

Indicators and policies to make work pay  
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# How to make public policies supportive to employment: Lessons from the Czech Republic

**Kamil Galuščák**, Czech National Bank copyright with the author

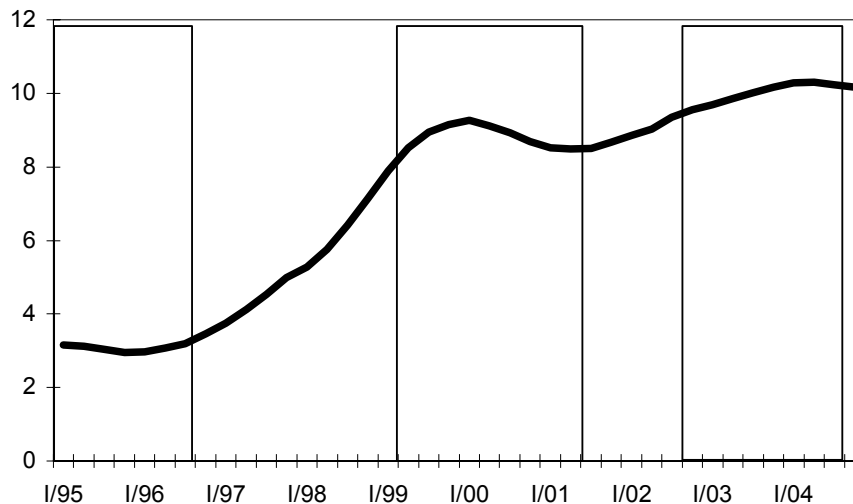
**Jan Pavel**, Ministry of Finance of the Czech Republic

The presentation contains preliminary results obtained within the framework of Czech National Bank research project No. D2/2005: "Distribution of Marginal and Average Effective Tax Rates." Address for correspondence: Kamil Galuščák, Czech National Bank, Na příkopě 28, 115 03 Praha, Czech Republic, e-mail: [kamil.galuscak@cnb.cz](mailto:kamil.galuscak@cnb.cz).

# Motivation

- The unemployment rate follows the business cycle, but never falls back to the level experienced during the previous recovery.
- Significant unemployment traps, evidence on AETR and NRR by OECD.
- Apply make-work-pay indicators and their distributions, assess potential effects of policy reforms.

Unemployment and the business cycle



Note: Seasonally adjusted registry data on the unemployment rate in %. Shaded areas denote periods of expansions as observed between the turning points in the cyclical component of the gross domestic product in constant prices. The cyclical component is derived using the Band-Pass filter.



# Model

- Mikrocenzus 2002
  - households according to OECD definitions
  - employees, unemployed and inactive
  - in the same state during the whole year
  - gross wages and unemployment benefits as observed in the data
- Simulations as in 2002:
  - social security contributions, income taxes
  - unemployment benefits, children benefits, parental allowance, housing benefits, social supplement, social assistance

# Net replacement rates

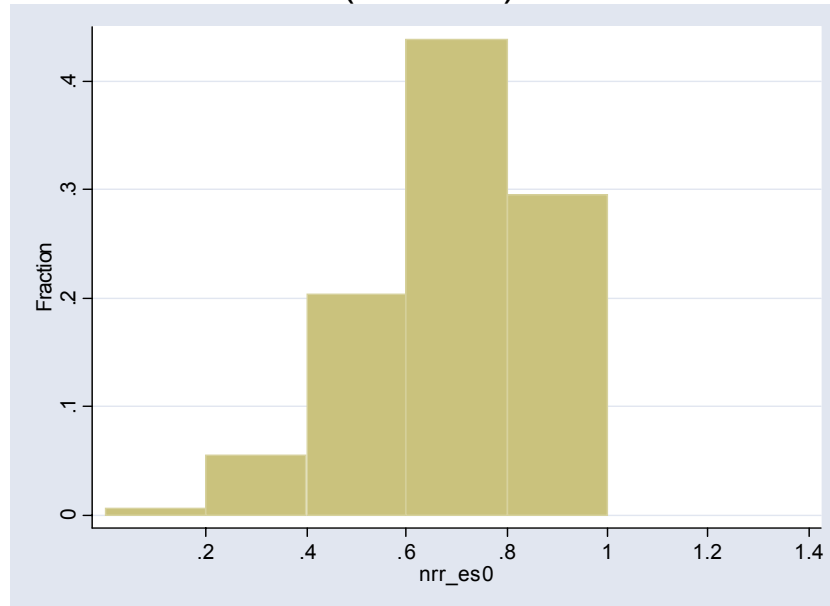
- The NRR measures the ratio of net household income while out of work divided by net household income while in work:

