منتدى الاستراتيجيات الأردني
JORDAN STRATEGY FORUM

Sovereign Debt: What is it? What are the Implications, & Why Do Economies Default?

July 2022

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JORDAN STRATEGY FORUM

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The JSF also offers a rare opportunity and space for the private sector to have evidence-based debate with the public sector and decision-makers with the aim to increase awareness, strengthening the future of the Jordanian economy and applying best practices.

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1. Background

No one doubts that COVID-19 has had a huge impact on the global economy. Indeed, the sharp reductions in economic output and the increases in public expenditures and decreases in public revenues have led to significant increases in public debt levels. In its' 2021 update of the Global Debt Database, the IMF states that "as countries were hit by the pandemic, global debt rose to $226 trillion, or 256 percent of GDP in 2020. "Borrowing by governments accounted for slightly more than half of this increase, as global public debt jumped by 20 percent, which is the largest one-year increase in debt since the Second World War."

Central Government Debt to GDP Ratio					
Country	**2019**	**2020**	**Country**	**2019**	**2021**
Japan	**199.2%**	**221.1%**	Oman	60.5%	81.2%
Singapore	128.5%	155.4%	Morocco	65.1%	75.4%
Lebanon	171.1%	150.4%	Qatar	62.3%	72.1%
Bahrain	102.1%	129.7%	Austria	52.5%	62.8%
USA	93.1%	119.0%	Algeria	45.8%	55.6%
UK	84.3%	103.5%	Germany	37.4%	44.9%
France	81.1%	93.4%	Turkey	30.8%	35.9%
Brazil	82.5%	92.9%	Denmark	26.4%	34.6%
Tunisia	74.2%	89.7%	Chile	28.2%	32.5%
Jordan	**78.0%**	**88.0%**	Saudi Arabia	22.8%	32.5%
Iraq	45.1%	84.2%	Kuwait	11.6%	11.7%
Source: IMF Database.					

Within the context of the global public debt levels, it is unfortunate that as uncertainty associated with COVID-19 was abating, the world has witnessed the Russian invasion of Ukraine. Uncertainty is on the rise again. Indeed, emerging economies, as well as low-income countries, which are net importers of energy and food, will be adversely affected by the recent increases in prices. This trend, if continued, will put pressure on these countries' public finances and economic growth.

The fiscal impact of rising commodity prices will vary across countries. However, importers of energy and food will feel the impact in terms of growth and budgetary revenues. Exporters of energy and food, on the other hand, will benefit. In other words, if the levels of international oil prices and domestic retail prices as of the end of April 2022 persist during the rest of 2022, emerging economies and low-income developing economies "would face another round of substantial fiscal effects" (IMF).

It is probably accurate to state that following the sudden increases in public debt, and the on-going Russian War, the world might increasingly hear about countries defaulting on their debt (sovereign). With rising global inflation rates and interest rates, one cannot but predict few sovereign debt defaults in the near future. Indeed, the US Federal Reserve has already raised interest rate by 25 basis points in March 2022, and by 50 basis points in May 2022.

When a country / government cannot pay back its creditors (interest payments and or principle), we have what is called a sovereign debt default. In more specific terms, Standard & Poor's (S&P) defines sovereign debt default as **"the failure of an obligor to meet a principle or interest payment on the due date (or within the specified grace period) contained in the original terms of the debt issue".**

1. In the case of local and foreign currency bonds, notes, and bills, "each issuer's debt is deemed to be in default when a scheduled debt-service payment is not carried out on the date due or when an exchange offer of new debt comprises of less favorable terms than the original issue".

2. In the case of bank loans, "when either a planned debt-service payment is not settled on the due date or a rescheduling of principle and or interest is arranged to by creditors at less favorable terms than those of the original loan".

2. Sovereign Debt, Sovereign Credit Ratings: Some Observations

Within the context of sovereign debt, it is useful to remember Moody's, Fitch Ratings, and Standard & Poor's. These credit agencies evaluate the credit risk of sovereign entities to determine their ability to service their financial obligations. Indeed, the credit rating of a country determines its' ability to access funds in the international (and national) debt markets. In addition, the credit rating of a country determines its' cost of borrowing as well.

On average, the rating criteria of the three credit agencies incorporate factors which are known to affect a sovereign government's willingness and ability to service its financial obligations. For example, Standard & Poor's sovereign credit analysis rests on five pillars:

Institutional Assessment:
This assessment reflects how governmental institutions and policymaking affects sovereign credit fundamentals by delivering sustainable public finances, promoting balanced economic growth, and responding to economic or political shocks.

