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## PUBLIC DEBT, GROWTH, AND STABILIZATION IN TUNISIA: A NEW NARRATIVE FOR A STRUCTURAL REFORM AGENDA

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#### Abstract

This paper assesses debt sustainability in Tunisia using the Debt Sustainability Analysis (DSA). We construct three hypothetical scenarios (A, B and C) over the period 2023-2027. The first two scenarios are called Business as usual approaches. In Scenario A, we assume that Tunisia will continue the same path as in the past three years, without an IMF agreement. In scenario B, Tunisia reaches an agreement with the IMF. However, the lack of considerable progress on the reform agenda causes the ending of the IMF agreement. The last one (Scenario C) is a proactive reform scenario. We conclude that "business as usual" approach (scenario A and B) cannot guarantee neither economic resilience nor debt sustainability. There is an urgent need for a broader approach to debt sustainability with reforms, similar to Scenario C, that would lead to resilience toward both economic and non-economic shocks.

Keywords: Debt sustainability, potential growth, climate change, structural reforms

JEL Classification: H6, O4, E6

ملخص

تقيّم هذه الورقة القدرة على تحمل الديون في تونس باسـتخدام سـيناريوهات القدرة على تحمل الديون. نقوم ببناء ثلاثة سـيناريوهات افتراضـية ((أ) و (ب) و(ج)) خلال الفترة 2023-2027. يُطلق على السـيناريو الأول والثاني اقتراب العمل كالمعتاد. في السـيناريو (أ)، نفترض أن تونس ستواصل نفس المسار كما في السنوات الثلاث الماضية، دون اتفاق صندوق النقد الدولي. في السيناريو (ب)، تتوصل تونس إلى اتفاق مع صندوق النقد الدولي. ومع ذلك، فإن عدم إحراز تقدم كبير في جدول أعمال الإصلاح يتسبب في إنهاء اتفاق صندوق النقد الدولي. أما السيناريو الأخير (السيناريو (ج)) فهو سيناريو إصلاحي استباقي. ونخلص إلى أن نهج «العمل كالمعتاد» (السيناريو (أ) و (ب)) لا يمكن أن يضمن المرونة الاقتصادية ولا القدرة على تحمل الديون. وثمة حاجة ملحة إلى اتباع نهج أوسع نطاقا إزاء تحمل الديون مع إجراء إصلاحات، على غرار السـيناريو (ج)، من شـأنها أن تؤدي إلى المرونة في مواجهة الصـدمات الاقتصادية وغير الاقتصادية على حد سواء.

#### **1. Introduction**

The Tunisian economy has been facing a major macroeconomic disequilibrium in public finance since the revolution. Public finance has been tightening, with a rising risk of public debt unsustainability. The fastest and largest increase in the debt-to-GDP ratio, which took place from 2010 to 2019, was driven by external debt. While the pace of the increase in the total public debt ratio has slowed down significantly since 2019, that of domestic debt has increased considerably. Tunisia has been increasingly relying on external short-term debt, and public debt has been the main driver of external debt. Several elements could trigger lower levels of future growth, such as the decrease in investment, capital accumulation, and labor force, as well as the weak governance in the country. Other risks are looming; the deadlocks in the political system, the COVID-19 pandemic, and adaptation to climate change are all major challenges to the economy. For instance, the COVID-19 pandemic and prevailing political uncertainty have weighed on Tunisia's economic activity in recent years. The country faces major hurdles in raising external funding, and internal divides have reportedly caused delays in mobilizing the necessary resources.

Like several Arab countries, an austerity plan to accomplish the fiscal consolidation exercise is essential to put the country back on a sustainable debt trajectory (Arab Planning Institute, 2021; Sarangi, 2021; UNESCWA, 2021). This is even more important when the four main drivers of unsustainability are in eruption, which is the present case. The increasing primary deficit reached 4.3 percent of GDP in 2022; the widening current account deficit reached around 7.9 percent of GDP in 2022; the decline in foreign exchange reserves led to downward pressure on the domestic currency; and the IMF foresees an anemic growth of nearly 1.3 percent in 2023. In addition, the interest rate and growth differential (IRGDs) have deteriorated, where the average interest rate on the Tunisian debt exceeds the growth rate; this is mainly because of the rise in interest rates under the threat of inflation and the tightening of monetary policies.

Since 2020, the Tunisian authorities and the IMF have been in talks to agree on a program that entails important reforms. The country sought USD four billion in funding from the IMF and reached a staff-level agreement with the Fund in October for a new 48-month Extended Fund Facility worth around USD 1.9 billion to support the government's economic reform program. However, there is a lot of uncertainty regarding its finalization. Several elements can explain the lukewarmness on both sides. From the IMF side, there are doubts that the Tunisian Government could really tackle the reforms without strong support from its civil society and other actors. This element is important given Tunisia's experience since 2010 and its failure to effectively implement reforms, which led to the ending of the IMF program in 2020. Presently, the IMF is requesting some actions prior to any commitment, such as implementing reforms on SOE governance and lowering subsidies in fuels. Until now, Tunisia has not been able to implement all the required actions. From the Tunisian side, there is a fear that such a program could be way too austere and lead to social tensions and high instability in the country; the economic and social conditions of

Tunisians were highly impacted by the pandemic and even more by the conflict between Ukraine and Russia.

Scenarios with and without an IMF agreement have been present in public debate since 2020. In this paper, we construct three hypothetical scenarios using a debt sustainability analysis (DSA) framework. There is a scenario without an IMF agreement, a scenario with an IMF agreement, and a third scenario where we identify a new path to support the country's return to a sustainable track. For each scenario, we present Tunisia's debt sustainability outcomes by 2027. In the following, we start by describing public debt in Tunisia over the last decade. Then, we present the DSA assumptions and results of our first two scenarios. In the fourth section, we describe our third scenario along with its challenges and prerequisites before identifying its reforms, DSA assumptions, and results. We conclude in the last section.

### 2. The rising risk of public debt

### 2.1 Debt evolution

The evolution of debt indicators is shown in Figure 1. The fastest and largest increase in the debtto-GDP ratio took place from 2010 to 2019, where public debt was the main driver of external debt. The ratio of public debt as a percentage of GDP has doubled, driven by external public debt as shown by Nabli (2023). The pace of domestic public debt has also increased since 2019; while the ratio of domestic public debt to GDP increased by five percentage points from 2010 to 2019, it increased by an additional 10 points by 2022. On the other hand, the ratio of public external debt to GDP has more than doubled from 2010 to 2018 but has stagnated since then.

The average period remaining to pay off the public debts declined to less than six years at the end of 2021. This decline was mainly due to the decrease in the average period of repayment of the domestic debt due to the increasing recourse to short-term treasury bond issuances during 2021, the short maturity of the internal debts in foreign currency, and the approaching deadlines for the repayment of previous debts. In contrast, the average duration of external debt repayment is around seven years (Ministry of Finance, 2023b).



Figure 1. Debt-to-GDP ratios, 2010-22 (%)

Source: Ministry of Finance, Republic of Tunisia.

