 population)	1.3	2017	1
Crime is effectively controlled (worst 0–1 best)	0.77	2022	2
Unsentenced detainees (% of prison population)	9.9	2016	1
Birth registrations with civil authority (% of children under age 5)	99.1	2021	1
Corruption Perceptions Index (worst 0–1 best)	35.0	2023	4
Children involved in child labor (%)	4.8	2014	2
Exports of major conventional weapons (TIV constant million USD per 100,000 population)	0.0	2023	1
Press Freedom Index (worst 0–1 best)	25.1	2024	4
Access to and affordability of justice (worst 0–1 best)	0.46	2022	4
Timeliness of administrative proceedings (worst 0–1 best)	0.20	2022	4
Expropriations are lawful and adequately compensated (worst 0–1 best)	0.41	2022	4
SDG17 – Partnerships for the Goals			
Government spending on health and education (% of GDP)	5.7	2021	3
Other countries: Government revenue excluding grants (% of GDP)	21.0	2015	3
Corporate Tax Haven score (best 0–100 worst)	0	2021	1
Statistical Performance Index (worst 0–100 best)	79.9	2022	2
Index of countries' support to UN-based multilateralism (worst 0–100 best)	68.1	2023	2

Source: SDG dashboard (<https://dashboards.sdindex.org/rankings>)

Notes: In the rating column, 1 refers to SDG achieved, 2 to challenges remain, 3 to significant challenges, and 4 to major challenges.

Table 4. Progress towards SDGs in Egypt

	Improving	Moderately im-proving	Deteriorating	Stagnating
Major challenges remain		Good health and wellbeing (3) Decent work and economic growth (8)		Zero hunger (2) Life below water (14) Life on land (15) Peace justice and strong institutions (16)
Significant challenges remain	Quality education (4) Clean water and sanitation (6)	Gender equality (5) Affordable and clean energy (7) Industry and innovation (9) Sustainable cities and communities (11)		Partnerships for goals (17)
Challenges remain	Responsible consumption and production (12)	Climate action (13)	No poverty (1) Reduced Inequalities (10)	

Source: Author's own elaboration using the online dashboard of SDG <https://dashboards.sdindex.org/>



Table 5. SDG priorities

	Urgent and Important	Important
Short term	1. No Poverty 2. Zero Hunger 10. Reduced Inequalities 13. Climate Action 16. Peace, Justice and Strong Institutions	3. Good Health and Well-Being 4. Quality Education
Medium term	8. Decent Work and Economic Growth 9. Industry, Innovation and Infrastructure	5. Gender Equality 6. Clean Water and Sanitation 7. Affordable and Clean Energy 14. Life Below Water 15. Life On Land
Long term		11. Sustainable Cities and Communities 12. Responsible Production and Consumption 17. Partnerships for the Goals

Source: Author's own elaboration.

5. Conclusion

5.1. Main findings

The objective of this report is to analyze the different characteristics of the Egyptian economy to investigate its progress towards the Sustainable Development Goals (SDG). It proceeds in several steps: first, it provides a macroeconomic analysis of its economic growth, its sources and its evolution. Second, it analyzes the different macroeconomic (fiscal and monetary) policies, with the aim of seeing how such policies contributed to Egypt's sustainable development. Third, the report presents the different development dimensions including health, education, institutions, environment, and infrastructure. Finally, it provides a thorough analysis of the different SDGs. Throughout the report, Egypt's is compared to three comparator economies from the region (Jordan, Morocco and Tunisia) and to two categories which are the Middle East and North African (MENA) and Lower-Middle Income (LMI) countries.

The main findings show that, while macroeconomic policies helped the economy stabilize in the short term, development was not mainstreamed within such policies. This is why Egypt's progress in SDGs is rather modest, compared to other economies from the region or belonging to the same income level.

More particularly, while growth in Egypt was positive and relatively resilient in crisis times, exports and investments were weak, growth was primarily driven by capital intensive sectors that were more productive. Indeed, capital accumulation was the main driving force behind economic growth because of the prevailing employment laws that foster the adoption of capital-intensive production techniques in sectors like mining, cement, iron, and steel. Thus, economic growth was jobless.

Fiscal policy was mainly characterized by a high share of current spending (around 80% of total spending with the share of wage declining, interest payments increasing, subsidies decreasing and government consumption almost doubled). In contrast, the share productive spending (including purchase of non-financial assets and other expenditure) represents around 20%. As per revenues, the lion share comes from taxes. To finance the deficit, the government relied mainly on banking financing with high interest rates. Finally, while domestic debt was declining, external one was soaring. In the same vein, monetary policy was chiefly characterized by a high interest rate, high and volatile inflation rates, and an increase in government lending by the banking system. Generally, despite several currency devaluations, the Egyptian pound was (is) relatively managed by the Central Bank of Egypt.

