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# North Africa Subregional Profile:

# Public-Private Partnerships for Inclusive and Green Post-COVID-19 Recovery in North Africa

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* ECA/SRO-NA/ICSOE/36/1

**Executive summary**

1. The COVID-19 pandemic induced an unprecedented economic shock caused by the reactions of governments to an unknown disease. In 2020, the Global GDP decreased by 3.2% and 255 million full-time job equivalents were lost relative to the fourth quarter of 2019. Some 120 million people are estimated to have fallen into extreme poverty. While the latest IMF World Economic Outlook projects growth of 5.9% for 2021, the recovery is uneven and is subject to significant downside risks.

2. The pandemic impacted North African economies in different ways and at varying degrees, because of differences in their economic structures, integration to global value chains, and the intensity and speed with which governments responded to both the health crisis and its economic and social consequences. In 2020, excluding Egypt, the GDP of the subregion as a whole contracted by 1.6%, and by 5.8%. While Egypt maintained growth, the economies of Tunisia and Morocco shrank by 8.8% and 6.3% respectively. Unemployment increased substantially in all countries, peaking to 12.4% in the subregion.

3. Governments responded with large fiscal spending which, in a setting of revenue reduction, led to a deterioration of the fiscal balance and a rise in public debt. North African countries are emerging from the crisis with weakened fiscal capacities, in a context of rising prices, disruptions in global supply chains, and a potential tightening of financing conditions on international markets. Moreover, the subregion suffers from structural fragilities in dimensions critical for their capacity to adapt to the challenges induced both by the COVID-19 crisis – such as reorganization of global value chains, forced structural transformation, increased role of human capital etc. - and technological and climate changes. The COVID-19 crisis has underlined weaknesses in education and health, and is accelerating digitalization, while it coincides with the new and more alarming projections on the speed and extent of climate change. The subregion is one of the most exposed to climate change. The ability of North African countries to emerge from the crisis and initiate a new development trajectory will thus depend on implementing policies to tackle the medium to long run consequences of the pandemic, and to create quality jobs.

4. To address the combined challenges of the health and economic crises and of climate change, investments in education, renewable energy, ICT, and resilient transportation is important, as as well as the strengthening of social infrastructures.

5. The State has a central role to play, but North Africa suffers from insufficient State capacity and inefficiency of public investment, resulting in an insufficient contribution to GDP growth and jobs creation. Consequently, to address all the challenges of the current crisis and the post-COVID-19, building partnership with the private sector will be key. In particular, the development of Public Private Partnerships (PPPs) can help increase efficiency of public investment. The use of PPPs in developing countries has increased since 2004 as an effective means to overcome infrastructure bottlenecks to achieve sustainable growth. PPPs provide several benefits compared to traditional procurement. They embody the potential of efficiency gains, better quality infrastructure and services, and at their best, they combine private and public strengths to promote socially improved outcomes. While all North African countries have made progress since 2015, they are new emerging players with respect to private sector participation in infrastructure financing.

6. This report outlines the recent evolution of the socio-economic conditions in North Africa and analyses weaknesses of PPPs environment. It proposes some policy recommendations to develop more efficiently PPPs in a context of recovery and long run growth strategy. PPPs should be included in a comprehensive reform package that (i) builds a culture of cooperation and partnership between the State and the private sector, (ii) improves governance of public investment management institutions, (ii) builds a comprehensive investment setting that tackles short run and long run development challenges amid the crisis spillovers and long-term challenges, and targets building resilience in the economy and the social system, and (iii) builds collective PPPs capacity.

## I. The impact of the Covid shock and recovery paths

***An unprecedented economic shock, divergent recoveries …***

7. The crisis induced by the Covid-19 pandemic differs in size and nature from other recent economic crises. Compared to the Great Depression, for example, the decline of global output, although temporary for most countries, was three times larger and occurred much faster than in 1929. Moreover, while the Great Depression was a financial crisis, this one is primarily a health crisis, which in turn became an economic crisis due to the mitigation policies introduced by governments. Global lockdowns have led to a decline in global GDP by 3.2% in 2020 (IMF 2021a), to the loss of 255 million full-time equivalent jobs in Q4 2020 relative to the fourth quarter of 2019 (International Labour Organization, 2021) and to an increase in the number of people living in extreme poverty (on less than $1.9 a day in PPP terms) by about 120 million (Lakner et al., 2021).

8. North Africa [1] has been hard hit, as real GDP decreased by 1.4%, and by 5.4% [2] excluding Egypt[3] (Table 1).

**Table 1: GDP growth, unemployment 2020**

| | Real GDP growth (annual) | Unemployment rate (of LF) |
|---|---|---|
| **Algeria** | -4,90% | 12,9% |
| **Egypt** | 3,60%* | 7,9% |
| **Morocco** | -6.3% | 11,90% |
| **Mauritania** | -2,20% | 10,6 |
| **Sudan** | -1,6% | 22,10% |
| **Tunisia** | -8,80% | 15,10% |

Source: Ministry of Finance, National Statistics Office or Central Bank for all countries, except: Unemployment rate Algeria and Mauritania (ILO), Sudan all data from IMF, except growth (from CBOS).

(*) Fiscal year 2019/2020. (**) Average.

9. However, it is not the worst performing subregion in Africa, nor among middle- and low-income countries. GDP decreased by 14.5% in Southern Africa, and -5.4% in Central Africa. East Africa GDP recorded a 2.1% increase. GDP in Emerging markets and developing countries dropped by -2.2% in 2020.

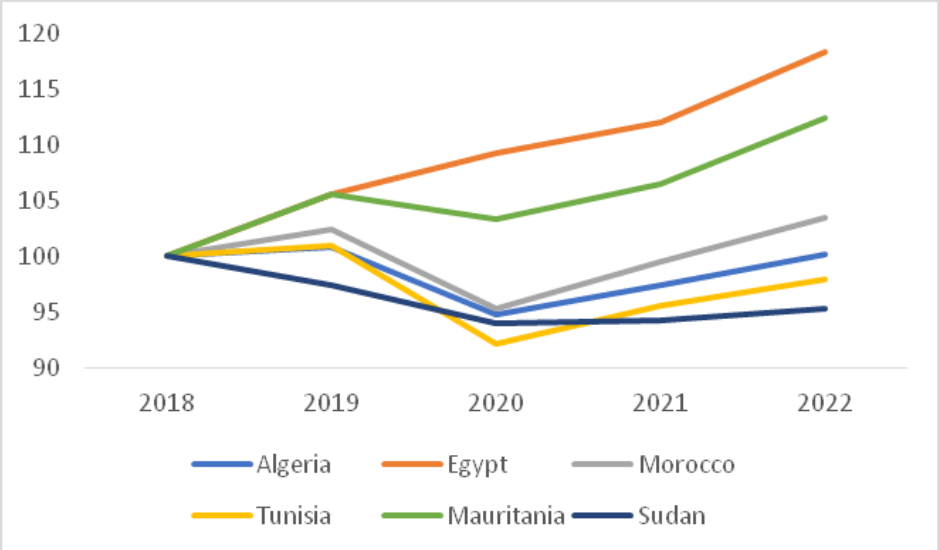
10. Unemployment increased substantially in all countries, reaching as high level as 22.10% of labor force in Sudan[4], or 15.1% in Tunisia[5], and overall in the region 12.4%[6]. The reduction in government revenue, coupled with an increase in public spending to mitigate the health crisis and support the economy led to a widening of fiscal deficit in almost all countries and a rapid rise in public debt. This posed a great constraint on governments in the subregion.

[1] Excluding Libya whose growth is highly volatile.
[2] Authors' calculation.
[3] Egypt growth is not aligned to fiscal year of other countries, it is calculated from June 30 to July 1 fiscal year 2019/2020.
[4] IMF database.
[5] National Institute of Statistics.
[6] Author's calculation.

