Text:

The following part consists of **eight** questions. You will have 1 minute per page.

We ask you to answer to the best of your knowledge and capabilities.

Do NOT look for answers elsewhere. If you do not know an answer, click on the "*I am not sure*" option. **Please do not guess the answer**.

Questions:

How much do you know about the topic of *colonialism*?

Not at all knowledgeable

Slightly knowledgeable

Moderately knowledgeable

Very knowledgeable

Extremely knowledgeable

Choose the option that best describes the arrangement of the following empires based on the maximum number of overseas colonies they possessed at any one time. Begin with the empire with the most overseas colonies to the empire with the least.

French, Portuguese, British

British, Spanish, Portuguese

Spanish, British, French

Portuguese, Spanish, British

French, Spanish, British

I am not sure

How much do you know about the topic of *territory control*?

Not at all knowledgeable

Slightly knowledgeable

Moderately knowledgeable

Very knowledgeable

Extremely knowledgeable

Choose the option that best describes the following countries based on the percentage of their territory that is effectively controlled by the government from the highest percentage to the lowest percentage.

Mexico, South Sudan, Uruguay

Mexico, Uruguay, South Sudan

Uruguay, Mexico, South Sudan

South Sudan, Mexico, Uruguay

South Sudan, Uruguay, Mexico

I am not sure

How much do you know about the topic of *state capacity*?

Not at all knowledgeable

Slightly knowledgeable

Moderately knowledgeable

Very knowledgeable

Extremely knowledgeable

Choose the option that most accurately ranks the following countries based on their current state capacity from least to most.

Oman, Global Average, Syria

Oman, Syria, Global Average

Global Average, Oman, Syria

Syria, Oman, Global Average

Global Average, Syria, Oman

I am not sure

How much do you know about the topic of *global tax revenues as share of GDP*?

Not at all knowledgeable

Slightly knowledgeable

Moderately knowledgeable

Very knowledgeable

Extremely knowledgeable

Choose the option that best describes the following countries based on the percentage of their GDP collected as tax revenue from least to most.

Saudi Arabia, Malaysia, France

Malaysia, Saudi Arabia, Denmark

Denmark, Malaysia, Saudi Arabia

France, Saudi Arabia, Malaysia

Malaysia, France, Saudi Arabia

I am not sure

Visualisations [Multiple Choice Questions]

Text:

In this second section, you will explore different visualisations about the current state of the world and how it has changed over time.

In particular, the visualisations will show key insights on *state capacity,* which is defined as the ability of governments to effectively implement policies and achieve their goals.

All the data presented is derived from real-world sources. **We ask you to rely solely on the information provided in the graphs rather than your prior knowledge to answer the questions.** We hope you enjoy this section and maybe learn something new!

In the following pages, you will answer questions related to four different visualisations. This will consist of approximately eight-to-nine multiple choice questions per visualisation and two short answer questions.

Please respond to these questions to the **best of your ability without leaving the page or consulting external sources**.

In the following pages you will be shown the first visualisation and asked to answer eight questions.

You will be able to **see the visualisation for all questions**, but you will **not be able to go back** to change any answers to previous questions.

As in the previous section, **please do not look for the answers elsewhere**, answer using **only the information provided in the image**.

