

Measuring Development in Turbulent Times  
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# Inequality and development

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# Overview

1. Economic inequality in the post-crisis period
2. Inequality within the nations
3. Economic inequality: Piketty and beyond
4. Inequality in Romania- an issue with many faces

# 1. Economic inequality in the post-crisis period

- Starting with the 1980's, inequality started to rise in the developed world, thus contradicting the "classic" theories in the field that economic growth will eventually lead to more fairness in society
  - E.g. USA: the bottom 90% owns about as much as the top 0.1% (Saez & Zucman, 2016, 23)

*"Economies are more successful when we close the gap between rich and poor and growth is broadly based. A world in which 1% of humanity controls as much wealth as the other 99% will never be stable."* - Barack Obama, 44<sup>th</sup> President of the USA for The Economist, October 8<sup>th</sup>, 2016

*"Inequality can no longer be treated as an afterthought. [...] There doesn't have to be a trade-off between growth and equality."* - Angel Gurría, the Secretary-General of OECD

## 2. Inequality within nations

Inequality within nations

- Kuznets hypothesis (Kuznets, 1955): income inequality and economic growth find themselves in an inverted U-curve relation,

meaning that

when a country becomes advanced in its capitalist development, inequality will automatically decrease

→ his predictions- contradicted by scholars and economic evolutions after the year 2000

# 3. Economic inequality: Piketty and beyond

- Prominent scholars have been preoccupied with the forces of divergence in income (*“The richer one is, the richer he gets”* – Piketty, 2014, 582)
  - **James Meade**- Efficiency, Equality, and the Ownership of Property (1964) - a study of the extreme inequalities in the ownership of property + economic, demographic and social factors + remedies
  - **Atkinson & Harrison** - Distribution of Personal Wealth in Britain (1978)- examination of evidence concerning the extent of and trends in the concentration of wealth
  - **Thomas Piketty** – Capital in the Twenty-First Century (2014)
  - **Branko Milanovic** – Global Inequality (2016) – preoccupation with inequality between nations

# T. Piketty, “Capital in the Twenty-First Century” (2014)

- evolution of income and wealth dating back to the eighteenth century, mainly in France, USA, and Great Britain
- As long as the rate of return exceeds the rate of growth, it tends to accumulate faster, to make inherited wealth more relevant, and to exacerbate inequalities. The income and wealth of the rich will grow faster than the typical income from work
- A society with a high wealth-to annual-income ratio will be a society with an extremely unequal distribution of wealth.
- **As we are currently witnessing a period of reduced growth (in economic and demographic terms), capital gains significant momentum in the detriment of labour**

# “After Piketty. The agenda for economics and inequality” (2017)

- Capital in the Twenty-First Century amounts to  
“a unified field theory of inequality, one that integrates economic growth, the distribution of income between capital and labor, and the distribution of wealth and income among individuals into a single frame” - Paul Krugman

# Global inequality- B. Milanovic (2016)

- Globalization did not put inequality to rest
- Main source of divergence: **winners versus losers of globalisation**
- 1988 - 2008 - real income gains
  - greatest among people around the 50th percentile of the global income distribution (most of them coming from emerging Asian economies), and **among the richest 1%**.
  - lowest gains were recorded for the 80th percentile globally, meaning the lower middle class of the rich world
- Global inequality = the result of differences in development between states, which in turn are determined by domestic inequalities

# Inequality in Romania- an issue with many faces

- Method:

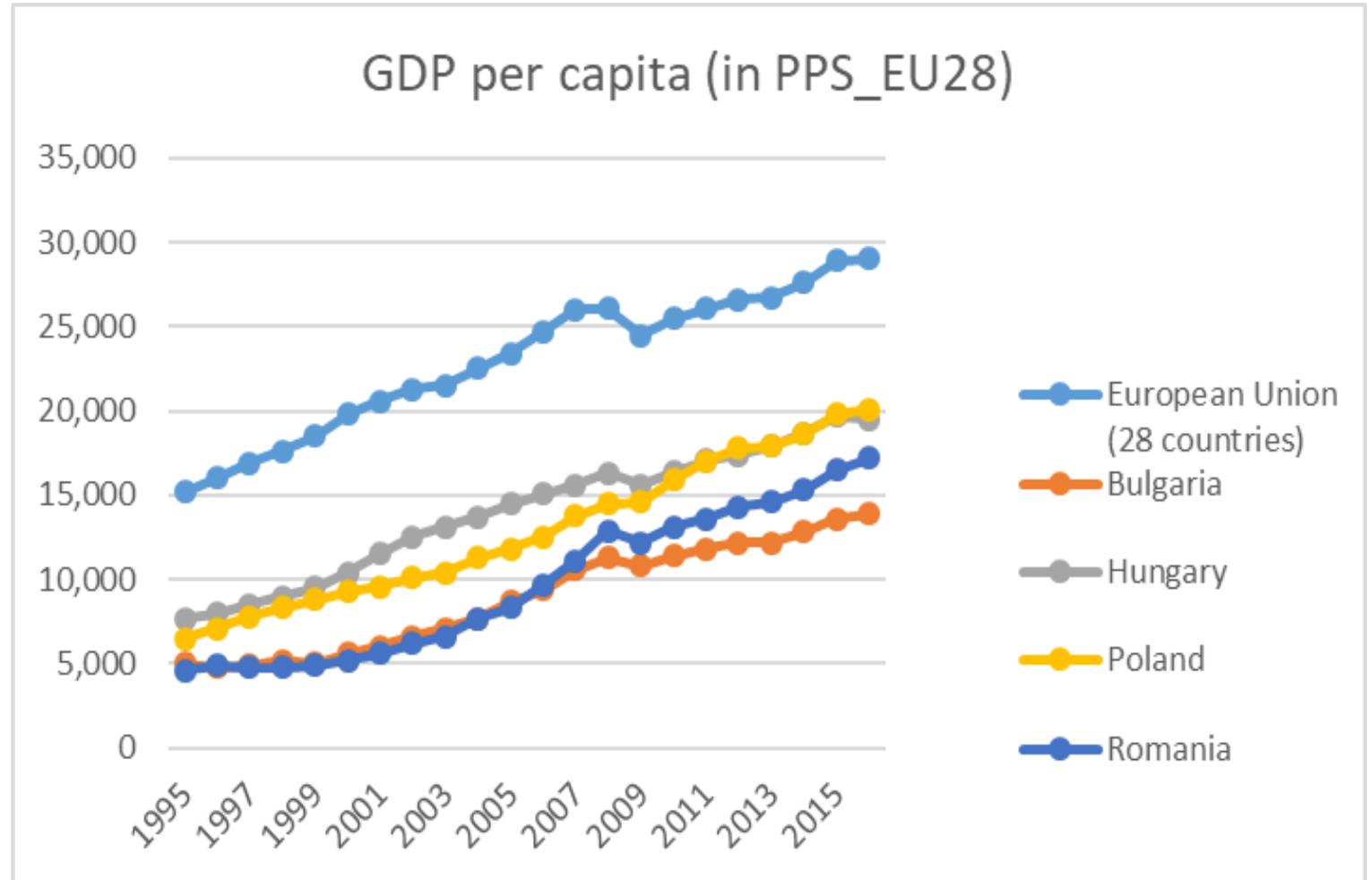
Secondary data analysis, using data from various sources: Eurostat, National Institute of Statistics in Romania, the State of the Nation data aggregator

- Time frame: 1990-present (dependable on the data availability)
- Comparative approach (wherever possible) - Romania compared to peer group (Poland, Hungary, Bulgaria) and to EU average

# Inequalities in economic development

## GDP/capita in PPS

- 1995 – 2006 the cleavage between Romania and the EU grew constantly
- After 2006, the difference remained almost unchanged → EU membership failed in stimulating economic development for our country
- Furthermore, in our peer group, we are second-to last to Bulgaria



Source: Eurostat, real expenditure per capita in PPS\_EU28 (prc\_ppp\_ind)

