# Welcome back to the **World Bank's MENA COVID-19 vaccination strategy** workshop series

We will be starting shortly

Here are some ways to **engage with us** today

We **want to hear from you;**

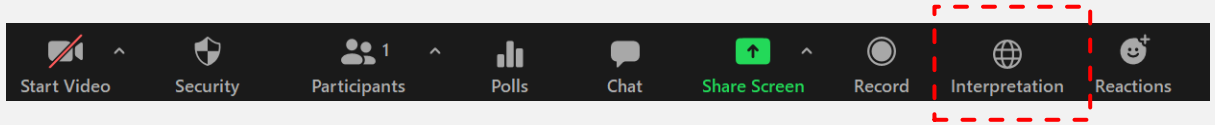
- If you have questions or comments to share during the presentation, please **share your thoughts using the Zoom chat feature**
- Our team will **monitor the questions** and **share them with the presenters** to address immediately or when they get to the appropriate topic

At the end, there will be a **short Q&A session** where you can raise outstanding questions.

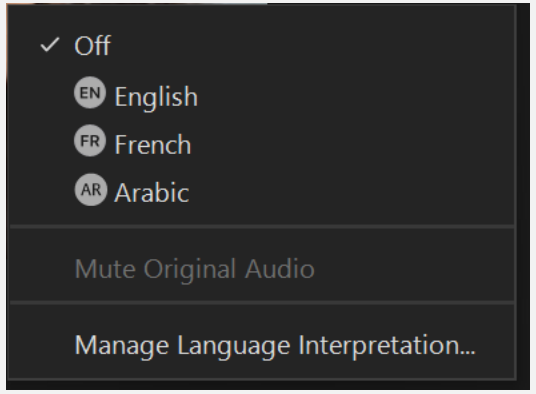
Thank you for your engagement and participation!

# Interpretation options available in French & Arabic

1. In your meeting/webinar controls, click **Interpretation**




2. Click the language that you would like to hear.




3. (Optional) to hear the interpreted language only, click **Mute Original Audio.**

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# Workshop 2: COVID-19 Vaccine Financing

World Bank MENA COVID-19 Vaccine Strategy Workshop Series

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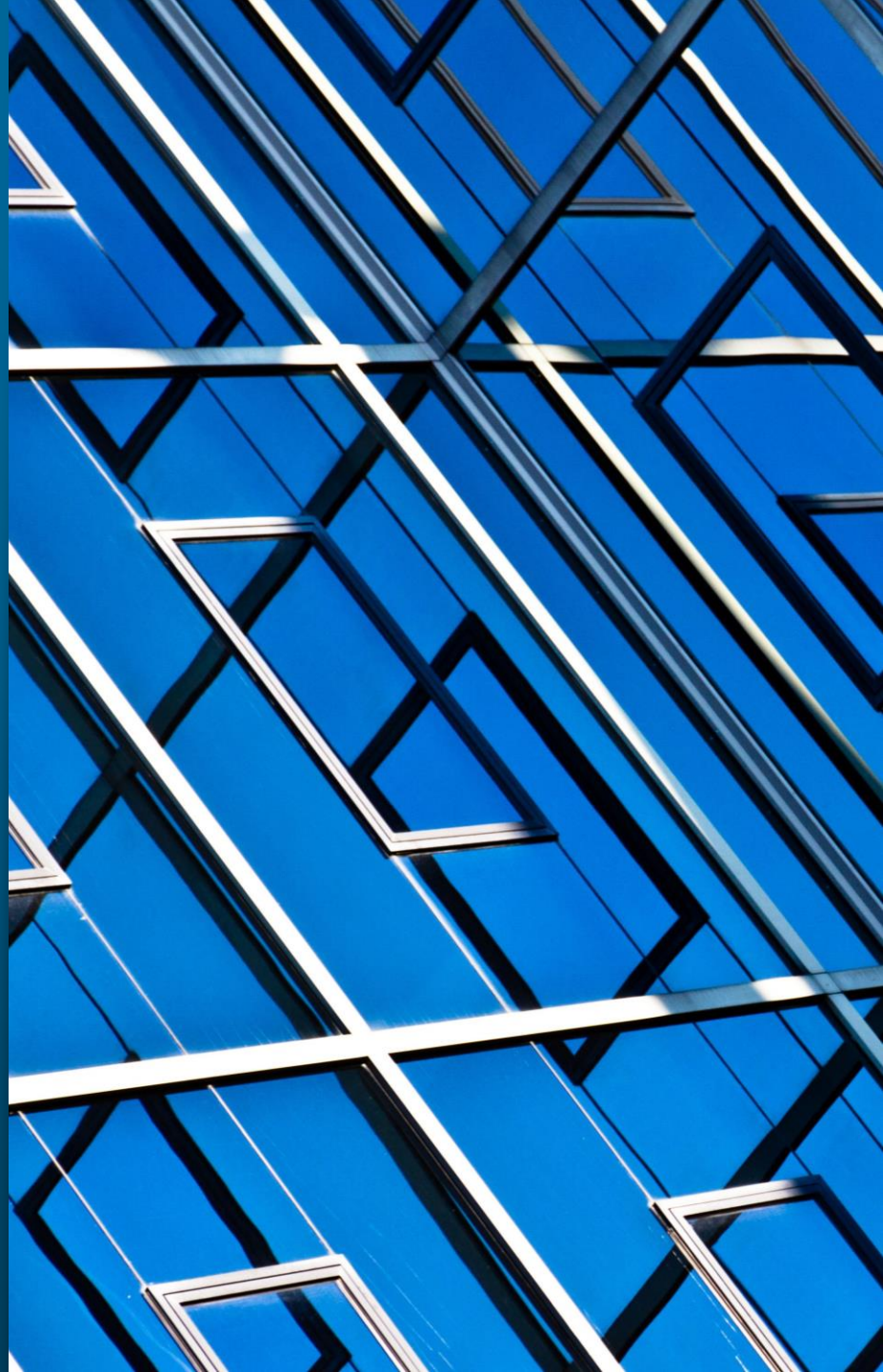
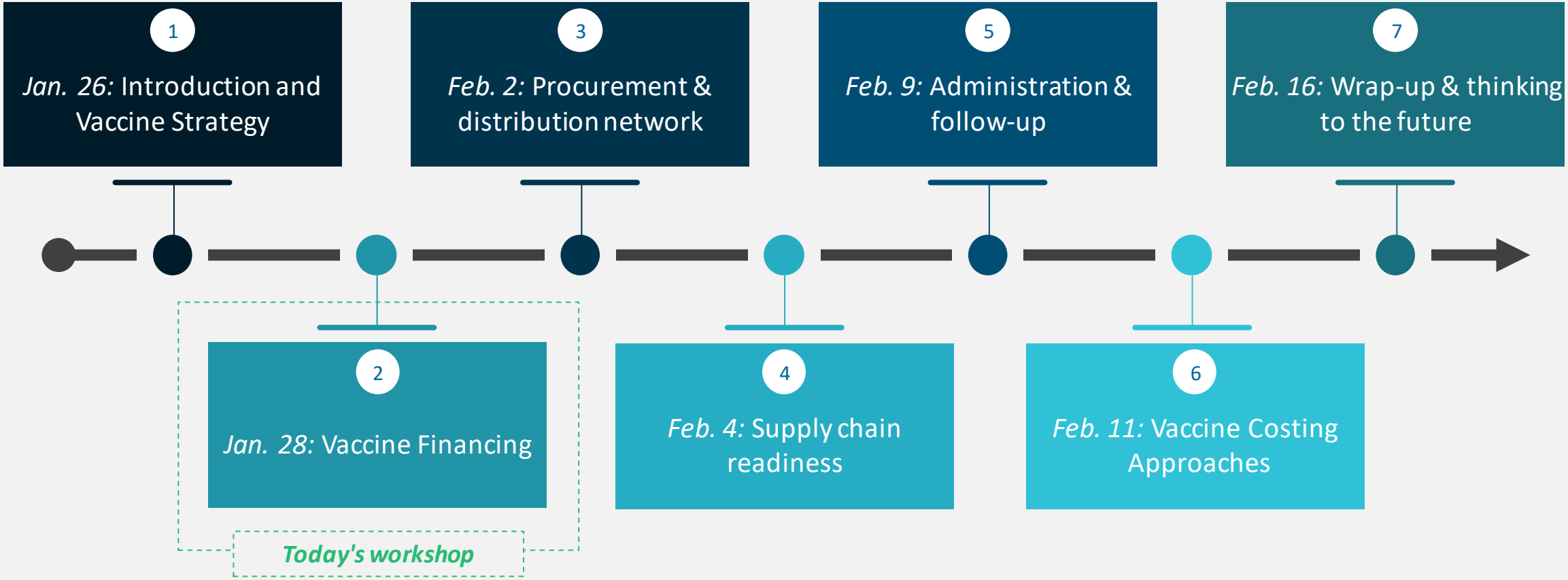
28 JANUARY 2021

# Welcome Remarks

by Jorge Coarasa, Senior Economist, World Bank



# Second in seven workshops to address critical vaccination topics



## **What we covered** in last work-shop on: Vaccine Strategies

*Shared perspectives from experts on COVID vaccine strategy in face of uncertainty*

*Reviewed critical strategic considerations when developing approach to vaccinations*

## **Where we are:** Objectives for Financing workshop

1. Provide overview of Macroeconomic impact of COVID-19 and implications for health financing
2. Present high-level estimates of vaccination costs in MENA
3. Give an overview of current funding options and implications for health financing

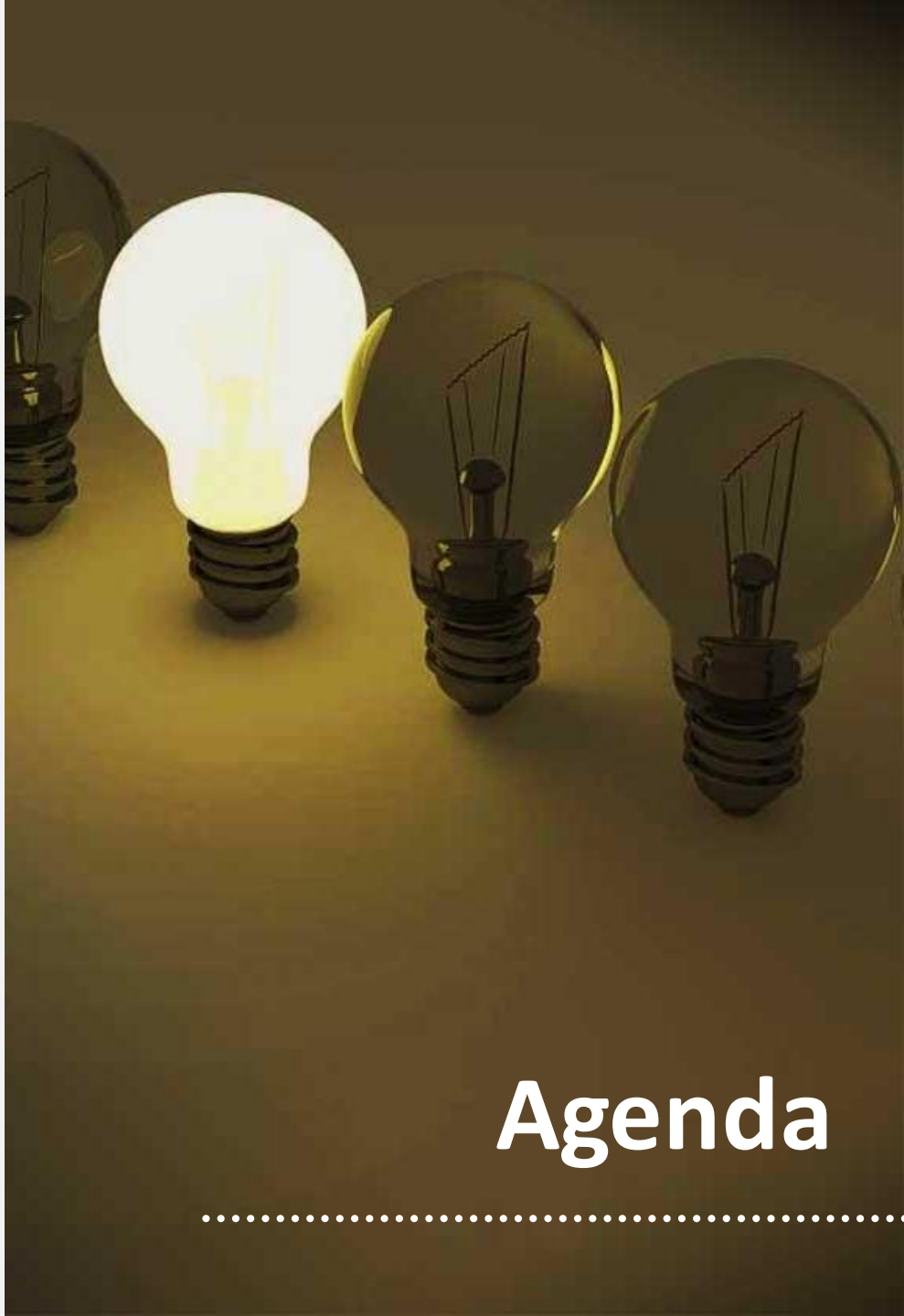
## **What's next:** Procurement and Distribution Strategy