The debt figures presented above do not include the various contingent liabilities of the government, most of which come from public enterprises. The financial relationships between the central government and public enterprises are complex. The budget deficits of the central government are transferred to public enterprises through unpaid subsidies and payment arrears. Losses of public enterprises are transferred to the government budget through unpaid taxes or social security contributions, unpaid debts (which may be guaranteed or not), and coverage of the losses incurred. The risk incurred is that public enterprises would be unable to reimburse their debts, which are guaranteed by the government. As of the end of 2020, the total debt (external and internal) of public enterprises guaranteed by the government amounted to a total of 14.7 percent of GDP (TND 17.2 billion, of which 13.2 billion are external debt) (Nabli, 2023). These numbers do not include overdrafts and other borrowing from domestic banks, which are significant.

Figure 2 shows the decomposition of the various contributions to the increase in the debt-to-GDP ratio during the period 2010-22. The main driver for the change in the debt ratio has been its primary deficit followed by its debt services. In 2022, the primary deficit contributed to an increase of 37.8 percent in the debt-to-GDP ratio, and debt services contributed to this ratio by 29.21 percent. The exchange rate depreciation (percent of GDP) contributed by 16.66 percent in 2022. During the same year, inflation decreased the debt-to-GDP ratio by 41.75 percent. The impact of real GDP growth, which reduces the ratio of debt to GDP, was less than 10 percent in 2022.



Figure 2. Tunisia's public debt decomposition

### 2.2. Historical overview of financing

To construct potential scenarios for a DSA, it is necessary to understand Tunisia's history of financing government debt over the last 12 years. Therefore, we begin by reviewing the experience in public debt financing to help envision DSA scenarios.

As previously discussed, external financing has traditionally been the primary source of debt for Tunisia's government. Tunisia benefited from two IMF programs, the Stand-By Agreement in 2013-16 and the Extended Fund Facility Agreement in 2016-20. The last program failed and did not continue, which might explain the decline in the new external borrowing in millions of TND in 2020, as shown in Figure 3. New external borrowing in millions of TND unexpectedly recovered in 2021-22, while domestic financing increased in 2021-22.



Figure 3. New borrowings (millions TND): 2010-22

Source: Ministry of Finance, Republic of Tunisia.

#### External financing

Figure 4 shows that multilateral sources are the primary source of public external debt, which has been increasing recently and reached 54 percent in 2021. Bilateral debt is another major source of debt. Meanwhile, the share of financial markets has declined from 36.7 percent in 2018 to 24.6 percent in 2021.



Figure 4. Composition of external debt (%): 2010-22

Source: Ministry of Finance, Republic of Tunisia.

Following the reports of the Tunisian Ministry of Finance (2023a, 2023c), 76 percent of foreign borrowing from multilateral and bilateral sources has been used for budget support during the last three years (2020-22). It increased continuously from USD 1.383 billion in 2020 to an important level of USD 1.810 billion in 2022. However, it is unlikely that it will be available on such a scale in the future. Since 2019, mobilizing external financing resources has proven increasingly difficult

for several reasons, including the downgrading of the sovereign rating of Tunisia, the delay in concluding a new program with the IMF, and the delay in the implementation of reforms.

Project financing averaged 20 percent of external borrowing throughout 2020-22. It is a steady but small source of finance, at around USD 400 million per year. Access to the international financial market stopped in 2019 and its return is dependent on a credible IMF program and the confidence of the markets.

#### Domestic financing

Domestic financing surged in 2020 and in 2021, respectively reaching 26.56 percent of GDP and 31.58 percent of GDP as shown in Figure 1. Sources of domestic financing come from issuing medium- and long-term treasury bills (bons du Trésor) or bonds (obligations d'emprunts nationaux) (Nabli, 2023). Treasury bills vary by maturity, from a few weeks to 10 years, while bonds are for five to 15 years of maturity. It reached 46.07 percent of total domestic debt in 2021 as shown in Figure 5. This government paper is held by banks, the Central Bank (through open market operations), and other operators (private and institutional investors). In addition, the sources of domestic financing have been diversified since 2019, with a higher recourse to shortterm debt and syndicated loans from domestic banks in foreign currency. Indeed, short-term debt was null till 2020. It attained 7.28 percent of total domestic debt in 2021 and 5.06 percent in 2022. Another mechanism for domestic debt is through syndicated loans from domestic banks in foreign currency. It exceeded 11.06 percent of total domestic debt in 2020 while it was an average of one to two percent until 2016. Treasury operations using various deposits at the Treasury (postal deposits, savings deposits) represent the second biggest component of domestic debt, ranging from 29 percent to 40 percent of total domestic debt during 2010-22. Such financing increased from 6.95 percent of GDP in 2019 to 9.74 percent in 2021. This means that the potential for this type of financing is increasingly difficult as it is constrained by the deposits with the Treasury. It should be noted that an exceptional direct financing of TND 2.8 million was obtained in 2020 from the Central Bank to the Treasury.

This analysis of domestic borrowing leads to the following conclusions:

- Domestic debt as a share of GDP reached 31.58 percent in 2021 and 32.20 percent in 2022, pointing out that there is still a possibility for additional borrowing,
- The issue of treasury bills and bonds remains the main available possibility, mostly to be held by banks. The holdings of government paper by other investors seem to be constrained at around four to five percent of GDP.
- The use of the Treasury to mobilize domestic resources is increasingly constrained.



Figure 5. Domestic debt components (% of domestic debt), 2010-22

Source: Ministry of Finance, Republic of Tunisia.

The large increases in government borrowing over the last few years have led to significant increases in the cost of borrowing. The spread (difference between interest rate on treasury bills and money market rate), increased from 2.5 percent in 2016 to 3.2 percent in 2021. In addition to the fact that this increase remained moderate despite the large increases in domestic borrowing, this spread declined in 2022. This clearly indicates the scope for major additional domestic borrowing using this instrument. International experience shows the potential for such borrowing (Nabli, 2023). For instance, domestic public debt in Egypt reached around 71 percent of GDP in 2020 (IMF, 2021a). Similarly, in Morocco, domestic debt was more than 50 percent of public debt in 2022 (IMF, 2023).