Data availability: 1995-2016

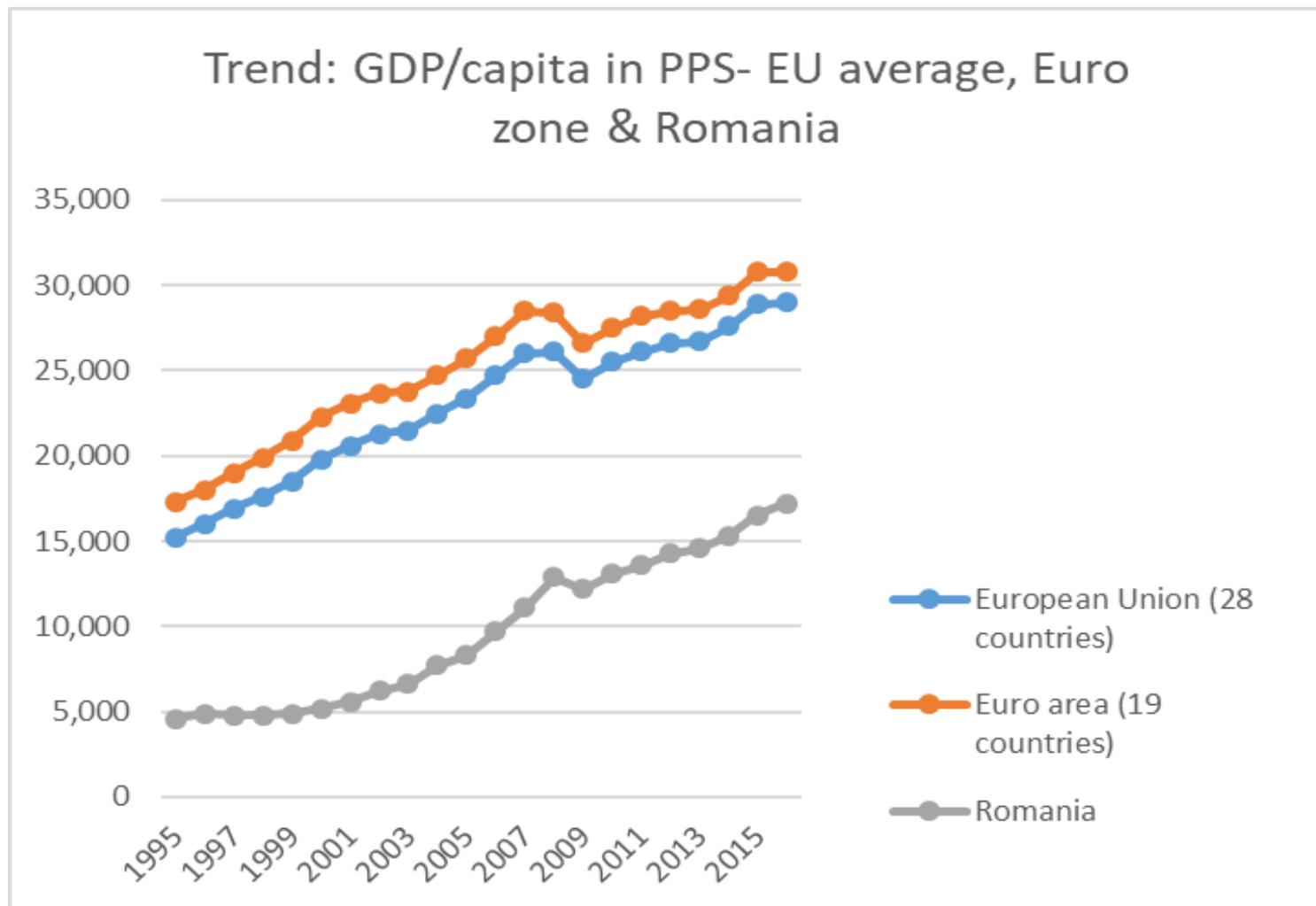
# GDP/capita in PPS

- In the last ten years, little has been done to reduce the discrepancies between Romania and EU average/the Euro zone

2016: Romania's GDP/capita in PPS is

- 59% of EU28 average GDP/capita
- 56% of Eurozone average /capita

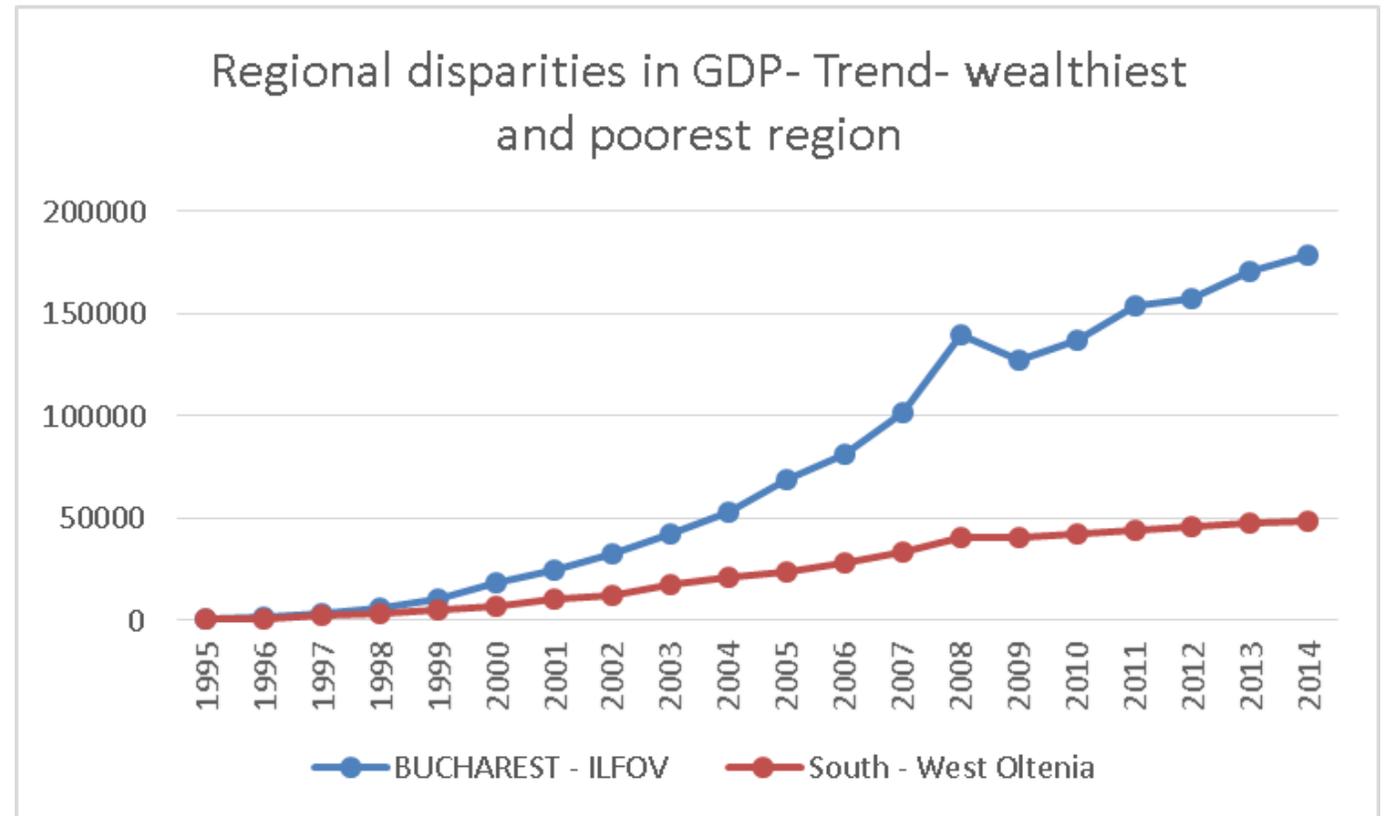
Aggravating fact: Romania's population decreased during this time, due to migration and low birth rate



Source: Eurostat, real expenditure per capita in PPS\_EU28 (prc\_ppp\_ind)  
Data availability: 1995-2016