Economic Assessment:
This assessment incorporates the income levels of a country as measured by its GDP per capita, indicating broader potential tax and funding bases upon which to draw, which generally support creditworthiness, growth prospects, and its economic diversity and volatility.

External Assessment:
This assessment provides an indication of the economy's ability to generate the foreign exchange necessary to meet its public- and private-sector obligations to nonresidents, and the country's external position, which shows residents' assets and liabilities (in both foreign and local currency) relative to the rest of the world.

Fiscal Assessment:
This measure considers fiscal flexibility, long-term fiscal trends and vulnerabilities, debt structure and funding access, and potential risks arising from contingent liabilities.

Monetary Assessment:
This assessment considers the credibility of monetary policy as measured, among other factors, by inflation trends over an economic cycle and the effects of market-oriented monetary mechanisms on the real economy.

To measure these five pillars, Standard & Poor's uses many indicators including real GDP per capita growth, real investment growth, unemployment rate, consumer price index growth, budget deficit to GDP ratio, general government revenues to GDP ratio, general government interest expenditure to revenues, gross general government debt to GDP ratio, short-term public debt (% of total), foreign currency debt (% of total), and many others.

The scores on the used indicators determine the ratings of countries. The credit rating system assigns specific weights to each indicator ranging from A to D. Following this, the S&P's highest and lowest grades are AAA D respectively.

S&P Ratings			
GRADE	**RATING**	**GRADE**	**RATING**
Prime	AAA	Non-Investment Grade Speculative	BB+
High Grade	AA+		BB
	AA		BB-
	AA-	Highly Speculative	B+
Upper Medium Grade	A+		B
	A		B-
	A-	Substantial Risks	CCC+
Lower Medium Grade	BBB+		CCC
	BBB		CCC-
	BBB-	Extremely Speculative	CC
IN DEFAULT		**D**	

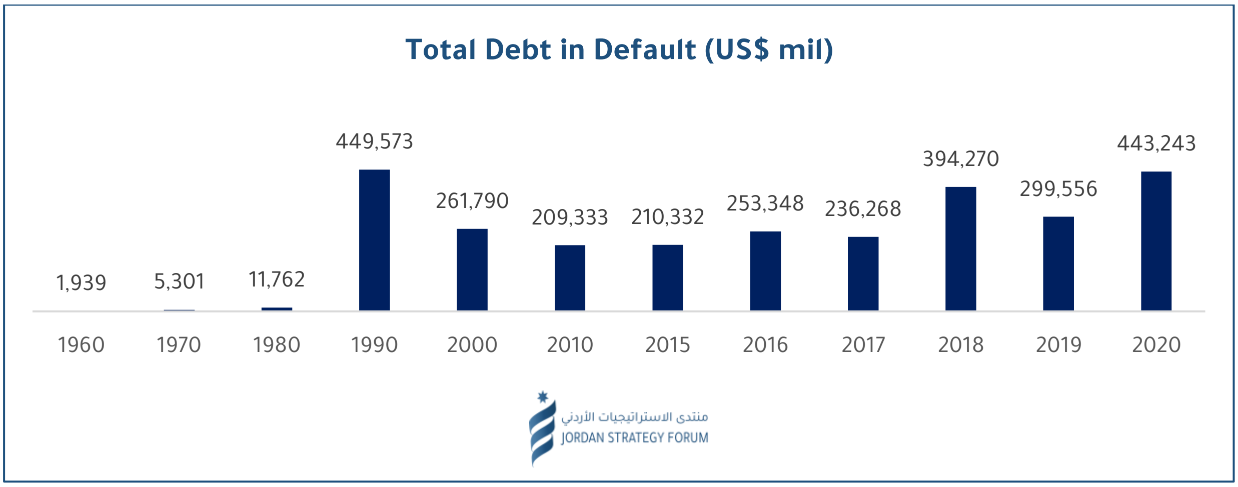
The S&P's credit rating for Germany (and few other economies) stands at AAA. The credit ratings for the United Arab Emirate (UAE), Qatar, Kuwait, and Saudi Arabia stand at AA, AA-, A+, and A- respectively. The credit ratings for Morocco, Jordan and Egypt stand at BB+, B+, and B respectively. The Lebanese economy is "in default". Here, it is worth noting that Jordan succeeded in issuing Eurobonds worth 650 million dollars in the global financial markets on 6/8/2022. The Governor of the Central Bank of Jordan indicated that the high demand for this issue reflects the confidence of the global investors in the fiscal and monetary policies in Jordan[1].