*Detail emerging portfolio of COVID-19 vaccines for MENA region*

*Review key considerations on delivery sites, including type and number of sites and allocation across sites*

# Agenda

| | |
|---|---|
| Welcome remarks & objectives | 8:00-8:10am |
| Part 1: Macroeconomic impact of COVID-19 and implications for health financing | 8:10-8:20am |
| Part 2: Financing needs for COVID-19 vaccines | 8:20-8:30am |
| Part 3: Financing landscape overview for COVID-19 vaccines | 8:30-8:50am |
| Part 4: Country perspectives | 8:50-9:10am |
| Closing and Q&A | 9:10-9:30am |



# Part 1: Macroeconomic impact of COVID-19 and implications for health financing

**Iryna Postolovska**
Senior Economist,
World Bank

# Macroeconomic impact of COVID-19

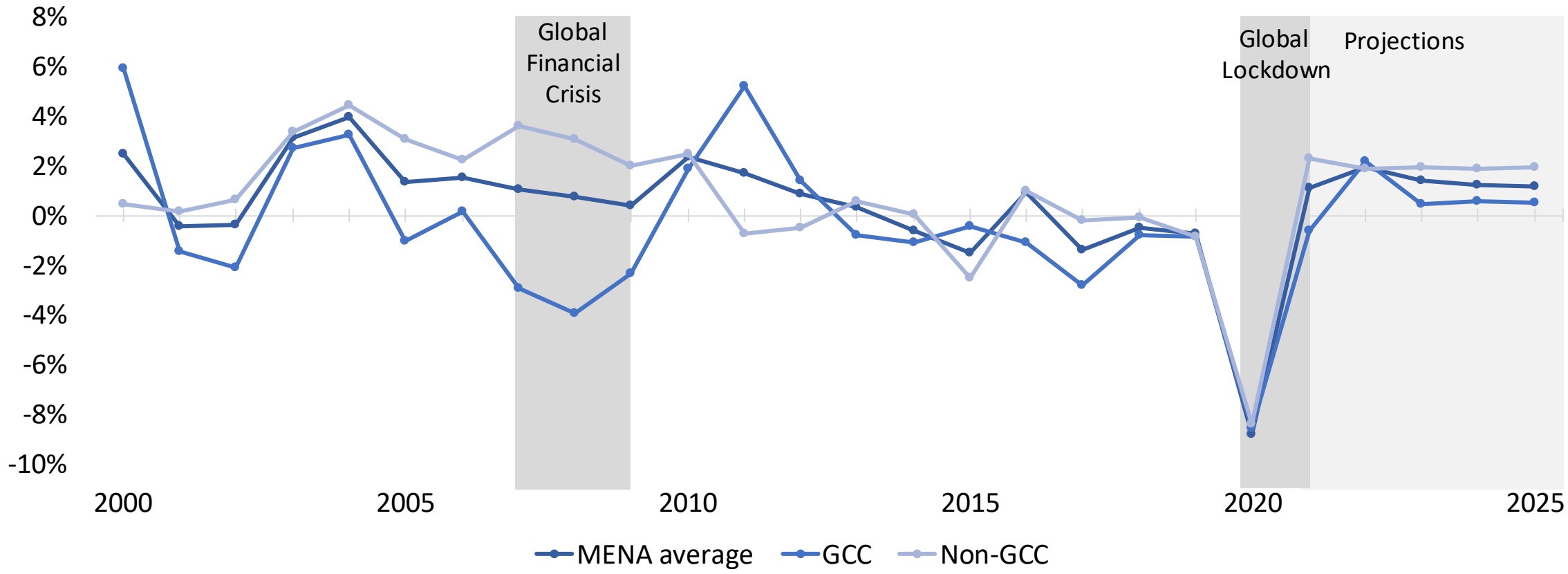
Declining GDP growth

Declining revenues

Rising expenditures

# All but one MENA country saw declines in GDP in 2020; modest growth projected in 2021

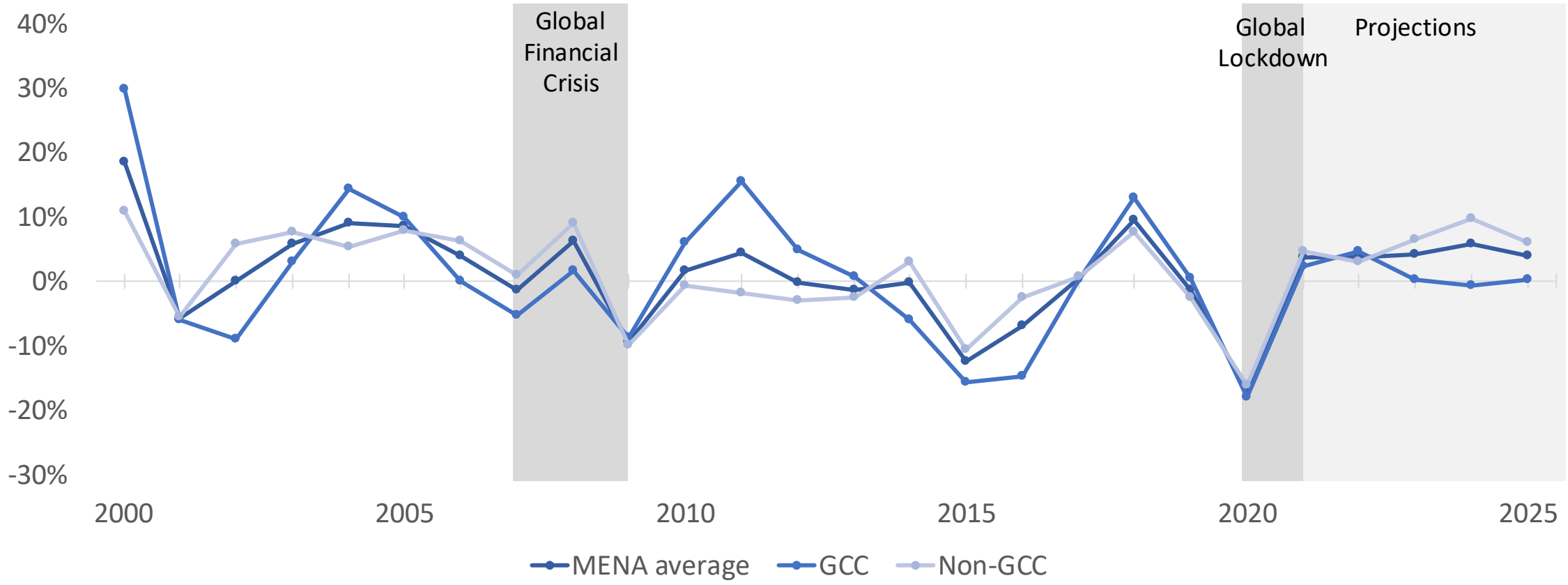
Real per capita GDP growth rate (%), 2000-2025




Source: IMF World Economic Outlook October 2020
Notes: The Gulf Cooperation Council (GCC) includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

# Government revenues have fallen even faster than GDP

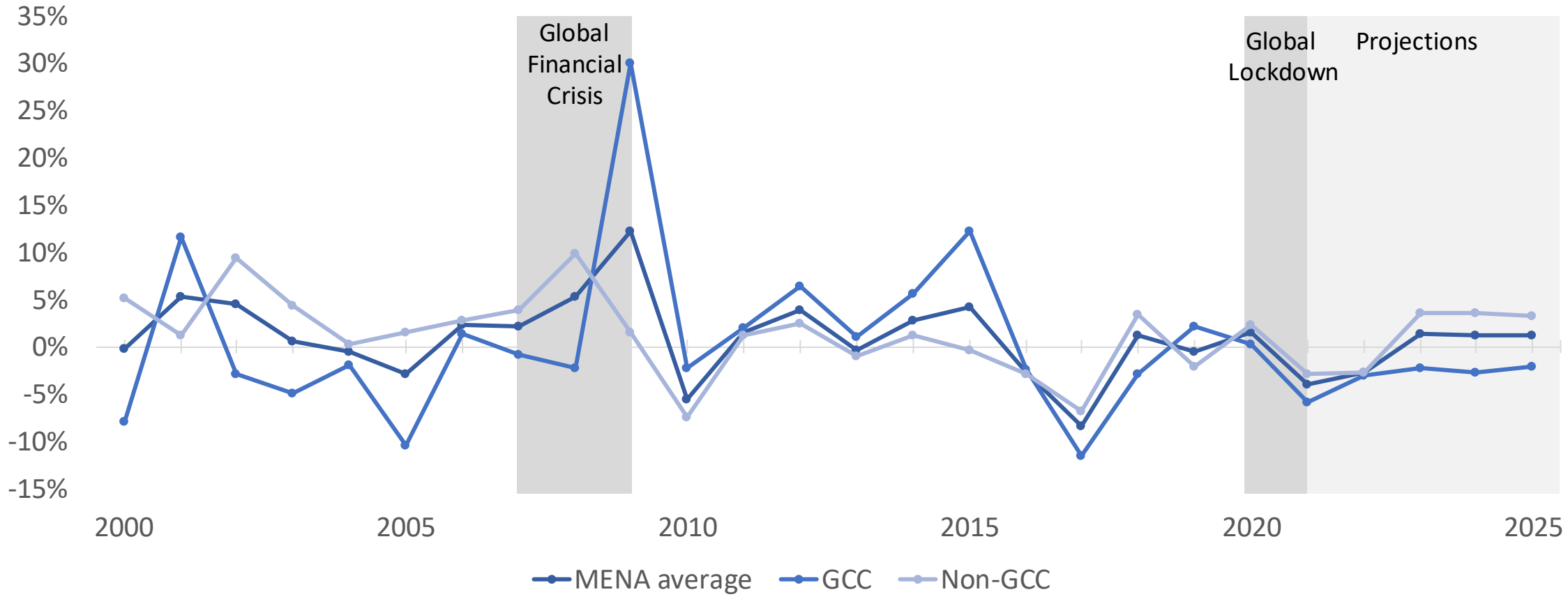
Real per capita government revenues growth rate (%), 2000-2025




Source: IMF World Economic Outlook October 2020
Notes: The Gulf Cooperation Council (GCC) includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

# Governments increased spending in 2020, but levels are projected to fall in 2021

Real per capita government expenditures growth rate (%), 2000-2025




Source: IMF World Economic Outlook October 2020
Notes: The Gulf Cooperation Council (GCC) includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