# Regional inequalities in GDP (NUTS2- Romania)

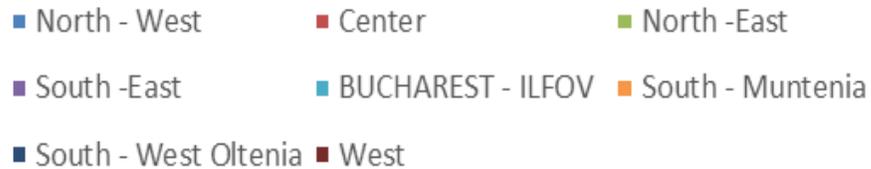
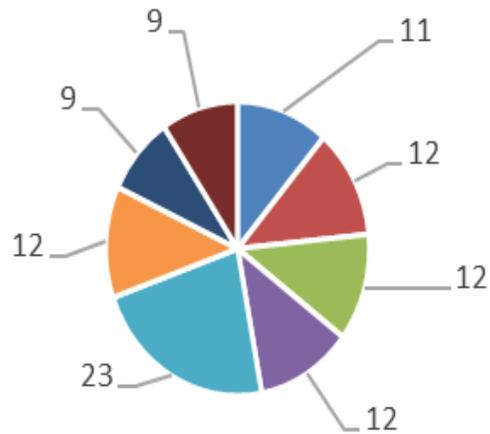
- Striking regional differences within Romania
- Uneven development
- Since 1995, the difference between Romania's wealthiest and poorest region increased constantly
- 1995-2014: The gap size increased 280 times
- 2014: The GDP of South-West Oltenia was 3.8 times lower than the GDP of Bucharest-Ilfov
- The economic dependency of the Bucharest-Ilfov region grew over time



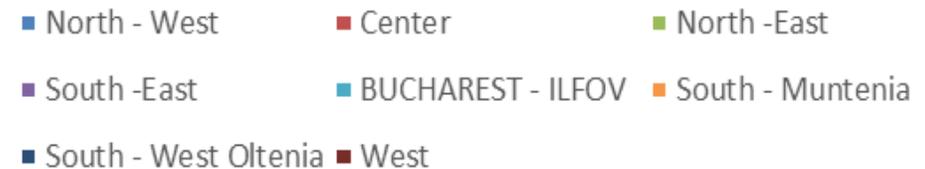
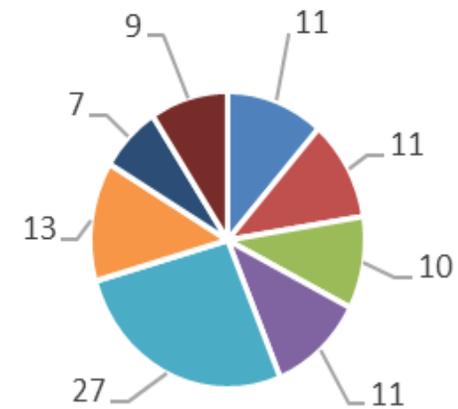
Source: National Institute of Statistics in Romania, Regional gross domestic product (RGDP) - current prices, calculated according CANE Rev.1 (1995-2008) & Regional gross domestic product (RGDP) - current prices, calculated according CANE Rev.2 - ESA 2010 (2000-2014)

# Regional inequalities in GDP (NUTS2-Romania)

Regional GDP (2000)



Regional GDP (2014)



Source: INS (Regional gross domestic product (RGDP) - current prices, calculated according CANE Rev.2 - ESA 2010, authors's calculations

Distribution issues

# Labour share versus capital share in the national income

## Labour share in the net national income

|      | USA   | Germany | France | UK    | Romania |
|------|-------|---------|--------|-------|---------|
| 2000 | 66%   | 64%     | 58%    | 60%   | 50%     |
| 2001 | 66%   | 64%     | 59%    | 61%   | 52%     |
| 2002 | 65%   | 63%     | 60%    | 60%   | 51%     |
| 2003 | 65%   | 63%     | 60%    | 59%   | 48%     |
| 2004 | 64%   | 61%     | 59%    | 59%   | 48%     |
| 2005 | 63%   | 59%     | 60%    | 58%   | 49%     |
| 2006 | 63%   | 57%     | 59%    | 60%   | 48%     |
| 2007 | 64%   | 56%     | 59%    | 60%   | 46%     |
| 2008 | 65%   | 58%     | 60%    | 60%   | 48%     |
| 2009 | 64%   | 60%     | 62%    | 62%   | 47%     |
| 2010 | 63%   | 59%     | 62%    | 60%   | 44%     |
| 2011 | 62%   | 58%     | 61%    | 58%   | 41%     |
| 2012 | 61%   | 60%     | 62%    | 59%   | 41%     |
| 2013 | 61%   | 60%     | 63%    | 60%   | 40%     |
| 2014 | 61,8% | 60,1%   | 62,5%  | 59,7% | 39,7%   |

- Ideally, the ratio should be of 60-65% of the national income in favour of labour and 35-40% in favour of capital
- In developed countries, capital has a 40% share of national income, whereas labour has a 60% share
- In Romania, the ratio is reversed
- declining labour shares means that improvements in macroeconomic performance may not translate into commensurate improvements in personal incomes of households (Atkinson 2009)
- trends in labour shares negatively affect the main macroeconomic aggregates, namely household consumption, private sector investment, net exports and government consumption

Source: "Economic growth, Romania's development, and poverty reduction", by Florin Georgescu, First Deputy Governor, National Bank of Romania

Lecture held at University "Valahia", Târgoviște, 2<sup>nd</sup> of June 2017

Labour share vs Capital share (2014)

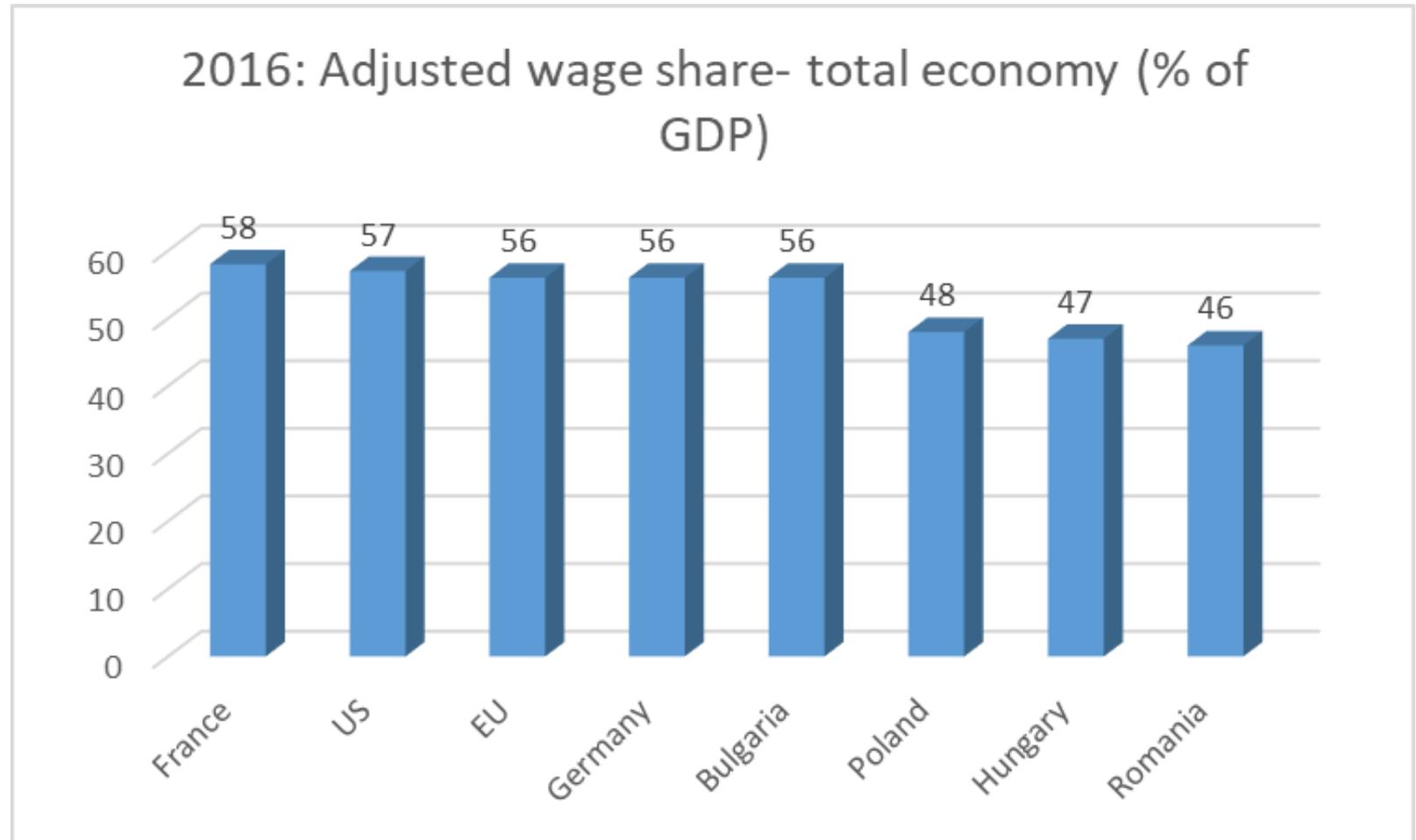


\*Authors' visual representation.

