



# THEME 3

## INCOME INEQUALITY AND REDISTRIBUTION

# OVERVIEW THEME 3

## INCOME INEQUALITY AND REDISTRIBUTION

- H1: INCOME INEQUALITY
- H2: INCOME REDISTRIBUTION

# **CHAPTER 1 (LPD 6): INCOME INEQUALITY**

- 1. BASICS: WHAT IS INCOME?**
- 2. INCOME DISTRIBUTION**
- 3. NUMERICAL MEASUREMENT OF INCOME INEQUALITY**
- 4. GRAPHICAL VISUALISATION OF INCOME INEQUALITY**
- 5. CAUSES OF INCOME INEQUALITY**

# **CHAPTER 1 (LPD 6): INCOME INEQUALITY**

## **6. WEALTH INEQUALITY**

# 1. BASICS: WHAT IS INCOME?

## 1.1 CASE-STUDY

Read the following news headlines

**(1) INTEREST RATES ON  
THE RISE**



**(2) AVERAGE GROSS SALARY IN  
BELGIUM APPROXIMATELY €3,800**



**(3) BELGIAN FARMERS PAY  
€343 PER HECTARE IN  
RENT EACH YEAR**



**Question: Which factors of production can we recognise in the examples?**

HEADLINE NUMBER	PRODUCTION FACTOR

## 1.2 INCOME

Income is the remuneration made available to the owners of the factors of production.

Capital: rent, interest, dividend, ...

Labour: wage/salary

Nature: rent

**Remark 1:** “Entrepreneurship” is considered part of the production factor “labour”. The remuneration for entrepreneurship is profit.

In this theme, we focus solely on the incomes of natural persons.

**Remark 2:** Although the agricultural sector is shrinking, rent remains a source of income for many landowners. In 2023, Belgian farmers paid an average of €343 per hectare per year to rent arable land and €294 per hectare for grassland.

## 1.3 WEALTH

The terms 'income' and 'wealth' are often used interchangeably. However, they are two different concepts.

**Wealth is the sum of possessions of a person (or company).**

**Net wealth is the difference between assets and liabilities.**

Examples of assets include savings, shares, property, antiques, etc.

The link between the two concepts is that assets generate income. And that income in turn causes the assets to grow.

For example, a savings account earns interest. If the interest earned is saved, the savings increase.

**Note: in this theme, we will focus solely on the concept of income.**

## 1.4 TAX DECLARATION

Where can we find data on Belgian incomes?

Belgian incomes are declared in the annual tax declaration.

Every family is obliged to declare their income to the tax authorities each year.



declaration on paper

**TAX***on***WEB**

digital declaration

Complete the sentence:

The three factors of production are...

Explain the difference between income and wealth:

Income is ...

Wealth is...

Answer the following questions:

What is a tax declaration?

What are the two types of tax declaration?



The tax declaration distinguishes between:

Type of income	Examples	
Income from property	Rent	
Income from movable goods	Interest, dividend	
Professional income	Wage/salary	
Miscellaneous income	Gift, inheritance	

NATURE AND CAPITAL

LABOUR

We recognise the various factors of production in the table above.

The categorical income distribution reflects the share of the various factors of production in the national income.

Labour income is crucial and is used for spending more than other types of income.

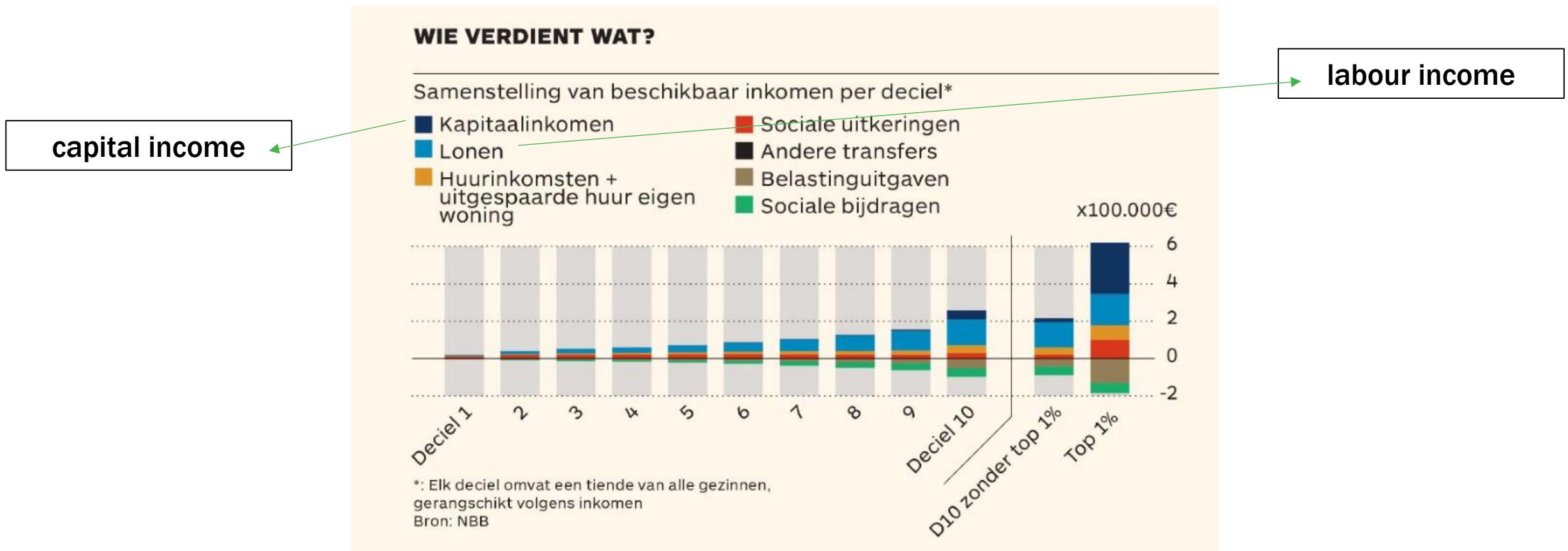
Low labour income can lead to a decline in consumption and vice versa.

