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Impact Evaluation of an ESF-Funded ALMP for People with Disabilities

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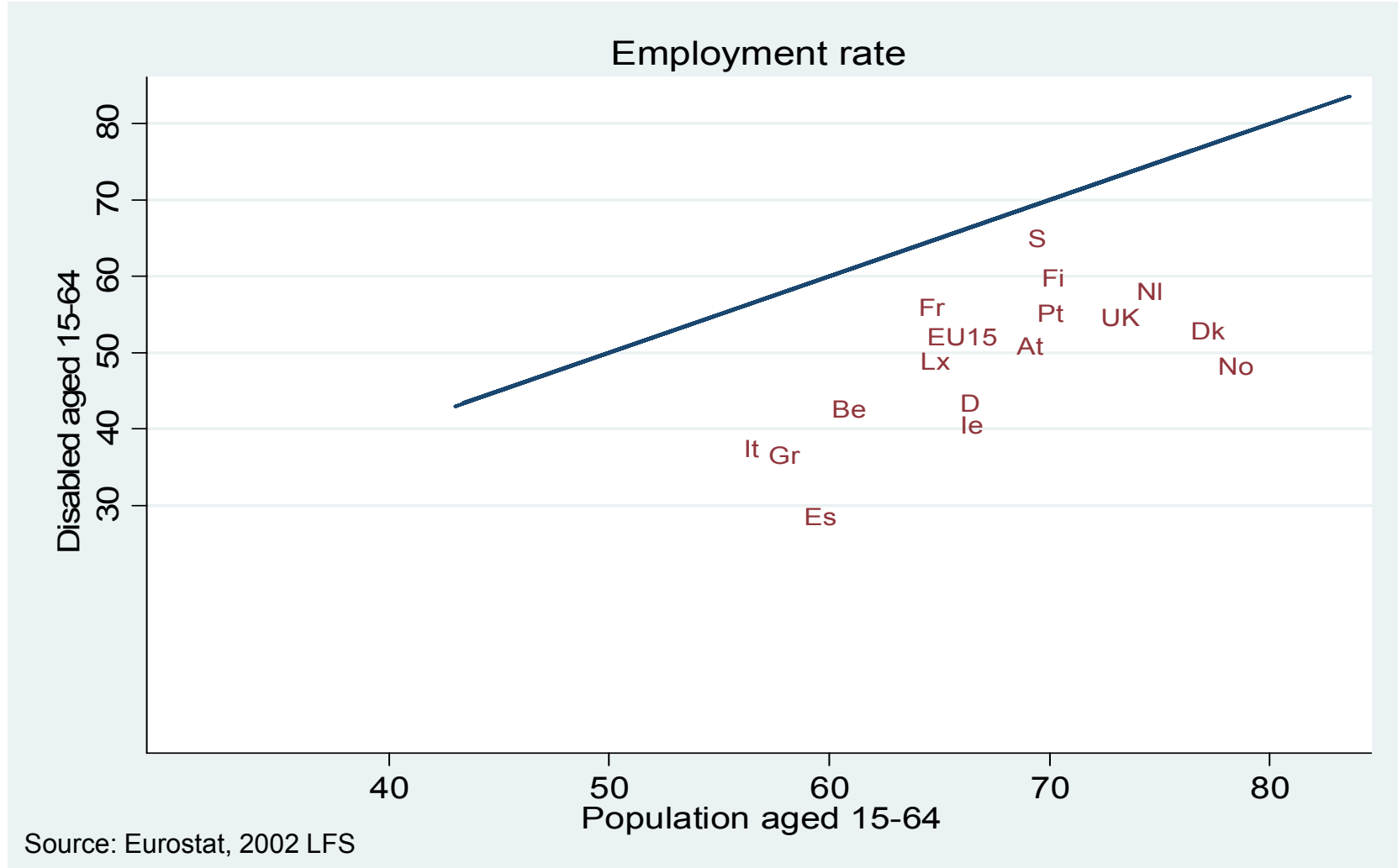
The Budapest Institute – in brief

- Established in 2008 by four economists
- Independent research and analysis to support policymaking, including impact evaluation
- Expertise in:
 - employment policy
 - social policy
 - education policy
 - quality of business environment
 - better regulation

Outline

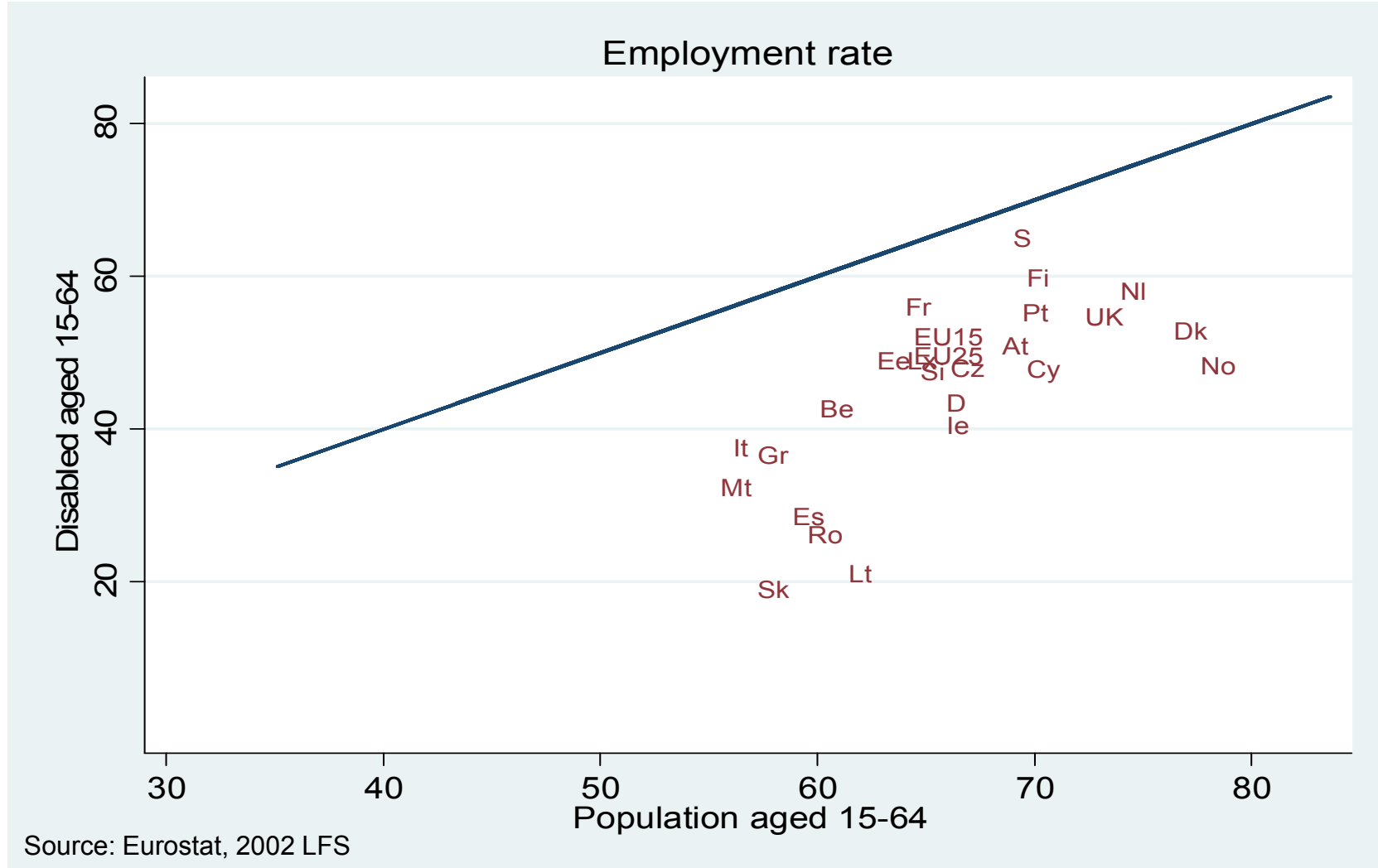
- Employment of the disabled in the EU
- Paradigm shift and the SROP 1.1.1 programme
- Data
- Selection and impact evaluation methodology
- Results and discussion
- Conclusions
- Lessons and suggestions regarding evaluation