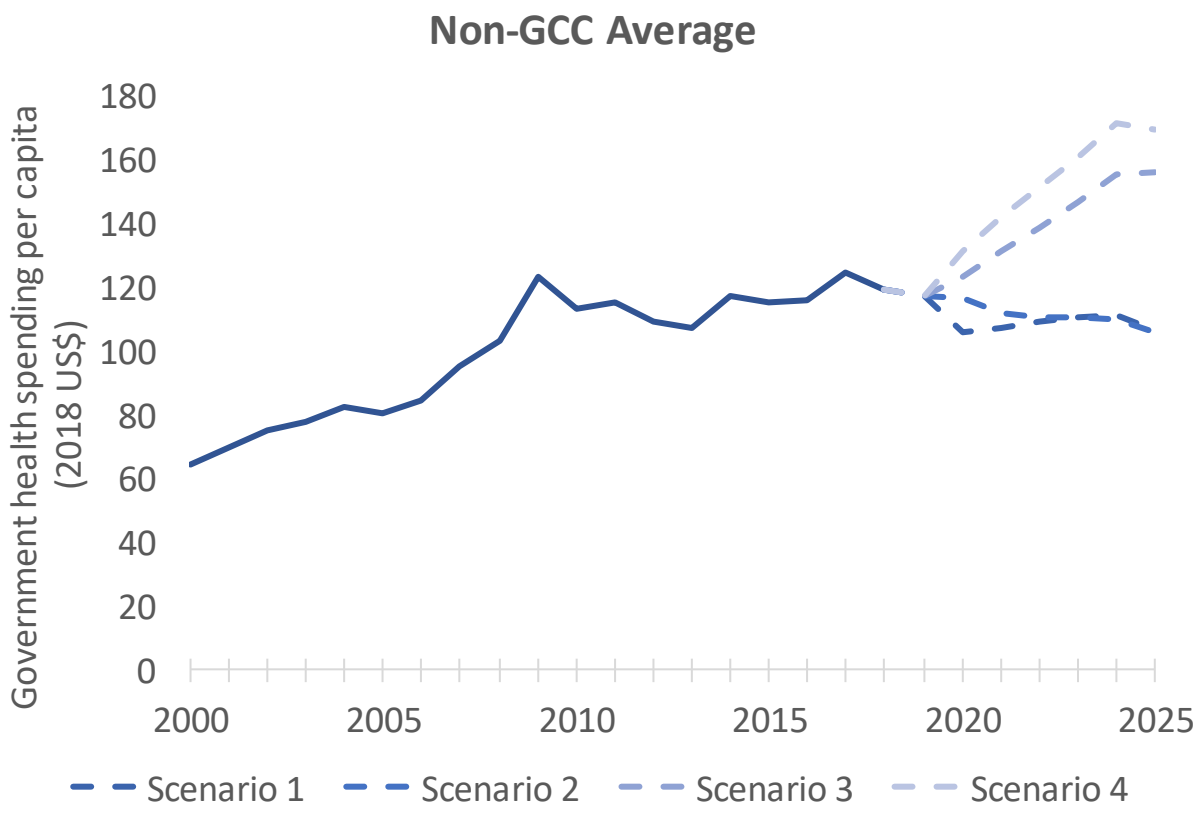
# Implications for health financing

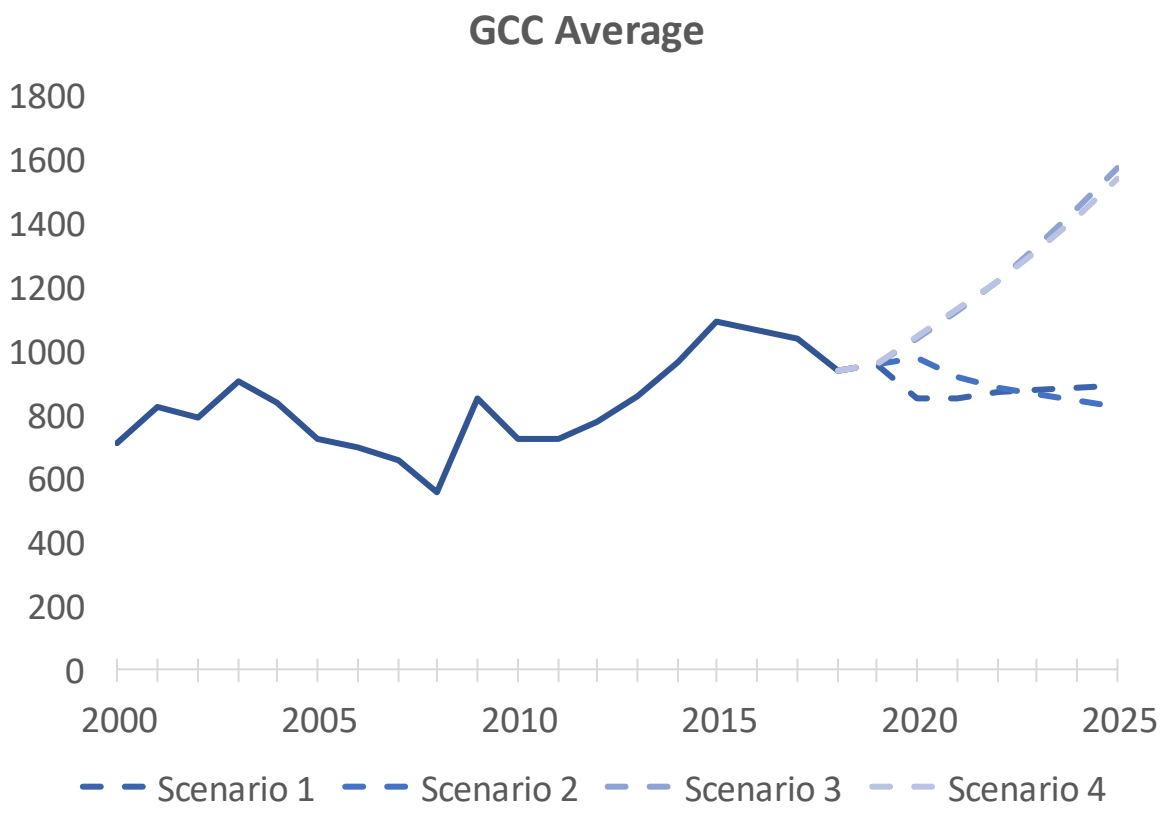
## Four scenarios for estimating the potential impact on health financing

1. Government decisions about per-capita health spending follow the same procyclical trend observed in the past
2. Governments choose to hold the pre-pandemic share of health in government spending constant
3. Governments protect the pre-pandemic trends in the growth of per capita government health spending
4. Governments increase spending at pre-pandemic growth rate, compensating also for lower Out-of-Pocket (OOP) spending

Source: Kurowski et al. (forthcoming). The COVID-19 Crisis: Implications for Health Financing

# Unless governments protect and reprioritize health, per capita government health spending will decline




Source: Projections based on data from the WHO Global Health Expenditure Database and the IMF World Economic Outlook
Notes: The Gulf Cooperation Council (GCC) includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

# Key messages

- COVID-19 has had a significant macroeconomic impact in MENA
- Important to continue prioritizing the health sector in order to sustain progress towards universal health coverage
- Investments in health are critical for recovery not only in the long-term … but also the short term
- Vaccines are not only a health intervention but also an economic stimulus

# Part 2: Financing needs for COVID-19 vaccines

**Nejma Cheikh**
Health Specialist,
World Bank

# MENA region will require more than $4B to vaccinate the majority of its population

**PHASED APPROACH**

**Cost of vaccinating 20%**

To protect high-risk populations[1], MENA countries will require

**~$1.2B**

**Cost of vaccinating 50%**

Reaching (~50%) will require

**~$4.2B**

**Cost of vaccinating 70%**

Reaching (~70%) will require

**~$6.2B**

**Cost of repeat vaccination**

Additionally,

**~$1-5B**

will likely be needed to cover on-going & repeat COVID-19 vaccinations[2]

1. Including health care workers, people 65+ and adult with co-morbidities 2. Significant level of uncertainty, to be discussed in Workshop 6

Source: World Bank, Gavi, WHO, Press Research, BCG Expertise

# WHO has proposed an allocation framework to manage this phased approach

**GOALS** Protect public health and minimize societal and economic impact by reducing COVID-19 mortality

**PRIORITIES**

**Health and social care workers**

**All participants receive doses to cover 3% of their population.**

This would be enough to cover all workers involved in health and social care work.

**High risk adults**

**All participants receive additional doses beyond the 3% to total 20% of their population (in tranches).**

This could include the elderly, adults with comorbidities or others depending on locally relevant risk factors

**Further priority groups**

**Participants receive doses to cover more than 20% of their population.**

This would cover additional priority populations

***Between country prioritization based on:***

- *Threat of COVID (assessed using R0 and co-circulation of influenza viruses)*
- *Vulnerability (assessed using health system capacity and hospital bed occupancy)*
- *Exceptional factors (e.g., natural disaster or sudden major outbreaks)*

***Two main flexibilities:***

1. *Countries can receive doses for next tranche if there is availability which other countries can't absorb*
2. *Quantity per allocation round can be increased for smaller states to help cost effectiveness*

**TIMING**

*Participants receive doses proportionally to their total population**

*If protracted severe supply constraints remain, timing is based on participants' vulnerability & COVID-19 threat*

Note: * The fundamental principle applies that all participants receive doses at the same rate to the extent possible, notwithstanding likely practical limitations to be further worked out (e.g., minimum delivery volumes)

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# MENA countries have advantage of young population but some of the world's highest obesity and diabetes prevalence rates

| Country Name | Nurses and Physicians (%) | Population ages 65 and above (%) | Obesity rate (%) | Diabetes prevalence rate (%) |
|---|---|---|---|---|
| Algeria | 0.33 | 7 | 27 | 6.7 |
| Bahrain | 0.34 | 3 | 30 | 15.6 |
| Djibouti | 0.10 | 5 | 14 | 5.1 |
| Egypt | 0.24 | 5 | 32 | 17.2 |
| Iran | 0.42 | 6 | 26 | 9.6 |
| Iraq | 0.28 | 3 | 30 | 8.8 |
| Jordan | 0.51 | 4 | 36 | 12.7 |
| Kuwait | 1.01 | 3 | 38 | 12.2 |
| Lebanon | 0.38 | 7 | 38 | 11.2 |
| Libya | 0.86 | 4 | 33 | 10.2 |
| Morocco | 0.21 | 7 | 26 | 7 |
| Oman | 0.62 | 2 | 27 | 10.1 |
| Qatar | 0.97 | 2 | 35 | 15.6 |
| Saudi Arabia | 0.81 | 3 | 35 | 15.8 |
| Tunisia | 0.38 | 9 | 27 | 8.5 |
| UAE | 0.83 | 1 | 32 | 16.3 |
| WB & Gaza | 0.25 | 3 | NA | 9.5 |
| Yemen | 0.13 | 3 | 17 | 5.4 |
| World average | | 9 | 13 | |

All MENA countries except Djibouti and Yemen have obesity rates > 25%

MENA is the region most affected by type 2 diabetes (12.2% prevalence rate in 2019)

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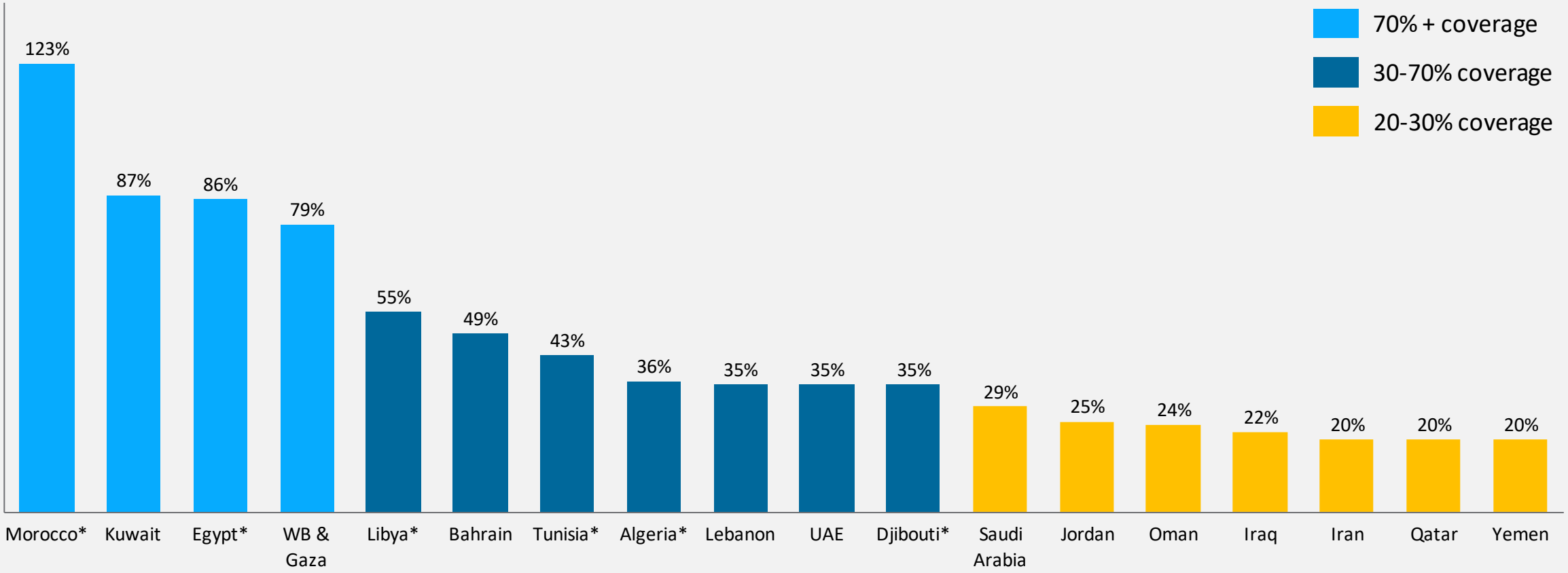
# At least 20% of MENA countries have officially already secured enough doses to achieve 70% coverage

**Proportion of population covered by existing supply deals**




Note: Supply deals estimate include 20% of population coverag through COVAX, (*) c.15% of population covered by African Union doses (Algeria, Djibouti, Libya, Morocco, Syria and Tunisia), publicly available information on additional bilateral deals with vaccine manufacturers
Source: Airfinity; Press reports

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# Vaccine and delivery costs

AMC92 countries

- Will receive first 16-20% free from COVAX
- Should expect doses to cover 20% of their populations in 2021
- May cost-share additional doses at $7/dose

Eligible African Union Countries will be able to access additional Pfizer, AZ and J&J to cover up to 15% more of their population

Most countries will have to purchase and manage the implementation of more than one type of vaccine

- Purchase costs ranging from $2.5 a dose to > $20 per dose
- Variable implementation costs depending on ultra cold chain requirements (mRNA vaccines) or single dose (J&J) versus 2 doses vaccines (all other current frontrunner vaccines)

Note: Current assessment of vaccine costs based on averages communicated by COVAX and manufacturers, and global service delivery estimates

# Estimated cost to vaccinate one person in MENA countries

| Anticipated average cost per dose | Two doses needed for most vaccines | Transportation cost currently included in dose price | Service delivery in country $2.76 per person; 5% wastage | Supply chain in country $1.18 per person | Climate sensitive cold chain investment $0.56 avg. / person[1] |
|---|---|---|---|---|---|
| $7.00/ $10.55 | $14.00/ $21.10 | $14.00/ $21.10 | $17.46/ $24.92 | $18.64/ $26.10 | $19.42/ $26.88 |

Dose prices vary based on producer and country income classification

COVAX suggests AMC countries assume $7 average per dose for those purchased through cost sharing, and $10.55 for self-financing countries. AU average dose price is $6.80

Only J&J vaccine (which makes up some of AU doses) is a one dose regimen

Assumption of 5% wastage factored into service delivery cost; COVAX currently not delivering additional doses to include wastage

Cost estimates for supply chain and service delivery are based data from routine childhood immunization. Estimates presented above are for non-GAVI eligible countries

Cost estimates for climate friendly cold chain are estimated by WBG and ESMAP, and are on a global basis

1. (20% of service delivery and supply chain cost)
Source: Portnoy A, Vaughan K, Clarke-Deelder E, Suharlim C, Resch SC, Brenzel L, Menzies NA. Producing standardized country-level immunization delivery unit cost estimates. PharmacoEconomics. Sept 2020;38 (9):995-1005.