The labour income quote is the proportion of labour income in national income.

The labour income quote has declined in recent decades. This decline has mainly benefited capital gains (profits).

A declining labour income quote indicates that companies are spending an increasingly smaller proportion of the added value on the production factor labour. This may mean that production is becoming increasingly capital-intensive. This results in a decline in employment, the rejection of labour and an increase in structural unemployment.

The proportion of labour income versus capital income also varies according to income class.



Capital income rises systematically across income classes, and among the top 1% of earners (with an average annual income of around €430,000), capital income occupies the most important place.

Complete the sentence:

The four types of income are...

Give an example of labour income and capital income:

An example of labour income is ...

An example of capital income is...

Answer the following questions:

What is the categorial income distribution?

What is the labour income quote?



What is the evolution of the labour quote income quote in the recent decades?

What is the impact of this evolution?

Complete the following sentence:

Capital income rises ...

and among the 1% top earners, capital income...



## 2. INCOME DISTRIBUTION

### >>> PERSONAL INCOME DISTRIBUTION

The personal income distribution indicates how a country's income is distributed among its population.

The most common way to do this is to divide household incomes into income classes.

Such an income class is called a decile.

A decile is one tenth of all households classified according to income.

Note: all statistics use net income. This is the taxable income remaining after deducting the costs of earning that income (e.g. costs of travel to work, specific work clothing, etc.).

Below is an example of personal income distribution.  
The deciles are ranked from low income to high income.

DECILES	% DECLAR.	TOTAL NET INCOME		
		UPPER LIMIT (€)	TOTAL AMOUNT (€)	% INCOME
<b>TOTAL</b>	<b>100,00%</b>		<b>254.676.934,997</b>	<b>100,00%</b>
1	10,00%	4.613	1.170.892,418	0,46%
2	10,00%	15.949	7.487.698,856	2,94%
3	10,00%	19.787	12.317.940,808	4,84%
4	10,00%	23.620	14.684.323,310	5,77%
5	10,00%	28.145	17.499.297,463	6,87%
6	10,00%	34.033	20.960.769,234	8,23%
7	10,00%	41.628	25.551.078,057	10,03%
8	10,00%	53.188	31.786.733,944	12,48%
9	10,00%	75.010	42.561.060,061	16,71%
10	10,00%		80.657.140,846	31,67%

lowest incomes

highest incomes

# 3. NUMERICAL MEASUREMENT OF INCOME INEQUALITY

## 3.1 WHAT IS INCOME INEQUALITY?

Income equality means that everyone has the same income.

If incomes are not distributed equally among the population, there is income inequality.

This is measured on the basis of the distribution of personal income (see previous slide).

If income were equal, each decile (10% of tax declarations) would also earn 10% of the national income.

The example shows that this is not the case: the lowest 10% of tax declarations earn 0.46% of income, the lowest 20% earn 3.40%, the lowest 30% earn 8.24%, etc.

The highest 20% of tax declarations earn 48.38%, which is almost half of the national income!

Incomes are therefore unevenly distributed across the population.

Because income distribution is based on tax declarations, we can assume that actual income inequality is even greater...:

- People with no income or with an income that is too low (e.g. student jobs) are tax-exempt.
- Capital income on which withholding tax has already been deducted no longer needs to be declared.
- Tax avoidance and/or tax evasion distort the picture.

