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EUROSYSTEM

Does the COVID-19 crisis threaten macro-financial stability in the Western Balkans?

A look at the household sector

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Introduction

Research Questions

- How financially vulnerable are households in the Western Balkans?
- How might job losses resulting from the COVID-19 slump impact on the debt service capacity of households?

Data

- OeNB **Euro Survey** collected in fall 2019
- 4 Western Balkan countries: Albania, Bosnia and Herzegovina, North Macedonia and the Republic of Serbia

Analysis

- Descriptive statistics
- Micro-simulation

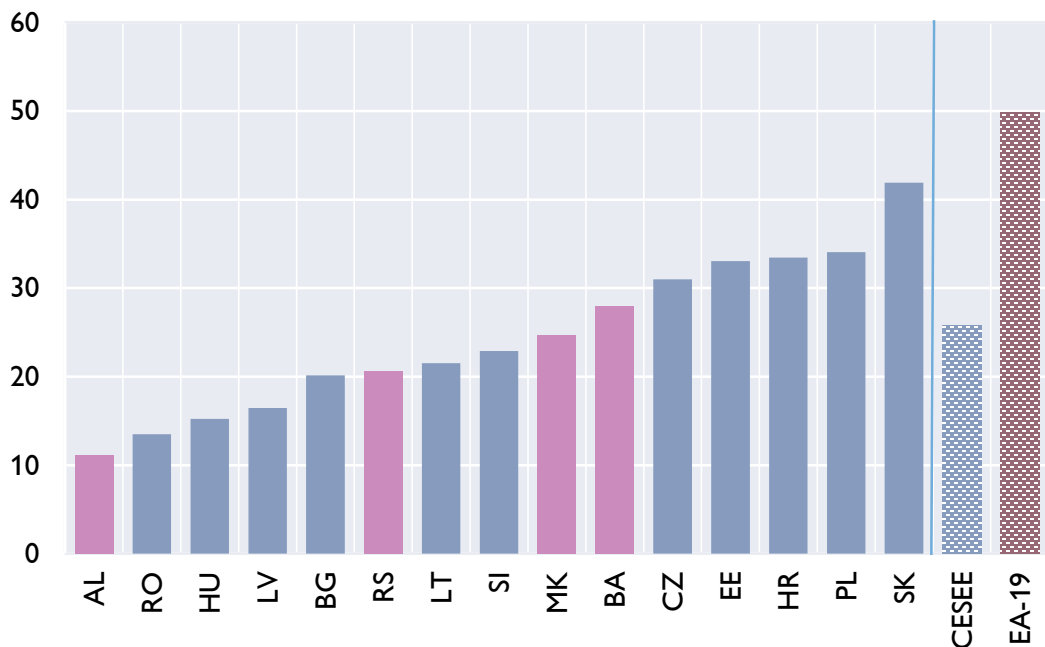
Household debt in CESEE: where do the **Western Balkans** stand?

Heterogeneous Debt-To-GDP ratios, but...

... in line with levels of economic development

Household debt in 2019

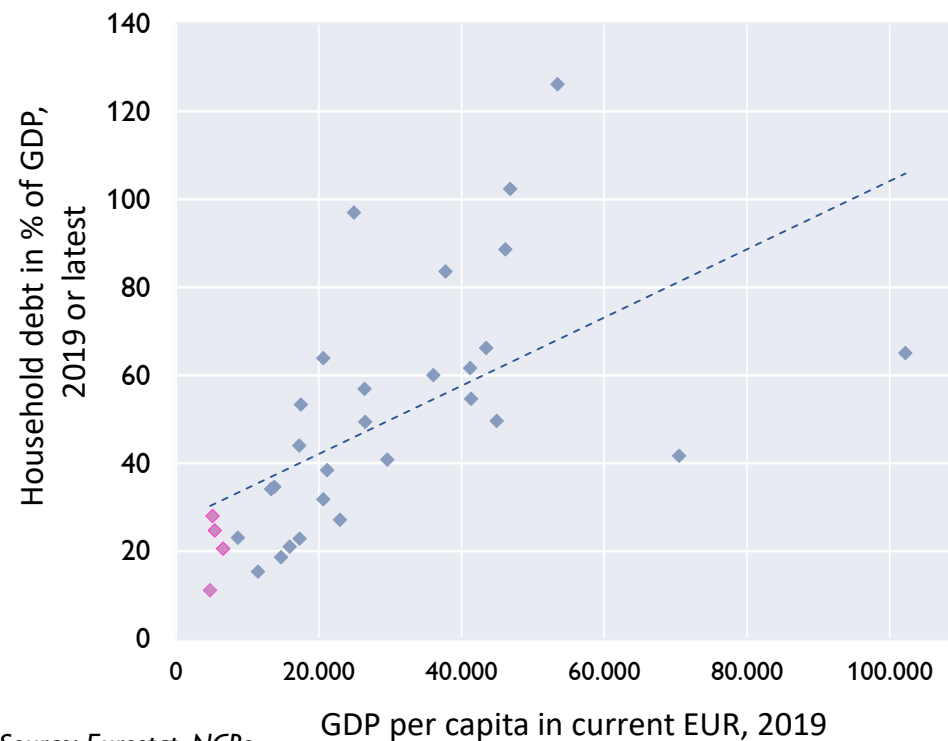
in % of GDP



Source: NCBs, ECB, Eurostat.

