



# Education Financing

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# Hello! We are...

Vibha Dabholkar:

Freshman | Computer Science & Public Health

Michael Lo:

Freshman | Economics & Data Science

Sumukh Suresh:

Freshman | Business Administration & Data Science

Thomas Le Corre:

Junior | Economics & Data Science



# Agenda

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Introduction  
to Problem

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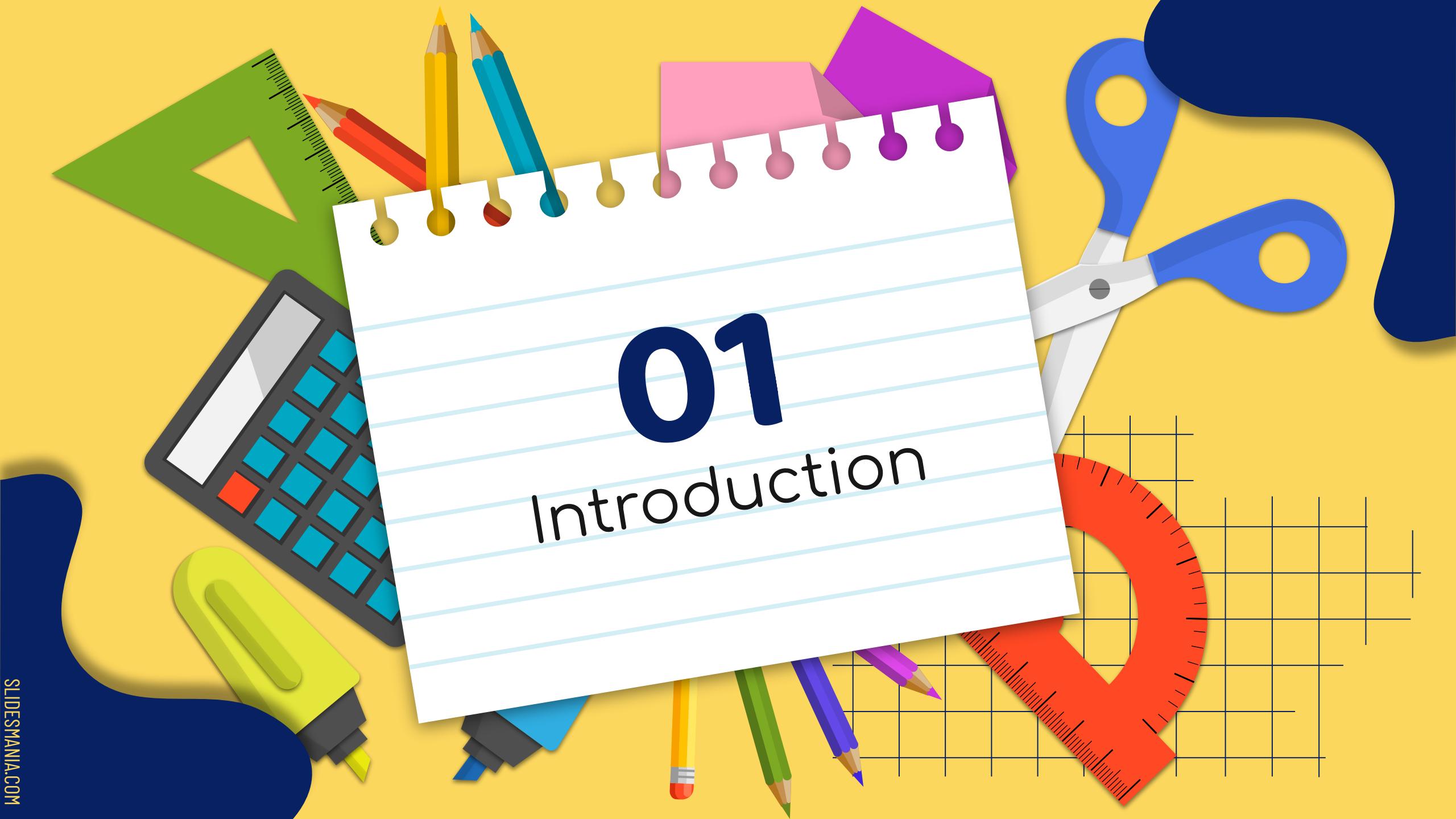
Background  
on Problem

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Quantitative  
Data for the  
Problem &  
Methodology