Visualisation A

Data Storytelling Condition | Traditional Visualisation Condition
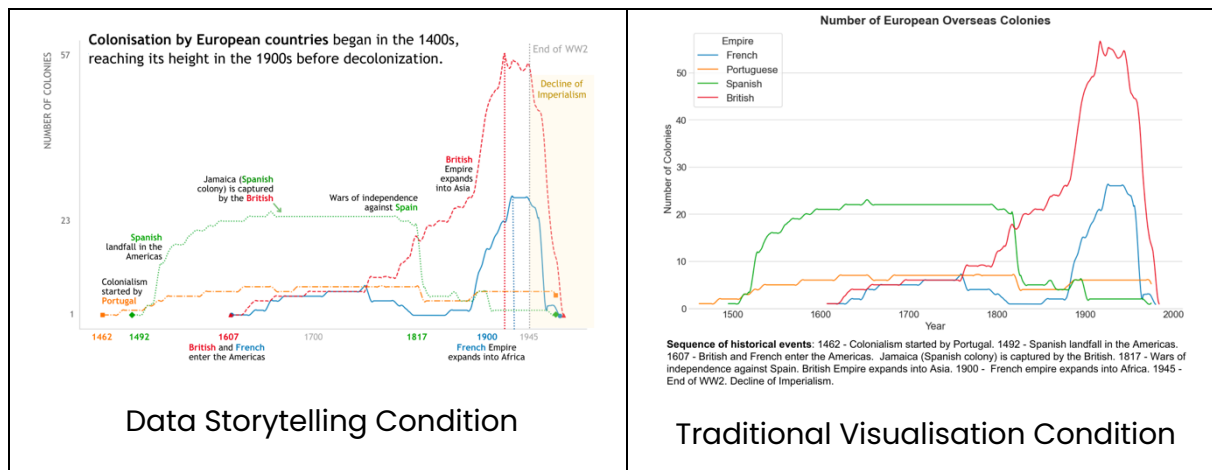
Questions:

Which Empire had overseas colonies as early as the 1460s, as shown in the graph?

French

Portuguese

British

Spanish

I am not sure

Which is the most probable explanation for the observed trend in the Spanish Empire plot line from 1800-1850?

Increased military conquests by Spain in Africa

Wars of independence in Latin America

Napoleonic Wars that led to the cession of colonies to France

The liberal principles in the 1812 Constitution were implemented throughout the Spanish Empire

I am not sure

How would the Spanish Empire plot line change in the graph if 10 colonies had gained independence in 1700 and 10 new colonies had been incorporated in 1705?

The plot line would not change as the colonies are replaced

The plot line would decrease only

The plot line would increase only

The plot line would increase then decrease

The plot would decrease then increase

I am not sure

How would the graph change if the British Empire had captured half of Spain's colonies in 1700? Select all that apply; *multiple options may be correct*.

The distance between the French plot line and the British plot line would increase

The distance between the British plot line and the Spanish plot line would decrease

The British plot line would reach its maximum in 1700

The Portuguese plot line would be higher than the Spanish plot line

The distance between the Portuguese plot line and the Spanish plot line would increase

I am not sure

According to the graph, how does the colonisation pattern of the French Empire compare to that of the British Empire?
Select all that apply; *multiple options may be correct*.

The British Empire always had more colonies than the French Empire

The British Empire did not lose colonies before 1900, while the French Empire did

The British and French Empires started to decline simultaneously

The British and French Empires reached their peak number of colonies on the same year

The British Empire gained overseas colonies years before the French Empire

I am not sure

Organise the following empires based on the duration of their overseas colonial activities from shortest to longest, as shown in the graph.

French, Portuguese, Spanish

Spain, Portuguese, British

Portuguese, Spain, French

French, Spanish, Portuguese

British, Portuguese, Spanish

I am not sure

What other pieces of information would you need to evaluate the validity of the following sentence: "*The Spanish Empire impacted negatively more people than the French Empire*".
Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct*.
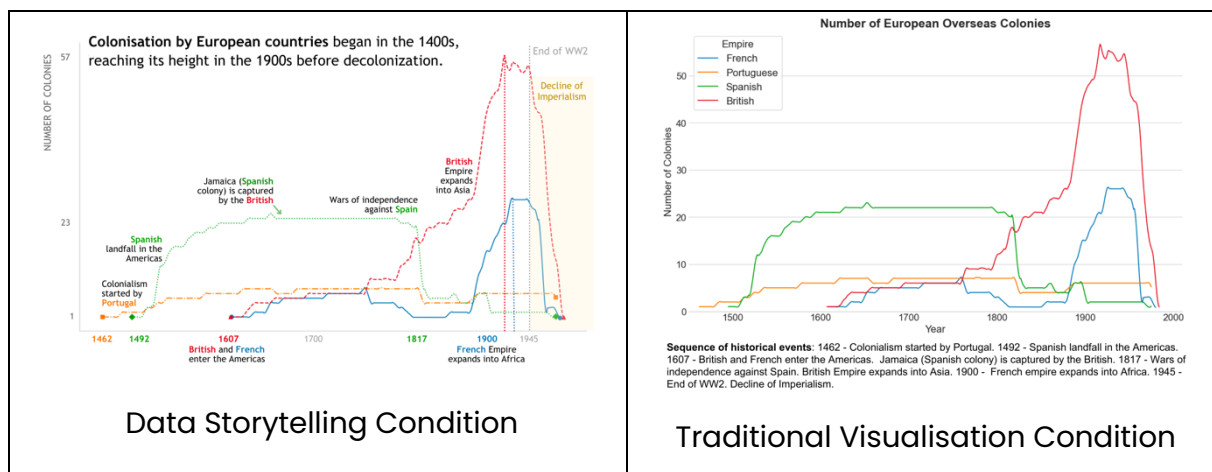
The duration of colonialism under the French and Spanish Empire

