



ASSA 2021 Virtual Annual Meeting

[Policy Session: Debt Sustainability and Financial Stability in MENA Countries](#) (G2, E6)

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The Social Sustainability of Public Debt in the Framework of MENA Countries: Egypt, Lebanon, Morocco, Tunisia, and Turkey

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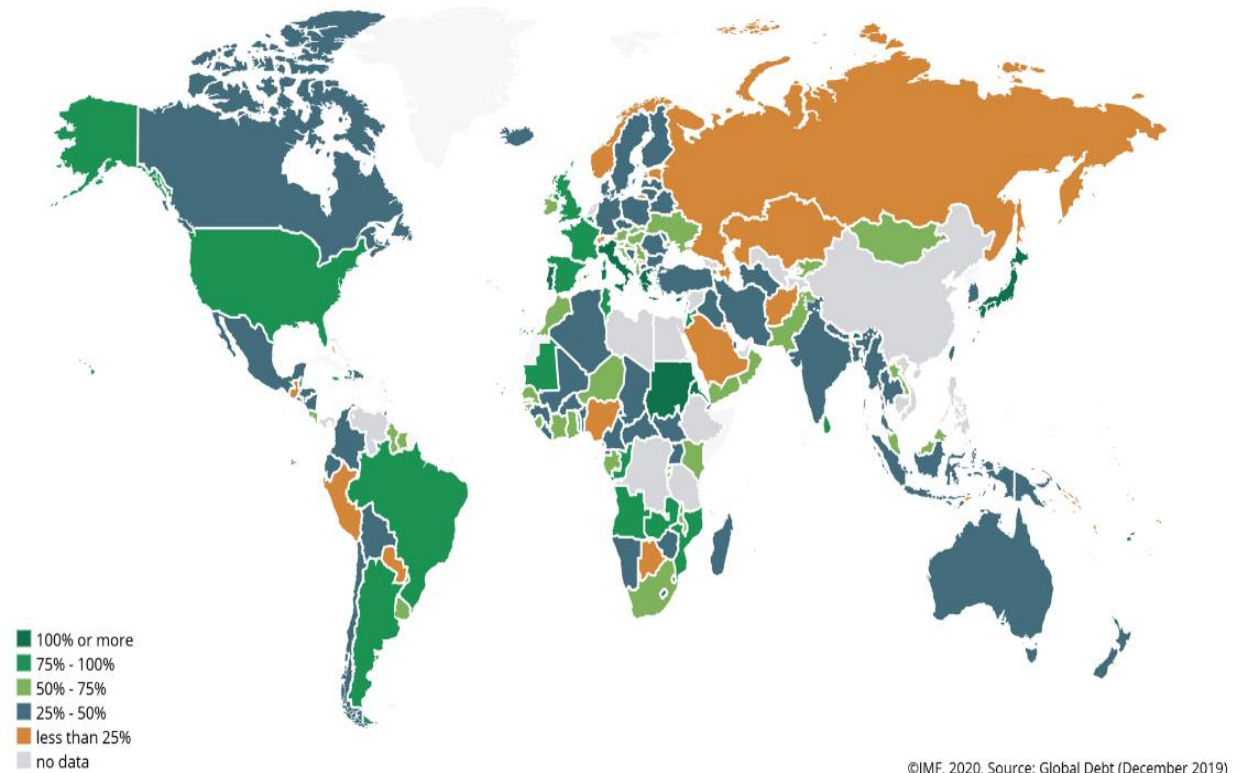
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Introduction

- During the last decade, both developed and developing countries had experienced high levels of public debt.
- In 2018, countries such as the United States, Japan, Belgium, Greece, Italy, and Portugal recorded public debt rates above 100% of Gross Domestic Product (GDP).
- Paradoxically, Statistics show that, on average, developing countries had experienced lower levels of public debt.
- However, some of these economies may face a debt sustainability problem.
- In 2018, the level of public debt in GDP percentage reached 28 % in Turkey, 65% in Morocco, 77% in Tunisia, and 151% in Lebanon.