4

Conclusion  
& Impact

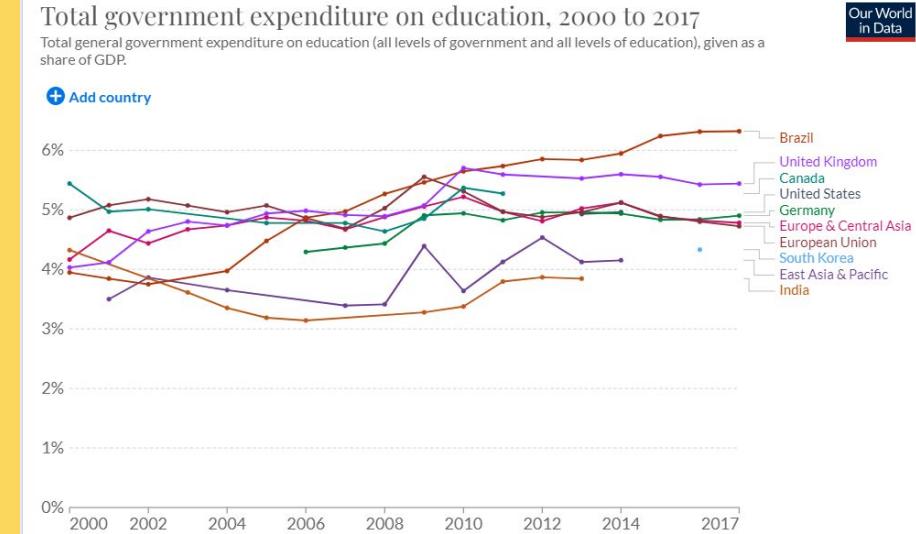
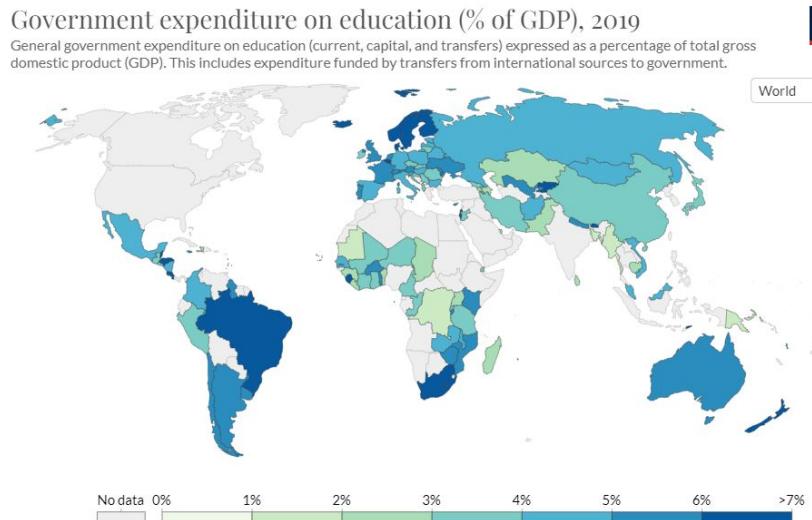


# 01

## Introduction

# Education Financing

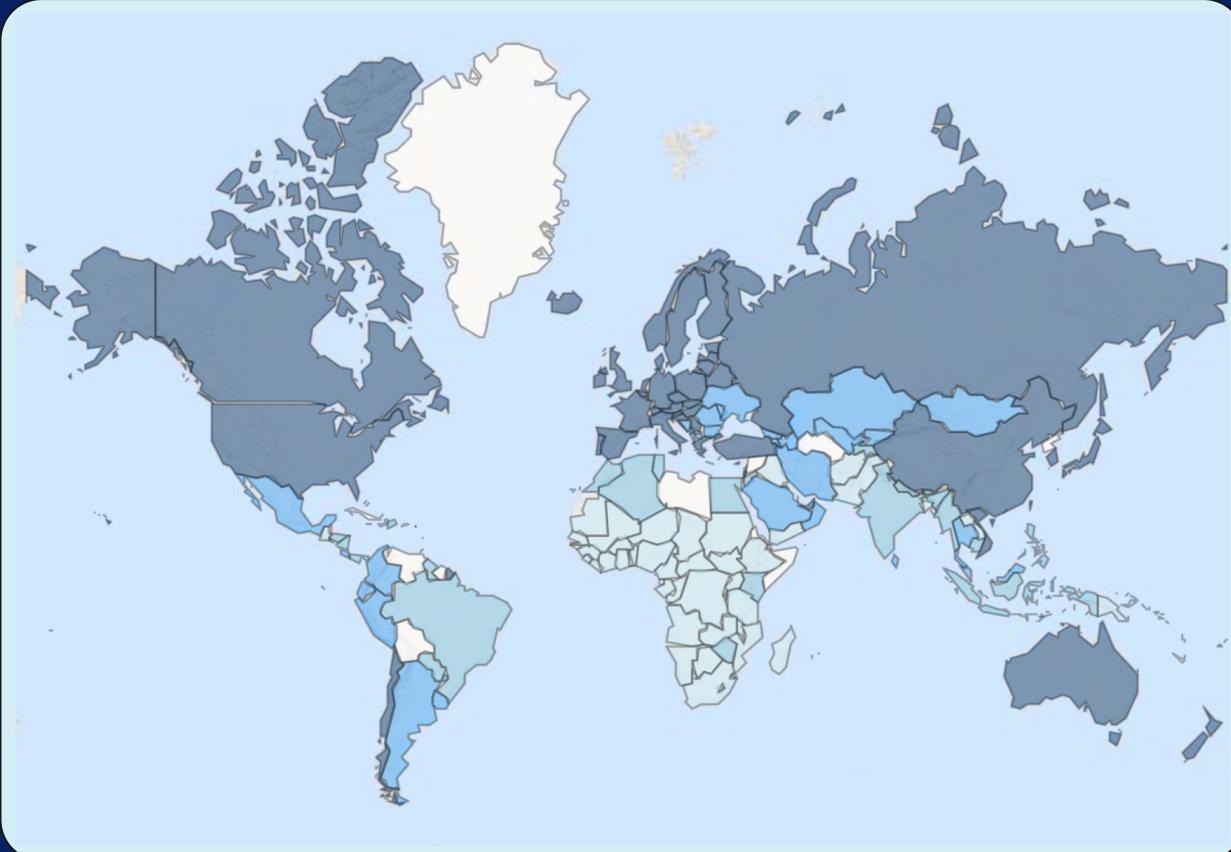
Increased industrialization of countries → increased importance of education



