

# Inequality and Poverty

3.4



# What are the 3 main objectives of an economy?



# 3 Macro Objectives

1. Economic Growth
2. Low Unemployment Rate
3. Low and Stable Inflation



**Possible additional goals:** Sustainable Debt, Equity, and Income Distribution

**Do most economies in the world today  
promote equality?**

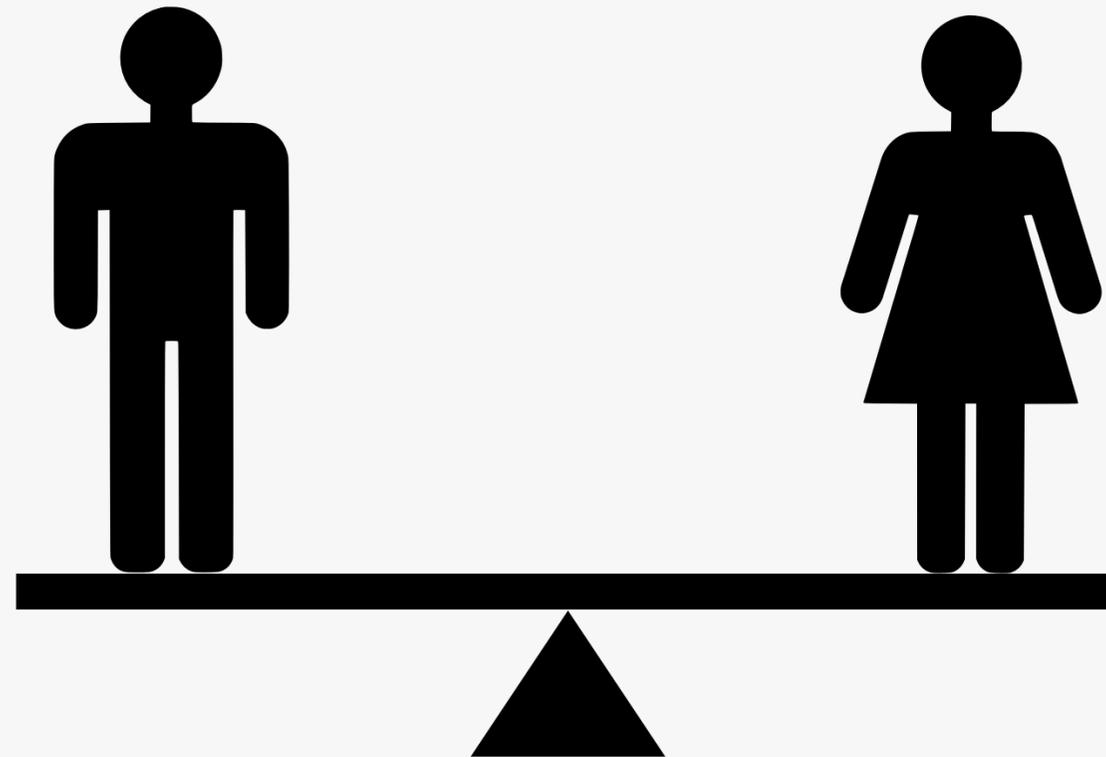
**What are the barriers to equality?**



# Definition

## Equality

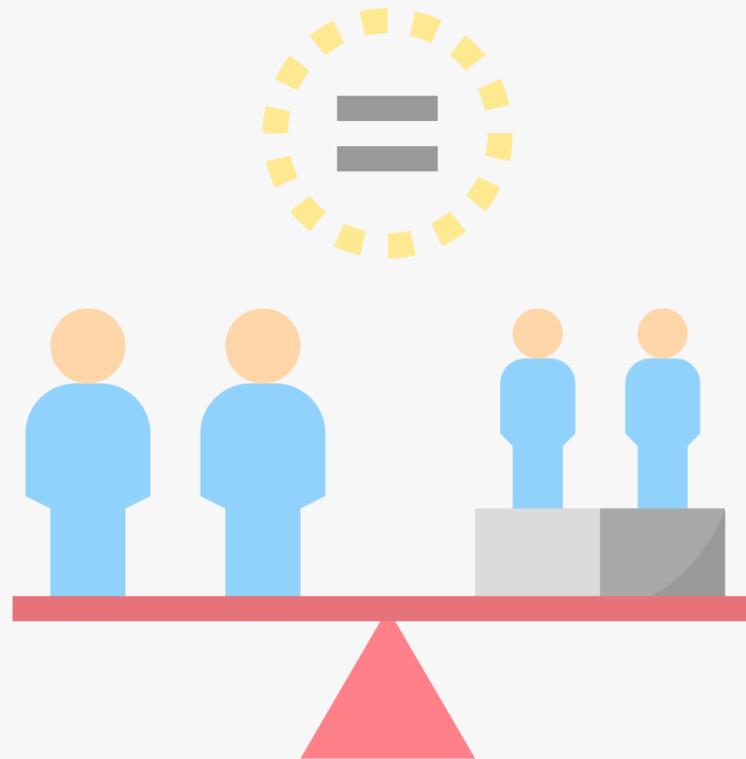
Situations where economic outcomes are the same for all.



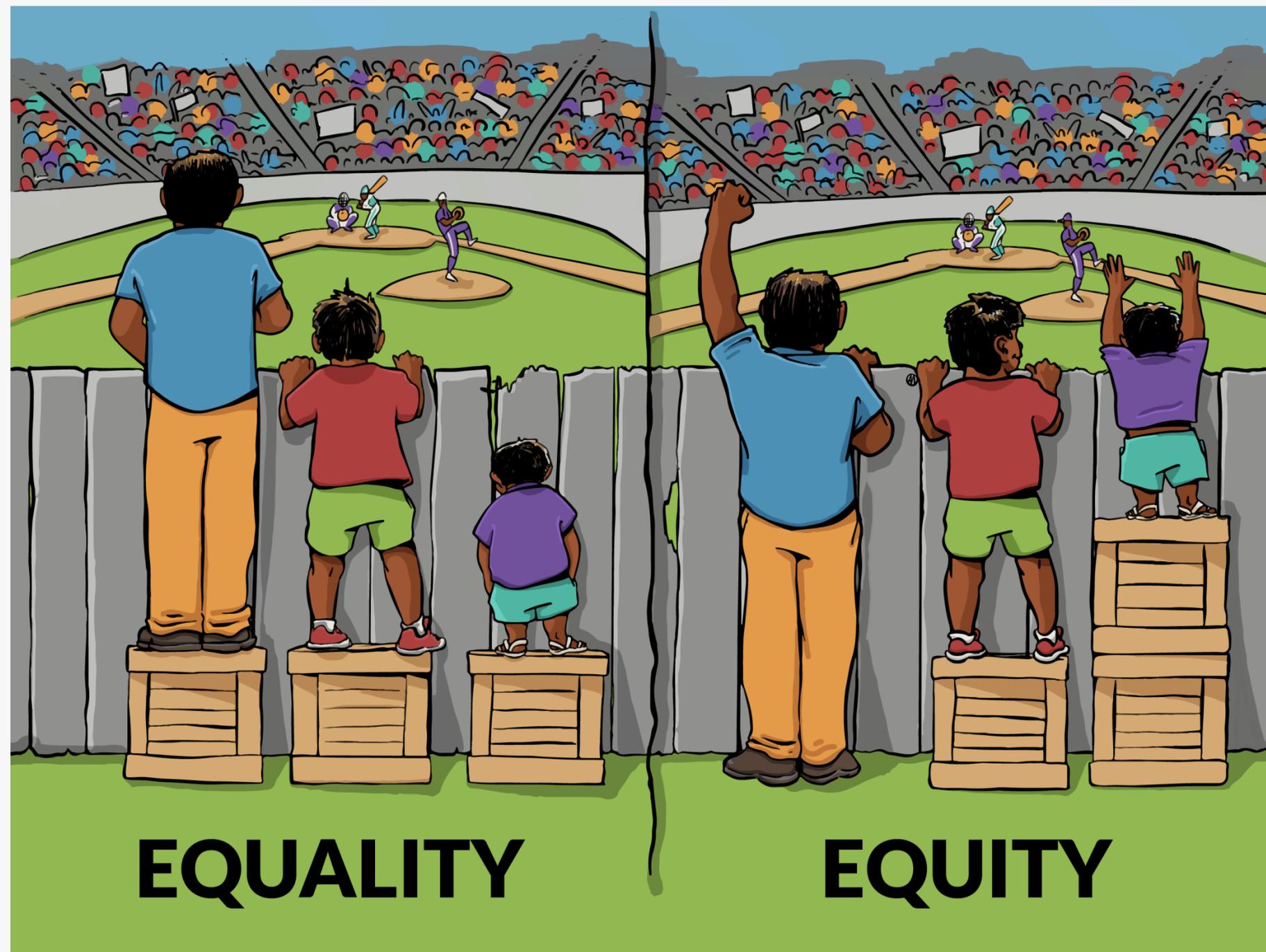
# Definition

## Equity

Refers to the idea of fairness. Different people are given different things to promote equity.



# Equity vs Equality



**EQUALITY**

**EQUITY**

Interaction Institute for Social Change | Artist: Angus Maguire.”

# Definition

## Economic Inequality

unequal distribution of wealth, assets, or incomes in society. Sometimes referred to as the "wealth gap".