# Vaccine and delivery costs

| Countries | AMC | Vaccine cost ($M) | | | Service delivery, supply chain, incl. climate-friendly ($M) | | | Total Cost of vaccination ($M) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Coverage: 20% | Coverage: 50% | Coverage: 70% | Coverage: 20% | Coverage: 50% | Coverage: 70% | Coverage: 20% | Coverage: 50% | Coverage: 70% |
| Algeria | ✓ | 31 | 209 | 341 | 42 | 107 | 149 | 73 | 316 | 490 |
| Bahrain | ✗ | 6 | 17 | 25 | 2 | 4 | 6 | 7 | 22 | 31 |
| Djibouti | ✓ | 1 | 5 | 8 | 1 | 2 | 2 | 1 | 6 | 10 |
| Egypt | ✓ | 73 | 489 | 797 | 98 | 250 | 349 | 171 | 740 | 1146 |
| Iran | ✗ | 280 | 837 | 1214 | 80 | 203 | 284 | 360 | 1040 | 1498 |
| Iraq | ✗ | 136 | 408 | 592 | 39 | 99 | 138 | 174 | 508 | 730 |
| Jordan | ✗ | 34 | 100 | 146 | 10 | 24 | 34 | 44 | 125 | 180 |
| Kuwait | ✗ | 14 | 43 | 62 | 4 | 10 | 14 | 18 | 53 | 76 |
| Lebanon | ✗ | 22 | 66 | 95 | 6 | 16 | 22 | 29 | 82 | 117 |
| Libya | ✗ | 23 | 68 | 99 | 7 | 17 | 23 | 29 | 85 | 122 |
| Morocco | ✓ | 26 | 174 | 284 | 35 | 89 | 125 | 61 | 264 | 409 |
| Oman | ✗ | 17 | 52 | 75 | 5 | 13 | 17 | 22 | 64 | 92 |
| Qatar | ✗ | 10 | 29 | 42 | 3 | 7 | 10 | 12 | 36 | 52 |
| Saudi Arabia | ✗ | 116 | 348 | 505 | 33 | 85 | 118 | 150 | 433 | 623 |
| Tunisia | ✓ | 8 | 56 | 91 | 11 | 29 | 40 | 20 | 84 | 131 |
| UAE | ✗ | 33 | 98 | 142 | 9 | 24 | 33 | 42 | 122 | 175 |
| WB&Gaza | ✓ | 4 | 25 | 40 | 5 | 13 | 18 | 9 | 37 | 58 |
| Yemen | ✓ | 21 | 143 | 234 | 20 | 52 | 72 | 42 | 195 | 306 |
| Total | | 855 | 3167 | 4792 | 410 | 1044 | 1456 | 1266 | 4211 | 6248 |

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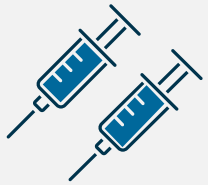
# Spending needs on vaccines alone will increase substantially

Covering 20% of the population would require vaccine spending to increase by between **36% to 130% in AMC countries**



Covering 50% of the population would require vaccine spending to increase by between **122% to 434% in AMC countries**

Covering 70% of the population would require vaccine spending to increase by between **200% to 708% in AMC countries**

....this increase excludes delivery and investments needed to support successful vaccination of the adult population

# Reaching 70% of the population will represent a high fiscal burden for most countries

| Countries | AMC | Total Cost of Vaccination ($M) Coverage Scenario: 50% | Total Cost of Vaccination ($M) Coverage Scenario: 70% | Vaccination as share of GDP Coverage Scenario: 50% | Vaccination as share of GDP Coverage Scenario: 70% | Vaccination as % of government spending Coverage Scenario: 50% | Vaccination as % of government spending Coverage Scenario: 70% |
|---|---|---|---|---|---|---|---|
| Algeria | ✓ | 209 | 341 | 0.2% | 0.3% | 0.2% | 0.3% |
| Bahrain | ✗ | 17 | 25 | 0.1% | 0.1% | 0.1% | 0.1% |
| Djibouti | ✓ | 5 | 8 | 0.2% | 0.3% | 0.3% | 0.5% |
| Egypt | ✓ | 489 | 797 | 0.2% | 0.4% | 0.2% | 0.4% |
| Iran | ✗ | 837 | 1214 | 0.2% | 0.3% | 0.3% | 0.5% |
| Iraq | ✗ | 408 | 592 | 0.2% | 0.3% | 0.2% | 0.3% |
| Jordan | ✗ | 100 | 146 | 0.3% | 0.4% | 0.3% | 0.5% |
| Kuwait | ✗ | 43 | 62 | 0.0% | 0.1% | 0.0% | 0.0% |
| Lebanon | ✗ | 66 | 95 | 0.2% | 0.2% | n.a. | n.a. |
| Libya | ✗ | 68 | 99 | 0.2% | 0.2% | 0.1% | 0.1% |
| Morocco | ✓ | 174 | 284 | 0.2% | 0.3% | 0.2% | 0.3% |
| Oman | ✗ | 52 | 75 | 0.1% | 0.1% | 0.1% | 0.1% |
| Qatar | ✗ | 29 | 42 | 0.0% | 0.0% | 0.0% | 0.0% |
| Saudi Arabia | ✗ | 348 | 505 | 0.1% | 0.1% | 0.1% | 0.1% |
| Tunisia | ✓ | 56 | 91 | 0.2% | 0.3% | 0.2% | 0.4% |
| UAE | ✗ | 98 | 142 | 0.0% | 0.0% | 0.0% | 0.1% |
| WB&Gaza | ✓ | 25 | 40 | 0.2% | 0.4% | 0.2% | 0.1% |
| Yemen | ✓ | 143 | 234 | 0.9% | 1.4% | 3.7% | 6.0% |

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# Part 3: Financing landscape overview for COVID-19 vaccines

**Ajay Tandon**
Lead Economist,
World Bank

# *FINANCING LANDSCAPE OVERVIEW FOR COVID-19 VACCINES*

Christoph Kurowski & Ajay Tandon
*Health Financing Global Solutions Group*
*Global Practice on Health, Nutrition, Population, World Bank*
*January 2021*

# Outline

- Status of COVID-19: health, economic impact, impact on public revenues/expenditures
- Financing for vaccines vs financing for health: importance of public financing of COVID-19 vaccine while protecting spending on routine health services
- Options for financing COVID-19 vaccines

# Outline

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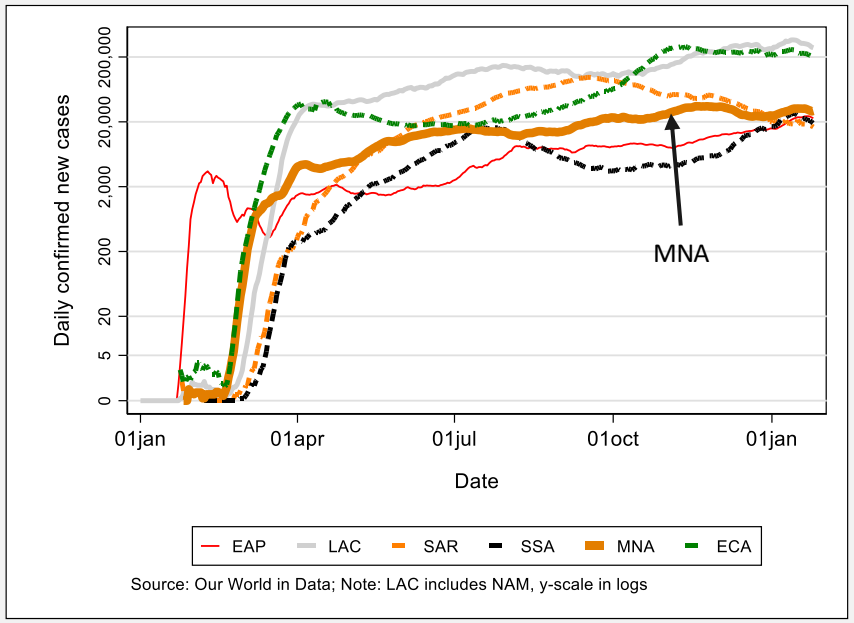
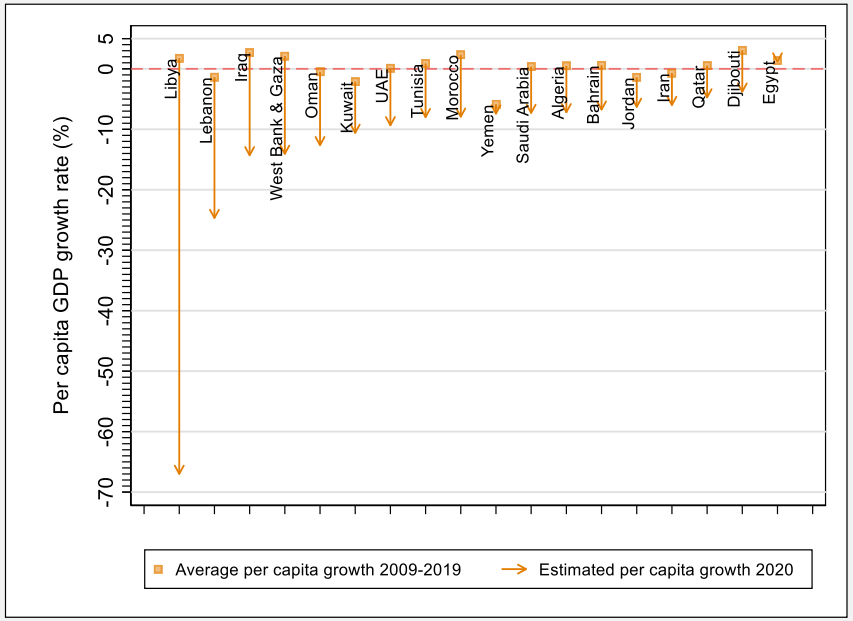
# COVID-19: Not Just Health, But Also Massive Economic Impact

COVID-19 incidence still not declining in MNA

⇩




Economic activity may not return to pre-crisis levels for several years

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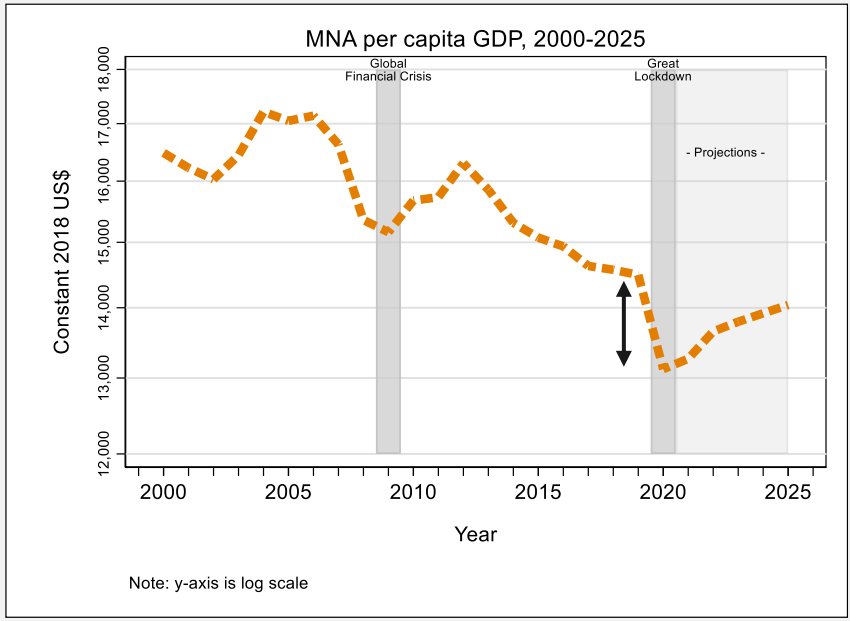


⇧

Huge economic contraction in 2020: from +0.5% over 2009-2019 to -12.0% in 2020 (worst affected region economically) due to lockdowns, commodity price declines, decline in tourism, cross-country spillovers etc.; economic cost of COVID-19 ~US$300 billion in 2020