The number of colonies over time for the British and French Empires

The population size of the colonies under the French and Spanish Empires

Economic and cultural policies implemented by the French and Spanish Empires in their colonies

The information on the graph is sufficient

I am not sure

What additional information would be necessary to validate the following statement: "*The British Empire had the most rapid territory expansion in comparison with its European counterparts*"?

Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct*.

Year-by-year growth metrics of the British Empire's population compared to other colonial empires

Economic growth rates of the British Empire during its expansion phase in comparison with its European counterparts

Rates of land area increase per year during the expansion periods of European empires

Data on the rate at which the British naval and military capabilities expanded compared to other European powers

The information on the graph is sufficient

I am not sure

Click on all the visual elements on the graph that you found useful.

Data Storytelling Condition

Traditional Visualisation Condition

Visualisation B

Data Storytelling Condition | Traditional Visualisation Condition
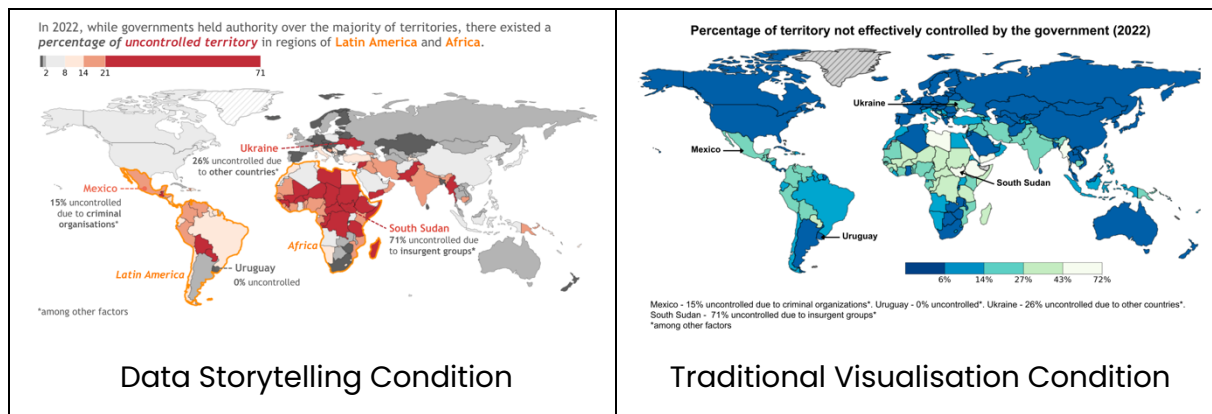
Questions:

Which of the following countries has the least amount of territory that is uncontrolled by the government as indicated on the graph?

Mexico

Ukraine

South Sudan

Uruguay

I am not sure

What is the most likely explanation for the amount of territory that is uncontrolled in Mexico?

Criminal organisations

Foreign military occupations

Presence of insurgent groups

Uninhabitable environmental conditions

I am not sure

How would the graph change if Argentina successfully occupied half of Uruguay's territory? *Select all that apply; multiple options may be correct.*

There would be no visible change on the graph

Argentina's percentage of uncontrolled territory would increase

Argentina's percentage of uncontrolled territory would decrease

Uruguay's percentage of uncontrolled territory would increase

Uruguay's percentage of uncontrolled territory would decrease

I am not sure

Country *X* is located in Latin America. It shares a similar government structure and faces similar issues to the majority of Latin American countries. Which of the following options is the most likely?

