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Debt Sustainability and Debt Management in the Arab Region

United Nations

Beirut

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Abbreviations

API	Arab Planning Institute
CDS	Credit Default Swap
DMS	Debt Management Strategy
DMO	Debt Management Office
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
ESCWA	Economic and Social Commission for Western Asia
GDP	Gross Domestic Product
IBP	International Budget Partnership
IDA	International Development Association
IFC	International Finance Corporation
IFI	International Financial Institution
IMF	International Monetary Fund
INTOSAI	International Organization of Supreme Audit Institutions
IRGD	Interest Rate Growth Differential
LICs	Low-Income Countries
MACs	Market Access Countries
MDB	Multilateral Development Bank
MENA	Middle East and North Africa
NIRP	Negative Interest Rate Policy
OBI	Open Budget Index
OECD	Organization for Economic Co-operation and Development
REER	Real Effective Exchange Rate
PPG	Public and Publicly Guaranteed
SDGs	Sustainable Development Goals
SME	Small Medium Enterprise
SOE	State-Owned Enterprise
US	United States
UNCTAD	United Nations Conference on Trade and Development
WB	World Bank
WEO	World Economic Outlook
ZIRP	Zero Interest Rate Policy

Introduction

The COVID-19 pandemic marked an important shift in public debt sustainability. The situation, though, is significantly different between Advanced and Developing countries.

Advanced economies have benefited from the extremely accommodating monetary policies, such as Zero interest Rate Policy (ZIRP) and, Negative Interest Rate Policy (NIRP) which allowed low-cost financing at a near-zero or even negative rate on the capital market; a comfortable position to finance recovery plans and mitigate the collateral damage of the COVID-19 pandemic shock. Consequently, the debt sustainability issue is not on the agenda for these countries.

Developing economies found themselves in a difficult situation. The specter of debt unsustainability hangs over the developing world. Thus, a distressed debt situation characterizes several developing countries, which is more pronounced in low-income countries (LICs). Many Market Access Countries (MACs) live under the threat of a further rating downgrade and/or an event of default of payment.

The Arab region is one of the most highly indebted regions in the world. The public debt average in Algeria, Bahrain, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Oman, Palestine, Sudan and Tunisia reached 98.8% of GDP in 2020 compared to an average of 55.2% of GDP in MENA region and 77.4% of GDP in Latin America and Caribbean region.

Many Arab countries encountered difficulties to raise the capital needed for their economies, given several reasons, including but not limited to the drying up of external financing sources, donor restrictions due to the slow progress in structural reforms, debt unsustainability, inflationary risks, and crowding out effect for domestic financing, among others. This situation has been exacerbated since March 2020 by the impact of the COVID-19 pandemic. Many countries in the region further increased their sovereign debt throughout the pandemic in order to reduce the social and economic risks of the crisis.[1] And more recently, since February 2022, the situation has been aggravated by soaring energy and food prices in the aftermath of the outbreak of Russian-Ukrainian crisis.

The slow pace of economic reforms is crippling growth in the Arab region, making them progress at a very low level. Due to this anemic growth profile at the domestic level, and the monetary tightening cycle, witnessed on the global stage, many Arab countries which are most vulnerable to external shocks are constantly threatened by debt unsustainability.

A unidimensional view of debt sustainability that only focuses on the economic aspects in a totally hostile environment (i.e., political instability, social downgrading, climate change, and a sharp rise in prices of food products, …) is far from reassuring.

In a region such as the Arab region, where several countries remain threatened by severe water shortage, poverty, failure at school, draught, and the constant food crises, such an approach would not have been sustainable in the long term. Because the weight of the debt service will end up blocking the reforms carried out on the environment and strangling social expenditures. Subsequently, this would result in a sharp deterioration in the quality of life, a further widening of social and regional inequalities, and a rise in social downgrading. In short, social expenditures are constantly being the adjustment variable for successful consolidation of public finances which creates a context quite favorable for social instability and political turmoil.

In light of these existing challenges and settings, this paper seeks to answer the following questions: Are the structural economic reforms' implementation pace and the public debt management quality sufficiently reassuring to ward off the spectre of debt unsustainability in the Arab region?

[11] Karaki and Medinilla, 2022

Can we achieve the objective of debt sustainability, which is resilient to extra-economic shocks, even when Debt Sustainability Analysis (DSA) and Debt Management Strategies (DMS) remain limited to a simple economic approach?
How can we better embed the SDGs in the debt management strategies and planning to avoid a situation whereby social expenditures are being sacrificed on the altar of the dominant debt sustainability approach that emphasizes an exclusively economic focus?

This paper is organized as follows: Section 2 presents the conceptual framework of debt sustainability analysis and its overall strengths and weaknesses. Section 3 analyses the situation of the public debt in the Arab region in order to draw the key drivers of debt sustainability. Section 4 identifies some useful overall lessons for the Arab region. Section 5 presents some recommendations for policymakers.

Debt Sustainability Framework

"In general terms, public debt can be regarded as sustainable when the primary balance needed to at least stabilize debt under both the baseline and realistic shock scenarios is economically and politically feasible, such that the level of debt is consistent with an acceptably low rollover risk and with preserving potential growth at a satisfactory level".[2]

The notion of debt sustainability generally refers to the fact that debt service must be guaranteed at all times. Public debt sustainability is linked to two concepts: solvency and liquidity. A country is considered solvent if the present value of its current and future primary expenditure (excluding interest payments) does not exceed the present value of current and future income. A country is considered liquid if its liquid assets and available funding are sufficient to cover maturing liabilities. Essentially, liquidity issues pose the greatest risk to debt sustainability. However, it is important to note that in the case of low-income countries that have limited access to capital markets but high debt ratios due to their concessional borrowing from official creditors, the risk of liquidity is lower than the risk of insolvency.
The notion of sustainability highlights the social and political limits to the adjustment of expenditure and revenue necessary to strengthen the economic capacity of a country to pay its debts and preserve its sovereignty.
The sustainability analysis is conducted as part of a DSA exercise.

Debt Sustainability: IMF-WB analysis

The IMF has designed a practical model reporting public and external debt and sustainability analyses since 2002; the DSA exercise is then part of the IMF surveillance mission. This analytical framework, revised in 2003, 2005 and 2011-2013, is automatically incorporated into the reports of the Article IV consultations[3].

This framework provides greater consistency and transparency to sustainability analysis aiming to strengthen both the basis for economic policy advice and the design of individual country programs with the IMF. The objective of the exercise is to assess the risks that could negatively impact the medium-term debt trajectory and to propose the economic reforms necessary to guarantee medium-term sustainability.

[2] IMF, 2013a
[3] Ibid.

Box 1. Vulnerability Indicators

"Vulnerability Indicators measure the risk that current economic conditions generate over public debt."

1. Public debt to GDP

"Solvency indicator of public sector; can be defined for total debt or for external debt"

The best known and most common indicator is the debt-to-GDP ratio. It is calculated by dividing the total public debt outstanding by the country's GDP at a given moment. It provides information on the level of indebtedness in relation to the country's economic activity, on the assumption that all GDP resources are devoted to financing debt charges, which is not always the case. However, this indicator is given as the most useful and simple to measure the degree of indebtedness, highlighting the solvency capacity of the government.

2. Debt service to total revenue

"Hybrid indicator of solvency and liquidity concerns"

The public debt service to total revenue ratio is a fluent indicator of the repayment ability of a government through its domestic resources. Where public debt is over-present in an economy (as in many low-income countries), the public debt service (including government guarantees toward SOE's) divided by total revenues could also a way to predict the potential public sector vulnerability.

3. Short-term external debt over total term external debt

"In combination with leverage, indicator of vulnerability to temporary cutoff from financing"

Having lower short-term external debt ratio is an indicator of less external debt maturity. This vulnerability shows how much external financing relies on long-term loans and how much the economy is over-debted.

4. Multilateral external debt over total term external debt

"Indicator of confidence of official creditors"

Having higher multilateral external debt ratio is an indicator of better external financing mobilization. This ratio shows how much an economy could benefit from official creditors financing especially concessional loans.

Source: IMF, 2003.

Box 2. Sustainability Indicators

"Sustainability Indicators evaluate the government's ability to face upcoming contingencies considering certain expected circumstances."

1. **Short-term primary gap Indicator**

"The primary gap indicator provides the primary balance level needed to stabilize debt as a proportion of the GDP"

If the permanent primary balance exceeds the current primary balance, the primary path is positive. This means that the fiscal policy is not sustainable; because it tends to increase the debt-to-GDP ratio. On the contrary, when the permanent primary balance is lower than the current primary balance, the fiscal policy tends to reduce the debt to GDP ratio.

2. **Macro-adjusted primary deficit**

"This indicator is motivated by the high volatility of macroeconomic variables which makes the deficit vary around the expected value under normal macroeconomic conditions"

It is used to compare the macro-adjusted balance with the estimations of the current values. The challenge lies within the necessity to establish what a "normal economy condition". Where is the real interest rate for the analysis, g represents the analyzed year's real growth, and dMt is the primary macro adjusted balance.

3. **Sustainable fiscal position Indicator**

"A complement to the analysis on traditional sustainability indicators using a methodology that explicitly evaluates the tax authority reaction when variables, linked to sustainability of debt, change over time"

The sustainable fiscal position indicator explicitly adds a reaction function of fiscal authority, and whose variation over time allows evaluating how the fiscal policy has reacted whenever the conditions have changed. The reaction function of the fiscal authority is defined as the ratio between the primary effective balance gap and the primary sustainable balance (or goal) as well as in the debt to GDP ratio.

Statistically, it may be complementary to the indicators already discussed, and explains how income and expenditure policies (which define the primary balance) are pointed to create a convergence of the debt-to-GDP ratio, to an ex-ante sustainable (goal). On the other hand, dynamically, this ratio indicates how the tax authority has reacted from year to year (through innovations on its fiscal policies), while facing variations in the existing gap between the indebtedness level and sustainable level.

4. **Currency availability Indicators**

"This indicator assumes that volatility of capital flows variables is higher than that of macroeconomic variables"

It compares the external debt-to-internal debt ratio with the proportion of tradable goods related to the non-tradable goods in economy.

In concrete terms, the DSA assessment consists of comparing the trajectory of debt indicators (Box 1, Box 2) according to a reference scenario with a series of sensitivity tests in order to assess the country's vulnerability to shocks. The objective is to:

- Assess the current debt situation: the outstanding debt, the structure of maturities, the breakdown of interest rates, etc.
- Show points of weakness in the policy framework of debt structure so that necessary corrective action can be taken before payment difficulties occur.
- Examine the effects of various debt stabilization measures.

The DSA exercise is composed of two major parts:

- An analysis of the current debt situation and its projection according to a reference scenario, based on macroeconomic projections that reflect the policies that the government intends to apply as well as the main parameters and underlying assumptions.
- A resilience analysis through operating a panoply of stress tests on the basis of a reference scenario, which establishes an upper probability threshold for the shape of the debt trajectory under a series of hypotheses around the macroeconomic environment, the political variables, and the financing charges.

Furthermore, it is important to note that the DSA results should not be interpreted mechanically or rigidly; indeed, the DSA exercise should take into consideration the specificities of the countries, in this case, the capacity to implement the reforms, the availability of a fiscal space, etc.

In 2005, the IMF and the World Bank adopted a joint low-income country debt sustainability framework DSA-LICs. This standardized debt sustainability analysis methodology has been reviewed several times, particularly in 2012 and 2017, with a view to ensuring greater relevance and effectiveness.[4]

The sustainability analysis framework is also called upon to develop the conditions requested by the IMF and to unquestionably inform an alleviation of the debt burden in the operations proposed to restructure the debt under the IMF program.

The DSA-LICs is comprised of an external debt sustainability analysis and a public debt sustainability analysis. The external DSA concerns the external debt contracted or guaranteed by the State (DECGE), as the external debt with its both public and private sides. The public DSA concerns the DECGE (external public debt) and the internal public debt[5].

Furthermore, it is important to note that the external sustainability analysis is crucial in the DSA-LICs exercise. The DECGE is considered the main component of debt for many low-income countries. Indeed, the debt in many low-income countries is mainly dominated by the DECGE. The DSA-LICs makes it possible to analyse the DECGE and to assess the risk of external over-indebtedness.

Vulnerabilities related to domestic public debt and private external debt are also important factors in the analysis of the overall risk of over-indebtedness.

In addition, it is important to note that the DSA and the DSA exercise conducted by the IMF staff are prepared on the basis of a reference scenario and tests that assess the impact of shocks on the debt. The fact remains that the DSA integrates more into its approach the budgetary aspect (through debt service) and the external aspect (through exports) in the assessment of alternative scenarios. These are operationalized through "Bound Tests" for shocks other than major shocks, and "Tailored Tests" to assess major shocks in more detail than in the DSA exercise (natural disaster, soaring prices of bases, etc.)

To help countries, in particular LICs and emerging countries, in developing their debt strategies and debt management, the World Bank and the IMF adopted in 2007 the Medium-Term Debt Management Strategy (MTDS) framework. This methodological framework is supported by targeted technical assistance for capacity building in debt management.

The MTDS Framework provides a structured and consistent approach to designing and implementing a debt management strategy by enabling governments to assess the cost and risk options to which they may be exposed. Indeed, the adoption and implementation of the MTDS helps the authorities to properly manage risk exposures, reduce macro-financial pressures, strengthen fiscal policy, and support the development of the government securities market.[6]

[4] IMF, 2018
[5] IMF, 2014a
[6] IMF, 2017

The MTDS covers (i) objectives and scope of the debt management strategy, (ii) characteristics of the existing debt portfolio and identification of risks, (iii) potential sources of domestic and external financing as well as the macroeconomic framework and (iv) basic price assumptions and shock scenarios.
Currently, 69 countries have MTDS including Egypt which published its MTDS for the period 2021-2024 in 2020.

Stress test for country vulnerabilities

Sensitivity tests are used to analyze and assess a country's vulnerability to a shock. This vulnerability is estimated by comparing the debt trajectory in the baseline scenario with the results of these tests[7] (Box 3).
It should be noted that these tests are a reference scenario based on macroeconomic projections underpinned by public policies and development programs.
These sensitivity tests (also known as Standardized Stress Tests or Tailored Stress Tests) are applied to estimate the positioning in relation to a probabilistic upper limit, according to a set of assumptions relating to macroeconomic variables and the cost of financing.

Box 3. Stress Tests and Heat Map

To test the sensitivity of preserving public debt sustainability, staff initially assess the response of public debt (relative to the 70 percent of GDP threshold), public financing needs (relative to 15 % of GDP) and the debt profile, according to a baseline trend scenario, to certain specific shocks:

1. Low sustainable growth
2. A budgetary shock at the level of the primary deficit
3. A high real interest rate
4. A depreciation of the real exchange rate
5. A major security shock

The evolution of debt indicators according to the reference scenario and in the resilience tests makes it possible to draw up a "heat map" of the country's risk in terms of unsustainability.

Source: IMF, 2013

These sensitivity tests constitute the contribution of the DSA exercise. The selection of shocks and the corresponding limit thresholds, based on the periods and contexts of analysis, was fed by the statistical evolution of the tests used, which enriched the reading of the heat map.
The alternative adverse shock scenarios represent a reasonable selection for such sensitivity analysis. The results of these tests reflect the impact of one or more shocks on the main budgetary and macroeconomic variables. It is important to note that the measurement of the magnitude of these shocks is often standard and is independent from the specific characteristics of each country.
These scenarios make it possible to reflect the actual perceived risks at any given moment. However, empirical volatilities are also considered important and can be calculated as part of the stochastic DSA (VAR model). These scenarios are designed as country-specific shocks, but they follow a harmonized methodological approach. The shocks propagate to the debt following the endogenous interrelations of the model.

DSA-LICs vs DSA-MACs

The Joint IMF-World Bank DSA-LICs is a standardized debt sustainability analysis methodology.

[7] IMF, 2013a

The specificity of the DSA-LICs exercise lies in the fact that it considers the characteristics of LICs economies by incorporating three key elements: (i) the concessionality of the debt, which is generally characterized by the application of low interest rates and the existence of grace periods and long maturities (ii) a long-term projection horizon of generally 20 years, which makes it possible to take into account the long concessional loans' maturity as well as the long-term return on investments and (iii) the incorporation of an assessment of the external debt distress risk based on the DECGE's analysis, given the importance of the latter in a large number of LICs.[8](World Bank-IMF, 2018).

The IMF and the World Bank rely on the DSA-LICs to make policy recommendations. Donors use the results of the DSA-LICs as an information guide in granting loans and grants. Finally, borrowers consider the results of the DSA-LICs in the development of medium-term debt management strategies.

The DSA-LICs is based on a macroeconomic framework containing forecasts of key interrelated economic variables covering the different sectors of the economy. The evolution of these variables is often referred to as the "reference scenario" or "base scenario".

The relevance of the DSA-LICs exercise depends on the reliability of the underlying macroeconomic framework. If the projections and assumptions are realistic and consistent with national policy guidelines, then the debt sustainability assessment is considered reasonably reliable.

DSA-LICs are typically jointly prepared by IMF and WB staff at least once a year as part of an IMF Executive Board document, like a report produced for consultations under Article IV for a program request, for a program review, or as part of an IDA Board document.

A new DSA-LICs could be required in special cases such as a request for financing from a member country to access an exceptional recourse to IMF resources. IMF would bring the total level of access to 80% of the quota, a request from a country exposed to a high risk of over-indebtedness or already in a situation of over-indebtedness, etc. Also, a new DSA-LICs could be required in the case of a waiver request for non-observance of a performance criterion relating to the debt ceiling under a support program led by IMF. Another special situation that may lead to the request for a new DSA, for countries subject to the IDA policy of non-concessional borrowing, is when a demand for non-concessional borrowing exceeds the most recent levels assessed in the DSA.

For countries that have access to the international financial market and aiming for improving consistency and rigor in the analysis of debt sustainability, the IMF is developing a DSA-MAC exercise for the assessment of the sensitivity of the trajectory of the debt compared to crisis scenarios for a horizon of 5 years. The main aggregates used for the DSA analysis are growth, inflation, and the primary balance.[9]

The MAC-DSA had undergone some revisions like the ones in 2003 and 2005 that aimed to make some improvements and later in 2011-2013, in an attempt to provide responses to the emergent events revealed during the global financial crisis and the European crises of sovereign debt. The main reforms introduced in 2013 included the following:

- requirement to conduct at least one DSA exercise for countries that are part of the IMF programs and an exercise as per Article IV cycle for non-program countries,
- Adoption of risk-based approach by distinguishing between high-risk and low-risk countries in the analysis of debt vulnerabilities,
- Introduction of new elements in the model: (i) a detailed analysis of the assumptions and baseline projections in relation to the context and downside factors, (ii) a heat map reflecting the risks of sustainability and (iii) fan-chart debt revealing the full distribution of risks around the scenario of reference. The model is based on fan-charts calculated on the basis of symmetrical shocks.

[8] IMF, 2018

[9] IMF, 2013a

In January 2021, the IMF presented a guidance note for a new debt sustainability analysis framework for countries with market access or with sovereign risk and assessments risk based framework of sustainability at three horizons[10]:

- Short term by evaluating sovereign stress.
- Medium term by focusing the analysis on the assessment of the prospects for stabilization of the debt, the risks of refinancing and the stress tests focused on specific risks (price of raw materials, banking stress, natural disaster, etc.).
- Long term with analysis.

This new analytical framework aims to (i) improve soundness of sovereign risk analysis thanks to a broader coverage of debt and a longer projection horizon, (ii) develop the ability to predict sovereign risks with tools that take into account the structural characteristics and specificities of countries and (iii) improve transparency in the exercise of judgment and assessment.

The adoption of this new DSA-MAC framework with an approach based on risk by including the liabilities of the central bank and/or the contingent liabilities of public enterprises in the scope of the debt is likely to support risk analysis and sovereign stress.

Debt Sustainability Analysis: Strengths

The debt sustainability exercise allows for broader and more consistent debt coverage with medium and long-term projection horizons. The main strengths of this exercise are[11]:

- The enrichment of the analytical work of the IMF and the World Bank to improve the recommendations of these institutions and to help with the borrowing decision for LICs, etc.
- The standardization and uniformity of the analysis to promote comparisons between countries and over time. This is supported by the regularity of reviews and examinations.
- The transparency in the methodology and evaluations of results.
- The construction of early warning indicators for both the country and its financial partners. The DSA exercise makes it possible to predict in advance and with precision the sovereign risk in the event of a shock.

In addition, it is important to note that as much as it is important to guarantee transparency and to communicate the results of the potential risk, it is also necessary to be concerned about the sensitivity of the markets, particularly in relation to the perception of sovereign risk.

Debt Sustainability Analysis: Weaknesses

The sustainability exercise is a general analytical framework that cannot cover all the specific aspects of the different countries, especially those with low incomes. Indeed, the results of the sustainability analysis should not be interpreted mechanically or rigidly. These results should only be assessed after studying the relevant characteristics of the country under consideration, in particular in terms of policy implementation and the room for maneuver available to it. The main areas to improve this sustainability exercise are[12]:

- The consideration of aspects related to human development in the analysis of sustainability. The priority given to social spending to improve the resilience of vulnerable people in the face of justified shocks is likely to accelerate thinking in this direction.

[10] IMF, 2021a
[11] IMF, 2013a
[12] IMF, 2013a

- The development of analysis of the interrelationship between debt sustainability and social peace. The threats looming in terms of budgetary austerity and its impact on social development explain the need to integrate this component into the sustainability analysis.
- The need to integrate the demographic dimension into the sustainability analysis, particularly for low-income countries. Indeed, it is desirable to construct average ratios per head in order to make comparisons and refine the analysis.
- The need to move away from marginalizing the achievement of the SDGs
- The development of a specific exercise for the analysis of budgetary sustainability (Box 4).

