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## **Views on the Crisis**

## Seeking Ground in a Bottomless Sea: Addressing Misconceptions About External Debt in Egypt



**General Introduction** 

ECES initiated a set of studies to analyze the implications of the Corona crisis on the various variables and sectors. Now it is time to move to the second stage, which is to put forth the strategic pillars for the post-corona phase in the Egyptian economy, taking into account the new global economic situation imposed by the crisis.

This series of new reports provides a detailed discussion of a set of drivers of change, i.e., issues that, if properly addressed, are expected to cause major developmental strides for the Egyptian economy. These issues may have been dealt with previously, but were not adopted in the required manner and therefore need revisiting, or they may be issues that were not addressed in the first place despite their importance.

This series of reports follows a descriptive and quantitative analysis approach according to the nature of the topic.

Each report focuses on an issue through three main aspects, clarification of the importance of focusing on this issue and the rationale behind it, followed by a quick description of the current situation, a detailed discussion of the proposed change mechanism and timeframe, and any immediate/ medium-term/ long-term changes. Finally, it identifies the parties responsible for implementation, preconditions for success and the most important expected results.

> "...We don't yet know when the crisis will end. But we can be sure that by the time it does, our world will look very different. How different will depend on the choices we make today."

#### **Josep Borrell**

EU High Representative of the Union for Foreign Affairs and Security Policy, Vice-President of the Commission for a Stronger Europe in the World In the grand scheme of the economy, a quintessential goal for governments lies in maintaining a growth rate that is high enough to achieve sustainable development goals regardless of economic pressures and, if insufficient, a complementary debt level that is used efficiently and serviced properly towards generating revenue for development and not cycle into more debt. Debt, by definition, is a fiscal tool that supports the target achievement of growth and development, not impede it by using debt to finance more debt. A sound debt management plan lies at the heart of it all, reducing the risk that accompanies international exposure, be it in interest or currency.

Managing debt then becomes a matter of meeting needs for development and growth while simultaneously ensuring the lowest cost of servicing, which is met at a certain level of risk. Debt analysis becomes a key aspect of the budget review as it not only advances macroeconomic stability, but it also allows for the mobilization of resources crucial for long-term development, in addition to boosting financial deepening within the domestic market. This is where certain pitfalls can appear within the debt diagnosis; there are hazards regarding the costs and treatment of such a debt level that seemingly appear to be manageable in the present, only to pose a high risk to the wealth of future generations. If such hazards are examined carefully and the government hedges against such risks, only then can debt be set on a

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sustainable path that sustains itself and, more importantly, become a driver of real change within the economy.

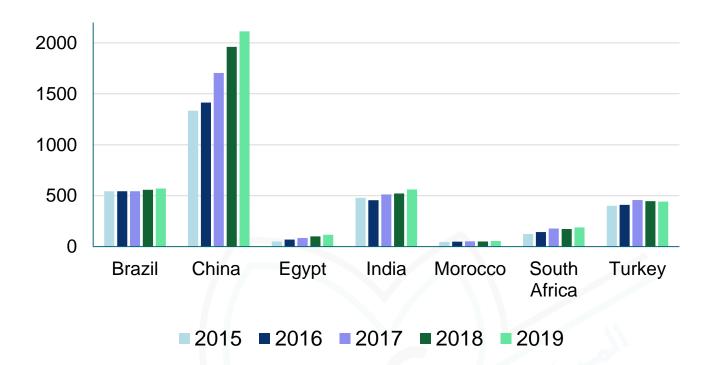
Much like most developing economies, Egypt is no stranger to debt dynamics. However, with the most recent global crisis, potential risks of rising debt accumulation, servicing and their respective impacts on the current and future budgets, there is a need to identify potential hazards and examine the external debt accounts closely with these risks in mind. The following report then provides an assessment of the external debt position for Egypt, updating the existing narrative using recently published 2019/20 data. Framing Egypt's accounts in relation to selected peer economies, we then proceed to identify certain pitfalls that can cause a deviation in the debt path. Finally, a close examination of Egypt's external accounts, taking into account the recent effect of the crisis and debt projections, showing the understanding and management of these hazards, could impact debt management for the better. We provide an all-round view of where the hazards can emerge and the key takeaways that can be drawn in order to revisit our understanding of the debt evolution and its pitfalls.

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#### First: Egypt's International Position on the Debt Map

In order to properly analyze Egypt's debt circumstances, it is essential to place Egypt on the debt map alongside a number of counterparts. The aim is to provide a well-rounded view of where Egypt's external debt position stands. Towards that purpose, Egypt is compared to selected economies in terms of growth and level of competition. This is done through using the categorization previously established by the ECES in the international positioning of Egypt, such that Egypt is weighed against role models, represented by China in the analysis, neighboring countries such as Morocco, direct competitors in Turkey, South Africa and India, in addition to other countries such as Brazil. The analysis covers debt, growth and export values of the selected economies in comparison to Egypt<sup>1</sup>, as well as ratios for sustainability and capacity for repayment.

<sup>&</sup>lt;sup>1</sup> Note: Data for external debt values and other ratios used within this section for Egypt and selected countries are obtained from the World Bank Group's International Debt Statistics report for 2021 for consistency and fair comparison purposes.



#### Figure 1. External debt levels (USD billion)

Source: The World Bank Group, International Debt Statistics 2021 report.

The above Figure 1 features the development of the external debt stock for Egypt and the selected countries over the past five years pre Covid-19, specifically 2015-2019. A first glance immediately shows how China holds a remarkable external debt level, far surpassing the level of any other economy and steadily increasing. Additionally, other economies such as Brazil follow China, suffering from a costly level of debt that has surpassed USD 500 billion for five years in a row. Within direct competitors, India and Turkey hold the highest levels of external debt, with even South Africa's level of debt surpassing Egypt. At face value, Egypt appears to have a low level of external debt, exceeding only the external debt of Morocco. Egypt has also been able to repay a sum

of USD 35 billion since the 2016 devaluation despite the level of debt reaching its highest level thus far in 2019.

Given the debt level, there must be an assessment of debt payment mechanisms. To assess debt capability, below is an analysis of several ratios including: (1) external debt in percent of GNI— a closer assessment of how much of the national income goes into debt management indicating the ability to repay such commitments, complimented with (2) external debt in percent of exports— a significant indicator of liquidity, particularly as a measure of external debt level to one of the main sources of foreign currency financing, export revenue, and (3) external debt servicing in percent of exports— an especially important indicator for short-term liquidity as it examines short term servicing obligations in relation to incoming foreign currency revenue.