The percentage of uncontrolled territory by Country *X*'s government is less than 6%

The percentage of uncontrolled territory by Country *X*'s government is around 14%

The percentage of uncontrolled territory by Country *X*'s government is around 27%

The percentage of uncontrolled territory by Country *X*'s government is around 35%

The percentage of uncontrolled territory by Country *X*'s government is greater than 50%

I am not sure

How does the percentage of uncontrolled territory in Latin America compare to that of Africa on the graph? *Select all that apply; multiple options may be correct.*

Africa's territory is larger than Latin America's territorial extension

Latin America's territory is larger than Africa's territorial extension

There are no differences between both regions

Latin America has more countries in the highest percentage (countries in the highest bin) of uncontrolled-territory-by-the-government than Africa

Africa has more countries with highest percentage (countries in the highest bin) of uncontrolled-territory-by-the-government than Latin America

I am not sure

Arrange the following countries based on the percentage of their territory that is effectively controlled by the government from the *lowest percentage* to the *highest percentage*, as shown in the graph.

Mexico, South Sudan, Uruguay

Mexico, Uruguay, South Sudan

Uruguay, Mexico, South Sudan

South Sudan, Mexico, Uruguay

South Sudan, Uruguay, Mexico

I am not sure

According to the graph, what is the capital of South Sudan?

Juba

Sudan

Malakal

Pibor

There is not enough information

What other pieces of information would you need to evaluate the validity of the following statement: "*The percentage of territory that is not controlled by the government in Latin America is greater than in Africa.*" Select *only the relevant options* providing the minimum necessary information; *multiple options may be correct.*

The exact percentage of territory uncontrolled by the government per country

Reasons why the territory is not effectively controlled by the government

The military expenditure of Latin American and African countries

Territorial extension per country

The information on the graph is sufficient

I am not sure

What additional information would be necessary to evaluate the validity of the following statement: "*The level of government control over territory is decreasing over time worldwide.*"?
Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct.*

Demographic information of the regions with uncontrolled territory

The number of government officials in each country through time

The percentage of uncontrolled territory per country for the previous decade

Socioeconomic data in each country through time

The information on the graph is sufficient

I am not sure

Click on all the visual elements on the graph that you found useful.

In 2022, while governments held authority over the majority of territories, there existed a *percentage of uncontrolled territory* in regions of Latin America and Africa.

2 8 14 21   71

Ukraine
26% uncontrolled due
to other countries*

Mexico
15% uncontrolled
due to criminal
organisations*

South Sudan
71% uncontrolled due
to insurgent groups*

Africa

Latin America

Uruguay
0% uncontrolled

*among other factors

Data Storytelling Condition

Percentage of territory not effectively controlled by the government (2022)

Ukraine

Mexico

South Sudan

Uruguay

6%   14%   27%   43%   72%

Mexico - 15% uncontrolled due to criminal organizations*. Uruguay - 0% uncontrolled*. Ukraine - 26% uncontrolled due to other countries*.
South Sudan - 71% uncontrolled due to insurgent groups*
*among other factors

Traditional Visualisation Condition

Visualisation C

State capacity **improvements** span worldwide, though conflicts have led to **decreases** in some
State capacity is the extent to which the state sustainably raises sufficient resources, and has skilled and impartial security forces and public servants.

MORE CAPACITY
LESS CAPACITY

Coup in **Syria**
to end union
with Egypt

Modernisation
of **Omani** state
administration

Economic diversification
in **Oman**

Oman

Global
average

Civil war in
Syria

Syria

1961 **1970** 1980 1990 **2000** **2011**

Data Storytelling Condition

State Capacity
State captures the extent to which the state sustainably raises sufficient resources,
and has skilled and impartial security forces and public servants.

Oman
Syria
Global Average

State Capacity

1.0
0.5
0.0
-0.5
-1.0

1960 1970 1980 1990 2000 2010
Year

Sequence of historical events: 1961 - Coup in Syria to end union with Egypt. 1970 - Modernisation of Omani state administration. 2000 - Economic diversification in Oman. 2011 - Civil war in Syria.