Employment of the disabled in Hungary

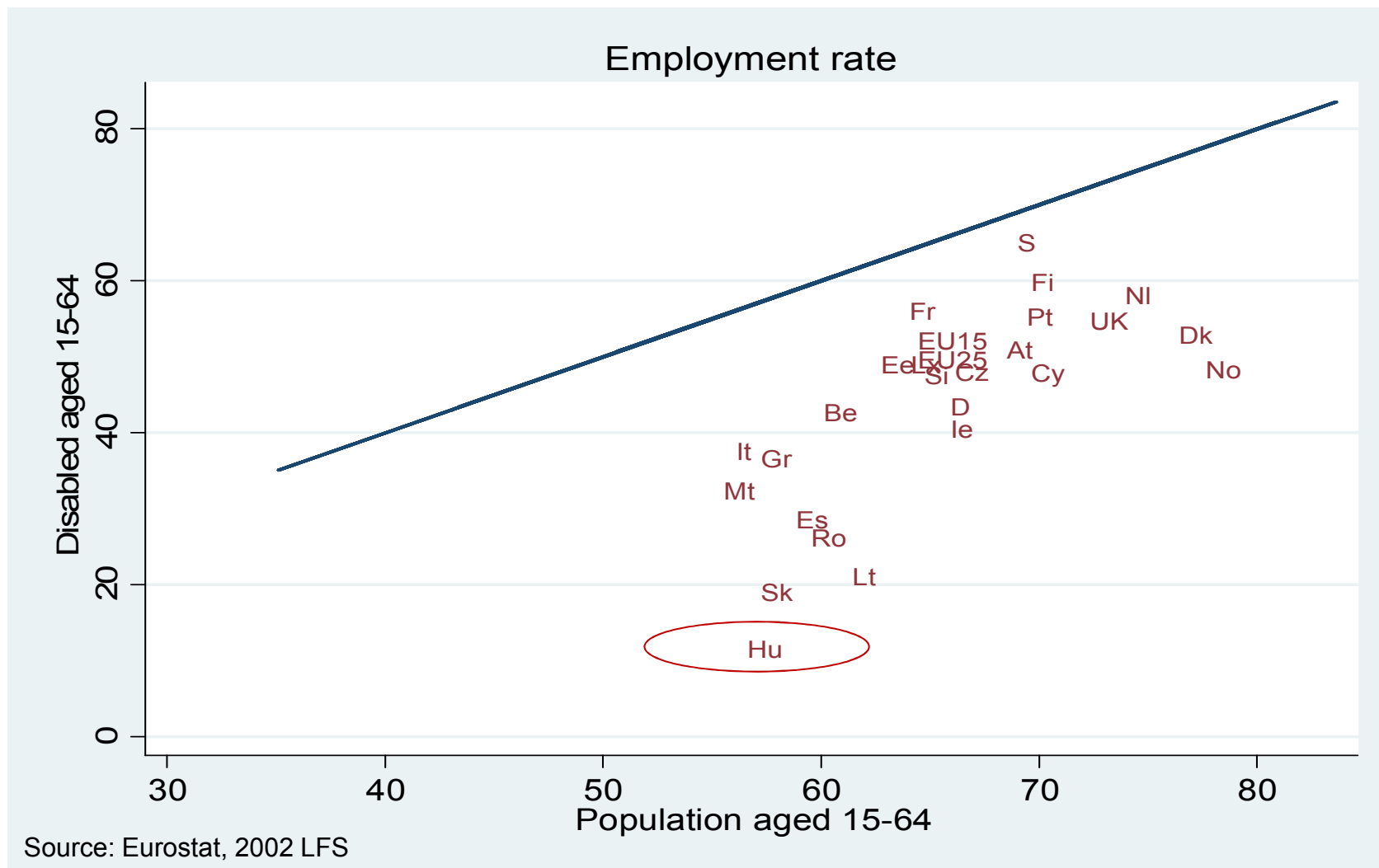


Source: Eurostat, 2002 LFS

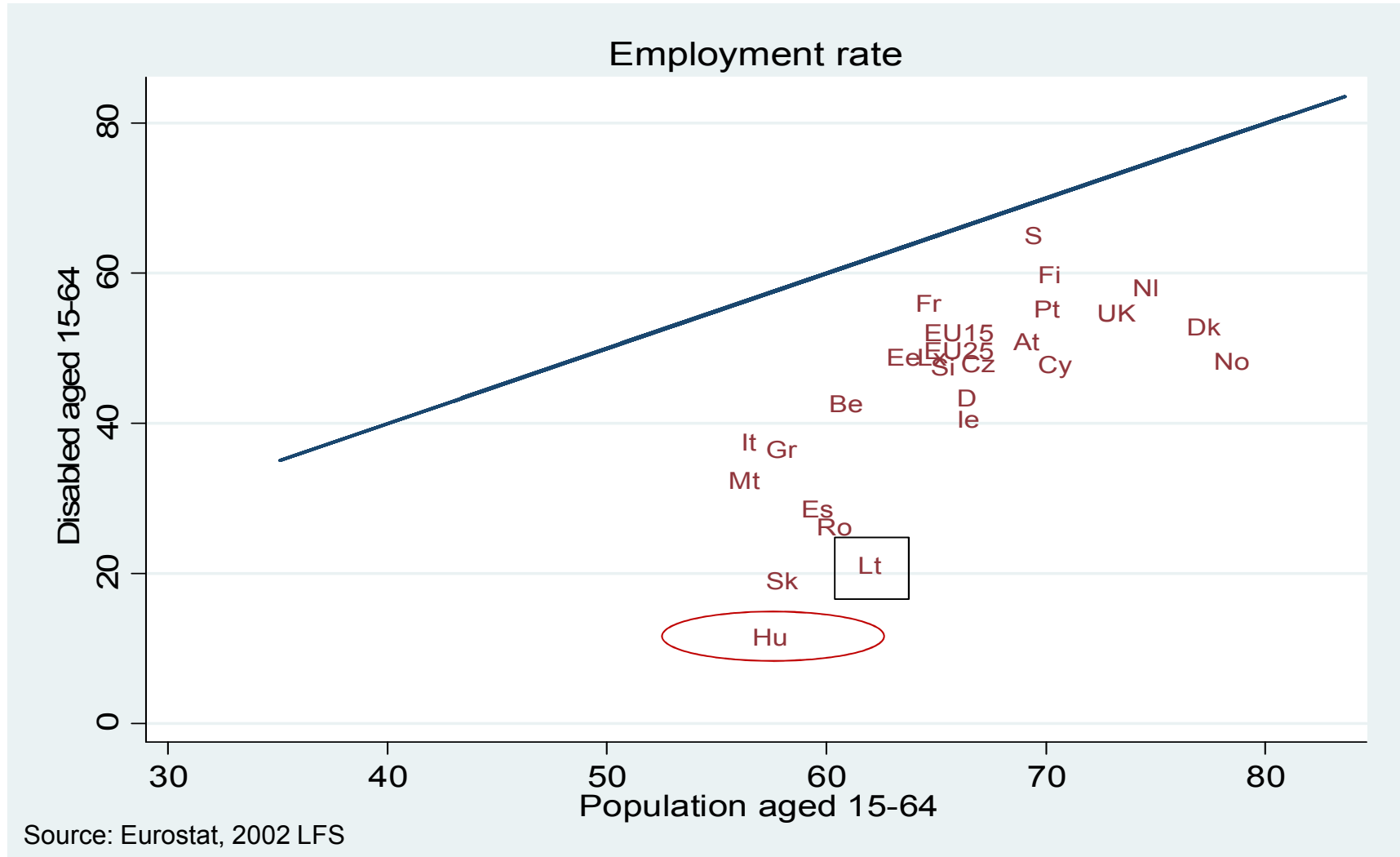
Employment of the disabled in Hungary



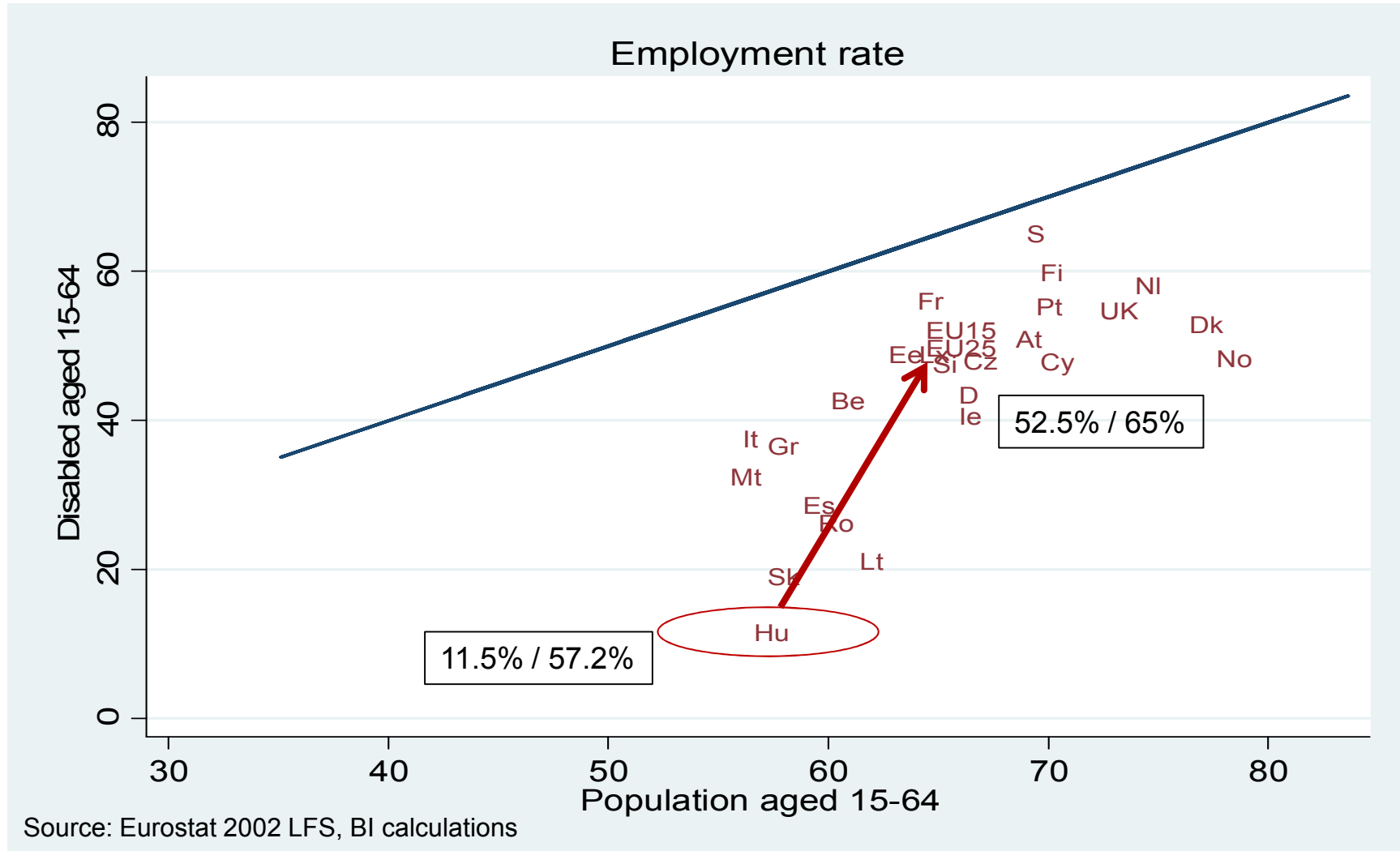
Employment of the disabled in Hungary



Employment of the disabled in Hungary

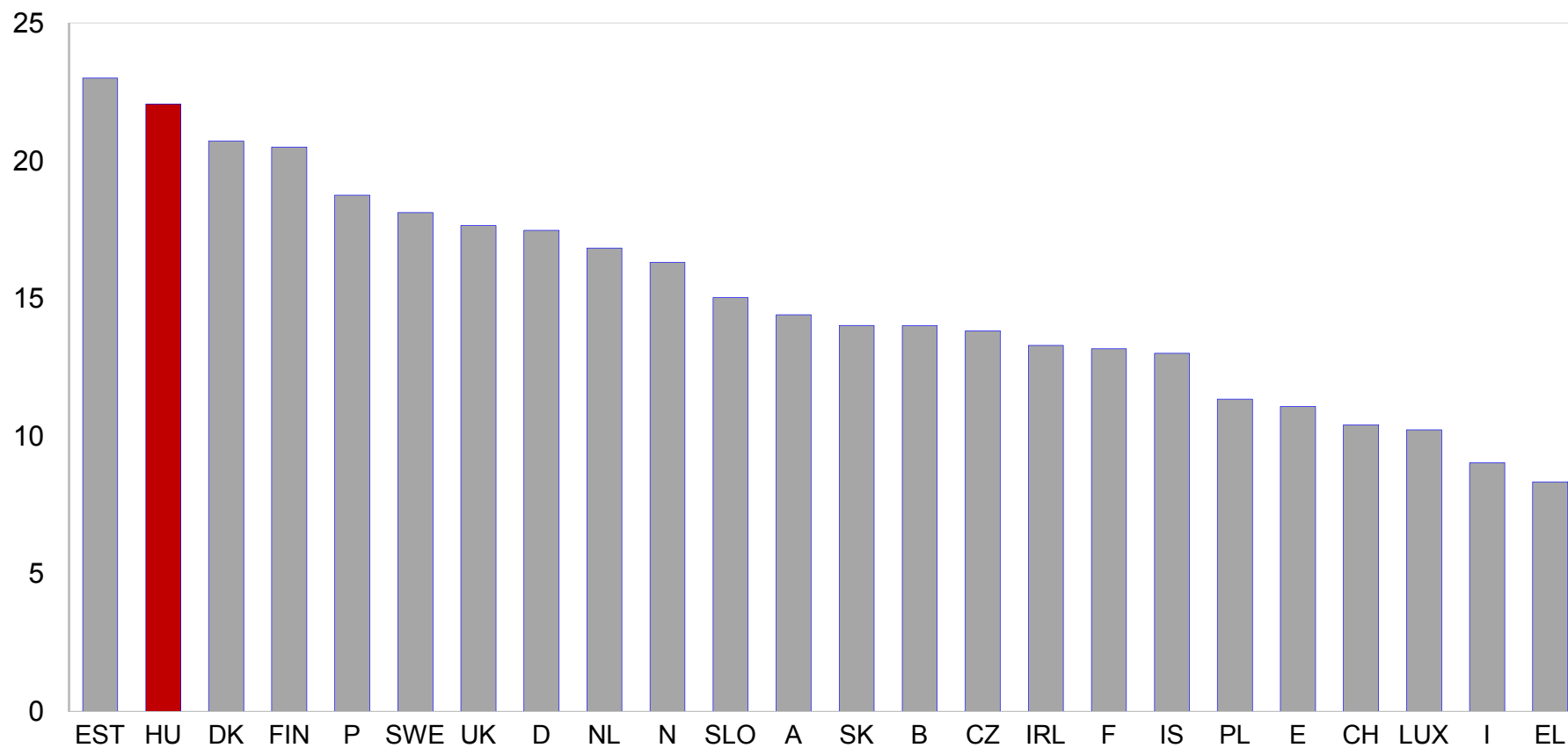


Employment of the disabled in Hungary



People with disabilities in Hungary

Prevalence of disability, age 20-64



Source: OECD

Policy answer – a paradigm shift in LMPs

- Shift from pension-type benefits towards active labour market measures
- Hungarian example: SROP 1.1.1 ALMP
 - target: people with disabilities
 - goal: reactivation/reemployment
 - 2008-2013
 - mentoring, counselling, training, wage subsidy
 - average package: either training or wage subsidy + mentoring and labour market counselling