Source of data: "Economic growth, Romania's development, and poverty reduction", by Florin Georgescu, First Deputy Governor, National Bank of Romania

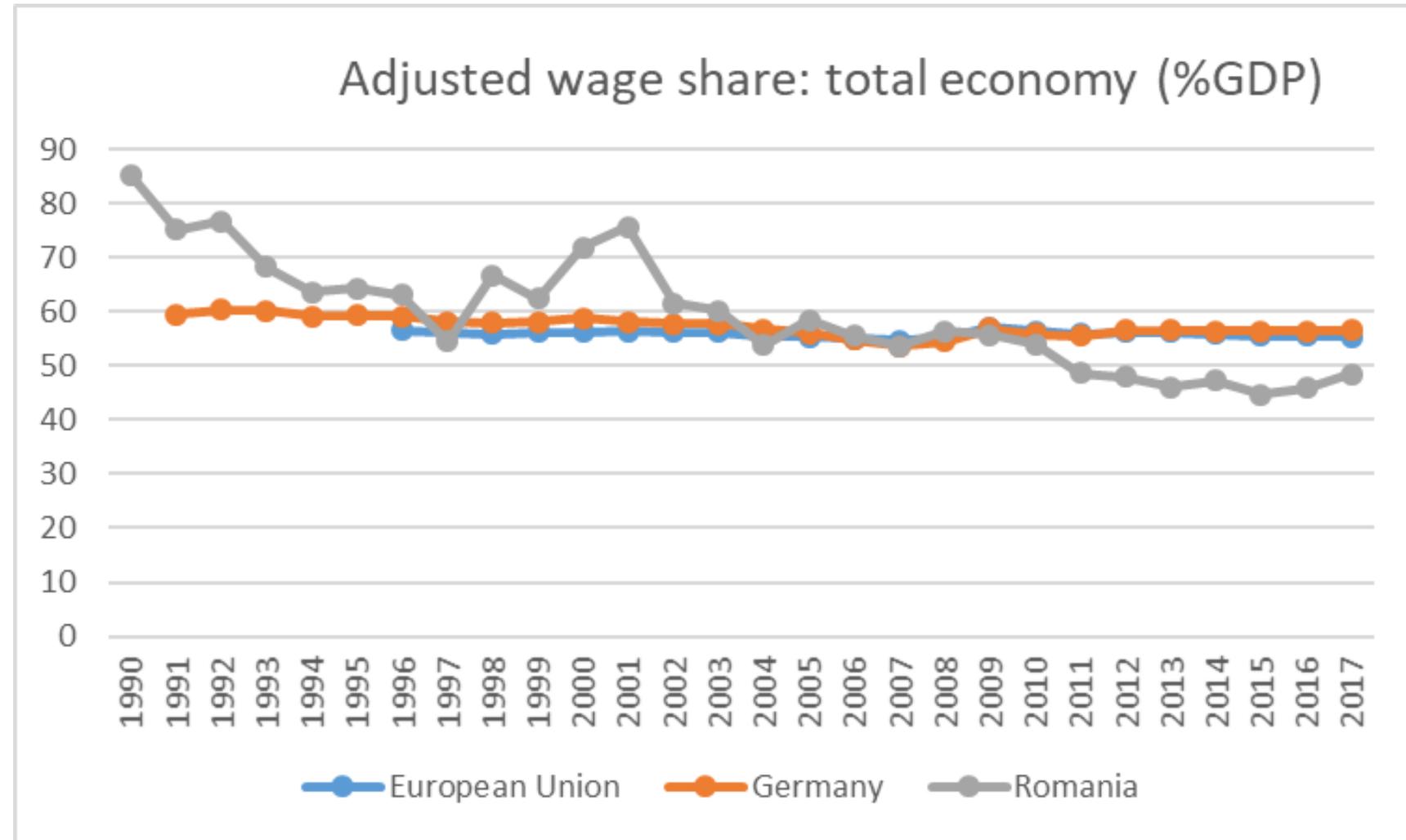
Lecture held at University "Valahia", Târgoviște, 2<sup>nd</sup> of June 2017

In developed societies, labour takes over 50% of the national income, in the detriment of capital



Adjusted wage share: total economy: as percentage of GDP at current prices (Compensation per employee as percentage of GDP at market prices per person employed) Source: AMECO

- Labour share in Romania decreased constantly starting with 2001
- The cost of the economic crisis was transferred to labour
- Labour share in Romania is below EU average and below Germany (for reference)

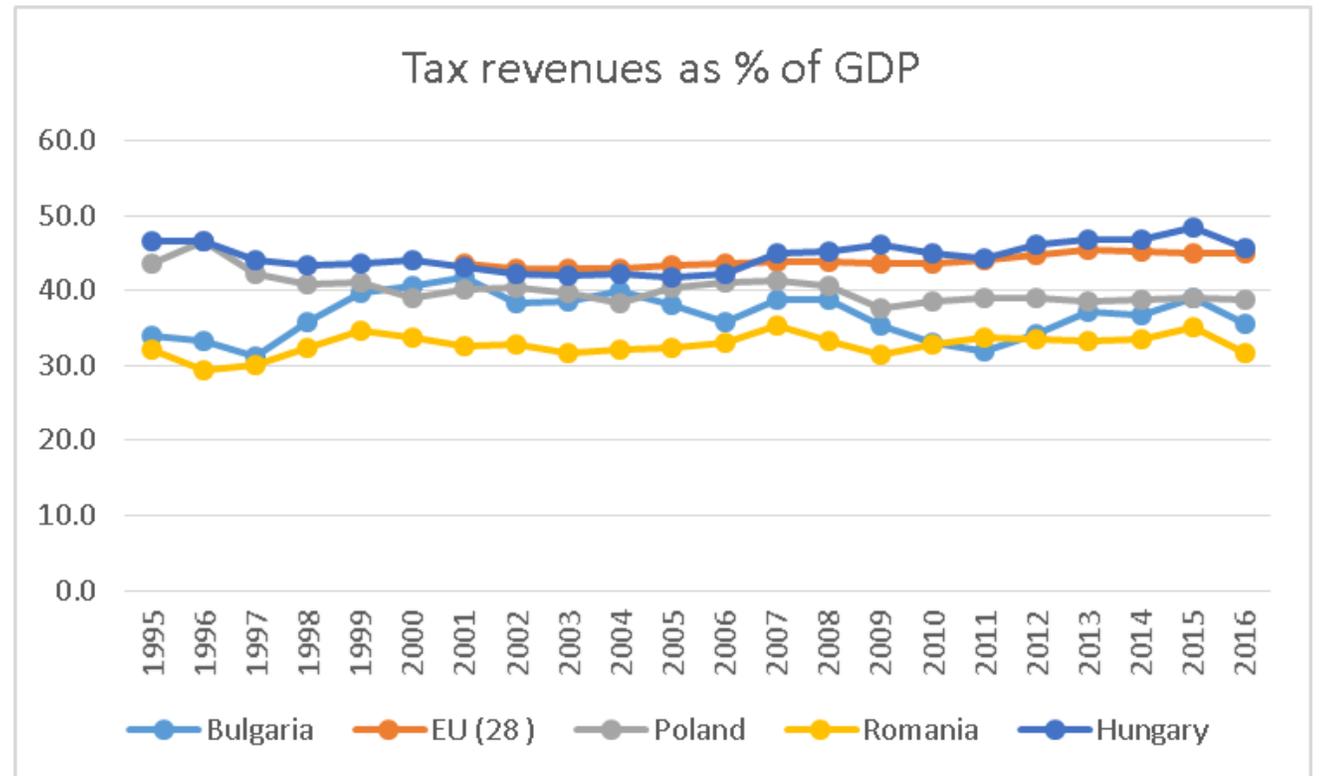


\*Labour income share is calculated as the compensation of employees over total economy GDP multiplied by total employment