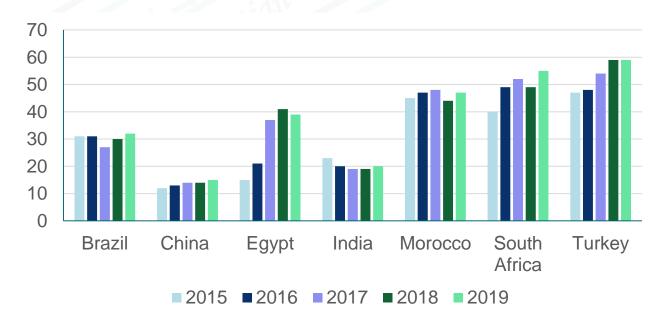


Figure 2. External debt in (% gross national income i.e.: GNI)

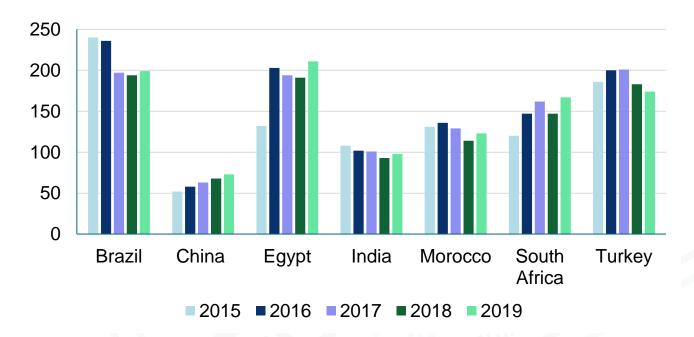
Source: The World Bank Group, International Debt Statistics 2021 report.

The ratio in Figure 2 above assesses the percentage of debt in relation to incoming revenue, which is crucial in determining the extent a country can sustain current and future debt levels with its income levels, feeding into efficient debt management. Evidently, the ratio paints a different picture to the one presented by the debt stock in Figure 1, as China holds the lowest proportion of debt to GNI indicating a high ability to cover the debt levels with income streams, a situation found in India as well. Conversely, debt level in most countries within the set is eating away at income, as Turkey holds the highest percentage of debt to GNI. Despite having moderate levels of debt and a low but positive growth rate of GNI (see Table 1 below), countries such as Morocco and South Africa have external debt levels that occupy a large portion of their national income, surpassing even Brazil. Egypt, while not having the highest debt to GNI percentage, has witnessed an increase in debt to GNI ratio with recent years, hovering around the 40 percent mark that, without necessary guarantees and monitoring, could push past the fifty percent mark of national income, consuming more funds within the budget from which the growth in income might not be able to sustain.

The external debt to GNI is a key measure for sustainability, however, in order to fully analyze Egypt's external debt flows, it is vital to examine the external debt to exports ratio, another measure

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of sustainability focusing on how foreign currency needs are met by one of the main sources of foreign currency, exports.



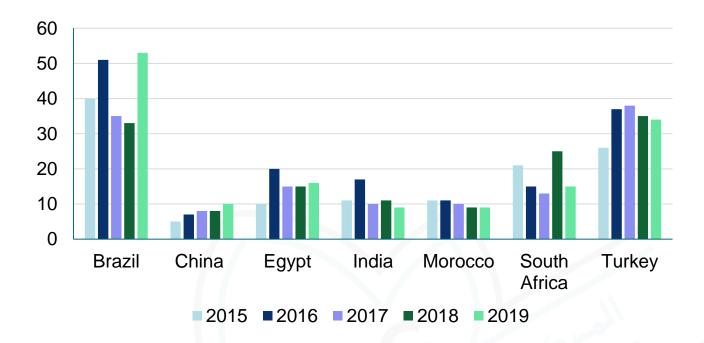
#### Figure 3. External debt in (% exports)

Source: The World Bank Group, International Debt Statistics 2021 report.

Foreign currency, especially for emerging markets, is difficult to come by. It is then imperative to weigh currency demand versus its supply. Since exports represent the traditional source of foreign currency, a high external debt to exports percentage signals that the debt level is increasing faster than the main external income source. While the threshold varies with each economy, the inability to repay debt increases with higher levels ranging between 200-250 percent<sup>2</sup>. This presents problems for future debt obligations, where debt level can

<sup>&</sup>lt;sup>2</sup> See the World Bank paper "When is External Debt Sustainable?" for further comments on thresholds; <u>http://documents1.worldbank.org/curated/es/180871468764989631/103503322\_20041117151006</u>/additional/wps3200externaldbt.pdf

spiral beyond income coverage. Again, the same patterns emerge, with China having significantly low levels of external debt to GDP, highlighting efficient management of debt. What is of concern is that Egypt has on average one of the highest percentages of debt to exports. When analyzing the external debt to exports ratio in relation to direct competitors, identified as Turkey, South Africa and India, Egypt's recent levels, particularly the figure for 2019, passes its counterparts and breaks the 200% ceiling for the first time since 2016. This postmarks the need to assess the trajectory of debt accumulation against the flow of exports, particularly with the drop in export receipts earlier in 2020. The only other country reaching similar debt percentages is Brazil, where the 2019 figures is just shy of the 200 benchmark and whose debt situation has been consistently poor across all indicators. Building on this, a closer look at the debt service to exports ratio will provide further insight on short-term liquidity status.



#### Figure 4. External debt service (% exports)

The external debt service to exports indicator presents a combined liquidity and solvency measurement, particularly for short term, immediate concerns. A country with a high debt service to exports ratio has a higher risk of default sooner rather than later. As shown above, Brazil currently occupies the most hazardous position, as its debt servicing has risen significantly compared to its exports for 2019. Turkey, combined with its high debt to export ratio, is also facing a high risk as debt burdens weigh in heavily in the budget. China, on the other hand, has fully met its short-term liquidity needs, despite the upward trajectory, managing to keep debt servicing below or at 10 percent of its exports. While witnessing a rising debt service to exports ratio compared to India, South Africa and Morocco's

Source: The World Bank Group, International Debt Statistics 2021 report.

decreasing trends, Egypt has kept debt servicing under 20 percent; however, with the increased need for external borrowing for 2020, there is an expectation that this ratio will surpass the 30 and 40 percent benchmarks for 2019/20 and 2020/21<sup>3</sup>. It is therefore increasingly important to assess the debt packages offered in order to weigh the risk of acquiring more debt versus the ability to meet its servicing obligations.

Analyzing debt level, debt payment and typical debt indicators is only one part of the story. Unless complemented by growth performance in the economy, the debt situation cannot be fully assessed. This is the case because the growth situation is a reflection of to what extent the debt is properly used as a fiscal tool supporting growth and achievement of sustainable development goals. In explaining the growth performance, the study examines two indicative variables, the level and percent change of GNI and industrial export performance, both of which are shown in Table 1 and Tables 2.1 and 2.2 respectively.

<sup>&</sup>lt;sup>3</sup> See the IMF Egypt Country Report no. 20/271.