Note: CESEE and EA-19 are weighted aggregates.

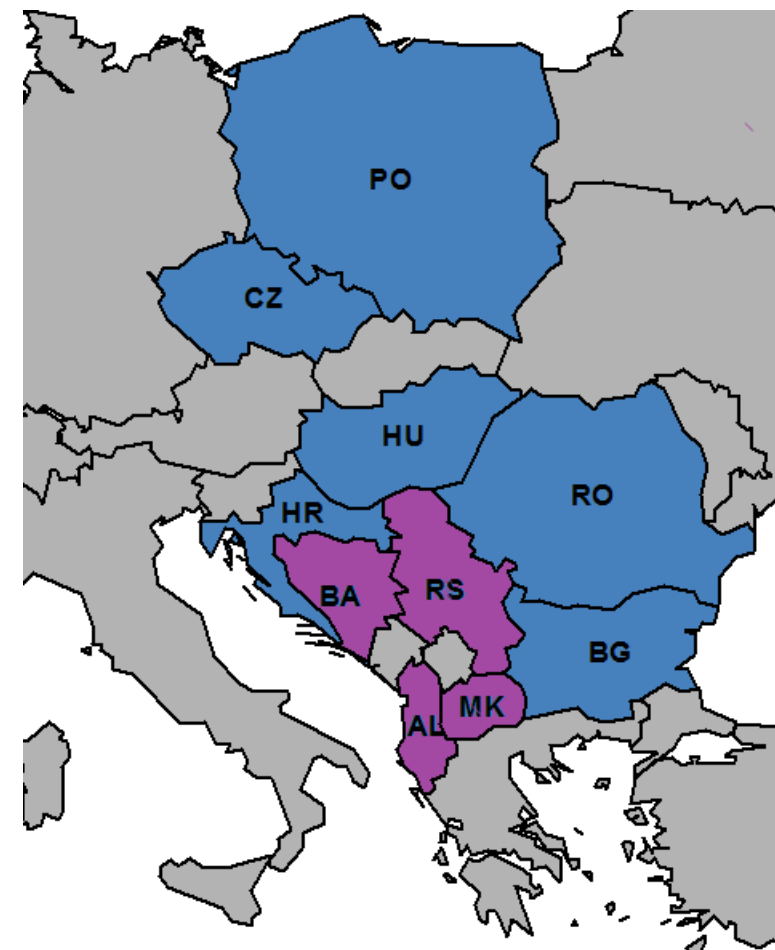
Household debt and GDP per capita in Europe, 2019



Source: Eurostat, NCBs.

Data – The OeNB Euro Survey

- Survey of individuals in CESEE
 - 6 EU Member States: Bulgaria, the Czech Republic, Croatia, Hungary, Poland, Romania
 - 4 Non-EU Member States: **Albania, Bosnia and Herzegovina, North Macedonia, Serbia**
- Since 2007 (semi-) annually
- 1,000 randomly selected respondents per country/wave
- Unique information about (euro) cash holdings, saving behavior and debt; respondents' economic opinions, expectations and experiences.



Data – The OeNB Euro Survey

Fall-wave 2019 contains information on

- Debt service payments
“Think of all members in your household that have loans. How much money does your household have to spend per month to service all these loans including interest and principal payments?”

- Household net income
“What is the total monthly income of your household after taxes?”