#### 2.3. Key drivers of debt unsustainability in Tunisia

Debt sustainability depends on the ability of economic policy to create a primary surplus and reduce its debt, providing that future primary surpluses will eventually be used to pay down the recently issued debt. Following Labidi (2022), we identify four key drivers of debt sustainability: primary balance, current account balance, exchange rate, and interest rate and growth rate differential (IRGD). They all point to the debt unsustainability in Tunisia:

#### - Continued increase in the primary deficit

There are at least two reasons for the rapid weakening in the government's primary deficit, which was already in deficit during the last decade: (i) the 2011 revolution was accompanied by a surge in social demands that generated a slip in public spending, and (ii) a poor collection rate in tax revenue. The latter is largely explained by the development of the informal sector as a result of the

administration's resistance to the digitalization process and by numerous regulatory constraints on private investment (exchange control regulations, labor code, fiscal pressure...etc.) that are no longer in tune with the challenges facing the Tunisian economy. The primary balance depends on several factors. First, primary balance is sensitive to external shocks that impact, for instance, the price of food, the exchange rate, or commodities. Second, primary balance is affected by internal factors. On the one hand, some factors, such as social expenditures and public investment, may trigger a positive dynamic that promotes growth. The presence of the informal sector, corruption, and military spending, on the other hand, may result in a vicious cycle for state finances. In the case of Tunisia, public sector salaries and commodity subsidies saw considerable increases during the period 2011-22. The wage bill averaged 13.5 percent of GDP during the period 2011-22 and increased by 3.5 percentage points from 2011 to 2022. Subsidies and transfers averaged 7.5 percent of GDP and increased by 7.1 percentage points from 2011 to 2022. The primary budget deficit averaged 2.8 percent of GDP during the last decade (2010-20) and closed out in 2023 at 4.3 percent. The rise of the primary deficit illustrates that all the shocks to the economy during the last decade were absorbed by the state budget. The deficit, in return, was funded by a recourse to indebtedness.

#### - Positive interest rate-growth rate differential (IRGD)

On the growth front, the 2011 revolution was accompanied by a surge in social demands that weighed heavily on public finances, prompting authorities to cut investment spending to finance current expenditures. This has resulted in a sharp decline in potential growth. Tunisia's average growth rate exhibited a declining tendency from 2010 to 2020, particularly starting in 2017. The average annual growth rate in Tunisia from 2010 to 2020 was 0.9 percent. Despite post-COVID-19 recovery, the growth rate remained weak at 2.4 percent in 2022. The situation has worsened further with the pandemic crisis and the Ukraine war. The COVID-19 shock stormed in a context characterized by an environment with very limited fiscal space. The growing need for aid to compensate the most damaged sectors and most severely affected households has also been met by budget cuts in investment expenditures. Public finances remain under pressure given the limited level of fiscal space. Similarly, the rise in political and institutional uncertainty, observed through a very frequent political turnover, has fueled the wait-and-see in the business world, pushing investment rates to very low levels (16.2 percent of GDP).

Domestic interest rates were on an upward trend similar to that of foreign interest rates. The rise in the domestic interest rate is largely explained by the inflationary push, observed after the post-COVID-19 crisis and with the outbreak of the war in Ukraine, which led the central bank to tighten its key rate at eight percent.

Similarly, the rise in interest rates on foreign borrowings has its roots, first, in the normalization of ultra-accommodative monetary policies put in place by the major central banks (FED, ECB, BOE...etc.) in the aftermath of the subprime crisis, and then, in the successive downgrades of

Tunisia's rating, boosted by the blocking of negotiations with the IMF. An ongoing cycle of downgrading has led to Tunisia's further sinking into the speculative grade category joining the high-risk countries group (a Caa2 negative outlook on Moody's since 27 January 2023, and more recently, a CCC rating on Fitch Ratings since 9 June 2023). This context would ultimately force an increase in long-term bond market interest rates, complicating market access for the Tunisian Treasury. Overall, economic growth has remained anemic, unable to reverse the unemployment curve and correct social and regional inequalities.

In sum, interest rates in Tunisia are greater than its rate of growth (IRGD > 0). Given the nation's limited fiscal space, this position increases the likelihood of unsustainable debt.

# - Deterioration of current account deficit coupled with a depreciation of the real effective exchange rate

The worsening of the post-revolution current account deficit is explained by the deterioration of the trade balance. The depreciation of the Tunisian dinar, observed throughout the decade, has not resulted in an improvement in the export revenues, as it was not strong enough. Instead, it increased imports because of the weight of certain incompressible goods (hydrocarbons and cereals).

Unfortunately, the balance of services has not been of much help in mitigating the widening of the trade deficit. The terrorist attacks that hit Tunisia during the last decade led to a drop in tourism revenues. Even the sharp improvement in the aftermath of the COVID-19 crisis has not reversed the trend in tourism receipts. Rising political uncertainty has weighed on the business climate and, as a result, dampened investment, thereby limiting export potential. The war in Ukraine and its collateral damage in terms of soaring food and fuel prices has led to the further deterioration of the trade balance. In sum, this deterioration has fueled the frequent recourse to debt financing.

During the last decade (2010-20), the current account deficit averaged 7.9 percent, highlighting the weaknesses of the production structure. The level reached in 2022 was 8.8 percent of GDP. The growing trade imbalance is the key factor contributing to this deterioration. Additionally, Tunisia's real effective exchange rates depreciated (-0.4 percent) from 2010 to 2020. Public debt in Tunisia has reached considerable levels, which puts pressure on medium-term sustainability (Labidi, 2022). The widening of the current account deficit creates downward pressure on foreign exchange reserves and on the domestic currency. During the last decade, the foreign exchange effect has greatly increased external debt servicing and increased the cost of subsidies. However, the exchange rate has remained relatively stable in recent years, though the hidden side of this stability must be seen in the growing shortages of certain commodities, spare parts, and medicines. It is an unsustainable medium-term context both economically and politically.

The country is facing other risks along with its debt unsustainability. A primary risk is low growth potential prospects due to the slow pace of reform implementation, the barriers to private

investment, the complexity of labor market regulation, the rise in structural unemployment, declining investment rates...etc. The structural deficiencies are described in depth by Nabli (2019) and Nabli and Nugent (2022), among others. At current trends, it is unlikely that potential GDP growth will exceed two percent per year over the next decade after the full recovery from the COVID-19 pandemic. In addition to low growth potential, Tunisia faces new risks. The biggest threat to Tunisia is its political system, which is deadlocked. More than a decade after the fall of the pre-2010 regime, Tunisia has not succeeded in transitioning to a new stable political system. Political institutions and the government are highly unstable. This has caused lots of uncertainty, a lack of vision, and a major barrier to structural reforms. In addition, Tunisia has been subjected to a proliferation of external shocks ranging from the global pandemic to the war in Ukraine. Finally, climate change is likely to have a major impact on Tunisia with worsening conditions of water availability.

#### 3. DSA Scenarios: A business-as-usual approach

In the current situation, the debt crisis means that the critical problem resides in the financing constraints of the budget. Given the important levels of budget deficits, the loss of credibility, and especially access to external finance, the possibility of financing the deficits is the starting point.

We use DSAs to construct three hypothetical scenarios over the period 2023-27. The DSAs are tools that help project the evolution of the country's economy over time, particularly fiscal indicators, economic growth, inflation, and cost of borrowing on the debt-to-GDP ratio (D/GDP). It requires a prior assessment of the economic situation beforehand. Projections are developed based on different scenarios. It allows for the assessment of debt sustainability at the end of the considered period. Debt sustainability is defined by the IMF (2013) as follows: "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 acceptable low rollover risk and with preserving potential growth at a satisfactory level."