- Central government debt (Percentage of GDP, 2018)



From the Economical to the Social Approach of Debt Sustainability

- The analysis by the thresholds where sovereign debt is summarized in a ratio (that of the public debt to GDP) seems irrelevant and lacks legitimacy.
- Admittedly, it is a simple and operational tool that synthesizes the debt problem into a prudential ratio.
- However, its arbitrary character makes it less and less credible.
- The international community's awareness of the limits of sustainability through debt thresholds has shifted the debate towards new approaches advocating social sustainability as the ultimate objective of public debt management policies.
- In recent years, attempts have been made to refocus the debate on foreign debt's effects on indebted countries' socio-economic rights.
- The issue of developing countries' indebtedness is being addressed from a new perspective on creditor and debtor countries' co-responsibility in debt sustainability.

The Paper's Interests

- In the literature, studies have generally explored the public debt sustainability hypothesis in a purely accounting view.
- In the MENA countries' framework, few studies analyzed the consequences of external public debt on the populations' conditions.
- This paper will be one of the first contributions investigating the social sustainability of the external public debt in MENA countries.
- The social sustainability analysis of the external public debt of MENA countries is more than necessary since these economies had faced significant socio-political instability for several years.
- Such a study could help the national authorities to define new debt management strategies and policies.
- It could also enrich theoretical and empirical research on public debt by considering new dimensions adapted to current issues.

Literature Review: Towards a Social Approach to Public Debt Sustainability

- At the theoretical level, research on the social sustainability of public debt is very recent.
- The relationship between external debt and the population's living conditions has rarely been the main concern in the economic literature.
- This question's historical origin can be found in Keynes' (1920) work and the Post-Keynesian school (Berr & Combarnous, 2007).
- The latter school study the expanded transfer capacity, i.e., the maximum income that the country can transfer abroad without affecting the standard of living of its population

Literature Review:

Towards a Social Approach to Public Debt Sustainability

- The dominant economic approach of debt sustainability is based on analyzing the gap between the economic growth rate and the interest rate on public debt, named the critical gap.
- Debt is a problem only if the real interest rate is higher than the growth rate (Aglietta, 2011; Sterdyniak, 2015).
- Despite its relevance and legitimacy, the critical gap analysis is called into question, especially for its theoretical foundation based on the solvency condition's scrupulous respect.
- According to this purely accounting view of public indebtedness, only the debtor's repayment capacity is privileged in the financing decision (Hanlon, (2000, 2002, 2006 & 2007); Ramasastry, 2007; Merckaert & Caliori 2007).
- Moreover, the social, cultural, political, and ecological impact on the public debt repayment process populations is ignored.

The Debt Social Sustainability

- The most general idea of unsustainable debt is that of a debt whose repayment has over time become problematic.
- This study affirms the importance of jointly considering both parties' interests concerned with analyzing debt problems.
- If a country has the financial conditions that allow it to meet its commitments to lenders, the consequences of debt repayment on its population may jeopardize its solvency over time.
- Consequently, it is useful to analyze the usual indicators' evolution with comparison to that of the new indicators likely to enrich the consideration of the debt problem.

Data and Methodology

- The study investigates the debt social sustainability in some MENA countries: Egypt, Lebanon, Morocco, Tunisia, and Turkey, during the 1990-2018 period with regression analysis.
- The questions asked are the following:
 - (1) What is the sustainability of public debt, particularly in countries where public finance imbalances risk undermining national authorities' choices regarding public expenditures and revenues?
 - (2) Are levels of external public debt in some MENA countries socially sustainable?

Statistical Analysis

- The statistical analysis aims at examining the evolution of the social sustainability indicators developed by Berr & Combarnous (2007) in the MENA countries selected.
- The study compares this evolution with that of the usual public debt ratios to show the importance of considering sustainability's social dimension.
- The purpose of these indicators is to assess how much debt servicing could limit a country's development opportunities by substituting for other, more beneficial uses such as investment, education, or public health.
- Table 1 summarizes the variables used.