Countries dedicate up to 7% of their GNP for financing education  
(Source: Our World in Data)

Government spending on education has increased over the past 20 years  
(Source: Our World in Data)

## The World Bank's Human Capital Index



What does this mean?



The expected productivity of a child born today in comparison to a child brought up in a perfect situation.

# 02

## Background

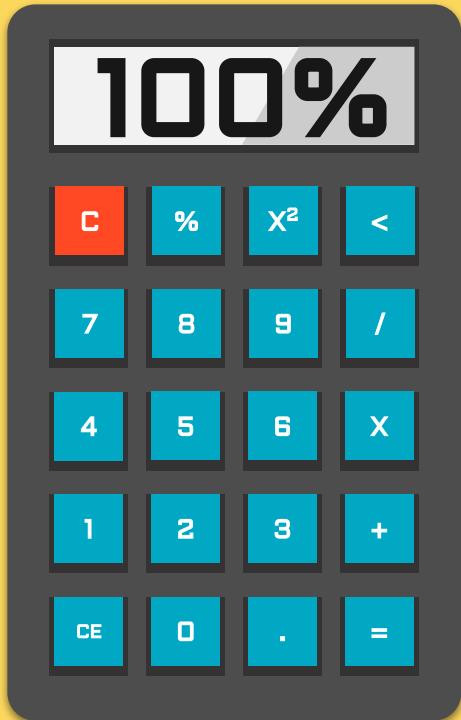
# Scope



% of Industrialized Nations



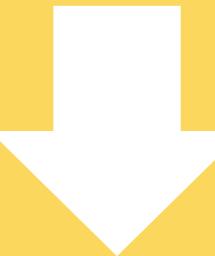
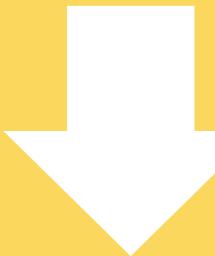
% of Developing Nations



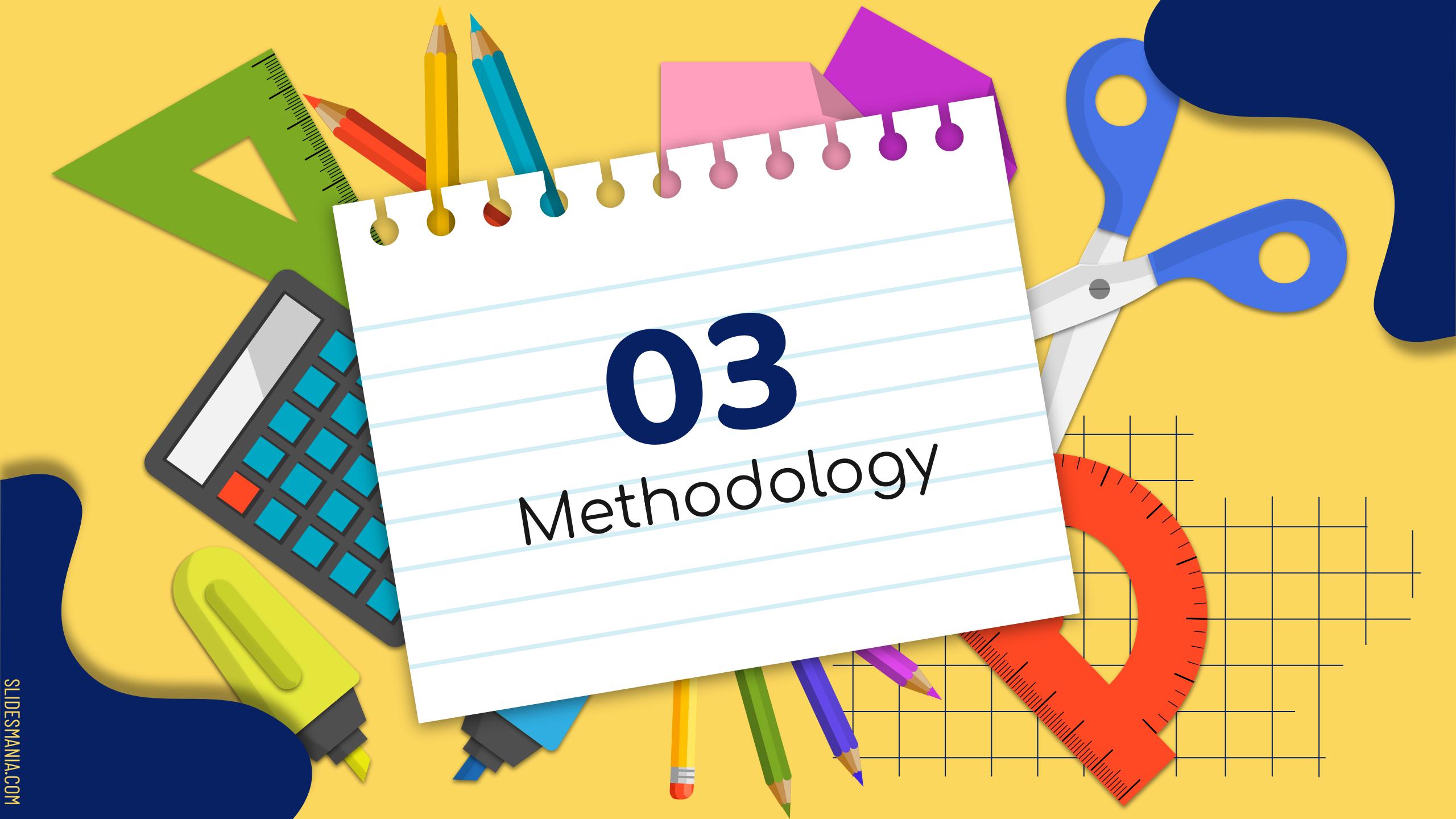
% of Nations that Spend Money towards Education