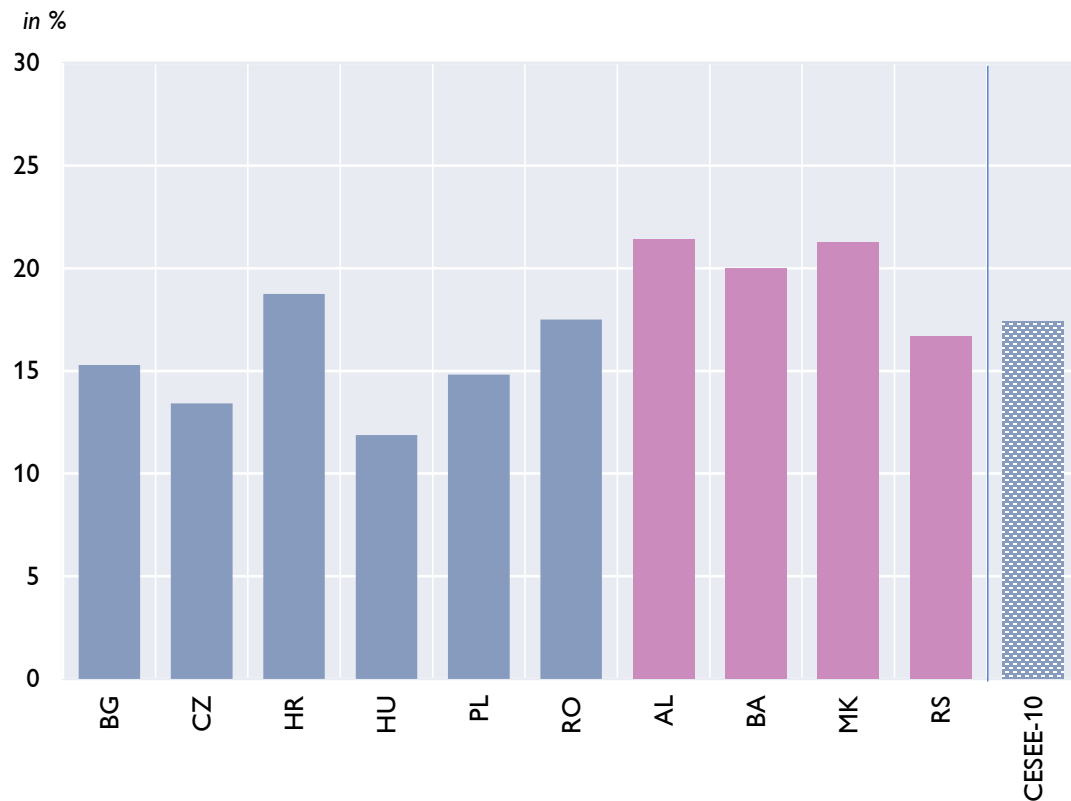
- Region of the household and number of household members

➤ For each surveyed person we calculate a **Debt-Service-To-Income ratio (DSTI)** of the household she lives in

➤ We construct household weights

Median DSTI is relatively high in the Western Balkan region

Debt service to income ratio 2019, median



Source: Euro Survey 2019.

Household debt: Micro versus Macro perspective



Source: NCBs, Euro Survey 2019.

Share of vulnerable households is relatively high in MK and BA

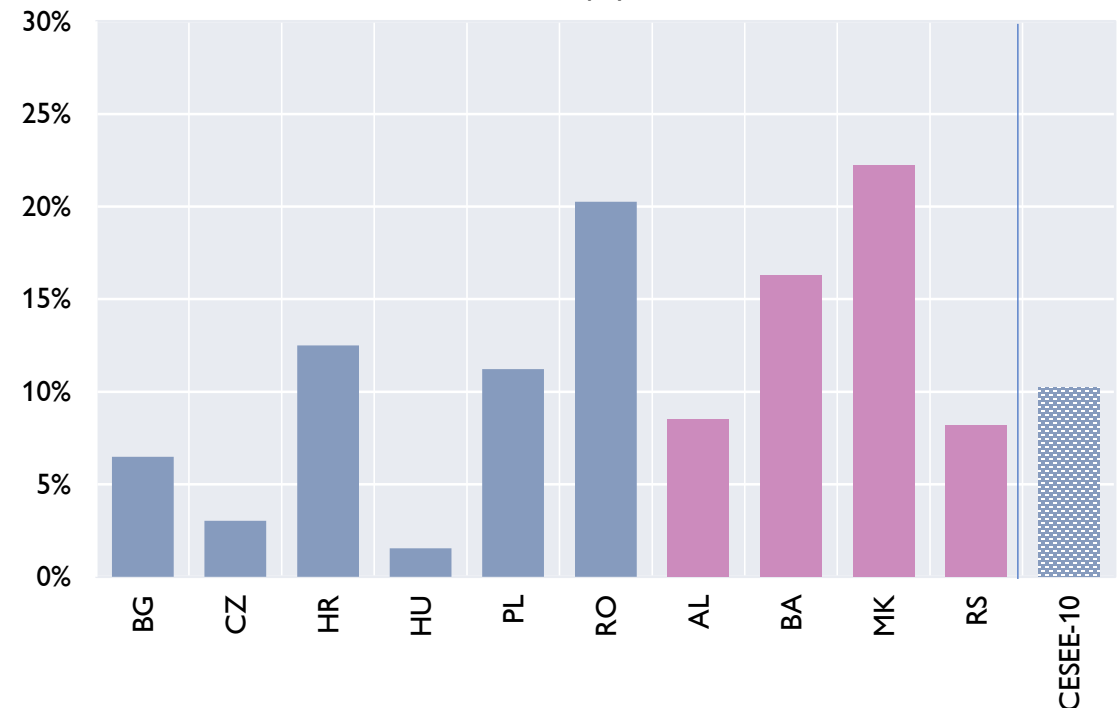
Widely used indicator (e.g. Ampudia et al. 2014*):