Indicators	Description
	SDIK Debt Service to Investment
	SDPED Debt Service to Public Education Expenditures
	SDPSA Debt Service to Public Health Expenditures
	SDEX Debt Service to Exports
	SDHA Debt Service per Capita
	SDDT Debt Service to Total Development Expenditures
	SDPDH Debt Servicing to Total Public Expenditures on Human Development
	ISD Debt Sustainability Indicator

Econometric Analysis

- The study adopts the methodology based on estimation using the Auto Regressive Distributed Lag (ARDL) dynamic panel model.
- The study analyzes both the short- and long-term relationships between the variables.
- Table 2 summarizes the variables used in econometric analysis.

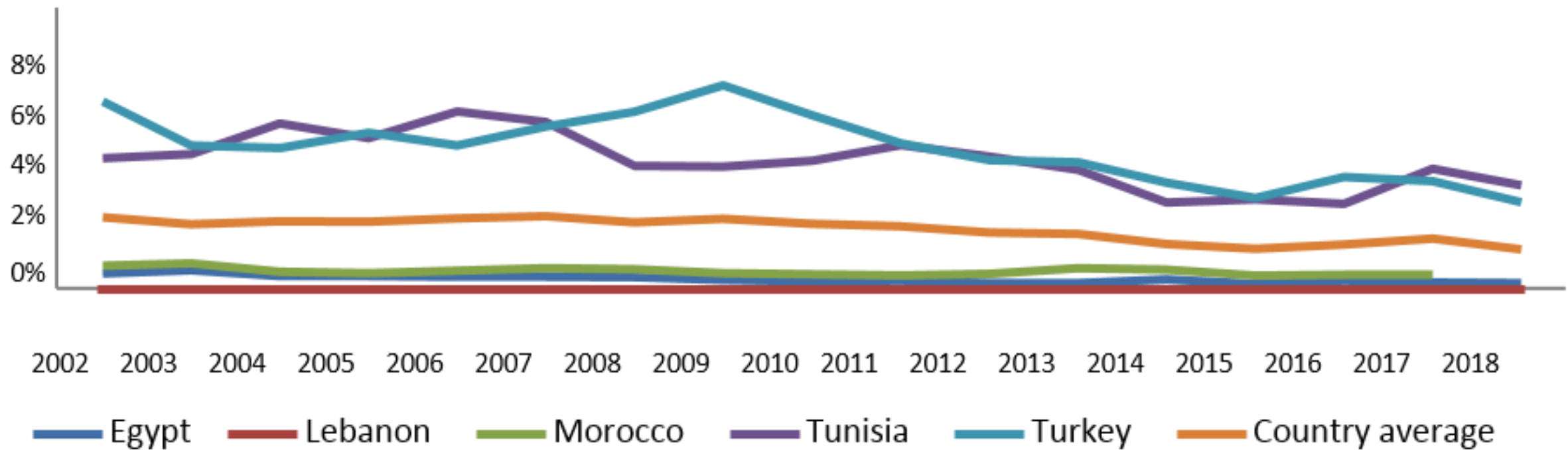
Variable	Definition	Description
GDPCAP	GDP per Capita	Measuring the level and social living conditions of the population.
EXDP	Public external debt ratio	Measuring the weight of the external public debt on GDP
INVGD	Investment ratio	Measured by the investment percentage of GDP
TERMS	The terms of trade	Measured by the ratio of the unit value index of exports to the unit value index of imports