Programme participants

- Recipients of a new rehabilitation subsidy
 - At least 50% loss in work capacity
 - Replaced disability pension, insurance based
 - Offered automatically with no sanctions if refused to participate
 - Coverage: 1/4 of the pool (~6,500 out of ~28,000)
- Recipients of an incapacity benefit
 - 40-50% loss in work capacity
 - Coverage: low (~4,000 out of ~150,000)

Similar international examples & results

Evaluation results of ALMP's are controversial
(Kluge, 2010, Hudomiet and Kézdi, 2008)

- National Supported Work Programme, USA
(Ham and LaLonde, 1996)
 - 90/65/40% reemployment
 - Long term impact: 10%points
- New Deal for Disabled People, UK
(Orr et al., 2007)
 - Impact: 7-11% points

Data sources

- NLO programme participation records (treated)
 - entering between 01 March 2008 -31 Dec 2010
- NLO unemployment register (control)
 - 100% sample of the unemployed between 01 Mar 2008 -31 Dec 2010
- Tax registry data on start of work contract
 - for control and treated, until Oct 2012

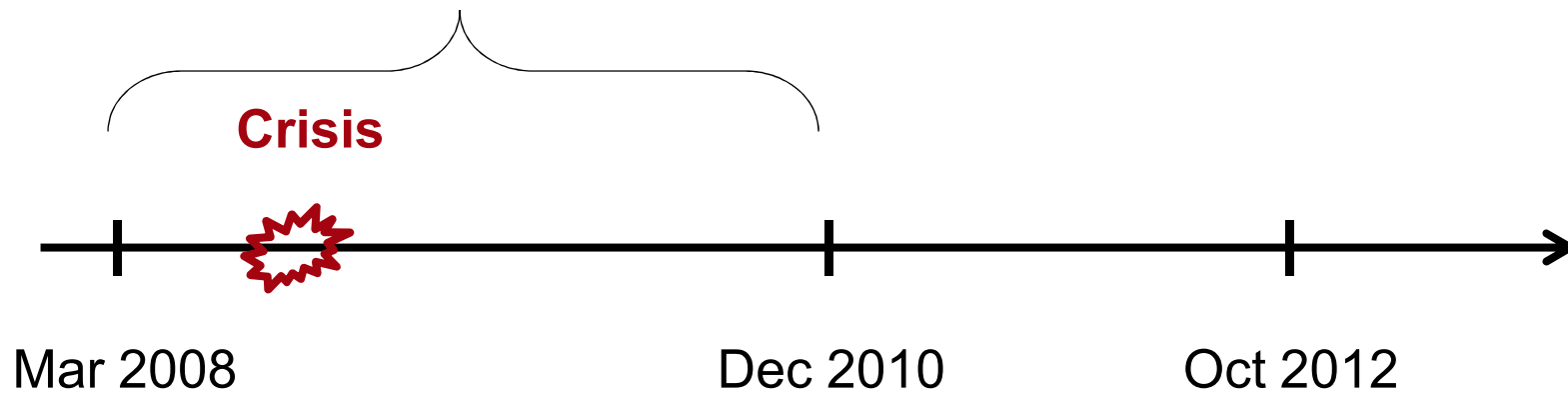
→ linked together at the level of the individual

Variables in the NLO data

- age, sex, education
- disability
- previous spells of unemployment
- spells of benefit receipt
- programme participation (entry, exit)
- measures within complex programme
- date of entering job

Time frame

Entries into the programme



Entries into employment/
unemployment

Selection into the programme

Selection model

$$P(TREATED = 1|X) = \Phi(X'\beta)$$

Programme participants are more educated

- New rehabilitation subsidy recipients(2/3): self-selection
- Old rehabilitation subsidy recipients(1/3): creaming?

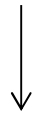
Selection into the programme

| | Treated group | Control group | Test | Differ? |
|--------------------|---------------|---------------|-----------|---------|
| No. of people | 10 911 | 153 275 | t-test | . |
| Man | 0.45 | 0.47 | t-test | yes |
| Age | 43.95 | 46.22 | t-test | yes |
| Unemployment rate | 0.11 | 0.11 | t-test | yes |
| Type of settlement | . | . | chi2-test | yes |
| Education | . | . | chi2-test | yes |

Source: BI calculations from NLO data

Focus: the uneducated

- Primary education at most (8th grade or less)
- Recorded in the unemployment register
 - All controls were registered
- Not participated in other programs



~1,700 participants

Focus: the uneducated

| | Included participants | Excluded participants | Test | Differ? |
|-----------------------------|-----------------------|-----------------------|-----------|---------|
| No. of people | 585 | 4 345 | . | . |
| Age | 44.740 | 45.550 | t-test | yes |
| Region | . | . | chi2-test | no |
| Settlement size | . | . | chi2-test | yes |
| Education | . | . | chi2-test | yes |
| Employment in/after | 0.510 | 0.470 | t-test | no |
| Employment after | 0.070 | 0.080 | t-test | no |
| Employment – medium term | 0.530 | 0.490 | t-test | yes |
| No reentering – short term | 0.870 | 0.890 | t-test | no |
| No reentering – medium term | 0.870 | 0.890 | t-test | no |

Source: BI calculations from NLO data

Impact evaluation: the method

- Impact of programme participation on the probability of reemployment /reentering unemployment (TOT)
- Compare to counterfactual
 - Selection of a control group by matching (one-on-one nearest neighbour matching combined with propensity score estimation)
 - Control group with same observed characteristics (age, sex, education, employment history, location)