As per drivers of sustainable development, spending on health and education was relatively low and decreasing, health outcomes improved, the quality of infrastructure increased but the quality of institutions deteriorated (with the investment climate in general). At the environmental level,

Finally, regarding the progress towards SDGs, a lot of heterogeneity is observed as Egypt managed to implement several SDGs especially those related to health (SDG3), responsible consumption, and production (SDG12), clean water (SDG6) and energy (SDG7). However, other SDGs especially no poverty (SDG1), zero hunger (SDG2), inequality (SDG10), climate action (SDG13), and peace, justice and strong Institutions (SDG16) will require immediate action.



5.2. Recommendations

Deeper and more structural reforms are needed to make the private sector more dynamic and to streamline development in macroeconomic policies. Thus, this section proposes some recommendations to accelerate the progress towards the achievement of the SDGs.

First, several stabilization reforms are needed to reduce the internal and external imbalances. At the fiscal level, growth has been mainly driven by an increasing public spending that led to a surge in Egypt's debt. This is why, in the short term, three reforms are necessary. First, in order to reduce the pressure on foreign currency and reimburse the external debt, the option of restricting imports that are mainly price inelastic goods and intermediate inputs might not be a plausible option. This is why a more comprehensive approach of debt restructuring (renegotiation of terms of servicing of existing debt, coordination among creditors, etc.) might be needed as most of the reimbursements are skewed towards the short term. Second, fiscal consolidation is needed to reduce the domestic debt, which will require limiting spending on infrastructure projects. Third, it is important to revisit the spending priorities in order to reduce interest payments and increase spending on education and health (SDG3, SDG4 and SDG6). In other words, it is crucial to reallocate spending from current to productive spending, which will clearly help people get out of poverty (SDG1).

At the monetary level, the Central Bank of Egypt (CBE) must revisit its policy of increasing interest rates as it does not reduce inflation (that is supply driven, not demand driven) and of maintaining the exchange rate of the Egyptian pound at unrealistic rates. Indeed, at the exchange rate policy level, the CBE announced several times the adoption of a free-floating exchange rate regime as one of the conditions of the recent IMF loan. Thus, this policy must be more credible and more sustainable to avoid managing an overvaluation of the Egyptian pound and to reduce the burden on foreign exchanges to keep the currency stable. While this is necessary to improve the competitiveness of exports (SDG9), some structural reforms are needed to foster and diversify domestic production and remove administrative and unjustified non-tariff measures that affect exports and therefore production (Youssef and Zaki 2019).

At the real sector level, structural and deep reforms are needed to improve the business environment, increase competition, attract FDI in the manufacturing sector, increase exports and thus increase the availability of foreign currency. In fact, the economy faced several challenges due to the deficient business regulatory environment and lack of competition with State-protected markets and State-controlled resources (SDG16). Furthermore, with the surge in government borrowing, credit to the private sector has been declining, leading to a decrease in private investment and an increase in public investment (mainly in public utilities and infrastructure). Hence, all these structural weaknesses need to be addressed in order to increase domestic investment, FDI and exports and, thus, reduce the scarcity of foreign currency. This will help achieve SDG9.

As per development outcomes, while Egypt made a significant progress in health outcomes, improving the public health system and implementing the UIH are crucial to achieve SDG3. Second, at the environmental level (SDG7, SDG13, SDG15), investing in renewable energy, reducing the reliance on oil and streamlining environmental laws to better tailor mitigation and adaptation policies are key to address climate-change related problems. Finally, at the social level, SDG5 and SDG8 should be addressed by promoting gender friendly policies at the workplace and reducing informality. As was mentioned before, this includes reducing the cost of hiring formal workers, providing security to those who are outside the workplace and, at the firm level, adopting a formalization through promotion approach by giving informal firms incentives to formalize.

All these policies are presented in Table 6 with the status quo of the SDG based on what Egypt achieved and the nature of challenges it faces. I also include the prioritization of the policies based on their importance, urgency, and time-horizon.

To conclude, while Egypt did a significant progress in some macroeconomic and development outcomes, there is still a long way to go to achieve SDGs. While this will require deep and structural reforms in the Egyptian economy, the political leadership is key to achieve such a target.