Results and Discussion

Statistical Analysis

Econometric Analysis

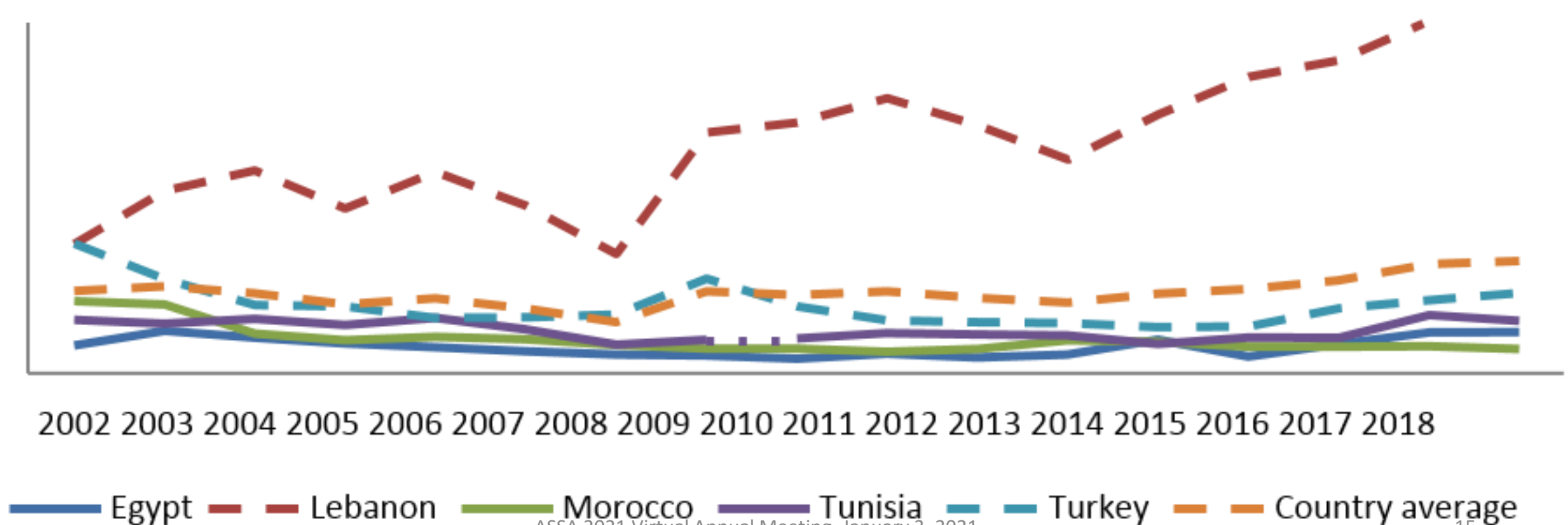


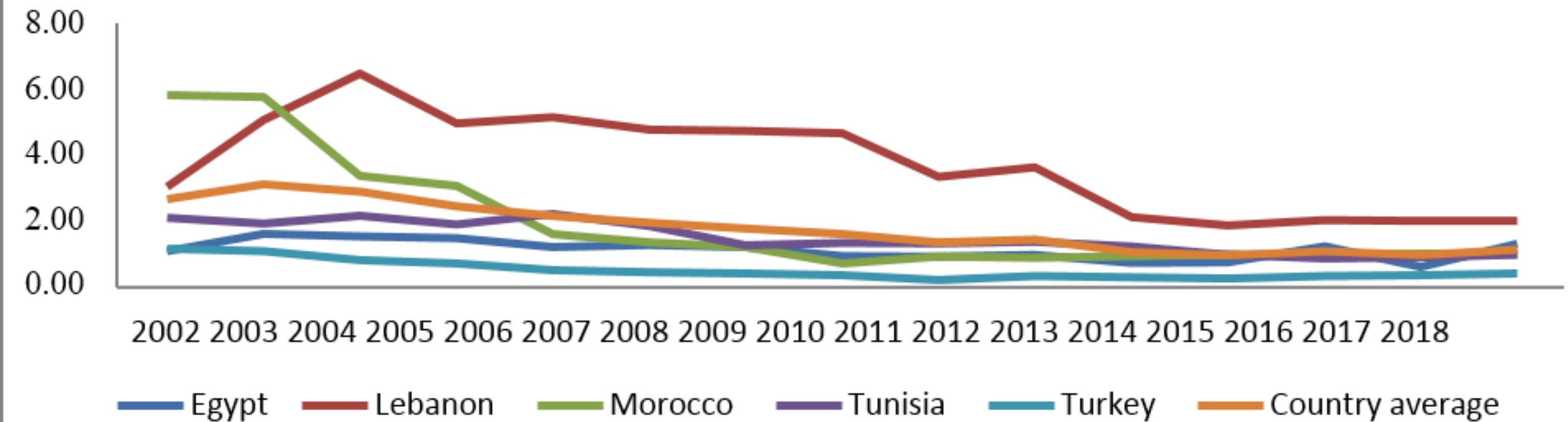
The Debt Service per Capita

- The Debt Service per Capita (SDHA) indicates the actual burden of public debt service on the debtor countries' populations.
- These levels represent in 2002 and 2018, respectively 2.05% and 1.14% of the countries' GDP per capita (PPP).
- Statistics show that Tunisia and Turkey have shares of service debt in GDP per capita that exceed the average of the study sample
- The external debt service weighs more on Tunisia and Turkey's population than in the other countries in the sample.

The Debt Service to Investment

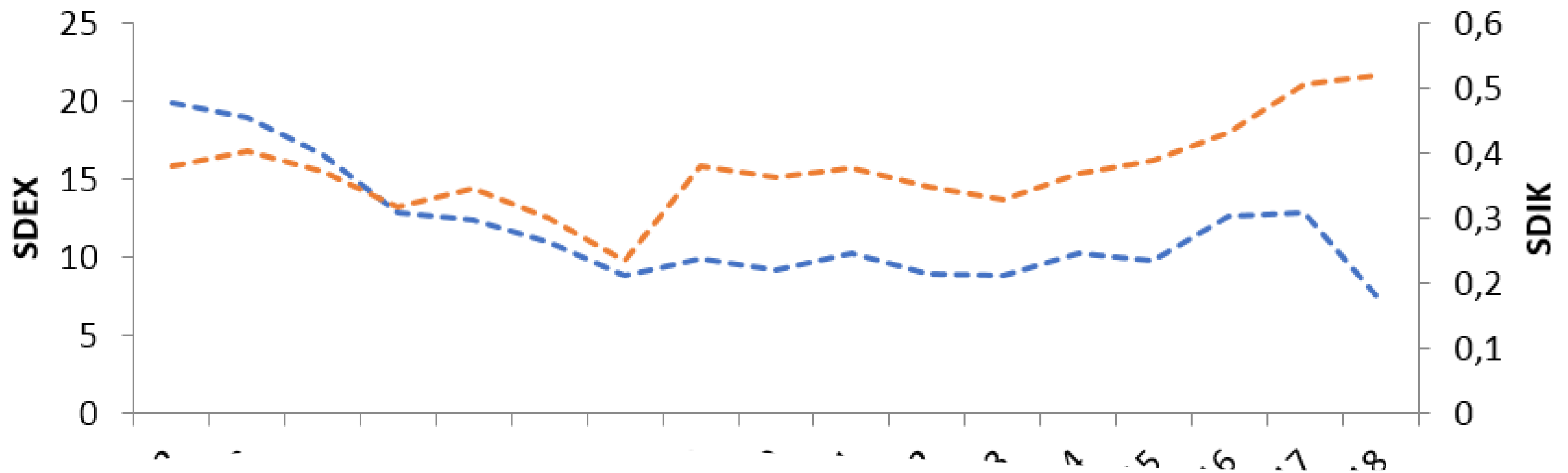
- The Debt Service to Investment (SDIK) represents the amount of public debt service in relation to the amount of public expenditures devoted to financing public investment.
- Statistics show that the average SDIK of the countries studied is at a level of 0.37 during the study period. It represents 37% of the investment in the countries studied.
- The average level of the SDIK in Lebanon between 2002 and 2018 represents an amount higher than the budget allocated to investment.
- This result proves that the servicing of the external public debt weighs heavily on the expenditures allocated to public investment.





The Debt Service to Public Health Expenditures

- The average Debt Service to Public Health Expenditures for the five MENA countries in the sample stands between 2002 and 2016 is 1.80.
- The external public debt service exceeds 180 percent of the budget allocated to public health.
- In Lebanon, the average SDPSA during the reporting period is at a level of 3.74.
- Morocco occupies the second position with an average SDPSA of 2.01.



