

# THE IMPACT OF COVID-19 PANDEMIC ON LABOUR MARKET OUTCOMES OF VULNERABLE GROUPS IN SERBIA

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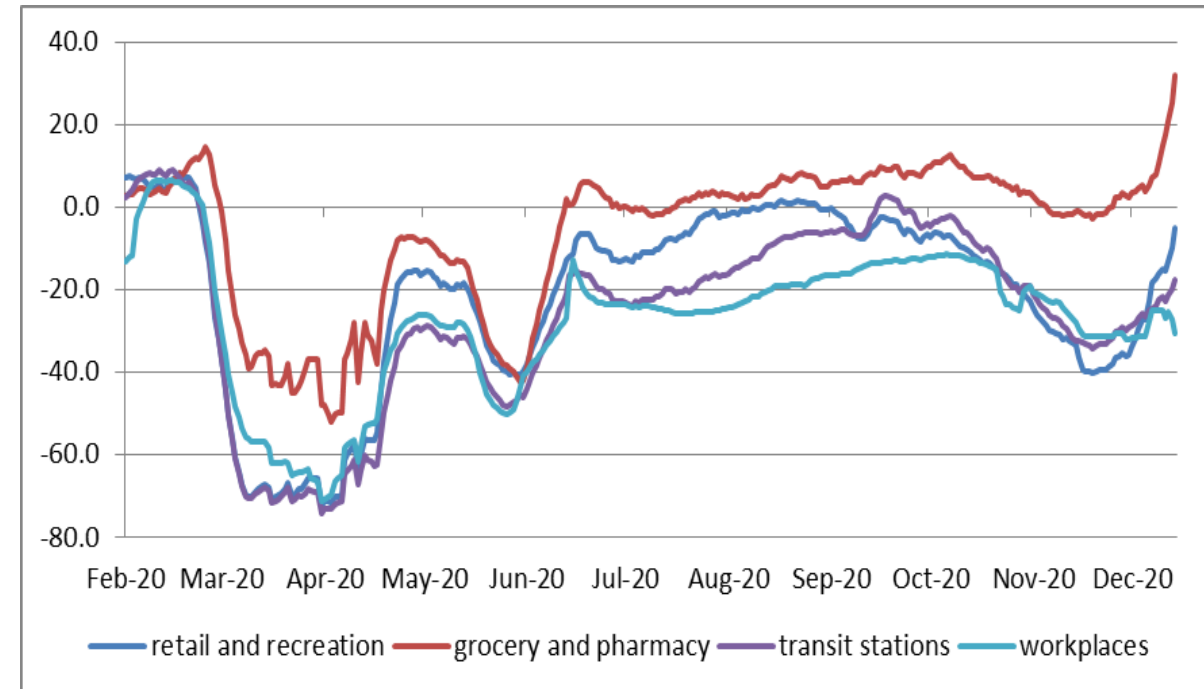
# Motivation

- Some groups on the labour market were more severely hit by the pandemic than others
- More vulnerable groups were more exposed to unemployment shocks (Fasani and Mazza, 2020; Montenovo et al., 2020)
- Women were especially hard hit due to increased childcare responsibilities (Alon et al., 2021)
- The reason that some vulnerable groups were more affected can be explained only to some degree by occupational sorting (Montenovo et al., 2020)
- This paper studies the impact of the COVID pandemic on the following vulnerable groups (by using LFS data from 2019 and 2020): youth, women, low educated workers, Southern and Eastern Serbia and rural areas

# Context

- State of emergency was declared in Serbia on March 15, 2020 and it lasted until beginning of May 2020
- New increase in the number of cases and hospitalisations happened in June and July (“second wave”), as well as in November and December (“third wave”)
- Employment retention measures
  - for MSMEs – three MW per employee across the entire private sector except finance (May, June, July) + 60% of MW per employee (Aug and Sep)
  - For large companies 50 % of MW for each employee who was on the furlough in the period, rarely used
  - Additional help for Tourism (December) and free-lance artist