11. As of July 2021, the IMF projects a global real GDP growth of 5.9 % in 2021 and 4.9 percent in 2022[7], with downside risk to the baseline induced by the slower-than-anticipated vaccination rate with worsening pandemic dynamics in low income countries, supply disruptions in advanced economies, and potential tightening of financial conditions. Developing countries, which suffer from constrained access to vaccines and a deterioration of their financial positions, are more susceptible to these risks. To varied degrees, countries in the subregion have been able to adapt to Covid-19, gain access to vaccines, and thus ease the health constraints that disrupted the running of the economy. As of September 2021, Morocco (52.1%) and Tunisia (34%) are the two North African countries that have made the most rapid progress in full vaccination (two jabs), while for Mauritania (0.5%), Sudan (1.3%) and Egypt (5.7%) and Algeria a significant effort is still needed. In advanced economies, nearly 40% of the population in fully vaccinated.

12. While output growth has rebounded in most countries, the recovery is occurring at varied speeds. For example, at one end of the spectrum, Egypt has avoided the real output drop altogether while Sudan's real GDP level stagnates after the gradual slide since 2018 (Figure 1). Algeria and Libya are benefiting from the increase in oil prices (which reached 80 USD in September), however the recovery has been undermined by macro-economic instability, rising inflationary pressures and belated reforms. Tunisia's recovery is marred by political instability that is also weighing on reforms. Finally, though weakened by the very slow recovery of the Tourism sector, economic growth in Morocco enjoyed a rebound in both domestic and foreign demand.

**Figure 1: Real GDP in North Africa, 2018 – 2022e, (indices, 2018 = 100)**




Source: IMF and authors' calculation.

13. The Covid-19 has exacerbated North Africa's structural weaknesses and vulnerabilities and brought about deep structural transformations (the increasing rate of digitalization, reorganization of global value chains, forced structural transformation, increased role of human capital etc.). The last Intergovernmental Panel on Climate Change (IPCC) report has revealed that the subregion is one of the most exposed to climate change. The State has a central role to play. However, because of the resource constraint it faces, the complexity of the challenges, and its limited capacity, cooperation with the private sector will become even more critical.

[7] No changes were made to 2021 from the last projection (April 2021).

***The pandemic can leave lasting economic and social scars***

14. While the crisis has impacted all countries, many developing countries were disproportionately affected due to their less diversified economies, less prepared public sector, including the health sector, limited economic resources, underdeveloped financial markets, and more vulnerable population due to the relatively high rates of poverty, malnutrition and HIV/AIDS.

15. Besides the lockdown restrictions, being small economies, African countries were strongly impacted by reduced trade, foreign direct investment and remittance flows. Egypt, Morocco and Tunisia were hit by the travel restrictions reflecting their high dependence on tourism (World Bank, 2021a). For fuel exporters (e.g., Algeria, Libya) the fall in oil prices amplified the initial Covid shock. North African countries have first felt the Covid-19 pandemic in March 2020. According to Johns Hopkins University data, since then cumulative deaths reached 24,553 in Tunisia, 17,106 in Egypt, 14, 009 in Morocco, 5,725 in Algeria, 2,879 in Sudan, and 767 in Mauritania by (as of September 2021). Governments took several actions to limit the virus spread and mitigate its health impact[8]. This turned the health pandemic into an economic crisis, initially through supply then demand shocks, though the transmission channels depend on structural characteristics of particular countries.

16. In 2020, central banks pursued accommodating policies to support economic activity, while the decrease in demand has put a downward pressure on inflation that remained contained in all countries except in Tunisia (5.9%) and Sudan (163.3%). However, in Tunisia, inflation maintained a downward trend, after registering 7.2% in 2019. The inflation rate in Sudan is driven by the Central Bank's devaluation of its currency in an attempt to converge official and black-market rates. However, inflation is a concern, worldwide, at least in 2021 and 2022, notably because of an increase in food and energy prices. According to FAO[9], weather, labor and equipment shortages, disruptions in supply chains and increase in oil prices have had a strong impact on food costs, with prices globally up nearly 33% in September 2021, as compared to September 2020. In North Africa, inflation is a concern in all countries, except in Morocco where it has been contained to 0.9% in the first half of 2021 and projected to 1% at the end of the year[10]. Because of rising food and oil prices, inflation is projected at 5.6% in Tunisia, 6.3% in Egypt in 2021, and in Algeria, it accelerated, reaching 4.1% in June 2021. Although still very high, inflation decelerated to 387.5% in Sudan, in August 2021, from 422.78% in July (Table 2).

[8] National state of emergency, adopting confinement measures, suspending all international passenger flights, forbidding public gatherings, and closing mosques, schools, universities, and restaurants.
[9] http://www.fao.org/worldfoodsituation/foodpricesindex/fr/
[10] According to Morocco's Central Bank.

**Table 2: Inflation 2020, and 2021**

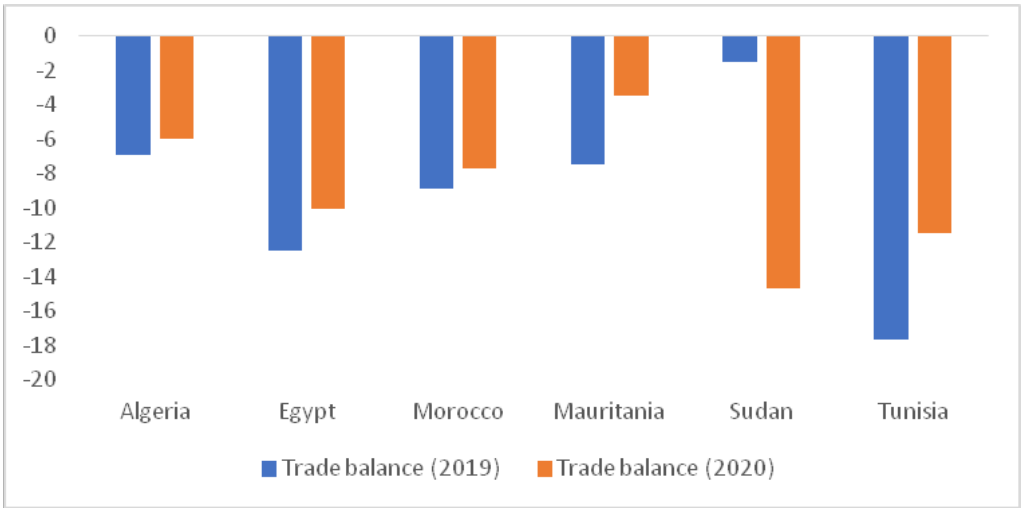
| | Inflation rate 2020 | Inflation 2021* | Inflation 2021** |
|---|---|---|---|
| **Algeria** | 2,40 | 4.1 | 5.3 |
| **Egypt** | 1,36 | 5.8 | 6.3 |
| **Morocco** | 0,70 | 1 | 0.8 |
| **Mauritania** | 2,3 | 2.5 | 3 |
| **Sudan** | 163,3 | 387.5 | 194.6 |
| **Tunisia** | 5,90 | 5.6 | 6 |

Source: National Statistics Offices and Central Banks. (*) Algeria June 2021, Morocco end year projections, Egypt August 2021, Tunisia 2021 projection, Sudan August inflation (**) 2021 inflation, IMF projections as of July 2021.

17. If inflation persists, major central banks in the world may increase their rates which will negatively affect developing countries' cost of borrowing.