Table 6. Towards a better implementation of SDGs

#	Goal	Status quo	Priority	Recommendation
1	No Poverty	Weak	1	Inclusive social safety nets
2	Zero Hunger	Weak	1	More structural policies that generate jobs. Tackling food security in a more comprehensive approach.
3	Good Health and Well-Being	Average	2	Revisit the spending priorities to increase public spending on health. Reallocate spending from current to productive spending.
4	Quality Education	Fair	2	Revisit the spending priorities to increase public spending on education. Reallocate spending from current to productive spending.
5	Gender Equality	Average	4	Gender-friendly labor policies to increase female labor force participation
6	Clean Water and Sanitation	Fair	4	Construction of new water treatment plants. Implementation of water conservation measures. Development of new water resources
7	Affordable and Clean Energy	Average	4	Investing in renewable energy. Reducing the reliance on oil
8	Decent Work and Economic Growth	Average	3	Promoting the services and the manufacturing sector to generate more jobs. Reducing the cost of hiring formal workers. Providing security to those who are outside the workplace and, Adopting a formalization through promotion approach by giving informal firms incentives to formalize
9	Industry, Innovation and Infrastructure	Average	3	Structural and deep reforms are needed to improve the business environment, increase competition, and attract FDI in the manufacturing sector to foster innovation and the competitiveness of the industrial (non-oil) sector.
10	Reduced Inequalities	Weak	1	Providing universal basic services, especially for the middle class.
11	Sustainable Cities and Communities	Average	5	Invest in public transportation for more inclusive cities.
12	Responsible Production and Consumption	Above average	5	Imposing a carbon tax to reduce emissions from the manufacturing sector.
13	Climate Action	Average	1	Streamlining environmental laws to better tailor mitigation and adaptation policies
14	Life Below Water	Weak	4	Laws for protection of marine sites is low. Regulations for more sustainable fishing practices
15	Life On Land	Weak	4	Enforceable laws to protect area that terrestrial and freshwater sites
16	Peace, Justice and Strong Institutions	Weak	1	Improving the quality of institutions, press freedom and streamlining administrative proceedings.
17	Partnerships for the Goals	Weak	5	Stronger support for the UN-based multilateralism

Source: Author's own elaboration.

Notes: 1 refer to important and urgent goals that need to be addressed in the short term; 2 refers to important goals that need to be addressed in the short term; 3 refers to important and urgent goals that need to be addressed in the medium term; 4 refers to important goals that need to be addressed in the medium term; 5 refers to important goals that need to be addressed in the long term.