Due to beliefs and financial status, some countries can't or choose not to spend money towards education.



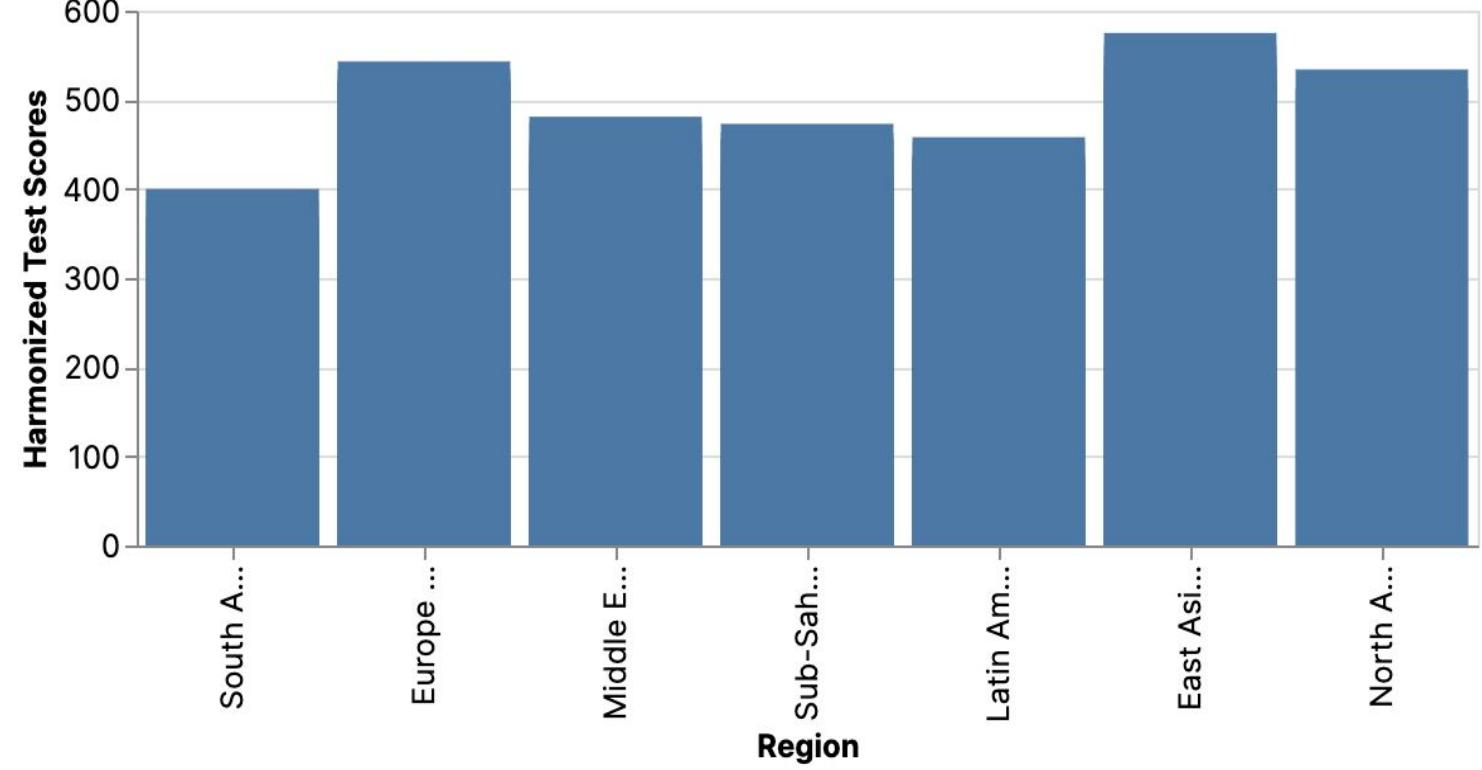
Does the amount of money spent by a nation on its education system affect the academic statistics of its population?