S&P Ratings: Some Countries / April 2022							
Country	**Rating**	**Country**	**Rating**	**Country**	**Rating**	**Country**	**Rating**
Germany	AAA	Chile	A	Morocco	BB+	Ghana	B-
USA	AA+	Saudi Arabia	A-	Greece	BB	Mozambique	CCC+
UAE	AA	Thailand	BBB+	Bangladesh	BB-	Belarus	CCC
Qatar	AA-	Italy	BBB	**Jordan**	**B+**	---	CCC-
Kuwait	A+	Cyprus	BBB-	Egypt	B	Russia	CC
						Lebanon	**D**

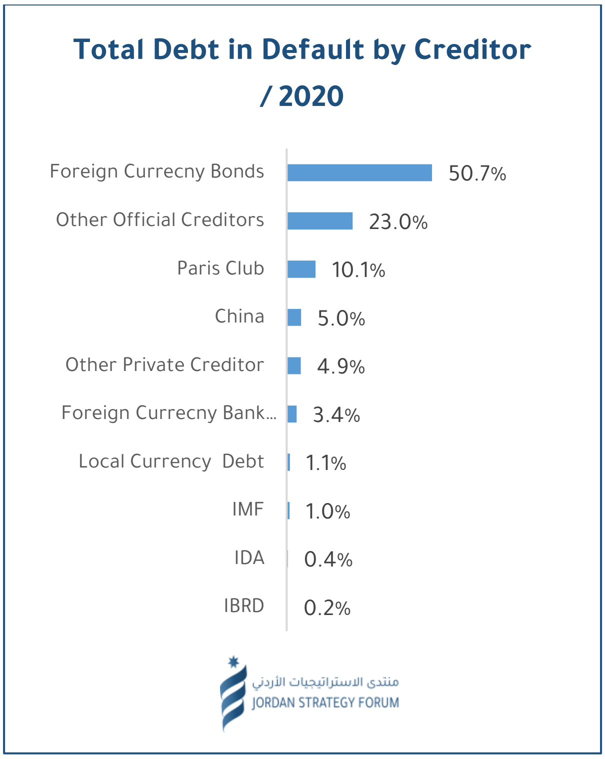
In addition to the above-mentioned observations, it is useful to note that sovereign debt defaults are not unusual. Based on the **"sovereign debt database"**, which is maintained by the Bank of Canada and Bank of England, few interesting observations can be outlined.

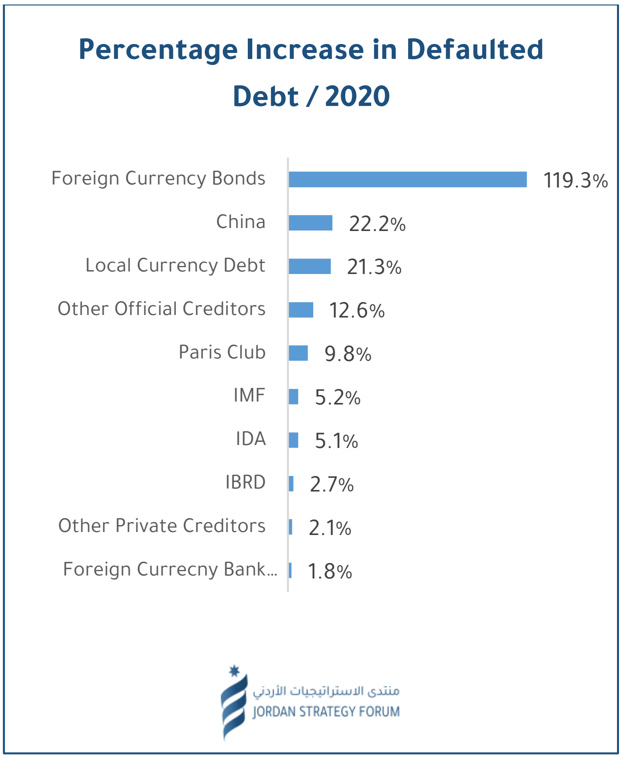
[1] During his meeting with members of the Jordan Strategy Forum on 28.6.2022

First, since 1960, a total of 147 governments have defaulted on their obligations. In 2020, the total debt in default increased from $299.6 billion in 2019 to $443.2 billion, or by about 48.0%.