Traditional Visualisation Condition

Text:

The topic of this visualisation is *state capacity*. The state capacity index is a measure of the ability of governments to effectively implement policies and achieve their goals. State capacity combines several metrics to indicate how effectively a state raises resources and maintains skilled and impartial security forces and public servants. **A higher index indicates better state capacity.**

Note that for the remaining questions, we will refer to the state capacity index as "*state capacity*".

Questions:

Which geographic entity had the highest state capacity in 1961 as shown in the graph?

Syria and the Global average were equal and higher than Oman

Global Average

Oman

Syria

I am not sure

What is the most likely explanation for the observed trend in the Syrian plot line from 2009 to 2011?

    Increased economic development in Syria

    Intensified foreign investments in Syrian infrastructure

    The impact of gradual international sanctions

    Civil war in Syria

    I am not sure

What would Oman's plot line on the graph most likely look like if it had successfully upskilled public servants nationwide in 1960 and implemented technology upgrades to strengthen the security forces in 1966?

    The plot line would not change as the capacity is restored

    The plot line would decrease only

    The plot line would increase only

    The plot line would decrease then increase

    The plot line would increase then decrease

    I am not sure

Country *X* had the same level of state capacity as Syria in 1960 and followed the global average trend until 2012.

Which of the following sentences are true? *Select all that apply; multiple options may be correct.*

    In 2012, the state capacity of Country *X* was greater than Oman's state capacity

    In 1970, the state capacity of Country *X* was less than Oman's state capacity

    The state capacity of Country *X* was never less than Syrian's state capacity

    In 2012, the state capacity of Country *X* was closer to the state capacity of Syria than Oman's state capacity

    I am not sure

How does the trend of state capacity in Oman compare to that of Syria on the graph? *Select all that apply; multiple options may be correct.*

Oman always had a higher state capacity than Syria

Oman's trend is always upward contrasting with Syria's consistent downward trend

Oman shows gradual changes while Syria has steep changes

Both Oman and Syria show gradual changes in state capacity

Both Oman and Syria show steep changes in state capacity

I am not sure

Organise the following entities based on the range (difference between the highest and lowest values) of their state capacity values, from the entity with the *lowest range* **to the one with the** *highest range***, as shown in the graph.**

Oman, Global Average, Syria

Oman, Syria, Global Average

Global Average, Oman, Syria

Syria, Oman, Global Average

Global Average, Syria, Oman

I am not sure

What other pieces of information would you need to evaluate the validity of the following sentence: "*Syria's decline in state capacity contrasts with the trend of all the other countries in the world.*"
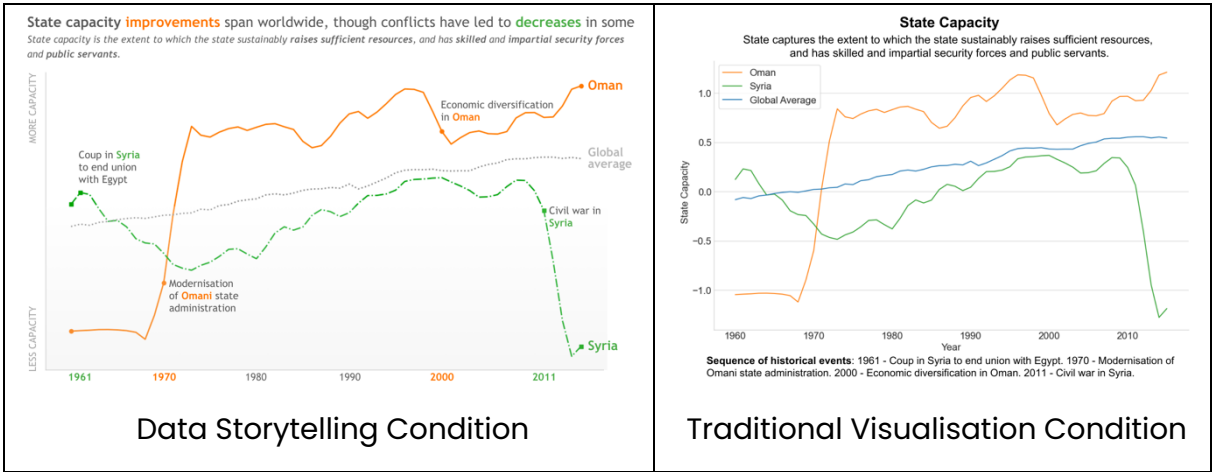**Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct.***