Box 4. Fiscal sustainability analysis, public debt sustainability and fiscal space

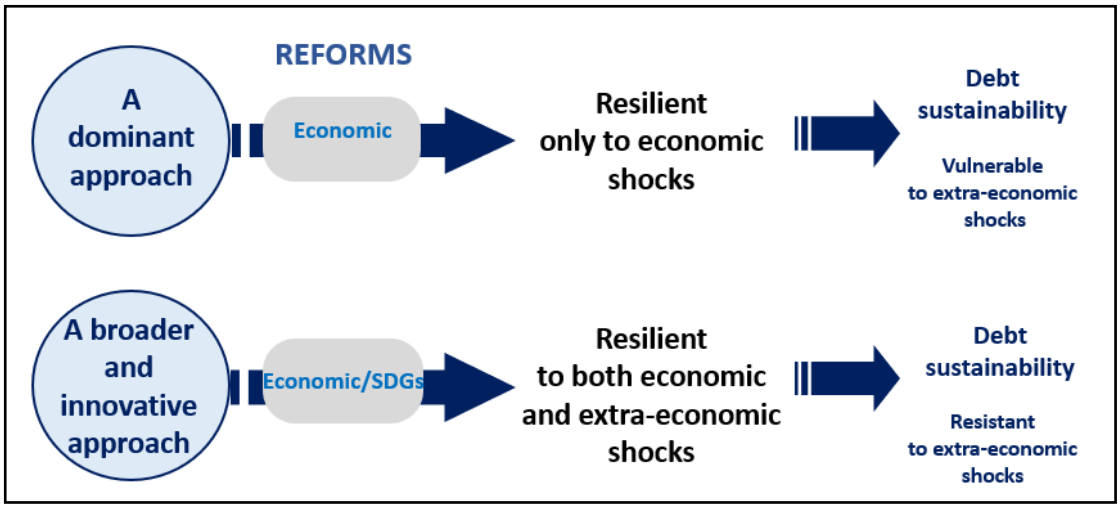
- The availability of sufficient fiscal space promotes the deployment of fiscal resources needed to stimulate economic activity. The impact in terms of public debt sustainability (i.e., the State's ability to ensure the repayment of debt service) and the promotion of growth is undeniable.
- Furthermore, the availability of fiscal space is dependent on three elements: (i) the composition of the budget, (ii) the public and private debt and (iii) market perception of sovereign risk.
- The measure of fiscal space refers to the government's long-term ability to finance its obligations primarily through the cyclically adjusted balance (defined as the difference between cyclically adjusted revenue and cyclically adjusted expenditure).
- Other indicators make it possible to measure fiscal space, in particular fiscal sustainability gaps, which assess the pressures that could result from the accumulation of budget deficits that risk becoming unsustainable stocks of debt. These deviation indicators help in formulating the adjustments deemed necessary to achieve debt objectives.

Source: World Bank, 2017.

- The revision of debt thresholds addressing socio-economic developments and the specificities of each country.
- The development of stress tests which are too mechanistic and standardized: Stress tests are based on the impact of shocks on certain variables in an isolated manner (growth, interest rates, etc.) without accounting for the correlation between shocks and policy responses reflected by changes in other variables.
- The development of an analytical framework to estimate the development impact of debt-financed investments (i.e., the future revenues that public investment can generate) on debt sustainability.
- Highlighting the dynamic interactions between key macroeconomic variables in a context specific to each individual country.
- Development of a coherent quantitative macroeconomic framework that estimates the effects of borrowing on growth.
- Importance of entrusting the development and analysis of sustainability to an independent institution to avoid conflict of interest where the lender is responsible for analyses and advice on sustainability.
- The development of the analysis relating to the aspects of liquidity and solvency, although the risk of lack of liquidity is predominant for low-income countries.
- The broadening of the scope of analysis to guarantee grants by governments for the benefit of SOEs in difficulty in order to access the necessary external funding.
- The analysis of debt sustainability should take into consideration structural vulnerabilities and institutions' quality. Several factors could affect a country's risk of debt distress and should be taken into account when determining the debt threshold.

A considerable effort of modernization and sophistication has marked the history of the DSA. Despite the recent opening to include the environmental dimension, the framework of the DSA remains limited to a simple economic approach. The dominant model of the DSA makes it possible to achieve the objectives of debt sustainability, however, a sustainability that will show signs of resilience only for economic shocks.[13]
Debt sustainability is, above all, a question of the capacity to undertake in-depth reforms (structural reforms and effectiveness of public debt management).
We could identify two different approaches (Box 5).

Box 5. Debt sustainability: A dominant approach vs A broader and innovative approach



The first approach **is the dominant approach**. It concerns the issue of debt sustainability from a purely economic angle neglecting the SDGs dimension. The implementation of reforms strengthens the resilience only to macroeconomic shocks and leads to debt sustainability which remains fragile to the threats of extra-economic shocks (e.g., climate change, health crisis, food crisis, social crisis, etc.).
The second approach **is broader and more innovative,** where the implementation of reforms will lead to an economy that is resilient to both economic and extra-economic shocks. This would make it possible to reconnect with a debt sustainability which is resistant to extra-economic shocks.
This is to say that, in conclusion, it is more difficult to achieve debt sustainability which is resilient to extra-economic shocks when Debt sustainability analysis (DSA) and Debt management strategies (DMS) remain limited to a simple economic approach.
However, IMF DSA has not yet started to integrate either nature risks or the SDGs. By avoiding nature risks "the IMF's DSAs miss significant economic and financial risk" (Kraemer and Volz, 2022). And by missing SDGs, the IMF marginalizes another aspect of economic resilience since it evades the economic and financial fallout from certain austerity measures generating social and political instability. In all, by avoiding these dimensions, the IMF underestimates the systemic implications of these risks on the major economic and financial balances.
Climate change risks complicate the equation of public debt management and sustainability, in the Arab region, a region heavily threatened by ecological deregulation (drought, water stress, ...). These hazards directly impact economic resilience through the weakness of the growth path and the additional external financing needs given the considerable widening of the current account and fiscal deficits. In particular, the lack of cereal harvests, for example in Egypt, Soudan, and Tunisia, not only weighs on the economic fundamentals, but also threatens the food security of their populations and social and political stability. As climate change takes hold from year to year, the introduction of a consistent approach to integrating nature and biodiversity risks into DSA

[13] IMF, 2021a

exercise[14] , sovereign credit rating[15] and debt relief linked to SDGs[16] seems increasingly essential in order to build a cleaner greener public finance in Arab region.

Public debt in the Arab Region: *Evolution and keys drivers*

Debt sustainability has now become a topical issue, particularly following the succession of shocks that have revealed the fragility of macro-fiscal situations in many countries.

The health crisis complicated this situation and affected the debt trajectory in several Arab countries including Algeria, Bahrain, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Oman, Palestine, Sudan and Tunisia.

In order to discuss debt sustainability and check eventual links with fiscal sustainability, Arab countries are classified in three groups with reference to two assumptions (Table 1):

- 70% of GDP is the standard common level of public debt ratio used by DSA IMF analysis.
- 90% of GDP is the level of debt ratio from which a country is considered facing a high risk of unsustainability.

Indeed, according to 2020 debt data, these 3 groups are composed of:

- Public debt under 70% of GDP: Algeria, Mauritania, Palestine.
- Public debt between 70% and 90% of GDP: Egypt, Iraq, Jordan, Morocco, Oman, Tunisia.
- Public debt more than 90% of GDP: Bahrain, Lebanon, Sudan.

Table 1. Select debt indicators

	2010	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***	***2017***	***2018***	***2019***	***2020***
Public debt to GDP Ratios											
Countries with public debt under 70% of GDP	25,7	24,8	26,2	26,0	30,0	34,9	36,0	38,1	44,2	46,3	52,6
Countries with public debt between 70% and 90% of GDP	46,1	46,1	48,0	50,9	52,1	59,7	66,4	70,0	68,9	68,3	82,1
Countries with public debt more than 90% of GDP	76,3	75,9	81,7	85,3	83,5	91,2	95,4	132,3	145,5	159,8	178,4
All Arab Region	48,6	48,2	51,0	53,3	54,4	61,4	66,0	77,6	81,9	85,7	98,8
Debt service to total revenue Ratios											
Countries with public debt under 70% of GDP	16,1	6,4	7,0	10,9	13,2	13,5	13,3	28,6	23,4	20,8	21,2
Countries with public debt between 70% and 90% of GDP	33,8	33,2	53,8	53,3	61,3	71,1	69,0	47,8	45,4	54,5	61,0
Countries with public debt more than 90% of GDP				177,7	159,1	188,6	120,1	118,8	100,0	90,0	93,2
All Arab Region	28,8	25,5	40,4	58,3	61,5	71,3	68,1	58,1	51,9	54,9	59,5

Source: IMF, 2022b; and countries respective IMF Article IV.

[14]Kraemer and Volz, 2022.

[15] Agarwala et al., 2022

[16] ESCWA, 2021a; Essers et al., 2022; Karaki and Medinilla, 2022

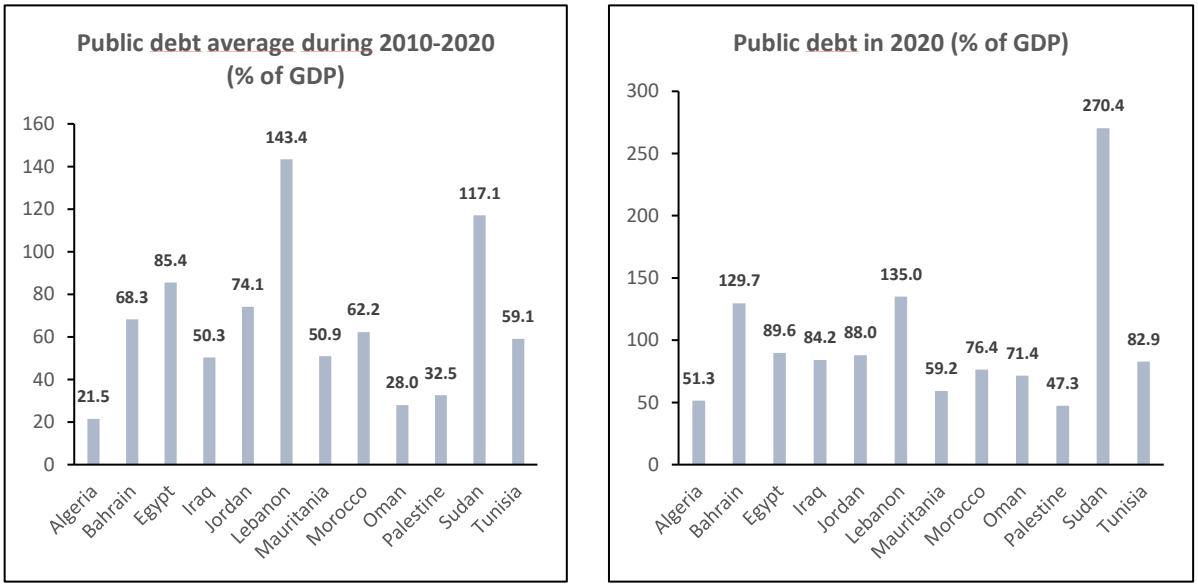
In the Arab region, the average public debt to GDP ratio was rising with an accelerated path from 48.6% in 2010 to 98.8% in 2020.
The public debt ratio average of countries debt between 70% and 90% of GDP group is under 70% of GDP during 2010-2019. It exceeded this level only in 2020, owing to the COVID-19 pandemic effect. The average of countries with public debt more than 90% of GDP public debt ratio exceeded 90% since 2015.
Countries with public debt under 70% of GDP had a debt service to total revenue ratio average under 30% during the last decade. The average of debt service to total revenue ratio was between 30% and 80% for all countries with public debt between 70% and 90% of GDP. Concerning countries with public debt more than 90% of GDP, the debt service to total revenue ratios average exceeded 90%. Therefore, fiscal unsustainability and less fiscal space are prior indicators of debt vulnerability, especially in countries where the debt unsustainability risk is high.

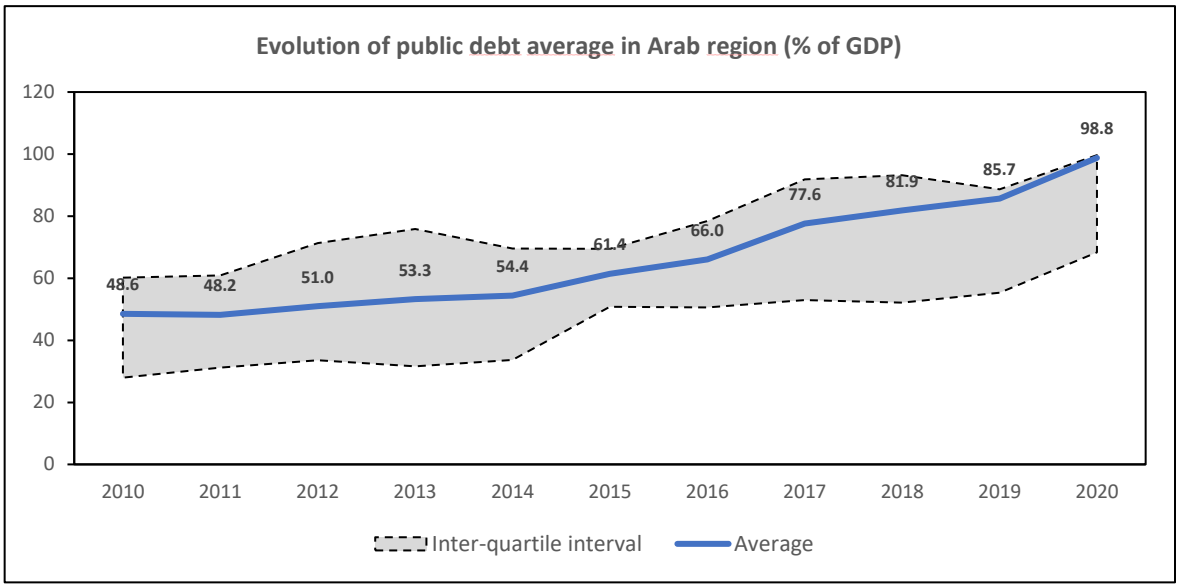
Evolution of Public debt indicators during 2010-2020

- *Many Arab countries have high **public debt ratios**, with an upward trend that exacerbated in 2020 due to the health crisis*

Economies of the Arab region exhibit relatively high debt ratios, calculated in terms of outstanding debt applied to GDP, with an upward trend since 2011. This trend increased following the spread of global COVID-19 health crisis.

Figure 1. Evolution of public debt (% of GDP)





Source: IMF, 2022b

In 2020, the public debt of Algeria, Bahrain, Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Oman, Palestine, Sudan and Tunisia reached 98.8% of regional GDP as compared with 85.7% in 2019 and 48.6% in 2010 (Figure 1).

This strong development is likely to have an impact on the medium-term perspectives, particularly in terms of sustainability.

Furthermore, it is important to note that the average trajectory of the debt ratio, between the two bounds of the interquartile interval, containing half of the distribution of debt ratios by country, shows that the public debt situation presents more differences and divergences since 2017, compared to the period 2010-2016[17]. Indeed, the calculations reflect the significant slippage recorded since 2017 and, especially in 2020, in relation, certainly, with the effect of COVID-19 but also exacerbated by the advent of exceptional circumstances (disturbances), particularly in Sudan (270.4%), Lebanon (135%) and Bahrain (129.7%).

Sudan's indicators show an over-indebtedness due to external debt arrears. The 2019 debt sustainability exercise showed that Sudan's public debt was unsustainable.[18] Debt relief, achieving strong fiscal performance and accelerating structural reforms, access to concessional financing, etc. are among the recommendations for crisis recovery in this case.

Lebanon's sustainability assessment reveals that public debt has been unsustainable since 2018. Continued deterioration of the debt outlook is mainly due to the gap between interest rates and growth in IRGD.

Concerning the countries with access to financial markets (apart from Lebanon), namely Algeria, Egypt, Jordan, Morocco, and Tunisia, it is interesting to note that these countries have lower debt ratios than the regional average during the period 2010-2020. However, following the health crisis, the public debt situation

[17] Calculations are made based on an average value of the series and this, by taking from the country cloud on a fixed date the threshold where 25% of the countries that are below and the threshold where 75% of the countries are below. The width of this obtained interval shows the difference between 50% of countries having the central values of the series, in comparison with the average value.

Furthermore, a significantly wide interquartile range shows a large dispersion in the values of the series by country. If the mean value moves away from the center of the interval, or even out of the interquartile interval, then there is at least one outlier.

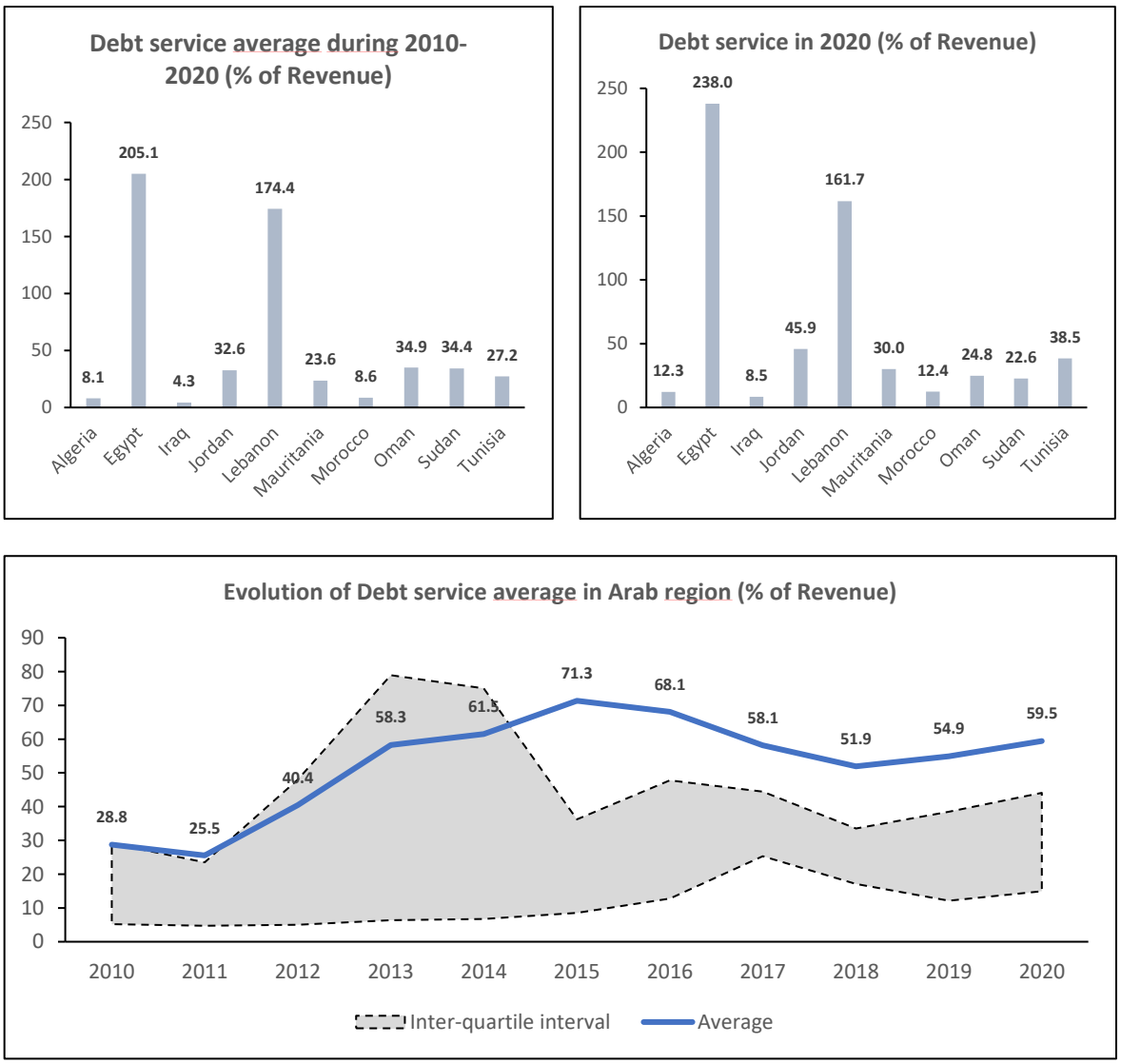
[18] IMF, 2020

of Algeria (average of 21.5%) and Tunisia (average of 59.1%) deteriorated and the debt ratios reached respectively 51.3% and 82.9% of GDP in 2020.

- ***Debt service*** *repayment implies increasingly heavy burdens on the budget*

Only Algeria, Iraq and Morocco realized low debt service to revenue ratios averages under 10% during 2010-2020. Debt service payment averages of other Arab countries ranged from 23% to 35% of revenues, except in Egypt and Lebanon where debt service averaged 205.1% and 174.4% of revenues respectively. This unprecedented situation generally reflects the beginnings of a financial crisis. This observation is verified for Lebanon, which is currently going through a financial crisis and collapse of the local currency value thus widening domestic debt service owing to domestic bank loans contracted in dollars. However, the judgment is nuanced for Egypt, because most debt service payments are made in local currency.
In addition, the concentration of the repayment terms of the principal of the debt is likely to expose certain countries to a considerable refinancing risk, as is the case for Tunisia, Jordan and Sudan; a situation that could contribute to worsening the position of public finances and impact medium-term sustainability (Figure 2).