Share of households with a DSTI $\geq 40\%$ among all indebted households

- General idea: spot households who have a high risk of not being able to repay the loan
- Limitations: no information on ...
 - financial or real assets of the household
 - Collateral security
 - Outstanding loan amount

Share of vulnerable households, 2019

in % of indebted households with debt service payments



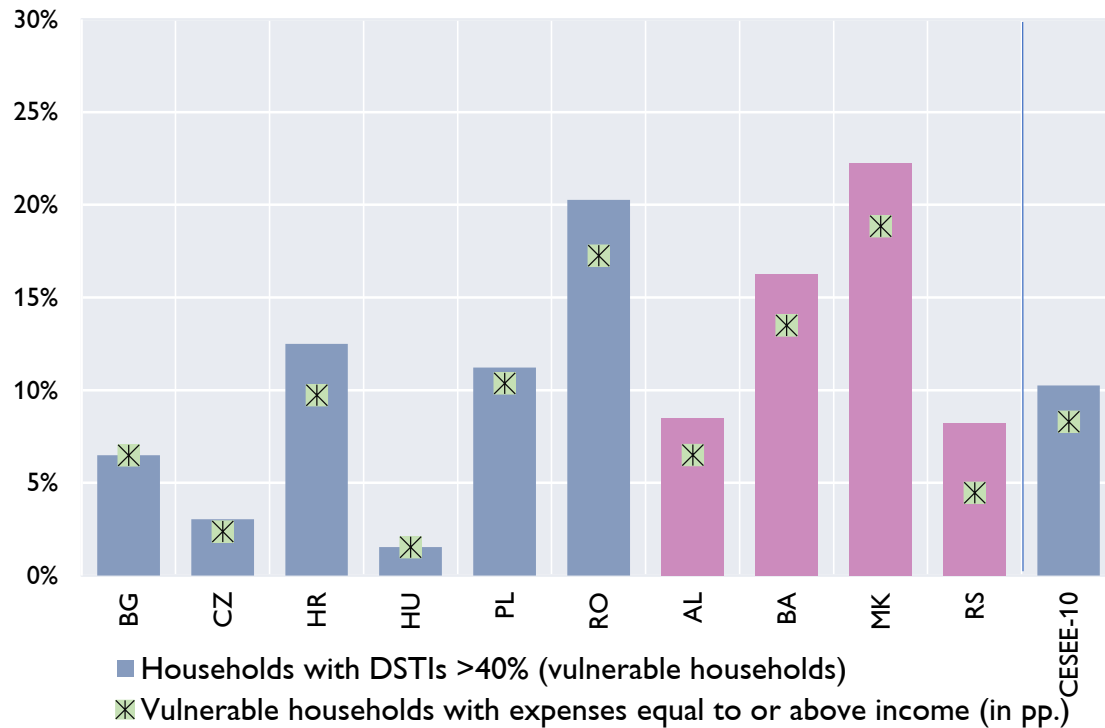
Source: Euro Survey 2019.

*Ampudia et al. 2014: Financial fragility of euro area households, ECB working paper series No 1737.

Households' wealth situation is not known, but income situation points to little room of manoeuvre

Vulnerable households with expenses \geq income, 2019

in % of indebted households with debt service payments



Source: Euro Survey 2019.

Characteristics of vulnerable households:

- Last year's expenses \geq last year's income (AL, BA, MK)
- Respondent has no savings at all (BA, AL)
- Household income < 1st tercile (AL)
- High share of single-earner households (BA, RS)

Households' wealth position is rarely known, but income situation points to little room of manoeuvre

Vulnerable households with no savings, 2019

in % of indebted households with debt service payments



Source: Euro Survey 2019.