Tax avoidance is intended to pay as little tax as possible without breaking the law.

Tax evasion involves fraud and breaking the law.

Complete the sentence:

The personal income distribution indicates...



Answer the following questions:

What is a decile?

Why is income inequality greater than what we observe in the tax declarations?

What is the difference between tax avoidance and tax evasion?

Tax avoidance is...

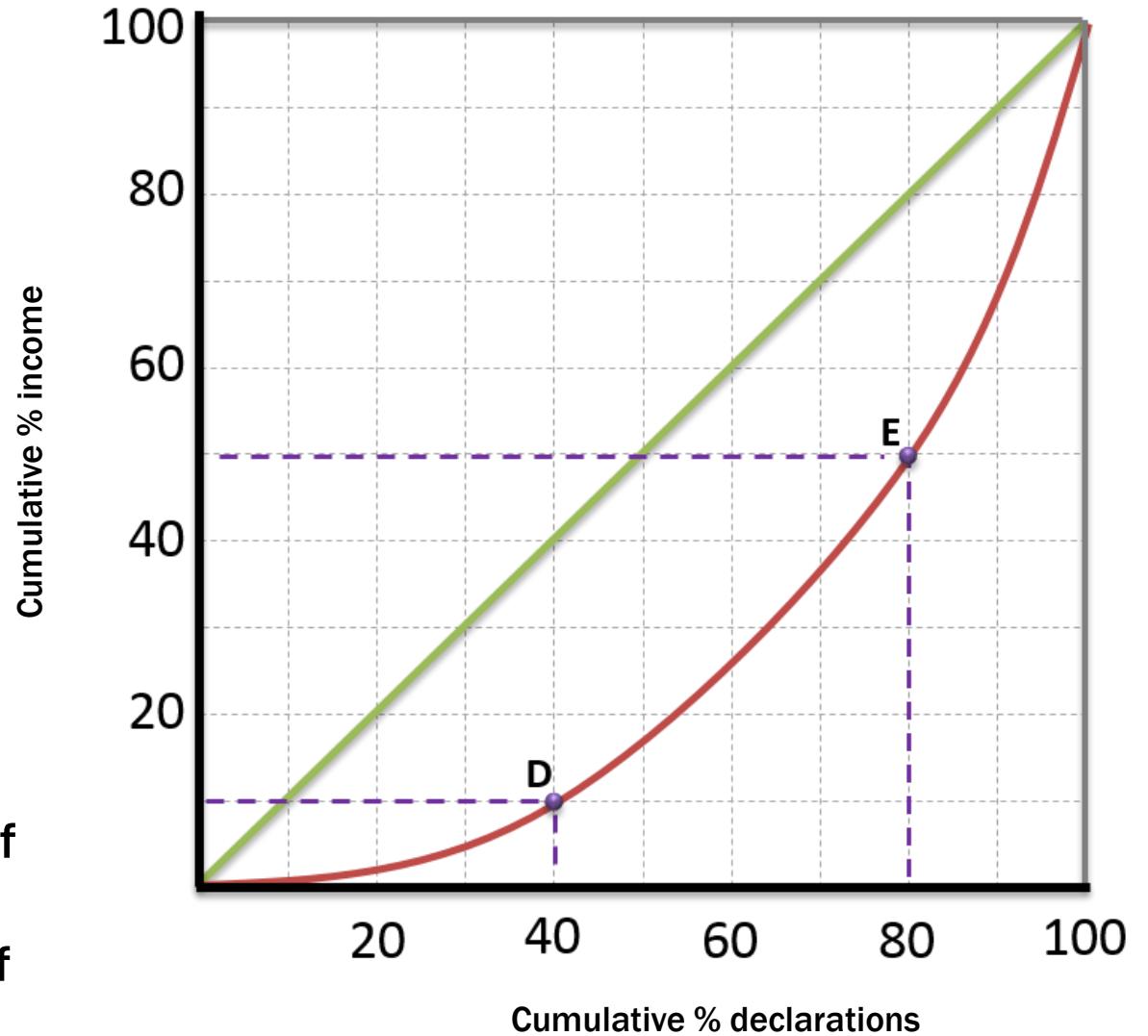
Tax evasion is...

# 4. GRAPHICAL VISUALISATION OF INCOME INEQUALITY

## 4.1 LORENZ CURVE

The Lorenz curve shows a country's income inequality.