**Figure 1: The Google Community Mobility Report for Serbia**



# Vulnerable workers

- Informally employed
  - Working without contract, easily dismissible and not covered by retention measures
- Workers with temporary contracts
  - No severance payment after contract expires, also not covered by retention measures
- Workers in small enterprises and self-employed
  - More susceptible to cessation of work in turbulent times due to lower liquidity
- Workers in “non-essential” sectors
  - At the beginning it was suggested that their activity should be stopped in order to prevent the spread of the virus (tourism, trade, transport, real estate, etc)

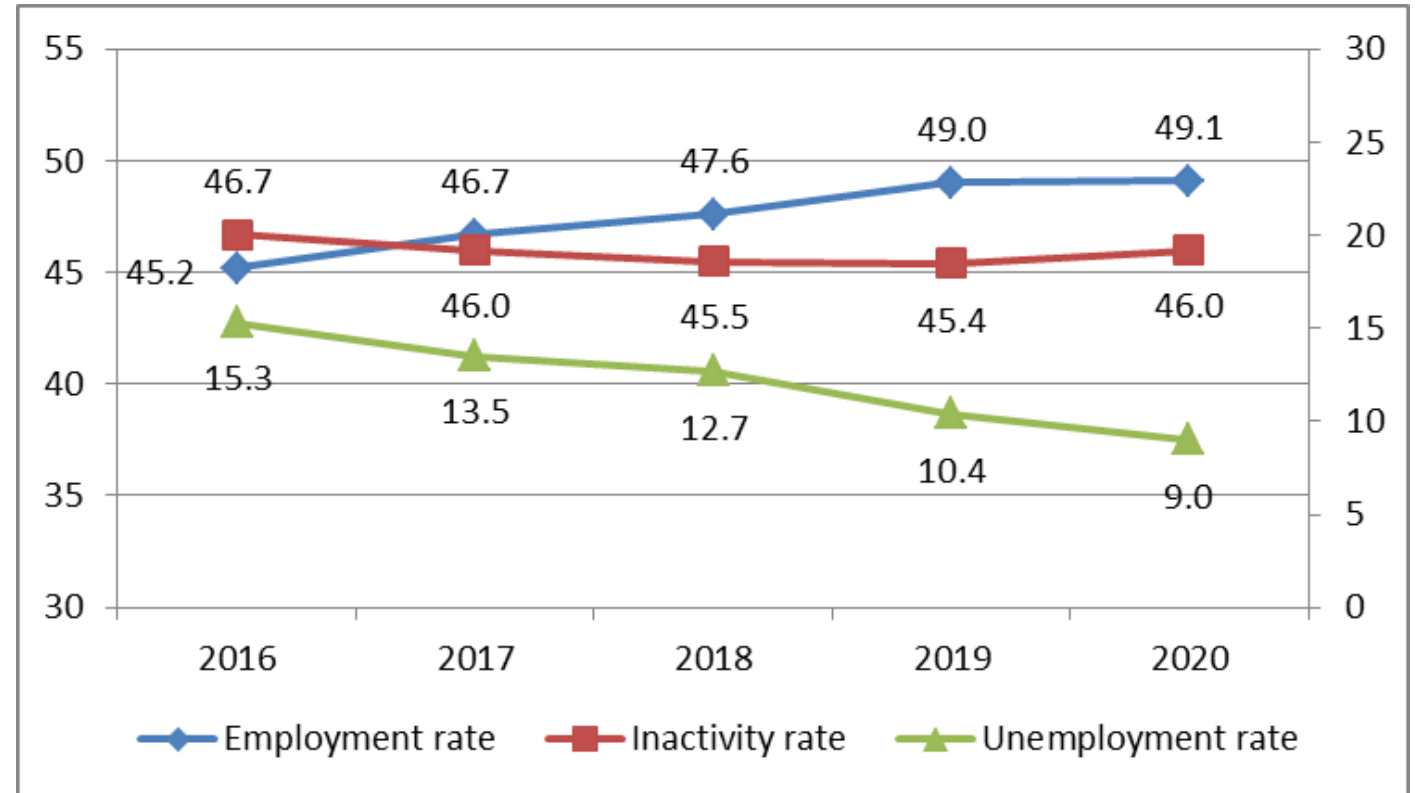
# Vulnerable groups

- Youth
  - Young people work more often in sectors that are more affected by the crisis, such as tourism and trade (Verick, 2009) or they can be the first ones to get laid off in the presence of tenure based mandatory severance pay
- Women
  - Increased need for parental childcare and household chores – largely born by women
- Low educated workers
  - More likely to work in the informal sector, temporary contracts, essential services, and in sectors affected by shutdowns (e.g. tourism and hospitality, etc)
  - Lower savings than skilled workers and income shocks can make them enter into poverty
- Southern and Eastern Serbia
  - Lowest employment rate among the four regions before the crisis
- Rural areas