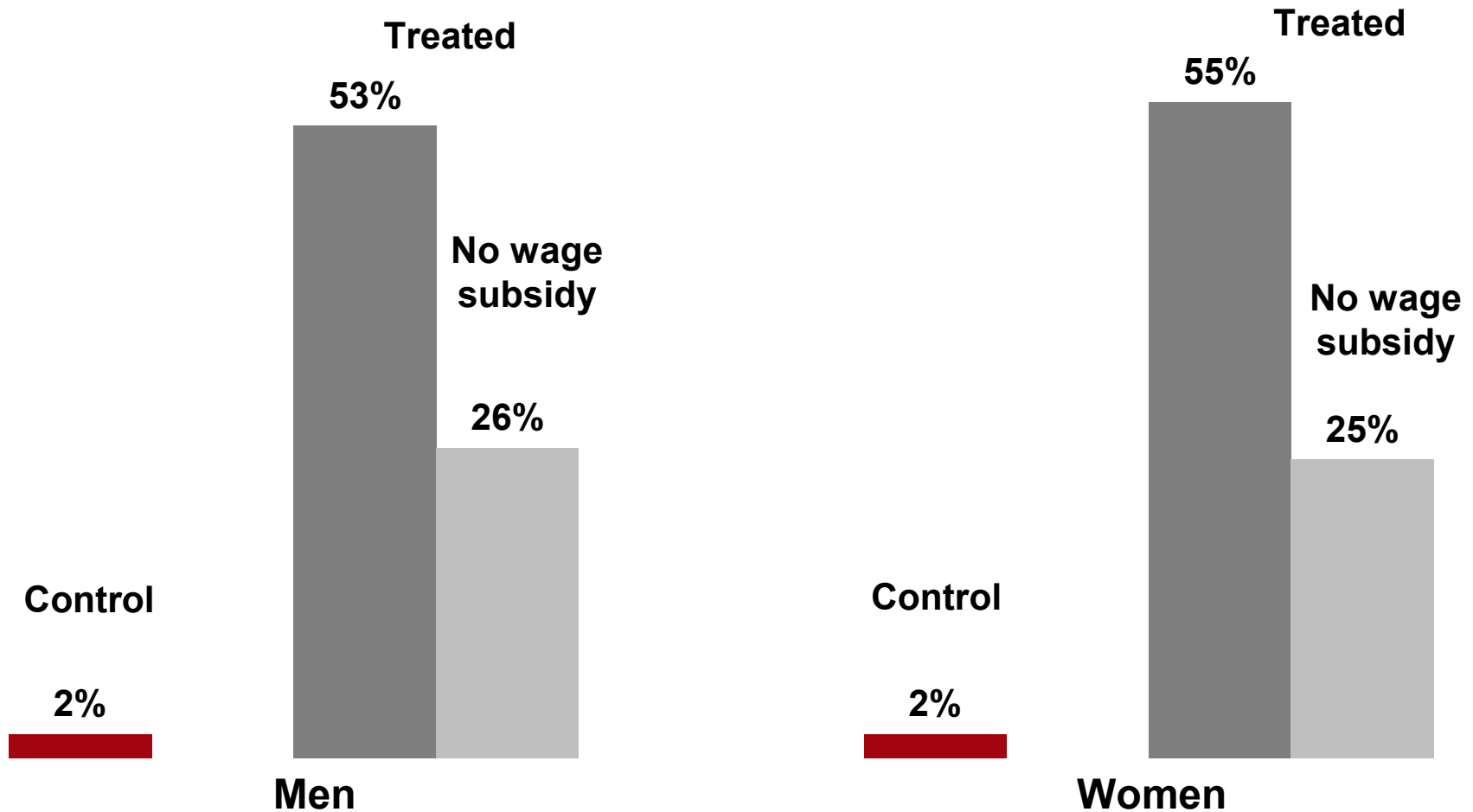
Treated vs. control group comparison - men

| | Treated group | Control group | Test | Differ? |
|----------------------|---------------|---------------|-----------|---------|
| Age | 46.05 | 46.64 | t-test | no |
| Unemployment rate | 0.11 | 0.11 | t-test | no |
| Unemployment history | 194.23 | 225.62 | t-test | no |
| Employment history | 798.48 | 928.60 | t-test | no |
| Long term unemployed | 0.49 | 0.49 | t-test | no |
| Type of settlement | . | . | chi2-test | no |
| Region | . | . | chi2-test | no |