- The green line indicates that all incomes are distributed equally (theory)
- The red line or Lorenz curve indicates the actual income distribution:
  - D: 40% of tax declarations earn 10% of income
  - E: 80% of tax declarations earn 50% of income (i.e. the richest 20% of tax declarations earn 50% of income)

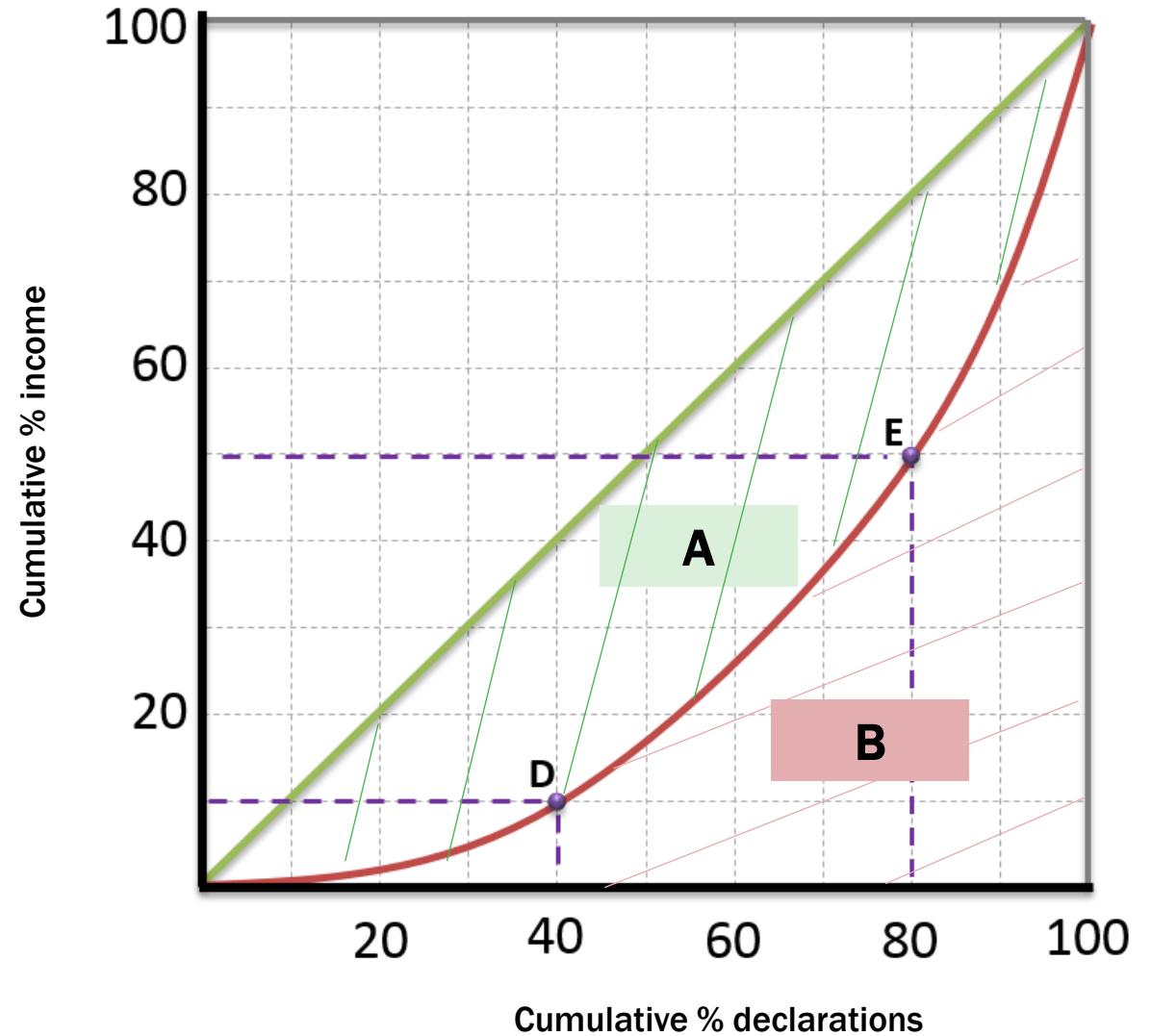


## 4.2 GINI COEFFICIENT

The GINI coefficient reflects a country's income inequality.

The GINI coefficient (GC) is determined by the area between the green line and the Lorenz curve in relation to the entire area under the green line.

$$GC = \frac{\text{surface A}}{\text{surface A} + \text{B}}$$



Four scenarios are possible:

VALUE GC	EXPLANATION
GC = 0	Incomes are distributed completely equally (green line coincides with Lorenz curve)
GC close to 0	Relatively low income inequality (small deviation between green line and Lorenz curve)
GC close to 1	Relatively high income inequality (large deviation between green line and Lorenz curve)
GC = 1	Total income inequality (one family has all the income)

Complete the sentence:

The Lorenz curve and GINI coefficient show...