A vibrant yellow background is adorned with various school-related illustrations. In the upper left, a green protractor and a black calculator with blue buttons are positioned. To the right of the calculator is a white spiral-bound notebook with light blue horizontal lines. A large, bold, dark blue number '03' is centered on the notebook. Below the number, the word 'Methodology' is written in a black, sans-serif font. In the lower right corner, there's a red protractor and a grid pattern. A blue pushpin is visible near the top center. A yellow pushpin is located at the bottom center. A blue paperclip is on the left side. A yellow highlighter is on the far left. A blue marker is at the bottom left. A purple pencil is at the bottom center. A red pencil is at the bottom right. A blue pencil is at the top center. A yellow pencil is at the top left.

03

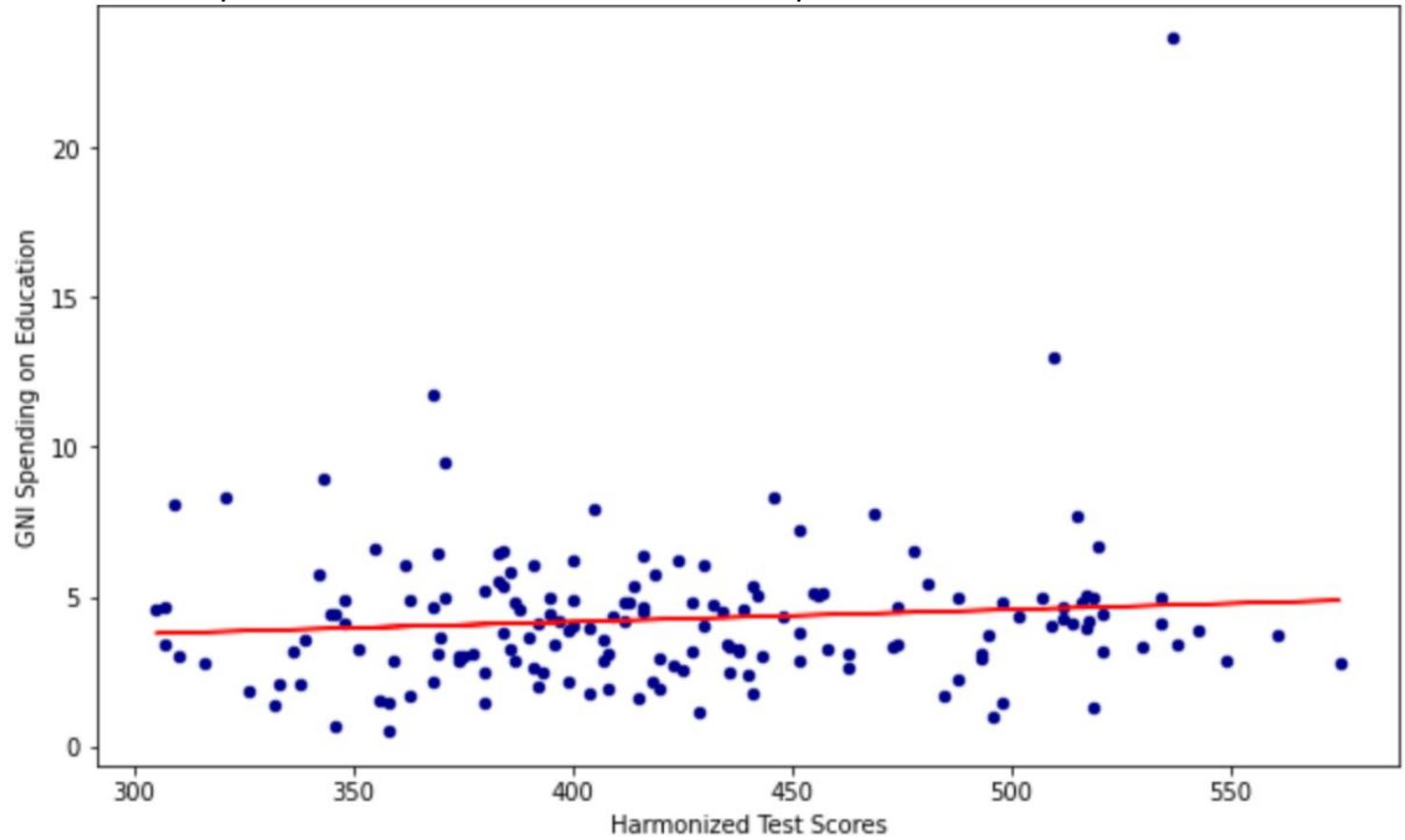
Methodology

## Harmonized Test Scores Compared Across Regions





GNI Spending on Education as a function of  
Learning-Adjusted Years of School (World Bank)  
(Correlation Coefficient: .104)