18. From the external side, all countries experienced a significant decline in their exports during the first half of 2020 compared to the first half of 2019, especially the most diversified economies Egypt (-16%), Morocco (-18%), and Tunisia (-25%), that heavily rely on exports. Oil-dependent countries posted a marked decrease in export proceeds due to a lower global demand, associated to lower oil prices. Therefore, Algeria -43% and Libya -72% (in real terms between 2019 and 2020). However, because of the contraction of imports, the net effect on trade is a decrease in trade deficit in all countries, except Sudan (Table 2). In 2021, oil exporting countries enjoyed an increase in oil prices. Algeria's trade balance deficit recorded a considerable decrease of 87.9% during the first 8 months of 2021 passing to - 926 million dollars at the end of August 2021 against - 7.6 billion dollars at the end of August 2020. Non-oil exporting countries have experienced differently. Trade deficit improved in Egypt, from -10.1% of GDP in fiscal year 2019/2020 to a mean of – 2.7% of GDP in the first 3 quarters of the fiscal year 2020/2021. Egypt's exports increased significantly in 2021, particularly exports of commodities (plastic, food, fresh fruits etc.). In Tunisia, trade balance deficit increased by 13.75% in the first eight months of 2021, compared to the same period in 2020. In Morocco, exports continued their recovery with an increase of 24%, against 19,5% for imports, however trade deficit widened by 13%.

**Figure 2: Trade balance (%GDP)**




Source: Central Banks except Sudan (IMF).

19. On top of short run impact on economic activity, the crisis can curb potential growth, through different channels. A major one is through reduced investment (and thus capital accumulation), both domestic and foreign. Domestic investment shrank by 29% in Tunisia, 21% in Egypt, and 10% in Morocco[11]. In Algeria, public investment, a primary engine of growth, dipped by 24%. Regarding FDI inflows, Mauritania has the highest net inflows as a share of GDP (7.7%) followed by Egypt and Tunisia (3%) and Morocco (2.8%). Except Morocco, where FDI flows have remained stable, these have been negatively affected by the pandemic, declining by 38% in Egypt, 16% in Tunisia and 34% in Sudan.

20. Finally, the crisis has had a strong negative social impact, leading to a surge in poverty. In Morocco, for example, according to the High Commission for Planning, the incidence of poverty rose from 1.7 percent before the Covid-19 crisis to 11.7 percent during the lockdown period before the transfers from the Government, and 2.5% after transfers[12]. In Tunisia, the World Bank [13] estimated poverty to increase from 2.9 percent of the population pre-Covid-19 to 7.4 percent in 2020.

***Differences in lockdown measures and structural characteristics***

21. All governments have taken steps to curb the spread of the virus, though with different speeds and stringencies (Table 3). Morocco and Algeria took the most stringent measures, while Morocco and Tunisia responded most quickly to the pandemic. Egypt, as Mauritania, didn't react strongly in March, but more in April and May 2020.

**Table 3: Stringency index, 2020(*)**

| | March - December | March-June | June-December | March | April | May | June |
|---|---|---|---|---|---|---|---|
| **Algeria** | 75 | 70 | 74.7 | 43 | 86 | 77.5 | 70.5 |
| **Egypt** | 65.8 | 70 | 63 | 32.9 | 84.3 | 84.9 | 73.9 |
| **Mauritania** | 46.9 | 68.7 | 33 | 38 | 77.8 | 77.8 | 77.8 |
| **Morocco** | 72.5 | 81.4 | 66.9 | 55.15 | 93.5 | 93.5 | 80.2 |
| **Sudan** | 60 | 74.7 | 51 | 44.5 | 81.7 | 84.9 | 84.3 |
| **Tunisia** | 54 | 67.9 | 45 | 54.5 | 90.7 | 84.9 | 39.5 |

(*) The index (from 0 to 100) measures the stringency of measures taken by governments to mitigate the health crisis, the higher the score the more stringent is the policy response.

Source:https://www.bsg.ox.ac.uk/research/research-projects/oxford-covid-19-government-response-tracker.

22. The speed and stringency of the response may explain part of the supply side effect of the Covid-19 crisis, as it is directly linked to the stoppage on the economic activity. There are quite some disparities in the size of the responses and the type of measures adopted. Morocco launched a 3% GDP special fund. Egypt adopted a 1.8% of GDP stimulus package. Tunisia

[11] Central Bank of Tunisia, and Egypt and HCP for Morocco.

[12] *"Evolution of household living standards and impact of the COVID-19 pandemic on social inequalities"*. - HCP, March 2021.

[13] Kokas,Deeksha; Lopez-Acevedo,Gladys C.; El Lahga,Abdel Rahman; Mendiratta,Vibhuti..*Impacts of COVID-19 on Household Welfare in Tunisia (English)*. Policy Research working paper,no. WPS 9503,COVID-19 (Coronavirus) Washington, D.C. : World Bank Group.

launched an emergency plan amounting to 2.3% of GDP which was announced in March 2020. Mauritania created a 1.1% of GDP emergency fund. In Libya, the Government of National Accord (GNA) announced a package of USD100 million (about 1% of GDP) for COVID-19 related expenditure.

23. In terms of economic structure and diversification, there are two groups of countries. The first group, comprising Algeria, Libya, Mauritania and Sudan, are commodity exporters. While the share of fuel exports in total merchandise exports represents 98% and 96% in Algeria and Libya, respectively, it is, on average, only 15% in Egypt, Morocco, and Tunisia. Sudan and Mauritania are largely based on agriculture and livestock, in addition to some metals (such as iron and gold). The second group, Egypt, Morocco and Tunisia, have more diversified economies.

24. The mechanics of the economic transmission of the pandemic shock worked differently in these countries. In resource dependent economies, the drop-in oil prices directly impacted the engine of growth, which is public spending and investment. In more diversified economies, the shock has been both directly a demand and a supply shock; the demand shock came (on top of a reduction in domestic demand) from the drop in external demand and in tourism revenue. In Morocco for example, the activities hardest hit by the health crisis were those highly dependent on external demand, particularly from European countries (tourism, mechanical, metallurgical and electrical industries, and textile and clothing industries). As for Tourism, it accounts for 5% of total employment in Morocco (OECD, 2020a) and 9.5% in Egypt (OECD, 2020b). Tourism receipts declined sharply by 53.7% in Morocco, by 64.1% in Tunisia and by 66.3% in Egypt between 2019 and 2020.

**Box 1: Egypt's growth resilience in 2020**

Egypt's performance in 2020, with a positive GDP growth, can be explained by 3 factors. First as shown in Table 3, the policy response to the pandemic was less stringent than in other countries, leading to less severe stoppage of domestic economic activity. Second, thanks to the reforms initiated in 2016, Egypt entered the crisis with stabilized macroeconomic environment and a high growth rate (5.6% in 2019). Moreover, the reforms allowed the Government to better target public policies to the most impacted sectors and households. Third, Egypt obtained an assistance of USD 8 billion from the IMF.

25. The subregion suffers from structural fragilities in dimensions critical for their recovery path, and for their capacity to adapt to the challenges induced both by the Covid-19 crisis and technological and climate changes. Although the subregion's economic structure has witnessed a major change over the past 20 years, with a reduction of agriculture share, exports from North African countries remain concentrated as compared to other middle-income countries. All sectors combined, labor productivity growth in North Africa has been lower than in comparable middle-income countries, as well as in high-income countries (See UNECA (2020)).

26. Productivity differences, respectively between industry and agriculture and services and agriculture have declined over the period 1999-2018. Therefore, structural transformation didn't contribute enough to productivity growth, explaining partly the low job content of growth in the subregion (See UNECA (2019)). The slow structural transformation may also explain the relative weak complexity and technological capacity of most economies. The level of sophistication of North Africa exports remains low, despite the progress made. The percentage of exports with a (low or high) technological content is indeed only 22.7%, while it reaches 58.8% on average for comparable emerging countries. Partly the consequence of all

the weaknesses described above, the subregion is not well integrated to global value chains (GVC). Again; the degree of integration varies, with 45% of Tunisian trade, 43% of Moroccan trade, and only 10% of Egyptian trade in goods linked to GVC. Moreover, the subregion is only weakly integrated to Africa, and Egypt is the only North African country with a share of imports from Africa above 10%.