Figure 2. Overview of debt service in Arab countries (% GDP)

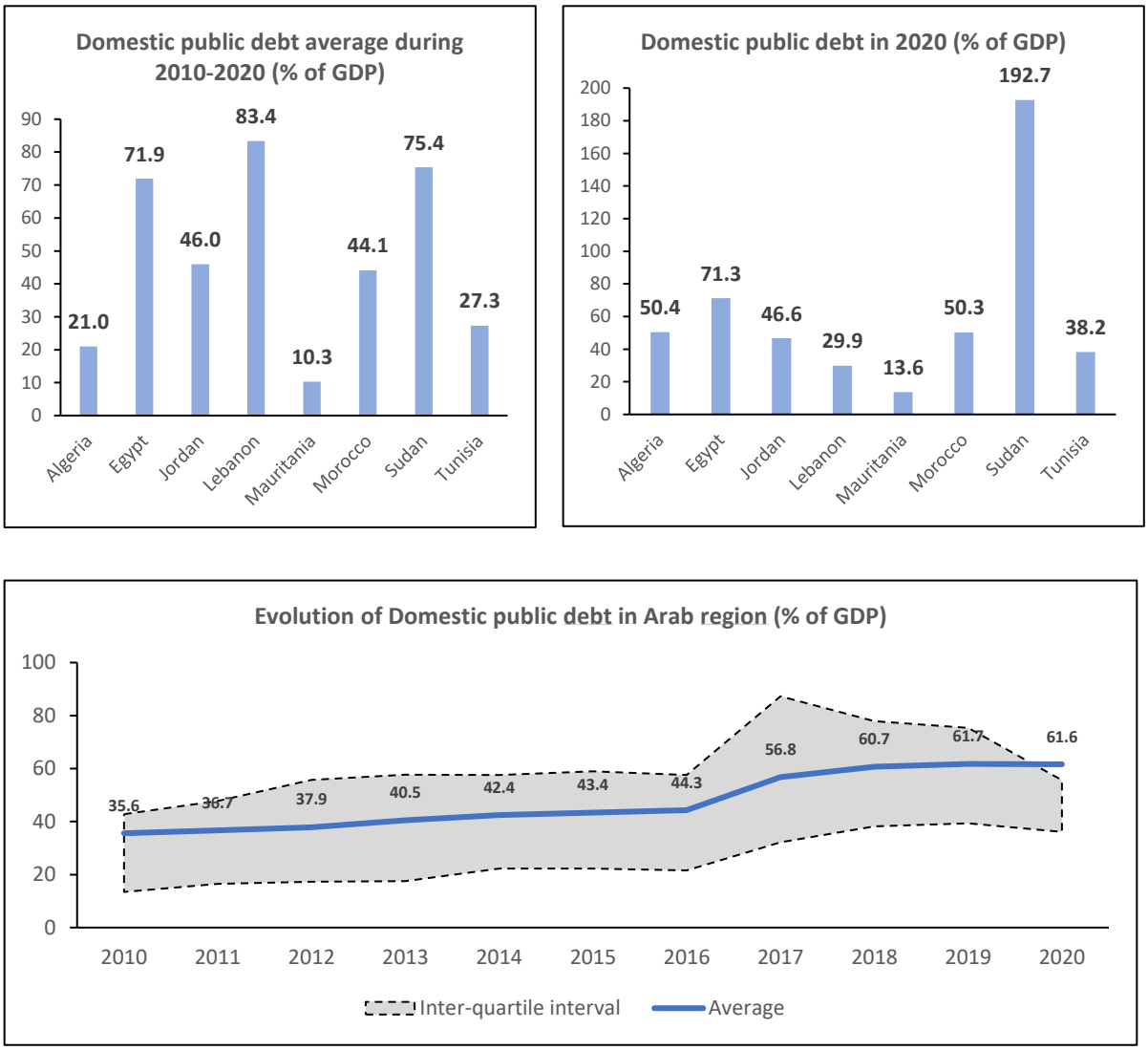


Source: IMF, 2022b

- *The average **public debt** in the Arab region is mostly **domestic***[19]

The trajectory of domestic debt, rising since 2011, has engendered a more sustained upward trend since 2017, in relation to the amplification of domestic debt in certain countries, especially in 2020, such as Sudan (192.7% of GDP) and Egypt (71.3% of GDP) and this, following difficulties in accessing the international financial market (Figure 3).

Figure 3. Overview of domestic public debt in Arab countries (% GDP)



Source: IMF, 2022b

The important proportion of domestic debt in total public debt limited the effects of exogenous shocks on the debt trajectory.

However, this important size could become:

– A source of crowding out effect on private investment (case of Egypt and Tunisia).

[19] Data available for Algeria, Egypt, Jordan, Lebanon, Mauritania, Morocco, Sudan and Tunisia

- A source of downward pressure on the exchange rate, especially if the domestic debt is predominantly in foreign currency, as is the case in Lebanon.
- A destabilizing factor for the credibility of the monetary authority, which is often called upon regularly to carry out monetary financing of the budget as was the case for Tunisia in recent years.

The domestic debt is sufficient to make the public debt to GDP ratio exceeding 90% of GDP for the countries with high risk of unsustainability. These countries have less access to external financial market and concessional credits (Table 2).

Table 2. Evolution of Domestic Debt (% of GDP)

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
Countries with public debt under 70% of GDP	9,2	7,9	6,8	6,7	8,6	11,1	14,6	17,1	27,4	30,4	32,0
Countries with public debt between 70% and 90% of GDP	36,1	40,6	44,3	47,8	50,2	50,4	52,6	51,4	49,8	45,9	51,6
Countries with public debt more than 90% of GDP	60,9	57,7	56,0	59,5	60,7	61,7	57,3	107,2	115,8	124,8	111,3
All Arab Region	35,6	36,7	37,9	40,5	42,4	43,4	44,3	56,8	60,7	61,7	61,6

Source: World Bank, 2021

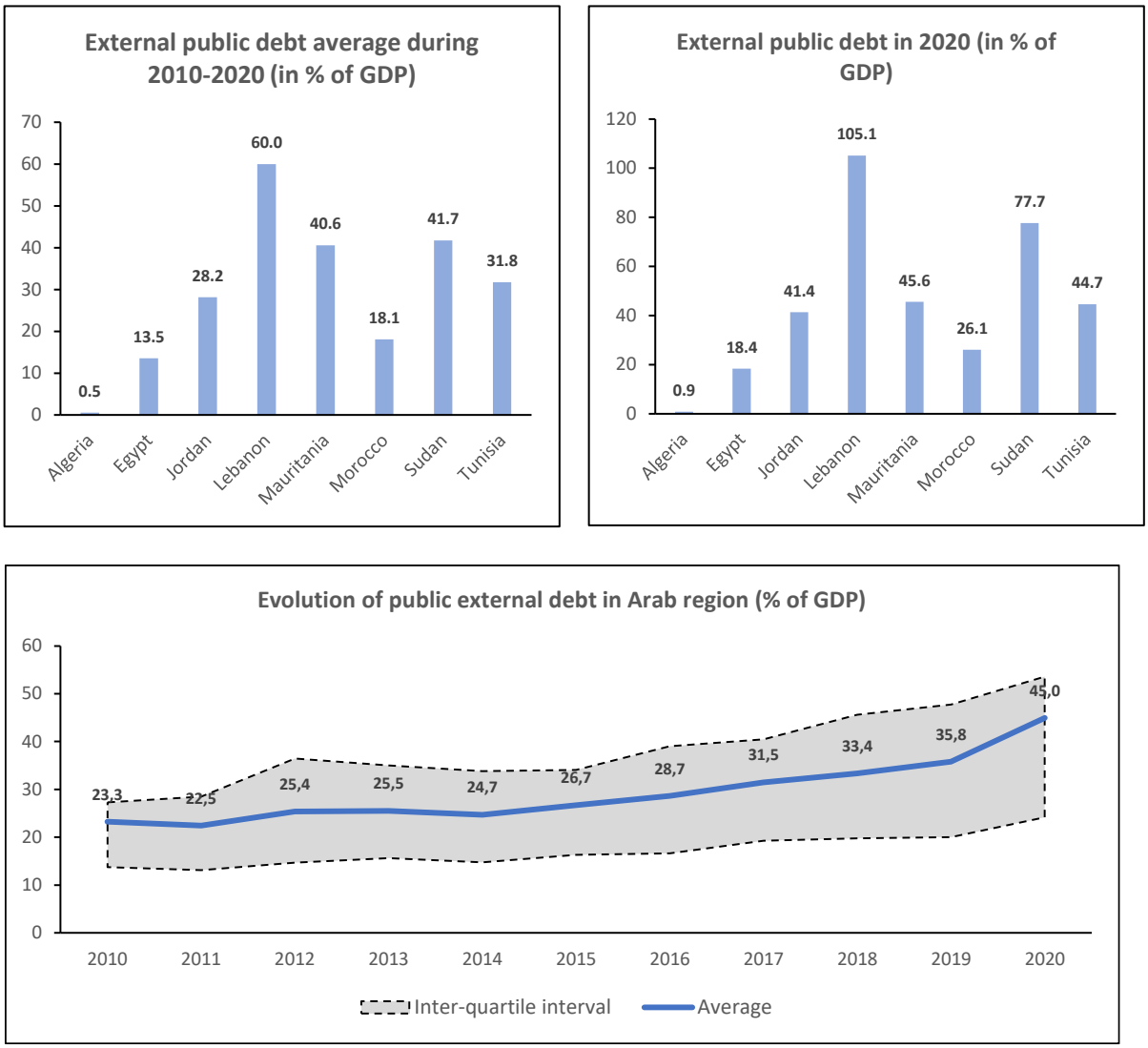
The average of public domestic debt ratio is around 50%, since 2014, for the countries with public debt between 70% and 90% of GDP especially Jordan, Morocco and Tunisia. Their evolving public external debt is the main cause of their debt vulnerability during the last years.
Public domestic debt has almost doubled in Algeria and Mauritania since 2018. The average of public domestic debt to GDP ratios for countries with public debt under 70% of GDP reached 32% in 2020, while 17.1% in 2017 and 9.2% in 2010.

- ***Public external debt*** *is dependent on access to the international financial market and sovereign rating* [20]

Most countries in the Arab region are exposed to high external public debt ratios following an upward trend since 2011, but less pronounced than total public debt, which became more pronounced in 2020 following the spread of the COVID-19 pandemic.
In 2020, the average public external debt of the Arab region reached 45% of the regional GDP against 35.8% in 2019 and 23.3% in 2010 (Figure 4). This reflects the difficulties of access to the international financial market and highlights the deterioration of the long-term sovereign currency rating.
In addition, the shape of the average trajectory of the external public debt ratio, between the two bounds of the interquartile interval containing half of the distribution of external public debt ratios by country, reveals that the external public debt situation has average differences and divergences over the entire 2010-2020 period. However, the public external debt situation slipped compared to the regional average in 2020, probably in relation to COVID-19 for some countries but also in relation to crises for others, particularly Lebanon (105.1 %) and Sudan (77.7%). Indeed, the projected (positive?) gap between interest rates and IRGD growth has worsened Lebanon's public external debt situation. For Sudan, the burden of arrears weighed on the external debt ratio.
For countries with access to the financial market (apart from Lebanon), the average public external debt ratios are lower than the regional average and range between 0.5% for Algeria and 31.8% for Tunisia.

[20] Data available for Algeria, Egypt, Jordan, Lebanon, Mauritania, Morocco, Sudan and Tunisia

Figure 4. Evolution of external public debt (% of GDP)



Source: World Bank, 2021

It should be noted that the external debt situation deteriorated in Tunisia in 2020 following the impact of the pandemic and the impact of the accumulation of arrears, thus bringing the public external debt ratio to 44.7% of GDP, owing to further external credits used to cover the gap caused by urgent required disbursement of arrears. Unless in 2020, there is not a significant difference in public external debt to GDP ratios average between countries with public debt under 70% of GDP and countries with public debt between 70% and 90% of GDP. Their averages reached respectively 23.2% and 32.6% in 2020 owing to the COVID-19 impact.

Concerning countries with public debt more than 90% of GDP, the public external debt ratios average was less than 60% until 2018. It reached 63.2% in 2019 and 91.4% of GDP in 2020, thus making public external debt sufficient to exceed high risk of unsustainability level in 2020.

Spread insurance premiums are increasing[21] in the Arab region especially since 2015 to reach 568.7 base points on average in 2019, particularly in Lebanon (1358.9 base points against 518.8 on average over 2010-2019)

[21] The premium cost of Spreads CDS minus 5 years reflect how deep ensuring institutions consider solvability risk in a named country.

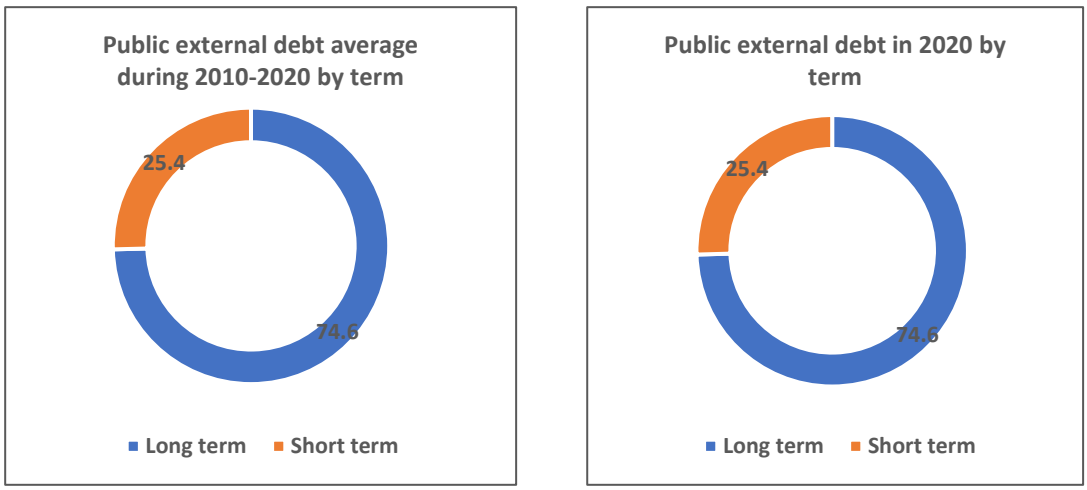
and in Iraq (804.5 base points against 562.7 on average over 2010-2019) owing to blocking or delaying crucial required reforms in most countries.
The only Arab country where spreads are on a downward trend is Morocco, which has recently managed to attract more foreign direct investment. Indeed, spreads average 174.6 base points over the period 2010-2019 and 105.3 base points in 2019. This drop in the premiums paid by Morocco, against other Arab countries, is dependent on a better implementation of reforms. This orientation has favored the fundamentals of improving the business climate, especially regarding foreign investors.

- **Public external debt structure**[22]

  - *Public external debt is mostly conducted on a long-term level*

Long-term public external debt in the Arab region represents 74.6% of external public debt during the period 2010-2020; this proportion is also verified in 2020.
The probability of over-indebtedness at the level of most of these Arab economies is quite high.

Figure 5. Maturity of External Public Debt (%)



Source: World Bank, 2021

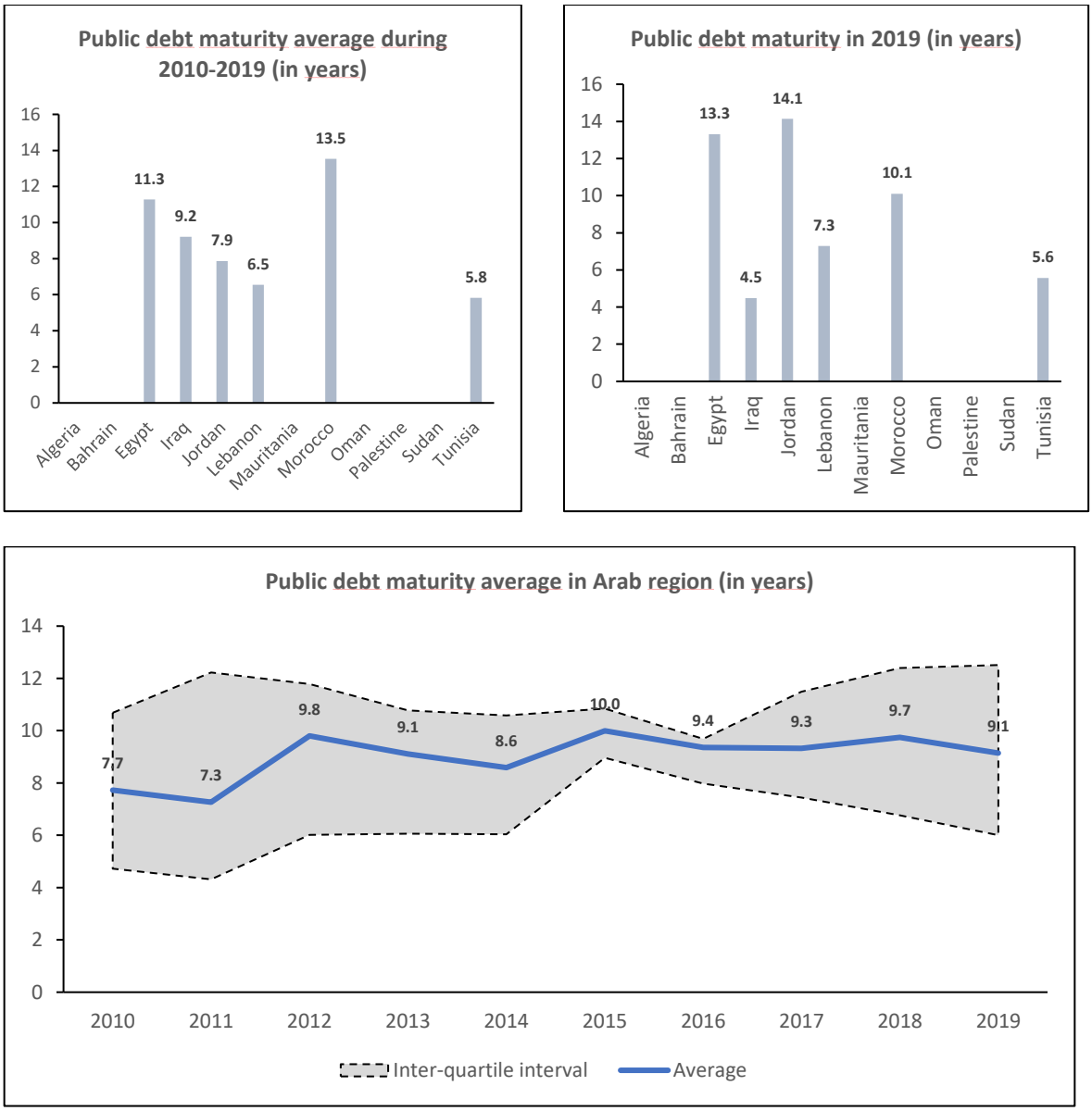
In addition, the maturity of the public debt followed a mixed trajectory on average during the period 2010-2020 to be around 9 to 10 years and to reach 9.1 years on average in 2020 (Figure 5). The analysis of this situation made it possible to divide the Arab countries into two groups (i) countries where maturity is gradually and continuously improving, such as Egypt and Jordan owing to easier access to bilateral credits and better access to financial markets and (ii) countries where maturity is decreasing, as is the case with Iraq, Morocco and Tunisia.

For Tunisia, public debt maturity decreased to 5.6 years in 2019. This maturity is among the lowest rates in Arabic region, thus confirms rising Tunisian difficulties to get concessional credits and access to financial market. In Morocco, the situation of public debt maturity is also decreasing to 10.1 years in 2019, but it remains above the average of all Arab regions.
The share of long-term external public debt is as important as the external public debt. Indeed, since 2015 and especially in 2020, the long-term external public debt is 64% for countries with public debt under 70% of GDP,

[22] Data available for Algeria, Egypt, Jordan, Lebanon, Mauritania, Morocco, Sudan and Tunisia.

77.5% for countries with public debt between 70% and 90 % of GDP and 79.6% for countries with public debt more than 90% of GDP in 2020 (Figure 6).

Figure 6. Maturity of Public Debt (in years)



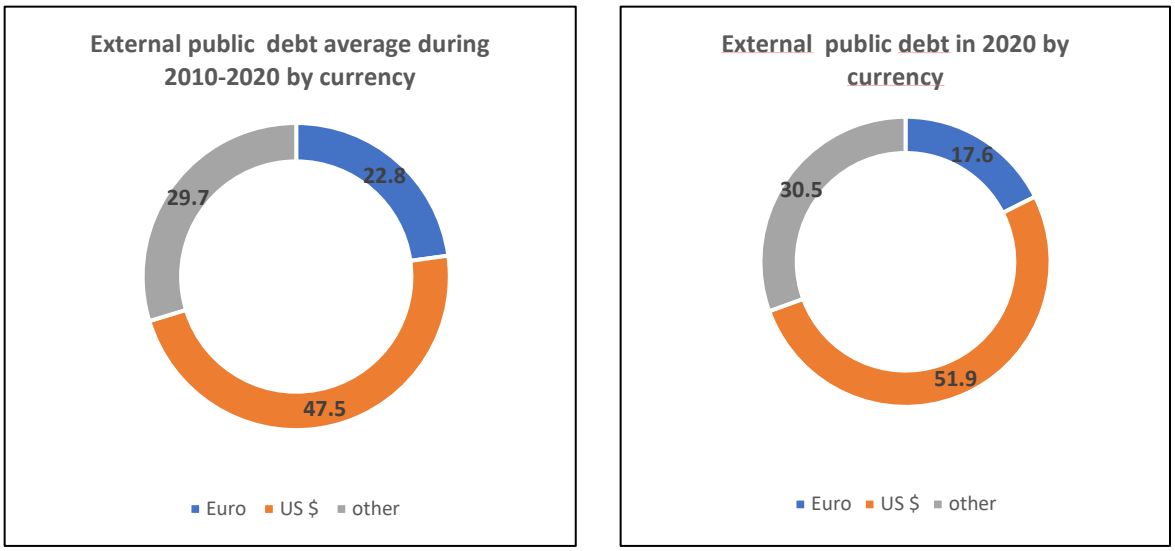
Source: World Bank, 2021

- ***Half of the external public debt in the Arab region is in dollars in 2020 against a decline in the share of debt denominated in euros***

The distribution of public external debt by currencies in 2020 was marked by the decline in the debt contacted in euros against dollars compared to the structure recorded during the decade 2010-2020.
In 2020, the public external debt contracted in dollars in Arab countries selected for this analysis amounted to 51.9%, against 17.6% of debt contracted in euros (Figure 7).