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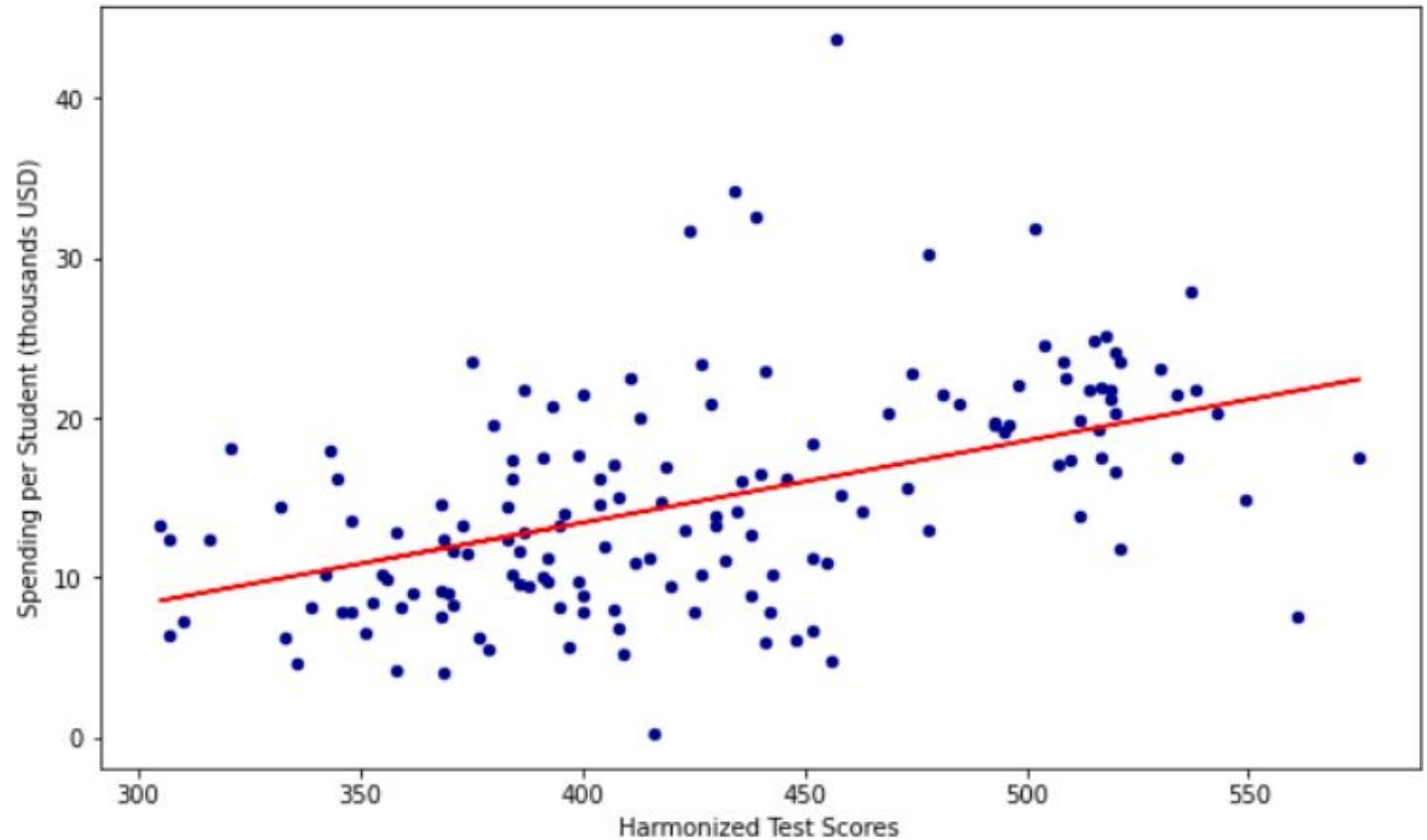
# An Alternative analysis:







Harmonized Test Scores as a function of Real  
Amount Spent on Education  
(Correlation Coefficient: .476)