27. In the context of rapid diffusion of new information and telecommunication technologies as artificial intelligence, one of the most challenging weakness of the subregion is its reduced capacity to stimulate human capital accumulation and its efficient use in society (in the economy, but more probably in all domains of society). This can be seen in the low capacity for innovation and the difficulty of qualified young people to enter the labor market.

28. Using the example of the Global Innovation Index[14], Tunisia ranked (70) the highest in North Africa, and Algeria the lowest (113) over 130 countries, against an average of 40 comparable emerging countries and 58.3 for developed countries used as benchmark. A recent study by ECA (UNECA (2021)) shows that removing distortions in human capital accumulation would probably increase GDP per capita of North African countries by a factor of 2.75 to 4.5.

### 1.1 Markedly reduced fiscal space requires efficient spending…

29. Due to the drop in GDP and the increase in spending induced by the pandemic, all North African countries have experienced a widening of their fiscal deficit (except Mauritania and Egypt), and a rapidly rising public debt (Table 4).

**Table 4: Fiscal deficit and debt (%GDP) in 2020**

| | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|
| | Fiscal balance | Public debt | External public debt | Fiscal balance | Public debt | External public debt |
| **Algeria** | -9.6 | 45 | 0.01 | -8.3* | 50.3 | 0.8 |
| **Egypt** | -8.1 | 78.4 | 29.2 | -7.9 | 84.8 | 3.3 |
| **Morocco** | -3.6 | 65.3 | . | -7.70 | 59.1** | 18.7** |
| **Mauritania** | 2 | 76.4 | 54 | 2.2 | 71.8 | 56.7 |
| **Sudan** | -10.8 | 200 | . | -5.9 | 249 | 238 |
| **Tunisia** | -3.5 | 72.2 | 51.2 | -11.7 | 87.6 | 56.6 |

Source: Ministry of Finance and Central Bank, except public debt for Sudan (IMF). (*) Data are for end of November 2020, (**) Treasury debt. No data for Libya.

30. A rapid and stronger deterioration of public finance position can threaten the sustainability of public policy as the cost of borrowing will become too high and the burden of debt will affect the ability of countries to finance their spending. A report by the World Bank (2021) stresses that "*in a post-pandemic world, most MENA countries may find themselves stuck with debt service bills requiring resources that otherwise could be used for economic development*". Increasing the impact of fiscal policy on long run growth thus should be a priority. Efficiency of public spending is indeed a major concern in North Africa. To this end, when launching large infrastructure investment projects, governments should follow key principles: (i) prioritization of investment projects with an investment plan aligned to a long-term development strategy and recovery plan, (ii) efficiency and evaluation of public spending, (iii) short term impact while keeping as a compass the long term. This brings

[14] Which compares 130 countries and measures a country's capacity and success to innovate.

out the importance of State capacity, in terms of both governance and effective fiscal policies, including revenue mobilization.

### 1.2 … and strengthened State capacity

31. The road from better taxation to more economic and social development involves a strong complementarity between tax capacity, public administration capacity [15] and legal capacity (Besley and Persson (2011)). Herrera and Ouedraogo (2018) show that the efficiency of public capital spending is correlated with some governance indicators, namely positively with regulatory quality and with perception of corruption. Efficiency of public spending often necessitates a rationalization of spending. Public wages, subsidies and social transfer account for a particularly large share of total spending in North African countries. High share of public employment, with a positive wage gap (See UNECA (2019)) is for example an issue in Morocco. Moreover, general price subsidies are not an efficient way of targeting the poor.

32. With limited resources and multiple objectives, fiscal policy is being designed in a complex process of prioritizations and tradeoffs. One important objective is to stimulate the development of the private sector, as it is the main engine of growth and jobs creation.

***Strengthening private sector is critical…***

33. In North Africa, the growth of the private sector is not high enough to absorb the flow of new entrants in the labor market, especially the most educated. Out of 123 countries, Egypt, Algeria, Morocco, and Tunisia had the lowest formal sector entry densities, underscoring also the difficulties faced by new firms to gain access to markets (Rijkers, 2014) and youth to become self-employed. Several reasons account for low private sector development, such as constrained business climate, with access to finance being a major obstacle pointed out by firms (Schwab, 2018).[16] This is a severe constraint given that the post-Covid-19 world will be marked by greater volatility of growth, forced structural transformation, and a greater emphasis on innovation, all factors that require financing.

***And so is the creation of green jobs***

34. Managing the economic and social consequences of the pandemic and tackling the long run induced challenges caused by reduced private investment implies strengthened role for the state, including in terms of public investments in green jobs.

35. The Mediterranean basin has been identified as one of the two most responsive regions to climate change globally, according to the latest IPCC report. Specifically, the subregion "*will suffer multiple stresses and systemic failures due to climate changes".* In this context, the greening of the recovery path, adaptation to climate change, is critical for North Africa, and partnership between governments and the private sector will be key in this field.

36. The Agenda 2030 for Sustainable Development was set as a common framework to facilitate global cooperation. However, the Covid-19 pandemic exposed the pre-existing vulnerabilities of countries and is threatening the achievement of the SDGs. Measures thus have to be taken both at the individual country level but also at the global level to constitute a guidance for policy frameworks. Governments should assume new forms of organization and association. This includes greater cooperation with the private sector and civil society.

[15] Public administration capacity is defined as the government's effective and efficient use of public money.
[16] According to World Bank Enterprise surveys, 23% to 28% of Egyptian, Moroccan and Tunisian businesses with less than 100 employees surveyed mentioned financing as a major or severe constraint, compared to less than 15% in countries like India, China or Turkey.

## II. Public investment needs are high

37. Pre-Covid-19 estimates indicated that, by 2040, Egypt, Morocco and Tunisia will need a total investment of 997 billion USD in infrastructure (Global Infrastructure Hub, 2017). Building high-quality infrastructure is a key for the crisis recovery and long-run growth. Several high potential sectors could be targeted in terms of public investment: The health care sector has strong Keynesian multipliers, the ICT sector is an engine for productivity growth, and private investment in transportation yields high crowding-in effects (see Reeves et al, 2013; IMF -Fiscal Monitor, 2020). Investment in water and sanitation infrastructure needs to be prioritized, given the currently deficient water supply, and the additional burden caused by climate change investment in maintenance and infrastructure adaptation can help reconcile the short-term crisis recovery and long-term sustainable development challenges.

38. Table 5 underscores the gap in human capital and health that North Africa has to address, and thus necessary investment to be made.

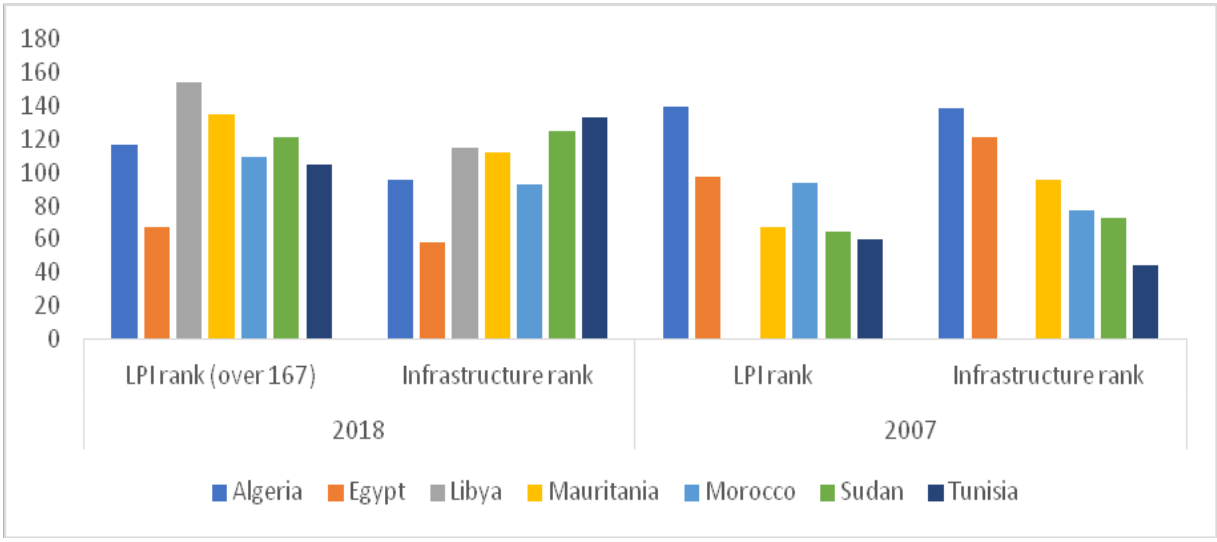
**Table 5: Human capital and health indicators**