Adjusted wage share: total economy (as percentage of GDP at current prices (Compensation per employee as percentage of GDP at market prices per person employed)  
Source: AMECO (ALCD0)

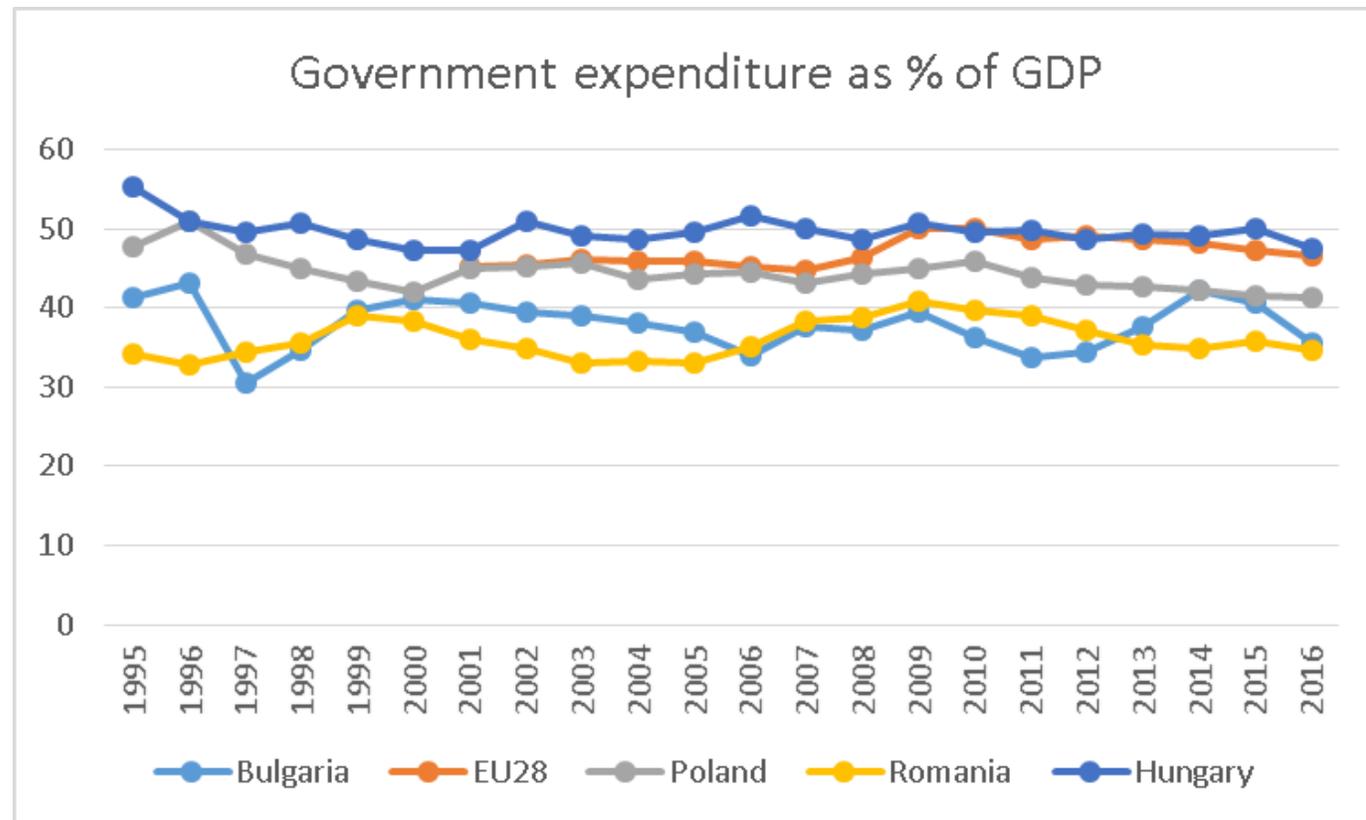
Redistribution issues

- Tax revenues (the main source of government revenues) are of vital importance for the sustainability and quality of the public services
- Insufficient tax revenues lead to growing public debt
- Romania collects the smallest tax revenues in her peer group
- Romania's tax revenues are 15 pp lower than EU average



Source: Eurostat, Government revenue, expenditure and main aggregates [gov\_10a\_main], data availability: 1995-2016

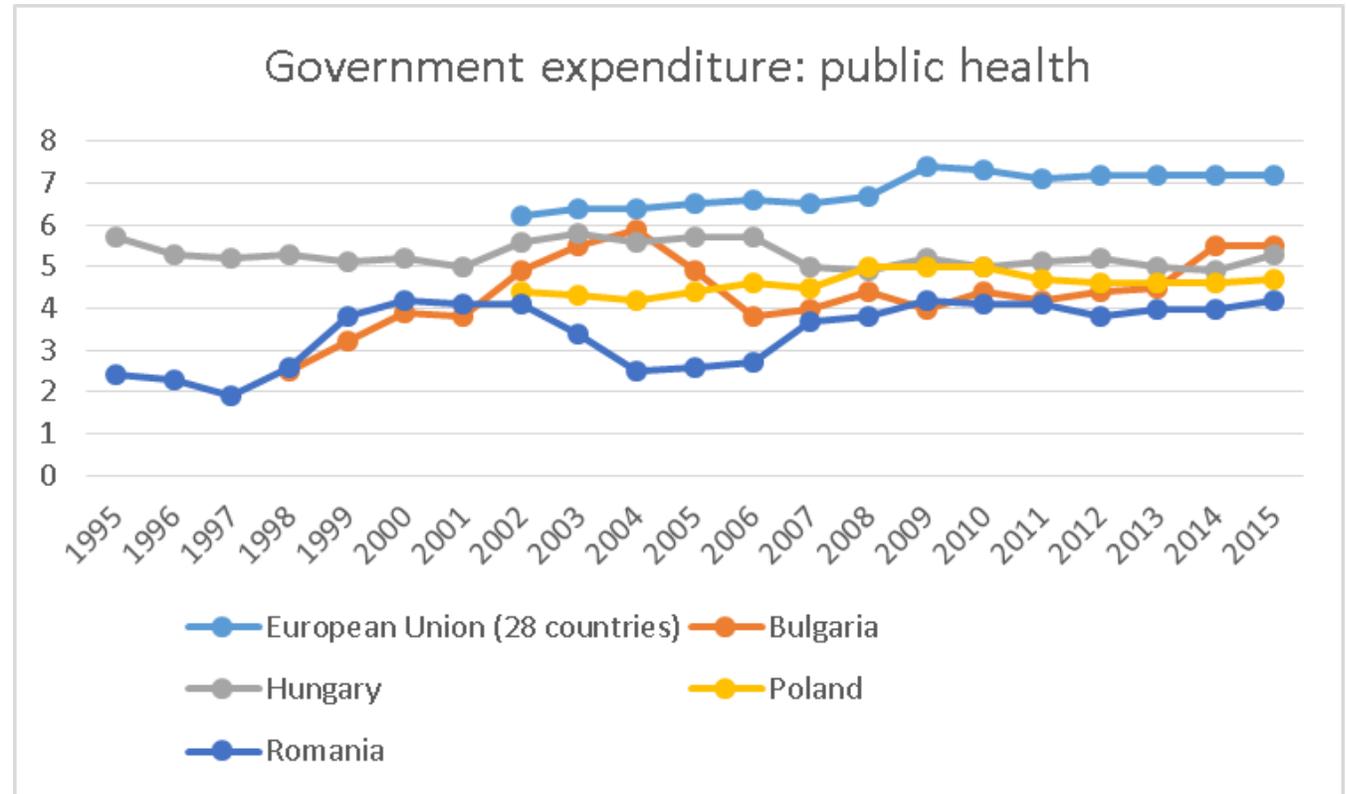
- The state as the main provider of basic services and investments in vital sectors such as: health, education, infrastructure
- Via redistribution, the state has the ability to tackle inequality and to foster development
- Government expenditure in Romania is significantly lower than EU average
- Noticeable influence of the economic crisis



Source: Eurostat, Government revenue, expenditure and main aggregates [gov\_10a\_main], data availability: 1995-2016