Country Name	2015	2016	2017	2018	2019	Percentage Change (2015-2019)
Brazil	2293.2	2212.6	2247.8	2254.9	2284.9	-0.4
China	8880.0	9485.9	10177.8	10814.9	11510.8	29.6
Egypt	245.5	257.3	266.5	279.0	291.2	18.6
India	2268.6	2434.2	2630.8	2792.1	2908.4	28.2
Morocco	111.2	112.3	117.1	120.8	123.8	11.3
South Africa	408.1	408.4	413.1	415.7	417.7	2.4
Turkey	1081.3	1117.9	1199.2	1231.7	1241.1	14.8

Table 1. Gross National Income (GNI)\* (level and % change)

Source: World Bank national accounts data; and OECD National Accounts data files.

GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2010 USD billion;

\*Note: GNI was used instead of GDP not only because of availability and consistency of data but also because it includes income from both domestic and foreign resource and is considered by the World Bank a good measure of a country's capacity to provide for the well-being of its people.

The scenario is completely switched when observing GNI developments over the years 2015-2019, as well as the percentage change between 2015 and 2019. For the debt level to be sustainable, it must be met with sufficient income levels to cover debt payments. From the table above, it can be seen that most countries have had a positive growth rate of GNI over the five-year period, with the exception of Brazil. China, in spite of being the

holder of highest external debt levels for several years, a situation known to be hazardous to an economy, it has in fact achieved soaring GNI levels, with an average of approximately 30 percent growth in the five years pre-pandemic. Likewise, among direct competitors, India had one of the highest external debt stock in the selection, yet it has also managed to achieve, in spite of this debt level, the second highest five-year growth rate in GNI. Other countries such as Egypt, Morocco and Turkey have had a reasonable five-year growth rate; however, the growth rates of South Africa and Brazil remain very low, with Brazil's even retracting over 2015-2019.

<u>Table A1</u> in the Appendix is an analysis of the same figures of GNI in current USD billion and is calculated using the Atlas conversion factor, a method that takes into account inflation both domestic and abroad. The figures reveal that most countries within the sample have positive growth rates both in current and constant prices. Even with inflation effects at play, China and India still hold the highest double digit GNI growth rate within the country selection, further that a country can witness a high level of debt and still achieve increasing growth rates. However, the growth rates are not as promising when taking into account price increase with some countries, even reversing signs all together with countries such as Turkey and Egypt.

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The conclusion that can then be drawn here is that the issue is not in how high or low the level of debt is but in how debt contributes to the achievement of growth and the extent of which it is safely serviced. High debt levels in China happen to be occurring with a great performance within the economy while low levels of debt as seen have been associated with poor performance. The key must be in the way the economy is managed and growth is promoted. This is where most economies fall into a vicious debt cycle, where debt begets more debt and higher costs. Further analyzing growth, a breakdown of the exports, with a focus on industrial exports, in Tables 2.1 and 2.2 will provide an outlook on the export productivity.

	Industrial Exports (%Total Exports)											
Year	Brazil	South Africa	Turkey									
2015	64.90	96.95	65.87	77.39	82.81	83.25	88.69					
2016	68.12	96.46	71.40	79.46	83.86	82.62	89.77					
2017	65.27	96.30	67.53	77.72	85.63	80.46	90.19					
2018	61.36	96.16	63.79	76.00	85.15	82.04	90.58					
2019	60.48	95.84	61.06	77.64	84.13	83.18	88.27					

Source: UN Comtrade.

Calculated manually using tables 2.2 and A2 with HS codes 16-26,28-76, 78-96 over total HS2002 (i.e.: HS level 2) code;

Industrial exports are particularly significant in identifying the productive capacity within the economy, as well as how the country promotes its economic growth. The manufactured exports are classified as economic activities that produce a high value added within the economic cycle, as opposed to exporting resources that have a low value added. The result is an increase in productivity, in addition to the potential creation of a comparative advantage as a country starts to specialize in certain industries. At first glance, most of the selected economies seem to be exporting a high level of industrial products relative to their total exports, with China taking the lead at almost 96 percent. The same patterns found in Table 1 emerge, where economies such as Turkey, South Africa and Morocco, who overall do not perform well in terms of debt indicators, have a high capacity for industrial production and seem to manage the economy in a way that encourages a high value added relative to their total exports, as all score above 80 percent of industrial exports. Furthermore, although India primarily exports services, there is a high level of industrialization within its exports sector, which leaves the Indian economy less vulnerable to fluctuations in external demand. Economies that ranked within the midrange of the sample, Egypt and Brazil, also exports a high level of services; however, they do not have a large industrial bundle within their exports and include exports of resources. Unlike India, this leaves such economies vulnerable to external shocks, as well as a low value added for exports.

Industrial Exports											
Year	YearBrazilChinaEgyptIndiaMoroccoSouth Africa										
2015	124.0	2204.2	14.4	204.6	18.5	66.8	127.6				
2016	126.2	2023.4	16.4	206.8	19.2	62.7	127.9				
2017	142.1	2179.7	17.9	228.8	21.9	71.0	141.6				
2018	147.2	2398.5	18.8	245.1	25.0	76.9	152.2				
2019	136.3	2394.6	18.7	251.0	24.7	74.4	159.6				

#### Table 2.2. Industrial Exports (USD billion)

Source: UN Comtrade database.

Calculations based on the ECES classifications using the HS level 2 codes 16-26, 28-76, 78-96;

Looking further at Table 3.2, the numbers in absolute values are even more revealing. The absolute terms show how far ahead China, holder of the highest value of debt, is in industrial capacity, as its figures outweighs all of its competitors combined. Furthermore, good export performance has also been seen in countries such as India and South Africa. On the other hand, in Egypt, the economy of concern, the lowest level of industrial exports has been observed. The key information here is that debt alone does not provide a lot of information, not without the context of economic performance.

To sum up, an initial assessment of debt stock revealed how most countries have seen increasing external debt through the years 2015-2019, with China holding the largest share of external debt amongst the selected economies. However, a narrative cannot be built on debt levels and indicators only; the above depicts how a low level of debt can be associated with poor performance and a high level of debt, such as in the case of China, has also been associated with a high level of growth and productive capacity. Therefore, it must be the case that the debt is analyzed in context of how the economy is managed and if the debt is properly utilized. Not accounting for such a context makes for an incomplete analysis that is potentially hazardous when constructing the debt assessment and path. This gives way to a few misconceptions in debt management that could serve as potential hazards for the external debt sustainability trajectory.