A Comparative Analysis of Current and New Indicators

- The statistical analysis of the evolution of the new debt indicators and their comparison with the usual ones demonstrates that the distribution of public investment expenditures (SDIK, SDPSA, and SDPED) is different from one country to another.
- However, in most sample countries, the external public debt service weighs heavily on the public expenditures allocated to investment.
- The external debt service is well more than the budget allocated for these expenses.
- The comparison between the two indicators (SDI) and (SDEX) in these countries shows that even if the debt is sustainable regarding the (SDEX) indicator, that does not need to be so in terms of those countries' social capacity (SDI).

The Econometric Results

The long -term relationship

- $D(LNGDPCAP)_t = -0.045087 * D(LNEXPD)_t + 0.204397 D(LNINVGDGDP)_t + 0.089176 * D(LNTERMS)_t$
(1)
- The long-term relationship reveals that the ratio of external public debt as a percentage of GDP has a negative effect on the standard of living of the population (GDPCAP).
- If the ratio of external public debt as a percentage of GDP increases by 10%, the population's standard of living deteriorates by 4.5%.
- The external public debt has not benefited the population but has been used to finance non-productive expenditures (notably debt servicing).
- This result converges with those obtained with the statistical approach performed previously
- This situation contributes to compromising the social sustainability of public debt in the countries studied.

The Short-Term Relationship

- $$D(D(LNGDPCAP))_t = -0.737741 * e_{t-1} - 0.043438 * D(LNEXPD)(t-1) - 0.036934 * D(LNINVGDGDP)(t-1) - 0.011155 * D(LNTERMES)(t-1) + 0.017567 C$$

(2)
- The short-term coefficient of the EXPD variable has a negative and significant sign (P-Value is <5%).
- The share of external public debt in GDP has a negative and significant effect on the population's living conditions (as measured by GDP per capita).
- On the other hand, the coefficients of the variables (INVPIB and TERMS) have negative but insignificant effects (P- Values > 5%).
- The recall force's coefficient to equilibrium Coint Eq (-1) = -0.738 is negative and significantly different from 0, at the 5% level of significance.

Concluding Comments

- This study reveals that external public debt can harm the population's standard of living.
- Even if the debt is not the only cause of the social situation deterioration (poverty, inequality, etc.), it contributes to its amplification.
- The approach to debt sustainability needs to evolve by considering the social constraints of the indebted countries.
- Studies focus on sustainability analysis from creditor countries' perspective : This approach is necessary, but it is not sufficient. The issue of social sustainability must complement it.
- Public debt can lead to a situation of antagonism between the interests of debtor and creditor countries: it may be sustainable in the creditors' point of view, but not in the indebted countries and vice versa.

Policies Implications

- The study highlights the need for national authorities:
- (1) to ensure comprehensive management of public debt that considers both the creditors' interests and the capacity of the indebted countries to reimburse their debt ;
- (2) to borrow only to finance the most productive investment expenditures, which can have a positive impact on the standard of living of the population and economic growth;
- (3) to limit the implementation of austerity and anti-social policies.



Thank you for
your attention

Any question?



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- AJILI Wissem & AYOUB Hassan, The Social Sustainability of Public Debt in the Framework of Middle East and North African Countries: Egypt, Lebanon, Morocco, Tunisia and Turkey, Journal of Sustainable Development, vol.13, N°4, p.251- 267, July 2020
- <https://doi.org/10.5539/jsd.v13n4p251>
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Sunday, January 3

Policy Session: Debt Sustainability and Financial Stability in MENA Countries (G2, E6)

Paper Session

 Sunday, Jan. 3, 2021 ·  12:15 PM - 2:15 PM (EST)

Hosted By: Middle East Economic Association & American Economic Association


Chair: Riza Demirer, Southern Illinois University-Edwardsville

Discussant(s):

Rahel M. Schomaker, Carinthia University of Applied Sciences-Villach and German Research Institute for Public Administration Speyer

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