Source: BI calculations from NLO data

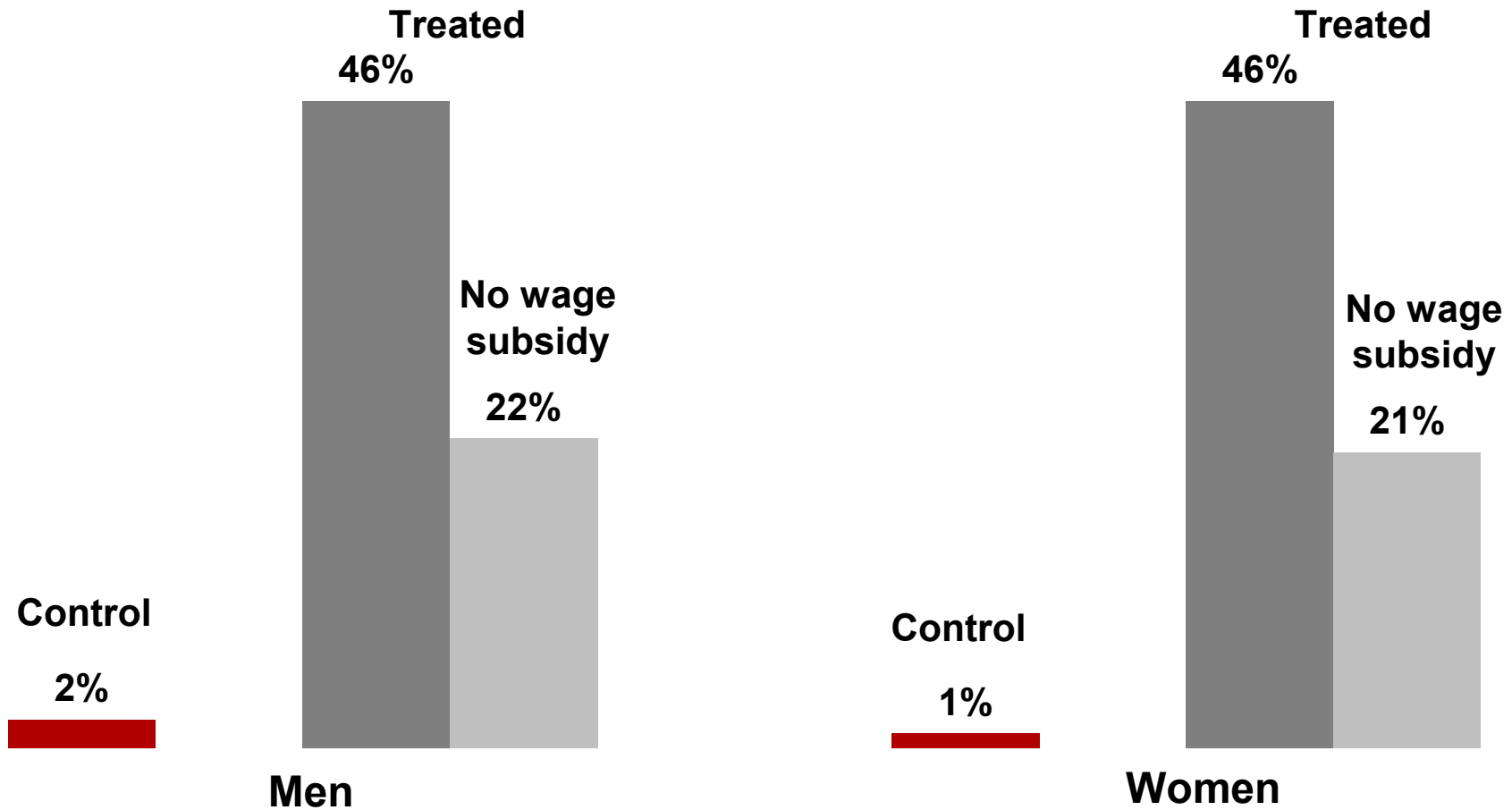
Impact of SROP1.1.1 w/wout wage subsidy

Employment rate



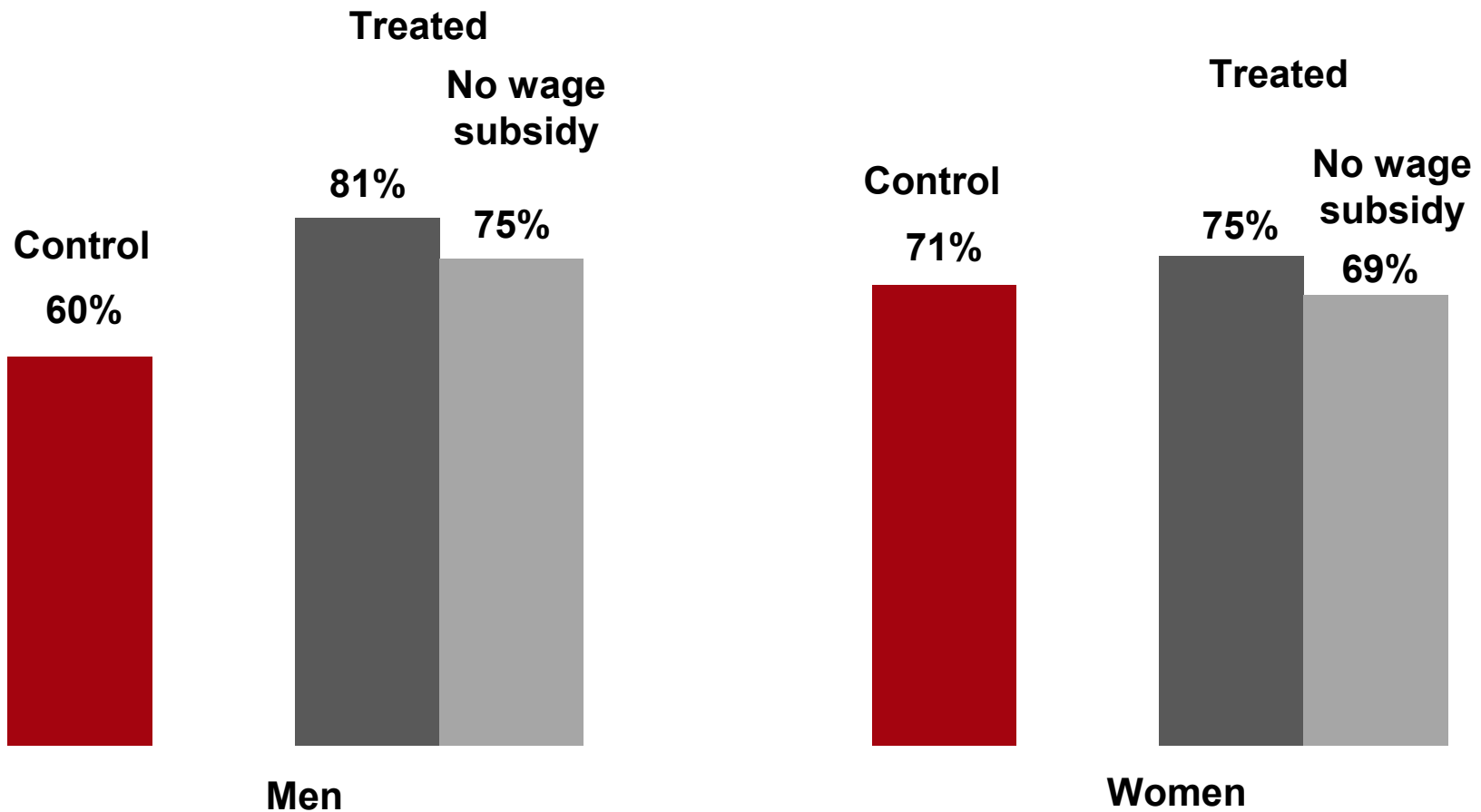
Impact of SROP 1.1.1 – long term unemployed