# Health expenditure (% of GDP)

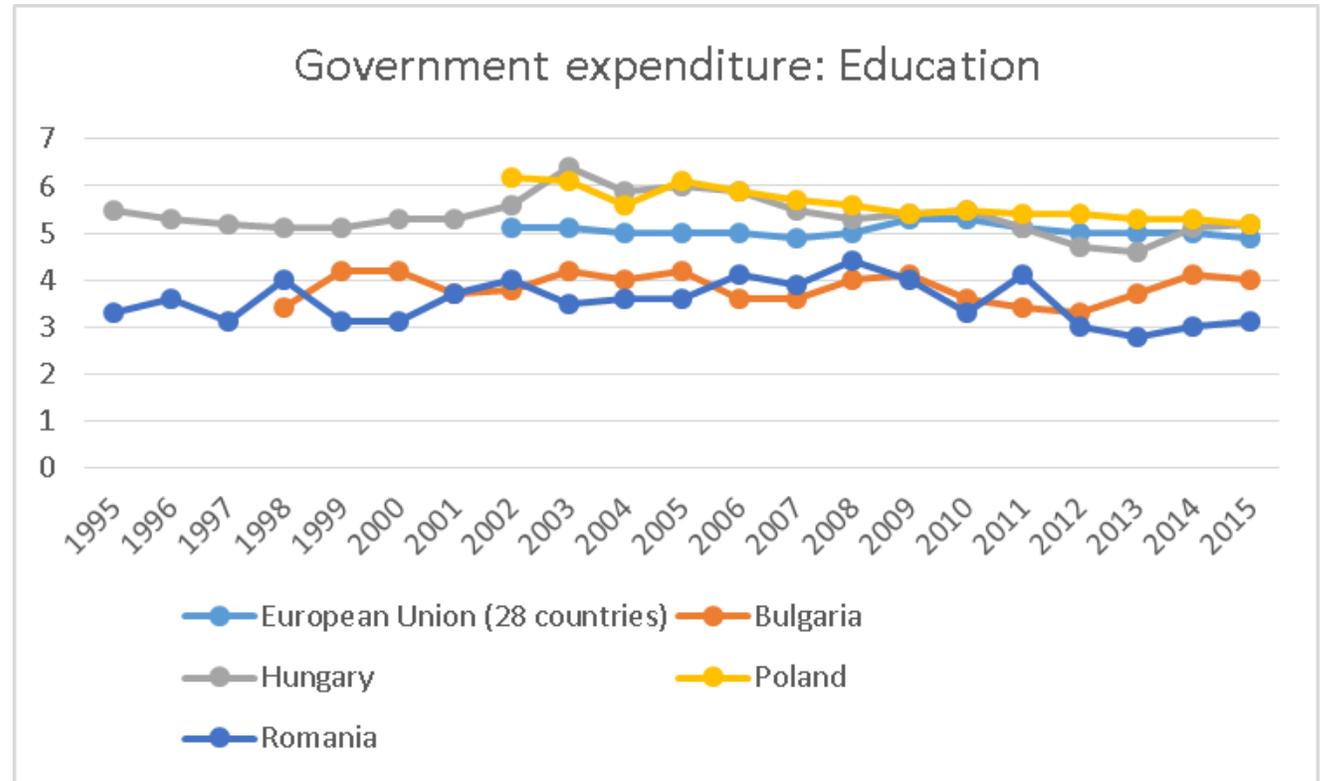
- In Romania, the health sector receives the least financial resources compared to EU average and the peer group
- In 2015, the Romanian government allocated ~50% less (as % of GDP) than EU average



Source: Eurostat, General government expenditure by function (COFOG) [gov\_10a\_exp], Data availability: 1995-2015

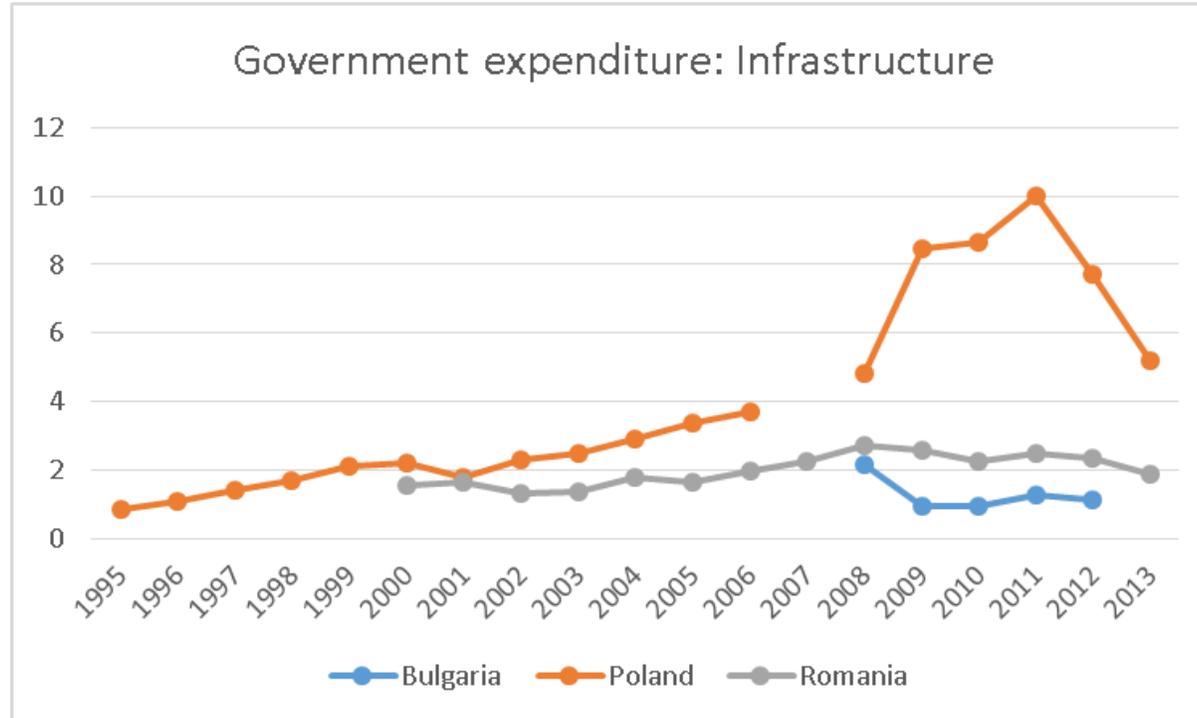
# Education

- Inside the peer group, Poland and Hungary invest more than EU average in education
- By comparison, the Romanian government spending for education is significantly lower than EU average and than its peers



Source: Eurostat, General government expenditure by function (COFOG) [gov\_10a\_exp], Data availability: 1995-2015