## Second: Analysis of Debt Misconceptions and Hazards with a Focus on Egypt

In order to assess the debt management position, it is often effective to provide context to the hazards and misconceptions within debt management, that could potentially be realized and represent serious risks. By investigating each misconception and hazard, we can provide recommendations for strategy that safeguard against these hidden risks and pave the way for change. Having said that, the misconceptions and hazards include risks, be it in the flow of debt or its treatment and dynamics, such as:

#### • Definition and Treatment of Debt:

The debt calculated by the Central Bank of Egypt's (CBE) bulletins is the gross external debt, which is defined as the outstanding amount of current contingent liabilities where payments of principal or interest to nonresidents are needed at a point in the future. This definition, per the IMF, has certain caveats to bear in mind: (1) It does not take into account the timeline of debt yet to be disbursed, nor (2) the timing of payment for certain instruments, which may be called upon at any moment with instruments such as the noninterest demand deposit schemes, and (3) it does not contain contingent liabilities, which if included, may raise the value of external debt beyond the published figures. Furthermore, it is often the case that debt is often referred to as an isolated issue both in time, as taking on debt in the present day may have adverse on future generations, and effects space, it is as а multidimensional issue that is affected by the different sectors in Egypt, not just monetary and fiscal policy, and should ideally be fueled by revenue streams from those sectors rather than by extended borrowing.

#### • Contingent Liabilities:

Represent amounts that the government owes but the upon which the exact value is determined by uncertain events. Due to their unmeasurable nature, contingent liabilities are difficult to account for, particularly since the timing of their turning into actual liabilities is not known. There is therefore legitimate concern that during the Covid-19 crisis, contingent liabilities may arise pushing the debt further beyond what the reserve level can cushion. In this context, there is an essential distinction to be made here between explicit and implicit contingent liabilities; explicit liabilities are obligations specifically guaranteed by the government by law or contract; implicit liabilities are essentially more moral obligations that the government is expected to take responsibility of<sup>4</sup>. Explicit liabilities are those included in the Ministry of Finance's (MoF) General Framework of the Draft State Budget, which include guaranteed private partnership (PPP) guarantees, and public loans. international arbitration fees for cases against the government of Egypt (GOE). Measures to mitigate such liabilities include coordination with the MoF in project approvals, mid-year reports identifying key financial risks, and hedging mechanisms to protect against deviations from the budget<sup>5</sup>. On the other hand, there are implicit liabilities that are often not included in budgets, a most recent example is the relief of natural disasters such as the Covid-19 pandemic, which has pushed expenditures within the budget to a growth of 8.8 percent<sup>6</sup>. Other implicit liabilities include guarantees

<sup>&</sup>lt;sup>4</sup> See the International Budget Partnership (IBP) "Guide to Transparency in Public Finances: Looking Beyond the Core Budget"

<sup>&</sup>lt;sup>5</sup> See the Ministry of Finance's (MoF) "General Framework for the Draft of the State Budget FY2019/20.

<sup>&</sup>lt;sup>6</sup> See the MoF Co-Published Brief on State Budget FY 2020/21; Including Spending on Covid-19, Transparency Brief no. 4.

for sub-national government loans, financing in the event of a reversal of private capital flows<sup>4</sup>, and, most importantly, future recurring costs of public investments, often assumed to be a longer-term consequence of public expenditure policies<sup>7</sup> and are therefore not included in the balance sheets. Contingent liabilities are therefore massively critical in tipping the scales of debt should there not exist appropriate provisions. The current guarantees in the 2020/21 budget include external guarantees at 12 percent of GDP<sup>6</sup>, with expected external gross financing needs of 10 percent of GDP for 2021<sup>3</sup>.

#### • Debt dynamics:

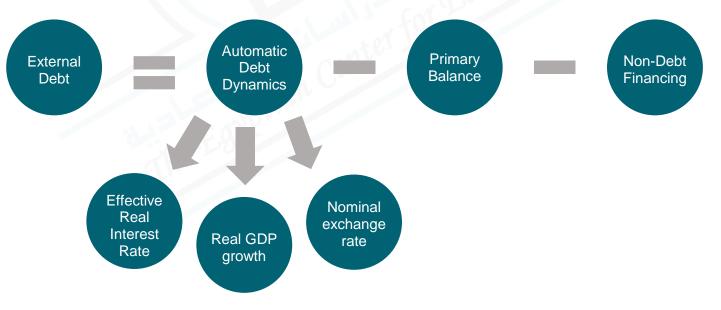
Irrespective of additional, unexpected obligations, a key assessment lies in addressing both the stock and flow of debt. Whereas debt stock provides a snapshot of current circumstances, the interactions between debt components in their flow state make for a deeper analysis of both trend and sustainability. To qualify for external sustainability, debt must be fully serviceable within the short-term and long-term. This is mainly governed by how well the country manages its constraint, which takes the following form:

$$d_t = \phi_t d_{t-1} - (pb_t + \mu_t)$$

<sup>&</sup>lt;sup>7</sup> See Polackova (1999) "Contingent Government Liabilities: A Hidden Fiscal Risk".

Where the present stock of debt is primarily influenced by the debtfinancing components of primary balance and additional non-debt financing, as well as the crucial momentum of previous debt. The built-in component of automatic debt servicing, which ultimately determines the extent of which debt is explosive, is determined by the parameter  $\phi_t$  which takes into account the differential between the real interest rate paid on external debt and the GDP growth rate, mitigated by factors such as the GDP deflator capturing price changes and the exchange rate depicting currency strength. Figure 5 is then simply a visualization of the constraint, focusing on outlining the key variables affecting external debt including:





This then translates the conditions upon which debt is sustainable and potentially declining. For this to occur, two conditions need to be met: (1) the country runs a primary surplus or obtains non-debt financing such as privatization receipts, and (2) that the value of the parameter  $\phi_t$  is less than 1. For condition (1) to occur, a stable market condition both internally and externally where business is uninterrupted beyond the regular cycle movement is needed, and a negative interest rate differential is required for condition (2), where the economy is growing at a pace that enables it to finance the external interest rate obligations. With Covid-19, both domestic and external markets have been disrupted and the concern here lies in Egypt being able to finance growing debt obligations in the face of such uncertainty, given the experienced deficit in external accounts.

#### • Debt types:

The combination of extending the maturities of debt instruments with possible room for deferral seems to be the favored course of action. While this reflects a vote of confidence for the Egyptian economy, an aspect that was evident in Egypt's most recent stable credit rating. there exists certain challenges with debt accumulation. The main challenge stemming from the majority of the debt being of long-term maturity lies in the size of debt servicing accompanying such long-term commitment. While the major segment of debt, is in the form of packages with international and regulatory institutions, there is not a lot of room for rescheduling for other forms of loans, particularly debt in the form of bonds. The MoF is taking positive steps with the introduction of green investments which is both providing relief and room for debt swapping. Egypt has managed to maintain a stable credit rating, which reflects confidence in the Egyptian economy. However, there are certain expenses accrued in meeting "green" standards, particularly since a third party is required to supervise the projects using green funds and the Financial Regulatory Authority (FRA) does not guarantee "greenness" of bonds<sup>8</sup>, which potentially require special compliance expenditure pre and post issuance<sup>9</sup>. Additionally, green bonds can carry their own rating, granted by environmental, social and governance (ESG) rating agencies<sup>10</sup>, that depending on the ESG performance of the project, adds to the borrowing cost, which is more evident in short-term issuances<sup>11</sup>, often in the form of higher interest rates. The commitment might also be risky if the government is in the midst of tightening its budget; promised outcomes may require more spending than what the budget allows for<sup>12</sup>, and it is therefore essential to ensure that it does not come at the cost of other social welfare projects.