Employment rate

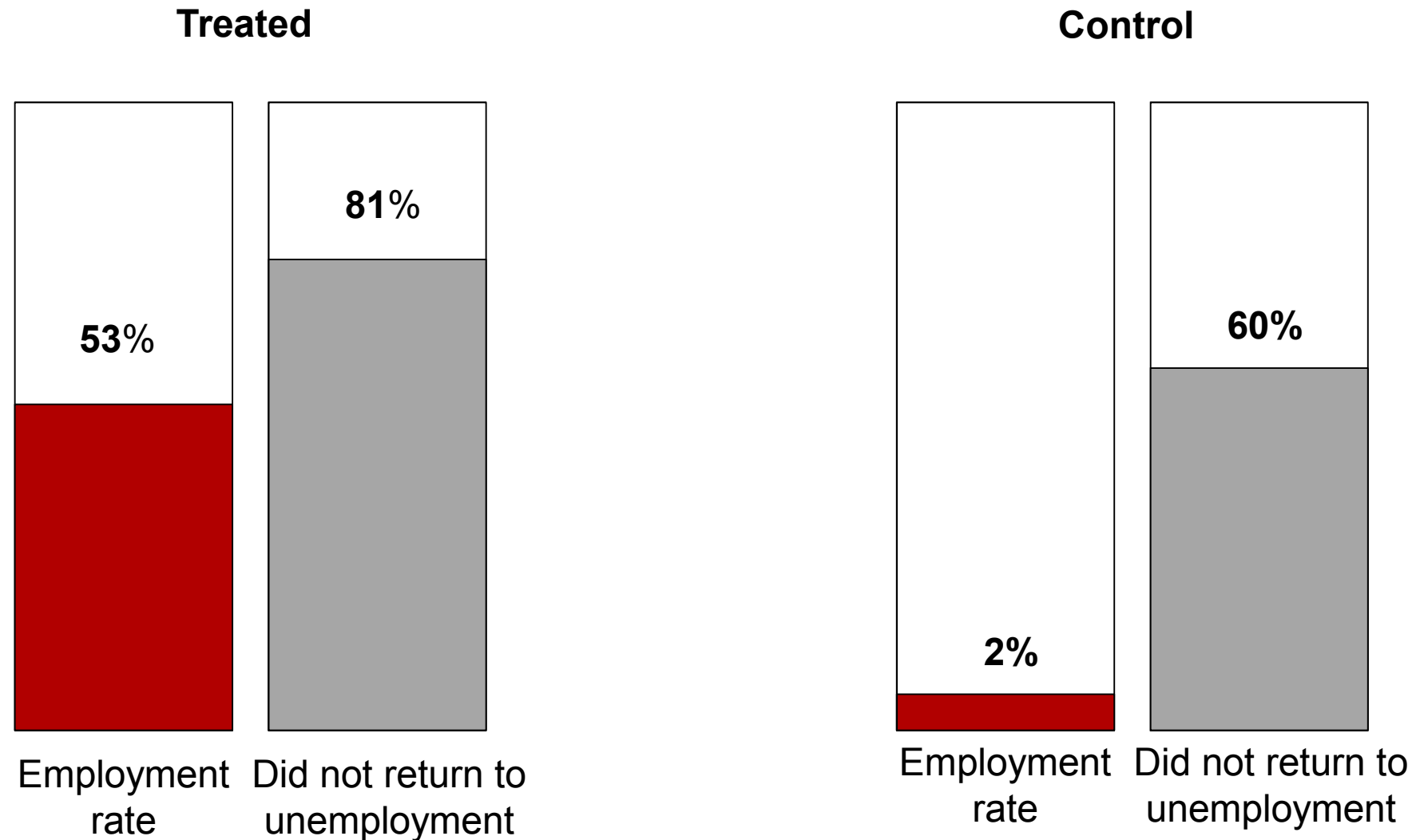


Impact of SROP 1.1.1 – w/wout wage subsidy

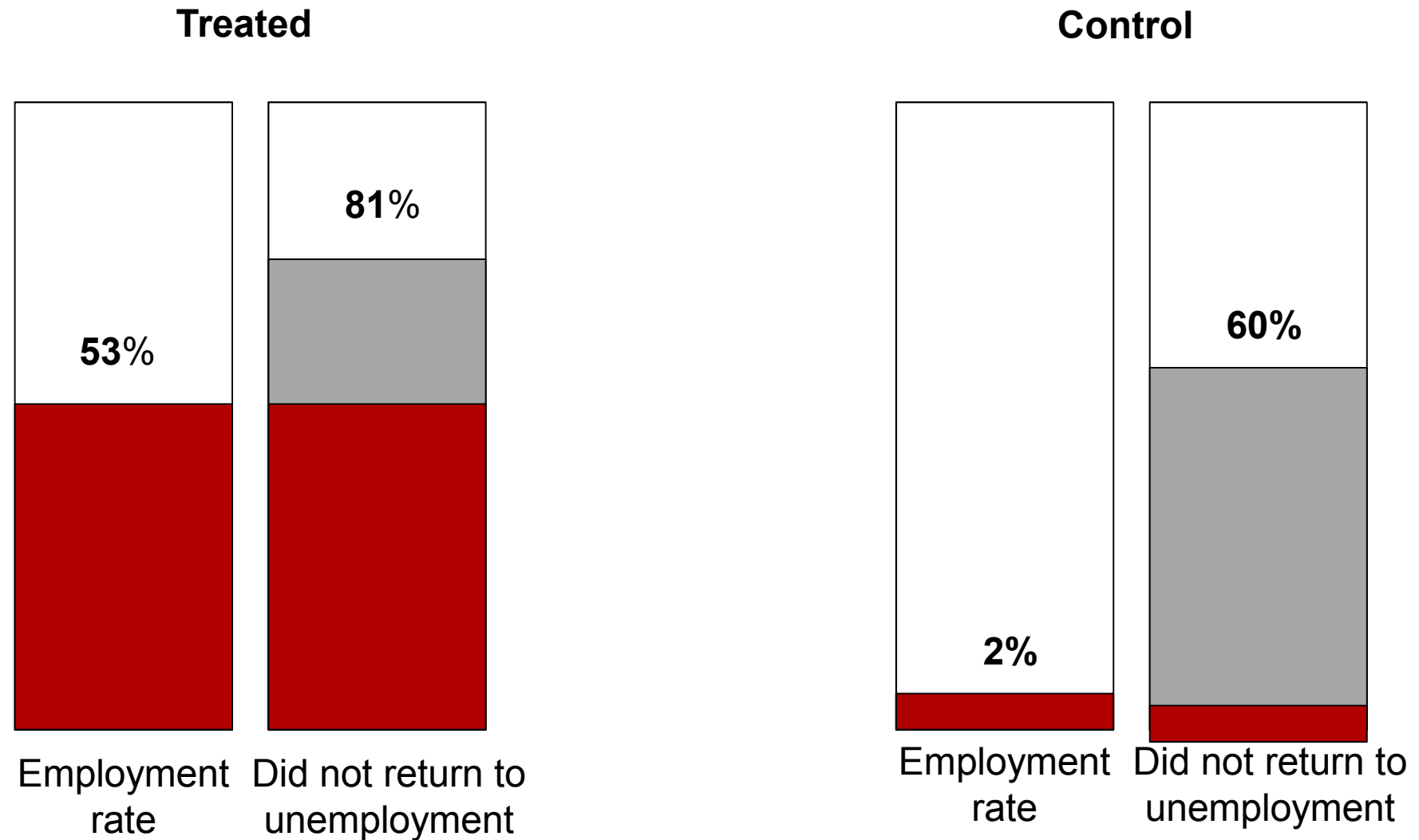
Did not return to unemployment register



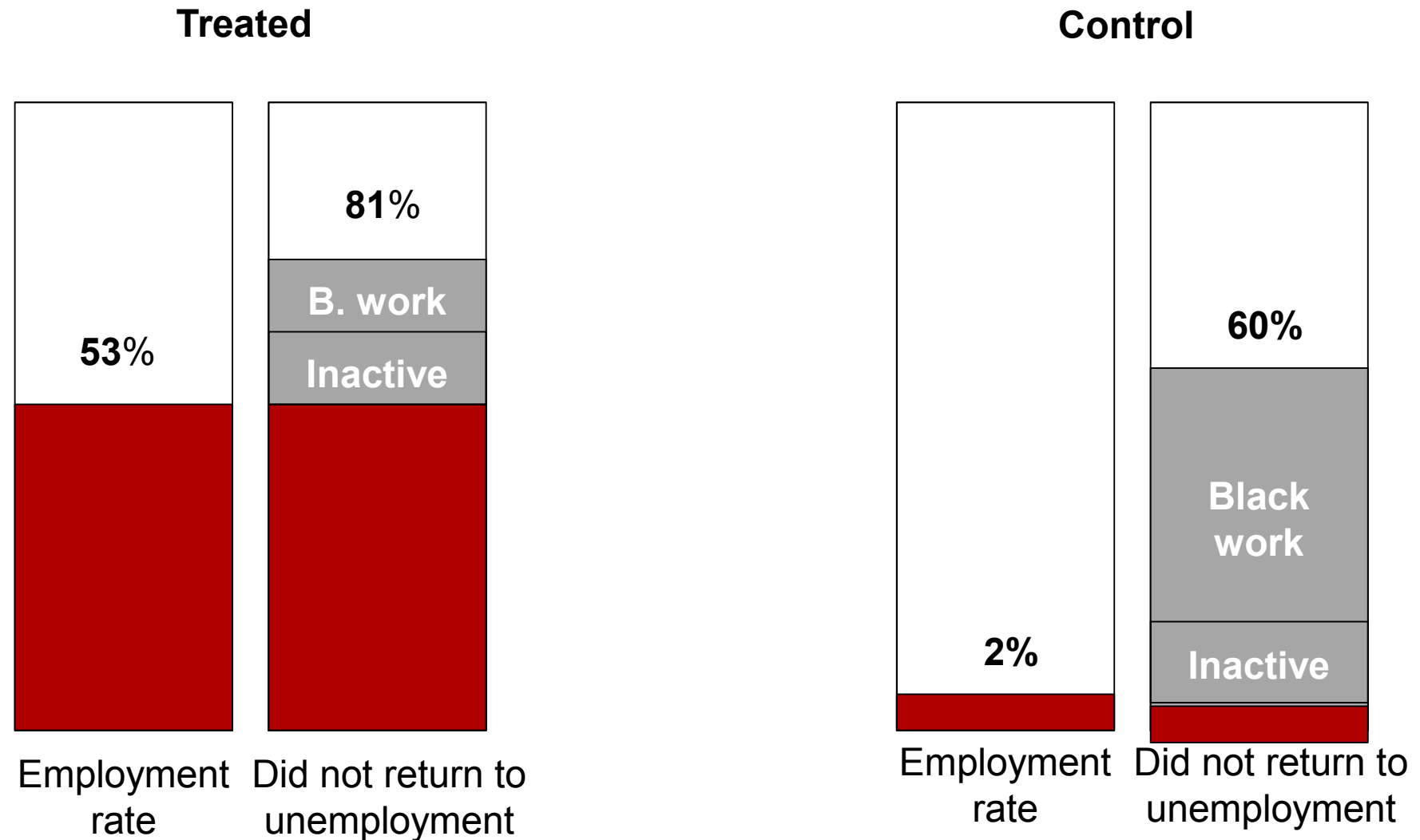
Impact of SROP 1.1.1 – different impacts from different outcome variables