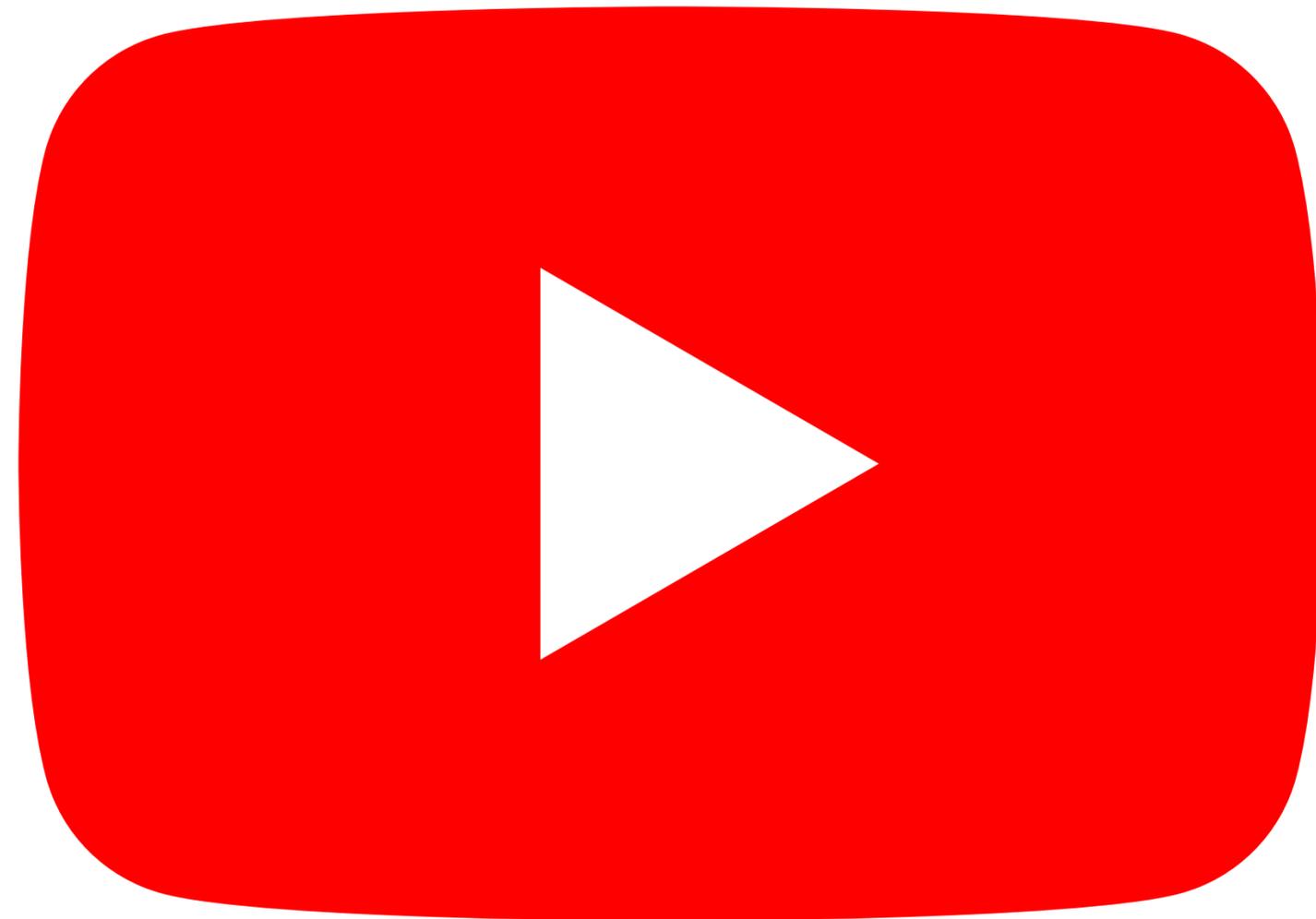


# Definition

## Social Mobility

The ability of people to climb or fall within the economic sectors of society.



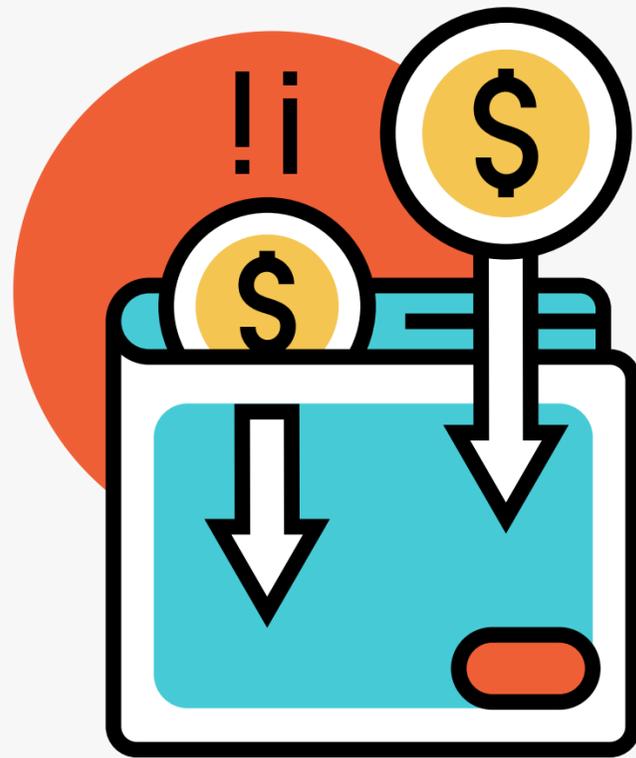


Wealth Gap

# Most Notable Types of Economic Inequality

**Unequal Distribution of Income**

**Unequal Distribution of Wealth**



# Unequal Distribution of Income



Capitalist, market-based systems are the most efficient economic systems in regard to resource allocation. While equal incomes may not be the goal, high inequality should be combated for economic growth.

## Solutions

- **Universal Basic Income (UBI)**
  - Universal transfer payment to every citizen to raise income levels.
- **Increase in Progressive Income Tax**

# Unequal Distribution of Wealth



Wealth is passed from generation to generation, unlike income. Wealth provides generations of families with greater educational opportunities, high standards of living, and effective healthcare.

## Solutions

- **Wealth Taxes**
- **Philanthropy**
  - Wealthy individuals choosing to give back to society through donations.

# Measuring Economic Inequality



# The Gini Coefficient & The Lorenz Curve



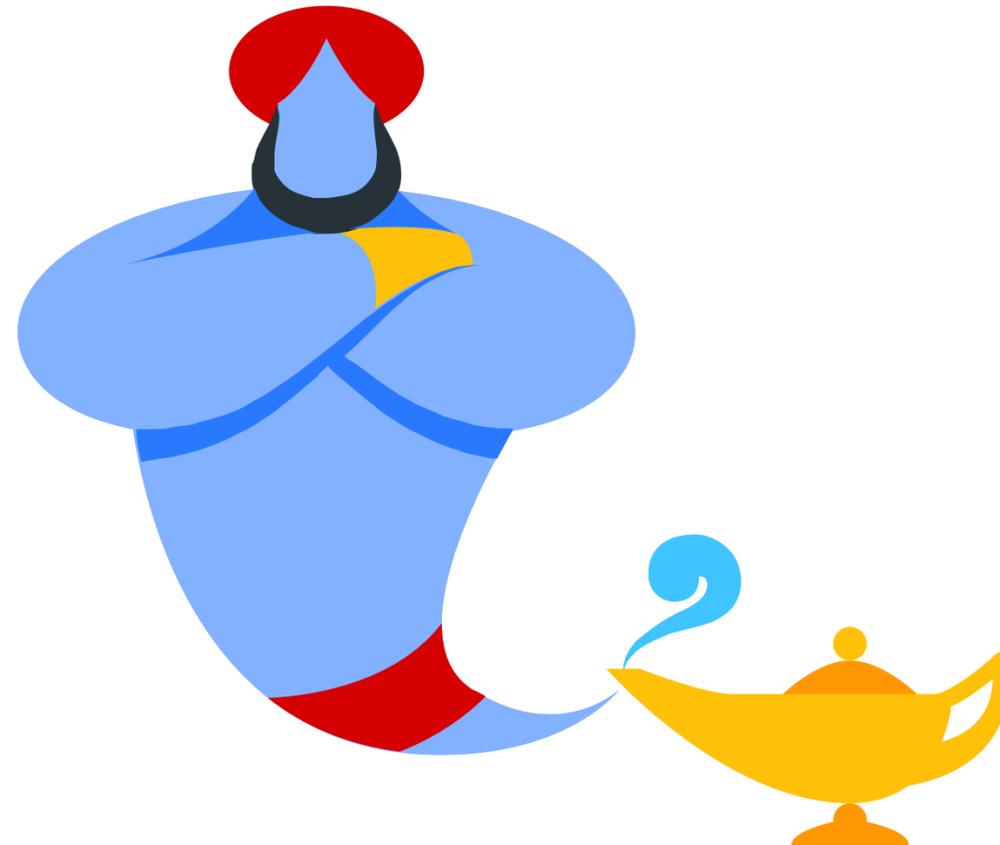
# The Gini Coefficient

## Definition

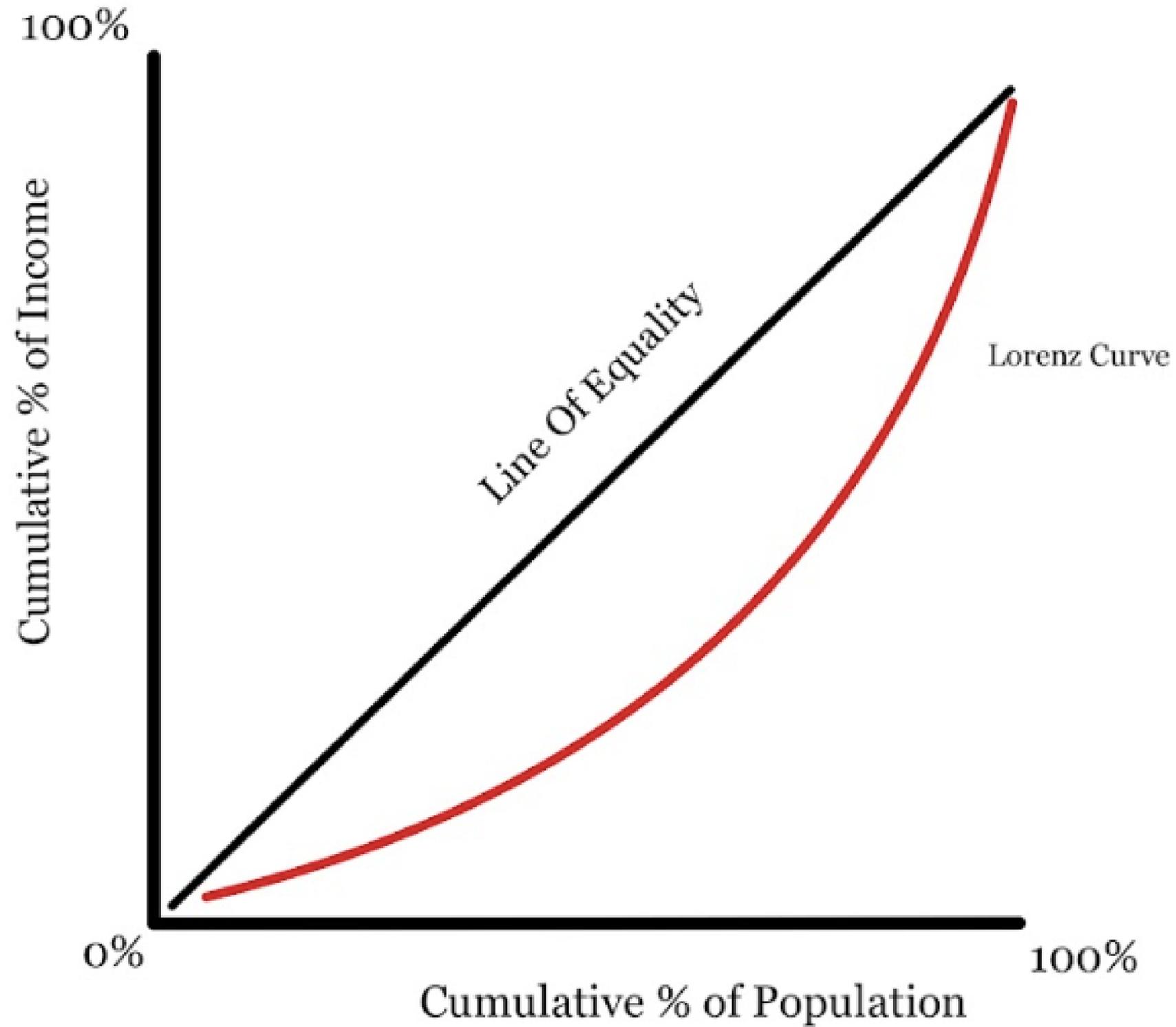
Measure of distribution of income within an economy. This coefficient is usually used to determine the level of income inequality.