Second, in 2020, about half (50.7%) of the defaulted debt was in foreign currency bonds. In addition, the 2020 increase in the total debt in default was driven mainly by the increase in foreign currency bonds in default (119.3%). This was due to the "new defaults by Argentina, Belize, Ecuador and Suriname, a first-time default on foreign currency bonds by Lebanon, and a greater amount of interest arrears from ongoing bond defaults by Venezuela and Puerto Rico". Finally, it is interesting to note that since 2000, the Chinese government has been increasingly involved in the global debt market. This is why in 2020, 22.2% of defaulted debt was Chinese debt.





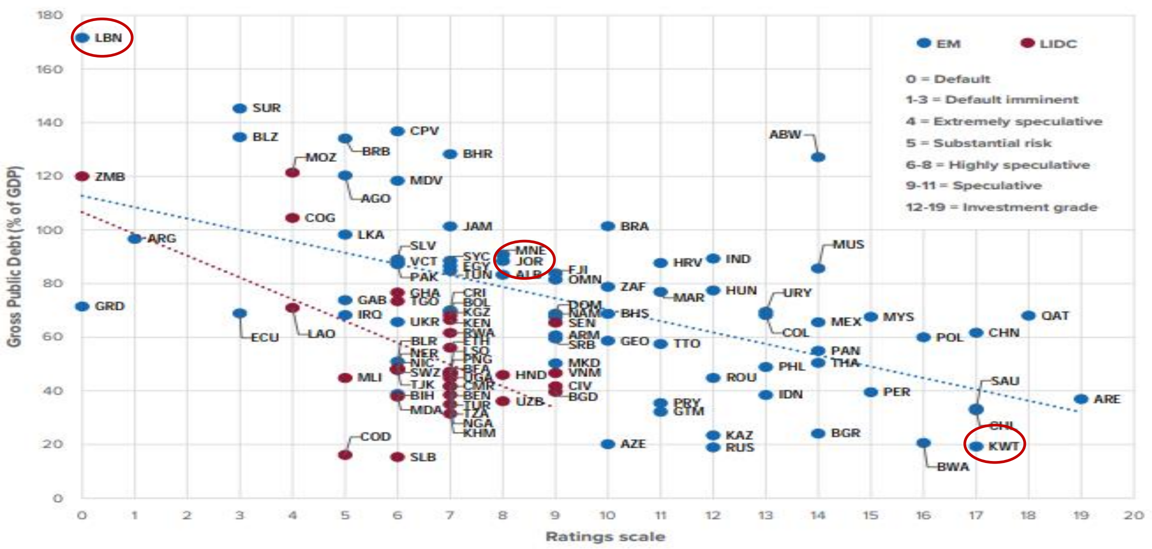
Third, in 2020, and earlier years as well, local currency debt default was very small. Indeed, in 2020, the increase in this debt (21.3%) was largely due to Iraq's restructuring of its' short-term debt into debt with longer-term maturities and lower coupon rates. Within this context, it is important to note that local currency defaults are less frequent than foreign currency defaults. A government has greater capacity to pay its local currency debt. Indeed, taxes are paid in the local currency, and the government may have better access to a stable domestic capital market. In addition, any government has some capacity to print money. This is why, international sovereign credit agencies typically rate local currency debt "one or two notches higher" than foreign currency rating.

Relative to the above-mentioned three observations, it is useful to raise two questions: What really determines the **"PROBABILITY"** of a government to default? What are the costs of defaulting?

As far as what affects the probability of a sovereign default, the economics literature contains numerous research papers, reports, and other documents, published by university professors, as well as by international organizations, such as the World Bank and the International Monetary Fund (IMF). Based on this literature, there is no single factor that impacts the probability of a default occurring. Indeed, a multitude of factors are important. These include many of the measures used by Standard & Poor's sovereign credit ratings. For example, total debt to GDP ratio, debt to exports ratio, external debt as a percentage of foreign reserves, short-term debt to reserves ratio, institutional capacity in the conduct of fiscal policy, external shocks such as interest rate increases or commodity price increases, and others.

Within the context of what determines the probability of sovereign default, it is informative to take note of a working paper published by the UNDP (Sovereign Debt Vulnerabilities in Developing Economies / 2021). In this paper, sovereign credit ratings are plotted against gross public debt (as a percentage of GDP) for 105 developing countries, 73 emerging market economies, and 32 least developed countries. The below Figure shows as the ratio of public debt to GDP increases, the credit rating of countries decreases.