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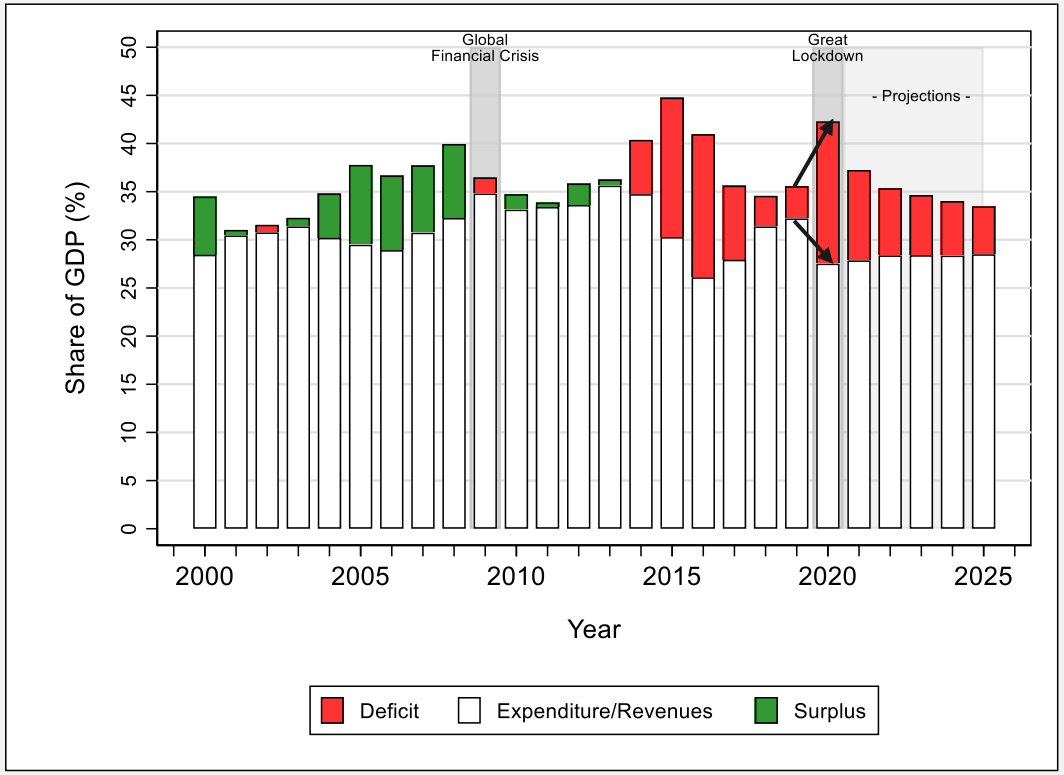
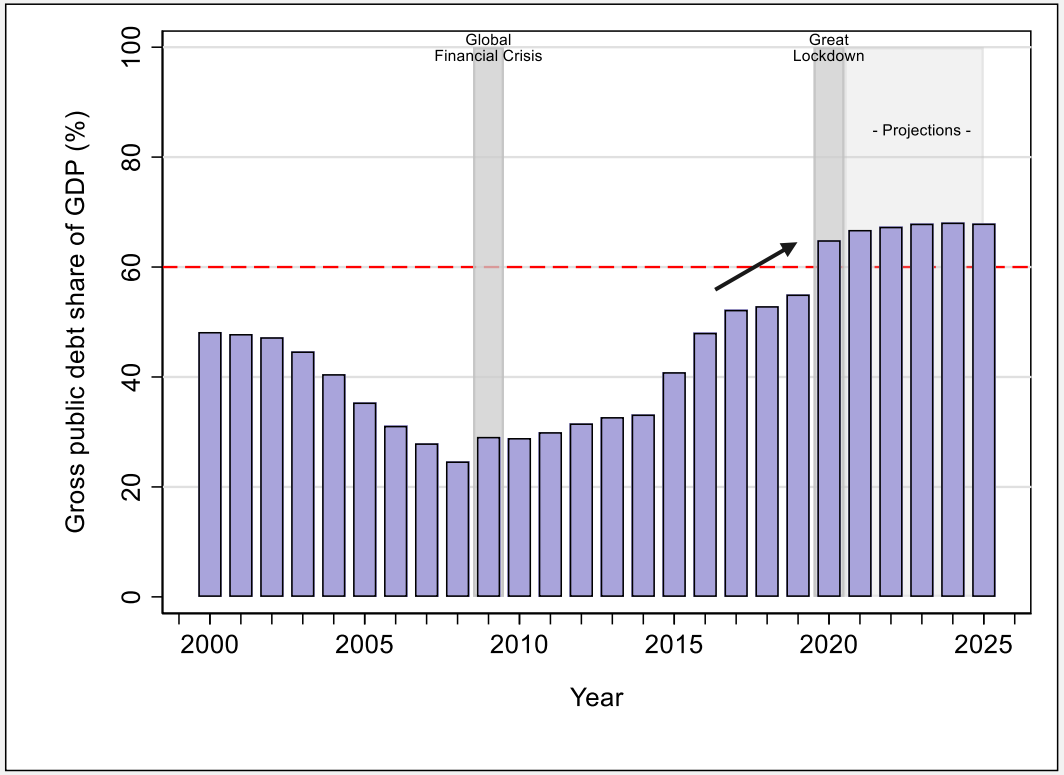
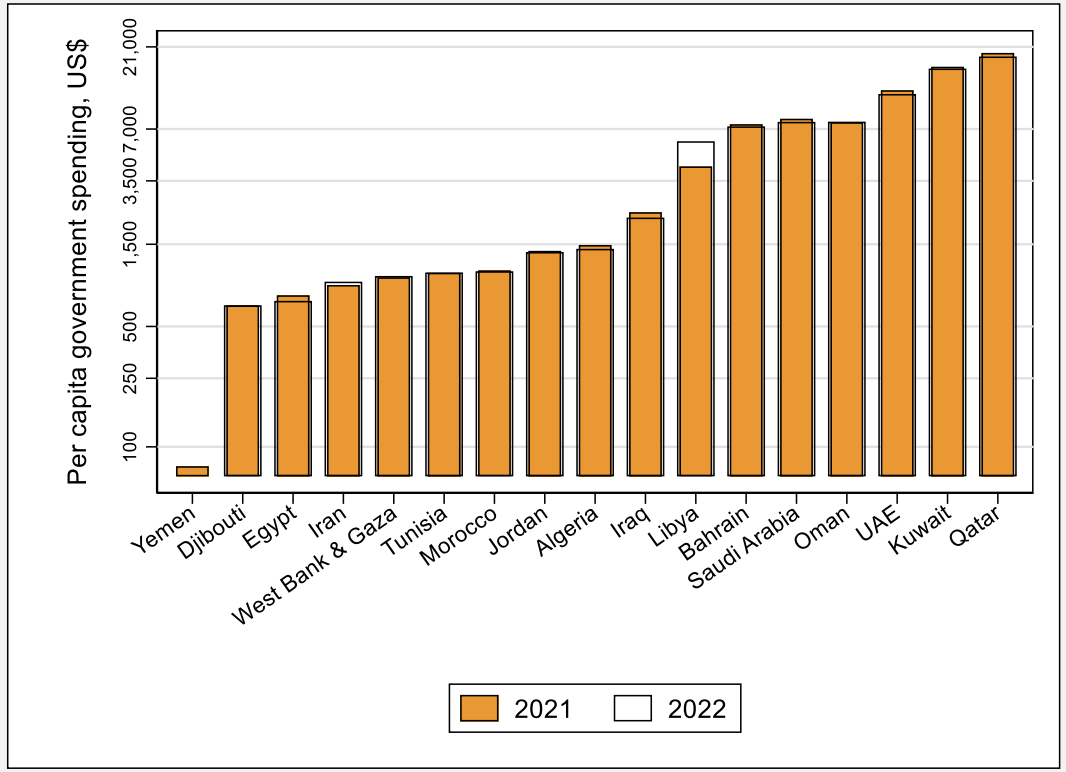
# Overall Public Financing Landscape Also Impacted by COVID-19

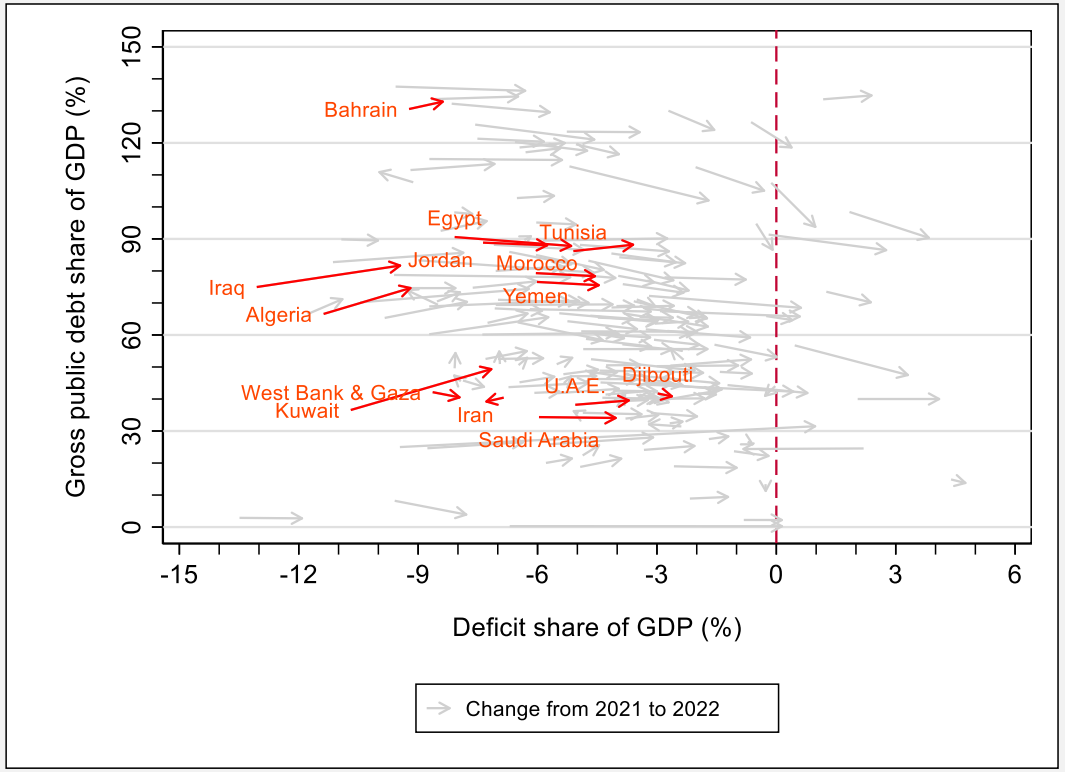
*2019-2020*: Revenues↓ Expenditures↑ Deficits↑ Debt↑
*2020-2021-2022*: Revenues↑ Expenditures↓ Deficits↓ Debt↔