  - large share of this population works in agriculture which is majorly informal and thus not included in retention measures

# Trends in 2020

- the stagnation of the employment rate - interruption of the favourable trends in the former period (continued in Q1 of 2020)
- the reduction of unemployment in Q2 2020 can be explained by lower job search activity during the lockdown (i.e. increased inactivity), rather than by an increasing employment

**Figure 1: Main labour market indicators trends in Serbia, 2016-2020**



Notes: Population 15 years and older. Source: LFS data, SORS database.

# Trends in 2020

- Pronounced quarterly dynamics, temporary effect of COVID-19 on employment in Q2 2020 (in almost all sectors within private), while in Q3 and Q4 there was stagnation
- Decrease of employment in Q2 in 2020 was partially due to dismissals and partially due to lower availability of seasonal jobs

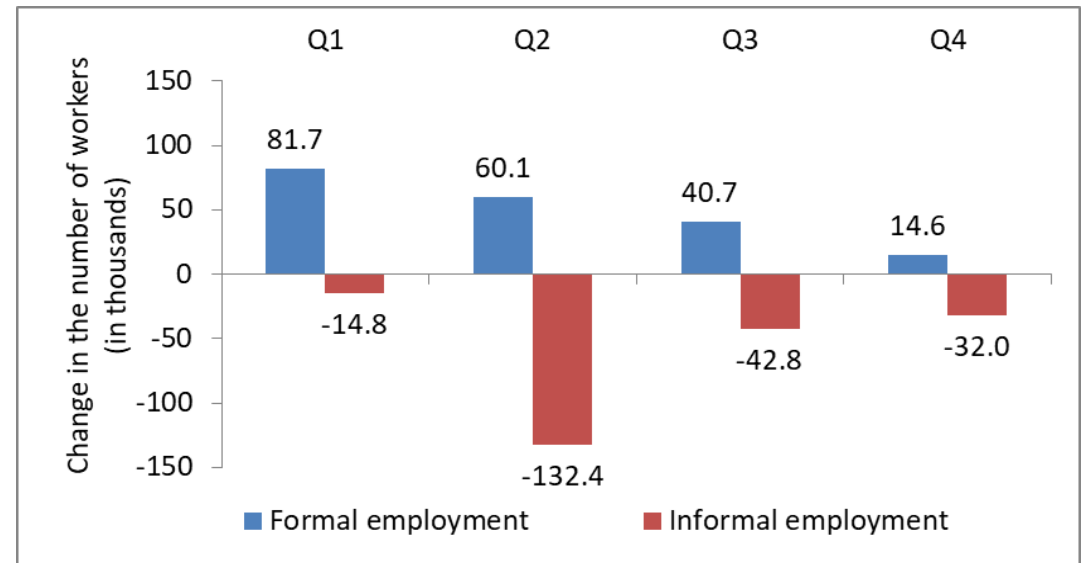
**Figure 2: Annual changes (2020/2019) in the main labour market indicators (in p.p.), by quarter**



# Trends in 2020

- Employment stagnation in 2020 is the result of a simultaneous annual increase of formal employment by about 50,000 and an annual decrease in informal employment by about 55,000 workers
- Within formal employment the number of temporary jobs decreased, while from the sectorial perspective Tourism was hit the most
- The decrease in informal employment stemmed from decreases in both wage- and self-employment; those working in the sector of Agriculture were hit the most