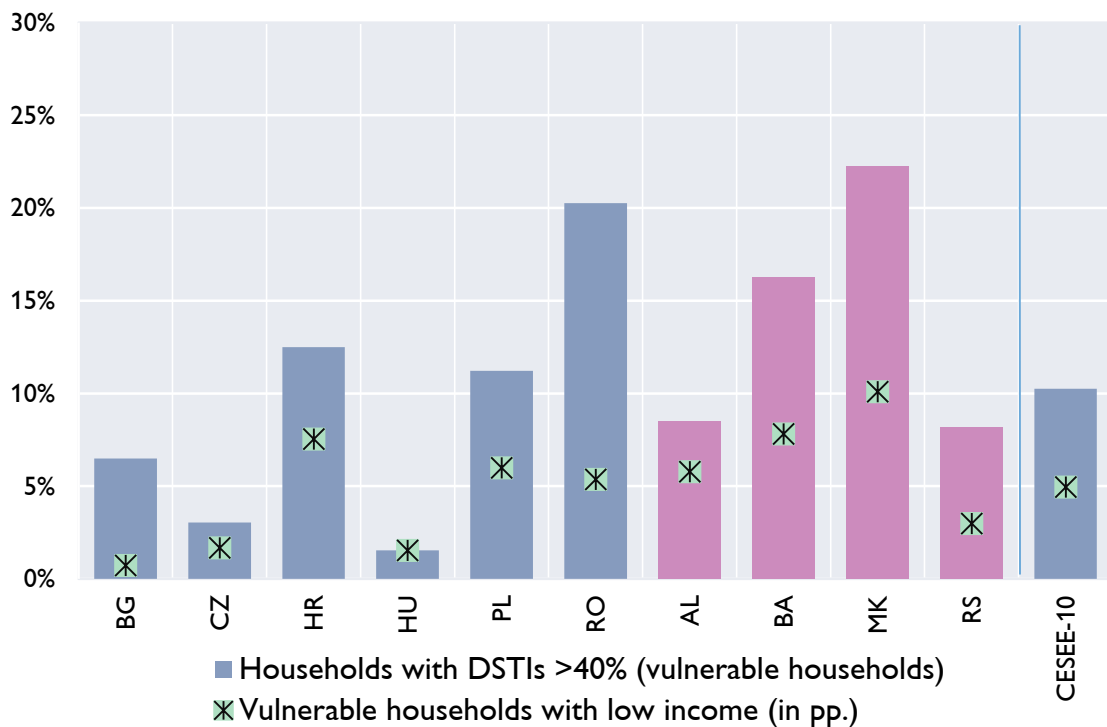
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Households' wealth position is rarely known, but income situation points to little room of manoeuvre

Vulnerable households with low income, 2019

in % of indebted households with debt service payments



Source: Euro Survey 2019.

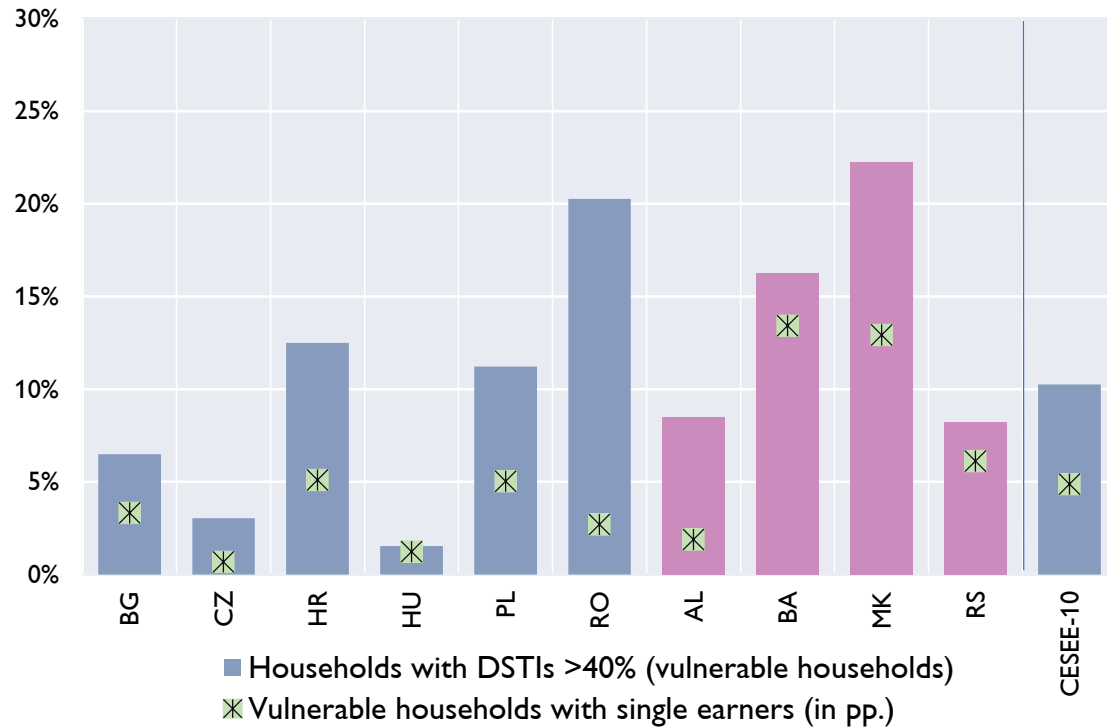
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Households' wealth position is rarely known, but income situation points to little room of manouvre

Vulnerable households with only one income earner, 2019

in % of indebted households with debt service payments



Source: Euro Survey 2019.