Several elements are addressed in the literature to improve the DSA. For instance, Guzman (2016) proposes changing the definition of debt sustainability to make it more coherent with economic theory. The author believes that public debt sustainability is reached when the macroeconomic policies to stabilize it are considered both "economically consistent and politically feasible." Labidi (2022) underlines that DSAs and debt management strategies (DMSs) remain limited to a simple economic approach where the focus is only on resilience to extra-economic shocks. Debt sustainability in this perspective is very difficult to reach. A broader approach to debt sustainability should include reforms that would lead to resilience toward economic and non-economic shocks such as climate change, the vulnerable population, and food security.

The assumptions are presented in Appendix 1. In this section, we present only the first two scenarios (A and B) described as "business as usual." The last one (Scenario C) is a proactive reform scenario. It will be presented in the next section.

In Scenario A, we assume that Tunisia will continue down the same path as in the past three years, without an IMF agreement. In Scenario B, Tunisia reaches an agreement with the IMF. However, the lack of significant progress on the reform agenda causes the ending of the IMF agreement.

### 3.1 Scenario A: Baseline scenario without an IMF agreement

In Scenario A, we assume that Tunisia will continue down the same path as the last three years, i.e., without an IMF agreement. This means that external financing will be extremely tight with access to only average projected and targeted finance, around USD 500 million/year in 2023 and 400 million/year during the next years. We assume that budget finance will tighten because of the failure of an IMF deal. In addition, we assume a limited budget finance does by multilateral and bilateral sources of around USD one billion per year. Domestic finance can be used to fund the budget with limited financing from the treasury of around 0.2 percent of GDP of new gross financing per year. In addition, the government will tap into domestic financing in various forms without restrictions at an increasing cost.

We assume that the primary budget will decrease following the trend registered in the last two years (2021 and 2022). It will decline progressively from -3.9 percent of GDP in 2023 and reach - 2 percent of GDP in 2027.

In the same vein, Tunisia must pay an estimated debt in foreign currency of TND 30.639 billion due from May to December 2023. Net assets in foreign currencies in Tunisia were only TND 22.138 billion (Central Bank of Tunisia) in May 2023, which is largely insufficient to pay off the debt due in foreign currency at the end of the year. This situation highlights the risks of a currency crisis that could start at the end of 2023 or the beginning of 2024 if there are no other sources to increase assets in foreign currency.

Scenario A has a sluggish growth rate starting from 1.5 percent in 2023 and ending with 1.1 percent in 2027. The inflation rate is assumed to increase from 11.3 percent at the beginning of the considered period to reach a level of 15.8 percent in 2027. The exchange rate will depreciate by 8.6 percent in 2023 and reach 13.8 percent in 2027. Such a crisis could lead to a dramatic deterioration of the Tunisian dinar against the dollar. We suppose that the depreciation will go from 20.1 percent in 2023 to 28.6 percent in 2027. With extremely tightened foreign financing, the recourse to domestic financing will create more inflation. As a hypothesis, we consider that inflation could reach 12 percent in 2023 and 18 percent in 2027. Similarly, growth is very sluggish in 2023 with a rate of 1.5 percent and will decrease gradually over the period to reach 0.7 percent in 2027.

This scenario will lead to a debt-to-GDP ratio of 111.5 percent in 2027, putting the country's public debt on an unsustainable path. In this scenario, the ratio of domestic debt to GDP will rise from 37.4 percent in 2023 to 59.3 percent in 2027, and the ratio of external debt to GDP will go from 49.1 percent in 2023 to 50.5 percent in 2027.

In addition, the currency crisis would lead to major risks starting the year 2024, such as:

- Shortages and difficulties in supplying the market with basic products.
- Deindustrialization and the destruction of productive capacities.
- Social instability due to the increase in unemployment and poverty.
- Proliferation of the informal sector.
- Deterioration of the financial situation of public enterprises.
- High exposure of banks to sovereign risk.
- Acute cash flow difficulties and recourse to disorderly adjustments at the level of the budget (salary cuts, increase in the prices of subsidized products...etc.).

#### 3.2. Scenario B: Scenario with an IMF agreement

We consider in this scenario that there is an IMF deal. However, the reforms register slow progress, which leads to the breakdown of the IMF agreement after two years (which happened in the Extended Fund Facility Agreement). Therefore, we assume that we will go back to Scenario A starting from 2025. It means that external financing will no longer be available from 2025 to 2027. The main source of financing will be domestic following the hypothesis in Scenario A. There are no major reforms and productivity growth will remain low.

This scenario stipulates the following assumptions on deficit and financing:

- The primary budget deficit will not be highly constrained. It is equal to 3.9 percent of GDP in 2023 and will hit 3.4 percent of GDP in 2027.
- External financing:
  - From IMF: USD 500 million/year in the first two years.
  - Significant budget support financing from other bilateral and multilateral sources: up to USD 2.5 billion per year.
  - Continued project finance: USD 500 million until 2024. Starting 2025, it will decline to USD 400 million.
- Domestic financing assumptions are like those considered in Scenario A.

Scenario B is not ambitious, with low growth rates starting at 1.5 percent in 2023 but increasing over the years until it reaches 1.8 percent in 2027. The inflation rate in this scenario ranges from 11.5 percent to eight percent in 2027. The depreciation of the exchange rate goes from 8.6 percent in 2023 to six percent in 2027. This scenario implies an overall increase in the ratio of public debt to GDP during the period, going from 83.2 percent to 94.9 percent. The rising level of this ratio

highlights the risks of such a scenario and the unsustainability of the public debt if Tunisia walks down this path.

The non-conclusion of the first reviews with the IMF in 2023 (before the end of the program) would result in a hardening of donors' positions and, probably, the revision of budget support funding.

The delay in implementing the announced reforms as envisioned in the scenario will fuel resistance to these reforms. In addition, the recourse to domestic financing to compensate for the absence of external resources during the last three years would be increasingly difficult. The same risks as Scenario A will also prevail.

### 4. DSA: Toward a novel approach to reform

Scenario C breaks away from the accounting approach of fiscal consolidation, which continues to dominate the IMF's work and recommendations despite the notable advances observed in recent years. It must be recalled that the consolidation of public finances is essential to restoring debt sustainability. However, an overemphasis on fiscal balances reinforces resilience only to economic shocks. As such, the economy is not able to resist the economic implications of social, pandemic, and environmental risks.

The dominant approach often offers a macroeconomic budgetary framework that relies on cutting investment spending as an adjustment variable to close a budget year. However, this approach has proven inadequate for the Tunisian economy, as shown by the suspension of two programs with the IMF (Stand-By Agreement 2013-16 and Extended Fund Facility Agreement 2016-20) and the inability to find a common ground to conclude a third agreement. Several reasons explain these failures and highlight the challenges to the successful implementation of reforms.