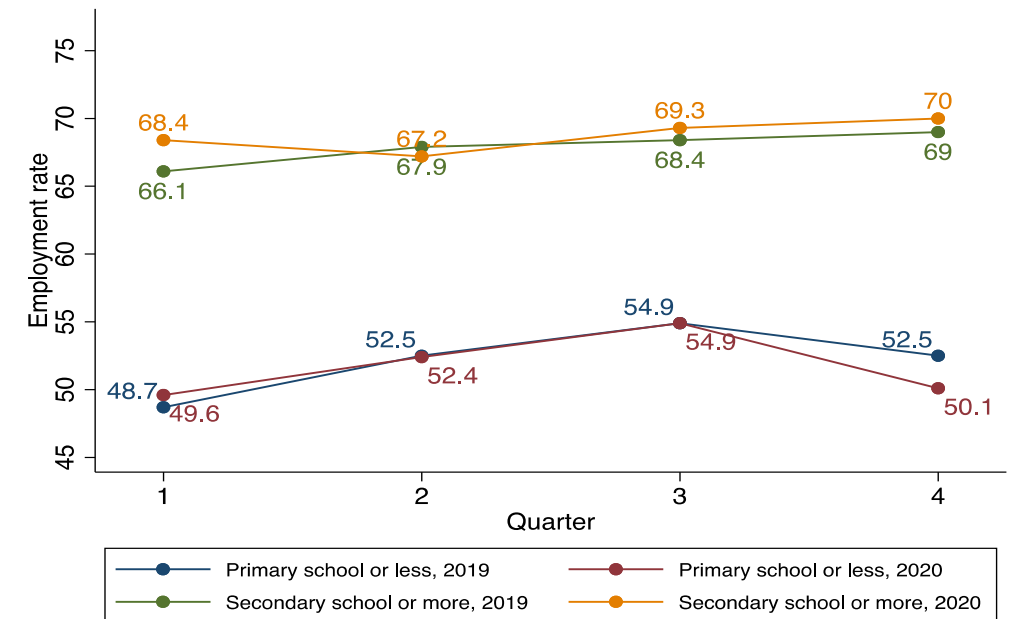
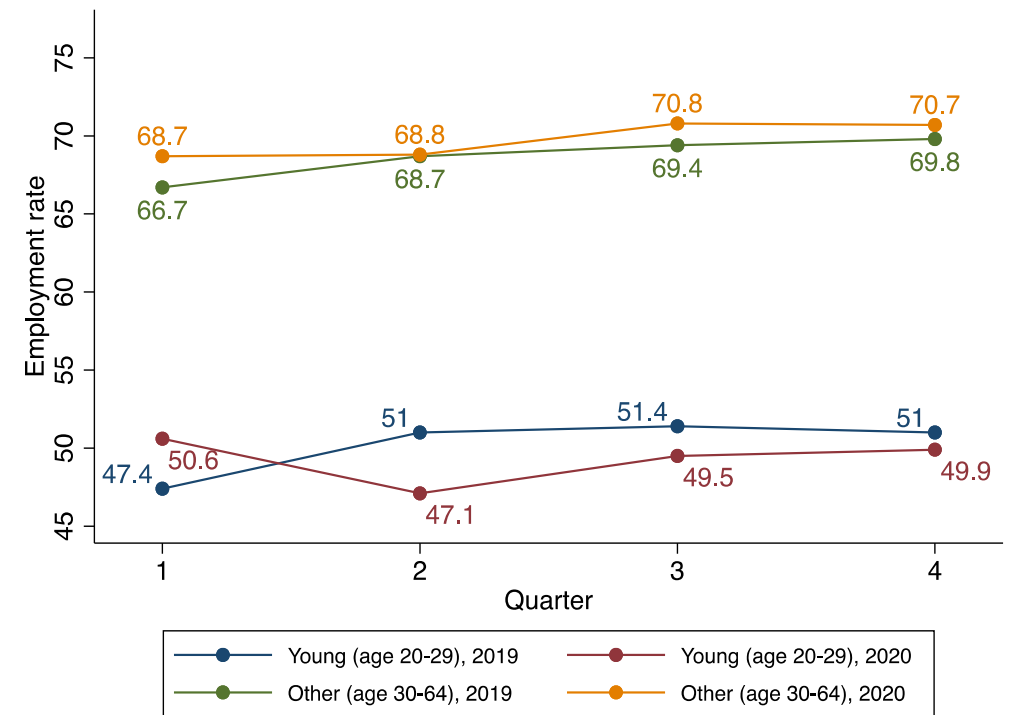
**Figure 3: Annual changes (2020/2019) in number of employees in formal and informal employment (in thousands)**