Characteristics of vulnerable households:

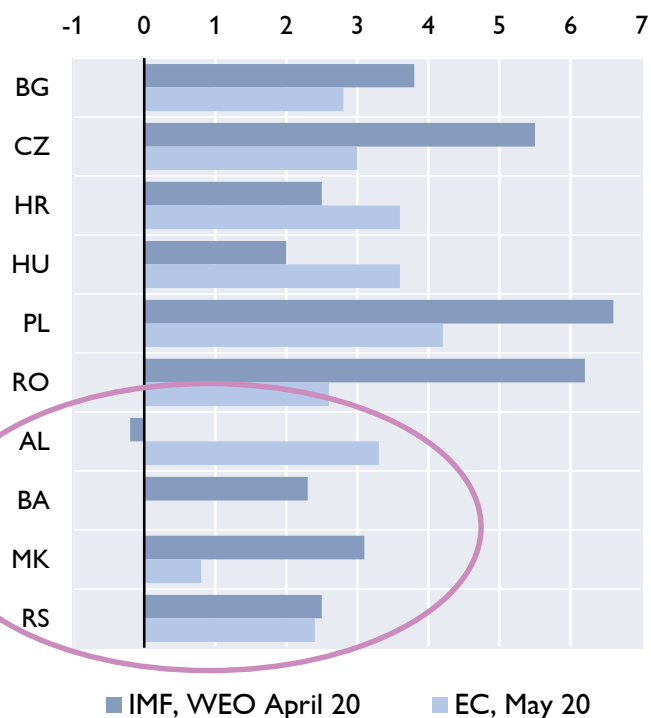
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MICROSIMULATION

Microsimulation: Assessing the impact of job-losses due to the COVID-slump

Projected increase in the unemployment rate from 2019 to 2020

in percentage points



Three shock scenarios: increase in the unemployment rate (U) by 2, 5 and 7 percentage points.

1. Draw so many “new” unemployed persons until the level of U matches the shock scenarios*
2. The “new” unemployed persons
 - ... loose their personal income
 - ... receive an unemployment benefit instead
3. Recalculate household income, DSTIs and obtain the vulnerability indicator (share of households with $DSTI \geq 40\%$)
4. The simulation is repeated 1000 times for each country
5. Result is the average of the indicator over all draws

*Individuals have a different probability of becoming unemployed depending on their education, position in the income distribution, age, no. of earners in the household, etc.

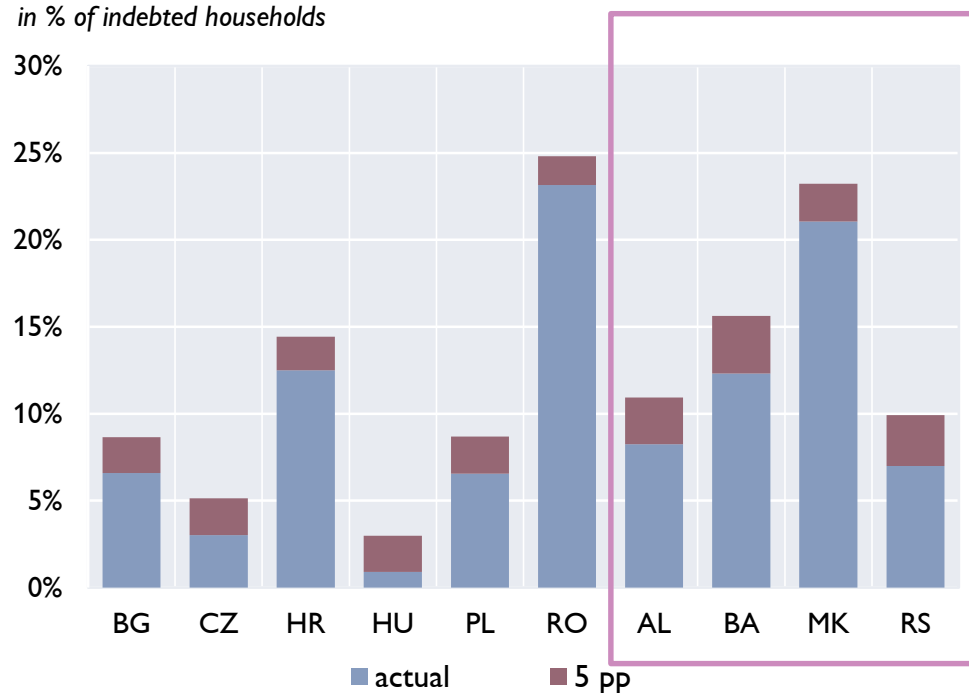
Results: 5pp increase in unemployment

No selection structure (=equal probability of becoming unemployed)

No unemployment benefits

Share of vulnerable households

in % of indebted households



Source: Euro Survey 2019.