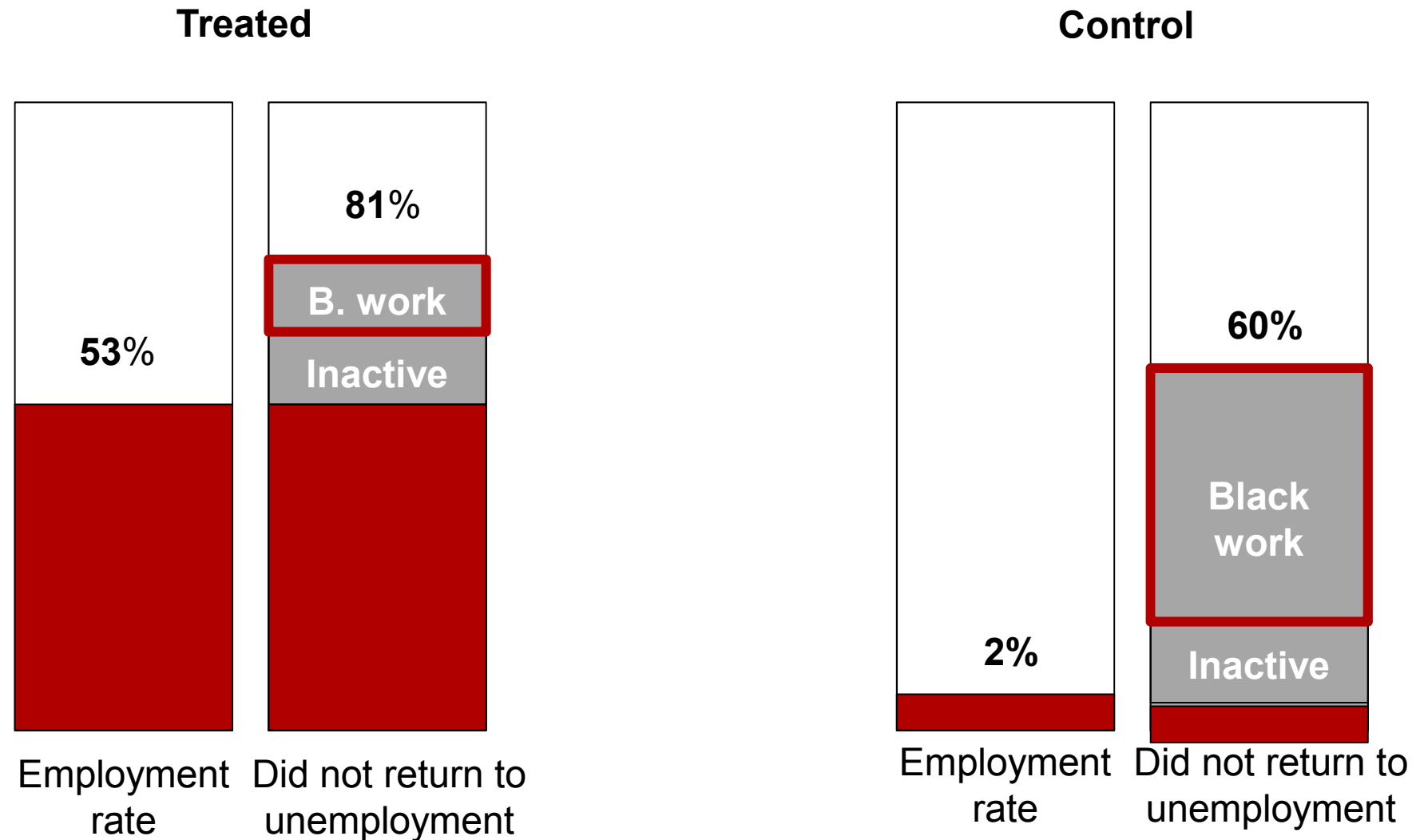
Impact of SROP 1.1.1 – different impacts from different outcome variables



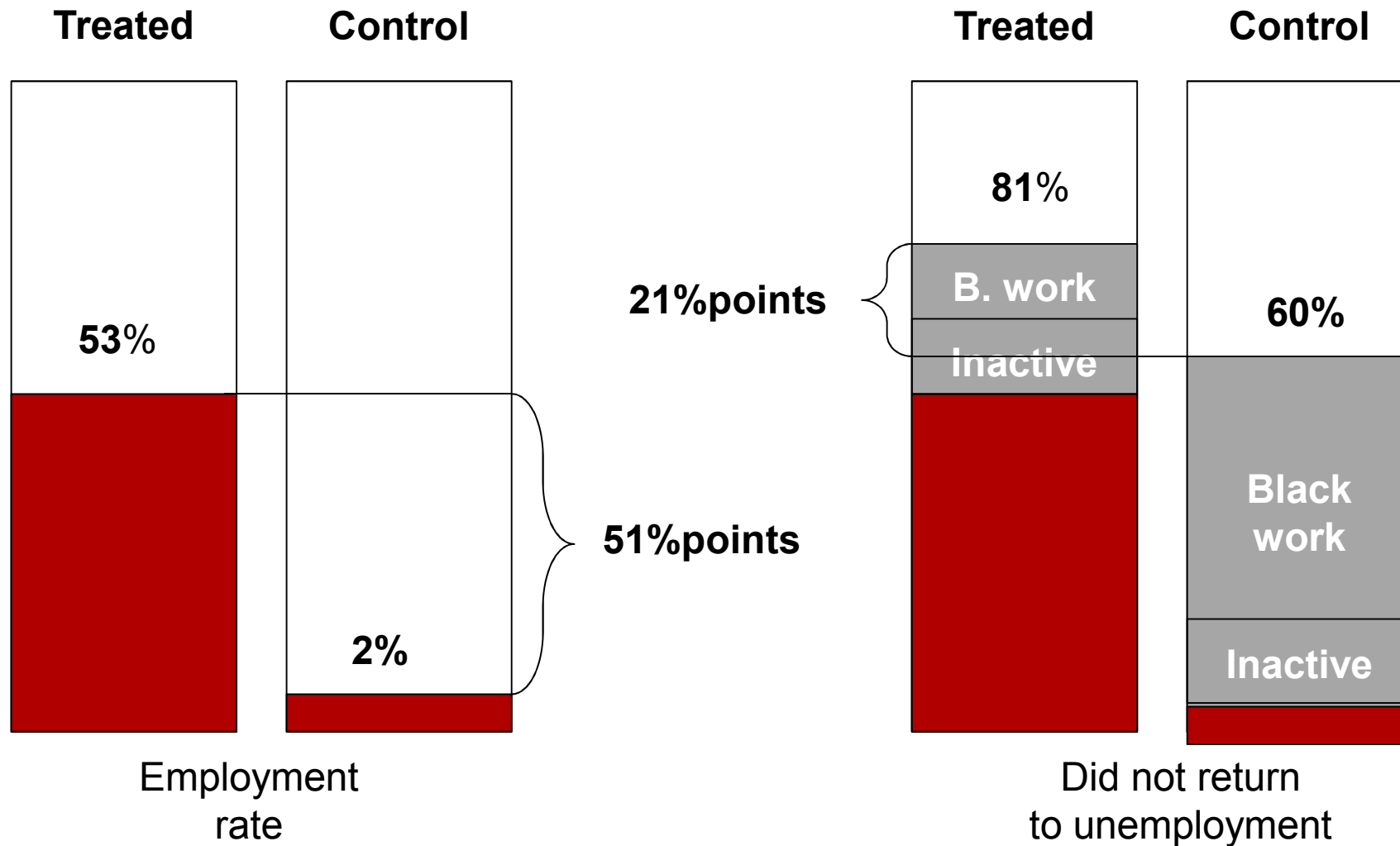
Impact of SROP 1.1.1 – different impacts from different outcome variables



Impact of SROP 1.1.1 – different impacts from different outcome variables



Impact of SROP 1.1.1 – The lower and upper bounds of the estimated effects



Robustness checks

- Several outcome variables
 - Both from employment and unemployment data
 - With/without public employment
- Resampling has no effect
 - Controls were chosen without replacement –
may affect the impact
- Significance check in many specifications, robust SE clustered by zip code

Conclusions and discussion

- Much larger than international evidence - upward bias
- Possible selection bias in unobserved characteristics (e.g. motivation, ethnicity), OVB
- Includes deadweight loss and substitution effects
- Training and mentoring improves reemployment even without wage subsidy
- Significant impact for long term unemployed as well

Suggestions regarding evaluation of ALMPs

- NLO register suitable for ex-post impact evaluation if linked to tax/employment data
 - relatively cheap and available soon after
- Quality of analysis could be improved by:
 - recording all characteristics that determine eligibility
 - additional variables (e.g. level of disability, duration of employment spell)
 - qualitative surveys on selection process
 - recording costs at the level of the participant
 - randomisation

Thank you for your attention!



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