<sup>&</sup>lt;sup>8</sup> See the FRA concept paper on green bond guidelines in partnership with the International Financial Corporation (IFC),

https://www.fra.gov.eg/content/efsa\_ar/pool\_extra\_efsa/UG43029UG43030.pdf

<sup>&</sup>lt;sup>9</sup> See Liaw (2020) "Survey of Green Bond Pricing and Investment Performance", Journal of Risk and Financial Management.

<sup>&</sup>lt;sup>10</sup> See the AllianzGI Global Investors report "ESG in Sovereign Bonds" (2017).

<sup>&</sup>lt;sup>11</sup> See Crifo et al. (2015), "Measuring the effect of government ESG performance on sovereign borrowing costs", HAL.

<sup>&</sup>lt;sup>12</sup> See Giugale (2018), "The Pros and Cons of Green Bonds" The World Bank.

#### Changes in financing flows:

Given the main sources of financing, there is no surprise that Egypt relies heavily on the inflow of capital for foreign currency. There are two main concerns within this risk, primarily the flow of capital funds from abroad, as well as the cost of servicing such funds. Behaving as a counterpart to saving and investments, capital flows have a tendency to interconnect with the domestic financial market, amplifying the effects of business cycles within<sup>13</sup>. A result of this impact on the economy, as defined by the World Bank, capital flows affect macroeconomic variables such as inflation, exchange rate and current account positions. When the 'credit' granted exceeds the core of deposits within banks, financial vulnerability is heightened as banks resort to what is dubbed 'noncore' liabilities such as foreign funds. Should a negative shock occur, the structural and institutional weaknesses exacerbate the effects, increasing the uncertainty surrounding investments. Credit recently granted in large amounts also devastates local funding, as international institutions become the preferred source of funding. With little domestic investment, a shock in external financing may occur at any rate, leading to further depletion of reserves as well as the risk of rescheduling with extra costs. As it stands, Egypt has some of the highest interest rates within the

<sup>&</sup>lt;sup>13</sup> This section relies on Claessens and Ghosh (2013) Chapter 3 in the "Dealing with the Challenges of Macro Financial Linkages in Emerging Markets" book published by the World Bank

MENA region, despite the interest rates cut of 350 basis points during 2020. This not only ties up monetary policy in keeping inflow level to fund the debt, but the high rates also remain a barrier to domestic private investment.

#### • Exchange rate shocks:

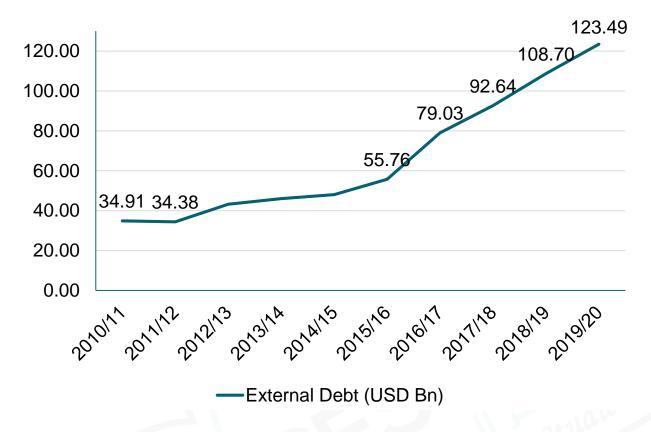
Exchange rate policy should be ideally kept floating and not tied down to debt levels or a currency overvaluation for that matter, limiting policy space. The capital flight risk has a heavy hand in determining exchange rate movements and could lead to an overvaluation adjustment of the exchange rate if the level of outflows is unanticipated and unbuoyed, as demand for foreign currency increases. Since debt dynamics, as displayed in Figure 5, indicate the crucial role exchange rate plays in determining the sustainability of external debt, changes in currency may worsen the debt circumstances, adding to the predetermined debt situation that has already restrained exchange rate policy in the first place. That being said, exchange rate movements in 2020 have been minimal, with a depreciation ranging less than 2 percent. Largely supported by the draw on reserves to manage the depreciation and avoid another 2016 crisis, this additionally triggered the need to obtain emergency funding.

To this effect, we analyze the potential manifestations of these hazards through a detailed analysis of Egypt's external accounts

and debt indicators. Capitalizing on what was done, a thorough examination of the indicators and ratios previously examined in the international positioning to provide a full picture on where the above hazards and misconceptions can emerge. Using the flow of data, trajectories and trends are reinstated to show how an alteration in debt management could drive real change.

## Third: Detailed Analysis of Egypt's Latest External Debt Position

Focusing on the most recent changes taking place during the pandemic, we provide a four-fold analysis of the following: (1) debt dynamics and levels for trajectory and payment capacity analysis, (2) quarterly comparisons for assessing the magnitude of change caused by Covid-19, (3) an evaluation of the debt types and the consequent debt servicing with the attached risks, and (4) projections of debt variables for the near future for trend and sustainability examination.

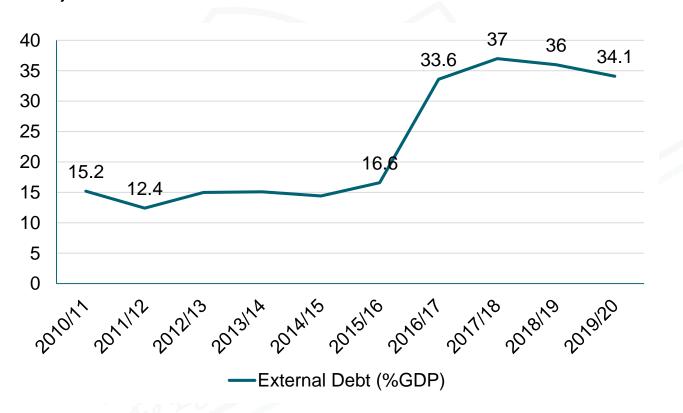


#### Figure 6. External debt levels (USD billion)

Source: CBE, Monthly Bulletins nos.233, 246, 251, 269, 282, 283.