Increase in the share of vuln. households (pp)



Source: Euro Survey 2019.

Size of the impact varies with (a) the distribution of DSTIs and (b) the household structure (e.g. single earners)

Results: 5pp increase in unemployment

Unequal probability of becoming unemployed

No unemployment benefits

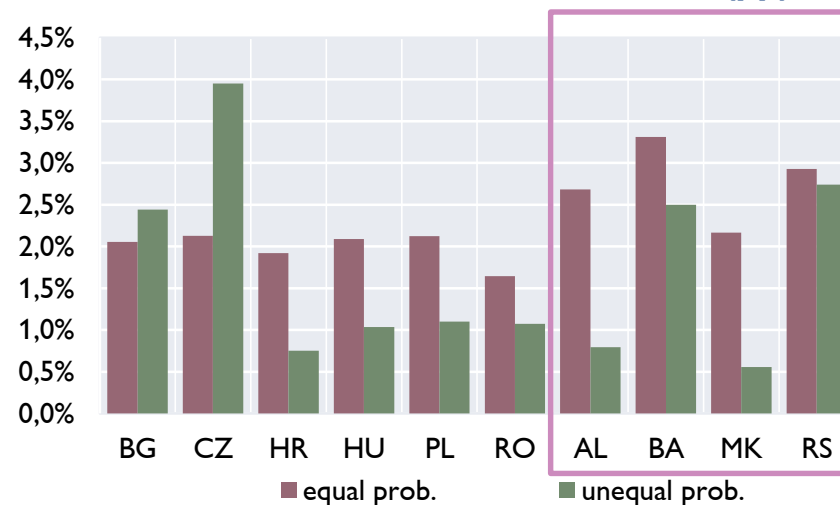
Share of vulnerable households

in % indebted households



Source: Euro Survey 2019.

Increase in the share of vuln. households (pp)



Source: Euro Survey 2019.