| | Human Capital Index | PISA Maths | PISA science | PISA reading | Physicians per 1000 2018 | Hospital beds per 10000 (2015) | Health expenditure per capita (USD) | Health Regulations core capacity score |
|---|---|---|---|---|---|---|---|---|
| **Algeria** | 0.5 | . | . | . | 18.3 | 19.0 | 998.2 | 80.0 |
| **Egypt** | 0.5 | . | . | . | 7.9 | 15.6 | 516.3 | 82.0 |
| **Mauritania** | 0.4 | . | . | . | 1.8 | 4.0 | 163.9 | 26.0 |
| **Morocco** | 0.5 | 367.7 | 376.6 | 359.4 | 7.3 | 11.0 | 465.7 | 75.0 |
| **Sudan** | 0.4 | . | . | . | 4.1 | 8.2 | 297.9 | 65.0 |
| **Tunisia** | 0.5 | . | . | . | 12.7 | 22.9 | 806.3 | 66.0 |
| | | | | | | | | |
| **China** | 0.7 | 591.4 | 590.5 | 555.2 | 17.9 | 42.0 | 761.5 | 94.0 |
| **Malaysia** | 0.6 | 440.2 | 437.6 | 415.0 | 15.1 | 18.6 | 1052.5 | 95.0 |
| **Poland** | 0.7 | 515.6 | 511.0 | 511.9 | 24.0 | 65.0 | 1784.4 | . |
| **Turkey** | 0.6 | 453.5 | 468.3 | 465.6 | 17.6 | 26.6 | 1089.2 | 73.0 |
| | | | | | | | | |
| **Korea, Rep** | 0.8 | 525.9 | 519.0 | 514.1 | 23.7 | 115.3 | 2711.7 | 94.0 |
| **Sweden** | 0.8 | 502.4 | 499.4 | 505.8 | 54.0 | 25.9 | 5386.7 | 92.0 |
| **United States** | 0.8 | 478.2 | 502.4 | 505.4 | 26.0 | 29.0 | 9869.7 | 91.0 |

Source: World Bank, OECD (PISA score), SDG Index database. Health Regulations core capacity score is WHO Average of 13 International Health Regulations core capacity scores.

39. Figure 3 shows also that although North African countries have made efforts in terms of infrastructure and logistic investment, they have still improvements to do. In logistic performance, there is only one country, Egypt, which is ranked under 100 (over 167 countries) in 2018. It is the same for infrastructures, with Egypt ranked 58 and others above 100.

**Figure 3: Logistic performance in North Africa**




Source: World Bank (2007,2018), "Logistics Performance Index". Retrieved 15 July 2021, from https://lpi.worldbank.org/.

40. North Africa needs public investment, but first, given the inefficiency of public investment in the sub region, quality matters certainly more than quantity. Second, investment should be tailored to long term challenges, in particular with acceleration of digitalization and the challenges of climate change.

41. Building resilient and higher quality infrastructures is key both for the recovery from the Covid-19 pandemic crisis and for long run growth. In the face of the challenges of the crisis and those of climate change, investment in renewable energy, ICT, and resilient transportation is important, as well as social infrastructures. Climate change calls for resilient infrastructures as shown by the example of Morocco, with the 2014 floods that deteriorated roads. Investment in water is also critical given the drought that threatens the subregion with reduced rainfall. The sub-region is water stressed, with per capita water availability expected to drop to only 500m3/year per capita by 2030. Water issues in the subregion are not only linked to resource availability but also to efficiency. The subregion experiences many losses during water distribution and its inefficient use. In Algeria, for example, water losses in the distribution network are estimated at 30% to 40% (Oxford Business Group, 2018). In Morocco, the new model of development emphasizes the importance of better use of water resources. Investments in this sector will be very significant. In Morocco the National Water Plan, which dates from 2015, provides for an investment of 261 billion dirhams (nearly 29 billion current dollars) over a period of 15 years.

42. Investment in maintenance and in adapting infrastructures to the challenges of sustainable development (energy efficiency of buildings for example, or resistance to temperature increase, and extreme weather events) is a way of both dealing with the short-term impact of the crisis while tackling long term development challenges. First, projects in maintenance are of short duration as compared to building, they are smaller in size, and deliver quicker results. Second, public infrastructure projects are associated with inefficiency

losses that can be as high as one third of spending according to some studies (Schwartz, G. et al., 2020). Third, in advanced economies, green investments have a high job intensity, and investment on adaptation to climate change may have high returns. In developing countries, this can also be the case, if appropriate reforms are conducted. This is even more important that advanced economies may put trade barriers to products that do not respect environmental norms.

43. Hepburn et al. (2020) identify five policies with "*high potential on both economic multiplier and climate impact metrics: clean physical infrastructure, building efficiency retrofits, investment in education and training, natural capital investment, and clean R&D. In lower- and middle-income countries (LMICs) rural support spending is of particular value while clean R&D is less important*". Furthermore, given the health nature of the current crisis (and the potential threat of other pandemics), investment in health care and other social services is critical. Moreover, these are the sectors benefiting the most from an increase in public Investment (IMF, 2020). They have strong Keynesian multipliers as import leakages are small and they are labor-intensive sectors (Reeves et al., 2013). The crowding-in effect for private investment is stronger for industries which have proven crucial during the Covid-19 health crisis (e.g. communications and transport) and its recovery (e.g. construction and manufacturing) (IMF, 2020). Finally investing in ICT is critical for all the other types of investments, as ICT will be a key engine of productivity growth in many fields.

44. The ability of North African countries to emerge from the crisis and embark on a new development trajectory will depend on the policies that are implemented to tackle medium to long run consequences of the pandemic, and to create new activities and thus new jobs. Defining a strategy of recovery from the Covid-19 crisis is beyond the scope of this report. However, given the fragilities and weaknesses of North Africa (see UNECA (2020), the priorities are to limit the impact on human capital, invest in education and health, particularly for the most disadvantaged, cope with the changes linked to digitalization, and to allow a better reallocation of labor between activities and sectors[17]. Hence, public investment will be a strategic tool, as long as Governments are able to implement necessary reforms to increase the impact of public spending on growth and jobs creation.

## III. The Role of Public-Private Partnerships in the post-Covid recovery

45. Especially, in times of strong pressure on the sustainability of public finances, public-private sector collaboration becomes increasingly important, and Public Private Partnerships (PPPs) are promising forms of cooperation. PPPs are service delivery arrangements based on a mutual commitment between a government agency and a private agent (Bovaird, 2004). They can either be concession contracts - whereby a public legal entity entrusts investment needs and the management of a public service to a private entity in return for a payment based on the results of the service operations - or availability-based contracts. However, the differentiation between the various forms is not always clear-cut and governments can use hybrid formats.

46. The use of PPPs in developing countries has increased since 2004 as an effective means to overcome infrastructure bottlenecks in order to achieve sustainable growth (EIU, 2015). The investment reached its peak in 2012 with more than USD 150 billion investments in 2012 (PPI Database, 2021).