Syria's state capacity before 1960 and after 2012

Confidence intervals for the global average

Population size of all countries in the world

Year-by-year metrics of state capacity changes in Syria compared to the world average

The information on the graph is sufficient

I am not sure

To evaluate the validity of "*In 1970, Syria and Oman had an equivalent state capacity and governments*" what additional information would be necessary?
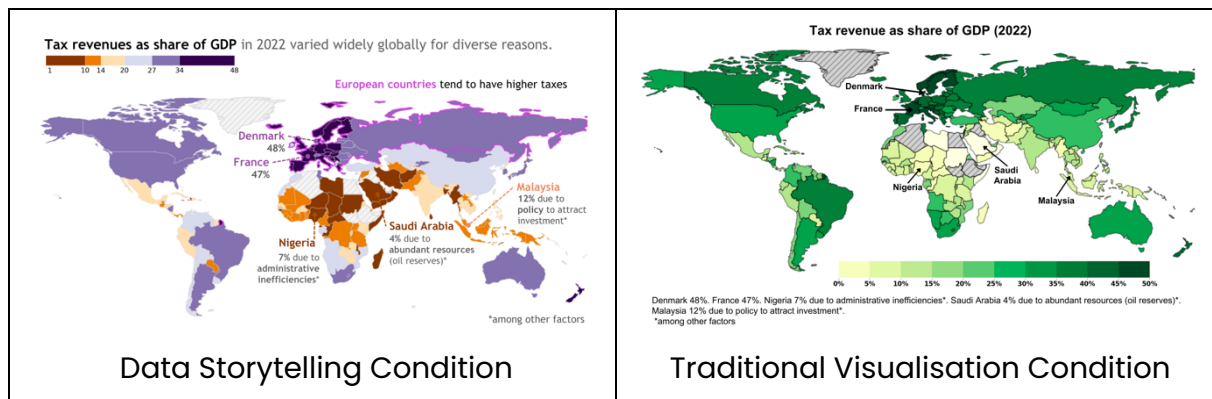**Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct.***

State capacity of both countries in 1970

Data on economic performance, including GDP, income levels of both countries in 1970

Information about the political systems of both countries in 1970

Information about each country's foreign policy in 1970

The information on the graph is sufficient

I am not sure

Click on all the visual elements on the graph that you found useful.

Data Storytelling Condition

State capacity **improvements** span worldwide, though conflicts have led to **decreases** in some

*State capacity is the extent to which the state sustainably **raises sufficient resources**, and has **skilled** and **impartial security forces** and **public servants**.*

MORE CAPACITY

LESS CAPACITY

Coup in **Syria** to end union with Egypt

Modernisation of **Omani** state administration

Economic diversification in **Oman**

Global average

Civil war in **Syria**

Oman

Syria

1961   1970   1980   1990   2000   2011

Traditional Visualisation Condition

State Capacity

State captures the extent to which the state sustainably raises sufficient resources, and has skilled and impartial security forces and public servants.

- Oman
- Syria
- Global Average

State Capacity

1.0

0.5

0.0

−0.5

−1.0

1960   1970   1980   1990   2000   2010

Year

Sequence of historical events: 1961 - Coup in Syria to end union with Egypt. 1970 - Modernisation of Omani state administration. 2000 - Economic diversification in Oman. 2011 - Civil war in Syria.

Visualisation D

Data Storytelling Condition   Traditional Visualisation Condition

Text:

The visualisation shows the tax revenue as share of Gross Domestic Product (GDP). GDP represents the total value of all goods and services produced within a country's borders over a given period. A **high tax revenue as share of GDP** suggests that a **large portion of a country's economic output is being collected as taxes**.

Questions:

Which of the following countries has the highest tax revenue as share of GDP as indicated on the graph?