Mostly, indebted households have a lower probability of becoming unemployed

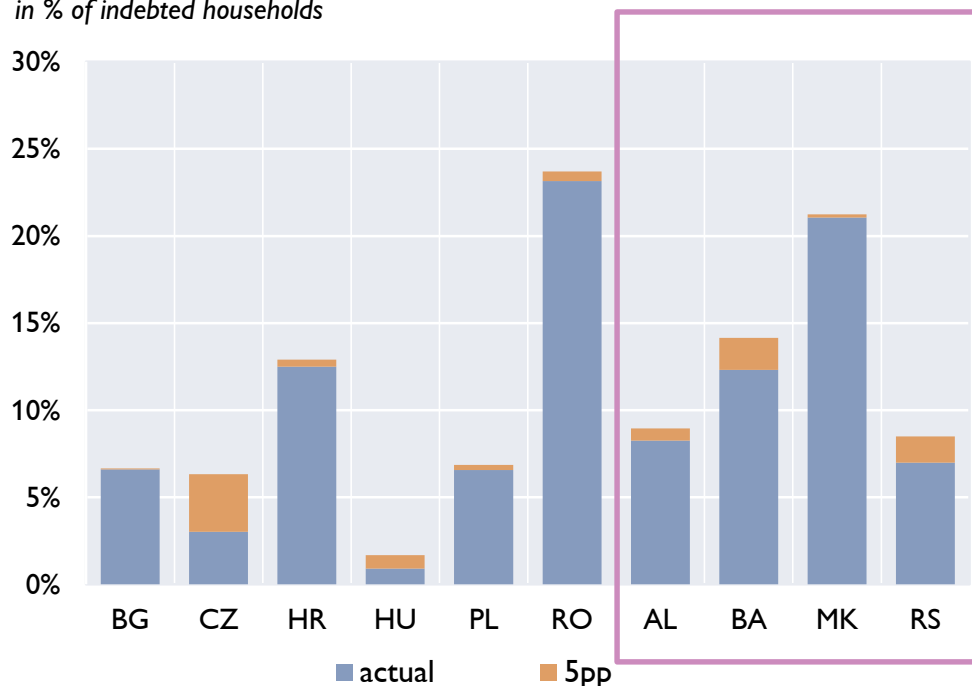
Results: 5pp increase in unemployment

Unequal probability of becoming unemployed

With unemployment benefits

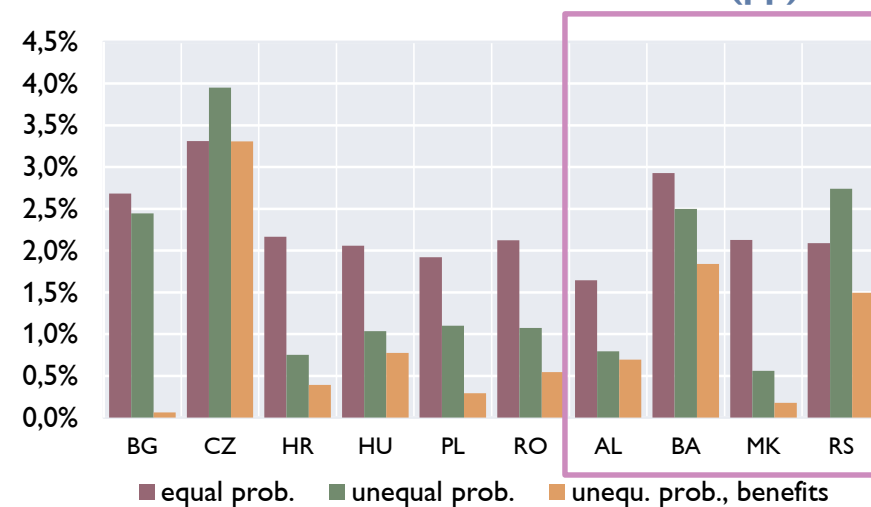
Share of vulnerable households

in % of indebted households



Source: Euro Survey 2019.

Increase in the share of vuln. households (pp)



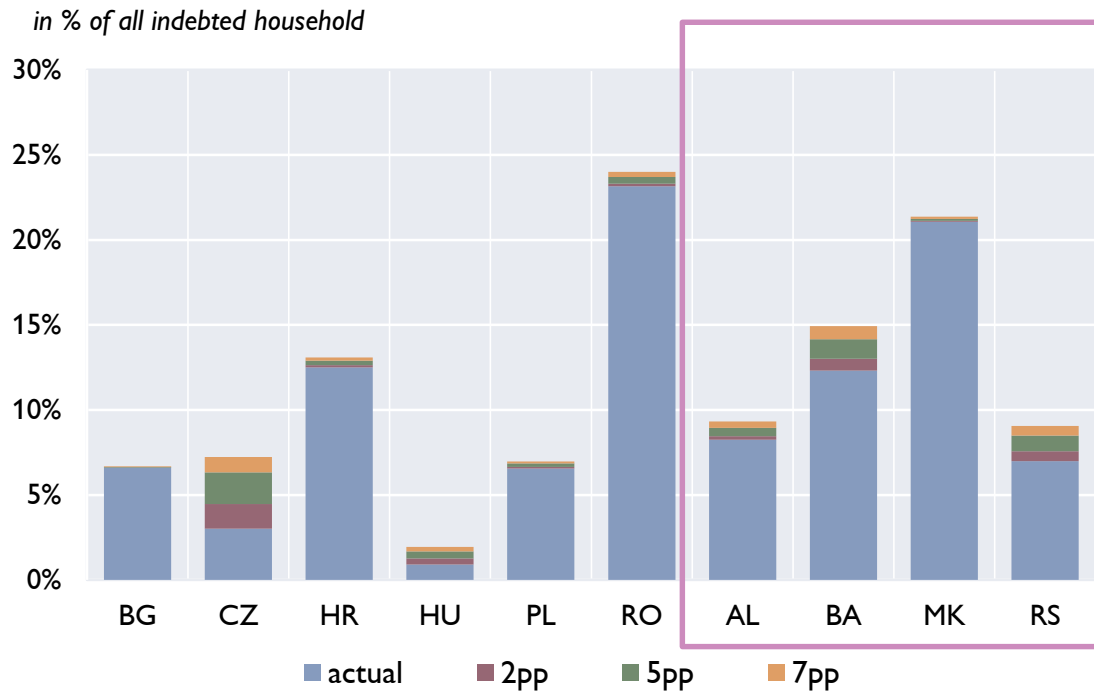
Source: Euro Survey 2019.

Unemployment benefits can dampen the increase in vulnerable households

Results: 2, 5 and 7pp increase in unemployment

Unequal probability of becoming unemployed
With unemployment benefits

Share of vulnerable households



Source: Euro Survey 2019.

- Significant increase in the share of vulnerable households in RS and BA (and CZ and HU)
- The impact increases almost linearly with the unemployment rate
- If selection into unemployment follows a different pattern in the COVID crisis than before, the effects will likely be higher

Summary

- Households in the Western Balkans spend a relatively high share of their income on loan repayments
- Significant share of households in BA and in RS might come into troubles repaying their loans. This can be cushioned to some extent by unemployment benefits.
- The countries facing the highest impact from job-losses are however not the ones with the highest share of vulnerable households in the region.
- Limitations and room for improvements:
 - No information on the wealth situation of households
 - No detailed information on interest rate versus principal payments
 - No information on the share of households with FX loans
 - No information on the amount of indebtedness

Danke für Ihre Aufmerksamkeit

Thank you for your attention

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