# Infrastructure

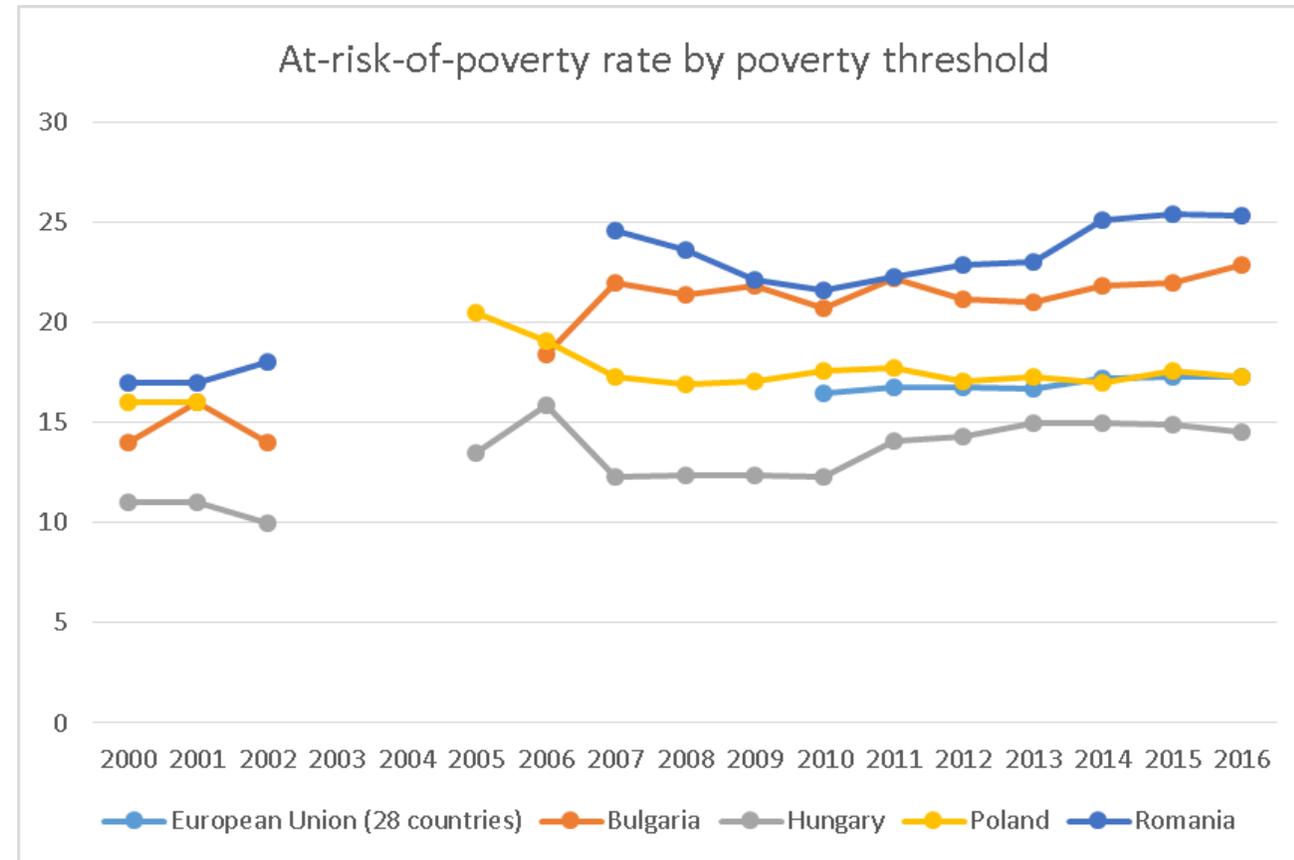


Source: State of the Nation Data Aggregator (based on data collected from Eurostat), data availability: 1995-2013

Poverty as an expression of inequality

# At-risk-of-poverty rate

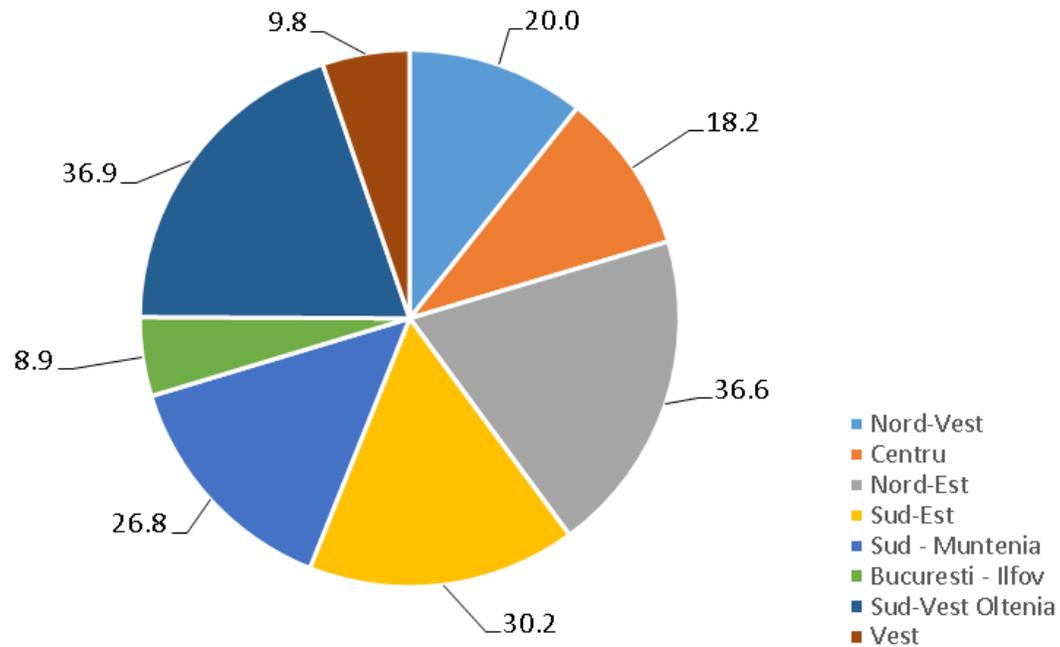
- The indicator measures the risk of social exclusion based on precarious income of individual compared to others in their country of residence
- Romania performs badly, with a poverty rate 8 pp higher than EU average
- The poverty rate in Romania is significantly higher than in Bulgaria, Poland and Hungary



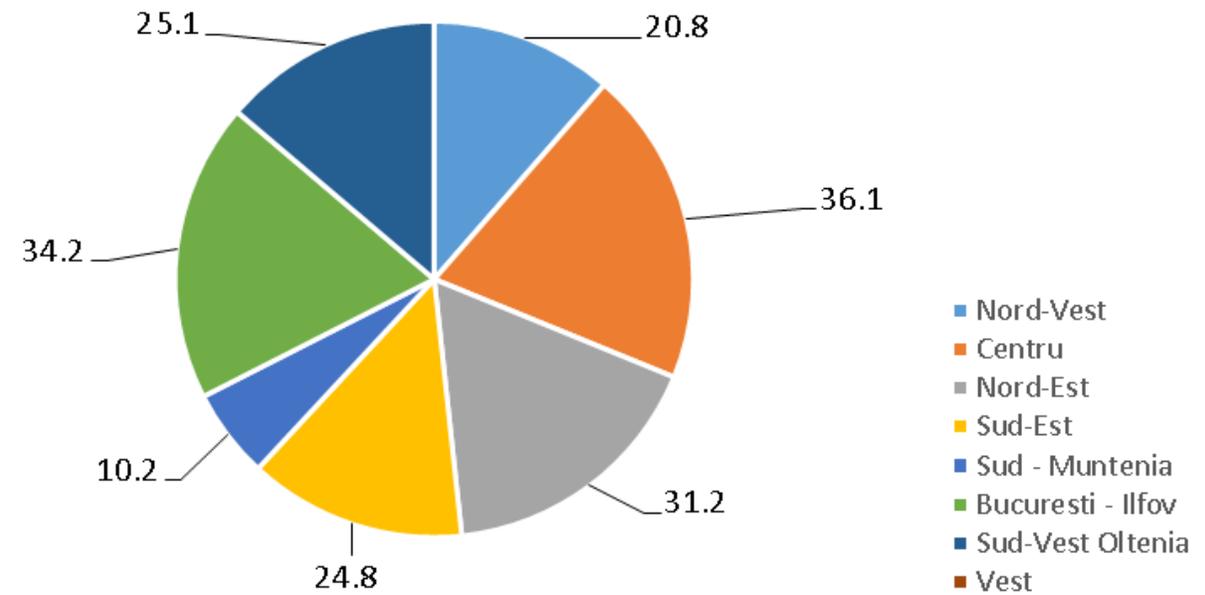
Source: Eurostat, At-risk-of-poverty rate by poverty threshold, age and sex - EU-SILC survey [ilc\_li02], data availability: 2000-2016 (cut-off point: 60% of median equivalised income after social transfers)