Sovereign Credit Ratings (as of February 5th, 2021)



As far as the costs of sovereign default are concerned, they come in various forms and shapes. Default is often associated with a decline in output growth. For example, high public debt can reduce capital accumulation and economic growth via higher long-term interest rates, lower savings rate, and by crowding out private investment. In addition, high public debt can create a climate of uncertainty about the future fiscal policy, hinder the government's ability to respond to a future crisis, and even force the government to adopt self-imposed fiscal austerity measures.

Foreign and domestic investors might also react to a sovereign that defaults on its external debt by doubting that the government has sufficient foreign currency to defend the exchange rate. As a result, a currency depreciation might occur. Here, it is important to stress that tightening monetary policy (to protect the national currency), might limit the extent of exchange rate depreciation but at the expense, in the short run at least, of reducing domestic demand and liquidity in the financial system. Therefore, a sovereign, banking and currency crisis may arise.

It is also interesting to note that the Global Sovereign Debt Monitor 2022 has been published (Entwicklung braucht Entschuldung e.V. and Bischöfliches Hilfswerk MISEREOR e.V. / Germany). In this report, it is stated that while "135 out of 148 countries surveyed in the Global South are critically indebted", it would be useful to reports the findings of this report about some of the included Middle East & North Africa countries.

1. The Lebanese economy reflects the poorest performance in terms of the five debt level measures. Indeed, it is unfortunate to note that external debt to export earnings is equal 1376.8%.

Some Countries Debt Levels / 2020					
	Public Debt / GDP	Public Debt / Public Revenues	External Debt / GDP	External Debt / Export Earnings	Debt Service / Export Earnings
Egypt	90.0%	502.8%	37.4%	323.7%	53.4%
Jordan	85.4%	386.0%	44.2%	337.4%	27.6%
Lebanon	150.4%	939.5%	212.0%	1376.8%	252.0%
Morocco	75.4%	265.2%	59.1%	171.4%	13.5%
Tunisia	107.4%	325.1%	89.7%	247.3%	19.6%
Algeria	55.6%	176.5%	3.7%	20.1%	0.7%
Georgia	60.0%	239.0%	132.7%	291.3%	35.3%
Turkey	39.5%	135.3%	61.3%	207.5%	41.4%

2. In terms of the levels of risk, the Lebanese economy is "in debt distress" in all five measures of the debt levels. The Jordanian economy is in debt distress in "external debt to GDP ratio", and "external debt to export earnings".

Arab Countries Levels of Risk					
	Public Debt / GDP	Public Debt / Public Revenues	External Debt / GDP	External Debt / Export Earnings	Debt Service / Export Earnings
Egypt	High	Distress	Low	Distress	Distress
Jordan	High	High	Distress	Distress	High
Lebanon	Distress	Distress	Distress	Distress	Distress
Morocco	High	Moderate	Moderate	Moderate	Low
Tunisia	High	High	Distress	High	Moderate
Algeria	Moderate	Low	Low	Low	Low

IN A NUTSHEL, total sovereign debt in default increased by 48% in 2020. Indeed, this increase outpaced the 13% increase in gross world public debt. While the factors that affect the probability of a sovereign default are many, the most important is "high public debt", and the realization of strong and sustainable real economic growth is a sure way to reduce this probability. Automatically, such growth would decrease the public debt to GDP ratio.

Given present circumstances in the global economy (inflation, interest rate hikes, and the on-going Russian invasion of Ukraine), no one can argue that in 2022 and probably beyond, economic growth in Jordan is likely to reduce the public debt burden significantly. Sooner or later, the government must look at its persistent budget deficits seriously. The government must forget what is called the **"deficit bias".**

3. Recommendations to Reduce the Budget Deficit & Public Debt in the Future

To improve and strengthen its fiscal framework, promote debt sustainability, and increase the credibility of fiscal policy, the government should consider the adoption of the following:

1. Looking at the sources of Tax Revenues:

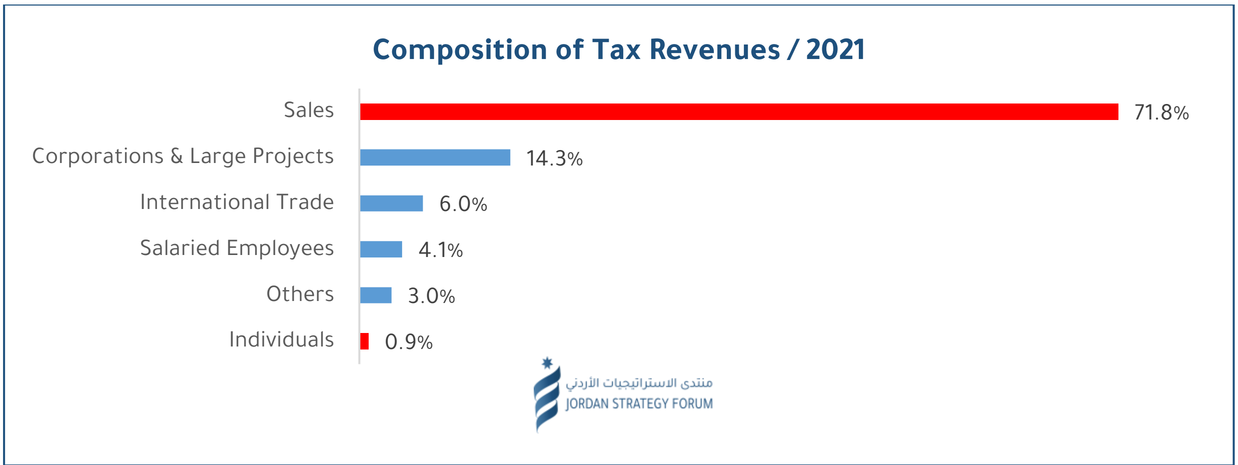
The government should look at the sources of its' tax revenues. If one looks at total tax revenues, their composition, and other related matters, the following points are worth stressing:

A. Total tax revenues to GDP ratio is around the 15% to 16% mark. Internationally speaking, this ratio is too low.

B. Sales tax makes-up around 72% of total tax revenues. Internationally speaking, this ratio is too high.

Sources of Tax Revenues (JD Million)				
Source of Taxes	2018	2019	2020	2021
Sales	3,184.6	3,302.4	3,533.9	4,038.7
Corporation & Large Projects	762.3	785.7	773.8	802.8
International Trade	292.9	276.6	274.4	338.0
Salaried Individuals	149.9	190.4	211.4	228.3
Others	93.0	81.6	112.5	170.6
Individuals	52.9	44.1	52.6	48.5
Total Tax Revenues	4,535.6	46,80.8	4,958.6	5,626.9
Total Tax Revenues to GDP Ratio	14.9%	14.8%	16.0%	

C. Tax revenue from "individuals" makes-up only 0.9% of total tax revenues. This is ridiculously low.



Here, one should note that that the term individuals refer to the private sector establishments outside the corporate and large projects' sector. They include establishments like medical doctors, lawyers, mini markets, supermarkets, private schools and kindergartens, contractors, garages, pharmacies, and many others. It does not make sense that tax revenues from "salaried individuals" are higher than from "individuals".

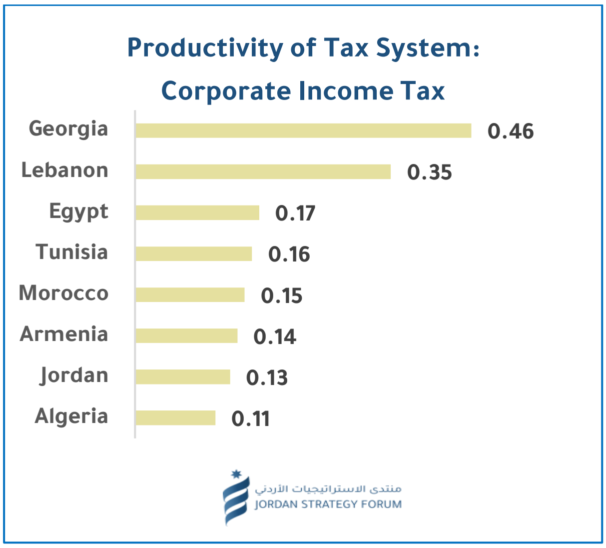
D. It is common knowledge that tax systems in all countries (advanced and developing) grant "tax concessions" to some consumers and producers. The budgetary cost of these concessions is referred to as "tax expenditures" or "foregone revenues".