Answer the following question:

What is the meaning of the four different values of the GINI coefficient?

GC = 0 means...

GC close to 0 means...

GC close to 1 means...

GC = 1 means...

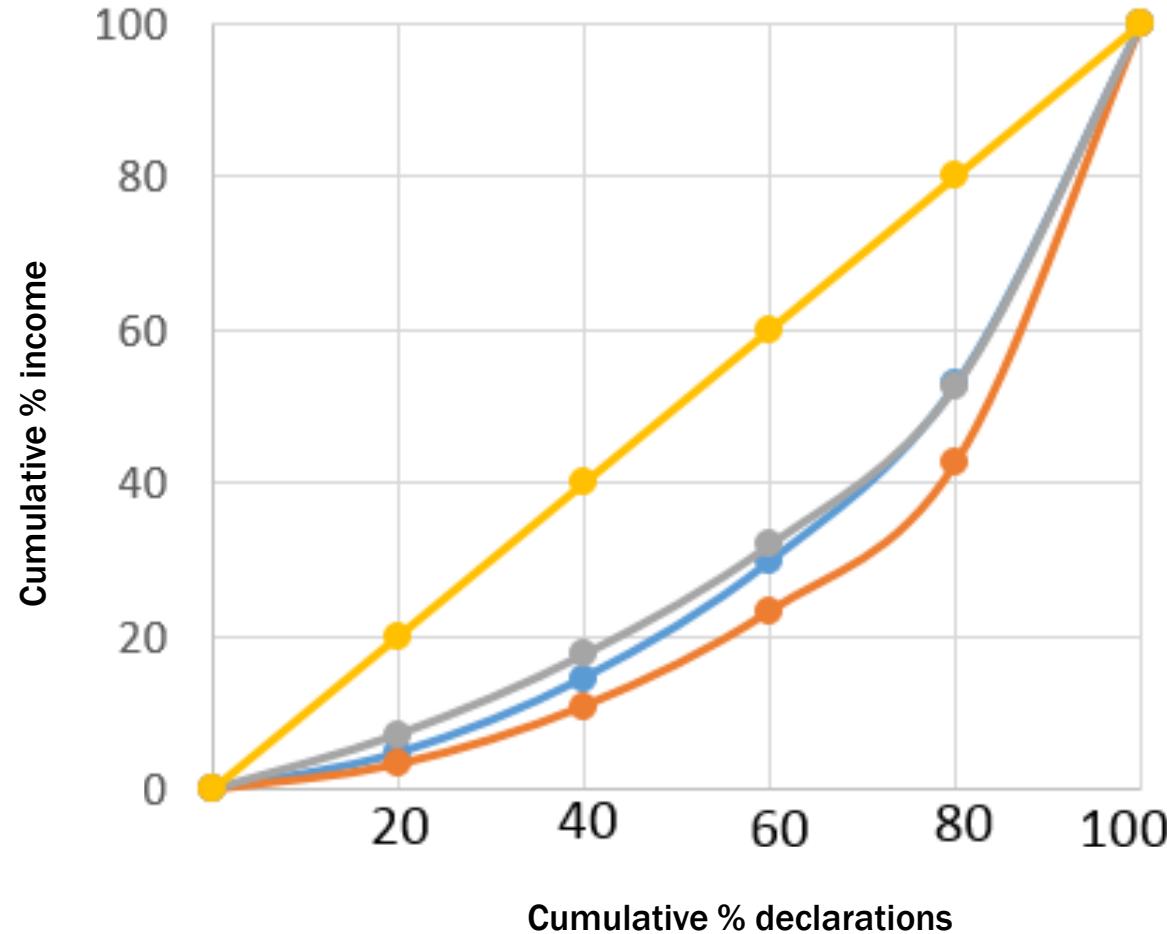
Examples of Lorenz curves and GCs for countries with high income inequality:

Grey: Indonesia  
GC 0,40

Blue: Argentina  
GC 0,43

Red: Brazil  
GC 0,53

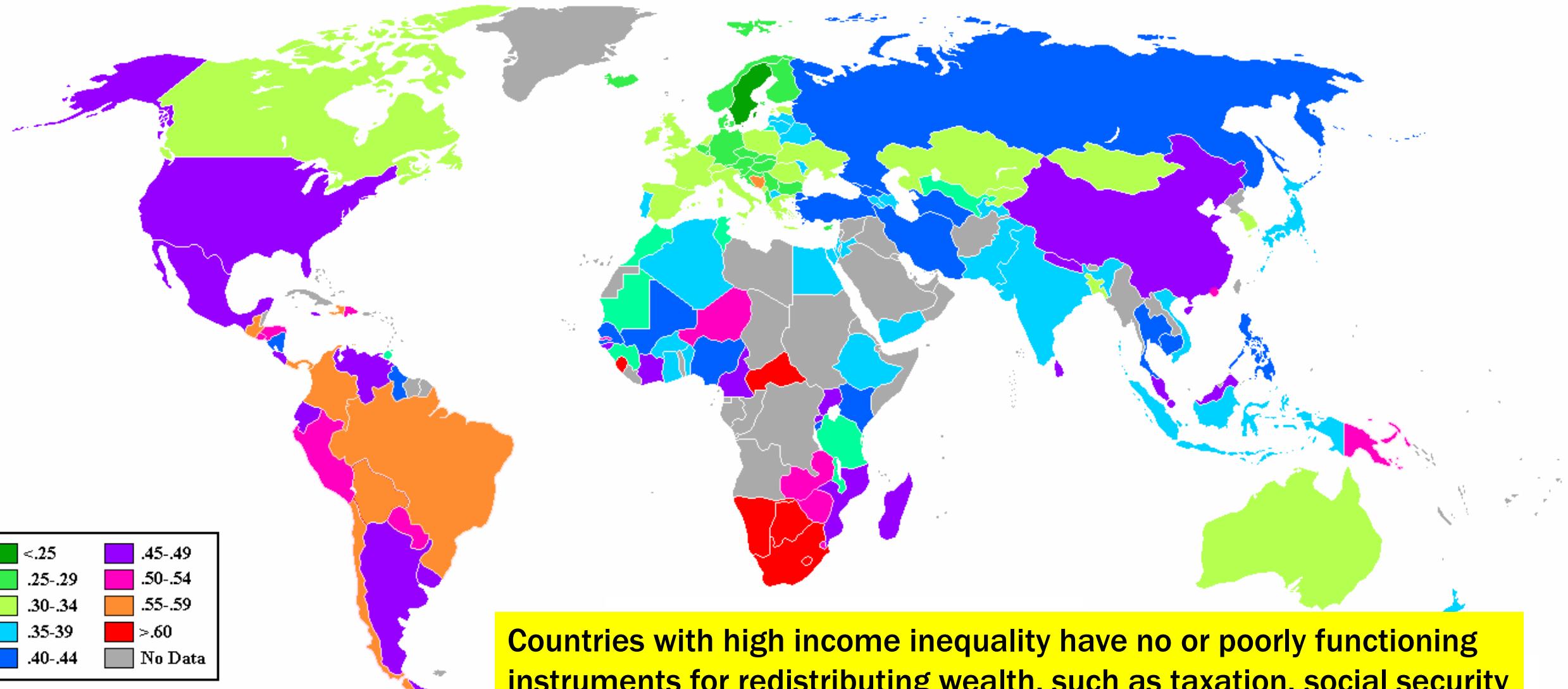
and Indonesia



## Explanations

INDONESIA	ARGENTINA	BRAZIL
Colonial legacy: concentration of land and wealth among a small elite	Historical large-scale land ownership → concentrated wealth	Historical inequality: slavery, colonisation and racism laid an uneven foundation.
Regional differences: wealthier Java and poorer rural areas	Export business: profits flow to a small elite	Land concentration: few people own most of the land.
Unequal access to education and healthcare	Economic instability, inflation and crises affect the poor	Unequal access to education.
Informal labour market: low incomes and no security	Informal labour market without protection	Informal labour market: many precarious, poorly paid jobs.
Little redistribution through taxation or social security	Limited redistribution through taxation or social security	Little redistribution through taxation or social security.