[17] The retraining of workers is an important dimension, given the asymmetric sectoral impact of the pandemic and the persistence of the crisis.

### *The Potential Benefits of PPPs*

47. PPPs provide several benefits compared to traditional procurement. The first is to attract new and additional funds to finance infrastructure and public services. This is especially relevant in developing countries as a mean to bridge the investment gap[18] which was already existing prior to the Covid-19 pandemic. Second, outsourcing service provision to the private sector through PPPs might help improve the efficiency. The main benefits thereby are the private providers' expertise and lower costs of the public services due to their experience and the use of economies of scale. Public authorities can focus on the supervision of public services rather than their provision. Third, PPPs allow risks to be transferred from the public to the private party if the latter is more efficient at bearing it. Fourth, during the outsourcing process, different competitors are introduced which allows gaining information about their costs and thus enable the public authorities to reach a certain level of cost control that is more difficult to reach with in-house provisions. Fifth, PPPs can help reduce political interference through public organizations which potentially dilutes their objectives. Last, pooling all activities necessary to the execution of a project under a single contract ensures that the different stages of a project are combined efficiently to ensure the timely delivery of the project. Furthermore, PPPs allow the operator to innovate in order to increase efficiency and generate more revenues. However, PPPs can also lead to failure if the project steps are not executed correctly or if necessary, enabling factors are not met (Box 2).

**Box 2. Potential Pitfalls and Key Success Factors for PPPs**

PPPs are subject to a complex process that requires strong government capacity. First, potential projects must undergo an appraisal to ensure that developing and implementing them is a priority. Second, for PPPs to be efficient, potential risks (e.g. commercial, regulatory or political, construction) need to be identified, mitigated and allocated to the party who is best able to manage them. Moreover, the commercial viability, government capabilities as well as the project´s social impact and value for money should be evaluated. Third, an adequate contract structure and especially the payment scheme is another key success factor for the efficient use of PPPs. Fourth, a bidding process should be applied to ensure transparent and competitive procurement. Last, managing PPP contracts involves monitoring and enforcing the complex and long-term PPP contract requirements and flexibly managing the relationship between the public and private partners. The higher the instability of a political, economic and social environment, the higher the costs of a PPP contract and the smaller the cost-benefit relationship of outsourcing services through PPPs. Thus, contract enforcement and the overall quality of a country's judicial system is of utmost importance for PPPs.

Apart from the correct execution of the process steps, there are three key factors in creating a supportive enabling environment for successful PPPs:

- **Government capacity:** Governments need skills and knowledge to deal with the complex contractual and financial arrangements and avoid the pitfalls mentioned earlier. Enhancing government capabilities at all administrative levels is important because they are at the core of a good PPP strategy.
- **High-level political commitment:** Procurement decisions about PPPs are fundamentally political decisions made at the highest levels of government. Hence, high-level commitment can send important signals to the private sector as well as government officials. PPPs should be pursued for the right reason, to create value for money and social benefits, and not as a second-best substitute for public procurement or for debt constraints reasons.
- **Institutional Structures and Legal as well as Regulatory Framework:** Clear and transparent legal frameworks that the public and private parties can trust are necessary at all stages of the PPP process. They will help minimize the risk of corruption and unethical behavior.

[18] 2.5 trillion USD to achieve SDGs according to UNCTAD.

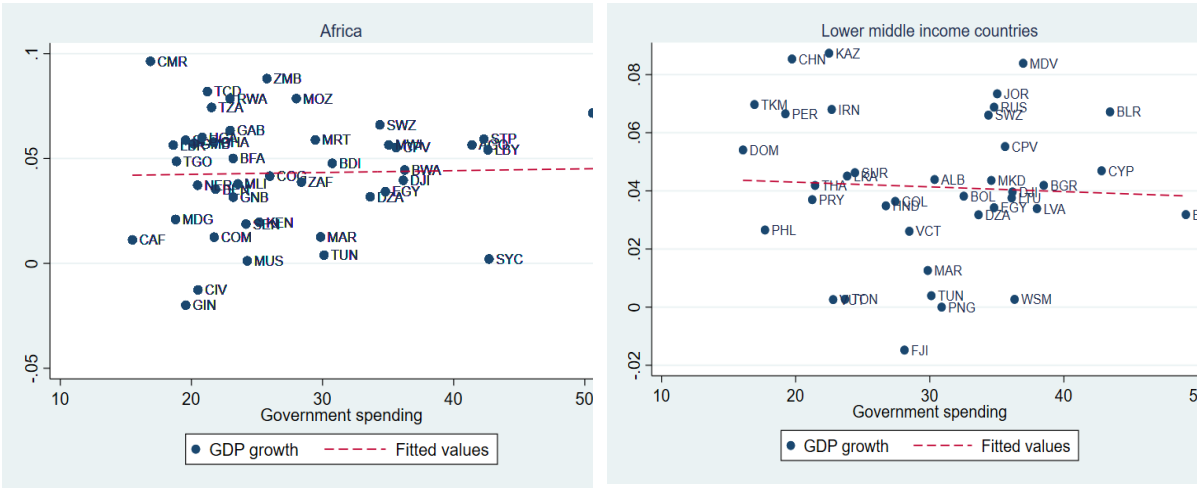
***PPPs can support public investment and recovery from Covid-19***

48. Even though public investment has been used by many governments around the world to boost their crisis-hit economies, growth implications of this strategy are different between developed and developing countries. In developing countries, the infrastructure gap is particularly high and maintenance inadequate (ILO, 2018).

49. The impact of public investment on employment creation and growth may be higher in developing countries as they have lower initial stock of public capital and higher public investment multipliers than advanced and emerging economies (Izquierdo et al., 2019). In low income developing countries, every US$1 million spent in key infrastructure such as electricity, roads, schools, hospitals, as well as water and sanitation creates 16–30 jobs in low-income developing countries (Moszoro, 2021).[19] Green investment and investment with a larger R&D component have a higher effect on employment. Moreover, public investment in these areas can have a crowd-in effect on private investment which may be important in times of uncertainty over the duration of the crisis, as the current one.

50. However, the positive impact of public investment requires efficient public spending. Distortions associated with the public investment process, present across North Africa, might render a crowding out of private investment and limiting its impact on growth[20]. Figure 5 plots GDP growth against government spending as a share of GDP for Africa and lower middle-income countries during the period 2000 – 2017. North African countries are among the worst performing both among lower middle-income countries (right panel of Figure 4), and African countries.

**Figure 4: Government spending and GDP growth**




Source: Author's calculation based on IMF data for government spending and real GDP from the World Development Indicators. Public expenditure and growth are averaged over the period 2000-2017.