The above Figure 6 is a close up of the evolution of the external debt level over the course of many crises taking place between 2010/11 and 2019/20. The challenge here lies not only in managing the level of debt accumulation to be below the threshold, but also in considering the servicing needed for the short and long terms. The debt level has been steadily increasing, the highest recorded level being in 2019/20, the result of an unanticipated dual shock caused by the pandemic that prompted a rise in foreign financing to cope with the added spending and imbalances. With an upward trajectory going into 2020/21, what is concerning about the rise in debt level is the acceleration in the year on year accumulation;

between 2017/18 and 2019/20, there has been a jump in the debt level of 33 percent. To determine the debt paying capabilities, a thorough analysis of debt is undertaken below with the indicators previously used for Egypt's debt map.



## Figure 7. External debt levels (% gross domestic product i.e.: GDP)

Source: CBE, Monthly Bulletins nos. 233, 246, 251, 269, 282, 283.

The indicator depicted in Figure 7, external debt as a percentage of GDP, serves as a link between debt and the main source of funding, often signaling when a reallocation in resources is needed to boost exports. Nonetheless, while the data depicted may indicate solvency of debt, solvency alone does not mean sustainability. It is underliably the case that due to the emergency fund assistance in 2019/20, there is an increasing accumulation of external debt up to USD 123 billion. Debt to GDP ratio reached as previously anticipated in the ECES Views on Crisis "Servicing Egypt's External Debt" report (report no.8) at 34 percent. Essentially, the debt to GDP level has in fact decreased around 2 percent in 2019/20 from the previous year, an indication of relative solvency, more likely due to the increase in GDP figures. It is therefore crucial to determine both the reason for this decrease- a decrease in debt is not the same as an increase in GDP- and the level at which debt to GDP stabilizes is important, as stabilizing above the benchmark of 30 percent is still potentially risky, particularly for an emerging market economy. An examination of the debt level against export receipts will shed more light on the management of payments in light of the global crisis.

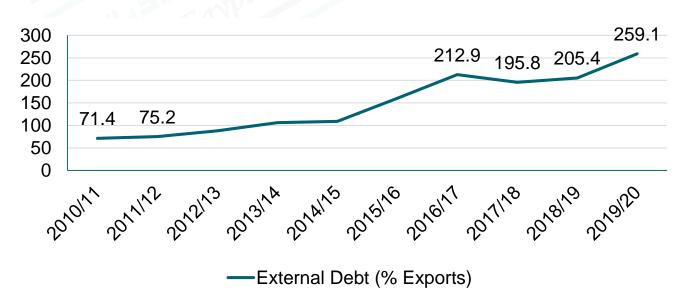


Figure 8. External debt levels (% exports)

Source: CBE, Monthly Bulletin no.251, 269, 283.

On the contrary, when examining the debt to export percentage, a percentage indicating capacity for repayment as previously noted, the level of debt relative to the main source of foreign currency, exports, is past the 200 percent benchmark and has reached its highest level in 2019/20. The rise in percentage during the pandemic year 2019/20, surpassing even the 2016/17 currency crisis, is a reflection of the unique nature of the Covid-19 crisis- the product of both the need for emergency funding, relieving BoP pressures as well as supporting fiscal stimulus mechanisms, and the fall in export revenue due to the subdued global demand for exported goods and services. The result is an upward trajectory that should be carried forward into 2020/21 should current circumstances remain as is. Repayment capacity is an element worth vigorously assessing, as it serves as a postmark for future sustainability of debt. Furthermore, as a short-term safeguard, short term debt must be compared to a standard in order for short term solvency to be achievable.

# Figure 9. Gross international reserves (% short-term external debt)



In this context, a stress test for liquidity is observed when comparing foreign currency reserves to short-term external debt (Figure 9). Seeing as how short-term debt is exhausting to the budget, it is often constructive to assess reserve adequacy with the usage of debt to reserves ratios, especially when it comes to the substantial yet uncertain capital flows financing Egypt has experienced. The ratio has been seen to steadily increase after the 2016/17 devaluation, where reserves were rising to a peak of percent. However, after the need for financing 167.6 to compensate for the loss in foreign currency revenue streams, a depletion of more than USD 5 billion during the second half of 2019/20 left the ratio at least 30 percent less. The trajectory appears to be downward heading for post Covid-19 years, where the portion of the short-term debt reaching maturity increases and reserves are tied to investors' confidence reflected in capital flows.

A presentation of changes in the current external debt position, as well as its severity, in the form of a comparison between last year's figures as well as the quarterly progression of the Covid-19 crisis effects makes for a cogent analysis. Table 3 presents the yearly changes between 2019 and 2020, with quarter on quarter monitoring, depicting the unfolding of the dual shock in supply and demand and the subsequent consequences on the external accounts.

#### Table 3- Quarterly comparison for the pandemic

Time Period	Onset of Covid- 19 Comparison		of Change ge Change		Mid Co Cris Compa	sis	f Change	e Change
Variable	Q1 2019 (January- March)	Q1 2020 (January- March)	Direction o	Percentage	Q2 2019 (April- June)	Q2 2020 (April- June)	Direction of	Percentage Change
Balance of Payments i.e.: BoP (USD Bn)	1.4	-5.5	→	-493%	0.2	-3.5	$\rightarrow$	-1850%
BoP (%GDP)	0.5	-1.5	Ļ	-400%	0.1	-1	↓	-1100%
External debt service (USD Bn)	3.06	6.81	$\rightarrow$	123%	3.09	3.46	$\rightarrow$	12%
Foreign currency gap*	1.64	12.34	1	652%	2.84	6.94	1	144%
Net International Reserves (USD Mn)	44112	40108	$\rightarrow$	-9%	44481	38202	$\leftarrow$	-14%
Net International Reserves in months of imports	8	7.7	→	-4%	8	7.3	→	-9%
Net bank assets (NBA) in foreign currency (1-2)	-12033	-61236	$\leftarrow$	409%	35758	-27116	$\rightarrow$	-176%
Bank assets (EGP Mn) (1)	318475	196659	$\rightarrow$	-38%	309602	267917	$\rightarrow$	-13%
Bank liabilities (EGP Mn) (2)	330508	257895	→	-22%	273844	295033	1	8%
Exchange Rate**	17.56	15.7	↓	-11%	16.96	15.91	↓	-6%

Source: CBE Monthly Bulletin no.282, 283; Ministry of Finance, the Financial Monthly Bulletin for Nov 2020

\*Calculated as the sum of BoP deficit and external debt service.

\*\*3-month average of the monthly averages.