$$NRR = \frac{y_{netOW}}{y_{netIW}}$$

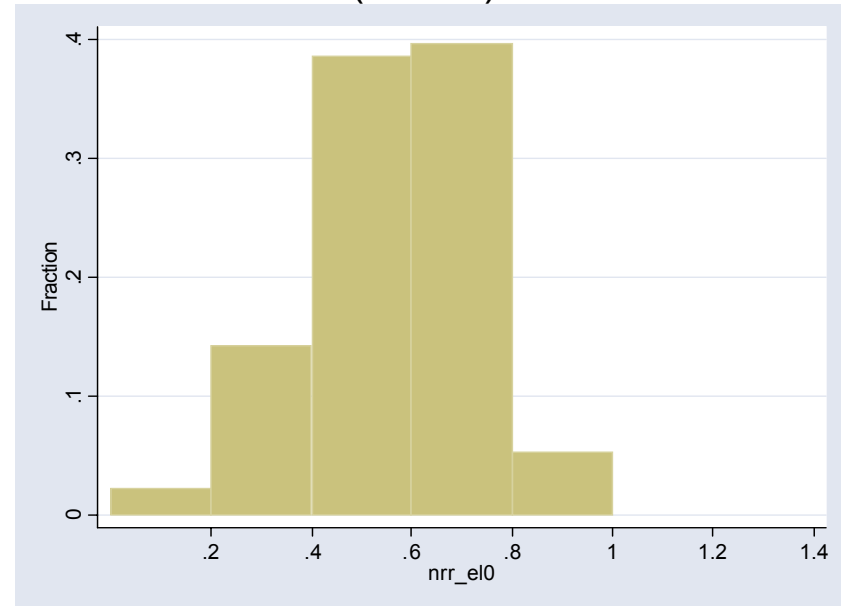
- For employees, simulate transitions to unemployment (with or without unemployment benefits)
- For unemployed, simulate transitions to work, earning 2/3 of the average wage

# Results I

Transitions E->U (with UB)



Transitions E->U (no UB)