**The higher the Gini – the more unequal the income distribution**

**The lower the Gini – the closer to income distribution equality**



# The Lorenz Curve

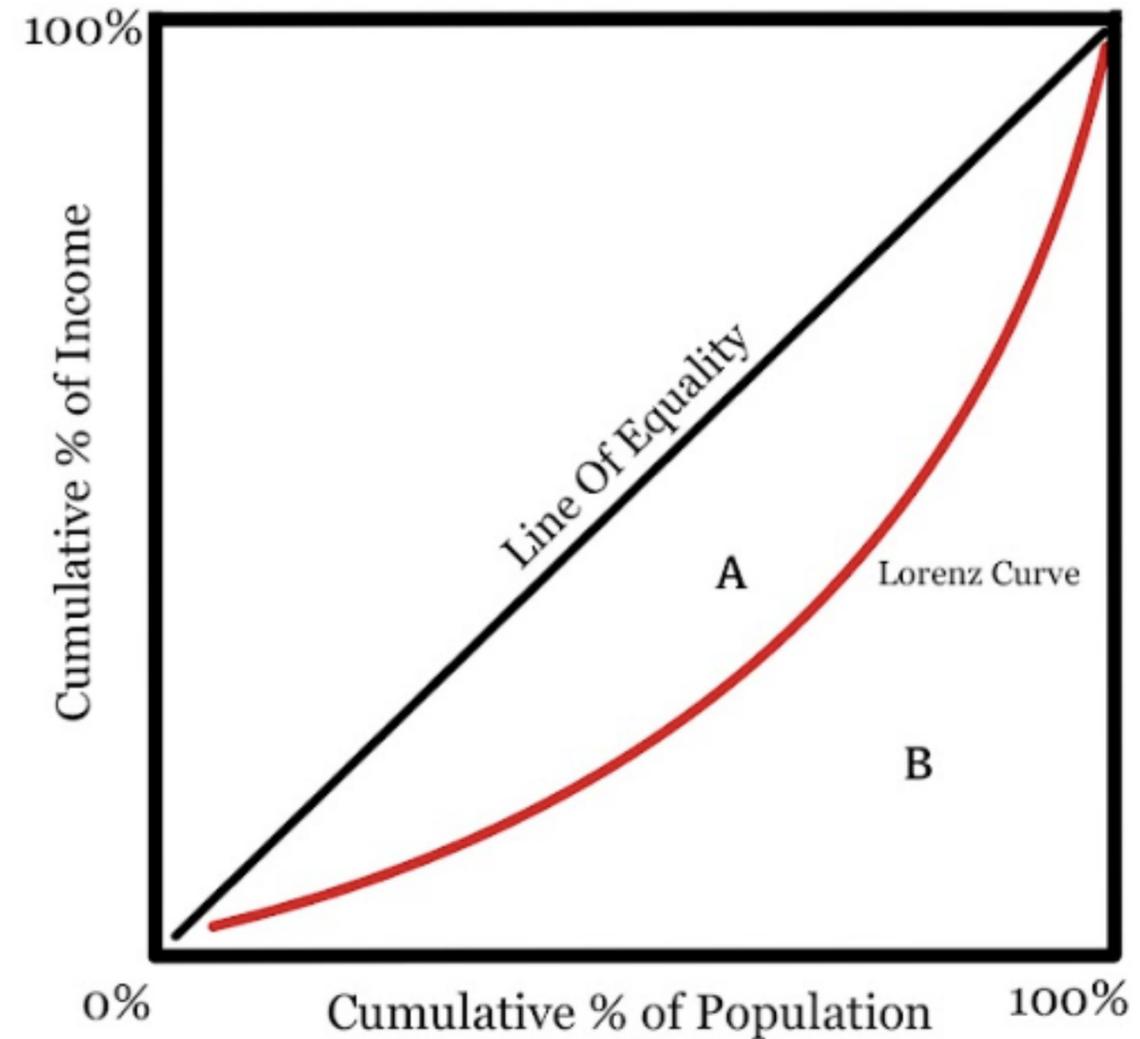


# The Lorenz Curve

**Representation of the Income Inequality. It shows the difference between perfect equality of income and the current status of a country's income equality by using the Gini Index.**

**The Gini Coefficient is represented by the area between the Lorenz curve and the line of perfect equality. (A)**

$$\text{Gini} = A / (A+B)$$

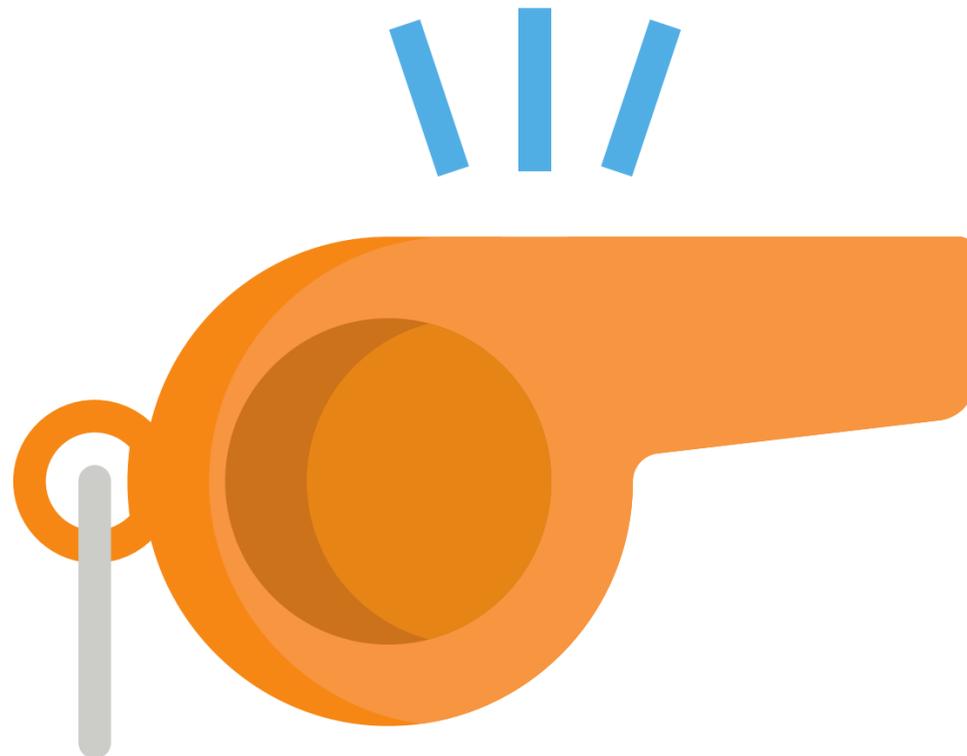


# Practice

**The United Kingdom has a Gini coefficient of 43.**

**Thailand has a Gini coefficient of 38.**

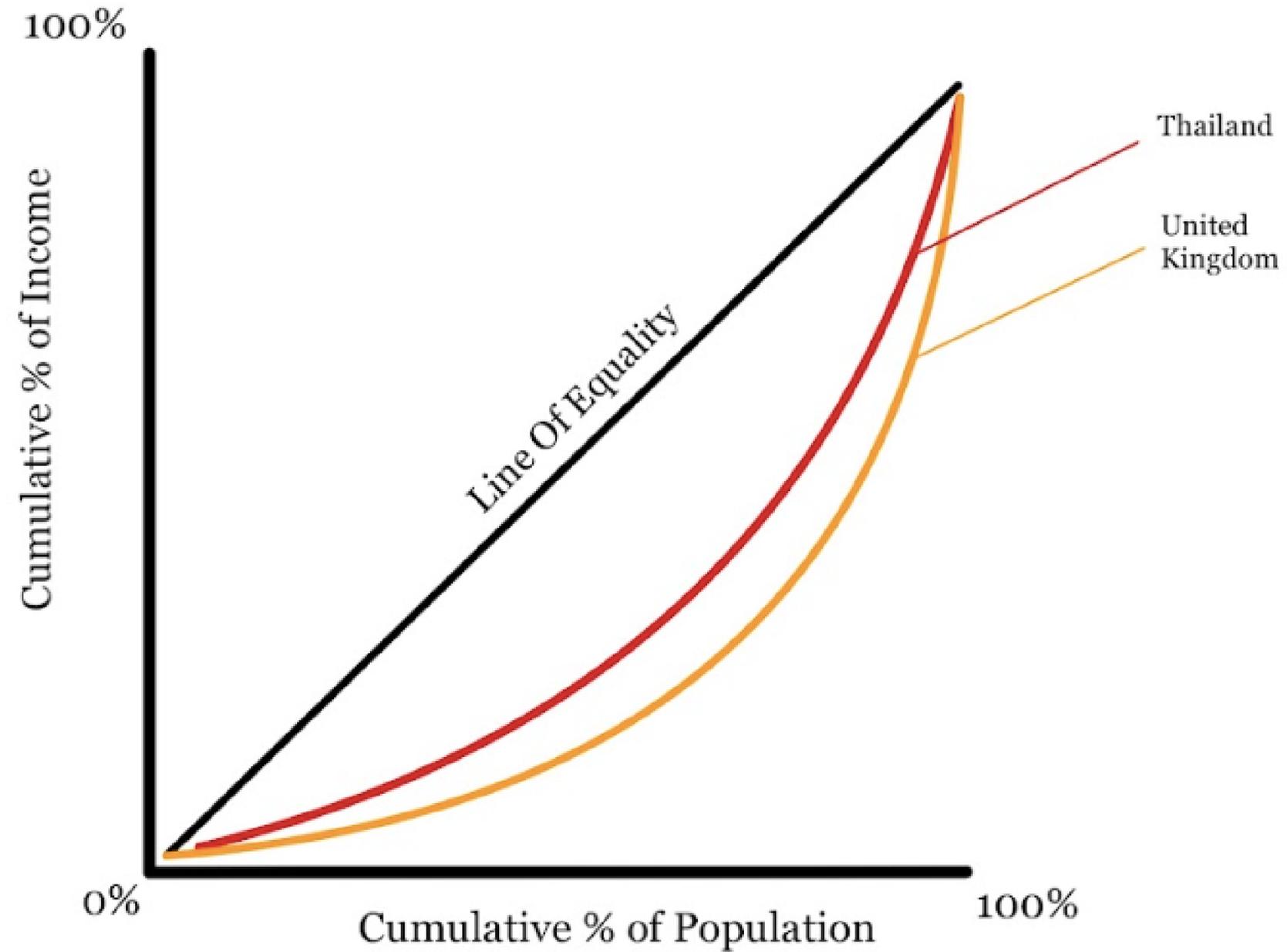
- 1. Determine which country has a larger gap in regard to income equality.**
- 2. Draw a representation using the Lorenz curve demonstrating their income equality status.**