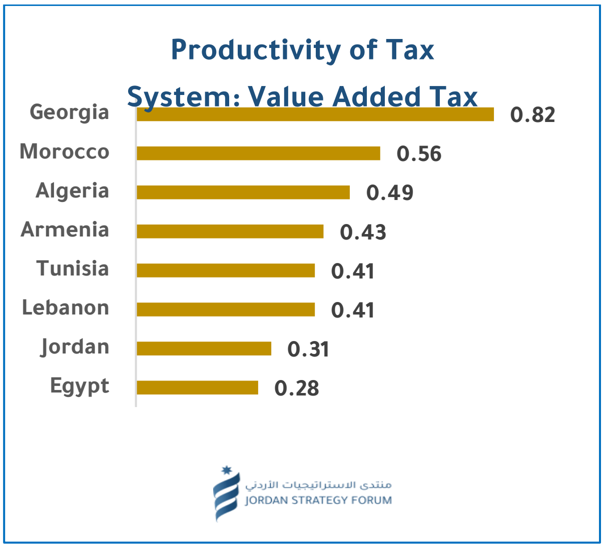
Based on the Global Tax Expenditures Database (GTED), in 2019 and 2020, the foregone revenues in Jordan were equal to 9.9% and 9.0% of GDP respectively (about JD 2.7 billion). The 2020 ratio (9.0% of GDP) is much higher than in Germany (0.9%), Chile (2.5%), Morocco (2.7%), Italy (3.8%), and in Turkey (4.1%). Tax expenditures are known to create inequities across taxpayers, tend to have some discretionary elements, and increase the complexity of the tax code.

1. The IMF issued its Country Report about Jordan in January 2021. The Report highlights a number of **"structural inefficiencies"** in the tax system. We outline below two sources of inefficiencies.

2. The IMF wonders why different business, depending on their size, activity, or location, pay differentiated rates. "Preferential tax treatment is a norm rather than exception, even at the level of individual companies and products", the reports states. The "complex web of preferential regimes complicates tax administration".

3. As a result of the many preferential tax regimes, the "productivity" of the tax system is low. For example, corporate income tax productivity (revenue per point of the standard rate, in percent of GDP) is low. Similarly, sales tax productivity (ratio of sales tax revenue to total final consumption net of sales tax revenue, divided by the standard general sales tax rate) is low.





Based on the above-mentioned five observations, there is a strong case for examining the taxes paid by "individuals", managing the tax exemptions better, eliminating the differences in tax rates within and across the various sectors of the economy, and reexamining tax expenditures.

The Jordanian economy needs a modern tax system that is fair, diversified, yields sufficient revenues to the government, and easy to administer. Within this context, it is always good to remember what Joseph Schumpeter (1883-1950), who was an Austrian-trained economist, stated about taxes.

"The spirit of a people, its cultural level, its' social structure…all this and more is written in its fiscal history…The public finances are one of the best starting points for an investigation of society".

2. The Adoption of Fiscal Rules:

A fiscal rule imposes on fiscal policy long-term constraints through numerical limits on the budgetary aggregates. Without fiscal limits, incremental budgeting becomes an open-ended process where governments accommodate "demands" by spending more than their revenues. The purpose of fiscal rules is to contain pressures to overspend, and to ensure fiscal responsibility.

Fiscal rules can come in a variety of shapes. Fiscal rules can set a limit on public debt (i.e. X% of GDP), constrain the size of the budget deficit (deficit ceiling of X% of GDP or even X% surplus of GDP), limit spending (i.e. public spending below X% of GDP, or real growth of current spending ceiling of X%), and revenue rules (i.e. public revenues at X% of GDP).

Recently, a growing number of countries have adopted fiscal rules. In 2021, 105 economies adopt at least one fiscal rule, 96 countries more than 1985 (IMF/ 2022). Based on a recently published paper by the IMF (Fiscal Rules and Fiscal Councils Recent Trends and Performance during the COVID-19 Pandemic / February 2022), it is interesting to note the following statements:

A. The average number of fiscal rules per country has also increased. Currently, countries have an average of about 3 fiscal rules up from about 2 in the early 2000s.

B. "About 70 percent of countries with fiscal rules have a debt rule combined with operational limits on annual budget aggregates.

C. Expenditure rules are increasingly common, often set as a ceiling on annual expenditure growth. Revenue rules have been less used, partly reflecting the fact that governments have less control over yearly revenues. Revenue rules are often set a ceiling on revenue-to-GDP ratio in advanced countries (Belgium) to avoid further tax hikes, while the rules are often set as a floor in low-income countries to encourage revenue mobilization".

D. About three quarters of advanced economies have expenditure rules… However, "only less than a third of emerging markets and developing economies adopted expenditure rules (Brazil, Mongolia, Paraguay), possibly reflecting the intention to increase expenditures paid by revenue mobilization efforts. Debt rules are particularly common in developing economies".