Arab countries where public debt exceeds 90% of GDP contracted only 3.6% of external debt in euros in 2020. Countries with public debt between 70% and 90% of GDP indicated a debt in euros in 2020, less than the average of the decade (27%). Algeria and especially Mauritania contract less and less loan resources in euros.

Figure 7. Currency Composition of External Public Debt (%)

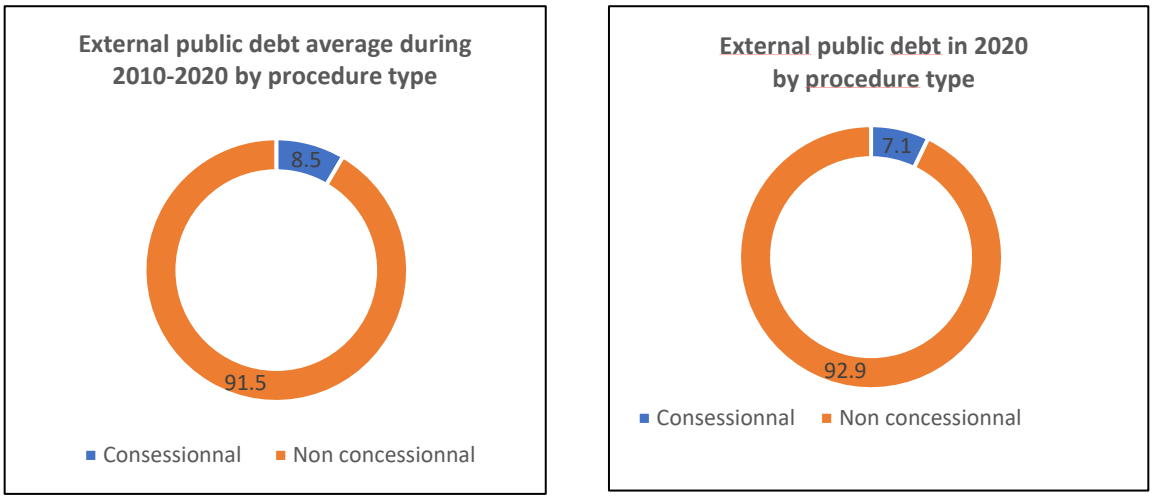


Source: World Bank, 2021

- *Arab countries rarely resort to **concessional resources** to borrow abroad*

Concessional external public debt is relatively low in most countries in the Arab region. The concessional external public debt was around 8.5% on average during the period 2010-2020 and decreased to reach 7.1% of the total in 2020 (Figure 8).

Figure 8. Weight of Concessional Loans of External Public Debt (%)

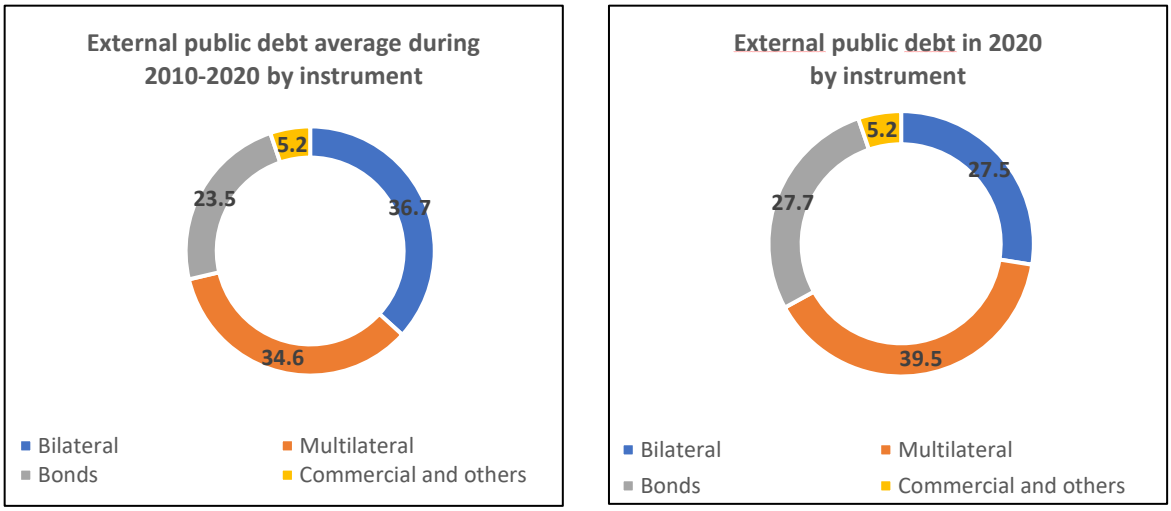


Source: World Bank, 2021

- *Sharp decline in the **bilateral indebtedness** of Arab countries in 2020*

The average composition of public external debt over the period 2010-2020 shows a predominance of bilateral debt (36.7%) compared to multilateral debt (34.6%) and bonds (23.5%). The debt contracted with commercial banks represents only 5.2% of the public external debt on average (Figure 9).

Figure 9. External Public Debt by instrument (%)



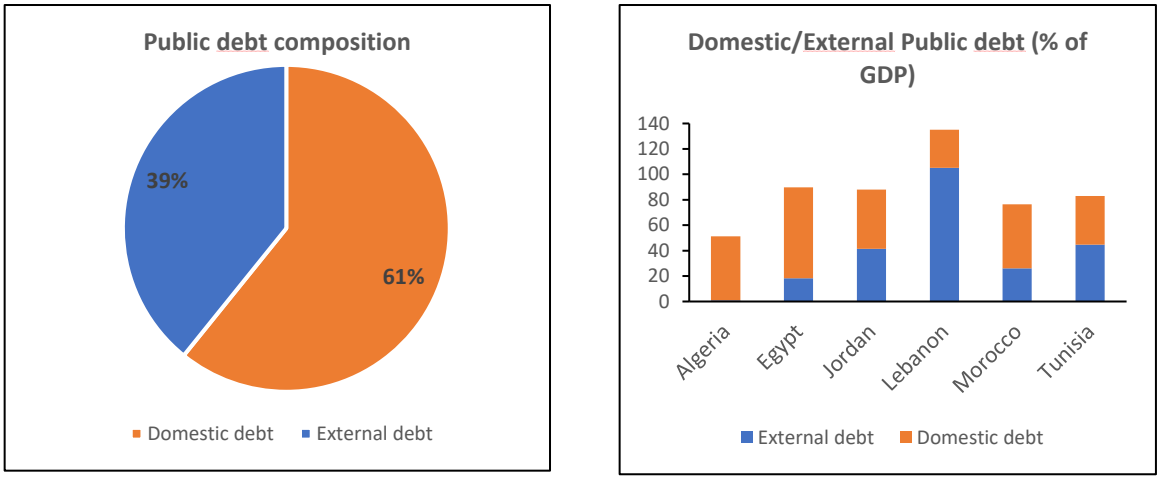
Source: World Bank, 2021

In 2020, the change in composition in favor of a larger share of multilateral debt (39.5%) and, also, of the international financial market (27.7%) reflects these countries' reliance on exceptional credit resources granted in emergency following the spread of the COVID-19 pandemic by international financial institutions such as the IMF.

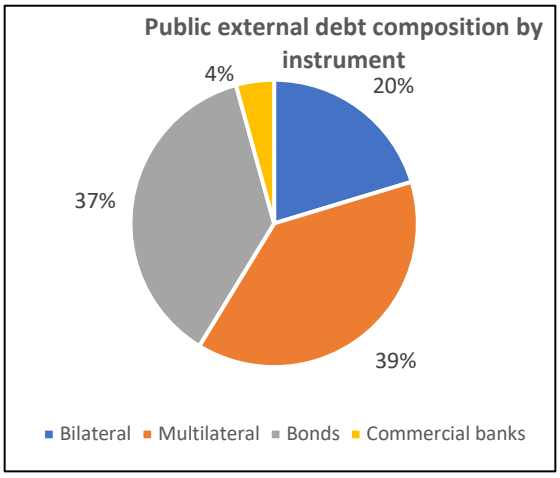
Figure 10. Overview of 2020 Debt Composition in Countries with Market Access (Algeria, Egypt, Jordan, Lebanon, Morocco, Tunisia)

Domestic debt represents three-fifths of total public debt …

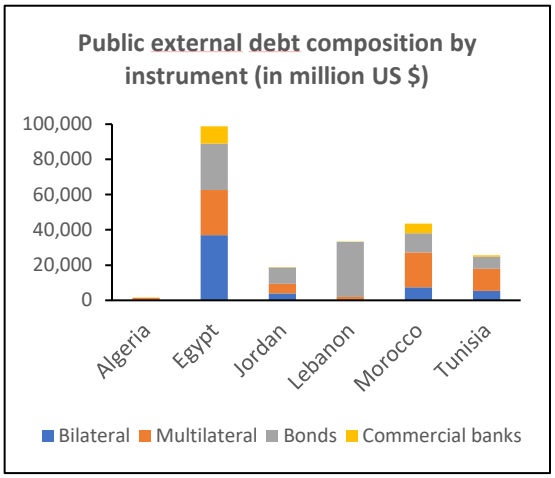
… Although external debt is the largest in some countries such as Lebanon and Tunisia



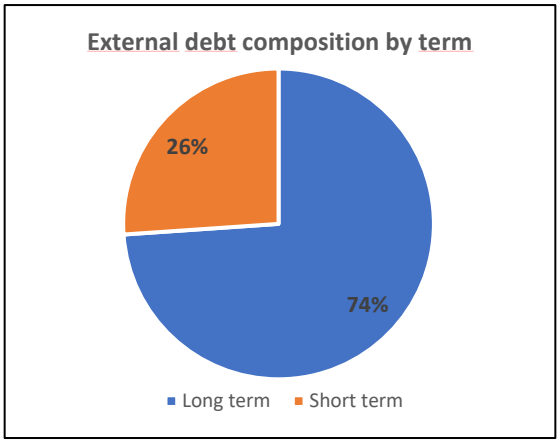
Multilateral public external debt is the largest …



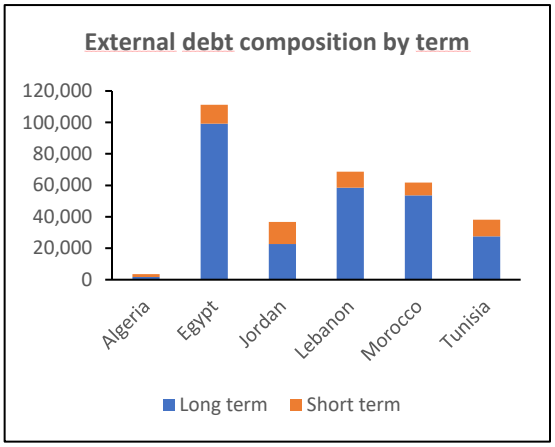
… Bilateral public external debt is the largest in Egypt



Three quarters of the external debt is in long-term …



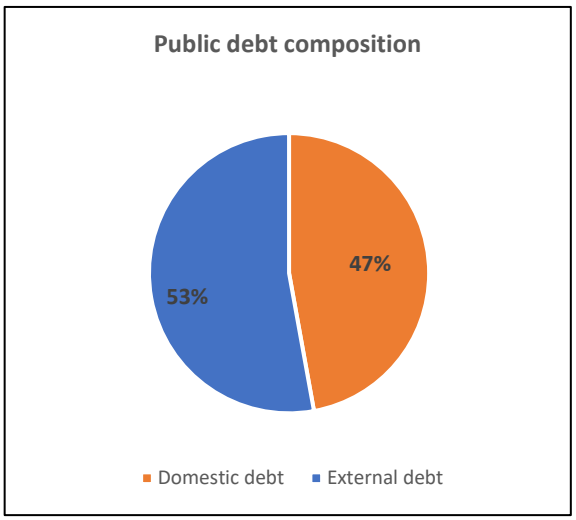
… Especially in Egypt where short-term debt is only around 10%



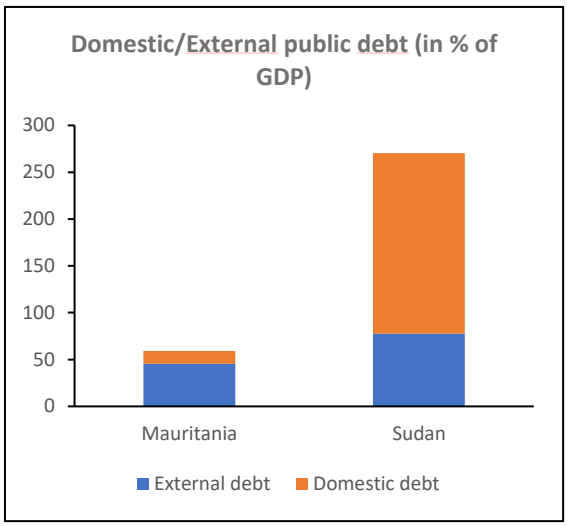
Source: World Bank, 2021

Figure 11. Overview of 2020 Debt Composition in Low-Income Countries (Mauritania, Sudan)

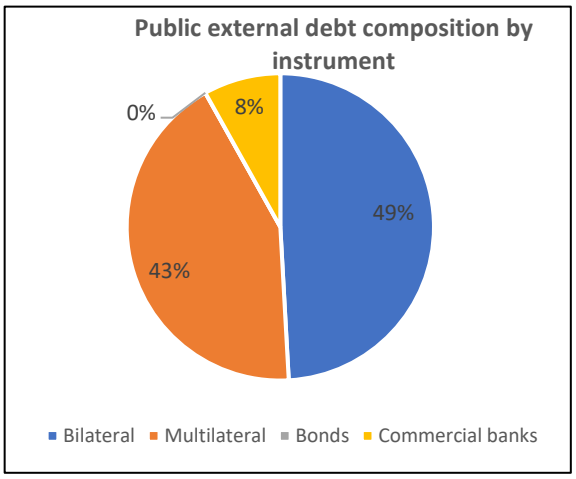
Domestic and external debt are almost at par level



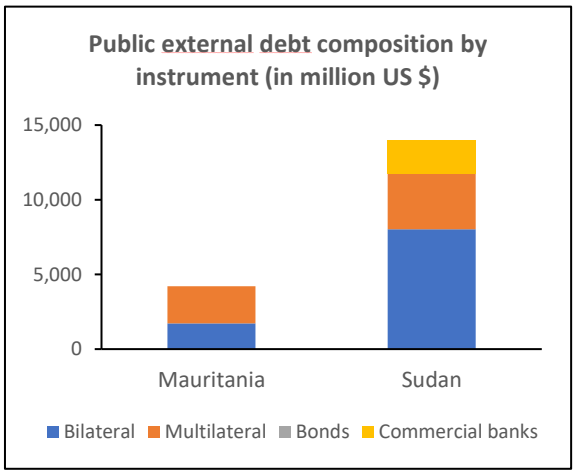
External debt is the largest in Mauritania



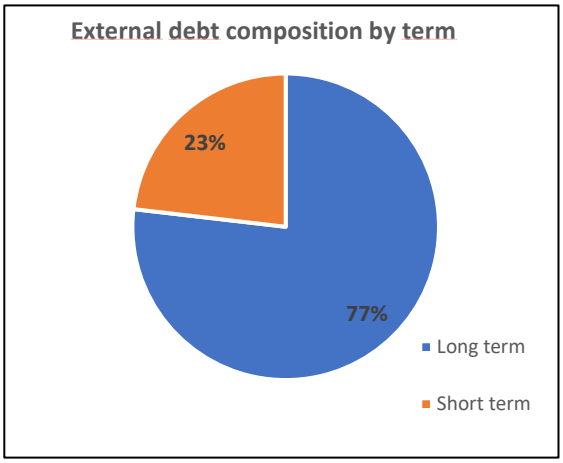
Bilateral public external debt is the largest

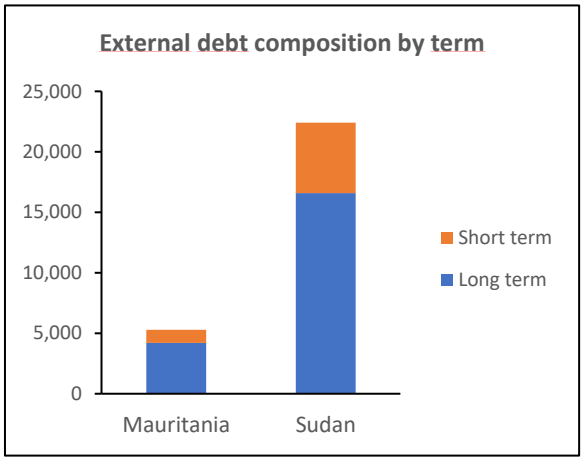


Commercial banks only operate in Sudan



Three-quarters of external debt is long-term classified



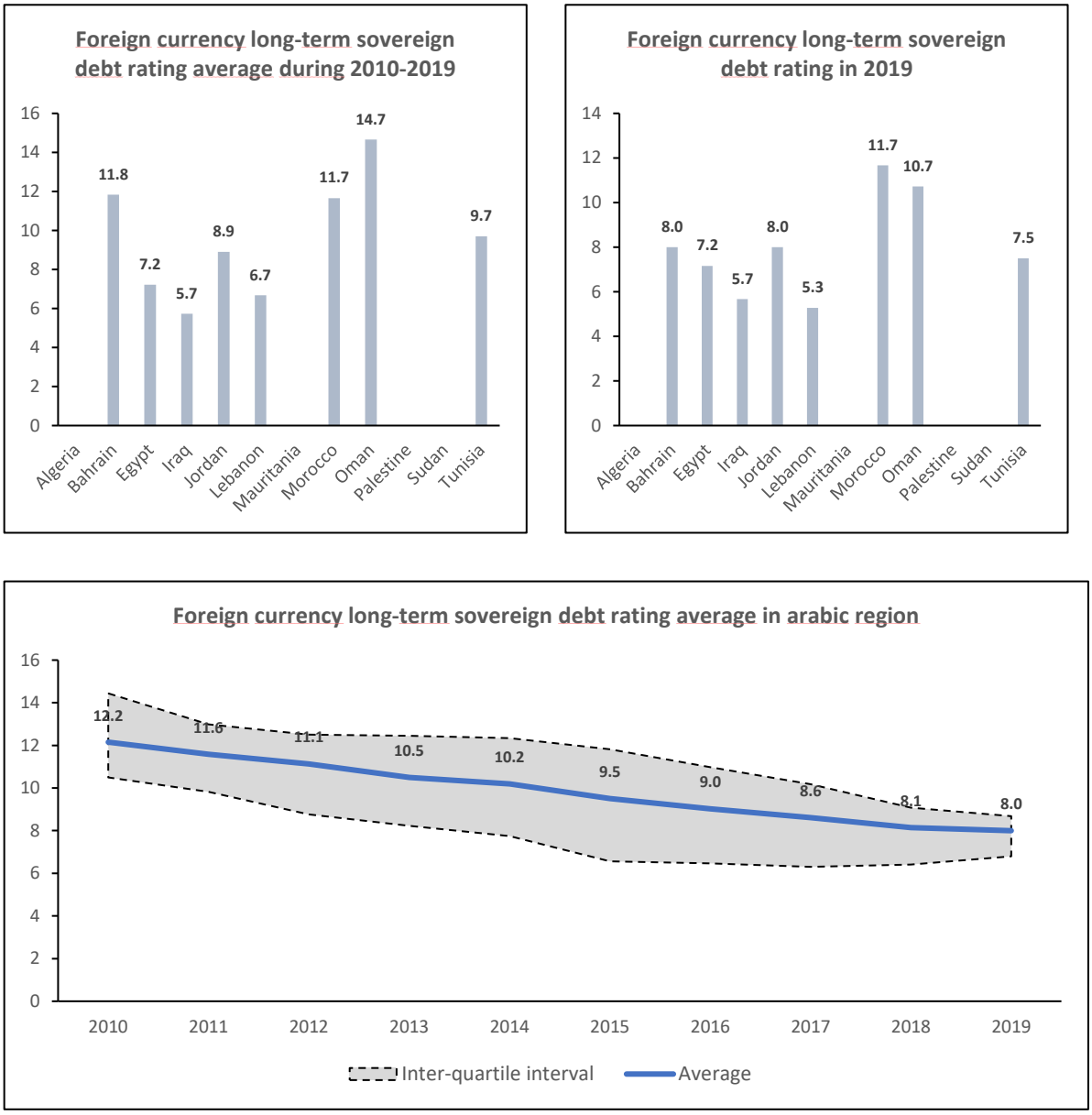


Source: World Bank, 2021

- *Arab **debt profile** is increasingly vulnerable, due to the continued deterioration of the **sovereign rating** of long-term foreign currency debt*

Oman (14.7/21), followed by Bahrain (11.8) and Morocco (11.7), have the highest foreign currency long-term debt average scores. Iraq and Lebanon have the lowest sovereign debt scores.