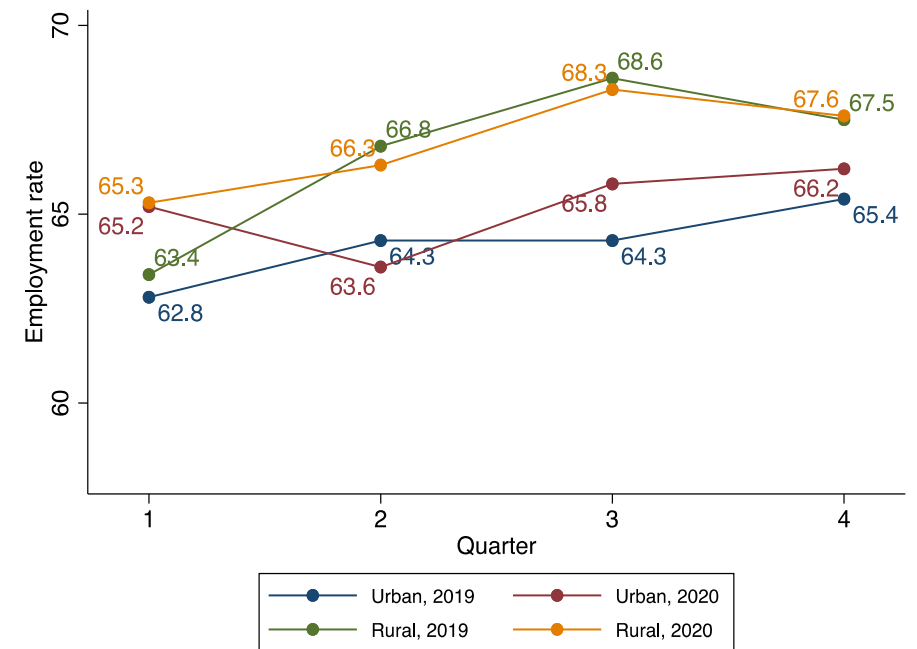
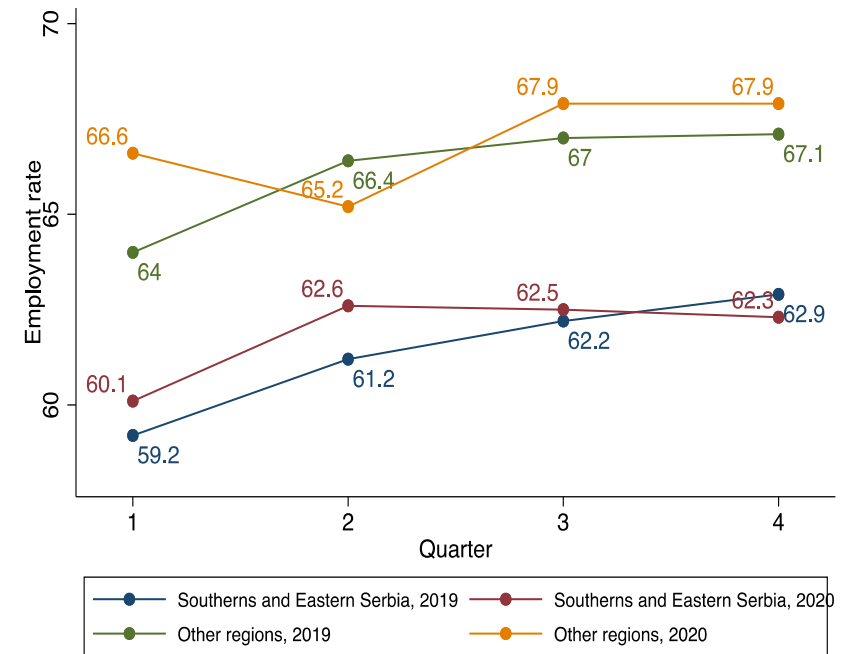
# Employment rate of vulnerable groups