The above table provides a close comparison between the pandemic guarters, Q1 and Q2 2020, and the corresponding quarters in the previous year, Q1 and Q2 2019. An initial look at the directions of change reveals that almost all of the indicators are declining in some form. The effect is more severe during the onset of Covid-19, where the unanticipated dual shock effects were not fully gauged. While there was space for adjustment in the succeeding quarter, though the figures are a great deal different than their 2019 counterparts. The drop is most significant in variables contributing to the foreign currency gap; the deficit in balance of payments has quadrupled early 2020 from at the same time the external sector industries have received a sizeable hit and capital flows have decreased, leading to a large outflow of payments. The resulting gap has risen to around 6 times in Q1 2020 and around 1.5 times in Q2 2020 than in 2019. An increase in this gap is perturbing as without a steady stream of foreign currency, the gap financed by reserves and net foreign assets for banks, will continue to deplete both sources and result in additional financing through loans and packages. Reserves, as can be seen, have been used to finance the emergency deficits arising from external accounts, thereby covering less imports reaching up to 7.3 months from the stable 8-month level experienced in 2019. The sudden global conditions have led to a negative balance in net bank assets in foreign currency, the decrease in assets potentially attributed to valuation changes. That being said, bank assets in Q2 2020 have been catching up to bank liabilities, the gap closing after the substantial difference in Q1 2020. Exchange rate, as previously highlighted, should be monitored closely as it plays into the debt dynamics of external debt, exacerbating the issue of debt accumulation further. Despite the support from foreign currency sources keeping the exchange rate from depreciating further, the quarterly figures reveal an 11 percent depreciation in Q1 2020 from its 2019 counterpart, the figure in Q2 2020 at 6 percent less than Q2 the previous year. Hence, a reassessment of the financing needs emerges, and the weighing of the cost that financing an extra amount of debt, both in dynamics and in servicing, will warrant. Naturally, different types of debt are managed differently, an aspect that is explored in Table 4 below.

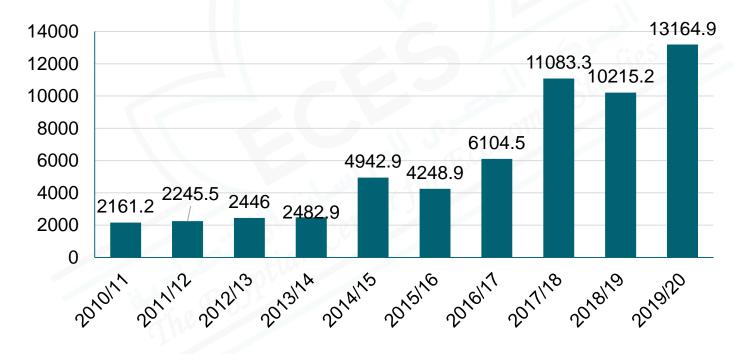
Debt Type (%)	2015/16	2016/17	2017/18	2018/19	2019/20
Rescheduled bilateral loans	9.4	5.4	4.0	2.9	2.0
Other bilateral loans	11.3	8.3	8.3	8.9	8.3
International Institutions (IMF, World Banketc.)	25.3	27.5	30.7	30.2	34.8
Buyers & Suppliers Credit	5.6	8.2	9.1	10.4	9.2
Long-term deposits	29.2	23.5	18.8	3.5	3.2
Bonds	6.3	11.4	15.4	17.8	19.4
Short-term debt	12.6	15.5	13.3	10.2	8.8

Table 4. Debt by type	(% total	debt)	

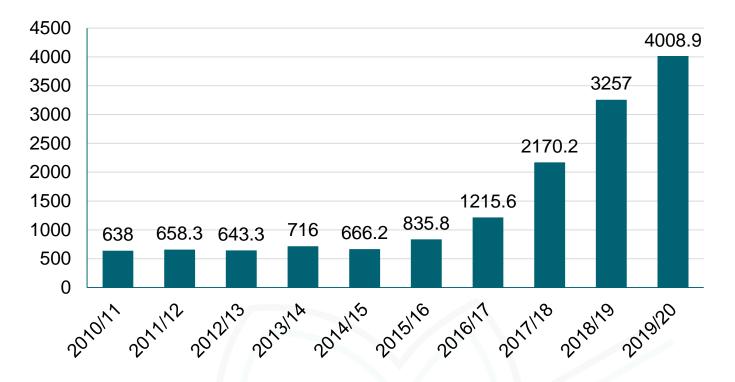
Source: CBE, External Position Reports, various issues.

The types of external debt in Egypt are becoming more diversified, which is favorable. Despite the slight decrease in long-term deposits, the majority of the debt tools used for 2019/20 are long term, and it doesn't go unnoticed that buyers and suppliers facilities has seen a fall, which considering the interest and penalty scheme within this debt tool, is much more advisable, as well as the fall in short-term debt. Since the 2016 floatation, a rise in borrowing from international institutions such as the IMF is evident. Ending with a reasonable increase in 2019/20, this type of debt instrument is preferred to bilateral loans that are subject to a change in terms, and that have seen a decrease for the past year. Another noteworthy increase is in the issuance of bonds, that require investor confidence for extension and makes for 19.4 percent of the 2019/20 loan structure.

The Ministry of Finance (MoF) has been issuing different bond packages since November of 2019/20 with extended maturities surpassing region average, USD 500 million of which in the form of 40-year bonds. Additionally, MoF has announced a USD 750 million valued green bonds at a 5-year maturity and a yield of 5.25 percent, making bonds attractive to a new investor base and advancing the agenda of investing in green bonds within the MENA region. The CBE has also recently extended its repo financing agreements with several international banks for an additional 1.5 years, making for a total period of 6 years. Nevertheless, with long-term obligations, cost must be taken into account, in the form of payments and interest, which is what Figure 10 depicts. Despite postponing USD 6 billion of the USD 13.4 billion of GCC deposits due in 2020, as well as the postponement of debt owed to a syndicate of international banks, Egypt still had to make payments of USD 13.2 billion in principal payments as well as USD 4 billion in interest payments (Figure 10).



#### Figure 10. Debt service (USD million)



Source: CBE, Monthly Bulletins nos. 283, 234. Principal paid in USD million (Top Panel), Interest paid in USD million (Bottom panel);

The amount of principal and interest paid in 2019/20 is nearly 3 times the amounts paid in 2016/17. This is reflecting the increasing burden of debt and the strain placed on external accounts, especially since there was a slowdown in inflows and a trade deficit. Such is a crucial step to consider when restructuring debt-that long-term debt can grant short-term advantages but gradually create unsustainable debt in the future through higher payments. This is taking into account that restructuring is matter of balancing increase in servicing and short-term benefits and is highly dependent on exogenous decisions. Additionally, the level of servicing is known to exhaust the budget further, using a sizeable

proportion in debt payment rather than allowing for an efficient allocation of funds.