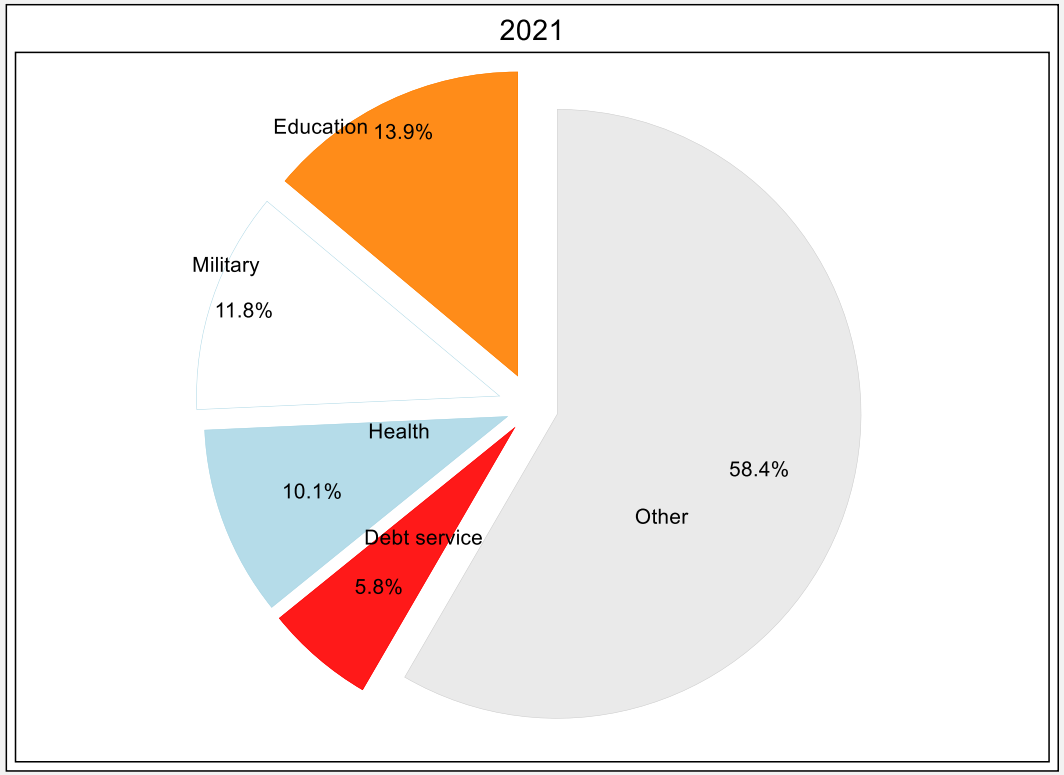



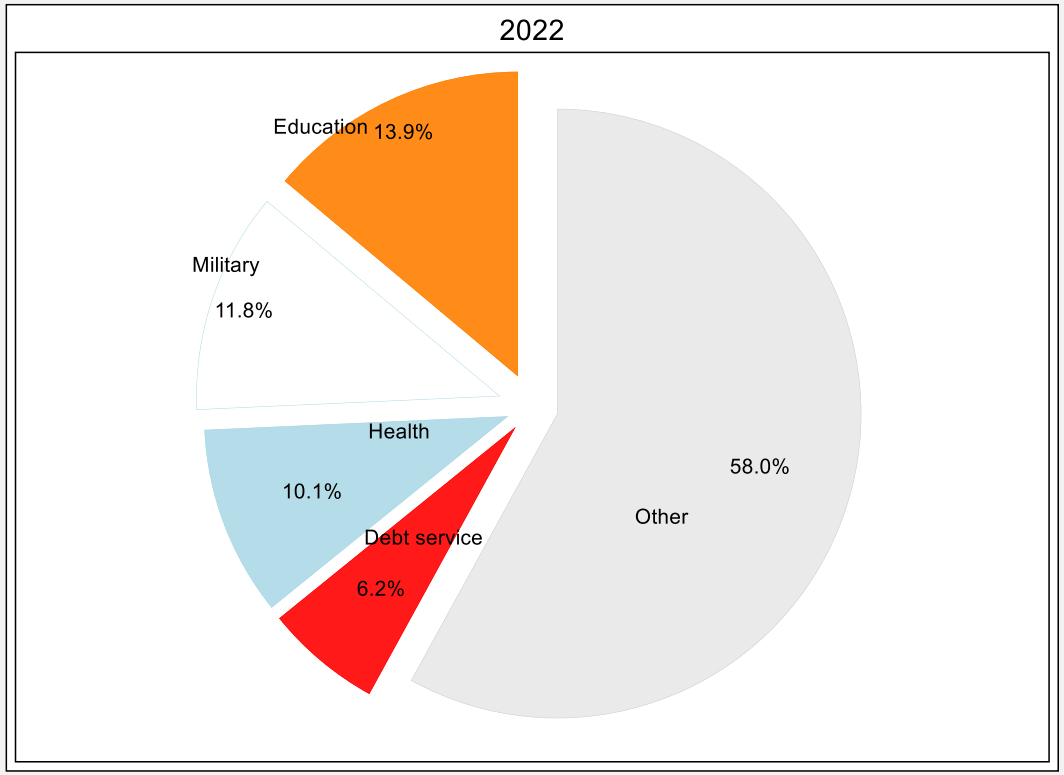
# Projected Per Capita Public Spending: 2021-2022



# Expenditure Allocations Across Sectors



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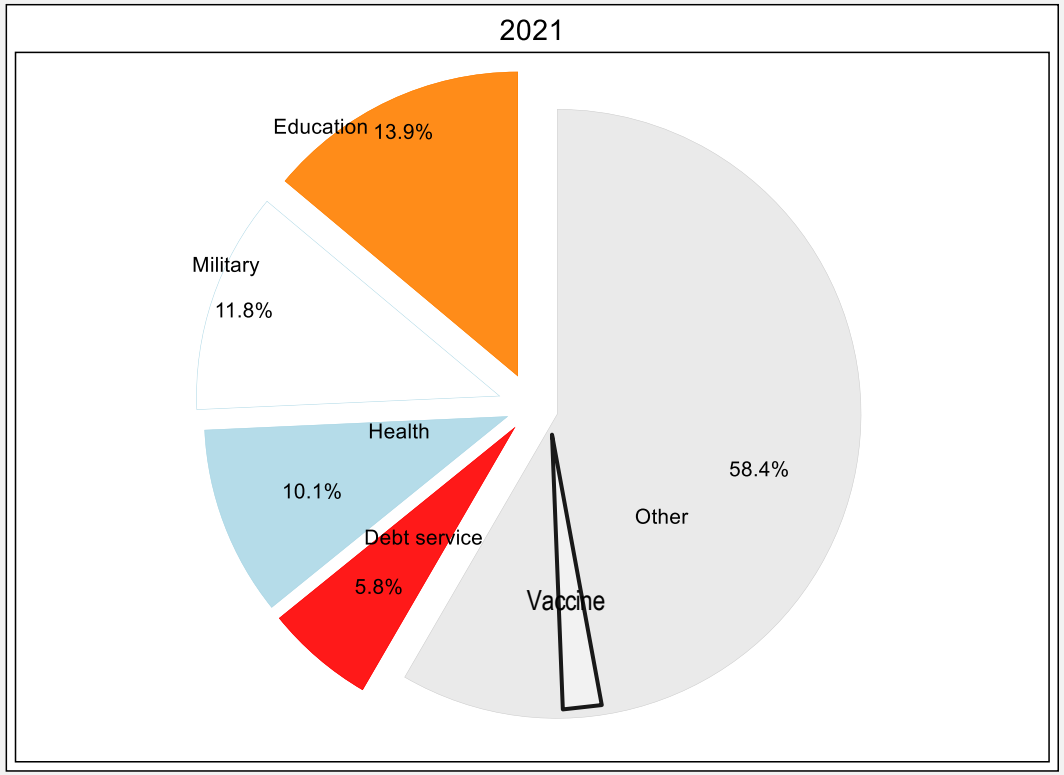


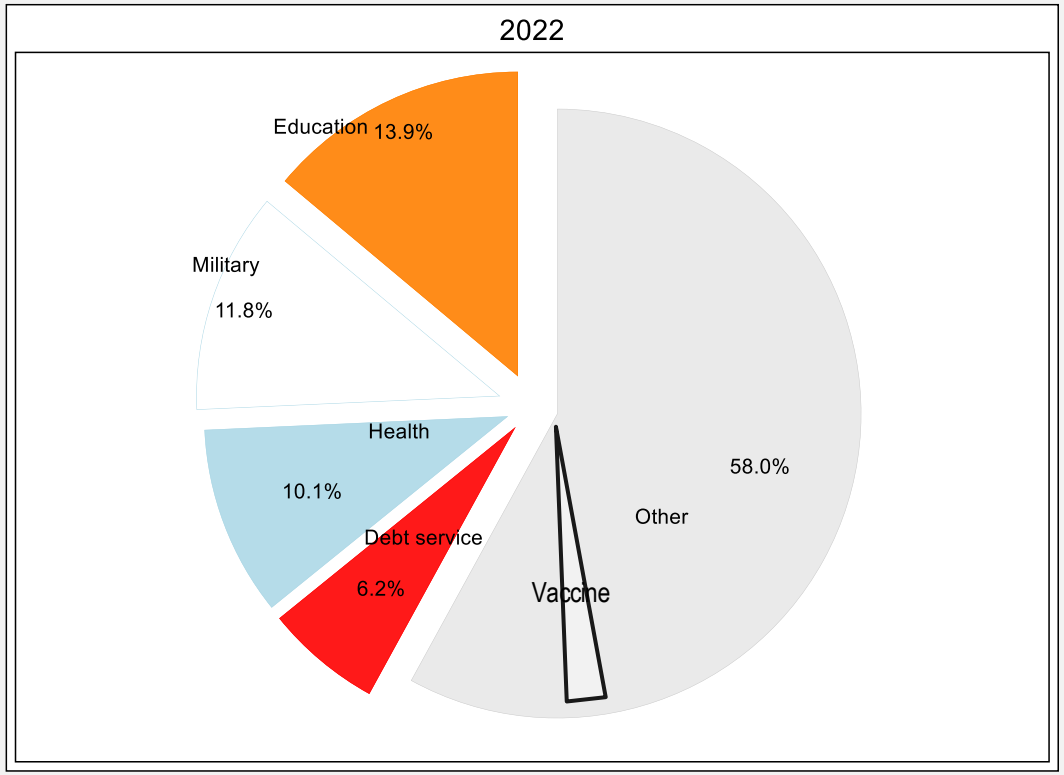

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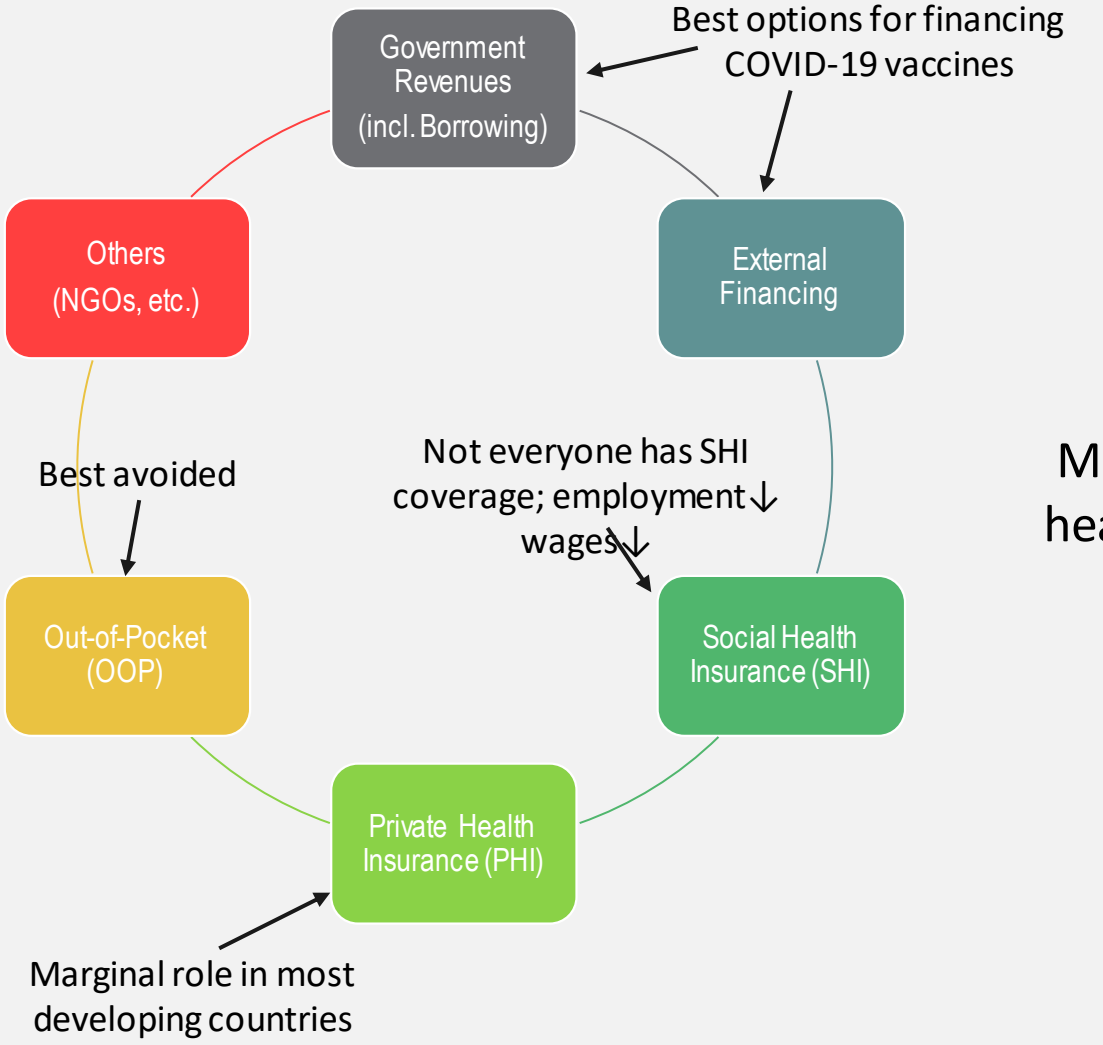
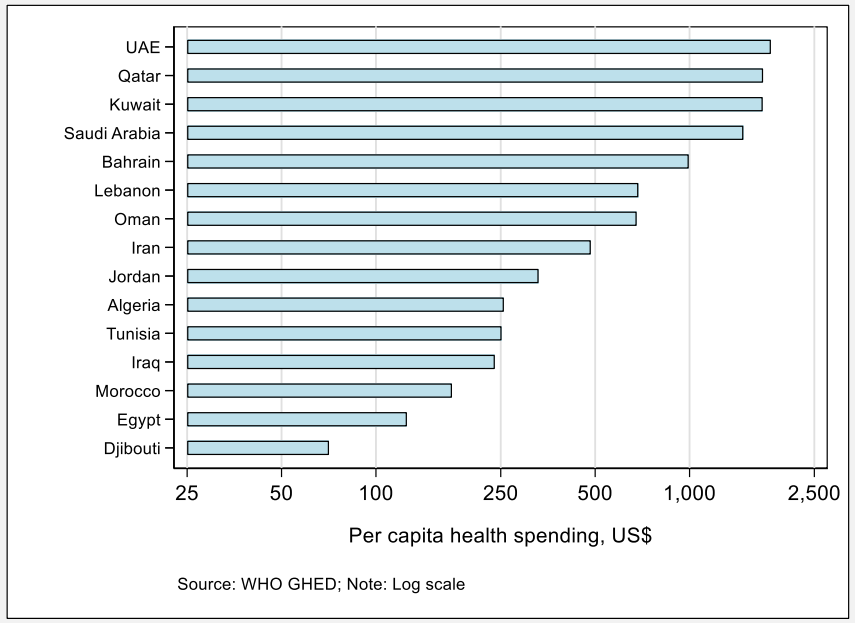
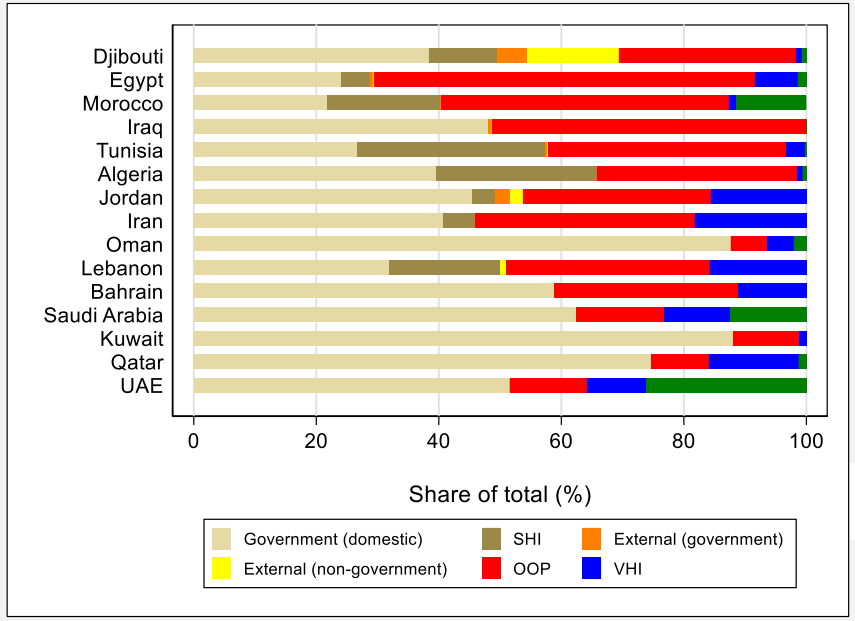
- Options for financing COVID-19 vaccines