Figure 12. Debt Profile Vulnerability in Arab region (% GDP)



Source: World Bank, 2021

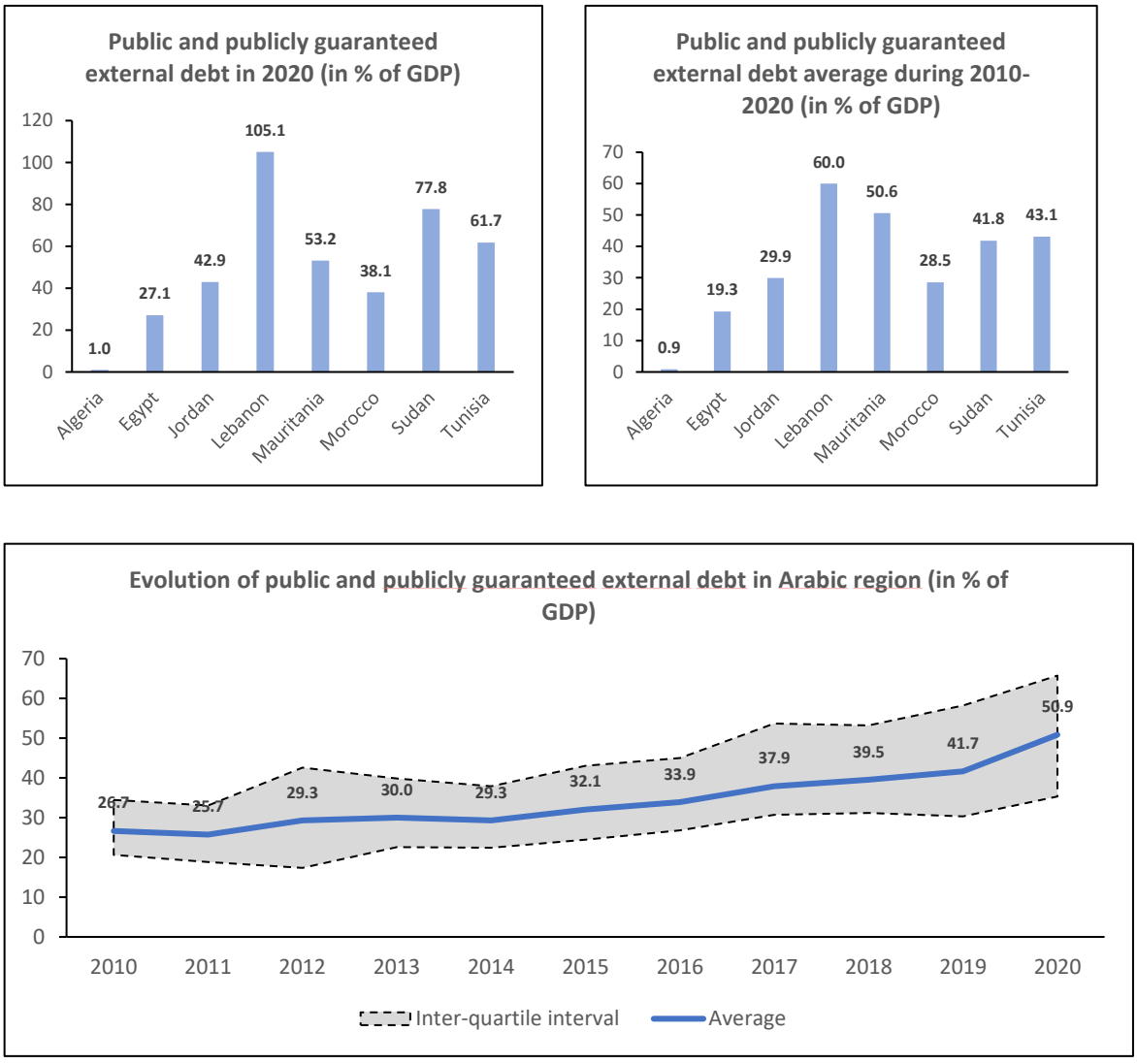
Generally, the average foreign currency long-term sovereign debt scores in the Arab region fell steadily over the years 2010-2019: 12.2 in 2010, 10.2 in 2014 and 8 in 2019. This justifies the decline in sovereign ratings in most Arab countries and the increase in difficulties in accessing external funding sources jointly with the cost of CDS spreads at less than 5 years (Figure 12).

- *The **guarantees** given by some Arab countries to the debt of **public companies** in difficulty threaten the sustainability of the debt*

The debts of public enterprises guaranteed by the State have continued to evolve from one year to the next during the period 2010-2020. On average, government-guaranteed debt reached 5.9% of GDP in 2020 in the Arab region. The highest level was recorded in Tunisia (17% of GDP in 2020 against 11.3% on average), Morocco (12% of GDP in 2020 against 10.4% on average) and Egypt (9.7% of GDP in 2020 against 5.8% on average) (Figure 13).

In Lebanon, Sudan and Jordan, public companies make almost no use of state guarantee.

Figure 13. Public and publicly guaranteed external debt in Arab region (% GDP)



Source: World Bank, 2021.

Key drivers of debt unsustainability in the Arab Region

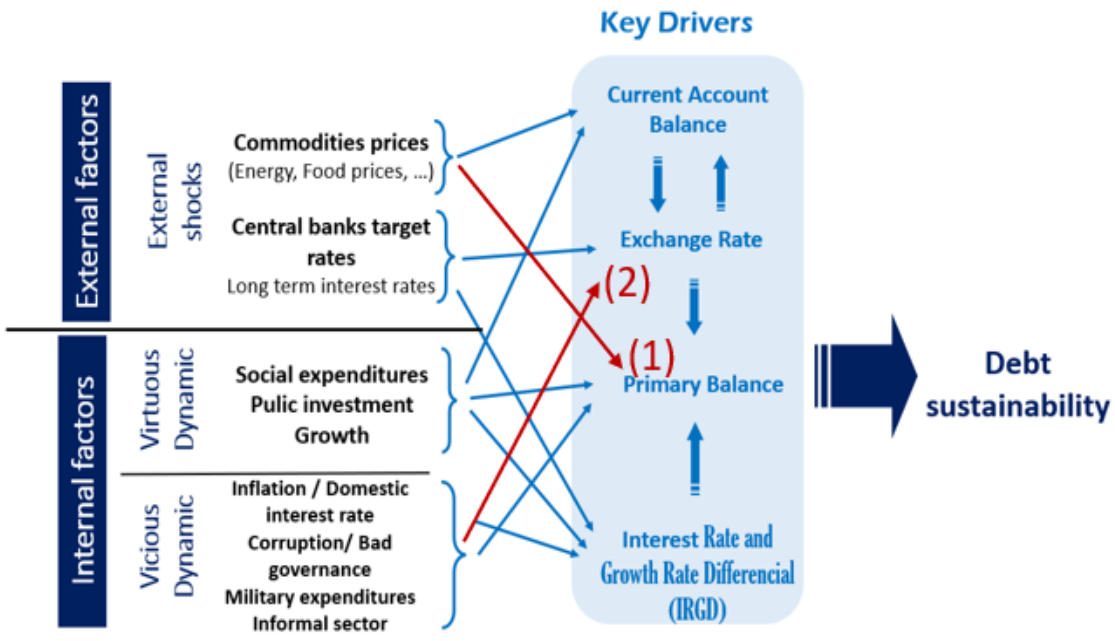
Debt sustainability depends on the ability of economic policies to generate a primary surplus and to roll over its debt, provided the newly issued debt is ultimately serviced from future primary surpluses.

For this section, we will focus on the key drivers of debt sustainability: Primary balance Current account balance, Exchange rate, Interest rate and growth rate differential.

The need to better understand the issue of debt sustainability requires us to focus on factors that affects these key drivers. A more realistic view of these drivers will quickly detect the risks of slippages in the debt indicators.

We can distinguish between external and internal factors (Box 6).

Box 6. Key drivers of debt sustainability



(1) reflects the effect of rising food and fuel prices on subsidy spending.
(2) signals how rising interest rates could curb imports that are financed by borrowing from the domestic banking sector. Hence a drop in pressure on foreign exchange reserves and less downward pressure on the domestic currency.

At the external level, the key drivers of debt sustainability remain highly sensitive to external shocks. Debt sustainability is largely about the perceived fragility of Arab countries and their ability to withstand external shocks. "Scaling up of development finance efforts is, therefore, closely linked to the need to reduce, as much as possible, the exposure of developing countries to external shocks, cross border capital flows and external debt service burdens".[23]Soaring food prices since 2008 and recently in 2022 with the Russian-Ukrainian crisis have further exacerbated the situation in many Arab countries. The rise in both current account and primary deficit imposed an excessive level of indebtedness. The tightening of U.S. monetary policies pushed short-term interest rates up, which resulted in a strong appreciation of the dollar's exchange rate; a beneficial appreciation for oil-exporting countries and harmful for importing countries, especially for countries whose debt is predominantly in US dollars (Egypt, Jordan, Lebanon, and Sudan). The transmission of the rise in key

[23] UNICTAD, 2019

rates to the long-term bond market interest rate hardens financing conditions on the international financial market, which results in a deterioration of the IRGD for countries such as Egypt, Tunisia, and Lebanon and to a lesser extent Morocco and Jordan.

At the internal level, we must distinguish between factors resulting from a virtuous dynamic and factors generated by a vicious dynamic. Although they could be largely responsible for the degradation of primary balance, these factors (social expenditures, public investment) play a crucial role in improving the quality of life of citizens and increasing potential growth.
This is far from being the case for the latter who are part of a vicious dynamic. These factors (corruption / Bad governance, military expenditures, informal sector) can only contribute to the deterioration of the primary balance. However, the rise in domestic interest rates, justified by the rise in inflationary pressures, will have a negative impact on the IRGD, through the increase in the cost of refinancing on the domestic market, which could be mitigated by the increase in economic growth.

Primary deficit

The primary balance depends on several factors impacting its level:

Cyclical factors: (commodities prices, exchange rate, food prices, ...), virtuous factors (social expenditures, public investments, ...) and viscous factors (corruption, informal sector, military expenditures, ...).

The primary deficit recorded in the Arab countries amounted to an average of 5.6% of GDP in 2020. This rather high level is partly explained by the increase in public spending to mitigate the impact of the health crisis (Table 3; Figure 14).

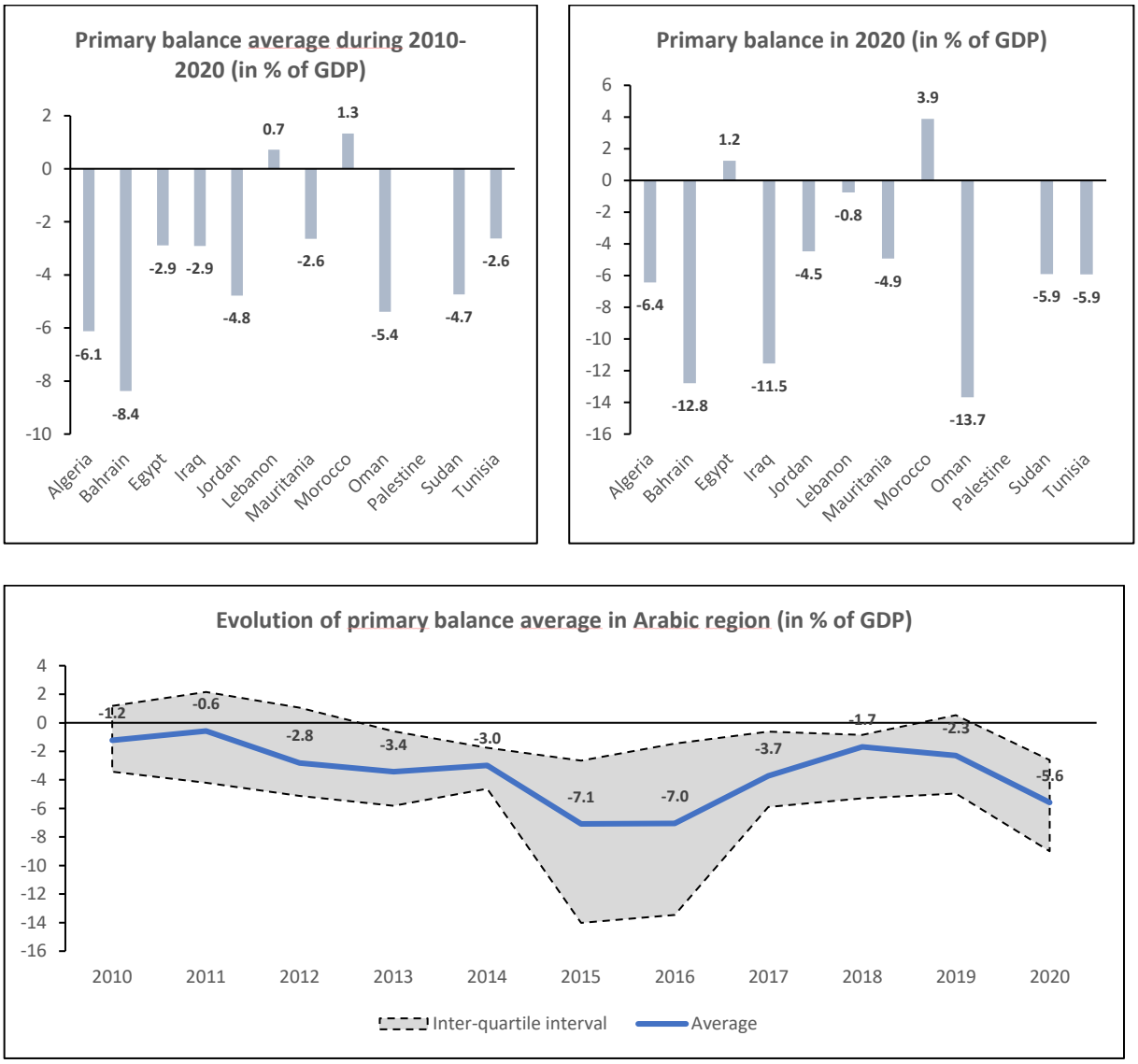
However, it should be noted that Morocco and Egypt achieved primary surpluses of 3.9% and 1.2% of GDP respectively in 2020. This is corroborated by the control of the public debt situation.

Table 3. Evolution of the Primary Deficit (% GDP)

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
Countries with Public debt under 70% of GDP	-1,3	-2,8	-5,0	-1,5	-4,9	-9,0	-7,6	-3,6	-2,9	-3,9	-5,7
Countries with Public debt between 70% and 90% of GDP	-1,0	0,2	-1,6	-3,6	-3,3	-7,0	-7,5	-3,1	0,7	-0,3	-5,1
Countries with public debt more than 90% of GDP	-1,6	-0,6	-3,7	-4,4	-1,0	-5,9	-5,8	-5,1	-5,5	-5,2	-6,5
Arabic Region average	-1,2	-0,6	-2,8	-3,4	-3,0	-7,1	-7,0	-3,7	-1,7	-2,3	-5,6

Source: IMF, 2022b

Figure 14. Overview of Primary Balance in the Arab region (% GDP)



Source: World Bank, 2021

Arab countries with access to the international financial market have achieved primary deficits around the regional average. However, some countries, such as Oman, Bahrain, and Iraq, had exceptional double-digit primary deficits in 2020, which led to a sharper deterioration in their respective public debt ratios.

During 2017-2020, countries with public debt under 90% of GDP still had primary deficits lower than 5% in most cases. This permitted them to maintain enough fiscal space to sustain their debt, except Iraq and Oman, which suffered from fiscal unsustainability in 2020; their primary deficits reached respectively 11.5% and 13.7%.

Therefore, countries with public debt under 90% of GDP succeeded to preserve lower debt service to total revenue ratios average (under 80% in the worst cases) and were still able to maintain their debt sustainability.

Concerning countries with public debt more than 90% of GDP, their primary deficit average was around 6.5% in 2020, thus confirming that their narrow fiscal space is a main reason to realize higher debt service to total revenue and public debt to GDP ratios averages (usually more than 100%), and they are facing higher risks of debt unsustainability.

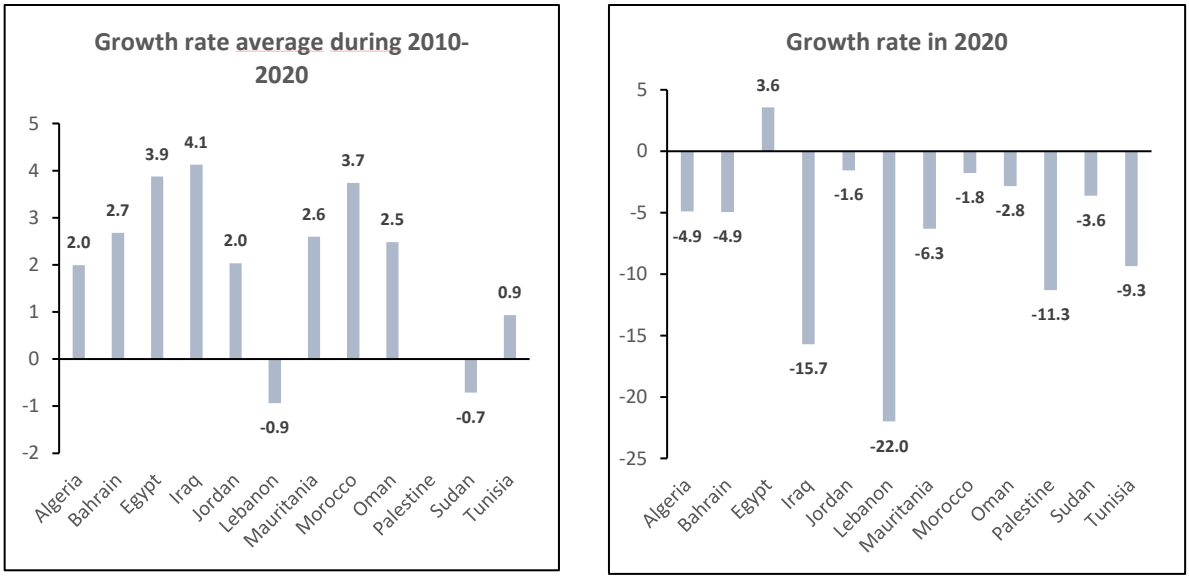
Interest rate-growth rate differentials (IRGDs)

The interest rate and growth differential (IRGD) are a determining variable in explaining the threat of unsustainable debt hanging over several Arab countries.

On the economic growth side, the multiplication of external shocks (COVID-19, Ukraine war) combined with the blocking of structural reforms in several countries have caused the fall in growth rates and, in particular, that of potential growth. Many structural factors have played a role, which varies from country to country, in postponing reforms, depriving Arab countries of enhancing their potential growth and putting their economies on the path of debt sustainability. We could identify two main factors: security problems and regional conflicts "which have been used to justify maintaining the status quo and avoiding the risks of instability caused by change and reform".[24]

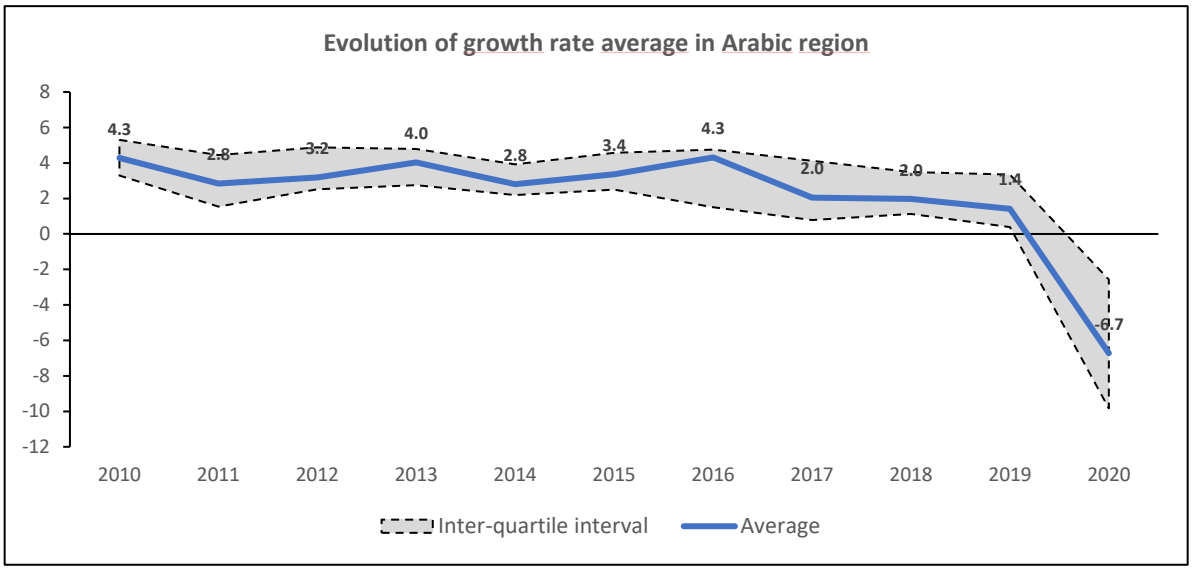
On the interest rate side, the situation is far from reassuring. Two factors plead for the rise in interest rates. At the international level, normalization of monetary policy observed in Advanced economies will end up pushing the long-term interest rates of the bond markets upwards, thus complicating the operation of refinancing on the international capital markets, especially for the MACs. In LICs, external debt tends to have concessional rates and long-maturity while the domestic debt often has short maturity and is subject to rollover and crowding-out effect risks. Containing the level of inflation and macroeconomic stability are key for a country's ability to issue domestic long dated bonds in its local currency at a low interest rate.[25]

Figure 15. Overview of growth rate in the Arab region (%)



[24] Nabli, 2007

[25] Panizza, 2008



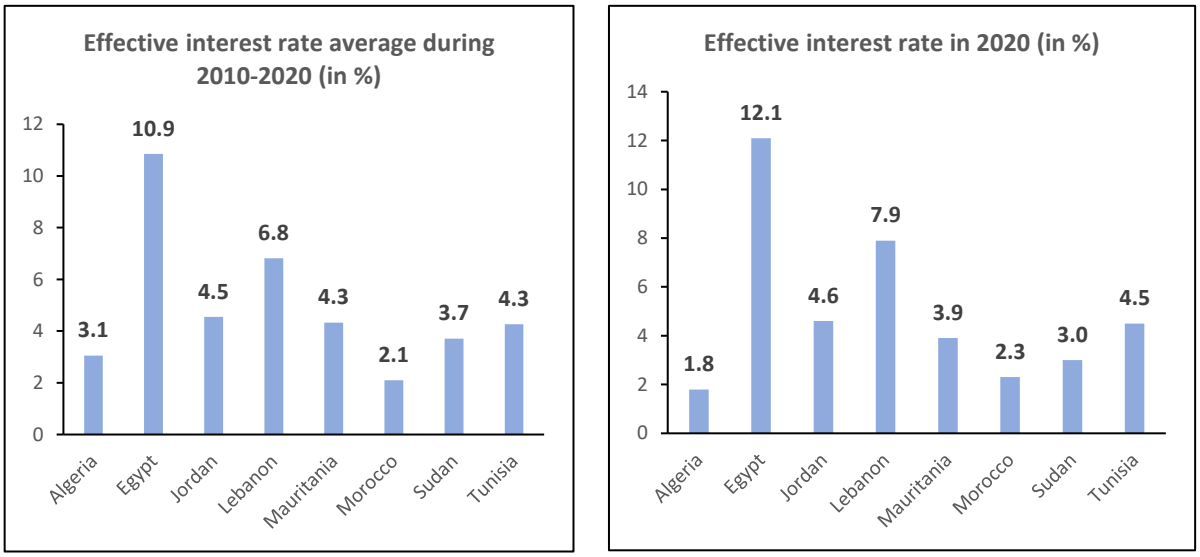
Source: World Bank, 2021

At the domestic level, to keep consistent with inflation targets, many central banks in Arab countries push nominal interest rate at a high level, which precipitates debt unsustainability.[26] Recently, the inflationary surge generated by the post-COVID rebound and exacerbated by the war in Ukraine, prompted the central banks of Arab countries to tighten their monetary policies.