## Map of the GC on a global scale:



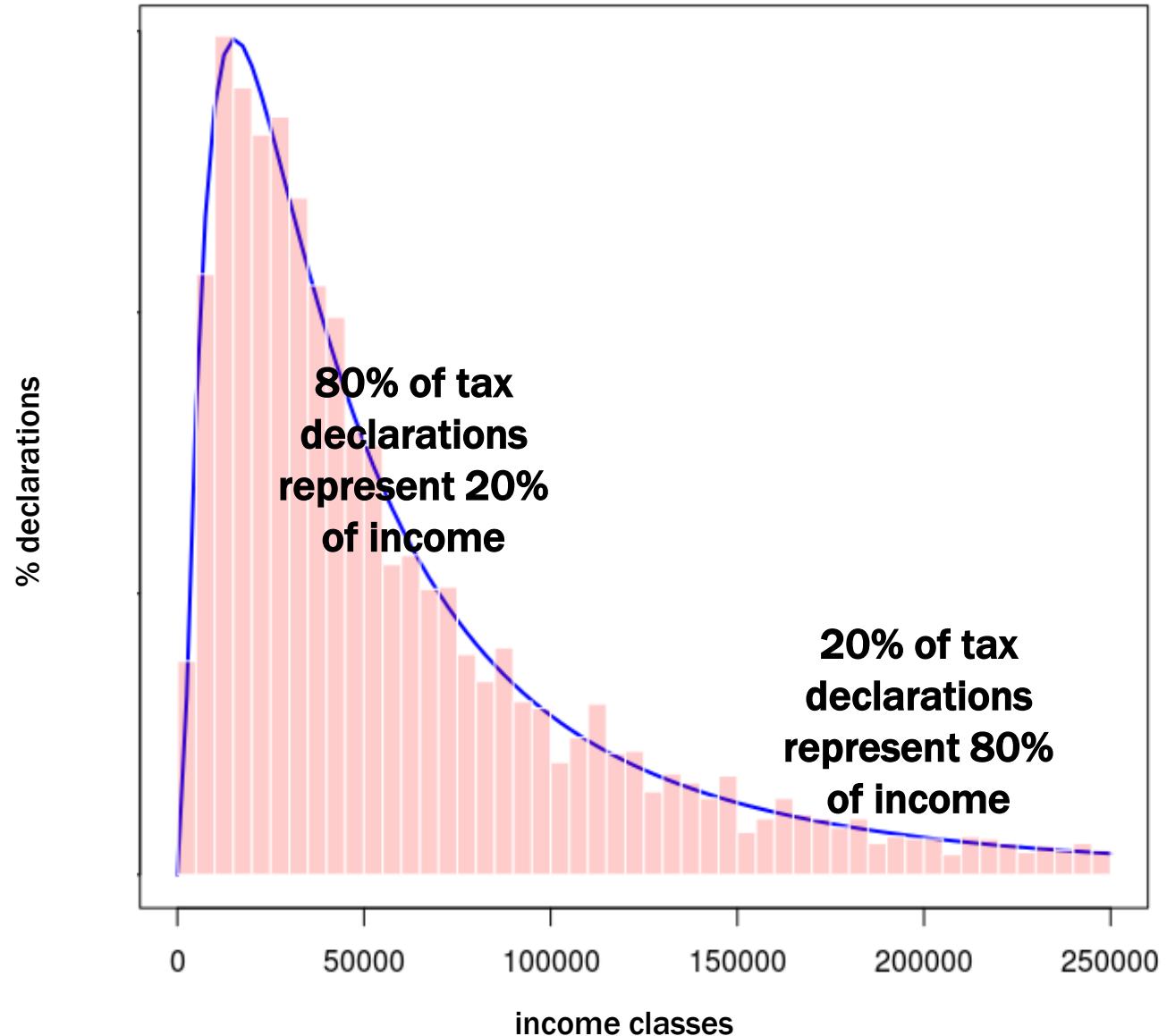
Countries with high income inequality have no or poorly functioning instruments for redistributing wealth, such as taxation, social security and education!

## 4.3 PARETO CURVE

Another graphical representation of income distribution is the Pareto curve.

The Pareto curve shows a “skewed” or unequal income distribution:

- on the left side of the graph are the lowest incomes, which represent the majority of tax declarations
- on the right side of the graph are the highest incomes, which represent the minority of tax declarations



# 5. CAUSES OF INCOME INEQUALITY

(see flip the classroom)

Income inequality can be explained by five factors:

## 1) **Wealth factors**

The greater your financial wealth, the more opportunities you have to increase it, e.g. by investing it. Small amounts of wealth grow much more slowly.

## 2) **Social factors**

The rich or poor environment in which you are born or grow up is a social factor.

### 3) Personal characteristics

Thriftiness is a human trait that can have an impact on increasing income. Entrepreneurial spirit is also crucial.

### 4) Labour market factors

Some jobs are better paid than others. This has to do with qualifications, but can also be linked to sector, seniority (experience), etc.

### 5) Random factors

Luck also plays a role: an inheritance or gift, winning the lottery, etc. can increase your income.

But you can also have bad luck: illness, bankruptcy, divorce, etc. All these events can have a far-reaching impact on your income..

Complete the sentences:

The five causes of income inequality are...

1

2

3

4

5

The reason why some countries have high income inequality is...