# Vaccine Financing Different from Health Financing

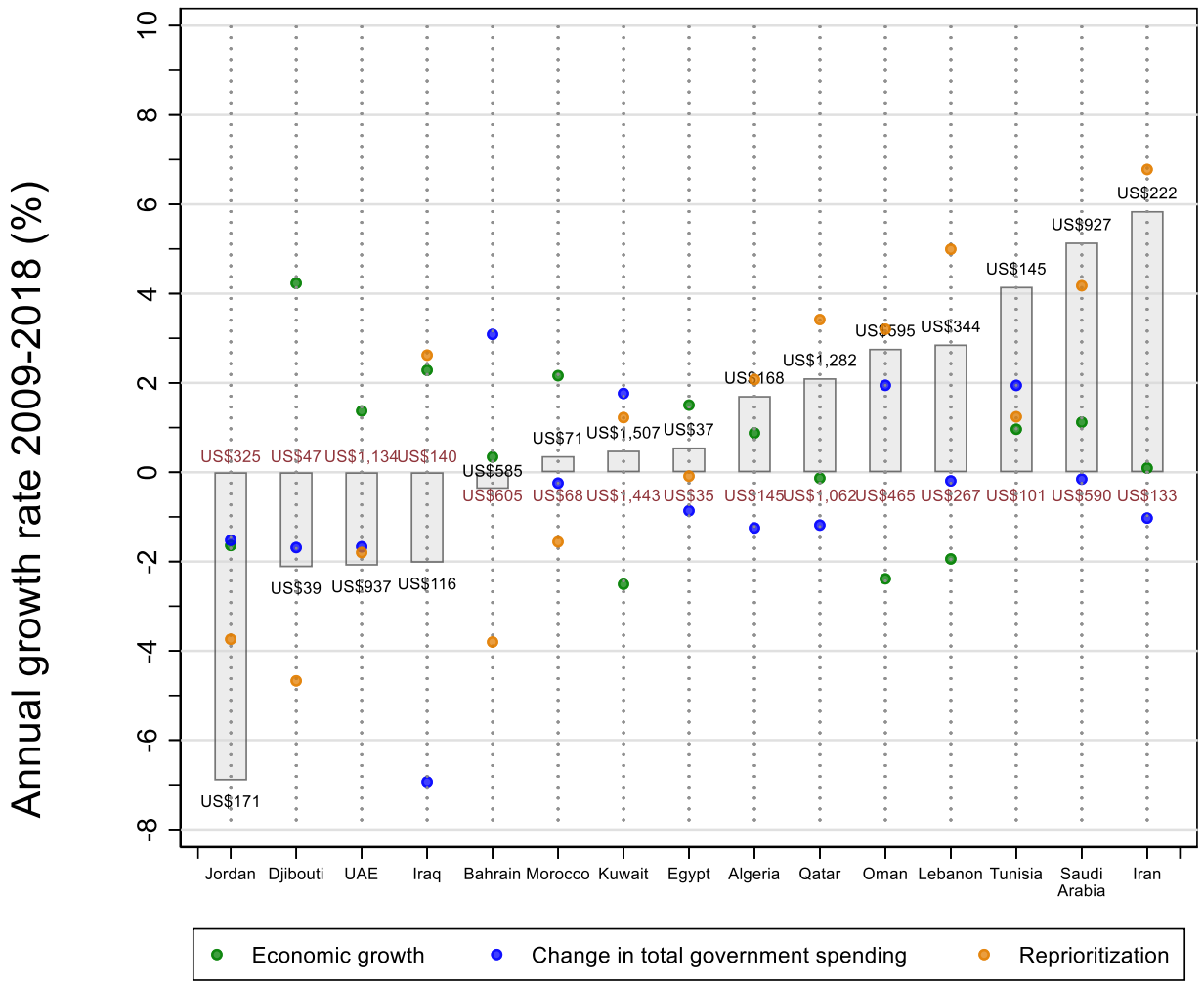


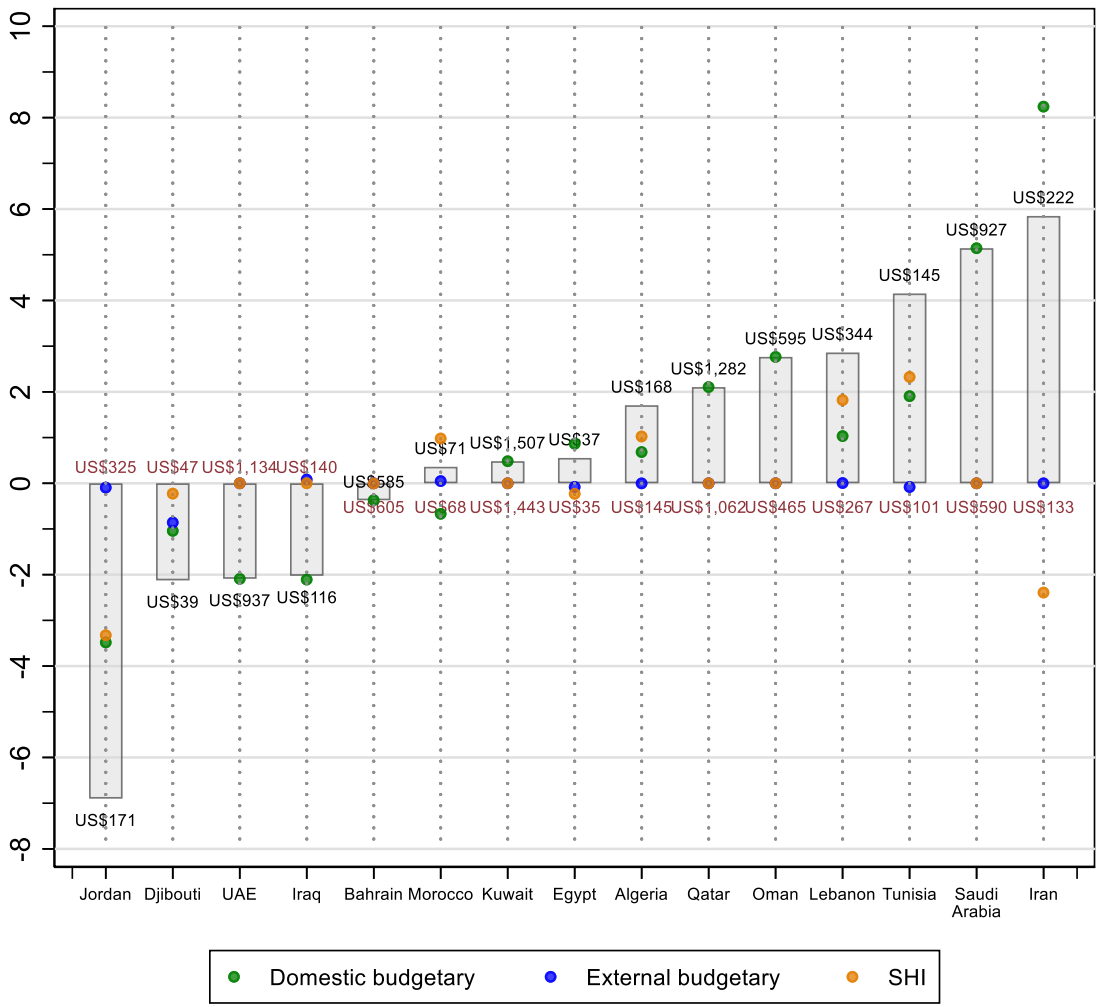

MNA pre-crisis health financing landscape



# Public Financing for Health Declining, Stagnant in Many MNA Countries



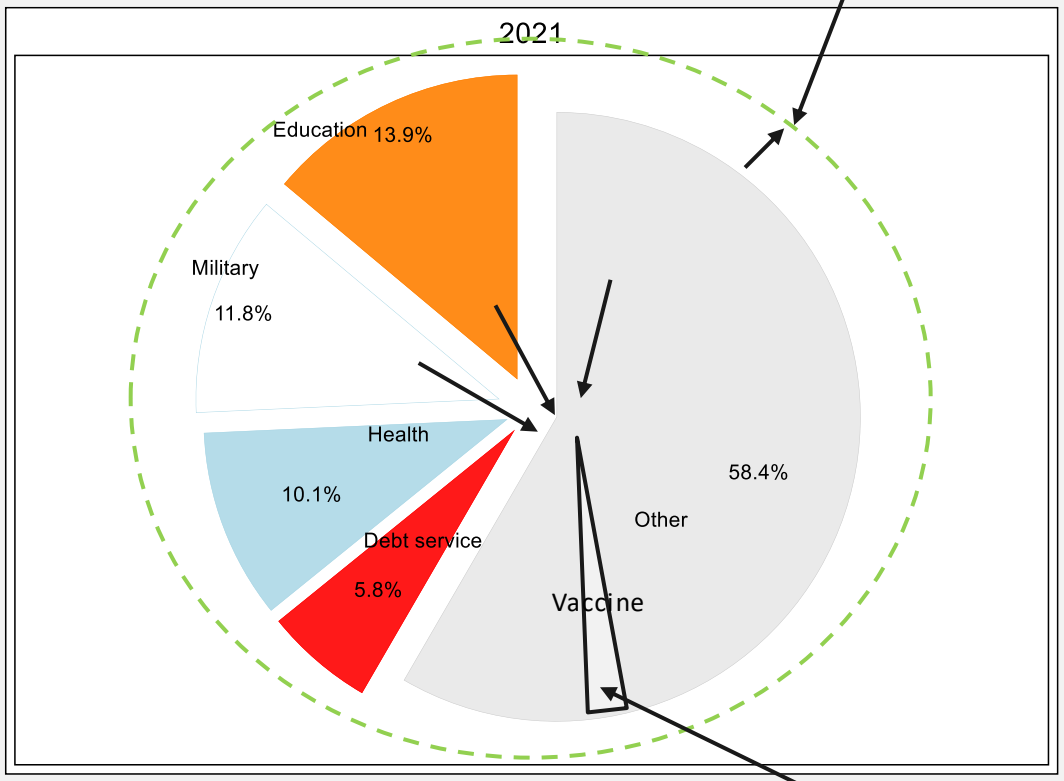



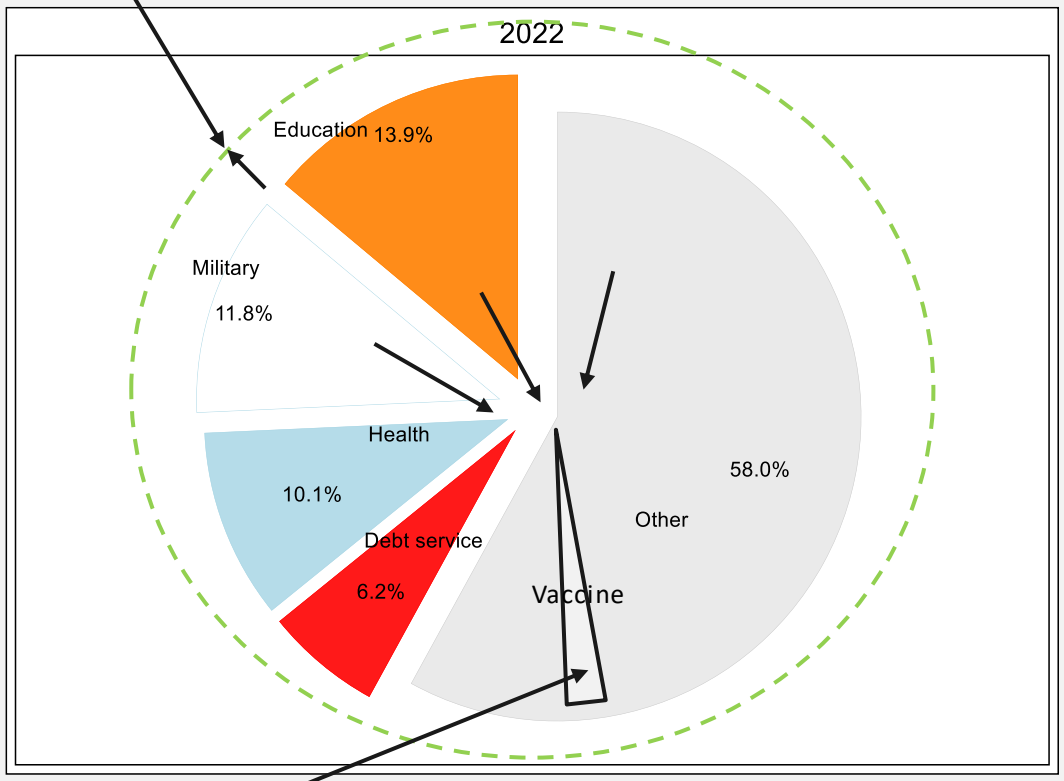
# Outline

- Status of COVID-19: health, economic impact, impact on public revenues/expenditures
- Financing for vaccines vs financing for health: importance of public financing of COVID-19 vaccine while protecting spending on routine health services
- Options for financing COVID-19 vaccines

# Where Could Additional Public Resources Come From?

Expanding revenues (including via health taxes), borrowing, external assistance (including and additional to COVAX), etc.



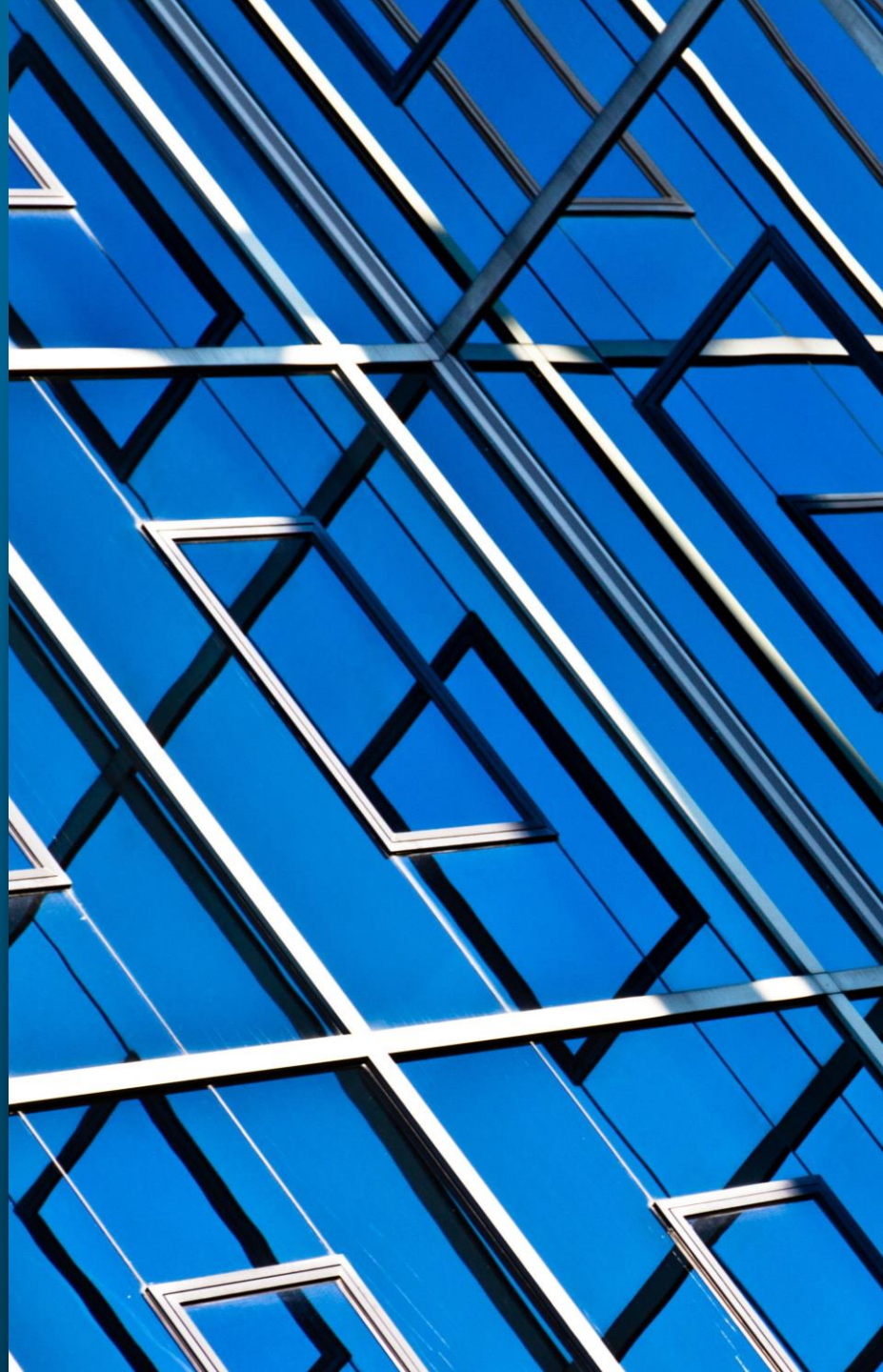




Reprioritization, efficiency gains, cutting pro-rich subsidies, debt restructuring, delaying capital expenditures, etc.

# Key Messages

- COVID-19 is not just a health "shock", it is also adversely impacting economies across the region as well as globally.
- COVID-19 vaccine is not just a health intervention, it is also an "economic stimulus" intervention: huge cost-benefit ratios.
- Given "externalities", financing for COVID-19 vaccines should come primarily from government sources to ensure widespread coverage, facilitating attainment of "herd" immunity.
- Given challenges of public financing for health across MNA region – both pre-crisis as well as due to COVID-19's adverse economic impact -- financing for COVID-19 vaccines should not come at the expense of allocations for routine health services (or even productive spending in other sectors).
- Countries could consider menu of options for financing COVID-19 vaccines: external financing, raising new revenues, additional borrowing, debt restructuring, reprioritization, as well as efficiency gains.

# Part 4: Country highlight | Vaccine financing approach by Iraq and Egypt



**Omar AbdulAmeer**

**Director of Financial Planning,**
**Ministry of Health of Iraq**


# Iraq’s Experience in financing National COVID -19 vaccination plan

# Iraq's Experience in financing National COVID -19 vaccination plan

## Pandemic Situation, Iraq till Jan 27, 2021

| | |
|---|---|
| 5,010,139 | Total tested |
| 615,380 | Total confirmed cases |
| 584,752 | Total cured |
| 13,010 | Total deaths |
| 95,0% | Cure rate |
| 2.13% | Case fatality rate |
| 29,033 | Total infected health workers |
| 181 | Total deaths among health workers |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# The impact of COVID-19 on the health budget

- The negative economic impact of the pandemic on Iraq's economy had multiple folds. Drop of oil price reduced the main government fund source by 35-45% during 2020 in comparison to 2019.
- The lockdown and its direct and indirect economic effects resulted in further drop of government local fund amounts compared to 2019.
- Iraqi MOH had to provide health services related to combating the pandemic using less funds than that was spent during 2019 i.e. before the pandemic.
- Failure to pass national fiscal budget law and/or emergency budget law subjected MOH budget to further strain. MOH had to come up with innovative solutions for securing necessary funds for the national vaccination plan focusing on involving key partners and decision takers from the Iraqi government, including the council of ministers, in the vaccination plan development and its financing options decisions. Similar process is followed with the international partners as well.

# The process to assess financial needs for vaccination

- The required budget for the National COVID-19 vaccination plan was calculated basing on the total cost of the planned activities that ensures the achievement of its main short and medium term objectives. Iraq intends to vaccinate 60% of Iraqi population within 1-2 years to reach the herd immunity threshold.
- The National COVID-19 vaccination plan takes in consideration scientific factors related to the virus and its transmission methods, the potential vaccines under development and their transportation, storage and distribution requirements. It also considers local factors such as the total number of infected patients, defining risk groups, training requirements and cost to increase knowledge and skills of MOH staff in handling and distributing the vaccine, existing vaccine cold chain and its compatibility with the requirements of the potential COVID-19 vaccine, number of existing health facilities that can be used as delivery points and the cost to upgrade them to attain to their intended functions within the plan.