Under this scenario, we assume growth-enhancing policies, a sustained increase in productivity and investment, and a less constrained growth of public expenditures. This scenario is based on the adoption of a structural reform package with an impact on growth (direct and indirect) and on the promotion of medium- and long-term sustainability. The goal is to restore confidence, improve public service performance, ensure energy and food security, and the right conditions for a return to strong and inclusive growth, thus offering the Tunisian economy better resilience. The complexity of the Tunisian case, which is characterized by the strong resistance to reforms observed in the aftermath of the revolution on 14 January 2011, forces us to think more about the specificities of this resistance to better understand the sources of the blockage and ensure better implementation of the structural reforms. This section explores the main challenges related to resistance to reform, the prerequisites for triggering a dynamic reform process, the novel approach of reforms identified in Scenario C, and the presentation of assumptions and results of the DSA.

#### 4.1. A strong social and political resistance to reform

The last decade has been characterized by resistance to structural economic reforms. Three major factors explain this resistance.

The democratic transition and its cycle of political and social instability: Since 2011, Tunisia has had eight successive governments, but it has not succeeded in setting up all the constitutional institutions (for example, the constitutional court). Governments on ejection seats often avoid commitment to painful reforms that can precipitate their removal from power. This results in a highly unfavorable environment for implementing structural reforms and budgetary consolidation.

**Strong resistance to reforms:** After the revolution, the forces of resistance to reforms (the Tunisian General Labor Union (UGTT), a strong central union with historical legitimacy, among other non-government organizations) successfully blocked all tentative reforms, benefiting from the climate of freedom and amateurism of the political class. This context has fostered the emergence of populist arguments in political discourse, which, in turn, increased the difficulty of implementing the necessary reforms.

A lack of resilience to non-economic shocks: An economy struggling to regain comfortable fiscal space will fail to mitigate the risks of climate change and pandemic crises. On the one hand, Tunisia, like most countries in the region, is increasingly under the threat of climate change and especially of its physical risks (droughts, floods, extreme precipitation, rising temperatures, water stress...etc.). There are several elements that pledge the integration of climate risks into DSAs (Kraemer and Volz, 2022; Labidi, 2022; Maldonado and Gallacher, 2022). Sovereign spread has become sensitive to environmental risks since rating agencies now include ESG criteria in their assessment. Climate risks could negatively impact the urban and transport infrastructures, thereby destabilizing public finances. Similarly, water stress penalizes the agricultural sector and could be a source of food inflation, large-scale migration to cities, and social tensions. On the other hand, the Tunisian economy cannot be resilient to pandemic crises (as shown by the COVID-19 crisis in 2020), given the deterioration in the quality of public services, particularly the healthcare system. In brief, a broader concept of resilience is needed to limit the destabilization effects of non-economic shocks on macroeconomic balances.

#### 4.2. Challenges to a successful implementation of reforms

The growth-austerity nexus is seen as a complex relationship. A real challenge remains to find an optimal balance between growth and austerity. Tunisia has been struggling for several years to find the right balance between accountable fiscal austerity and a macroeconomic stabilization policy crowned by an economic recovery in the medium and long term. This struggle highlights

the complexity of balancing fiscal austerity and more in-depth reform. Austerity is a complex issue, both economically (Aglietta, 2012; Baccini-Sattler, 2021), politically, and socially (Guriev, 2018; Alesina et al., 2021; Gabriel et al., 2022a and 2022b).

A sequencing issue: The sequencing of reforms is crucial for the latter to be accepted. Some contexts might provide better conditions for reforms. For instance, adherence to reforms might be improved when the first signs of austerity's "return in investment," even small, are visible in the second year. It is also admitted that crises remain a critical moment for engaging in structural reforms. On the other hand, the slowness and indecisiveness in the implementation of austerity measures precipitate failure, as they awaken the forces of resistance to reforms. Similarly, austerity policies are not recommended during an economic recession. Finally, lower budget spending combined with a deceleration in private investment would inevitably result in lower output. In Tunisia, austerity measures are often associated with a shallow fiscal stimulus in times of low growth, which could extend the recession with the risk of not generating the expected impact on the budget.

An approach issue: Austerity alone is not enough. Falling into a purely accounting perspective that does not differentiate between expenditures and taxes leads to a vicious cycle. Austerity, combined with weak private demand, leads to a fall in output, which may even cancel out the expected budgetary gains, or even worsen the deficit. Major reforms should go hand-in-hand with such policies (labor market code, exchange control regulation, competition law...etc.) to positively impact growth.

A cost-sharing issue: A fair divide of the austerity bill among all of society's actors remains decisive for the success of the implementation of austerity measures. The situation of the fiscal space is crucial to mitigate the collateral damages of austerity measures on the most vulnerable social groups. In addition, Social Safety Net (SSN) programs could play a key role in protecting fragile households from extreme poverty. Furthermore, the commitment and political support of reforms, especially those with a significant social impact, requires political courage. The acceptability of reforms needs a dialogue to explain the positive impact and risks of reforms with accountability to citizens and a communication strategy to reassure citizens with transparent messages about the acuity of the crisis and the identification of measures. A number of measures in Tunisia are needed to mitigate the collateral damages of austerity policies, such as setting a floor of social spending to preserve vulnerable groups, strengthening the social role of the state (to be included in the communication strategy), identifying associated measures to preserve low-income groups (free public transport, increases in social assistance under the national program for assistance to needy families (PNAFN), and widening the scope of beneficiaries through back-toschool grants, the promotion of women's empowerment, financial inclusion, a social and solidarity economy...etc.).

An issue of adherence to reforms: International experiences of austerity policies have shown that top-down approaches of reforms treat some of the symptoms but not the root causes of debt unsustainability. Only major reforms with widespread support of economic and social interest groups can succeed.

An issue of targeting the appropriate fiscal measure: Measures targeting austerity and reforms should be wisely identified. For example, what taxes should be raised and what other taxes should be lowered? What spending should be decreased and what other spending should be increased? Which structural reforms should be implemented to support the austerity program?

According to economic literature, the impact of austerity policies is negative on growth. This impact depends on the type of measures, new taxes, or expenditure cuts.<sup>3</sup> Empirical results show that adjustments based on expenditure reductions have a lower impact on growth than those resulting from additional taxation. The identification and targeting of appropriate measures to reduce the budget deficit are strongly correlated with the specificities of the Tunisian economy, the structure of the budget, and the impact on other spheres (real, monetary...etc.). Lessons learned show that one-off measures (such as exceptional contributions and social and solidarity contributions) have a limited and reduced impact on medium-term sustainability. The concentration of the adjustment effort on public investment impacts economic dynamics and leads to a deterioration in the quality of public services and the budgetary situation. Public debt sustainability is strongly correlated with the evolution of the payroll (42 percent of the total budget in 2023 and the highest level of the MENA region). The adjustment of the wage bill should be considered one of the solutions to be explored (despite the strong opposition of the social partner). The announcement of impactful supporting measures (such as renewable energy) gives more credibility to the proposed adjustment program. The slowness and delay in the implementation of reforms are likely to exacerbate budgetary constraints and threaten the debt trajectory in the medium term.