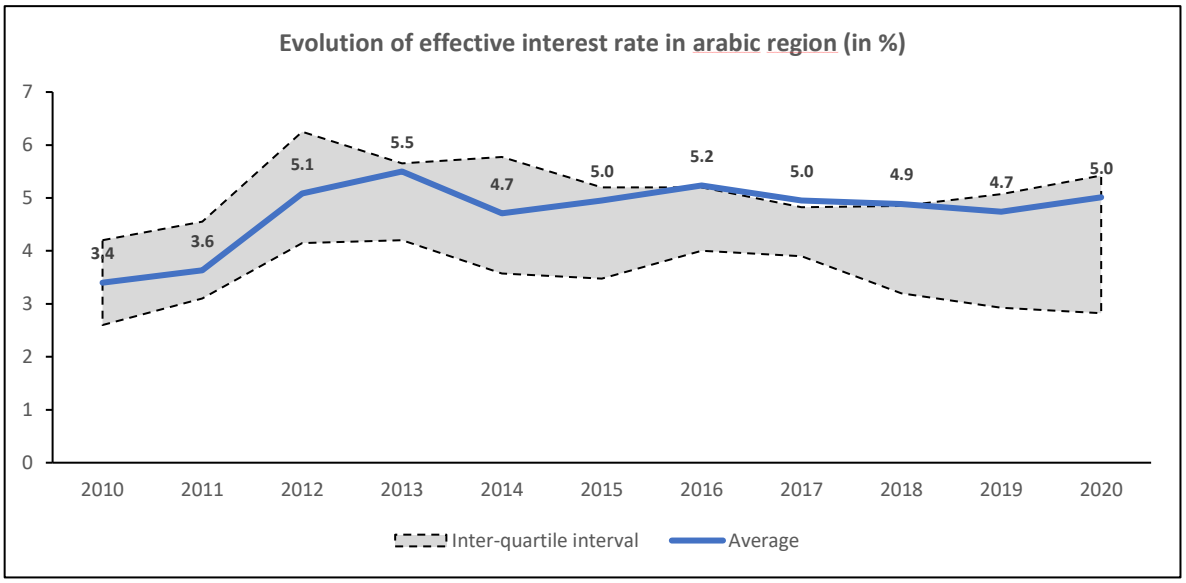
All in all, the context pleads for interest rates higher than the growth rate (IRGD > 0), a situation which fuels the risk of unsustainable debt, especially for non-oil producing countries which suffer from the absence of fiscal space.

During the period 2010-2020, the Arab countries showed a downward trend in the average growth rate, especially from 2017. The Arab region recorded a decline in growth by an average of 6.7% in 2020 (Figure 15). This decrease was preceded by a low average growth (1.4% in 2019 against 4.3% in 2010).

Figure 16. Overview of Effective interest rate in Arab region (% GDP)



[26] Sarangi, 2021



Source: World Bank, 2021

The decline in growth recorded in 2020 for countries with market access was lower than the regional average, except for Tunisia, where the recession has reached an unprecedented level in relation to the acuteness of structural problems and the weakening of resilience. It is reported that the Egyptian economy has achieved a growth of 3.6%.

The fiscal sustainability for countries with public debt more than 90% of GDP was impacted during 2018-2020, owing to continuous recession in growth rates especially in 2020. Their total revenue was reduced, thus their primary deficit and debt service to total revenue became much higher than the regional average and reached exceptional records.

Concerning countries with public debt under 90% of GDP, they realized growth rates under 3.3% during 2017-2020, which are not sufficient to create enough fiscal space to produce primary surplus and reduce debt service to total revenue ratios.

The average trend of the effective interest rate of the debt in the Arab region oscillates around the average threshold of 5% over the entire period 2010-2020 - significantly higher than the regional average economic growth. This largely explains the debt situation in the Arab region over this entire period, especially from 2017 (Figure 16).

It is important to note that the average effective interest rate of Egypt's debt far exceeds its economic performance, justifying its situation of over-indebtedness.

Morocco is the only country in the Arab region that recorded an average effective interest rate below its average growth rate over the period 2010-2020 (2.1% against 2.5%). This performance explains the fact that Morocco is in a better debt situation than the other Arab countries.

Concerning countries with public debt more than 70% of GDP, their effective interest averages regularly exceed 5% since 2015, which is higher than their growth rates and confirms their involving reliance upon external credits since 2018, thus worsening their debt vulnerability.

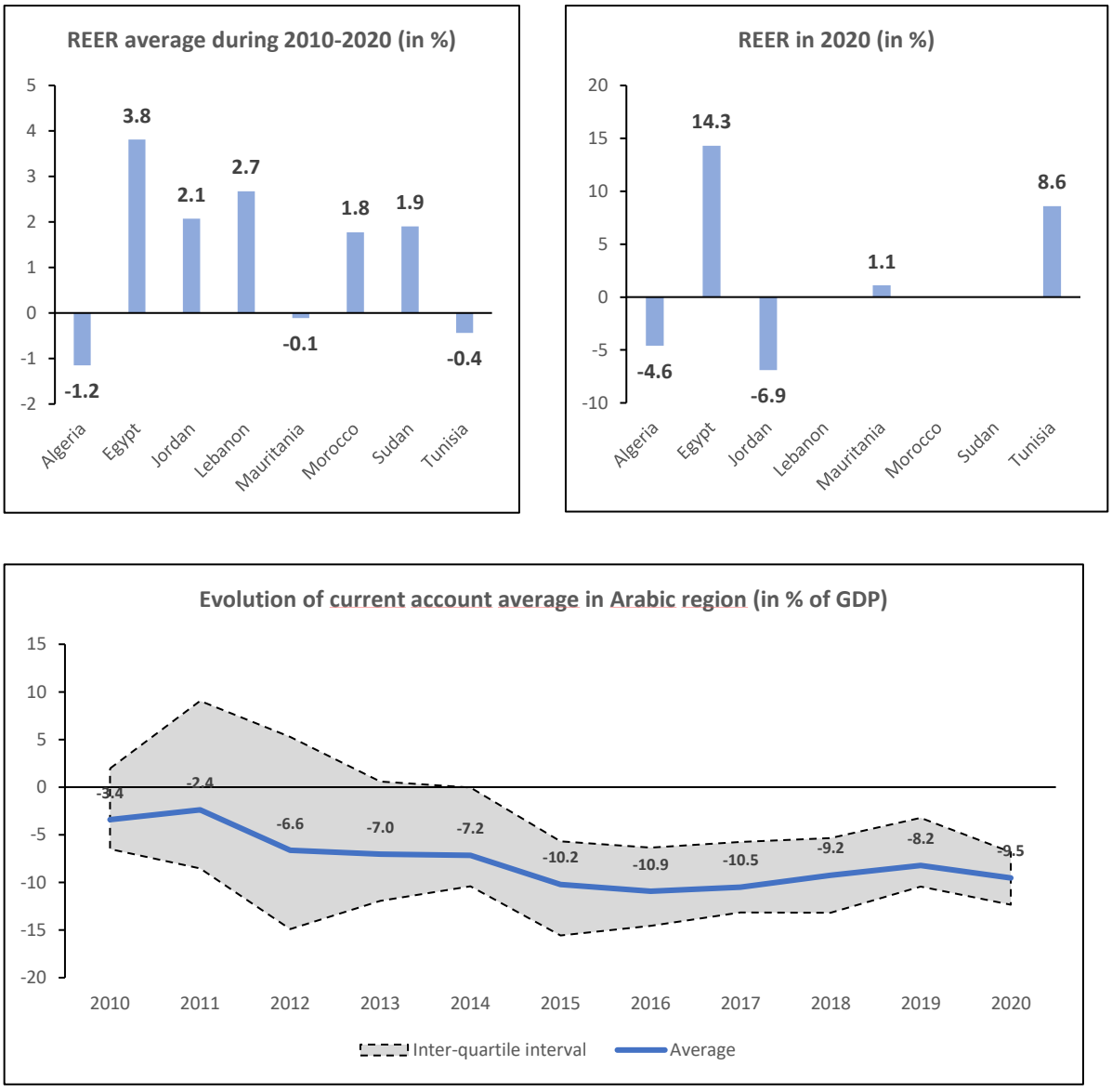
Effective interest rates in countries with public debt under 70% of GDP became owing to their higher share of public domestic debt to total public debt.

Current account deficit and real effective exchange rate

The deterioration of the current account situation is mainly explained by the widening of the trade deficit. The increased current account deficits recorded reflect the acuteness of the fundamental problems related to the structure of production.

During the period 2010-2020, most Arab economies experienced an average appreciation of their local currencies, except in Algeria, Mauritania, and Tunisia, which experienced an average depreciation of their real effective exchange rates respectively of (-1.2%), (-0.1%) and (-0.4%) (Figure 17).

Figure 17. Overview of REER in Arab region (%)

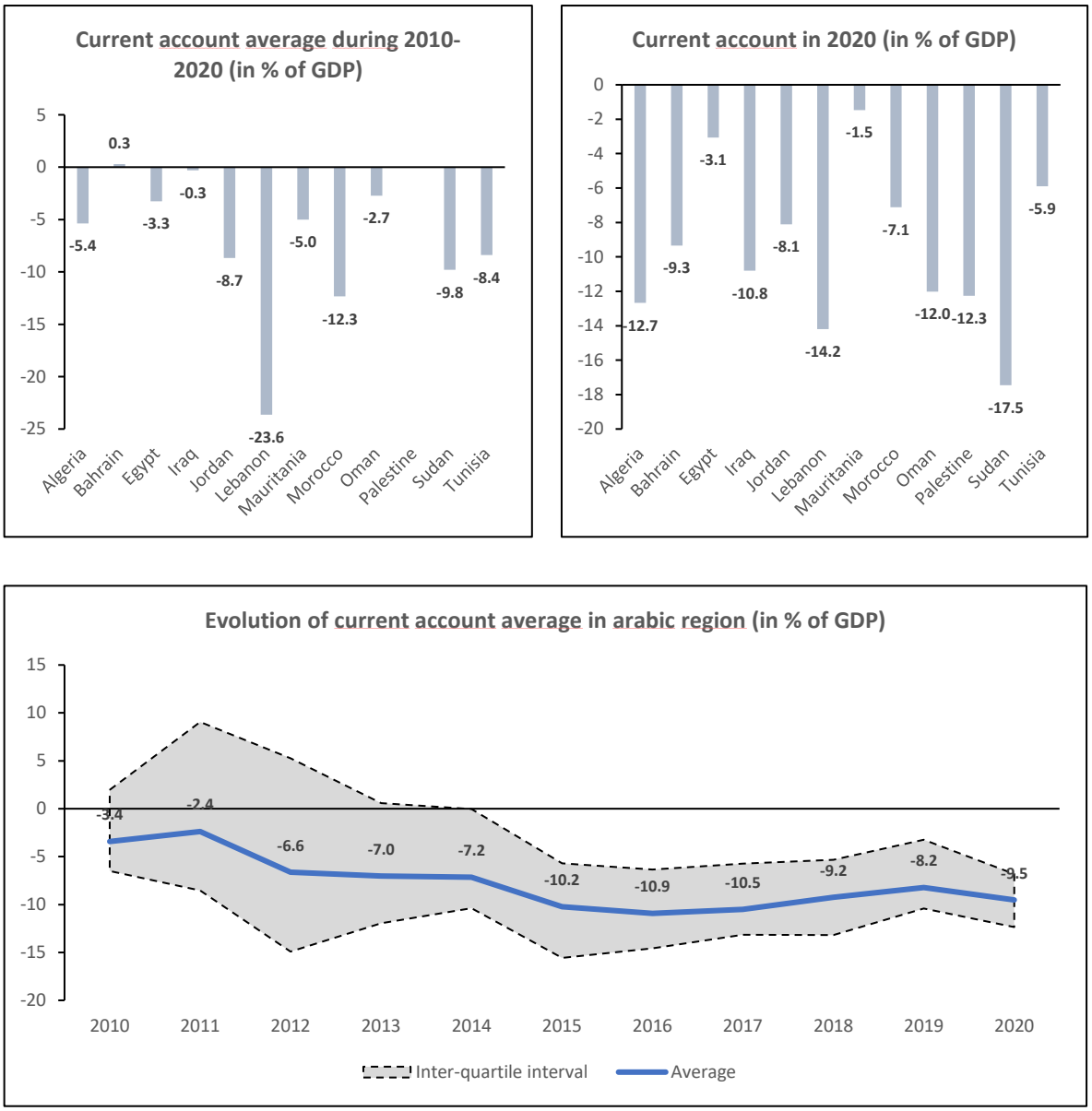


Source: World Bank, 2021

Egypt experienced the highest average appreciation of the local currency. On average, the Arab region achieved an appreciation in 2020 of 2.5%, supported by the significant appreciation of exchange rates in Egypt

and Tunisia, respectively of 14.3% and 8.6%, in relation to the reduction of respective trade deficits following the lockdowns and the impact of COVID-19 on imports (Figure 18).

Figure 18. Current Account Balance in Arab region (% GDP)



Source: World Bank, 2021

Public indebtedness in Arab countries has reached high levels which weigh on medium-term sustainability. This observation, confirmed by DSA analysis, must be nuanced. Therefore, the statistical and mechanical approach of DSA to estimating sustainability should be revised and contextualized.

In fact, the structural issues that explain the fact that the Arab countries find themselves in a low growth trap phase, in this case, the delay in the implementation of reforms, the obstacles to private investment, the complexity of the regulation of labour market, the rise in structural unemployment, etc. are decisive for the evaluation of the key drivers of public debt.

The Arab region is far from being a homogeneous area. Capacity building needs in public debt management varies from a country to another in this region. Financing needs and ease of access to resources remain conditioned by several constraints such as the state of macroeconomic fundamentals (current account balance, primary balance, inflation, growth rate, etc.), the exchange rate regime, the soundness of the financial sector, the credibility of the monetary authority, the quality of the regulatory mechanisms (competition, labour market, foreign exchange, etc.), the attractiveness of foreign investment, market judgment in the case of MACs (rating, sovereign spread, CDS, etc.), and the institutional capacity to design and implement reforms.
Since December 2010, all market access Arab countries have seen a downgrading in their rating (Table 4). Jordan and Morocco have succeeded in limiting the cycle of downgrading at not more than two-notch (Morocco: One-notch, Jordan: two-notch). In other countries, in view of the significant difficulties encountered by the public finances, the punishment is too harsh. Lebanon default of payment has led to 10 notch sovereign downgrades as well as at Fitch Ratings or Moody's. Tunisia, in view of the significant difficulties encountered by its public finances, was hit also a multi-notch sovereign downgrade (9 notch at Fitch Ratings et 8 at Moody's).

Table 4. Sovereign Debt Rating for the Arab Countries

		Fitch Ratings		Moody's		Standard & Poor's	
		Current Rating	# of notches changed since DEC 2010	Current Rating	# of notches changed since DEC 2010	Current Rating	# of notches changed since DEC 2010
Bahrain		B+	↓ 8	B+	↓ 8	B+	↓ 5 (Since Mar 18, 2011)
Egypt		B+	↓ 3	B+	↓ 4	B	↓ 3 (Since FEB 1, 2011)
Jordan		BB-	0 (Since JUN 13, 2019)	BB-	↓ 2	B+	↓ 2
Lebanon		RD	↓ 10	RD	↓ 10	D	↓ 7
Morocco		BB+	↓ 1	BB+	0	BB+	↓ 1
Oman		BB-	↓ 4 (Since JAN 3, 2017)	BB-	↓ 8	BB-	↓ 7
Tunisia		CCC	↓ 9	CCC	↓ 8	N/A	

Source: Fitch Ratings, Moody's and Standard & Poor's, 2022

It is important to consider that the institutional, environmental and, mainly, social aspects are fundamental to establish the pillars of an active management of the public debt. Public debt management is also dependent on the capacity of Arab countries to implement the necessary reforms with social acceptability.
Also, a medium-term expenditure framework is essential to foster greater visibility on the trajectory of public debt in the medium term. This medium-term forecasting framework adopted by the legislative power during

the adoption of the Finance Law is likely to guarantee budgetary discipline and the efficiency of resource allocation.

Public debt management in Arab Region: An important progress but not sufficient

The main objectives of public debt management are:

- to reduce the cost of public debt management by ensuring "that *the government's financing needs and, its payment obligations are met at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk*".[27]
- to strengthen the depth of the government securities market in order to ensure the success of treasury issues.
- to enhance liquidity and tradability of country's debt instruments, strengthening non-banking financial markets remains determinant to improve its attractiveness for foreign investments to finance projects designed to improve the public service for achieving the SDGs goals, without crowding-out effect in private investments.
- and to share equitably the benefits and costs of public debt among present and future generations.

Public debt management plays a key role in ensuring the sustainability of public debt. However, the challenge for the Debt Management Office (DMO) is to achieve the best coordination with fiscal and monetary policies[28] and to optimize its ability to manage economic and non-economic risks successfully, especially those risks related to climate change. Until today, debt management has not had the place it deserves in public policy in the Arab region. In 2021, only nine Arab countries (LICs: Sudan and Syria Arab Republic; MICs: Algeria, Djibouti, Egypt, Iraq, Jordan, Lebanon and Mauritania) have adhered to the DMFAS (Debt Management and Financial Analysis System Programme) of the United Nations Conference on Trade and Development (UNCTAD). This programme aims to guarantee the conditions for sound debt management. It "focuses on strengthening debt data transparency and capacity development in recording, processing, monitoring, reporting and analyzing public debt".[29]

In the Arab world, DMO spotlight should not focus solely on the public debt. Contingent liabilities represent one of the core public finance problems facing Arab countries.

While there is no reason for concern for Arab oil countries (Algeria, Bahrain, Iraq and Oman, in the sample), due to the comfortable level of fiscal space that they enjoy in their own public finance, especially when energy prices follow an upward trend, consideration of contingent liabilities is essential for implementing good governance practices in debt management and to avoid a worsening in their debt profile in the event of a fall in oil prices.

However, for the rest of Arab countries retained in the sample (MACs and LICs), the matter of contingent liabilities is of such urgency on the state of public finance and the drying up of external sources of finance. The continued adoption of a cash basis instead of accrual basis in national accounting is a source of hidden deficits.[30] The delay observed to switch to an accrual accounting and to impose good governance practices in SOEs presents fiscal risks that exacerbate debt profile.

In the Arab region, most countries have introduced Islamic and Sharia-compliant principles into finance tools. Certain markets, particularly those in the Gulf region, are very dynamic in this segment. This is not the case for Tunisia, which has so far failed to issue Islamic Sukuk despite a regulatory text voted by Tunisian Parliament.