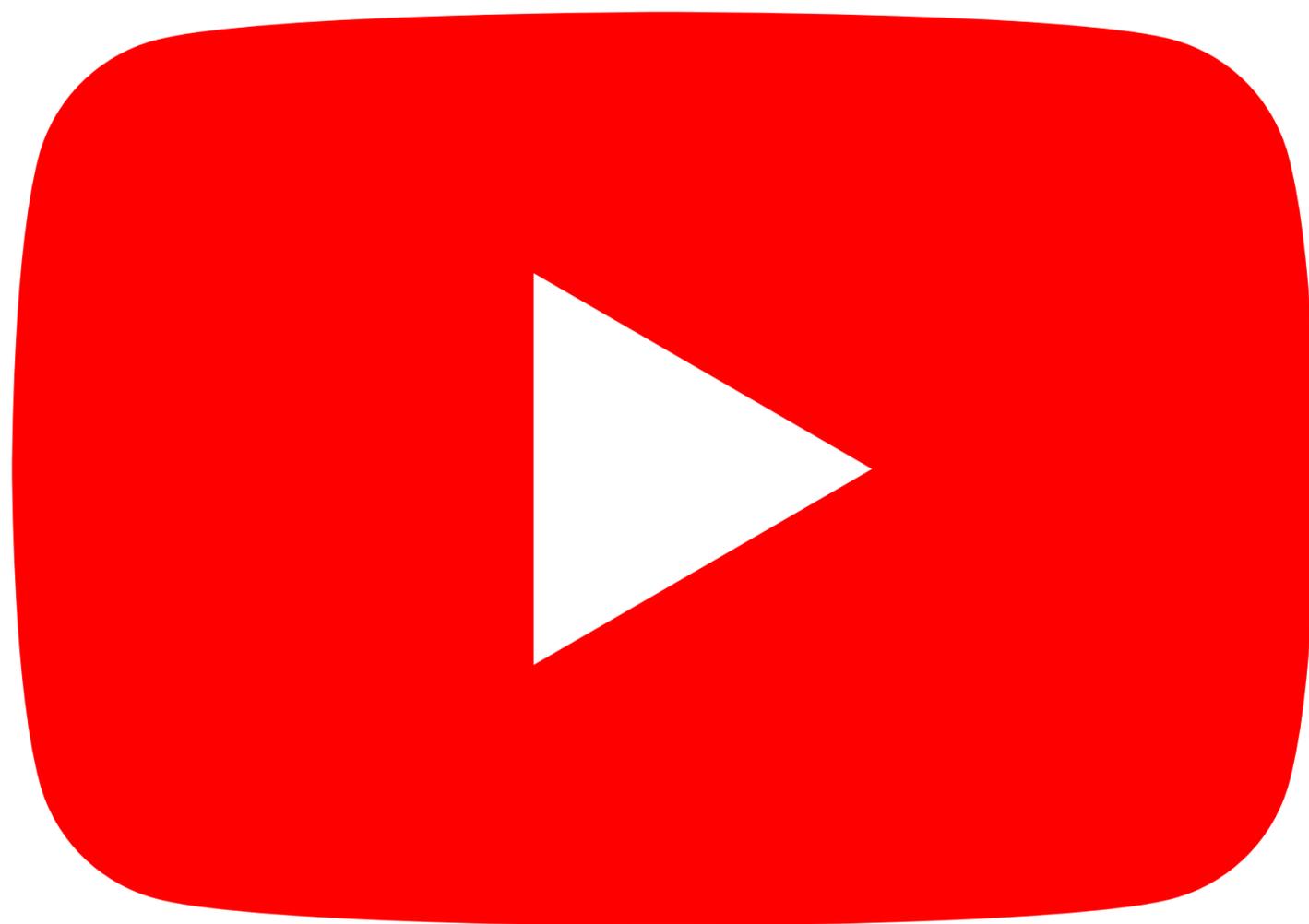


# Practice

The United Kingdom has a Gini coefficient of 43.

Thailand has a Gini coefficient of 38.





Gini and Lorenze Curve - Khan Academy

# Practice Question



# Practice Question

M17/3/ECONO/SP2/ENG/TZ0/XX

	Angola	Namibia
Human Development Index (HDI) rank	149	127
HDI value	0.526	0.626
Population (millions)	24.2	2.4
Land mass (kilometres squared)	1 246 700	825 615
Gross national income (GNI) per capita in purchasing power parity (PPP) terms (US\$)	6540	8577
Real GDP growth rate (%)	4.2	5.3
Inflation rate (%)	7.3	5.3
Life expectancy at birth (years)	52	64
Expenditure on health, public (% of GDP)	3.8	7.7
Expenditure on education, public (% of GDP)	3.5	8.5
Gini coefficient	0.43	0.60
Population below poverty line (%)	40.5	27.8

[Sources: adapted from [www.commonswikimedia.org](http://www.commonswikimedia.org), 14 August 2014; *The World Factbook*, Country Reports, Central Intelligence Agency, 2015; [www.databank.worldbank.org](http://www.databank.worldbank.org), accessed 13 August 2015 and [www.cia.gov](http://www.cia.gov), accessed 13 August 2015]

(b) Angola and Namibia have different Gini coefficient values. Using a Lorenz curve diagram, explain what this means (Figure 1).

[4]

# Mark Scheme

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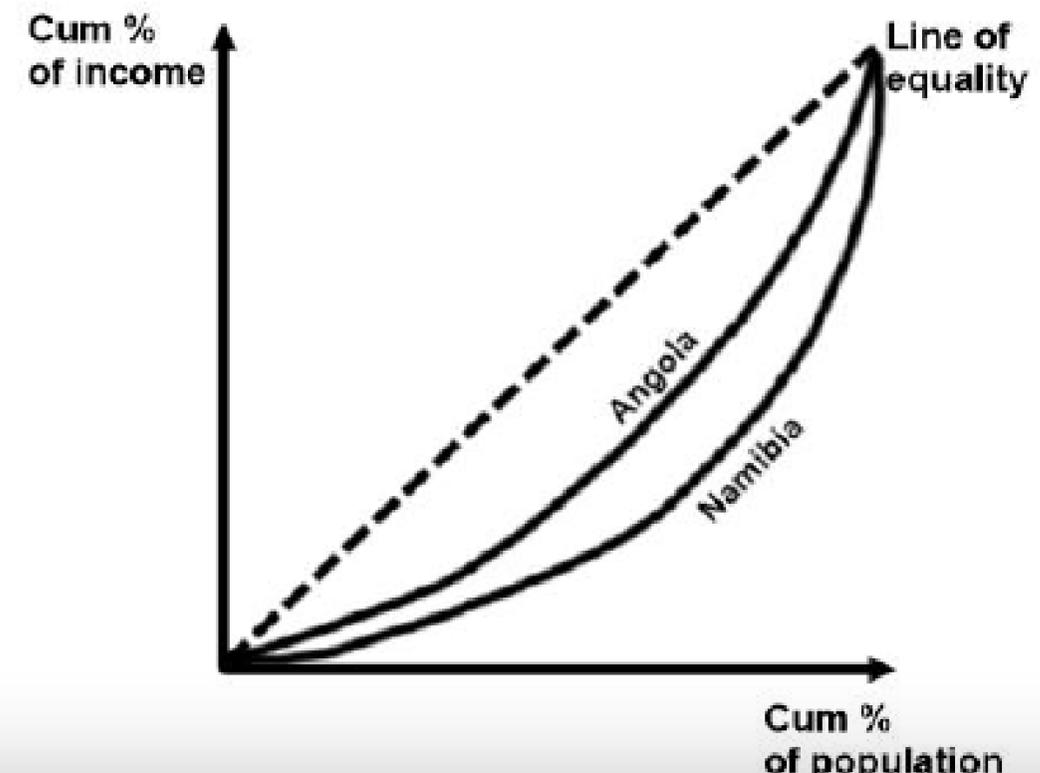
(b) Angola and Namibia have different Gini coefficient values. Using a Lorenz curve diagram, explain what this means (Figure 1).

[4]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>The written response is limited.</i>	1–2
	For drawing a clearly labelled Lorenz curve diagram showing the curve for Angola to be closer to the line of equality than the curve for Namibia or for an explanation that the lower Gini coefficient value for Angola means that income distribution is more equal in Angola than in Namibia.	
2	<i>The written response is accurate.</i>	3–4
	For drawing a clearly labelled Lorenz curve diagram showing the curve for Angola to be closer to the line of equality than the curve for Namibia and for an explanation that the lower Gini coefficient value for Angola means that income distribution is more equal in Angola than in Namibia.	