- The National plan takes in account the total cost and fund transfer schedule to fulfill Iraq's commitment with COVAX facility agreement (signed during 20).

# The estimated cost for COVID-19 vaccination and the growing spending needs in the health sector beyond vaccination

- The estimated cost for the national COVID-19 vaccination plan is: 358 million USD to cover 40% of the population (1st phase of the plan).
- There was growth in health expenditure related to covering recurrent costs for combating the pandemic (HRH safety PPE, disinfection requirements and materials, specific medicines, ext).
- investment costs to expand health services related to detecting the disease (increasing specialized labs from 1 central public health lab and 3 in KRG to 70 labs for COVID-19 diagnosis in all provinces including more than 15 lab for testing the travelers): increasing PCR machines from (7) to (216).
- Increasing hospital bed capacity for treating COVID-19 by adding more than (12,000) (increasing total hospital beds from 45,000 to 57,000). That added operational cost for running these new hospitals. The total number of newly opened hospitals is (60).

# Source of the money for vaccines

- Iraqi government and MOH are committed to provide the required fund for National vaccination plan by:
- Reallocating fund within MOH essential medicine procurement budget to cover part of the cost.
- Restructuring existing loans for other ministries to the vaccine plan (100 million USD loan from the WB).
- Donations from national (banks, businesses, phillantrofers and individuals) and international partners (Governments, UN, International NGOs).
- Negotiating new national and International loans (example: 500 million USD from IMF to the Iraqi government devoted specifically to procuring COVId-19 vaccine- pending approval by the Iraqi parliament).
- Attracting more international donors through the establishment of transparent fund management and vaccine procurement mechanism in accordance to the international standards (Joint steering committee, delegating procurement to WHO)


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# Iraq's successes and recommendations for others

**Successes**

- The biggest success MOH made in securing funds to the National vaccination plan is gaining the support of the council of ministers including skeptical decision takers whom advocated that the pandemic will subside due to extreme Iraqi summer.

**Recommendations to others on the cost assessment and financing journey**

- Estimated budget MUST be based on clear and well designed planning process that can produce realistic response plan (in this case vaccination plan).
- Active communication with decision takers within MOH and Iraqi government.
- Ensure provision of accurate information related to the progress of negotiation to MOH leadership.

# Challenges thus far in this process

- Justifying the high cost of procuring COVID-19 vaccine despite shortage of long term evidence on its safety and effectiveness.
- Iraqi laws and regulations related to procurement of the vaccine aren't compatible with the proposed mechanism of COVAX facility agreement.
- Iraqi parliament failed to pass (Emergency Budget) to cover the urgent costs of the pandemic (including the 1st batch of the vaccine) during 2020.

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Iraqi Ministry of Health
Founded 1920

# Thank you

**Mai Farid**

**Assistant Minister of Finance,**
**Ministry of Finance, Egypt**

# Closing remarks

- Thank you for joining the second workshop in our World Bank MENA COVID-19 Vaccine Strategy Workshop Series

- The next workshop will take place on Tuesday 2/2 at the same time. It will provide:
  - Detail on emerging portfolio of COVID-19 vaccines for MENA region
  - Overview of key considerations on delivery sites, including type and number of sites and allocation across sites

- If you have not already, please RSVP at www.113.vovici.net/se/13B2588B7195CC37

# Thank you

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