- Youth (20-29) employment rates decreased in Q2, and remained at lower level than in 2019 until the end of the year
  - On the other hand for the remaining population employment rate became higher
- Male and female employment rate trends followed similar trends in 2020
- People with low education (primary or less) suffered a decrease of employment in the last quarter of 2020
  - People with secondary school or higher have slightly higher employment rates at the end of the year



# Employment rate of vulnerable groups

- Unlike other regions which faced the temporary employment drop in Q2, while finishing with higher employment rates than in 2019, in the region of Southern and Eastern Serbia employment rate showed negative trends later on and recorded a drop compared to 2019 only in the fourth quarter
- Similar applies to urban areas, for which the outcomes improved after a temporary drop, while for rural areas, after initial improvement in Q1 the employment rate in other quarters was slightly lower than in 2019



# Methodology

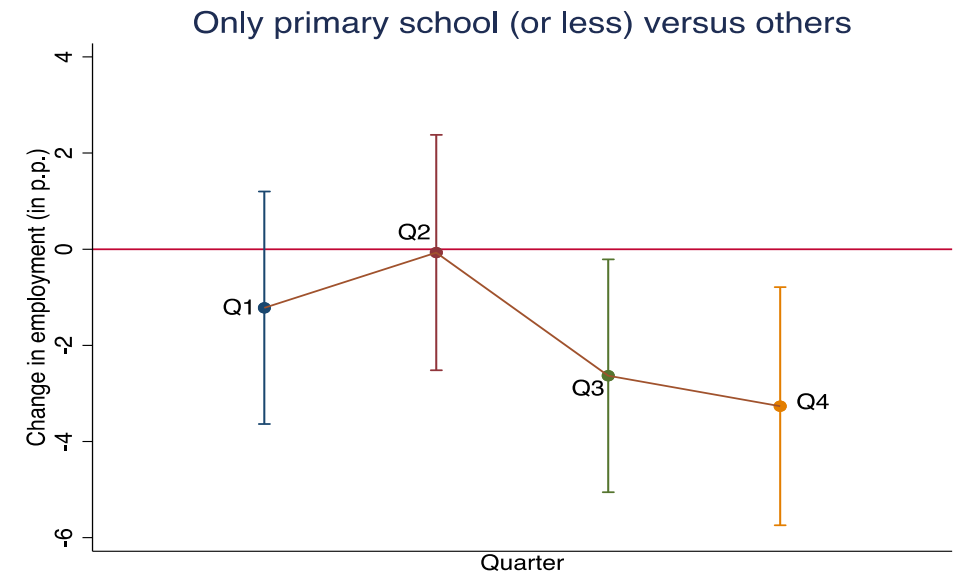
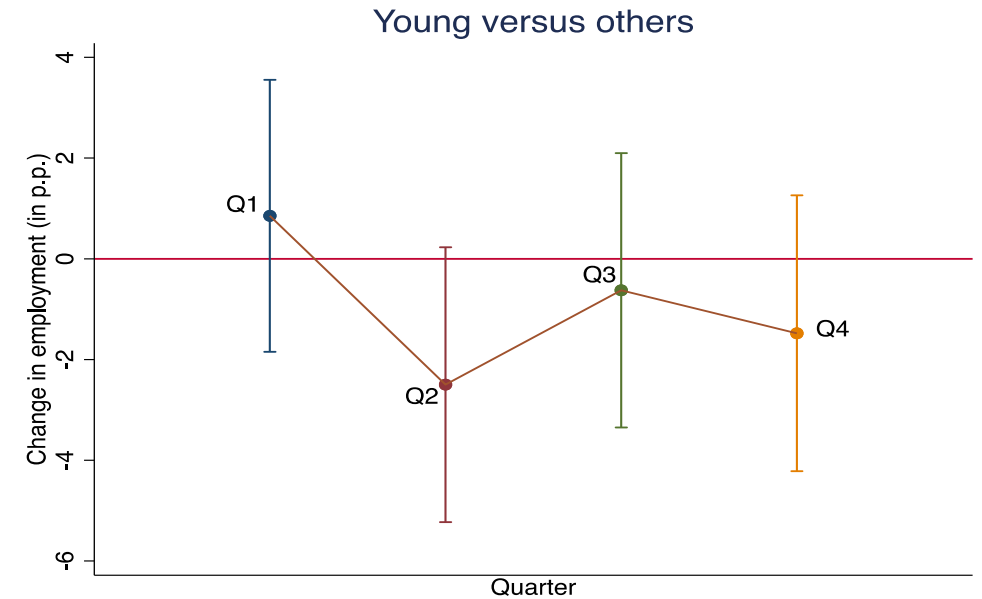
- We use the difference-in-differences methodology and we compare outcomes before (2019) and after (2020) the effects of the epidemic occurred for the groups that we identified as potentially vulnerable.
- We estimate the following regression:

$$y_{itd} = \beta_0 + \beta_{DiD} (I(vuln. group)_{itd} * Y2020_t) + \beta_1 vuln. group_{itd} + \beta_2 Y2020_t + X_{itd} \delta + \gamma_d + \varepsilon_{itd}$$

- Where  $y_{itd}$  is the employment of individual  $i$  in year  $t$  in district  $d$ .
- **$\beta_{DiD}$  is and indicator of the relative change in the position of a vulnerable group**
- We do the analysis for each vulnerable group and quarter separately.
- $X_{itd}$  is a vector of covariates which includes female, 5-year age groups, highest level of education attained, living in an urban area, and the presence of children aged 0 to 14 in the household, while district level fixed effects expressed in  $\gamma_d$
- To ensure that our results are robust and not driven by trends, we perform the so-called placebo tests where we assume the placebo treatment year to be 2019.

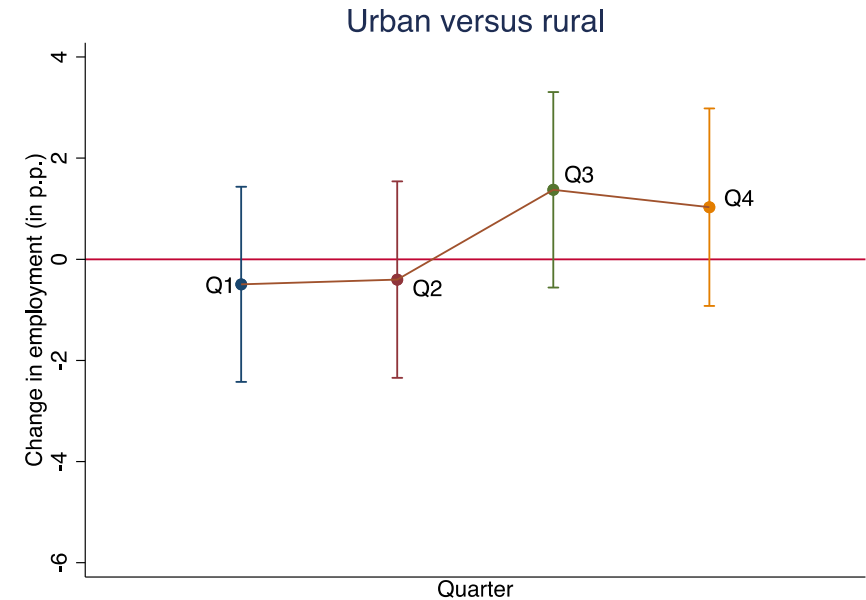
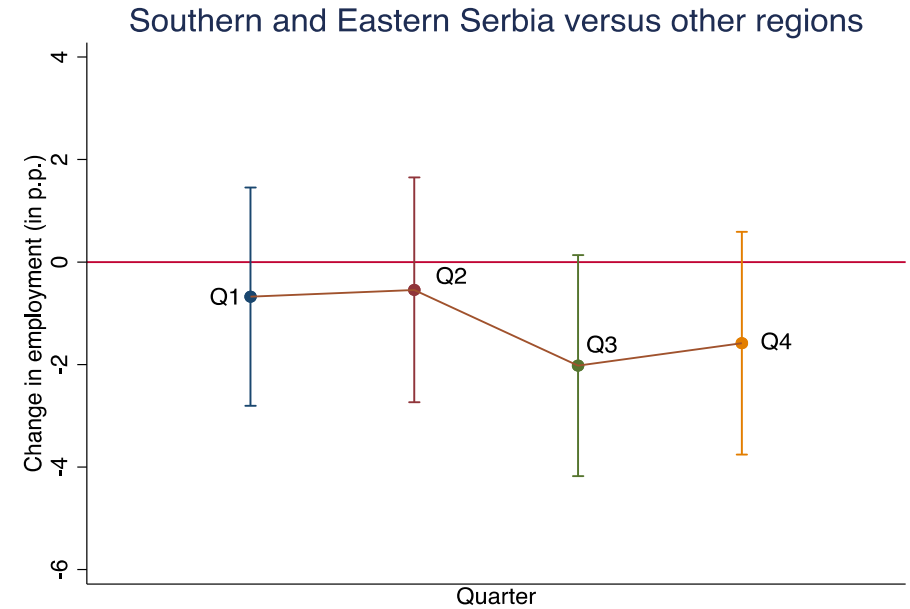
# Results