*Candidates who incorrectly label diagrams can receive a maximum of [3].*

*For Lorenz curve diagram, the vertical axis should be labelled cumulative % of income or % of income and the horizontal axis should be cumulative % of population or % of population. It is not necessary to provide a label on the "line of absolute equality". There should be labels on the Lorenz curves for Angola and Namibia. A title is not necessary.*



# The Lorenz Curve from Quintile

Data

(HL Only)



# Quintile Data

To represent the income distribution more accurately, quintile data is used by dividing the population into 5 groups from poorest 20% to the richest 20%.



Quintile Data for Income Distribution of Ecuador

	Poorest 20%	Second 20%	Third 20%	Fourth 20%	Richest 20%
Ecuador	5%	9%	20%	25%	41%
Cumulative Total Income	5%	5% + 9% 14%	14% + 20% 34%	34% + 25% 59%	59% + 41% 100%

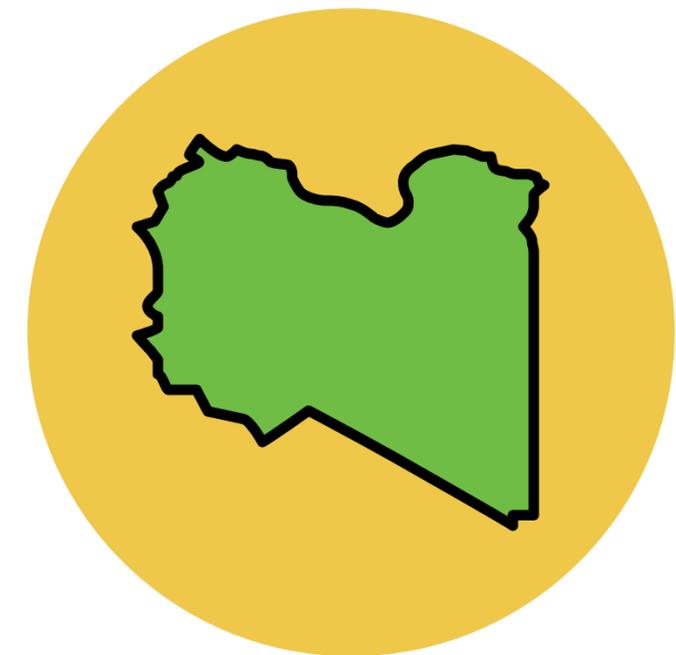


# Practice

Plot the Lorenz Curve for Libya using the Quintile Data Below

Quintile Data for Income Distribution of Libya

	Poorest 20%	Second 20%	Third 20%	Fourth 20%	Richest 20%
Libya	10	16	18	22	34



# Absolute vs Relative Poverty



# Absolute vs Relative

## Absolute Poverty

Poverty where people earn below internationally defined levels of income (USD 1.90 per day). People in absolute poverty lack access to basic necessities (food, education, shelter, etc.).



## Relative Poverty

Making below the average level of income relative to their specific country.



# Measuring Poverty



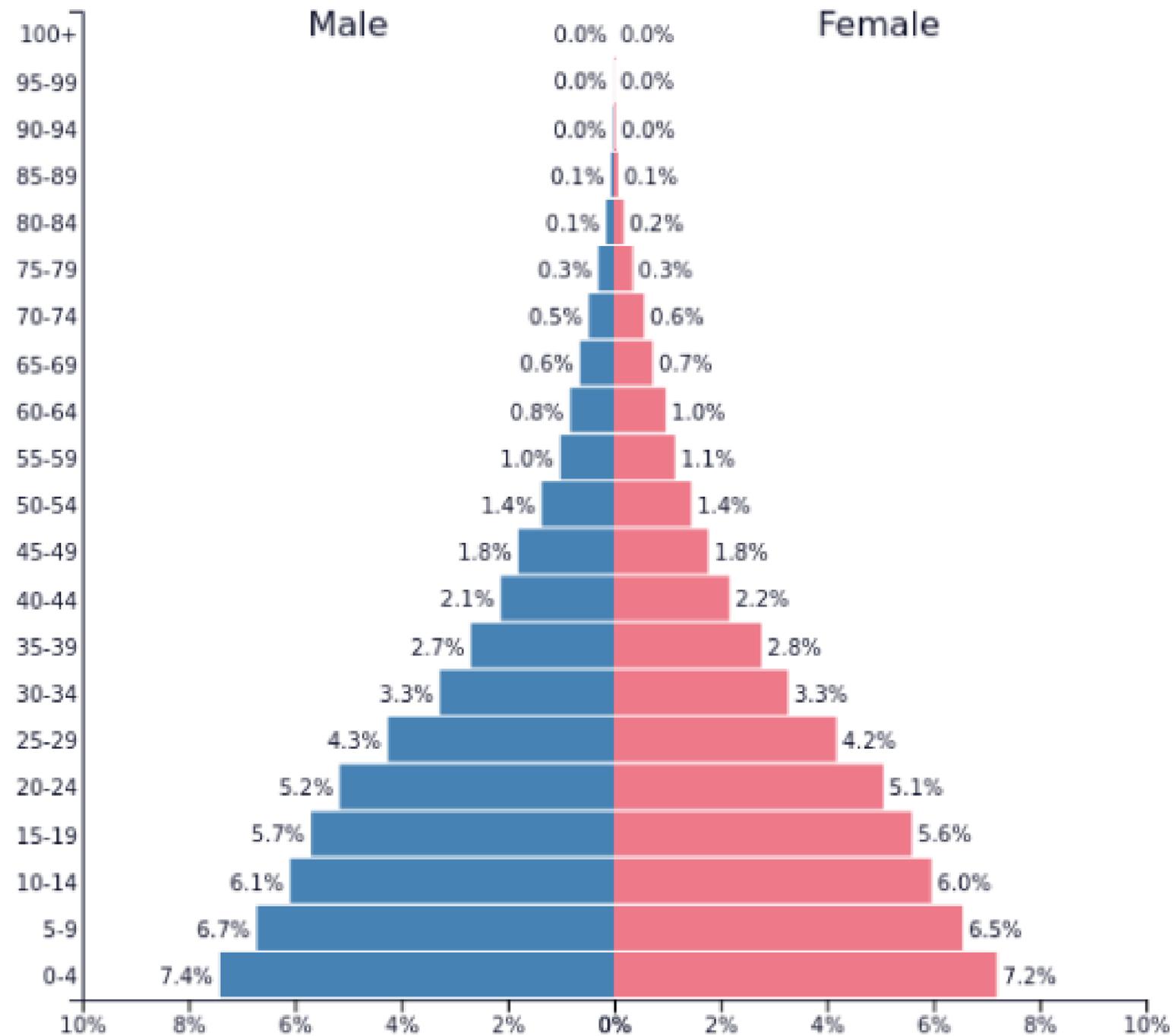
# Single Indicators

**Single indicators use only one factor to measure poverty.**

**Examples of single indicators that aim to measure poverty**

- **International Poverty Line (Absolute Poverty)**
- **Birth Rates**
  - A high birth rate suggests that a large portion of the population is too young to be employed and financially dependent on older adults.
- **Primary Sector Dependency**
  - The Primary Sector refers to sectors of an economy that extracts or uses natural resources such as agriculture, mining, or fishing.
- **Large informal economy**
- **Minimum Income Standards**
  - Each country typically has its own poverty line which can be used to determine the number of people in poverty.

# Birth Rate Example



PopulationPyramid.net

Ethiopia - 2020  
Population: **114,963,583**

# Composite Indicators

**Composite indicators compile multiple single indicators to form an accurate measure of the multi-dimensional concepts.**

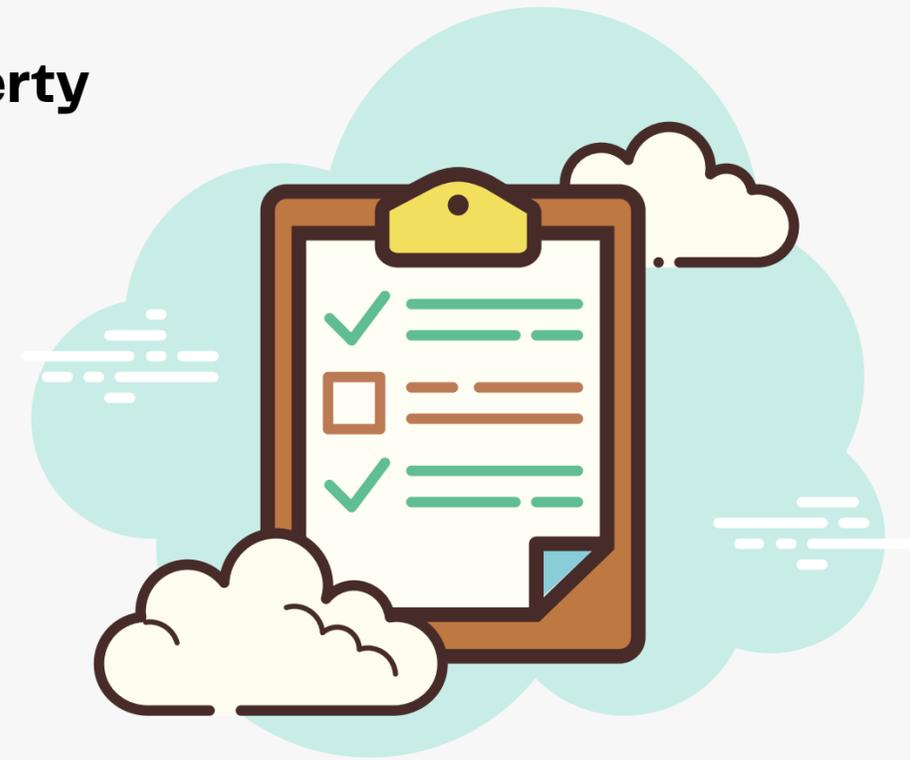
## **Examples of composite indicators that measure poverty**

- **Human Development Index (HDI)**

- Used by the UN to determine the quality of life.
- **3 main factors include:**
  - GDP Per Capita (Economic-Well Being)
  - Life Expectancy (Healthcare)
  - Average and Expected Years of Schooling (Education)