There must always be an evaluation of the tradeoff that investments offer-the acquirement of "debt of exchange" may thereby increase foreign currency debt and provide a gateway for increasing interest payments, usually a reflection of risk premium. The country's risk premium as of July 2020 lies at approximately 8.1 percent, a percentage considered relatively high compared to the Middle East regional weighted average of 2.92 percent<sup>14</sup>. This offers up two implications to consider, namely the increase in the marginal cost of debt, which by acquiring more debt, raises the associated interest payments and, more importantly, the rise in risk premium. The increased debt feeds into the feedback channel within the risk premium, essentially tying in the rise in the risk premium to an increase in refinancing costs when it comes to existing debt stock. To further explore the future consequences, Table 5 below provides an appraisal of the most recent projections developed by the IMF in the country report for Egypt post emergency funding, accompanied by an analysis of what the figures mean for Egypt's near future.

<sup>&</sup>lt;sup>14</sup> Based on calculations published as of July 2020 in the following NYU Stern paper: https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3653512

### Table 5. Debt dynamics variables

	Actual							Pote	ential	
	2016	2017	2018	2019	2020		2021	2022	2023	2024
Baseline: External debt	16.8	30.8	37.0	36.0	34.1		33.9	30.8	27.3	24.7
Change in external debt	2.3	14.1	6.2	-1.1	-1.8		-0.2	-3.1	-3.5	-2.5
Identified external debt- creating flows (4+8+9)	3.9	7.4	0.0	-5.3	-4.7		2.0	-1.2	-1.6	-1.9
Current account deficit, excluding interest payments	5.7	5.1	1.5	2.5	2.2		2.8	1.2	1.3	1.3
Deficit in balance of goods and services	9.7	12.3	10.5	8.3	7.6		7.7	5.5	5.6	5.6
Exports	10.5	14.5	18.9	17.5	13.2		9.8	11.1	12.9	13.9
Imports	20.1	26.8	29.4	25.8	20.8		17.4	16.7	18.5	19.5
Net non-debt creating capital inflows (negative)	-2.1	-3.2	-3.1	-2.6	-1.9		-1.4	-2.0	-2.5	-3.0
Automatic debt dynamics	0.2	5.5	1.6	-5.3	-5.0		0.5	-0.4	-0.3	-0.2
Contribution from nominal interest rate	0.3	0.5	0.9	1.1	0.9		1.4	1.4	1.3	1.2
Contribution from real GDP growth	-0.6	-0.9	-1.7	-1.7	-1.1		-0.9	-1.8	-1.6	-1.4
Contribution from price and exchange rate changes	0.6	5.9	2.4	-4.7	-4.8		-	-	-	-
Residual, incl. change in gross foreign assets (2-3)	-1.6	6.7	6.2	4.3	2.9		-2.2	-1.9	-2.0	-0.6

External debt- to-exports ratio (in percent)	160.3	212.9	195.8	205.4	259.1	346.6	276.7	211.3	178.0
Gross external financing need (in billions of US dollars)	25.2	24.0	20.5	25.7	24.9	31.9	29.7	29.7	31.5
in percent of GDP	7.6	9.4	8.2	8.5	6.9	8.1	7.1	6.6	6.5

Source: IMF, Country Report no. 20/271.

Calculations are in percent GDP, unless indicated otherwise

Observing the debt dynamics in Table 5, there is evidence of a decreasing primary balance deficit (defined as the current account deficit less interest payments) for 2020; however, the deficit is expected to increase for 2021 in the aftermath of the pandemic crisis. While automatic debt dynamics as a figure remains below 1, the figure is expected to rise in 2023. What is of concern within this parameter is the gap between the nominal interest rate and the contributions from the real GDP growth, as the gap is seemingly widening during the initial year's post-pandemic. The gap between exports and imports is also evident which, despite the depreciation in both supply and demand during the pandemic period, imports remain higher. This once again reinforces the idea that debt is not an isolated case- it is entirely tied to the economy's performance and should involve key players in all sectors providing growth and investment opportunities. Policy action is required to then increase export value added and by association, foreign currency inflows to

repay the equally increasing external debt to exports ratio, fueled by price and exchange rate changes.

Consequently, the estimation of the financing gap projected by the IMF remains at USD 24.9 billion and USD 31.9 billion for the years 2020-2021. The gap is funded mainly by exports, portfolio investments, and remittances, all of which are used to fill the reserves amount. This leaves the external debt financing vulnerable to external conditions, as the level of reserves is highly dependent on carry trade flows from non-residents that, despite the high interest rate, have significantly slowed down since the onset of Covid-19. Additionally, the level of non-debt creating flows, next to the projected primary balance deficit, is still providing a small buffer against the automatic debt dynamics that could stand to be increased.

To conclude, debt is a fiscal tool that is widely accepted as long as it is channeled to support the high performance of the economy and is serviceable on the short and long run. Adopting this perspective, the report aims to highlight the misconceptions often associated with debt, which, if taken into account, could aid Egypt in promoting a healthier track of debt management i.e.: that is not treated in isolation of the economy and that improves performance.

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Benchmarking Egypt to a number of selected countries in terms of debt mechanisms and a few of the many indicators of growth performance provided support of such a track of analysis of the debt situation. Among the misconceptions related to debt, there are several improvements that can be undertaken in the case of Egypt in the following areas: (1) adoption of a wider definition of debt, (2) management of debt as part of the economy and as a tool to achieve economic growth as opposed to simply financing the existing debt, (3) the continuous benchmarking of Egypt to high performing countries in the context of both debt and economic performance as this reflects how the debt is put into use and it is often the case, as previously seen, that a country with a low level of debt can also have a low level of growth and productivity, (4) expanding the list of contingent liabilities covered, and (5) balancing a variety of debt types and structure in terms of present and future costs and benefits.

### Appendix

Year	2015	2016	2017	2018	2019	Percentage change (2015-2019)
Brazil	1768	1758	2024	1832	1791	1.3
China	11020	11188	12301	13844	14308	29.8
Egypt	327	328	231	245	292	-10.6
India	2079	2248	2624	2684	2844	36.8
Morocco	99	101	108	115	116	17.3
South Africa	310	288	339	357	342	10.3
Turkey	850	855	842	759	742	-12.7

#### Table A1. Gross National Income i.e.: GNI (Current USD billion)

Source: The World Bank Group, International Debt Statistics 2021 report.

**Table A1-**GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in current USD billion;

#### Table A2. Total Exports (USD billion)

	Total Exports												
Year	Brazil	South Africa	Turkey										
2015	191.1	2273.5	21.9	264.4	22.3	80.3	143.9						
2016	185.2	2097.6	23.0	260.3	22.9	75.9	142.5						
2017	217.7	2263.4	26.4	294.4	25.6	88.2	157.0						
2018	239.9	2494.2	29.5	322.5	29.4	93.7	168.0						
2019	225.4	2498.6	30.6	323.3	29.3	89.4	180.8						

Source: UN Comtrade database.

Table A2- Total HS2002 (i.e.: HS level 2) exports in USD billion

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