## 4.3. Scenario C: Prerequisites for triggering a dynamic reform process

The delay in implementing the reforms has fueled resistance to them, as it has become increasingly difficult to achieve fiscal consolidation in an undermined context on the economic, social, and political fronts:

- Economically: through the non-cohesive nature of certain regulatory texts and the development of rentier behavior in a private sector that is heavily indebted, uncompetitive, and therefore unable to sustain growth.
- Socially: through widening inequalities, the rise of vulnerability, the delay in the implementation of SSN programs, and strong union resistance to any serious plan to restructure public enterprises or modernize the governance of the administration.

<sup>&</sup>lt;sup>3</sup> Cuts in public spending in a period of recession could put pressure on prices, inflation, and the real interest rate.

 Politically: through the rise of populism and its collateral damage to constitutional institutions that continue to fuel institutional uncertainty.

An urgent need to split from the "accounting approach" of the fiscal consolidation and to build the three main pillars is required in order to trigger a dynamic reform process: *the soundness of the rule of law, a government with a vision for a sustainable future, and broad popular support for the structural reforms.* 

**The soundness of the rule of law:** This is translated through the existence of a state capable of enforcing the law. This is represented by good democratic governance that must go hand-in-hand with greater accountability, compliance, and transparency in government actions. This democratic governance is reassuring for policymakers both to strengthen trust in the institutions and to successfully implement reforms.

A government with a vision for a sustainable future: A government with a vision, characterized by the stability of its institutions and the professionalism of its members, could successfully implement an austerity plan with a well-calibrated package of accompanying measures and a good communication policy (prepare, empower, and increase awareness amongst citizens), which, in turn, would boost citizens' adherence to reforms. Policymakers should pay particular attention to the sequencing of reforms. First, to promote adherence to the program of reforms, and second, to prevent the rise of a greater reluctance to change among political and economic forces who benefit from the system. In the presence of a strong state capable of enforcing the law, the government will be able, on the one hand, to impose standards of good governance in SOEs to curb the threats and latent risks on public finances. On the other hand, the government will be able to implement a fairer tax reform that will make it possible to widen the tax base, thus limiting the weight of the informal sector and reinforcing its popularity to succeed in consolidating its fiscal exercise.



Figure 6. Prerequisites for a dynamic reform process

Source: Authors.

**Broad popular support for the structural reforms:** It is important to instill trust in institutions and confidence about the future to strengthen adherence to reforms. However, when doubt sets in, mistrust occurs and the forces of resistance to reforms gain ground. This third condition is valid only in a democratic state (full democracies, flawed democracies, hybrid regimes) where civil society is active. It has no reason to be in authoritarian regimes, where civil society and trade unions are most often domesticated by the prevailing power.

## 4.4. An urgent need for a new social contract

The delay observed in the implementation of economic reforms and the rise of social vulnerabilities and political instability call for a new social contract.

The accumulation of disappointments after the revolution explains the attachment to the "old" social contract, which was characterized by "citizens' expectations that the state provides food and fuel subsidies, free health and education services, and public sector jobs for those educated enough to attain them" (Devarajan and Mottaghi, 2016). This commitment is reflected in the blocking of reforms, which are considered essential to achieving the consolidation of public finances and improving potential growth.

We employ the social contract concept to understand the various interactions between actors. Social contracts are designated here as "agreements between all relevant, societal groups and the sovereign, defining their rights and obligations toward each other " (Loewe and Albrecht, 2022). Social contracts do not end conflicts; however, they help find sustainable processes for the government and other actors on how to behave and interact. They help contracting parties manage conflicts in a non-violent way.

Tunisia needs a new contract to be part of a reform dynamic. An open dialogue is needed to frame such a contract in the presence of various stakeholders and not exclusive to the most important organizations as was the case with the National Dialogue in 2013. This contract is unlikely to emerge in a context undermined by a lack of confidence.

Today, the challenge of the new social contract is twofold: political and economic. At the political level, the challenge will be to avoid the trap of populism and succeed in restoring the democratic transition. At the economic level, the challenge will be to avoid the risks of being pushed into default on payment and to set the country on the path of economic reforms. Hence, it gives priority to economic issues.

We identify the following main actors in Figure 7: the state, the civil society (Labor unions: UGTT and others; business unions: UTICA, and others...etc.); political parties; and the Economic Council. That institution is designed to be an independent structure composed of leading economic figures. Its mandate is to present a roadmap to emerge from the economic crisis and put the country along the path of structural reforms.



#### Figure 7. The social contract in Tunisia

Source: Authors.

### 4.5. Scenario C: Agenda of priorities for the rapid stimulation of growth

The matrix adopted (Figure 8) for these reforms focuses on the concerns of citizens as the main driving force behind the adoption of these reforms. The reform matrix is based on four pillars: restore confidence, improve the quality of public services, energy security, and food security. To achieve these objectives, government action involves four instruments: fiscal policy, monetary policy, innovation, and regulations and laws (Figure 8).

Most of the reforms included in the matrix have an impact on economic growth. However, adherence to these reforms differs between various actors (households, unions, and firms) (Figure 8).



#### Figure 8. The main instruments used to implement reforms

Source: Authors.

**Restore confidence:** To overcome the obstacles to reforms, it is important to restore confidence in the rule of law and ensure that it guarantees fair justice for all citizens, including households and domestic and foreign entrepreneurs. The restoration of the rule of law is a reassuring sign of political and social stability, as well as for domestic and foreign investment. The main driver of confidence is to ensure a fair system of taxation, especially when it is part of a major tax reform that can correct inequalities, limit the informal sector, and incentivize investment and innovation. Citizens are demanding a fairer system of taxation. Implementing it would strengthen their trust and adherence to reforms. The challenge of the digital transition is equally important to undertake to ensure good governance, transparency, accountability, and agility in public administration, which, in turn, strengthens the credibility of the government and the acceptance of reforms. Transforming the digital divide into a digital opportunity leads to rising potential growth, thereby making the Tunisian economy more attractive for foreign investors and reversing the unemployment trend.

In addition, the government should lower the weights of rents and rentiers in the Tunisian economy. An overhaul of the competition law and the functioning of the Competition Council would be beneficial for the improvement of the business environment, and, in turn, for the level and quality of investment and economic growth.

Finally, businesses have suffered for decades from overly rigid exchange regulations. There is an urgent need to overhaul these regulations to encourage investment initiatives to limit informal transactions with foreigners and improve the balance of payments situation.

**Improve the quality of public services**: In addition to digitalizing its public services, the Tunisian government has an interest in rethinking its urban planning policy toward more sustainable cities (water conservation, public transportation green buildings, vehicle charging stations, solar farms, walkable and bikeable neighborhoods...etc.). These policies will limit citizens' vulnerabilities when exposed to fluctuations in world prices (hydrocarbon and food prices) and the threats of climate change.

The government has various instruments to accelerate these changes, such as its fiscal policy (tax incentives...etc.), its monetary policy (conventional and unconventional instruments) (Nabi, 2019), and digitalization and regulations.