- **Multidimensional Poverty Index (MPI)**

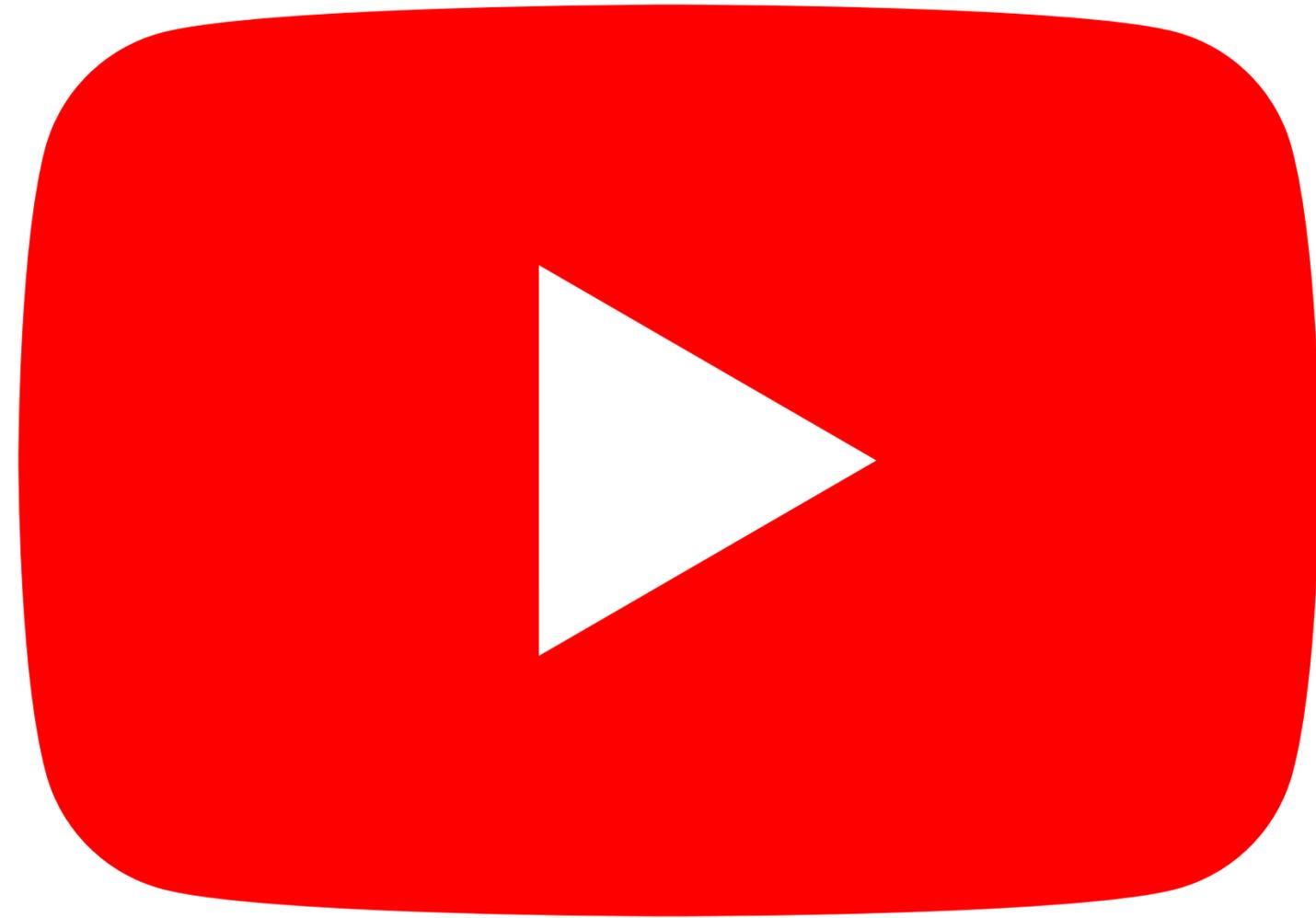
- Also used by the UN to measure poverty.
- Measures a wide variety of single indicators such as health, education, living-standards, sanitation, clean drinking water, electricity, etc.



# MPI

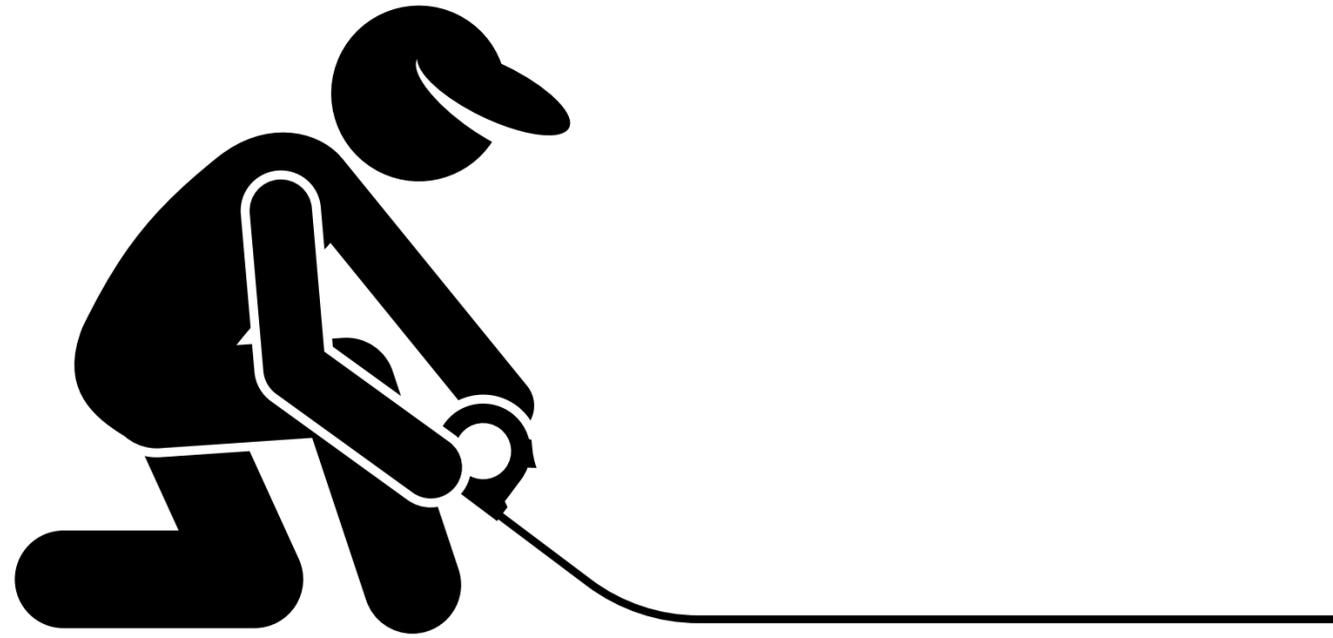
Dimensions of Poverty	Indicator	Deprived if living in the household where...	Weight
Health	Nutrition	Any adult under 70 years of age or any child for whom there is nutritional information is undernourished. <sup>1</sup>	1/6
	Child mortality	Any child under the age of 18 years has died in the family in the five-year period preceding the survey. <sup>2,3</sup>	1/6
Education	Years of schooling	No household member aged 'school entrance age + six' <sup>4</sup> years or older has completed six years of schooling.	1/6
	School attendance	Any school-aged child is not attending school up to the age at which he/she would complete class eight. <sup>5</sup>	1/6
Standard of living	Cooking Fuel	The household cooks with dung, wood, charcoal or coal.	1/18
	Sanitation	The household's sanitation facility is not improved (according to SDG guidelines) or it is improved but shared with other households. <sup>6</sup>	1/18
	Drinking Water	The household does not have access to improved drinking water (according to SDG guidelines) or improved drinking water is at least a 30-minute walk from home, round trip. <sup>7</sup>	1/18
	Electricity	The household has no electricity. <sup>8</sup>	1/18
	Housing	At least one of the three housing materials for roof, walls and floor are inadequate: the floor is of natural materials and/or the roof and/or walls are of natural or rudimentary materials. <sup>9</sup>	1/18
	Assets	The household does not own more than one of these assets: radio, television, telephone, computer, animal cart, bicycle, motorbike or refrigerator, and does not own a car or truck. <sup>10</sup>	1/18

Source: [OPHI 2020 MPI](https://hdr.undp.org/en/2020-MPI)  
<https://hdr.undp.org/en/2020-MPI>



United 4 Social Change - Human Development Index

# Challenges in Measuring Poverty



**Take 2-3 minutes and discuss with a partner what you believe the difficulties researchers face when measuring poverty.**



# Challenges in Measuring Poverty

- **Imperfect Data**

- **Intra-Household Poverty**

- By measuring poverty on a household basis, individual poverty is not included. For example, women in households may lack access to resources more than their male counterparts.

- **Urban Poverty**

- Most poverty measurements are based on rural poverty and don't take into account to goods and services available in cities (public transport, water fountains, public bathrooms).

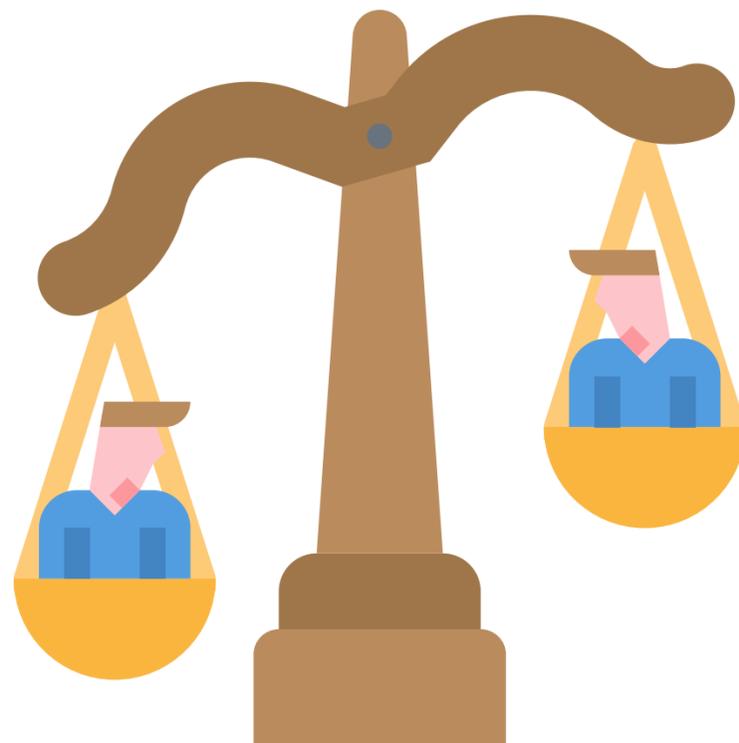
- **Disaggregated Poverty Data**

- **Minimum Income Standards**

- Each country typically has its own poverty line which can be used to determine the number of people in poverty.