Introduction

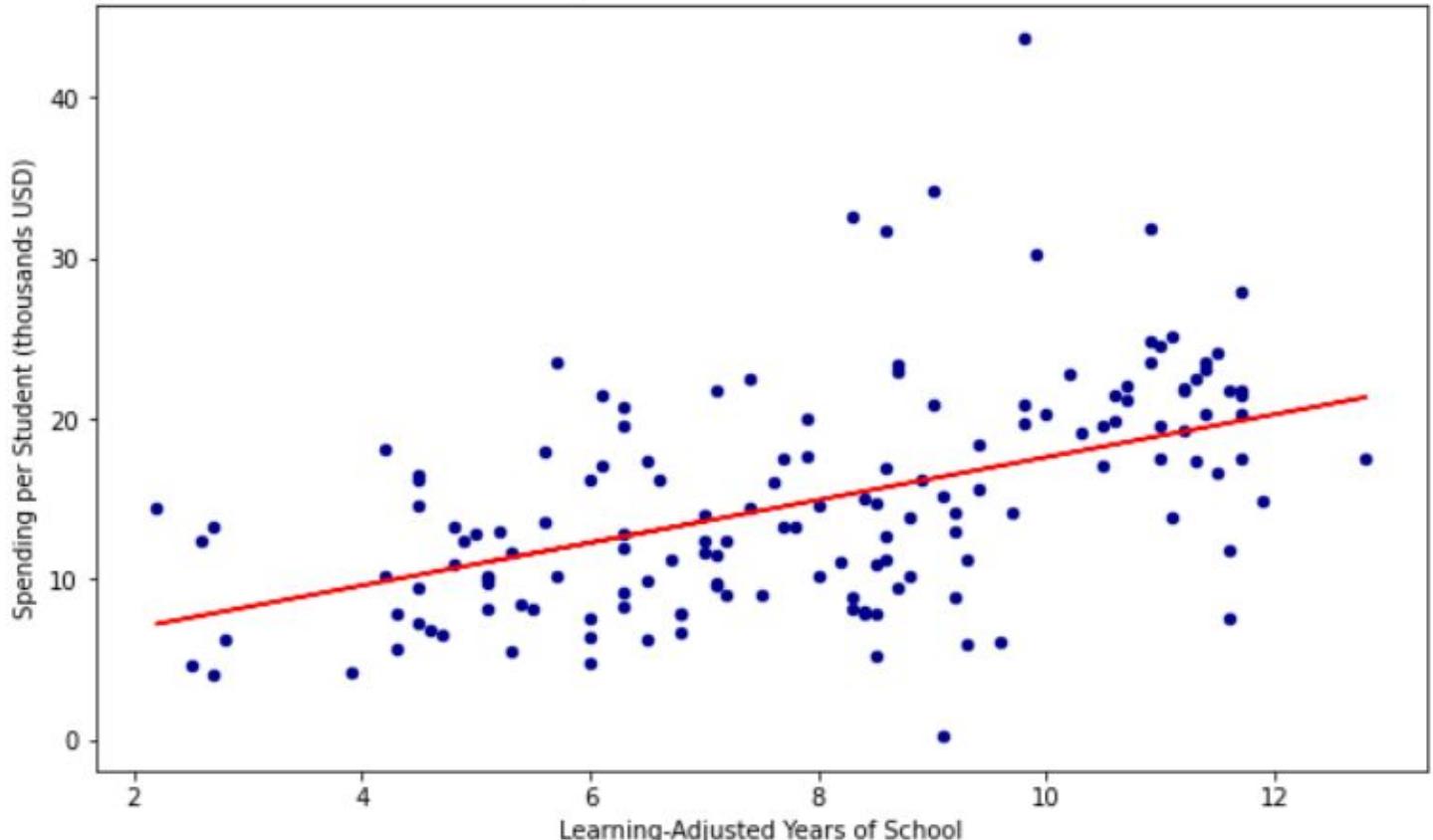
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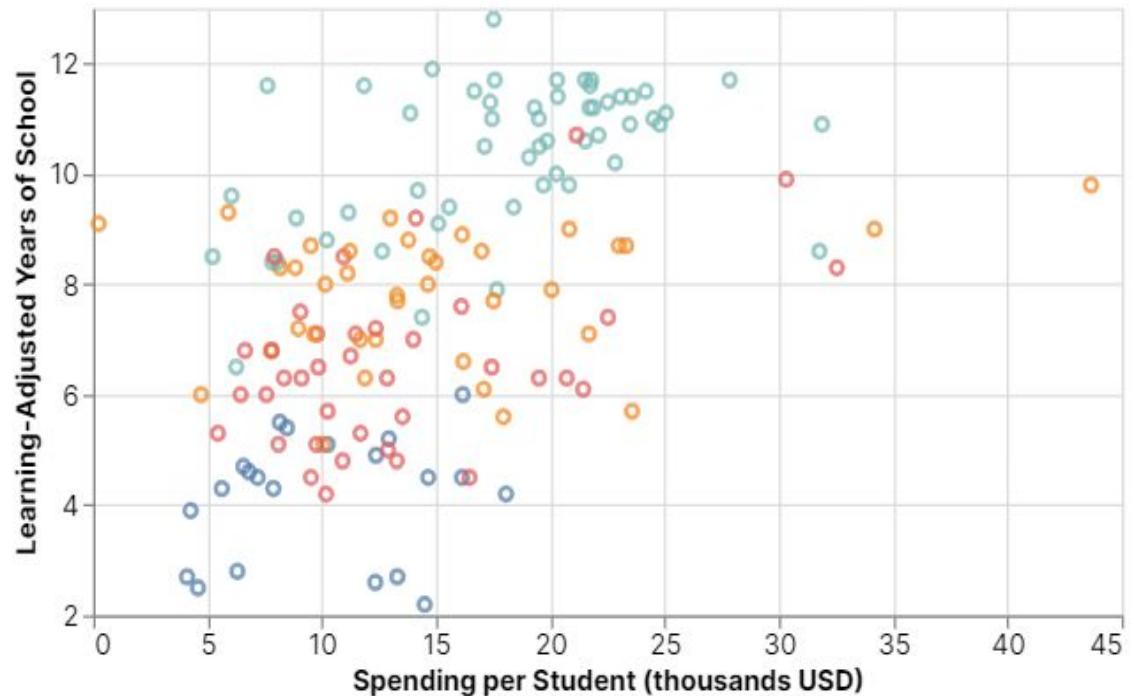
Real Years in School as a function of Real  
Amount Spent on Education  
(Correlation Coefficient: .487)