[27] IMF, 2014b
[28] IMF, 2014b; Sarangi, 2020b
[29] UNCTAD, 2022
[30] El Khishin, 2021

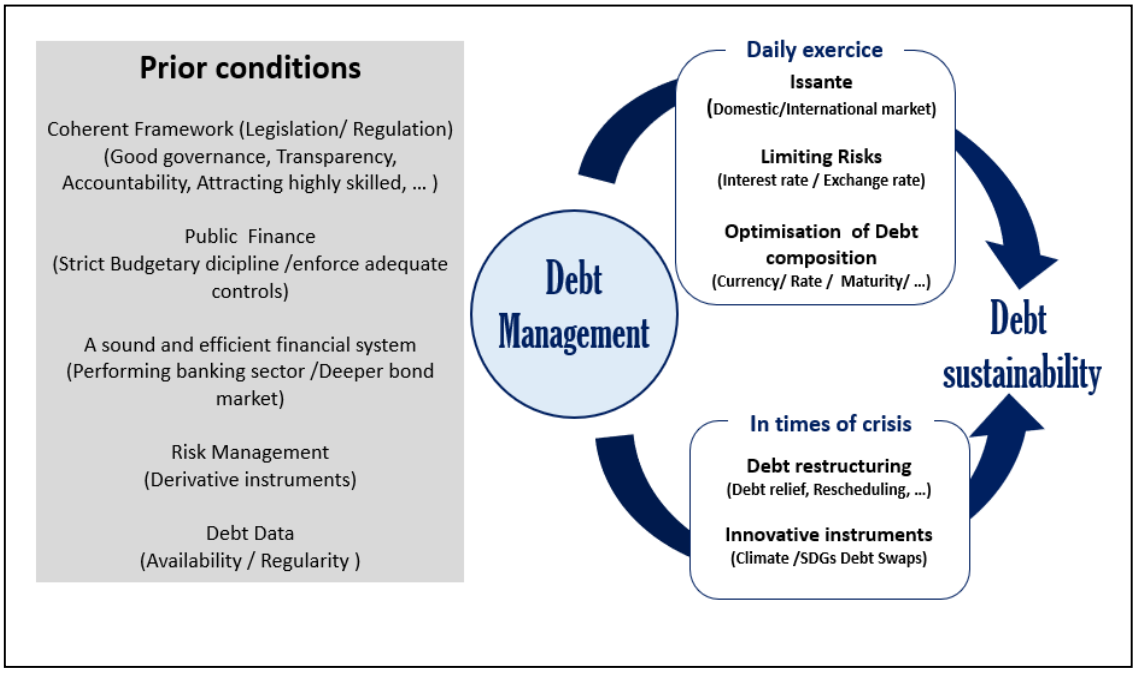
On the other hand, as regards integration in the fight against climate change, the region is lagging far behind despite its high exposure to climate threats. Only Egypt, Morocco and UAE have shown a real determination to modernize their conventional instruments by introducing green tools in fiscal policy (green bonds). The Sovereign Green Financing Framework, announced in September 2020 by the Egyptian government, underlines Egypt's commitment to issue green bonds as part of its strategic vision for achieving the SDGs and Egypt's 2030 Vision.

Public debt management: a cornerstone of debt sustainability

Effective debt management is crucial to improve debt sustainability.
But an effective debt management requires many prior conditions:

- A coherent framework (legislation/regulation) to promote good governance practices: transparency (debt strategy, reporting of risks, …) and accountability, which could create an enabling environment for attracting highly skilled workforce.
- The introduction of strict budgetary discipline and to enforce adequate controls.
- An efficient financial system: a sound banking sector and a deeper and liquid financial market and more precisely a secondary bond market.
- The introduction of derivative instruments in order to promote a genuine culture of hedging in public administration and SOEs (debt, commodities, currencies...).
- Availability of debt data and the regularity of its publications (public debt, contingent liabilities).

Box 7. Public debt management: a cornerstone of debt sustainability



Both types of operations characterize public debt management activities:

- Daily exercise: Issuances on the domestic and international market; limiting financial risks (interest rate, exchange rate); Reporting; optimization of debt structure (currency, rate, maturity, …); …
- In times of crisis: Debt restructuring (negotiation, debt relief, rescheduling, …) or the use of alternative instruments (climate/SDGs Debt swaps, …).

In short, the quality of debt management remains the cornerstone of debt sustainability.

Public debt management and macroeconomic policies

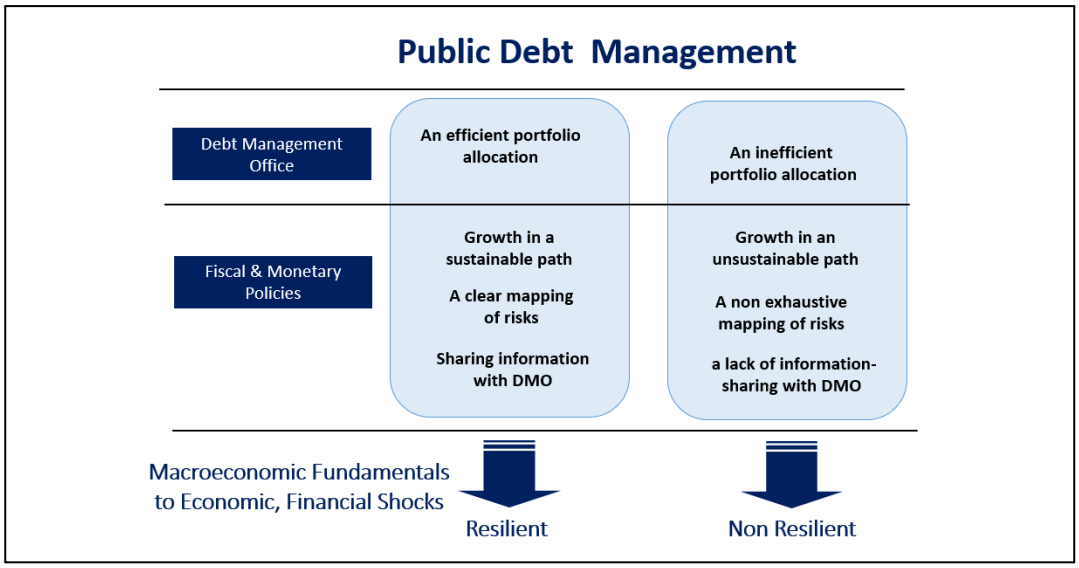
The main function of the DMO is to achieve the optimal composition of the government debt portfolio, which:

- covers the whole public sector debt: central government, central bank, local governments, and SOEs (State owned enterprises),
- includes both marketable (domestic and international financial market) and non-marketable debt (mainly concessional financing obtained from bilateral officials and multilateral institutions),
- incorporates the targets and goals of the government strategy regarding the degree of exposition of budget to the potential changes in the cost of debt servicing and in the volatility of international markets (exchange rates, interest rates, commodities, …).

Efficient public debt management should be based on good coordination between DMO and fiscal policy and monetary policies. DMO must ensure that the prospects for growth rate are on a sustainable path, taking into account the financing conditions in international capital markets (spread, rating, financial market stress, …) and in domestic market (cost, crowding-out effect risk, yield curve slope, soundness of the banking sector, etc.). All that information is extremely important and should be shared with fiscal and monetary and macroprudential authorities.

On the one side, prudent government debt management based on enhancing sound policies for managing contingent liabilities, led to a better allocation of debt portfolio, in terms of interest rate (more fixed than floating) composition, currency (diversification), maturity (long than short), or risks associated with contingent liabilities. Such management could indeed generate a government debt portfolio that is robust to shocks. Thus, avoiding that debt portfolio will become a source of instability for also the private sector and the banking system. Good public debt management would also strengthen resilience of macroeconomic fundamentals (government budget, balance of payment) to the extreme volatility in financial markets and to the potential non-economic risks related to climate change and pandemic crisis.

Box 8. Coordination with Fiscal & Monetary Policies



On the other side, the solidity of the fundamentals of the economy is far from sufficient to neutralize the destabilizing effects of exogenous shocks. "*Even in situations where there are sound macroeconomic policy*

settings, risky debt management practices increase the vulnerability of the economy to economic and financial shocks".[31] This is an issue requiring sound debt management practices.

The strong exposure of indebted economies to the volatility in the international markets (food and energy prices, exchange rates, interest rates, ...) imposes an effective coordination between a prudent fiscal policy, a credible and reactive monetary policy and an intelligent macroprudential policy to avoid the risk of debt unsustainability. Macroprudential policy should be sufficiently effective to forecast, monitor and assess economic and non-economic shocks threats to financial stability and to dampen the procyclicality of the transmission mechanisms of these shocks.

Until now, Arab countries do not seem to be well positioned on an active process of strengthening interaction between these three policies. On the one hand, the inflationary spiral observed in some countries and followed by a restrictive reaction from the central banks, pushes domestic interest rates towards higher levels, thus complicating domestic financing equation. The most exposed countries are the MACs whose access to external financing is temporarily almost closed (Lebanon and Tunisia) and of course the LICs which do not have access to the market (Sudan). Other countries, taking advantage of an interest rate differential favoring access to international markets, have been forced to make excessive use of external financing, as was the case for Egypt. But the tightening of the monetary policy of the major central banks, in advanced economies, observed in the aftermath of the Ukrainian crisis, showed the limits of this choice by putting the DMO in a bad position to guarantee the sustainability of the public debt.

On the other hand, macroprudential policy is still in its early stage in the Arab region, as evidenced by the strong exposure of the banking sector to sovereign risk in several countries (Lebanon, Egypt, Tunisia) directly via the holding of Treasury bills and indirectly via the public sector's contingent liabilities.

Public debt management in Arab region: an unfinished work

The history of debt crises teaches us that badly managed debt inevitably leads to badly structured debt. This misconfiguration of debt manifests itself through the dominance of variable rates and short maturities, the absence of diversification in the composition of currencies, and large and unfunded contingent liabilities. This has left public finances severely exposed to volatile financing conditions in international capital markets. This could fuel investor mistrust of the country's debt securities, triggering downward pressures on reserves and the exchange rates as is often the case for some MACs (Egypt, Tunisia, Lebanon, Jordan).

COVID-19 and Ukraine war have exacerbated the risk of unsustainable debt for several Arab countries, especially with the tightening of monetary policies on a global scale and the high volatility of exchange rates and the prices of energy and food products. These factors support and strengthen the urgent implementation of a debt management strategy.

Arab countries need a coherent framework of legislation and regulation to ensure better public debt management. Attention needs to be given to:

- improving and enhancing the disclosure of public debt information
- promoting transparency and accountability of government officials, and effective management practices
- scrutinizing full compliance with debt management exercises

In contrast, the facts on the ground, however, a strong bureaucratic and administrative resistance stands behind the slow progress of the implementation of debt management good practices.

For all countries selected in this study, there is no publication of debt sustainability analysis. Legal framework for issuing and managing debt is very fragmented, except for Oman, which has a single debt management law. However, excluding the cases of Jordan, Morocco, Oman, Egypt and Tunisia, Arab countries do not regularly disseminate comprehensive debt statistics (Box 9).

[31] IMF, 2014a

So far, all Arab countries have produced no debt sustainability analysis and they have been satisfied by IMF staff assessment methods based on IMF DSA approach. This lack of visibility on the medium and long-term debt situation had resulted in the slippages in public debt (domestic and external) in most countries observed under the effect of the COVID-19 pandemic. Indeed, in 2020, the less the unit responsible for debt management is independent and unified, the more significant these slippages are.

It is important to note that only Oman set up a Debt Management Office in 2017. Its main mission is to optimize financing costs through the diversification of sources of borrowing and the establishment of a focal point to link rating agencies and investors together knowing internal budget requirements as well as the strategic timing of debt issuances to maximize exploiting market opportunities.[32]

This Office has benefited from technical assistance from the IMF in order to strengthen its staff and its analytical skills. In addition, it is the author and the coordinator for drawing the medium-term debt strategy in 2021 which will make it possible to guide the government's borrowing program and give a better vision to the actors of the financial system.[33] Thus, Oman suffered a lesser deterioration in public debt in 2020 following the pandemic crisis and the debt ratio is estimated to fall to 43% of GDP in 2022 (IMF, 2022).

Box 9. Public debt management in Arab region: MICs

Country		Debt Management Office (DMO)	Clear debt management objectives	Reporting to Parliament on debt management activities	Reporting on contingent liabilities/ fiscal risks	Publication of debt statistics	Publication of debt management strategy	Publication of annual borrowing plan	Publication of debt sustainability analysis
Algeria		Treasury and Accounting Management of financial operations General Direction		✓	✗	✗	✗	✗	✗
Egypt		Public Debt Unity	-Meeting the needs of government financing at the lowest possible cost in the medium and long term. -Maintaining a balanced degree of risk in the public debt portfolio. -Developing the domestic market for government debt securities in order to enjoy efficiency and depth	✓	✓	✓	✓	✗	✗
Jordan		The Public Debt Directorate	-Reducing the costs of borrowing and associated risk negotiating and contracting of new loans and issuing domestic debt tools -Assuring the collection, remediation, and follow-up on both direct and guaranteed government debt	✓	✓	✓	✓	✓	✗
Lebanon		The Public Debt Directorate		✓	✗	✗	✓	✗	✗
Morocco		Department of Treasury and External Finance	-Defining the conditions of internal and external financial balance taking into account the economic and financial situation; -Defining the balance of Treasury and contributing to this effect in the development of the Finance law and monitoring its implementation; -Ensuring balance conditions of the Treasury, establishing the predictive situation of costs and resources and identifying and implementing	✓	✓	✓	✓	✓	✗
Tunisia		Financial Corporation and Public Debt Management General Direction	-Managing the State's debt and treasury under the best possible security conditions. -Minimizing the financial costs while respecting the budgetary and monetary objectives of the State. -Guaranting liquidity, total transparency and the desire to combine innovation in terms of financial instruments and security	✓	✓	✓	✓	✗	✗

Source: IMF, n.d.; Ministries of Finance of respective countries.

Regarding the Arab ***Middle-income countries***, only three countries (Jordan, Morocco, and Egypt) produce periodic statistics on their debt situation and, only Jordan and Morocco publish medium-term debt management strategies and annual borrowing plan reports (Box 9). Thus, their respective departments responsible for debt management have contributed to strengthening the resilience of their respective debt profiles, which have suffered from less deterioration in comparison with other Arab countries with access to the market (Algeria, Egypt, Lebanon, Tunisia). Indeed, only Jordan and Morocco debt ratios as well as their debt service-to-revenue ratio, their market perception indicators, and above all their external debt maturities experienced a relative deterioration in relation to the global context following the COVID-19 pandemic. In particular, Morocco has

[32] Ministry of Finance of Oman, n.d.
[33] IMF, 2021b

the cheapest spreads among the countries observed, and Jordan has the longest maturity of external debt. On the other hand, the upward trend of the debt ratio in Algeria and Lebanon is the most remarkable, knowing that these two countries publish the least data compared to their respective debt profiles.

Box 10. Public debt management in Arab region: GGC countries

Country		Debt Management Office (DMO)	Clear debt management objectives	Reporting to Parliament on debt management activities	Reporting on contingent liabilities/ fiscal risks	Publication of debt statistics	Publication of debt management strategy	Publication of annual borrowing plan	Publication of debt sustainability analysis
Bahrain		Public Debt Management Office	-Developing a strategy to manage the public debt and manage annual debt -Borrowing with the aim of securing fair pricing for the Government's financing requirements over the short, medium and long term	✓	✓	✓	✓	✗	✗
Oman		Debt Management Office	optimizing funding costs by: (i) diversifying funding sources; (ii) creating a central focal point to liaise with rating agencies, investors and internal budgeting requirements; and (iii) strategically timing issuances of debt securities to benefit from opportune market conditions	✓	✓	✓	✓	✓	✗

Source: IMF, n.d.; Ministries of finance of respective countries

Concerning ***Oil-Exporting GCC countries***, debt profile in Bahrain is not yet announced as unsustainable despite the critical level of debt situation under the effect of the pandemic. On the other hand, Oman's debt management office has enabled this country not only to reverse the trend in the debt profile from 2022, but also to help remedy financial imbalances (Box 10). Indeed, Oman is estimated to achieve sizeable primary fiscal surpluses as well as current account surpluses from 2022. Despite the critical debt situation in Bahrain under the effect of the pandemic, its debt profiles are not yet announced as unsustainable.

Box 11. Public debt management in Arab region: LICs

Country		Debt Management Office (DMO)	Clear debt management objectives	Reporting to Parliament on debt management activities	Reporting on contingent liabilities/ fiscal risks	Publication of debt statistics	Publication of debt management strategy	Publication of annual borrowing plan	Publication of debt sustainability analysis
Mauritania		External Debt Management Direction	-Developing the debt and debtreduction strategy, public debt sustainability analysis and monitoring of its financing	✓	✗	✗	✓	✗	✗
Sudan		Governemental Assets and Public Debt General Direction	-Documenting the financial obligations of the government towards others. -Working to reduce borrowing from the banking system and fill the deficit in the public budget. -Filling the deficit related to the annual state budgets. -Controlling inflation. -Contributing to the fair distribution of the burdens of negative monetary policies and liquidity management.	✓	✓	✓	✓	✓	✗

Source: IMF, n.d.; Ministries of finance of respective countries

Box 12. Public debt management in Arab region: Conflict-affected countries

Country		Debt Management Office (DMO)	Clear debt management objectives	Reporting to Parliament on debt management activities	Reporting on contingent liabilities/ fiscal risks	Publication of debt statistics	Publication of debt management strategy	Publication of annual borrowing plan	Publication of debt sustainability analysis
Iraq		Public Debt Direction	-Paying the amounts resulting from signing bilateral agreements with countries, as well as entering debt information into a database and following up on updating that. -Following up the implementation of loan and grant agreements and obtain the fundamental legal approvals for approval. -Scheduling and repaying old and new internal debts, issuing remittances, and following up on all matters and legal issues related to the issue of external debt settlement.	✓	✓	✓	✓	✓	✗
Palestine				✗	✗	✗	✗	✗	✗

Source: IMF, n.d.; Ministries of finance of respective countries

However, when we look at the ***Low-income countries*** (LICs), Mauritania has a higher debt service-to-revenue ratio compared to the level of its debt ratio. In fact, it publishes neither annual reports of its borrowing plan, nor reports on the risks of indebtedness or even statistics on its debt (Box 11). However, Sudan, which has a more independent and transparent debt management unit, has a better debt service-to-revenue ratio despite the fact that most of its debt is domestic and its debt situation is unsustainable.
Regarding the ***Conflict-affected countries***, excluding Palestine which does not have a debt management unit, the other countries are among the most transparent Arab countries in terms of publishing data relating to their debt situations (Box 12). Indeed, Iraq disposes of a transparent debt department which regularly publishes debt statistics and communicates its borrowing plan and debt strategy. Despite being in a conflict situation, Iraq's burden debt remained always under 70% of GDP, except in 2020.
This context, characterized by a sub-optimal public debt management, could only lead Arab countries to a high exposure of their government budget and balance of payment to the potential variation in the cost of debt servicing and the volatility of international markets.

Public debt management and Environment transition

The challenges of climate change have not been given their appropriate place in the management of public debt.
The situation is more threatening considering the potential risks that weigh on the region. There are several arguments which advocate for the integration of climate change risks and greening debt management in the Arab region. First, the major credit rating agencies are increasingly integrating climate risks into their sovereign risk assessment exercise, which will weigh on the sovereign spread. Second, physical risks can significantly affect debt service. Acute physical risks (droughts, floods, extreme precipitation, wildfires, …) may damage public infrastructure requiring an increase in public expenditures for the ongoing rehabilitation and reconstruction programs and a higher level of borrowing. Chronic physical risks (an accelerating loss of biodiversity, rising temperatures, water stress, etc.) may generate large-scale migration movements, which could lead to an escalation of social and political tensions in the country and undermine the capacity to honor the service of the debt. Third, transition risks penalize banks operating in the brown sector which could generate a systemic risk for the financial sector. On the one hand, the deterioration of the banking sector conditions leads to a significant downgrade rating credit which increases the sovereign spread. On the other hand, the fragility of the banking sector complicates the budget financing equation, especially for countries where domestic banks are accustomed to subscribing for Treasury securities during periods of the drying up of liquidity and the lack of concessional credit. Fourth, DMO could use innovative instruments to manage the debt burden and accelerate ecological transition (Climate-for-debt swaps, green bonds, ...).

Two main reasons can explain the refusal for some and, the hesitation for others, to prioritize the environmental transition in public policies.
Firstly, the reluctance of some oil-producing countries can be explained by the fact those countries take a dim view of the development of renewable energies. Energy transition means a future loss in budgetary revenues. Because of their high exposure to fossil fuels and their delay in the energy transition, these countries would have to modernize their public debt management by modernizing their DMO, and on the other hand, review the investment strategies of their sovereign wealth funds towards greater compliance with the imperatives of the energy transition.

Secondly, on the side of non-oil countries, limited fiscal space and tightening of financing conditions, linked to debt service, and pressing social demands, prevent them from thinking strategically and designing public

policies that strengthen their resilience to economic and non-economic shocks (climate change, pandemic crisis, etc.). This context is far from favorable to speed up the environmental transition.

Considering this, ecological transition is far from being the priority of policy makers in Arab countries. Climate change may hinder the ability to deliver a sound public debt management. Fighting climate change risks has emerged as a key policy priority globally, but not yet for the Arab region. The cost of inaction would be very high in a region where resilience to shocks (economic and non-economic) is very limited and where the culture of environmental transition is embryonic.

Several opportunities exist. First, the transition to renewable energy helps to lower the current account deficit and reduce downward pressure on foreign exchange reserves and the domestic currency. On the one hand, public finances will be less exposed to fluctuations in foreign exchange rates and hydrocarbon prices. On the other hand, the stability of foreign exchange reserves makes it possible to limit recourse to indebtedness, thus improving debt sustainability. Second, green bonds, social bonds, and green sukuk issues provide an opportunity for the fiscal authorities to mobilize private resources towards sustainable projects. The majority of Arab countries have not yet landed on this market. However, besides the UAE (National Bank of Abu Dhabi — now First Abu Dhabi Bank PJSC — issued USD 587 million the first green bond in March 2017), Qatar (Qatar National Bank issued USD 600 million in September 2020) and Saudi Arabia (Saudi Arabia Launches First $500 Million Tranche of Green Bonds), only three countries in our sample, Lebanon, Morocco and Egypt are present in this market. Lebanon's Fransabank issued its first green bond in the country in April 2018 with an initial investment of USD 60 million. Morocco has started its green bond issues since 2016 with a market that has remained primarily domestic. It has a well-designed regulatory framework for green bond issues, prepared by Moroccan Capital Market Authority in collaboration with Word-Bank – IFC. In this market, Morocco is ranked in the top 3 in Africa. Egypt has become very active in the green bond market with the USD 750 million issued in 2020. In September of the same year, thanks of the size of the issuance, Egypt became the first country in the region to issue a sovereign green bond.