# Causes of Economic Inequality and Poverty



# Causes of Poverty and Economic Inequality

## Inequality of Opportunity

People in the same society don't have access to the same opportunities. Positions in society with wealth, power, and status are more likely to have greater opportunities.

## Resource Ownership

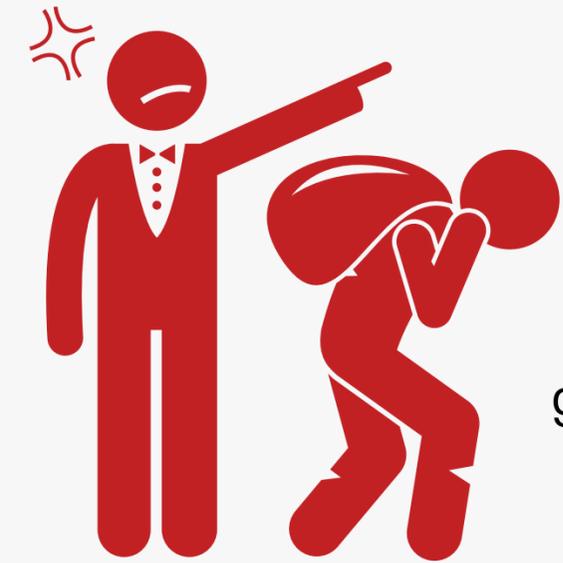
Wealth inherited in the form of stocks or property gives some greater advantages compared to low-income citizens.

## Different levels of Human Capital

State sectors often struggle to ensure a high quality of education leading to low levels of human capital in society. Those able to afford private education are likely to have higher levels of human capital.



# Causes of Poverty and Economic Inequality



## Discrimination

Discrimination through hiring practices and payment for services often leads to certain groups being disproportionately disadvantaged. (Gender Pay Gap, Hiring demographics)

## Unequal Status and Power

Cultural status and power play a large role in inequality. Cultural ideas about certain groups being "better" than others determine relationships, jobs, school placements, etc.

## Government Taxation and Benefits

Certain policies favor individuals with high wealth and income. Those that have the majority of money in stocks/bonds pay a lower percentage of capital gains compared to income.



# Causes of Poverty and Economic Inequality

## Globalization and Technological Change

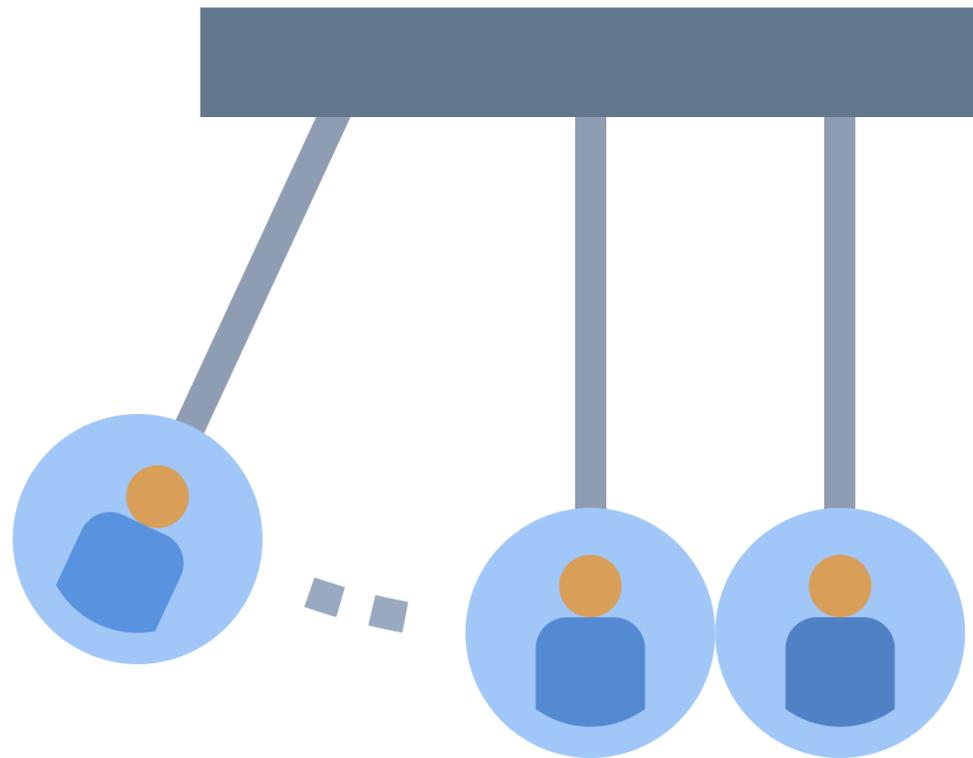
With increasing globalization and changes in technology, certain countries are left behind without desirable training or skills leading to increases in unemployment.

## Market-Based Supply-Side Policies

These policies aim to increase LRAS by increasing competition, labour reform, and increasing incentives. However, these policies can also further inequality. (Examples: Tax/Business Cuts, reducing unemployment, reducing minimum wage)



# The Impact of Income and Wealth Inequality



# Impact of Income and Wealth Inequality

## Economic Growth

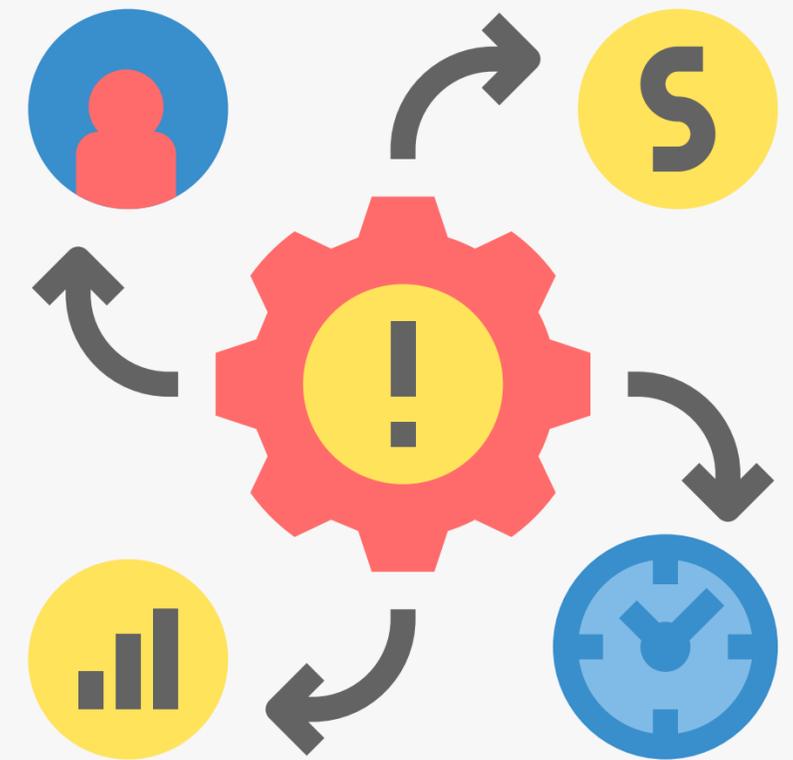
Economic growth is lower with poor income equality. Consumption and productivity are lower than potential.

## Standards of Living

Reductions in income lead to a fall in standards of living and serve as an obstacle to economic development.

## Social Stability

Individuals and countries who do not have adequate levels of health care or education struggle in their respective societies.



# The Role of The Government to Reduce Poverty, Income Inequality, and Wealth Inequality



# Taxation



# Taxation

**Taxation has the ability to aid or further income and wealth inequality.**

**Indirect Taxes** – Regressive in nature and theoretically increase economic inequality.

**Direct Taxes** – Progressive in nature and has the ability to redirect money to areas of need.



# Taxation

## Direct Taxation to Reduce Economic Inequality

**Personal Income Tax** – Takes a higher portion of income from high earners and redistributes money to lower earners.

**Corporate Income Tax** – Similar to Personal Income Tax but for corporations. Although corporate tax cuts could theoretically lead to greater employment, research estimated the richest 1% benefit the most.

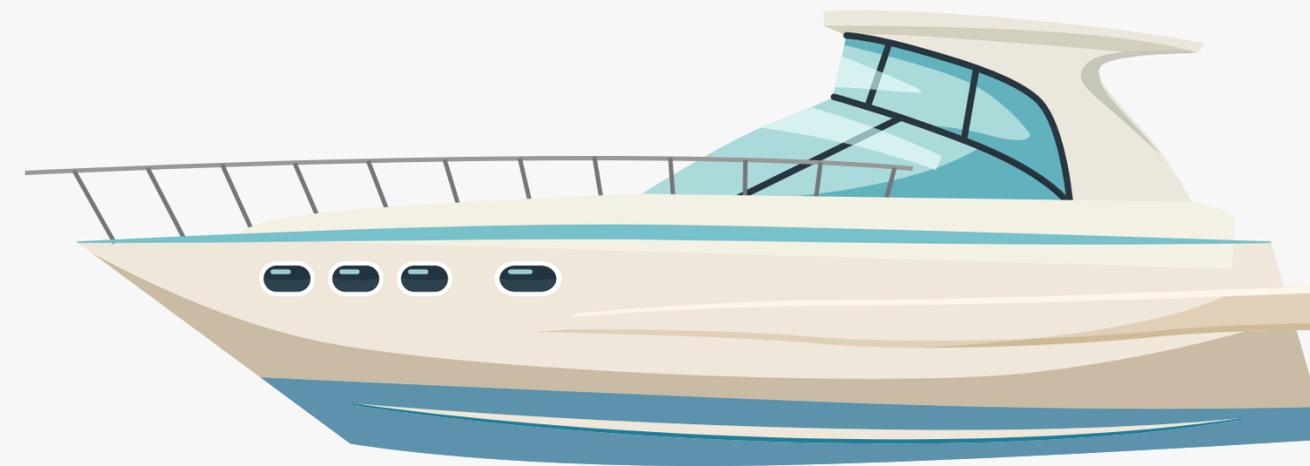
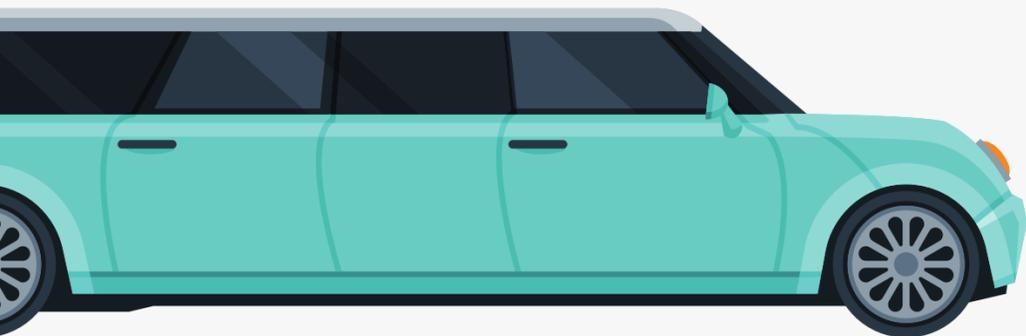
**Wealth Tax** – Wealth taxes are directed at an individual's assets such as real estate, cash, bank deposits, etc. The goal of a wealth tax is to reduce the accumulation of wealth and redistribute money to individuals with low wealth.