It is worth considering the adoption of fiscal rules with some flexibility to deal with the ups and downs of the business cycle.

3. The Adoption of Fiscal Councils:

Fiscal council is an independent non-partisan public entity with a "statutory or executive mandate aimed at promoting sustainable public finances through assessing fiscal plans and performance, evaluating macroeconomic and budgetary forecasts, monitoring the implementation of fiscal rules, and costing of government measures. Their functions help foster transparency and promote fiscal stability" (IMF / 2022).

Recently, a growing number of countries have established fiscal councils. For example, by the end of 2021, 49 economies have fiscal councils, twice the number in 2010 and a third more relative to last update in 2016 (IMF / 2022). These countries are shown below.

Countries With Fiscal Councils as of 2021					
1. Australia	9. Colombia	17. France	25. Ireland	33. Netherlands	41. South Africa
2. Austria	10. Costa Rica	18. Georgia	26. Italy	34. Panama	42. Korea
3. Bahamas	11. Croatia	19. Germany	27. Kenya	35. Peru	43. Spain
4. Belgium	12. Cyprus	20. Greece	28. Latvia	36. Portugal	44. Sweden
5. Brazil	13. Czech Rep.	21. Grenada	29. Lithuania	37. Romania	45. Uganda
6. Bulgaria	14. Denmark	22. Hungary	30. Luxembourg	38. Serbia	46. UK
7. Canada	15. Estonia	23. Iran	31. Malta	39. Slovak Rep.	47. USA
8. Chile	16. Finland	24. Iceland	32. Mexico	40. Slovenia	48. Uruguay
49. Vietnam					

Fiscal councils vary in their institutional forms. While some are attached to the legislature branch (parliamentary budget offices), others are attached to the executive. In some countries, fiscal councils are stand-alone entities. Irrespective of form, fiscal councils, unlike audit agencies, "contribute to the planning and formulation of policies and place a greater focus on economic evaluation and analysis of policies and less on verifying if the legal or budgetary processes were followed" (IMF / 2022).

An independent fiscal council can improve fiscal performance by limiting political influence over the technical aspects of fiscal policy formulation. Indeed, the fiscal council can make macroeconomic forecasts, provide assumptions or projections of key variables / parameters on which the budget rest, make independent revenue and expenditure projections, and assess the long-run implications of tax and spending initiatives.

It makes sense for the government to look into establishing a fiscal council. Indeed, such a council, with its characteristics and functions, can help the government in achieving sustainable public finances.

Features of the Fiscal Council:

A. Independent & Non-Partisan: A Fiscal council is an expert and professional body staffed by technical personnel, for oversight, guidance and advice on fiscal policies, plans, and performance.

B. Ex-Ante Role in Fiscal Policies: The ex-ante role of fiscal councils in policy making helps the Ministry of Finance and legislative committees better understand the medium-term implications of fiscal policy targets. Fiscal councils can improve the credibility of projected figures by validating macro-economic and fiscal forecasts in the budget process. When fiscal rules are established, fiscal councils can be tasked with responsibilities to monitor compliance with fiscal rules. They could help assess the fiscal impact of the interventions by governments to ensure long term sustainability.

C. Coordinate Fiscal Policies: Where authority over fiscal policies is discharged by sub-national governments or public institutions, fiscal councils can play the role of coordinator between them.

The international evidence suggests that **countries with established fiscal councils are more successful in reducing their budget forecast errors and deficit bias, and in strengthening their capacity to comply with numerical fiscal rules.**

Sovereign Debt

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Standard & Poor's (S&P) definition for sovereign debt default: "the failure of an obligor to meet a principle or interest payment on the due date (or within the specified grace period) contained in the original terms of the debt issue".

The five pillars of Standard & Poor's sovereign credit analysis:

- Institutional Assessment
- Economic Assessment
- External Assessment
- Fiscal Assessment
- Monetary Assessment

Standard & Poor's Ratings for Some Countries

Strong — Weak

AAA AA+ AA AA- A+ A A- BBB+ BBB BBB- BB+ BB BB- B+ B B CCC+ CCC CCC- CC D

Germany	UAE	Saudi Arabia	Morocco	Jordan	Egypt	Russia	Lebanon
AAA	AA	A-	BB+	B+	B	CC	D

There is a need to enhance the management of public finance in terms of its revenues and expenditures to maintain reasonable levels of public debt.

Source: Jordan Strategy Forum Policy Paper "Sovereign Debt: What is it? What are the Implications, & Why Do Economies Default? "

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