## 6. WEALTH INEQUALITY

# **National Bank: income inequality is greater than previously thought**

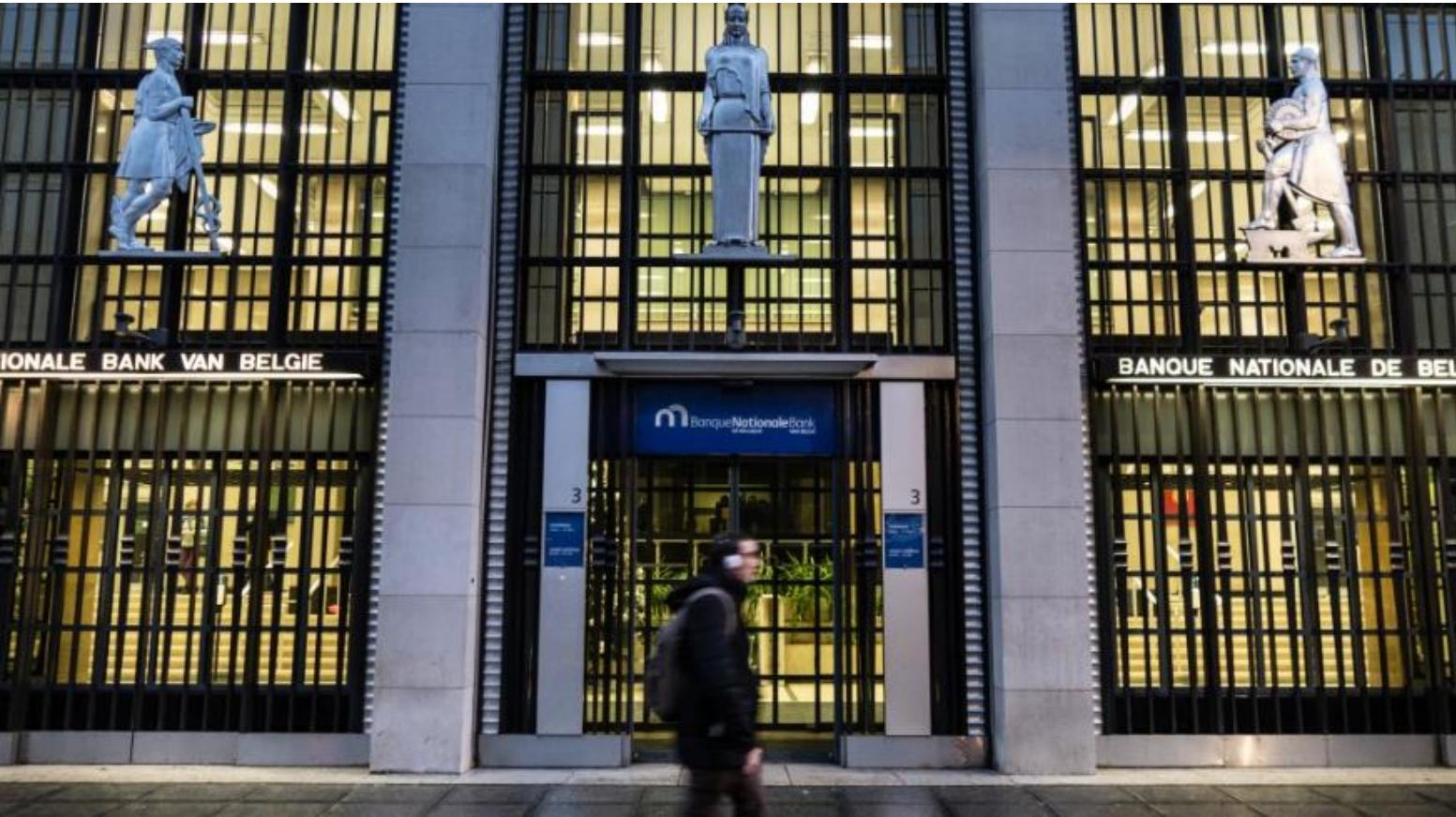
Income inequality in our country is greater than previously thought, a consequence of top incomes more often consisting of lower-taxed capital income. This is according to a study by the National Bank, which provides a more accurate picture of the overall economic situation.

After academic research in the autumn of 2024 had already pointed to greater than expected and rising income inequality in our country, the National Bank of Belgium (NBB) has now come to the same conclusion.

According to new calculations, the Gini coefficient – which measures inequality in a country on a scale of 0 (perfect equality) to 1 – is not 0.25 but 0.3. This refers to disposable income after taxes and social benefits.

A significant skew is particularly evident among the top 1 per cent of incomes. This group is dominated by capital income (dividends, interest), which is typically taxed at a lower rate than earned income.

This also means that the effective tax rate for the top 1 per cent – approximately 29 per cent – is lower than that of a large proportion of Belgian households.



The study reveals a shortcoming in the way in which income inequality has been analysed to date, based solely on information from tax returns.

The NBB also maps wealth and investment income on the basis of household surveys, but this raises another problem: wealthy households have a tendency to underestimate their wealth.

This method is therefore good for capturing earned income, but less reliable for investment income.