     France

     Nigeria

     Singapore

     Saudi Arabia

     I am not sure

Which of the following is the most probable explanation for the tax revenue as share of GDP in Nigeria?

     Inefficiencies in the country's administration

     High tax rates on individuals and corporations

     Policy to attract investment

     A wide tax base with consistent contributions

     I am not sure

Country *X* is located in Europe and shares similar economic structures and tax policies as the majority of European countries. Which of the following options is the most likely?

The tax revenue as share of GDP of Country *X* is less than 10%

The tax revenue as share of GDP of Country *X* is around 15%

The tax revenue as share of GDP of Country *X* is around 25%

The tax revenue as share of GDP of Country *X* is around 35%

The tax revenue as share of GDP of Country *X* is greater than 50%

I am not sure

Select the option with only one country

Saudi Arabia and Malaysia

Malaysia

Denmark, Malaysia and Saudi Arabia

France and Saudi Arabia

Malaysia and France

If all other factors remain constant worldwide, how would the graph likely change within one year if Saudi Arabia implements a tax reform similar to France - introducing personal income tax and corporate taxes? *Select all that apply; multiple options may be correct.*

- Saudi Arabia's colour on the map would not change
- France's colour on the map would not change
- France's tax-revenue-as-share-of-GDP would decrease
- Saudi Arabia's tax revenue as share of GDP would increase
- Saudi Arabia's tax revenue as share of GDP would decrease
- I am not sure

How does the tax revenue as share of GDP in European countries compare to that of the Middle Eastern countries on the graph? *Select all that apply; multiple options may be correct.*

- European countries have higher tax revenue as share of GDP than Middle Eastern countries
- European countries have lower tax revenue as share of GDP than Middle Eastern countries
- Europe has fewer countries with a high GDP than the Middle East
- The European country with the highest tax-revenue-as-share-of-GDP collects more taxes relative to its GDP than the Middle Eastern country with the highest tax revenue as share of GDP
- The differences in tax revenue as share of GDP are negligible between European and Middle Eastern countries
- I am not sure

Arrange the following based on the percentage of their GDP not collected as tax revenue from least to most as shown on the graph.

Saudi Arabia, Malaysia, France

Malaysia, France, Saudi Arabia

Denmark, Malaysia, Saudi Arabia

France, Saudi Arabia, Malaysia

Malaysia, Saudi Arabia, Denmark

I am not sure

What other pieces of information would you need to evaluate the validity of the following statement: "*The number of taxpayers is higher in France than in Nigeria.*" Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct.*

The exact percentage tax-revenue-as-share-of-GDP per country

The GDP per capita for France and Nigeria

Population of France and Nigeria

Proportion of each population living in urban areas

Tax compliance rates

I am not sure

What additional information would be necessary to evaluate the validity of the following sentence: "*Tax revenue as a percentage of GDP is decreasing worldwide.*"? Select *only the relevant options* providing the *minimum necessary information; multiple options may be correct.*

- GDP yearly growth rates per country

- Population growth rates per country

- GDP per capita growth rates per country

- The effect of international trade on tax policies and revenues

- Tax revenue per country for the previous years

- I am not sure

Visualisations [Create Task – Written Response]

Text:

You have now viewed two different visualisations and answered questions about each.

In the next task, you will use both visualisations to complete a longer exercise.

There is no time limit, but please stay within the range of 8-to-12 sentences. **Grammar and spelling mistakes will not be penalised.**

Please **do not use any external tools or resources** when answering this question.

Question:

Based on the visualisations, write a text on the relationship between the topics presented in the graphs. Your response should be *8-to-12 sentences long* and should *reference specific data points or trends from the graphs* to support your ideas.