**Despite the slight correlation we observe, there may be confounding variables  
(such as a country being wealthier)**



Income Group is still one of the strongest predictors of high spending+years in school



**Income Group**

- Low income
- Upper middle income
- Lower middle income
- High income



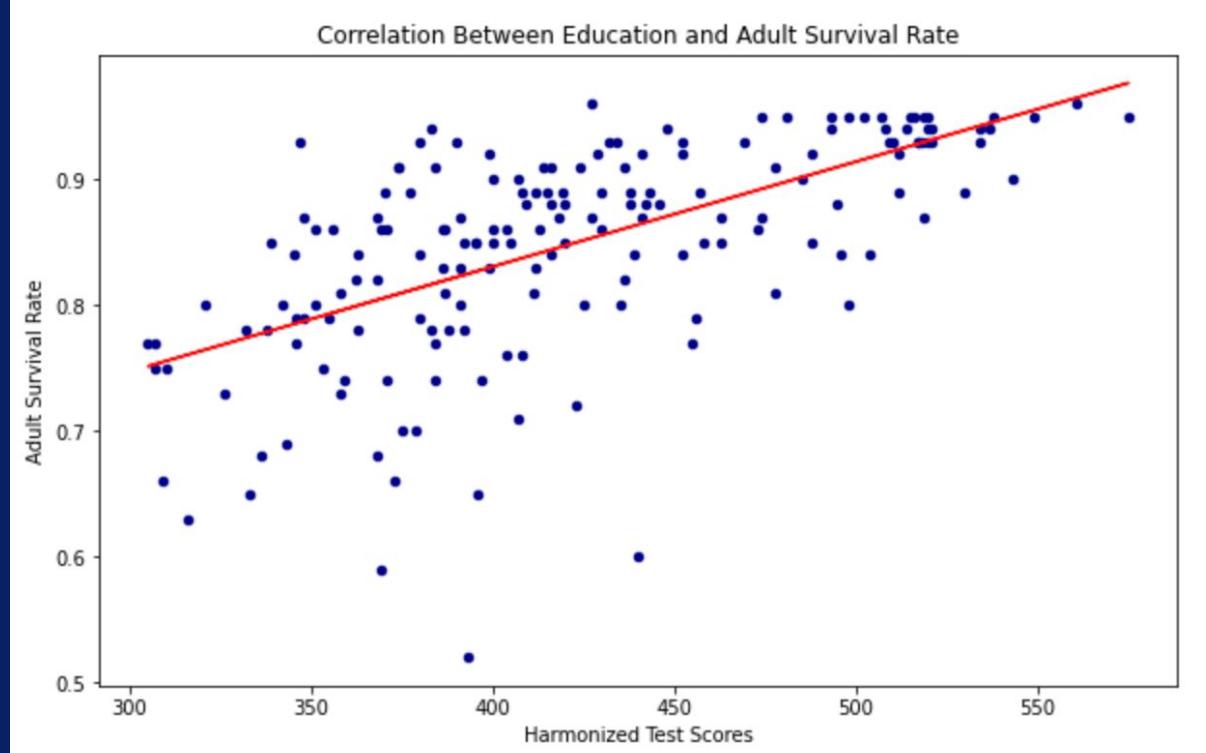
# 04

## Impact



**The amount of money (either real, or as a proportion of GNP) spent on education does not necessarily affect a nation's academic statistics!**

# Another possibility:



The correlation coefficient of 0.61 indicates that there is a moderately strong and positive relationship

Therefore, this led us to consider if healthcare improvements may meaningfully impact the outcomes of education

# Why does this matter?

A primary predictor of future prosperity- the World Bank's Human Capital Index, relies on three components:



Education (real years of schooling+harmonized test scores)



Chance of survival to Age 5 (Child Mortality)



Life expectancy at birth and other health conditions





# Thank you!

Do you have any questions?