**Energy and environmental security:** The energy and environmental transition is an important pillar of the reform trajectory that ensures sustainable development in line with national commitments. It is important to highlight the importance of investment and financing opportunities in relation to renewable energy and green economy projects that are likely to create more jobs. The areas of reform concern the revision of the legislative framework, the digitalization of the sector, the establishment of a regulatory institution for the electricity sector, the acceleration of the electricity interconnection project with Europe via Italy, and the development of green hydrogen production by establishing the appropriate legislative framework for hydrogen production for the local market and for export. Green fiscal policy is crucial to ensure the implementation of green stimulus programs. Governments can use green budgeting instruments both on the public expenditure side (green stimulus measures, investment tax incentives...etc.) to speed up structural transformation toward the low carbon transition. Similarly, other opportunities could emerge to finance public expenditures, such as green bonds, and restructure debt (debt-for-climate swaps and

debt-for-SDGs swaps) (UNESCWA, 2021; Volz et al., 2021; Essers et al., 2022; Karaki et al., 2022; Labidi, 2022). The central bank should be part of the ecological transition through the greening of its monetary policy and its banking supervision system to boost the progress toward the low carbon transition. Several instruments are at its disposal (green differentiated capital requirements, greening quantitative easing, greening collateral frameworks...etc.) to ensure a successful transition. The government should strengthen coordination between monetary policy and fiscal policy to accelerate the structural change toward the low carbon transition via benefits offered to "green bonds" over "brown bonds" during refinancing operations at the central bank's refinancing window. The reform of the energy subsidy system should adopt a progressive approach toward the liberalization of prices until the truth of prices is reached. The legal, fiscal, and environmental framework of the hydrocarbon code should be reviewed.

**Food security:** The threats of climate change are still not as fully integrated as they should be in the public policy agenda in a region hit by increasing drought and water stress. Tunisia has become heavily exposed to threats of water scarcity. In 2022, Tunisian dams recorded a decrease in capacity (31 percent of maximum). The situation has continued to deteriorate for several reasons. Firstly, Tunisia finds it difficult to improve the management of the water supply network given the narrow fiscal space. Secondly, it has failed to put an end to the overexploitation of aquifers in the country (agri-business irrigation, phosphate, tourism), a matter of critical urgency in the context of global climate change. Thirdly, the country still has not revised its water tariff with the damages of water overconsumption and the increase in the level of water stress. Finally, the country lacks a vision regarding the management of water stress threats on agriculture, food prices, food security, social stability, and tourism.

Reforms	Winners (+) / Losers (-)			Impact on growth		Impact on the budget	
Restore confidence	Households	Unions	Firms	Immediate	Delayed	Revenues	Expenditures
•Restoring the rule of law	+	+	÷		+	+,	
Fair and equitable tax system	+ +	+	+/-		+	+/-	
An agile administration	+		+/-	+	+	+	
•Fair competition		+/-	÷	+	+	+	
Renew the Exchange Control Regulation Act		• • •				+	
Improve the quality of public services							
•Strengthening good governance in SOEs	+	-	+		+	+	
Promoting a shift towards sustainable and connected city	+	+			+	+	•
Energy and environmental security •Greening fiscal policy	+/-	+/-	+/-		+	+	+/-
Greening monetary policy and Banking supervision			+/-		+	+	
Strengthening good governance in the hydrocarbon sector		-	+		+		
Accelerating renewable projects through PPP	+	•	+	+	+ +	+	
Food security							
Accelerating seawater desalination projects	+		+		++	+	
•Enhancing resilience of the agriculture sector to climate change	)( +		÷		+	+	

#### Figure 9. Impact of reforms

Source: Authors.

The Tunisian Government is called to strengthen the resilience of the agricultural sector to climate change through deep reforms, affecting both untapped agricultural lands and agronomic research to find smart irrigation practices and water-efficient seeds, to guarantee noteworthy progress on food security. In short, food security and energy security will not only generate a substantial cut in the subsidy expenditures without a social cost; they will also make the budget less exposed to fluctuations in food and hydrocarbon prices and foreign exchange rates and less dependent on external financing. Likewise, they contribute to reducing the current account deficit and limiting downward pressure on foreign exchange reserves and domestic currency as well as improving the effectiveness of monetary policy (thereby avoiding any risk of inflationary drift caused by the rise in food and energy prices).

### 4.6. Scenario C: Assumptions

The adopted approach is based on:

- The use of all instruments (fiscal policy, monetary policy, digitalization, regulation, and law) that have a direct impact on growth, and a latent impact on the implementation of specific measures must be mobilized.
- A new governance of reforms for better synergy and improved potential growth:
  - Adoption of horizontal measures or levers (digitalization and governance) that have a direct impact on growth and a latent impact on the implementation of specific measures.
  - Adoption of specific measures that affect factor productivity. The sequencing chosen is based on the prioritization of regulatory measures.
  - Progressive and delayed impact of all these reforms.
- Accelerated execution of structural and transformative projects, particularly in PPP.

The development of a macro-budgetary framework based on the following assumptions:

- Improvement of fundamentals in terms of the economic and financial situation.
- Improved potential growth.
- Control of financial balances, particularly the situation of public finances (positive primary balance from 2026 and a reversal of the public debt deficit).
- Stability of the financial sector.
- External financing: considerable financial support from donors to accompany the reform process.
  - IMF financing: USD 500 million per year for 2023-26.
  - Average financial project loans from external resources of about USD 500 million per year.
  - Significant budget support: USD 2.5 billion per year.
  - Use of the international financial market: USD 700 million from 2026 with acceptable conditions (improvement of the sovereign rating).

- Domestic financing: limiting banks' exposure to sovereign risk. This scenario assumes a more balanced structure of domestic debt (longer maturity).

#### 4.7. Results

Scenario C, which refers to the adoption of a proactive, coherent, and holistic reform program with an assumed political portage and a broad consensus, would lead to a higher level of growth with a rate of 7.9 percent by 2027 and guarantee sustainability in the medium and long term.

The key findings relate to stabilizing the inflation trend at levels that are manageable and close to the long-term average. This is in addition to the improving status of public finances and a firm forecast that public investment will rise between 2023 and 2027.

A positive primary balance of 0.8 percent of GDP in 2026 and 3.2 percent in 2027, as well as a reduction in the pressure on cash management due to the mobilization of the required funds, particularly external financing, are the characteristics of a budgetary balance.

Scenario C shows a downturn trend of public debt, implying that the debt is on a sustainable path (Figure 10). The public debt ratio would be around 69.8 percent of GDP in 2027 with a more acceptable structure. The share of domestic debt would be around 29.1 percent, reflecting a loosening of pressures on both the level of refinancing and the banks' exposure to sovereign risk. At the same time, the trend of external indebtedness, supported by Tunisia's return to the international financial market and the mobilization of resources from international financial institutions, shows positive perceptions of Tunisia's partners about the relevance of the reform momentum for quickly putting the crisis behind.



Figure 10. Public debt % GDP, 2023-27

The nominal exchange rate can only decline to levels that are acceptable (three percent in 2027). This scenario also assumes that the reform program with the IMF is successfully finalized, with all draws made and reviews completed.