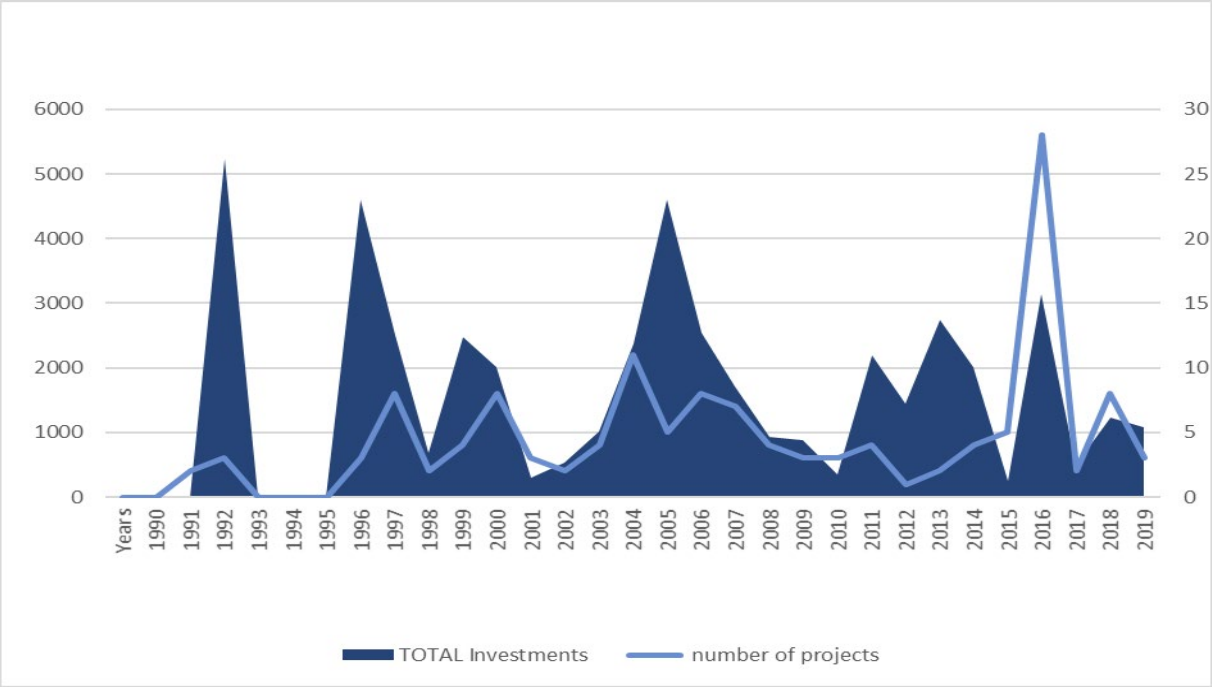
51. This relatively low growth elasticity of public spending may limit the ability of fiscal policy to boost firms' recovery from the Covid-19 crisis. A recent survey by UNECA in Algeria, Morocco and Tunisia, between November 2020 and May 2021, shows that on average firms expect to be able to return to their normal levels of sales and employment in twelve months' time. Public policy, and public investment in particular, can help facilitate companies' return to normal operations.

[19] In emerging markets and advanced economies, the numbers are 10–17 and 3–7 jobs, respectively.
[20] Cavallo, Eduardo, und Christian Daude "Public investment in developing countries: A blessing or a curse?" Working Paper, No. 648. Leibniz Information Centre for Economics, October 2008.

### *Using PPPs for public investment and services in North Africa*

52. Despite numerous benefits of PPPs, only few projects have been financed through PPPs in North Africa, with no clear trend until now (Figure 5).

**Figure 5: Morocco, Algeria, Egypt Arab Rep., Tunisia and Sudan (PPPs only) 1990-2020(H1)**




Source: PPI database, April 2021. Note: Sectors with the most important investments: Electricity far ahead, then natural gas and water.

53. PPPs certainly have a major role to play both to build infrastructures and to provide public services, although strong State capacity needs to be built before enjoying the full benefits of PPPs. Indeed, Section 4 has underlined the importance of the quality of institutions to capture efficiency gains of PPPs.

### *Assessing PPP's enabling environment in North Africa*

54. Table 6 presents the "Infrascope Index"[21] developed by the Economist Intelligence Unit which evaluates the PPP environment. While all NA countries have made progress since 2015, they remain emergent players regarding private sector participation in infrastructure financing. In 2019, the index shows an overall score of 56 for Morocco, 55 for Egypt and 55 and 57 for Tunisia (on a scale of 0 to 100 where 100 is the best), as compared to 79 for Chile or 71 for Brazil.

[21] The Infrascope index evaluates the PPP environment by analyzing the quality of the project lifecycle in five dimensions: laws and regulations (category 1), institutional framework (category 2), operational maturity (category 3), investment and business climate (category 4), as well as financing facilities for infrastructure projects (category 5). Scoring is 0 to 100, where 100 is best.

**Table 6: Enabling environment for PPPs in North Africa and selected countries, 2019.**

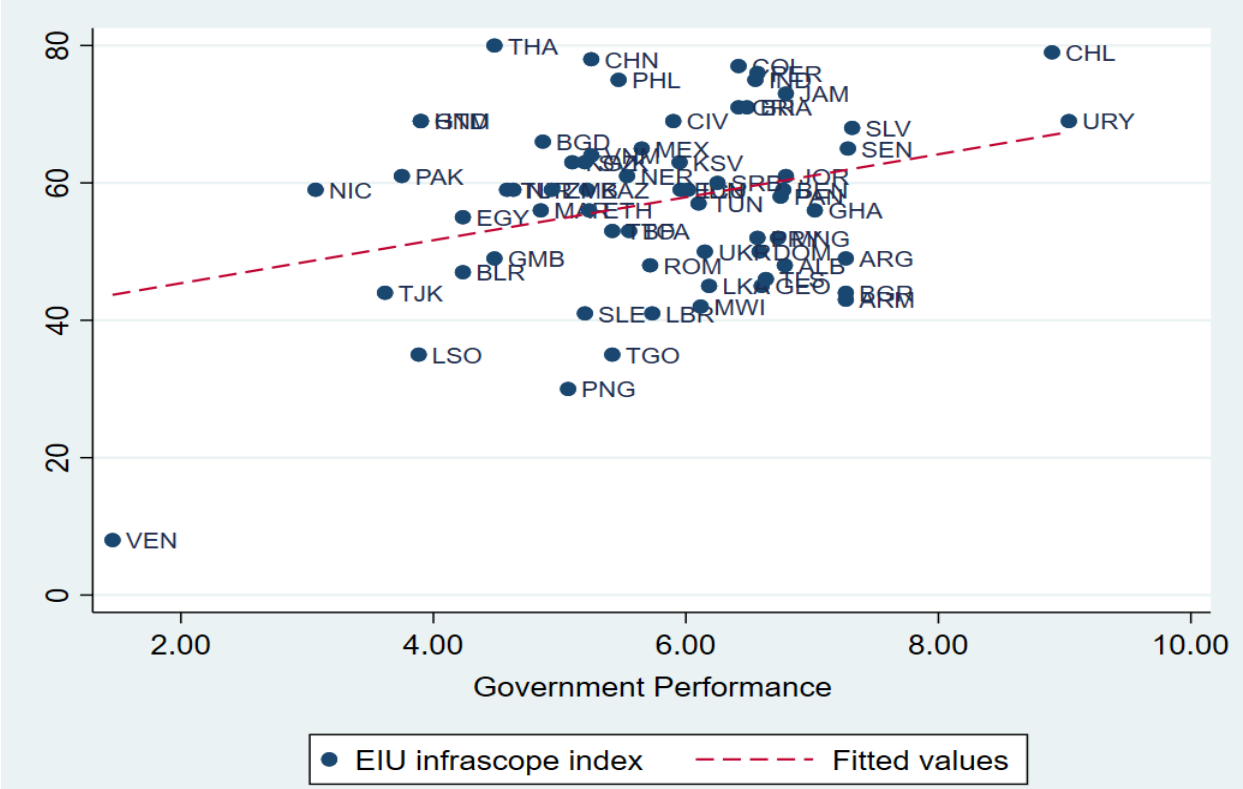
| | Overall | Regulations | Institutions | Maturity | Investment & Business Climate | Financing |
|---|---|---|---|---|---|---|
| **Morocco** | 56 | 51 | 40 | 72 | 58 | 53 |
| **Egypt** | 55 | 55 | 68 | 61 | 51 | 40 |
| **Tunisia** | 57 | 57 | 73 | 60 | 66 | 29 |
| **Argentina** | 49 | 66 | 40 | 50 | 49 | 37 |
| **Chile** | 79 | 94 | 80 | 78 | 83 | 63 |
| **Colombia** | 77 | 94 | 80 | 75 | 61 | 73 |
| **Brazil** | 71 | 63 | 88 | 66 | 69 | 69 |
| **Romania** | 61 | 49 | 78 | 68 | 56 | 53 |
| **Bulgaria** | 44 | 51 | 8 | 50 | 61 | 46 |
| **Jordan** | 61 | 48 | 78 | 68 | 56 | 53 |