Third, DMOs in Arab region are also missing the opportunity to develop innovative financing instruments like Debt-for-climate swaps and Debt for SDGs swaps. A debt-for-climate swap can be defined as "an agreement between a debtor country and its creditors, where the former's debt stock is reduced in exchange for a verifiable commitment to invest in climate mitigation or adaptation projects".[34] Many tools have successfully integrated solutions that offer a «triple win or dividend». These new tools will provide an exit strategy for debt crisis, curb the impact of climate change in the future, and limit the collateral damage in terms of biodiversity loss. Climate/SDGs debt swaps is a mechanism used to covert the debt service burden into domestic investment in promoting the greening of the economy through collaborative arrangements between debtors, creditors, and donors[35] (. The projects selected must have clear deliverables and tangible and measurable results that can boost progress toward the SDGs by 2030 and the Paris Agreement.

Accelerating the pace of greening fiscal policy does not seem to be at the top of the agenda of fiscal authorities in Arab countries. Public debt management provides a good example. The transition towards innovative instruments is not commensurate with the challenges facing the Arab region.

In short, as countries prioritize health problems and a rapid economic recovery, the fight against climate change receives relatively little attention. Hence, the implementation of necessary reforms has been disappointingly slow and incomplete.

[34] ESCAP, 2021

[35] ESCWA, 2021b; Essers et al., 2022; Karaki and Medinilla, 2022.

Debt Management and Debt Sustainability in the Arab Region: What lessons for the future?

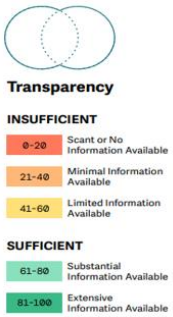
Many lessons can be learned, on the one hand, from the difficulties Arab countries experience in putting their economies on the path of debt sustainability, and on the other hand, in establishing global good practices in public debt management. Five lessons are particularly pertinent.

Debt transparency: Improving debt data and reporting

A lack of transparency and accountability should be vigorously addressed because it can exacerbate the fragile situation of public finance and complicate efforts needed to restore debt sustainability.
Debt transparency remains an urgent priority for all Arab countries, not only to improve short and long-term debt sustainability but also to guarantee both the implementation of the most effective debt management strategies and the most effective restructuring operations.
According to Open Budget Index's (OBI) transparency ranking, the MENA region is still in last place since 2010 (Table 5).

Table 5. Open Budget Index: Transparency in Arab region

	2015	2017	2019	2021
Jordan	55	63	61	61
Morocco	38	45	43	48
Egypt	16	41	43	43
Tunisia	42	39	35	42
Saudi arabia	0	1	18	23
Somalia	N/A	8	3	20
Lebanon	2	3	6	9
Iraq	3	3	9	6
Algeria	19	3	2	3
Qatar	0	0	1	2
Sudan	10	2	2	1
Comoros	N/A	8	0	0
Yemen	34	0	0	0

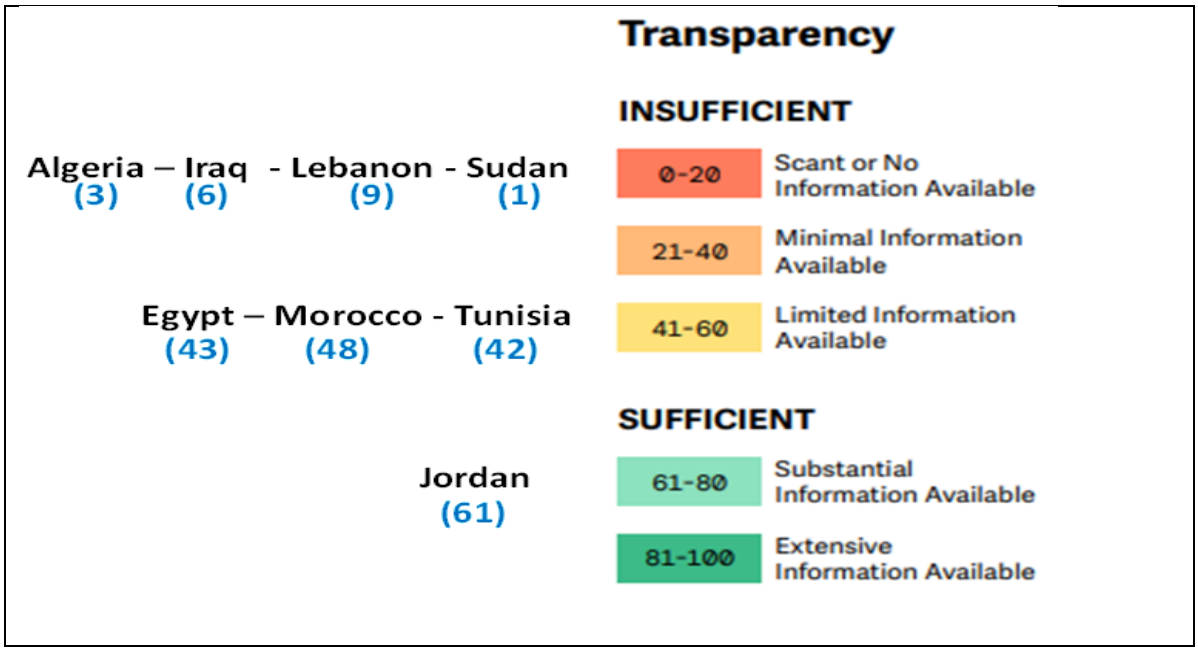


Source: International Budget Partnership, 2021.

Since 2015, several Arab countries have made progress in the field of budget transparency.

In 2021, only Jordan stands out from the rest of the countries with a score of 61, joining the group of countries whose budget transparency is deemed “sufficient” (60-100).
For the rest of the Arab countries classified by the OBI, the level of transparency is described as “insufficient” (0-40) (Table 6).

Table 6. Arab countries: An insufficient level of Transparency



Source: International Budget Partnership, 2021.

It is very difficult to find good management of the public debt in the region as long as progress in the field of transparency remains minimal. Transparency makes it possible to impose budgetary discipline and to succeed in the bet of accountability, which are the main pillar of good governance in public finance management. These conditions are crucial to avoid falling into the debt trap.

Arab countries need a coherent framework of legislation and regulations to ensure better public debt management. Such a framework will play a decisive role in enhancing the disclosure of public debt information, promoting transparency, accountability of government officials, and effective management practices, in scrutinizing full compliance with debt management exercises.

Transparency is sadly lacking when we try to analyze the debt risk related to contingent liabilities. Studies of public debt in developing countries often elude the issue of contingent liabilities. Recently, several Arab countries (including Morocco and Tunisia) are beginning to integrate the management of explicit financial guarantees into their public debt management strategies. Such coordination is decisive for improving transparency, and above all for better risk assessment.

However, the non-availability of data (delay in access for some and difficulties in quantification for others) limits the scope of the efforts made to date.

Economic resilience: the crucial role of fiscal space

In most Arab countries, interest rate growth differential (IRGD) remains the main driver of debt sustainability.

The action must focus much more on improving the growth rate than on lowering the interest rate.

On ***the growth front***, fiscal policies will need to play a greater role to foster a deep and lasting culture of good public debt management in order to strengthen debt sustainability. On the one hand, public finance consolidation policies will be decisive for improving fiscal space. Reducing inefficient and inappropriate tax expenditures (e.g., over-sized wage bills in Tunisia, energy subsidies in Egypt and Tunisia) would create more space for pro-growth outlays (investment in reviewable support to infrastructure investment, support to local SMEs with high potential during the search for financing and in developing innovative action, etc.) as well as building resilience to external shocks (commodities prices, exchange rate, interest rate, pandemic, climate change, etc.). As well, growth in most Arab countries needs to accelerate beyond the pre-COVID-19 rates. The

implementation of structural reforms could raise potential growth rates, improving the resilience of the economy and the sustainability of the public debt.

On **the *interest rate front***, the leeway for decision-makers is proving to be very limited. On the one hand, the benchmark interest rates for external financing are considered as exogenous variables insofar as they are determined from the orientations of the monetary policies of the major central banks (for short-term interest rates), and from fiscal policies and inflation expectations (for long term interest rates). On the other hand, domestic interest rates reflect the effectiveness of monetary policies. Such efficiency remains highly dependent on the origins of inflation. In a global context marked both by inflation -whose origins are exogenous - and a tightening of monetary policies, which is beginning to weigh on long-term interest rates, it is difficult for small open economies to curb the upward trend in domestic interest rates. This is largely due to the rise in inflation (rise in oil, food, and commodities prices) and foreign interest rates given the restrictive policies adopted by the major monetary authorities. In addition, it should be recalled that the quality of financial institutions, more specifically, the resilience of the banking sector as the main channel for transmitting monetary policy in the Arab region and the credibility of the central bank, play a crucial role in ensuring the effectiveness of monetary policy.

In short, improving the resilience of the economy through the commitment to energy transition and the strengthening of food security could mitigate the negative impact of rising prices of hydrocarbons and food prices on domestic inflation rates, limiting thus, the need for monetary tightening and the deterioration of the IRGD, hence creating a favorable situation for an effective public debt management in order to put the country on the road to debt sustainability.

Modernization of public debt management: Boosting the process

The size and complexity of the largest financial portfolio held by a government could destabilize that government's balance sheet and become a source of systemic risk. Mismanagement in a government's debt portfolio makes Arab countries more vulnerable to external shocks and needs to be countered by modernization of public debt management methods.

The main thrusts of this strategy are as follows:

- *Debt agency:* implementing a debt agency is essential to improve the efficiency and transparency of public debt management. But its success depends on its capacity to attract well-qualified managerial staff and to strengthen the depth of the secondary bond market.
- *Active debt management:* The debt manager is regularly called upon to manage the risks related to debt management operations: the exchange rate risk, and the interest rate risk (fixed and variable). Active debt management can also improve secondary market liquidity and reshape the maturities profile of the debt. Modernization imposes the introduction of derivative instruments (options, swaps, forward rate agreements, …) for better management of these risks.
- *Need for coordination among debt management and monetary and fiscal policies:* The dynamism of the domestic capital market and the independence of the central bank are two prerequisites for successful coordination among debt management and monetary and fiscal policies. The depth of the market gives rise to a yield curve which acts as a benchmark for private issuers. The slope of this curve should reflect market conditions and especially monetary policy expectations and the prospects for economic growth in the country. The Morocco debt agency (the Treasury and External Finance Department) participates actively in the design of the fiscal policy (fiscal deficit level, resources mobilized to meet the requirements for the fiscal year) and coordinates monetary policy on issues on the market.

Prudent public debt management limits the vulnerability of indebted economies to the vagaries of the international situation and helps to prevent poor management of the State portfolio from becoming either a source of fragility for the private sector or a threat to financial stability.

Ecological transition: Greening debt sustainability

Underestimation of climate risks and delays in setting up the energy transition have widened the fiscal deficit (rise in energy price subsidies). Similarly, a limited fiscal space prevents the country from implementing reforms in renewable energy, negatively affecting debt sustainability.
The introduction of the SDGs approach is proving to be decisive in guaranteeing debt sustainability. This introduction could be identified at three levels:
- **Reducing the Subsidy Bill:** To limit the frequent recourse to external debt and thus guarantee the sustainability of the debt via the transition to clean energy. The development of renewable energies aims to limit access to fossil fuels which remain strong sources of widening current account (imports) and fiscal (subsidies) deficits, helping to mitigate the negative effects of the volatility of hydrocarbon prices on the commodities market.
- **Tackling Climate Change:** to manage the 'macro-critical risks' generated by climate-related disasters (physical risks) which have increased by an order of five over 50 years (World Meteorological Organization, 2021) and policies favoring the greening of the economy (transition risks)
- **Addressing the Debt Crisis:** Managing the debt crisis through the use of alternative solutions to exit the debt crisis. Debt for climate swaps has emerged as an innovative instrument of financing climate change adaptation and mitigation, providing a genuine win-win situation to the parties concerned (for debtor and creditor countries).

Digitalization: an engine for good governance

Digitalization as «an Anti-Corruption Strategy»[36], insofar as it has the capacity to limit direct relation between tax officials and taxpayers. Digitalization is a lever for improving the mobilization of tax resources through various channels:
- Digitalization allows the acceleration of budgetary and accounting performance reforms.
- Digitalization limits the size of the informal sector, which improves tax collection. We should remember that the *informal sector* in the Arab region and more specifically in low-income countries is among the leading causes of weak performance in the collection of revenues.
- Digitalization remains an effective tool in the fight against corruption. It limits leakages in social transfer operations. The introduction of a universal digital identity would have made it possible to limit the subsidy budget and decrease the level of the budget deficit.
- Digitalization guarantees an improvement in the quality of the administrative service by introducing good governance practices in the administration, and reducing corruption, which could boost domestic investment (more tax revenue) and the attractiveness of the country to foreign investors (capital inflows).
In sum, an improvement in the primary balance will be decisive to improve the overall coverage of debt management and limit the risk of debt crisis.
However, vigilance is crucial. Digitalization cannot alone resolve corruption. Other factors play an important role: transparency, accountability, political determination, the rule of law, … And, with too much digitalization new risks and threats can emerge. An over-digitizing generated by the rising complexity of technological solutions could increase the economy's exposure to cybercrime risks.

[36] Santiso, 2021

Conclusions and Recommendations

Arab countries have made important progress in debt management over the last two decades. However, several important points should be highlighted.

• The threat of debt unsustainability looms over the Arab region due to a combination of reasons:

- The widening of the primary deficit resulting from the slippage of public expenditures and the insufficiency of fiscal resources
- The slowness in the implementation of structural reforms due to an almost absent fiscal space and a rise in social vulnerabilities
- The delay in anchoring the culture of transparency and accountability in the management of public finances and more specifically in public debt
- The difficulty of initiating budgetary austerity measures in economies undergoing a rise in poverty and social downgrading, particularly when public finances are in distress
- The growing need for foreign currency in economies unattractive to foreign investment

• Debt sustainability is a multidimensional issue. Any approach to sustainability that marginalizes the impact of extra-economic risks (i.e., pandemic crisis, social fragility, climate change, etc.) could only lead to an under-stressed sustainability. In this regard, the Arab region remains extremely exposed to these risks.

• The Arab region is far from being a homogeneous area. While oil-producing countries (i.e., Algeria, Bahrain, Iraq, Oman, etc.) have shown a certain resilience, taking advantage of a comfortable fiscal space to reduce exogenous shocks (exchange rates, food prices, pandemic crisis, etc.), other countries that promote both high energy and food dependence (i.e., Egypt, Morocco, Tunisia, Sudan, Palestine), are bearing the brunt of the rise in energy and food prices

• The threats of climate change have not yet had the place they ought to have on the public policy agenda, in a region hit by increasing drought and water stress. However, some countries are beginning to become aware of the risks that weigh on their economies (especially Morocco). Nonetheless, this delay complicates the debt sustainability equation and debt management strategies.

The main issues relevant to the present context are: given the limited fiscal space, the weak and fragile economic growth rates, the widening of the risk premium for MACs in countries such as Lebanon, Tunisia, and Egypt, the rise in long-term interest rates on capital markets (more strongly for US Treasury-Bonds), the rise of poverty rates and social downgrading, what recommendations should be drawn from this to reconnect with inclusive, shared and clean growth and sustainable debt? And how can we prevent social expenditures from constantly being the adjustment variable for successful consolidation of public finances or for increasingly being crowded-out by debt service repayments?

Several recommendations were made to address the situation:

- Winning the Battle of Resilience for connecting with a debt sustainability

The proliferation of external shocks (COVID-19, war in Ukraine, soaring commodities prices, downward revisions to growth rates in partner advanced economies, etc.) underlines the importance of implementing essential reforms.

First, the efficiency of expenditures should be improved. Still, a lot can be achieved through introducing more inclusive social policies and abandoning the inefficient ones (e.g., subsidies). Second, many reforms (consolidation of public finances, greater flexibility in foreign exchange regulation, in labor market regulation, and in competition, etc.) must be undertaken allowing the countries involved to be able to quickly reconnect with a comfortable fiscal space in order to mitigate the social impact of the COVID-19 lockdowns or more recently of the rising prices (food and energy) generated by Russian-Ukrainian crisis. Third, structural reforms (health education, infrastructure, environmental and energy transition, digitalization, etc.) must be implemented to improve the resilience of these economies to future shocks (economic, pandemic, climatic, etc.) and to increase the attractiveness of the Arab countries for foreign investors.

Given the limited fiscal space for many Arab countries, all these reforms remain a priority for the Arab region to raise potential growth and strengthen debt sustainability.

- **Strengthening coordination between monetary policy and fiscal policy**

This need requires breaking with coordination reduced solely to monetary financing of the budget, which heavily disfigures the policy-mix, to shift towards real coordination, concerned with both economic performance and the SDGs.

This coordination aims to enhance the fiscal space in order: (i) to limit the use of monetary financing and the resulting risk of crowding out private investment ; (ii) to strengthen the resilience of the economy to exogenous shocks, thus ensuring a sound public debt management (iii) to give scope for budgetary policy to support strategic sectors (agriculture, renewable, health, …) via an interest rate subsidies policy, when monetary tightening was imposed as an answer to the rise of inflation; (iv) to boost the greening of the economy through issuing "green bonds" by the Treasury which will be favored over "brown bonds" at the central bank's refinancing window (a much lower discount).

- ***Avoiding the debt crisis sovereignty leads to a social crisis***

During the debt crisis, the issue of foreign exchange reserves takes center stage. To prevent the balance of payment crisis from turning into a social crisis, it is important to grant the status of "domestic public good" to foreign exchange reserves. A status comparable to the Global Public Goods (GPGs) enables us to employ the «Environment public goods» (climate, land ecosystems, and marine ecosystems) or «Financial stability».[37] This imposes a prioritization of the use of these reserves for the regulation of imports of basic necessities (medicines, energy, hospital equipment, etc.) and inputs from exporting companies. In short, to prevent an escalation of the balance of payment crisis into a social unrest, the SDGs and the «producer» of these foreign exchange reserves (exporters of goods and services) should have priority in allocating the stock of these reserves.

- **Best practices in debt management should be adopted**

COVID-19 and Ukraine war have exacerbated the risk of debt unsustainable for several Arab countries. This situation requires: (i) the implementation of a debt management strategy and presents an urgent need to formulate an effective public debt management strategy, (ii) the creation of the Debt agency, which is essential to improve the efficiency and transparency of public debt management. But its success depends on its capacity to attract well-qualified managerial staff and to strengthen the depth of the secondary bond market and to strengthen coordination between fiscal policy, monetary policy and macroprudential policy.

- **Anchoring the culture of transparency and accountability in public debt management**

Given the risks generated by poor management of public debt and their implications for debt sustainability and financial stability, it is essential to implement a debt agency. *Public availability of information (*on the past, current, and projected trend), *accountability for debt management (*annual audit by external auditors), and measures of risk and strategies that are adopted should be clearly and fully explained.

- **Developing the domestic government bond market**

Policymakers and international financial institutions have long recognized that developing and strengthening bond markets is a key policy prescription to sound public debt management (Bossu and al. 2020). Bond market has a crucial role to play in ensuring debt sustainability: (i) by improving the depth of the capital market, hence a potential increase in long-term liquidity in the economy, (ii) and the emergence of a yield curve which remains an indispensable tool for debt management, (iii) playing a benchmark role for developing private capital markets, (iv) by developing the green bond market in order to integrate ESG factors during the issuing and reporting operations, and to boost climate/SDGs Debt swap mechanisms Secondary market transactions in Arab countries needs an adequate tax law framework: introducing derivatives instruments to modernize

[37]Shirakawa, 2012.

financial markets and, reforming tax treatment considerations for Repo transactions and security lending transactions to enhance the depth and the liquidity of the market.

- **Innovative instruments for managing debt burdens**

Encourages implementation of new innovative financial instruments for managing debt burdens more specifically the swap formulas linked to the SDGs (*Debt-for-climate*, Debt-*for-health*, *Debt-for-education, ...).* Given the environmental, health, and social challenges to be met, it is essential to have more significant involvement of multilateral institutions in this type of project.

- **Accelerating Energy Resilience to Strengthen Debt Sustainability**

Oil-importing Arab countries have an interest in accelerating the pace of their march towards energy and environmental transition. Hydrocarbons widen both the current account deficit and the budget deficit via the rise in the subsidy bill. The greening of fiscal policy (environmental taxes, fiscal incentives for green financial mechanisms, etc.), monetary policy adjust pricing to reflect counter-parties' climate related lending, adjust counterparty's eligibility, collateral pools a climate-related objective… and prudential regulation could boost enrollment in the environmental transition. On the one hand, renewable energy makes it possible to raise the level of economic growth. And on the other hand, it makes it possible to limit the downward pressures on foreign exchange reserves and the frequent recourse to foreign financing. In sum, an orientation favorable to debt sustainability.

- **Include climate/SDGs-conditionality in DSA and debt restructurings operations**

Recent history shows us that the origin of systemic risk does not necessarily lie in the financial or economic sphere. The multiplication of extra-economic shocks (pandemic crises, social upheavals, climate change, …) could also be highly destabilizing for the economic system. There is an urgent need to incorporate climate change (physical and transition risks) and SDGs concerns in discussion of the debt sustainability issue as reflected recently, within the IMF discussions to integrate climate change risks in the DSA exercise. The IMF is trying to introduce climate risk in its (MAC-DSA) frameworks.[38] The DSA needs to consider enhancing social expenditures and financing the SDGs, where the UN system as a whole should play a role and the IMF should consider engaging with the UN system on this important issue. An SDG-enhanced DSA framework would be useful in which ESCWA can play a role through the timely project on developing debt optimization strategies for Arab States. For instance, stabilizing debt to GDP in the medium term is an option for several Arab countries to enhance fiscal space to invest in social expenditures and SDGs.[39]

[38] IMF, 2022a; Gallacher, 2022.

[39] ESCWA, 2017 ; Altshuler and Sarangi 2021 ; Essers et al., 2022.

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