# Romania's at-risk-of-poverty rate: regional differences & evolutions

Romania: at risk-of-poverty rate, 2007



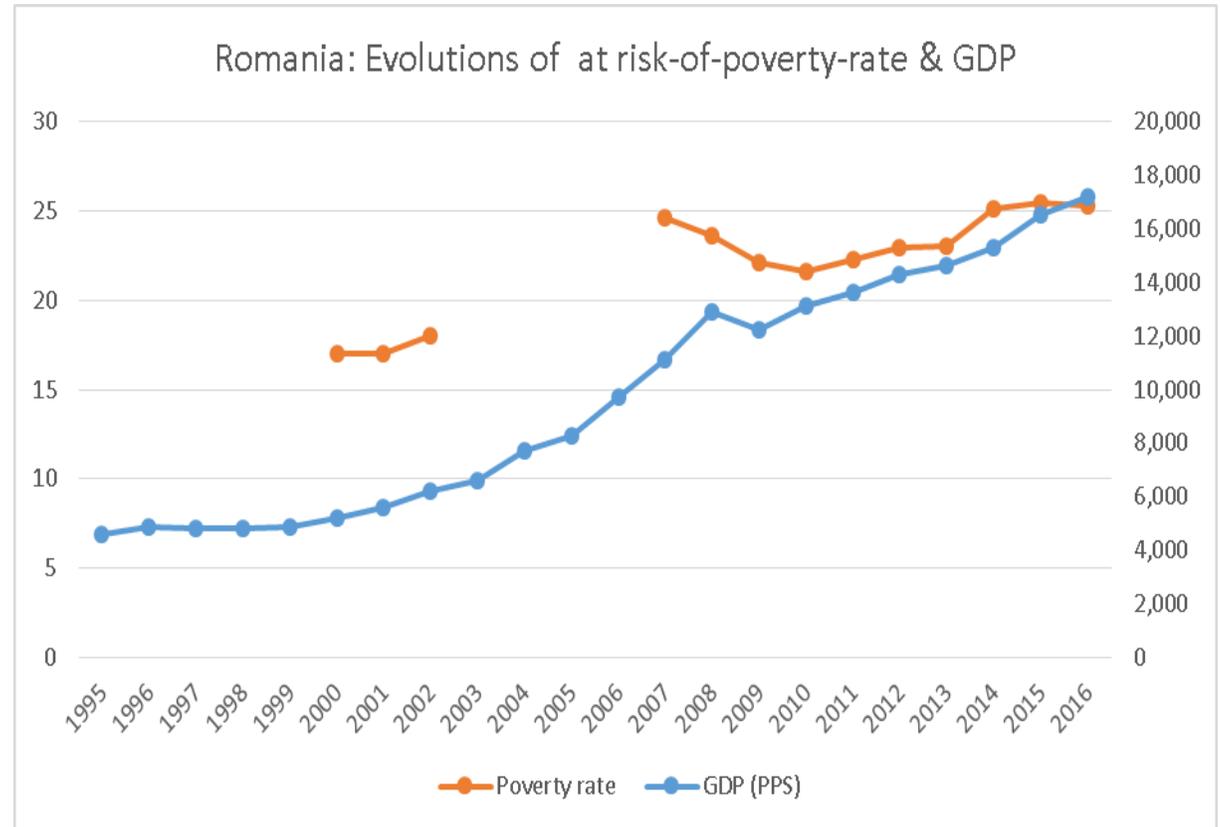
Romania: at risk-of-poverty rate, 2016



Source: Eurostat, At-risk-of-poverty rate by NUTS 2 regions [ilc\_li41], data availability 2007-2016

# Romania At risk-of-poverty rate versus GDP

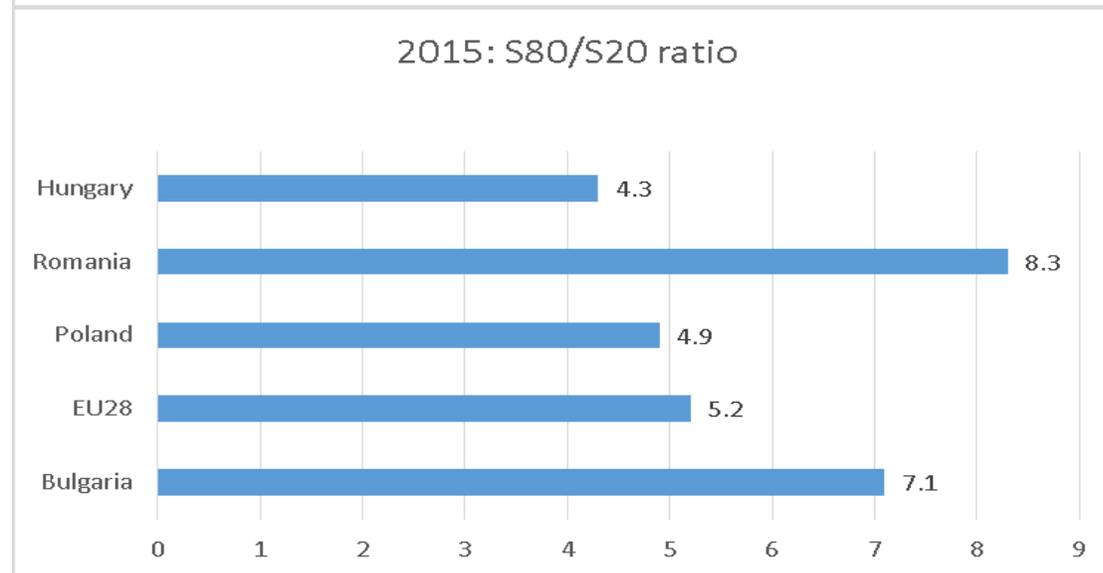
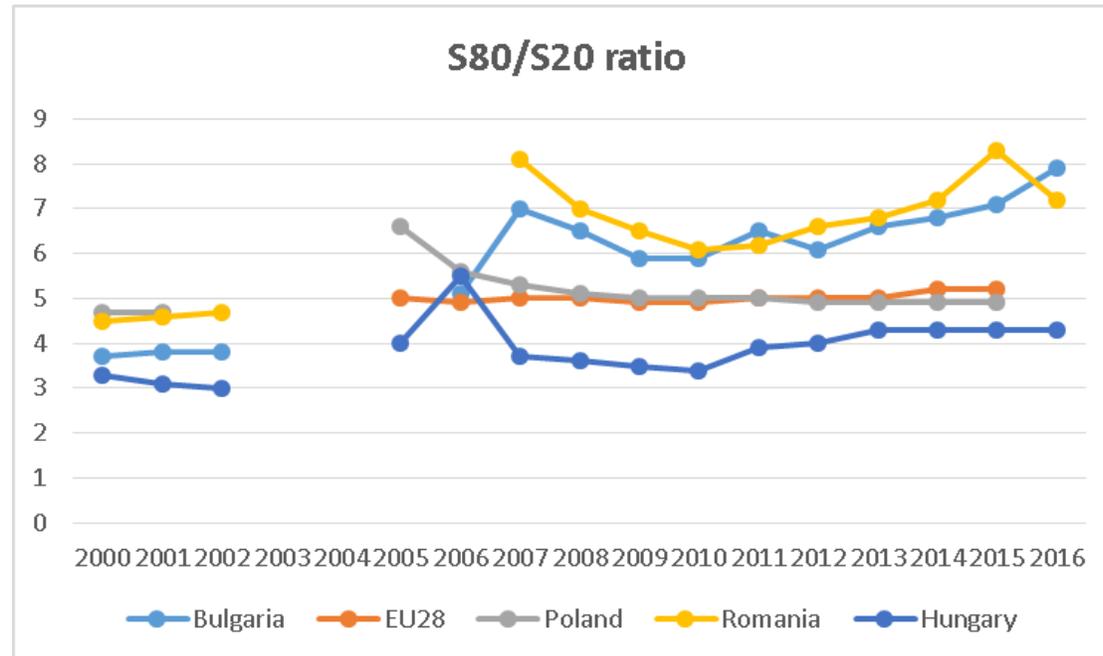
- Economic growth in Romania was not echoed by a decrease of the poverty rate
- Furthermore, the effects of the economic crisis led to an increase of the poverty rate since 2010



Source: Eurostat, At-risk-of-poverty rate by poverty threshold, age and sex - EU-SILC survey [ilc\_li02] &

# Income quintile share ratio (S80/S20 ratio)

- **income quintile groups** are computed on the basis of the total equivalised disposable income attributed to each member of the household
- **The income quintile share ratio or the S80/S20 ratio is a measure of the inequality of income distribution.** It is calculated as the ratio of total income received by the 20 % of the population with the highest income (the top quintile) to that received by the 20 % of the population with the lowest income (the bottom quintile).



# Conclusions

- economic growth is not translating into shared benefits for all, but rather rising inequality
- the greatest challenge for development: poverty and inequality (within countries and between countries)
- Reducing inequality is a question of:
  - Distribution (GDP size; labour share vs capital share)
  - Redistribution (government expenditure in strategic areas for development-health, education, infrastructure)
  - Fighting poverty (at-risk-of-poverty rate, the income quintile share ratio etc.)

# Conclusions- an agenda for Romania

- Strategic orientation towards development
- The need to increase regional cohesion
- The need to reinstate a better balance between the labour share and the capital share in the national income

Thank you!

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