The rise to a new level of growth and the completion of the economic transition are likely to strengthen decision-makers, partners, and economic operators as to the relevance of the newly agreed upon reform path. The tangible "returns on investment" from the first period of implementation of the reforms – with positive effects on the creation of new jobs, the fight against precariousness in regard to the integration of the informal sector and the fight against poverty, and the strengthening of social inclusion – are crucial factors likely to push adherence to this process of reform.

This is in addition to economic performance and a more attractive and competitive ecosystem promoting the development of a productive private sector supported by a more resilient banking sector that's less exposed to sovereign risk.

The implementation of a reform program would make it possible to identify a more important fiscal space to support efforts to improve public service and adopt pro-growth and green fiscal policy for better resilience to non-economic shocks.

The improvement in sovereign rating and lending conditions on the international financial market is seen as the crowning achievement of this momentum. A limited implementation of reforms, albeit sufficient to generate a growth rate within the interval of 4.1 percent to 4.8 percent during the last three years (2025-27), will lead to a reduction of the debt-to-GDP ratio reaching a level of 74.6 percent in 2027. In this case, the debt to GDP is certainly reduced. Nonetheless, the economy is still surrounded by risks, including debt unsustainability, if reforms are not fully implemented in the medium term.

## 5. Conclusion

The time has come to quickly and thoroughly break away from inaction and hesitation to reform, in an economy largely distorted by political considerations (government instability, amateurism, populism, terrorism...etc.); strong trade union resistance to reforms; and a regulatory framework that supports non-competitive practices and doesn't necessarily promote sufficient innovation and competitiveness.

- This paper calls for the following:
  - Adopting a new reform approach that places greater importance on improving citizens' support for fiscal consolidation, thereby dislodging the "accounting approach" that remains stuck to the major macroeconomic balances. The primary focus of this approach is to bridge the gap between citizens' expectations of the quality and efficiency of public sector services on the one hand and the average level of their satisfaction on the other hand. The objective is to restore confidence to limit the risks of political and social instability that can generate fiscal consolidation policies, which have been amplified since the Arab Spring.
  - Expanding the perimeter of resilience to counteract economic shocks as well as extraeconomic shocks (water stress, pandemic crises...etc.). It is necessary to reconsider the DSA framework by integrating climate change collateral damages. Without giving the challenges of climate change their appropriate place in the management of public debt, the DSA exercise could not provide satisfactory results.
  - Breaking the austerity that associates investment spending with an adjustment variable to end a fiscal year instead of focusing on their role as a lever for potential growth and improving collective well-being. Cuts in capital expenditure are leading to a deterioration in the quality of public services and a rush for private services (education, health, transport...etc.), thereby fueling the fall in purchasing power and social downgrading and further complicating the equation of subsidy reform, especially for food.
- The DSA exercise allows for showing the limits of the two business-as-usual scenarios (A and B). Scenario C, on the other hand, has the merit of integrating both economic and non-economic risks. It is reassuring for the return of growth; the sustainability of debt (a debt ratio on a downward trend); financial stability (a decrease in the banks' exposure to sovereign risk); and social stability (through the confidence-building package).
- Tunisia will not be able to curb either inflationary pressures or the slippage of its current account deficit without public policies prioritizing food and energy security.

- The success of a real reform dynamic needs to be sought not only on the economic ground but is also conditioned by certain considerations at the political level. A political portage should integrate these reforms within the framework of a strategic vision to encourage citizen support for reforms and guarantee their implementation without running the risk of a rise in social and political instability.
- Climate change risks call for rapid and large-scale action. There is an urgent need to implement effective public policies through the greening of monetary and fiscal policy, the inclusion of an environmental clause in all public procurements, the strengthening of research and development efforts to boost the circular economy, and the avoidance of the full impact of inflationary surges generated by the energy transition (fossilflation and greenflation). A rapid integration into the environmental transition could both improve the resilience of the Tunisian economy and open economic opportunities for support from international financial institutions on concessional terms.

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## Appendix

Table A1 shows the main assumptions of the various scenarios considered. The results are displayed in Table A2.

## **Table A1. Scenario assumptions**

	Scenario A					
Real economy assumptions		2023	2024	2025	2026	2027
Real GDP growth		1.5%	1.4%	1.2%	0.9%	0.7%
CPI inflation rate		12.0%	13.5%	15.0%	16.5%	18.0%
Average exchange rate depreciation		20.1%	22.7%	25.0%	26.7%	28.6%
Fiscal sector assumptions						
Primary fiscal balance	% of GDP	-3.9%	-3.4%	-3.0%	-2.5%	-2.0%
	Scenario B					
Real economy assumptions		2023	2024	2025	2026	2027
Real GDP growth		1.5%	1.5%	1.5%	1.8%	1.8%
CPI inflation rate		11.5%	9.8%	8.5%	7.4%	8.0%
Average exchange rate depreciation		8.6%	7.5%	6.5%	5.4%	6.0%
Fiscal sector assumptions						
Primary fiscal balance	% of GDP	-3.9%	-3.4%	-3.0%	-3.1%	-3.4%
	Scenario C					
Real economy assumptions		2023	2024	2025	2026	2027
Real GDP growth		1.5%	3.2%	5.1%	7.4%	7.9%
CPI inflation rate		11.5%	9.8%	7.4%	5.9%	4.9%
Average exchange rate depreciation		8.6%	7.5%	5.4%	3.9%	2.9%
Fiscal sector assumptions						
Primary fiscal balance	% of GDP	-2.7%	-4.6%	-1.7%	0.8%	3.2%

		Scenario A				
Fiscal adjustment (variation in primary balance)	ppts of GDP	2023	2024	2025	2026	2027
Overall fiscal balance	% of GDP	-6.7%	-7.5%	-8.3%	-9.4%	-10.6%
Public debt	% of GDP	87.9%	93.9%	99.7%	105.5%	111.5%
o/w domestic	% of GDP	37.4%	44.2%	50.0%	54.9%	59.3%
o/w external	% of GDP	49.1%	50.5%	49.7%	49.6%	50.5%
		Scenario B				
Fiscal adjustment (variation in primary balance)	ppts of GDP	2023	2024	2025	2026	2027
Overall fiscal balance	% of GDP	-6.5%	-6.9%	-7.1%	-8.5%	-10.4%
Public debt	% of GDP	83.2%	85.0%	87.1%	90.3%	94.7%
o/w domestic	% of GDP	33.2%	36.2%	43.3%	50.7%	58.6%
o/w external	% of GDP	49.1%	50.1%	48.7%	43.8%	39.6%
		Scenario C				
Fiscal adjustment (variation in primary balance)	ppts of GDP	2023	2024	2025	2026	2027
Overall fiscal balance	% of GDP	-5.3%	-8.0%	-5.6%	-3.2%	-0.5%
Public debt	% of GDP	82.0%	83.7%	82.1%	77.0%	69.6%
o/w domestic	% of GDP	32.0%	35.8%	36.1%	33.1%	28.3%
o/w external	% of GDP	49.1%	50.1%	47.9%	45.9%	43.8%

## **Table A2. Scenario outcomes**