Please write your response *in your own words* and keep your answer between 8-to-12 sentences. *Do not refer to any external resources* - please answer using the information within the visualisations.
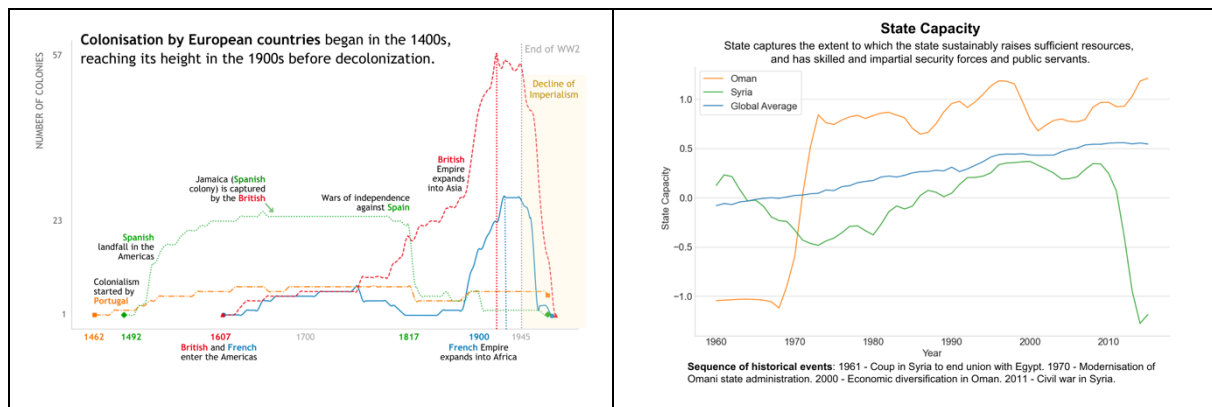
Qualitative Evaluation

Text:

We now want to understand your perception of the visualisations.

Please give us as much detail as possible.
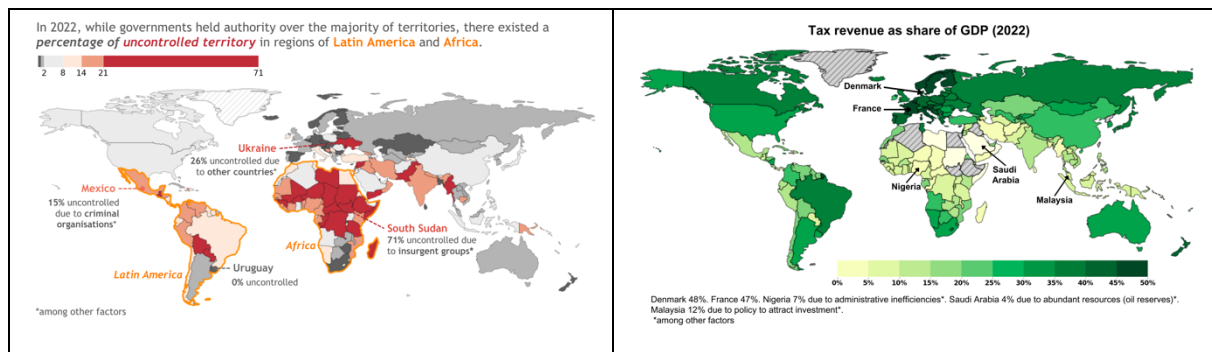
Questions:

Visualisations A & B

Regardless of the content, which visualisation do you prefer?

Top visualisation: Colonisation

Bottom visualisation: State Capacity

Why? Justify your preference.

Visualisations C & D

In 2022, while governments held authority over the majority of territories, there existed a *percentage of uncontrolled territory* in regions of Latin America and Africa.

2 8 14 21   71

Ukraine
26% uncontrolled due
to other countries*

Mexico
15% uncontrolled
due to criminal
organisations*

South Sudan
71% uncontrolled due
to insurgent groups*

Africa

Latin America

Uruguay
0% uncontrolled

*among other factors

Tax revenue as share of GDP (2022)

Denmark
France
Saudi
Arabia
Nigeria
Malaysia

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%

Denmark 48%. France 47%. Nigeria 7% due to administrative inefficiencies*. Saudi Arabia 4% due to abundant resources (oil reserves)*.
Malaysia 12% due to policy to attract investment*.
*among other factors

Regardless of the content, which visualisation do you prefer?

Top visualisation: Territory

Bottom visualisation: Taxes

Why? Justify your preference.

Experience with Visualisations

Questions:

State how much you agree with the following sentences:

I have the ability to understand and interpret data analytics.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

I have the ability to derive insights from data visualisations.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Are there any other factors that may have influenced your perception or interpretation of the graphs?