- Results suggest that, after controlling for other characteristics, youth (20-29) employment chances has decreased in Q2 (90% CI) when compared to others
  - The differences in employment changes between the groups are not significant in other quarters
- Changes in male and female employment rates were not different in any of the quarters
- Compared to others, those with low education (primary or less) have suffered a decrease of employment likelihood in Q3 and Q4 of 2020
  - The differences were not significant in first two quartiles



# Results

- After controlling for other characteristics, employment chances of those in SE Serbia are lower in Q3 and Q4 (90% CI) when compared to others
  - The differences were not significant in first two quartiles
- Changes in urban and rural employment rates were not different in any of the quarters



# Summary of findings

- COVID-19 has interrupted favourable trends on the labour market in Serbia, with employment rate stagnating in 2020 when compared to 2019
- Employment stagnation hides the unfavourable trends of some vulnerable workers
  - The number of those informally employed has decreased, particularly in agriculture
  - Within formal employment the number of those with temporary contracts and in tourism also decreased, while employment in some sectors increased
- When compared to others, youth (20-29) employment rate decreased in Q2. While their employment rate continued to be lower than in 2019 in Q3 and Q4, this decrease was not significantly different from others when controlling for other characteristics
- Employment chances of low-educated and those from SE Serbia were negatively affected by the pandemic in the year 2020, compared to their counterparts
- Differences in male/female and urban/rural employment changes were not significant

# Conclusions

- Strong initial measures introduced by the government of Serbia have preserved many permanent jobs in formal employment, particularly among the MSMEs. They also allowed for favourable trends from previous years to continue.
  - The fact that measures were applied across the entire private sector caused unnecessary high fiscal costs, particularly as some sectors could continue to work without interruption
- Some vulnerable groups of workers, such as those informally employed or those with temporary contracts were not protected with these measures and their employment decreased
  - Measures that targeted short-term income stability of these households could have had better effect on preserving social stability
- Particular attention should be paid to low-educated and those from SE Serbia who were negatively affected by the pandemic in Q3 and Q4 of 2020

# Future plans of the project INEQ RS COVID-19

- Perform robustness check of the results
- Finish the analysis of other labour market outcomes (work absenteeism, changes in the working hours, changes in wages)
- Analyse other effects on the labour market, health and income via new survey conducted in 2021
- Simulate the changes in income distribution and inequality that occurred as a consequence of the COVID-19 pandemic
- Devise short-term relief measures that would preserve income stability
- Propose long-term employment measures that can improve employability of those who were hit the most in the pandemic



Thank you for your attention

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