References

- Abou-Shady, N. and Zaki, C. (2019) "Investment climate and Trade Margins in Egypt: Which Factors Do Matter?", *Economics Bulletin*, vol. 39(4), pages 2275-2301.
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of economic growth*, 1, 385-472.
- Alkire, S., Kanagaratnam, U., and Suppa, N. (2024). The global Multidimensional Poverty Index (MPI) 2024 country results and methodological note. OPHI MPI Methodological Note 58, Oxford Poverty and Human Development Initiative, University of Oxford.
- Amer, M., Selwaness, I. and Zaki, C. (2021) "Patterns of economic growth and labor market vulnerability in Egypt" in "Regional Report on Jobs and Growth in North Africa 2020", edited by Assaad, R. and Marouani, M.A., International Labor Office and Economic Research Forum.
- Assaad, Ragui. 2020. "Prospects for Egypt's Population and Labor Force: 2000 to 2050", ERF Working Paper No. 1398.
- Assaad, R., Abdelaziz AlSharawy, and Colette Salemi. 2019. "Is the Egyptian Economy Creating Good Jobs? Job Creation and Economic Vulnerability from 1998 to 2018", ERF Working Paper No. 1354.
- Barro, R. J. (1990). Government spending in a simple model of endogenous growth. *Journal of political economy*, 98(5, Part 2), S103-S125.
- Beck, T., Demirgüç-Kunt, A., & Honohan, P. (2009). Access to Financial Services: Measurement, Impact, and Policies. *World Bank Research Observer*, 24(1).
- Beraldo, S., Montolio, D., & Turati, G. (2009). Healthy, educated and wealthy: A primer on the impact of public and private welfare expenditures on economic growth. *The Journal of Socio-Economics*, 38(6), 946-956.
- Caballero, R. J., & Hammour, M. L. (1998). The macroeconomics of specificity. *Journal of political Economy*, 106(4), 724-767.
- DeStefano, T., Kneller, R., & Timmis, J. (2018). Broadband infrastructure, ICT use and firm performance: Evidence for UK firms. *Journal of Economic Behavior & Organization*, 155, 110-139.
- El-Saharty, S., Nassar, H., Hamza, M., & Zhang, Y. (2022). Economic Impact of Population Growth in Egypt: Policy Brief.
- El-Said, H. Al Said, M. and Zaki, C. (2015) "Trade and Access to Finance of SMEs in Egypt: Is There a Nexus?", *Applied Economics*, vol. 47(39), pages 4184-4199.
- Farag, M. and Zaki, C. (2021) "Price and Income Elasticities of Natural Gas Demand in Egypt: A Bound Test Approach", *Review of Middle East Economics and Finance*, vol. 17(1), pages 27-55.
- Ferrazzi, M., Zwart, S., & Kalantzis, F. (2021). EIB Working Paper 2021/03-Assessing climate change risks at the country level: the EIB scoring model. European Investment Bank.
- Fodah, M., Kirat, D., Zaki, C. (2021) "On Stranded Assets and Climate Risk: Are Financial Markets the Last Resort?", ERF Working Paper No. 1526.
- Gramlich, E. M. (1994). Infrastructure investment: A review essay. *Journal of economic literature*, 32(3), 1176-1196.
- Haq, T and Zaki, C. (2015) "Macroeconomic policy for employment creation in Egypt: Past experience and future prospects", *Employment and Labour Market Policies Branch, Employment Working Paper No. 196*, International Labor Office, Geneva.
- Hoekman, B., Santi, F., & Shingal, A. (2023). Trade effects of non-economic provisions in trade agreements. *Economics Letters*, 226, 111081.
- Karam, F and Zaki, C. (2019) "Why Can't MENA Countries Trade More? The Curse of Bad Institutions", *Quarterly Review of Economics and Finance*, vol. 73, pages 56-77.
- Karlan, D., & Zinman, J. (2010). Expanding credit access: Using randomized supply decisions to estimate the impacts. *The Review of Financial Studies*, 23(1), 433-464.
- Kheir-El-Din, H., & Moursi, T. A. (2006). Sources of economic growth and technical progress in Egypt: An aggregate perspective. *Contributions to Economic Analysis*, 278, 197-236.
- Kneller, R., Bleaney, M. F., & Gemmell, N. (1999). Fiscal policy and growth: evidence from OECD countries. *Journal of public economics*, 74(2), 171-190.
- Lucas Jr, R. E. (2015). Human capital and growth. *American economic review*, 105(5), 85-88.
- Mattoo, A., Rocha, N., & Ruta, M. (2020). The evolution of deep trade agreements. Washington, DC: World Bank.
- North, D. C. (1990). Institutions, institutional change and economic performance. Cambridge university press.
- Othman, A., Sholkamy, H. and Zaki, C. (2021) "On Mainstreaming Social Thinking in Macroeconomic Policies" *Social Protection in Egypt: Mitigating the Socio-Economic Effects of the COVID-19 Pandemic on Vulnerable Employment*, Faculty Journal Articles, American University in Cairo.
- Otani, I., & Villanueva, D. (1990). Long-term growth in developing countries and its determinants: An empirical analysis. *World Development*, 18(6), 769-783.
- Romer, P. M. (1990). Endogenous technological change. *Journal of political Economy*, 98(5, Part 2), S71-S102.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The quarterly journal of economics*, 70(1), 65-94.
- Välilä, T. (2020). Infrastructure and growth: A survey of macro-econometric research. *Structural Change and Economic Dynamics*, 53, 39-49.
- Zaki, C. (2023) "The Economy of Egypt: Overview, Policies, and Prospects" in *The Middle East and North Africa 2024*, edited by Jill O'Brien, Routledge.
- Zaki, C., Alhelo, A. and Suliman, K. (2023) "Trade, Food Security and the War in Ukraine: the Case of Egypt and Sudan", ERF Working Paper No. 1659.
- Zaki, C. (2021) "Why Don't Firms Grow? Evidence from Egypt", *International Journal of Economic Policy in Emerging Economies* (in press).
- Zaki, C. (2021) "Why Egypt's Trade Policy Failed to Improve its External's Competitiveness?" in "Routledge Handbook of Contemporary Egypt" edited by Robert Springborg, Aisha I. Saad, Amr Ismail Ahmed Adly, Anthony Philip Gorman, Tamir Moustafa, Naomi Sakr and Sarah Smierciak.
- Zaki, C. (2017) "An Overview of Structural Imbalances in Egypt", *Egypte Monde Arabe, « L'État égyptien en quête de stabilité »*, vol. 16(3), pages 99-124.



About the Author

Chahir Zaki is a Chaired Professor of Economics at the University of Orléans and a research fellow at Laboratoire d’Economie d’Orléans. Chahir is also a lead economist (part time) the Economic Research Forum (Cairo, Egypt) and as a consultant for several international organizations (the World Bank, the International Labor Office and the OECD). He is also a Professor at Cairo University (on leave) and the director of Egypt’s pole of the Euro-Mediterranean and African Network for Economic Studies (EMANES) and a member of the experts’ panel of the Euro-Mediterranean Economic Association (EMEA). He has written numerous studies published in refereed journals on international trade, trade policy, trade in services, applied economics, and macroeconomic modeling.



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Contact Information

ERF Office
Address: 21 Al-Sad Al-Aaly St. Dokki, Giza, Egypt
PO Box 12311
Tel: +202 333 18 600 - 603
Fax: +202 333 18 604
Email: erf@erf.org.eg
Website: http://www.erf.org.eg

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