**Mature**
**Developed**
**Emerging**
**Nascent**

*Source:* Economist Infrascope (2021) "Infrascope - Measuring the enabling environment for public-private partnerships in infrastructure". [online] Available at: <https://infrascope.eiu.com/> [Accessed 14 June 2021]. *Scoring is 0 to 100, where 100 is best.*

55. The institution's dimension includes the quality of institutional design and PPP contract, hold-up and expropriation risk. According to the index, significant improvements in transparency and accountability as well as in risk allocation are necessary. The three North African countries do not have a high score for financing, and the worst score goes to Tunisia (29). Morocco has the highest score in the subregion. While the country has greater capacity to fund PPPs than most countries on the continent since its banks are larger and have more financial resources, Moroccan banks still have insufficient experience in financing PPP projects (EIU, 2015). On this aspect, in North Africa overall, access to credit is limited and contract enforcement and protection of property may be an issue as underlined in UNECA (2019). As PPPs efficiency gains are strongly linked to the quality of institutions, governance reforms should be central. Figure 6 below illustrates this link by drawing the Economist Intelligence Unit Infrascope index in 2019 against a measure of government performance. Table 7 (Appendix) presents some relevant governance indicators for the building of an enabling environment for PPPs. It shows that North Africa still has a lot of progress to make in all dimensions, such as the independence of justice, control of corruption, regulatory quality etc. The Bertelsmann Transformation Index (BTI) is of interest as it looks at some relevant governance dimensions for PPPs environment such as steering capability, or resource efficiency. The table shows that there is large room for progress in those dimensions.

**Figure 6: Infrascope index and governance performance**




Source: Economist Intelligence Unit Infrascope index, and BTI Transformation Index.

## IV. Conclusions and Policy recommendations

56. The crisis has highlighted that North African economies need to become more resilient, make growth more inclusive, and build collective capacity to deal with emerging issues as digitalization and climate change. This requires enhanced public investment but also more efficient fiscal policy. With the limitation of public resources and public administration capacity, building partnership with the private sector will be key. The development of PPPs can help increase efficiency of public investment. PPPs come with the potential efficiency gains through bundling investments, infrastructure and service delivery. They can also provide better quality infrastructure and services at improved cost and risk allocation and facilitate innovation. At their best, PPPs would combine private and public strengths to promote socially improved outcomes.

57. The improved efficiency of fiscal spending through PPPs would not only raise longer term, potential growth. It could also support faster recovery from short-term, cyclical crises such as the one generated by the Covid-19 through increased fiscal multipliers and hence more effective counter-cyclical fiscal policy. This, in turn, would partly mitigate the limited access of private actors to credit and reduced fiscal revenues, thus raising the leverage of public spending. Moreover, higher infrastructure spending, in particular in the ICT sector, would also alleviate some of the supply side bottlenecks that emerged during Covid-19 with production and services shifting online.

58. To this end, governments should be guided by key principles while launching large infrastructure investment projects, in particular prioritizing projects with: (i) an investment plan aligned to a long-term development strategy and recovery plan, (ii) framework for

efficiency and evaluation of public spending, (iii) high short-term impact while keeping as a compass the long term. Besides a solid institutional and legal framework, numerous conditions should be filled for PPPs efficiency gains to be attained[22]: Key ones are (i) synergy and communication between public and private partners, (ii) contractual design of incentives and performance measurement that encourages innovation and cost efficiency; and (iii) government staff who are skilled in risk management and enable learning and knowledge transfer to deal with the long term and complex nature of PPP contracts.

59. As this report has emphasized, North African economies still need to fill a large public infrastructure gap, particularly in critical sectors such as health. However, without a significant increase in the efficiency of public spending, its impact on longer term growth and job creation will also be diminished. Hence PPPs should be seen more as a strategy for efficiency and selection of public projects that do not crowd out private investment than tools for investment volumes. Key recommendations then are:

- Developing a strategy to build a culture of partnership between the public and private sector, particularly in the production of public services. Partnership should be built with the objective to strengthen countries' capacity to tackle key issues, innovate and adapt to change. This will be critical as the public sector lacks the capacity to improve the quality of all public services.
- Develop a comprehensive investment plan aligned with a development strategy that tackles in a comprehensive way short run and long run development challenges amid the crisis spillovers and long run challenges (higher uncertainty and volatility, induced notably by technological and climate changes). The strategy should focus on key vulnerabilities and build resilient economic and social systems. for example, the strategy could:
    - Include a specific investment plan for the maintenance and upgrading of infrastructures to increase their resilience to climate change;
    - Insert the use and development PPPs within the investment plan, by identifying key areas where the gains from the PPPs can be optimized, accounting for capacity constraints.
- Improve governance of public investment management institutions (procurement, transparency and selection). Strengthen the capacity of public investment management institutions in terms of skills and financial resources;
- Develop collective capacity for PPPs:
    - Besides dedicated teams in each sector, a transversal PPP unit, with enough capacity should be put in place to provide technical assistance, audit, and globally monitor the development of PPPs;
    - Set PPP pilots, under the conduct of the PPP unit, in each sector in order to increase knowledge transfer and better understand the specific context and difficulties of each sector;
    - Set a "data bank" on PPPs, by collecting data on PPP characteristics, risks, contracts, performance criteria, etc.
    - Set a dedicated fund that will support the capacity building for PPPs and their bankability, accounting for their low market value but high social returns.

[22] Roehrich, Lewis, & George (2014), Hodge, Greve, & Biygautane (2018) and Fabre & Straub (2019) provide a review of gains from PPPs.

## V. Appendix

**Table 7: Governance indicators**

| | Egypt | Morocco | Tunisia | South Africa | Chile | South Korea | Turkey | Thailand | Brazil | India | Peru |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Independent Judiciary** | 125 | 79 | 56 | 45 | 26 | 17 | 107 | 71 | 67 | 69 | 80 |
| **Government Effectiveness** | 36.5 | 47.6 | 48.6 | 66.4 | 81.7 | 88.5 | 54.3 | 66.8 | 43.8 | 59.6 | 49.5 |
| **Regulatory Quality** | 18.8 | 46.2 | 35.6 | 61.5 | 84.1 | 82.2 | 54.8 | 59.1 | 48.1 | 48.6 | 71.6 |
| **Control of Corruption** | 27.9 | 45.7 | 52.9 | 59.6 | 83.2 | 76.9 | 44.7 | 40.9 | 42.3 | 47.6 | 36.5 |
| **BTI-Governance Performance** | 4.2 | 4.9 | 6.1 | 7.2 | 8.9 | 8.1 | 4.6 | 4.5 | 6.5 | 6.6 | 6.6 |
| **BTI-Prioritization** | 5.0 | 5.0 | 6.0 | 7.0 | 8.0 | 8.0 | 4.0 | 4.0 | 6.0 | 7.0 | 6.0 |
| **BTI-Implementation** | 4.0 | 5.0 | 4.0 | 6.0 | 8.0 | 7.0 | 5.0 | 5.0 | 7.0 | 6.0 | 6.0 |
| **BTI-Resource Efficiency** | 4.3 | 3.7 | 5.0 | 6.3 | 8.7 | 7.7 | 5.0 | 4.7 | 6.7 | 6.0 | 6.0 |
| **BTI-Policy coordination** | 5.0 | 4.0 | 6.0 | 7.0 | 8.0 | 8.0 | 6.0 | 4.0 | 7.0 | 7.0 | 6.0 |

Sources: The World Justice Project (2021) “Rule of Law Index”. [online]. Available at: <https://worldjusticeproject.org/rule-of-law-index/>.

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