# Taxation

## Indirect Taxation to Reduce Economic Inequality

**Luxury Tax** – Reduced VAT/GST tax on necessity goods such as food, water, medical care, or public transport aims to reduce the proportion of tax paid by poor households.



# Government Policies



# Inequality of Human Capital

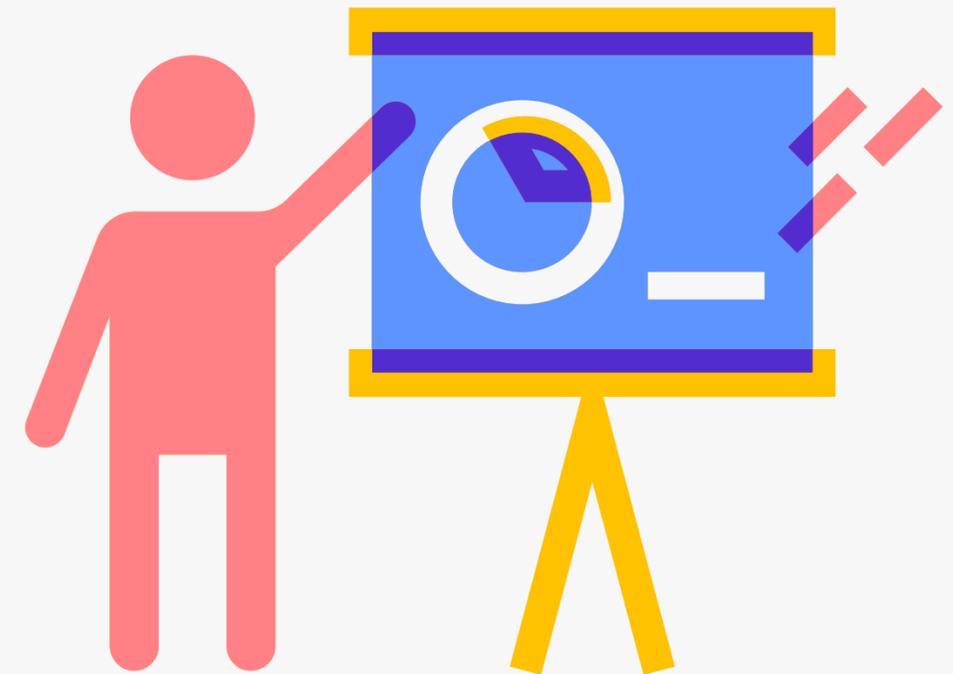
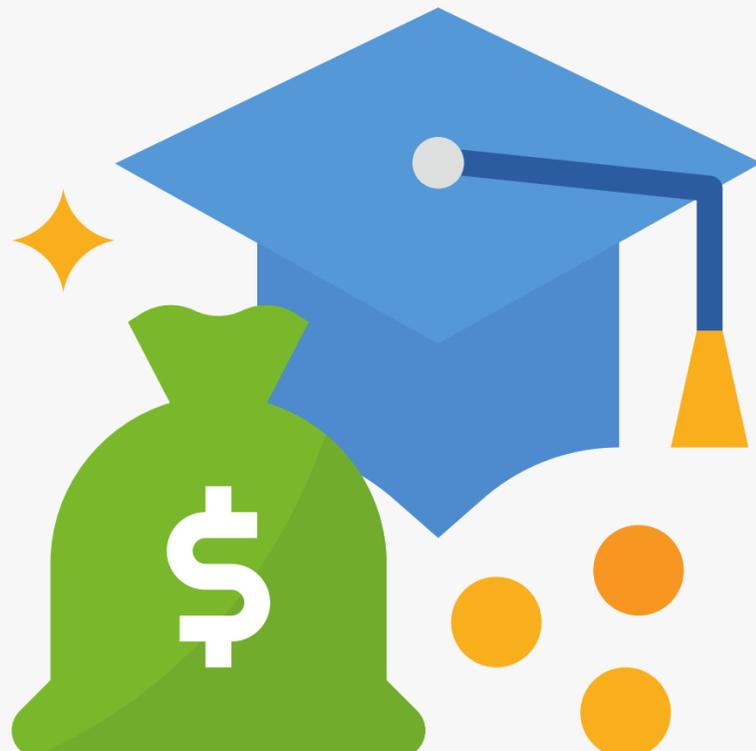
**Governments may try to ensure fair access to resources to reduce inequality**

**Funding for certain schools in low-income areas**

**Scholarships, grants, loans, or free university**

**Providing some type of universal access to health care**

**Offering training programs and job assistance**



# Inequality of Human Capital

Governments may use **Transfer Payments** (direct payments from the government to individuals to redistribute income)

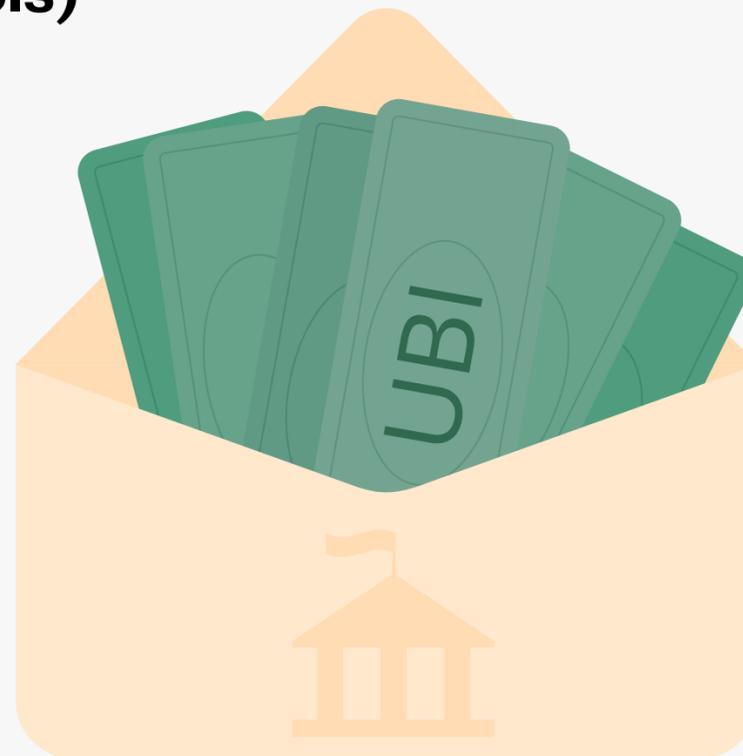
## Types of Transfer Payments

**Pensions for older individuals**

**Unemployment benefits**

**Child allowances (free meals at schools)**

**Universal Basic Income (UBI)**



# Inequality of Human Capital

## Additional government policies to reduce economic inequality

### Targeted spending

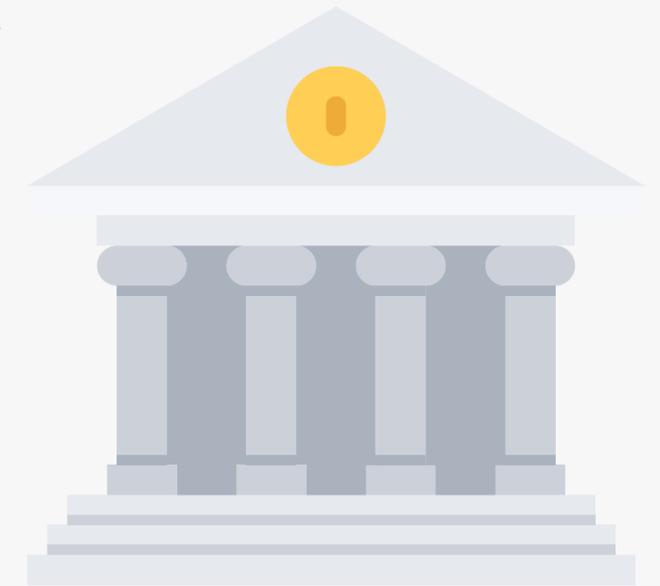
Spending on education, health care, and infrastructure in low-income communities

### Policies to Reduce Discrimination

Governments may implement legislation to protect certain groups typically discriminated against such as racial minorities, senior citizens, and those who identify as a non-dominant gender.

### Minimum Wages

While minimum wages do result in higher levels of unemployment, it also results in higher standards of living for those employed.



# Practice Question



# Paper 1

**M18/03/ECONO/SP1/ENG/TZ1/XX**

3. (a) Explain how income inequality might be measured in a country. [10]
- (b) Evaluate the view that the best way to reduce income inequality in a country is by using progressive taxation. [15]



# Mark Scheme

(a) Explain how income inequality might be measured in a country.

[10]

*Answers may include:*

- definition of income inequality
- diagram to show a Lorenz curve and how the Gini co-efficient is derived
- explanation of the methods used to measure income inequality: Lorenz curve, Gini co-efficient
- examples of countries with income inequality.

# Mark Scheme

- (b) Evaluate the view that the best way to reduce income inequality in a country is by using progressive taxation.

[15]

*Answers may include:*

- definition of progressive taxation, income inequality
- diagram to show how progressive taxation could decrease income inequality (inward shift of the Lorenz Curve), or a progressive tax diagram
- explanation of how progressive taxation reduces the disposable income gap between people of lower and higher incomes
- examples of where or how progressive taxation has been used
- synthesis or evaluation.

*Evaluation may include: the impact of progressive taxation in reducing income inequality including:*

tax avoidance/tax evasion; disincentive effects; effects on efficiency; consideration of alternative approaches such as government spending on merit goods/transfer payments, minimum wage, consideration of 'best'.

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