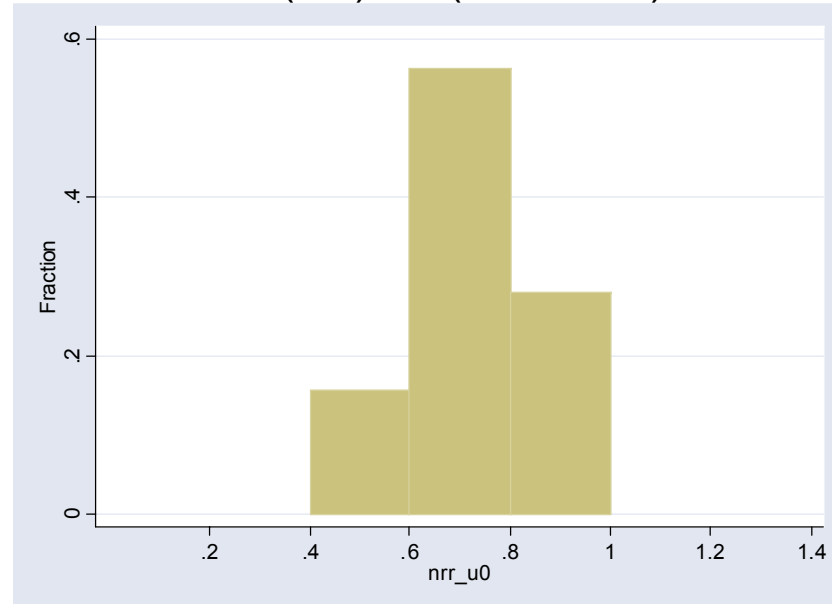


## Transitions from employment to unemployment:

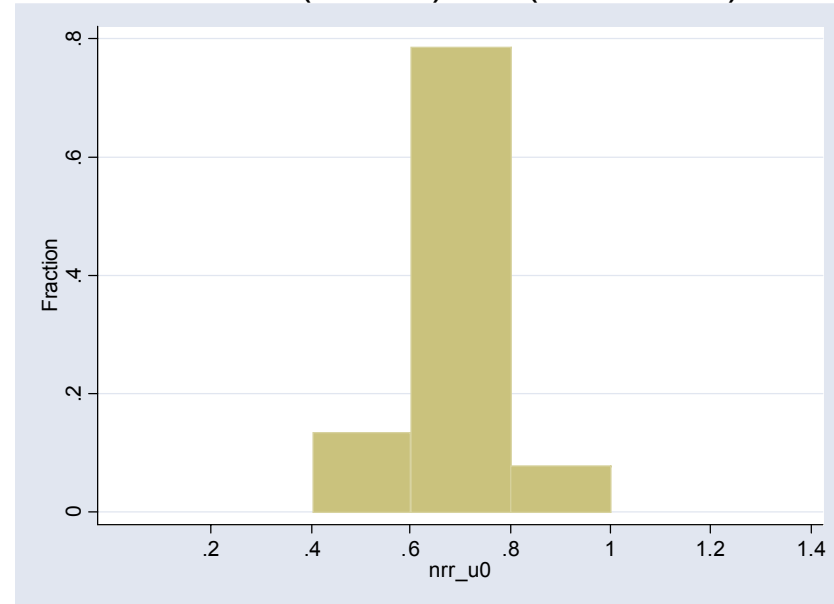
- Almost 30% of employees at high risk of being trapped in short-term unemployment upon losing their jobs (NRRs between 80 and 100%)
- Job search incentives are more “favourable” for the long-term unemployed.

# Results II

Transitions U (UB)->E (2/3 of AW)



Transitions U (no UB)->E (2/3 of AW)



## Transitions from unemployment to employment:

- Significant unemployment traps for one third of the short-term unemployed.
- Results sensitive to the choice of the entry wage.

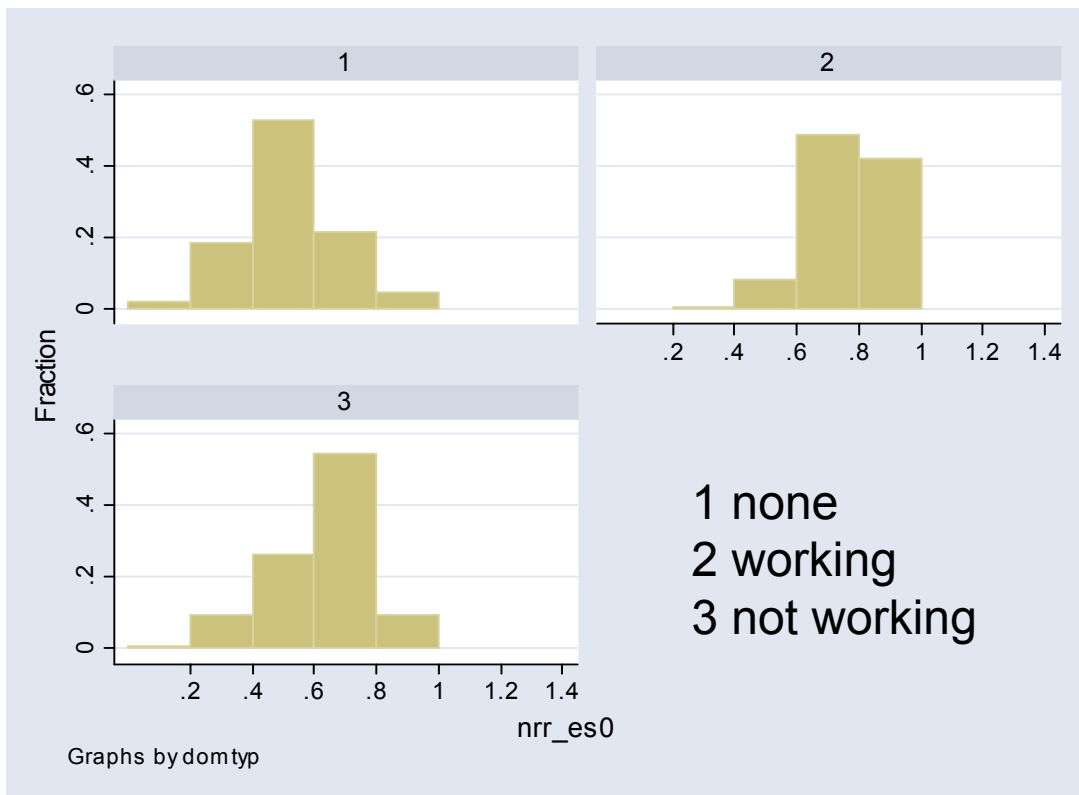
# Determining factors I

- Determinants of high net replacement rates
  - low educational attainment
  - women
  - more children
  - the presence of spouse
- All these groups are at high risk of being trapped in the unemployment.



# Determining factors II

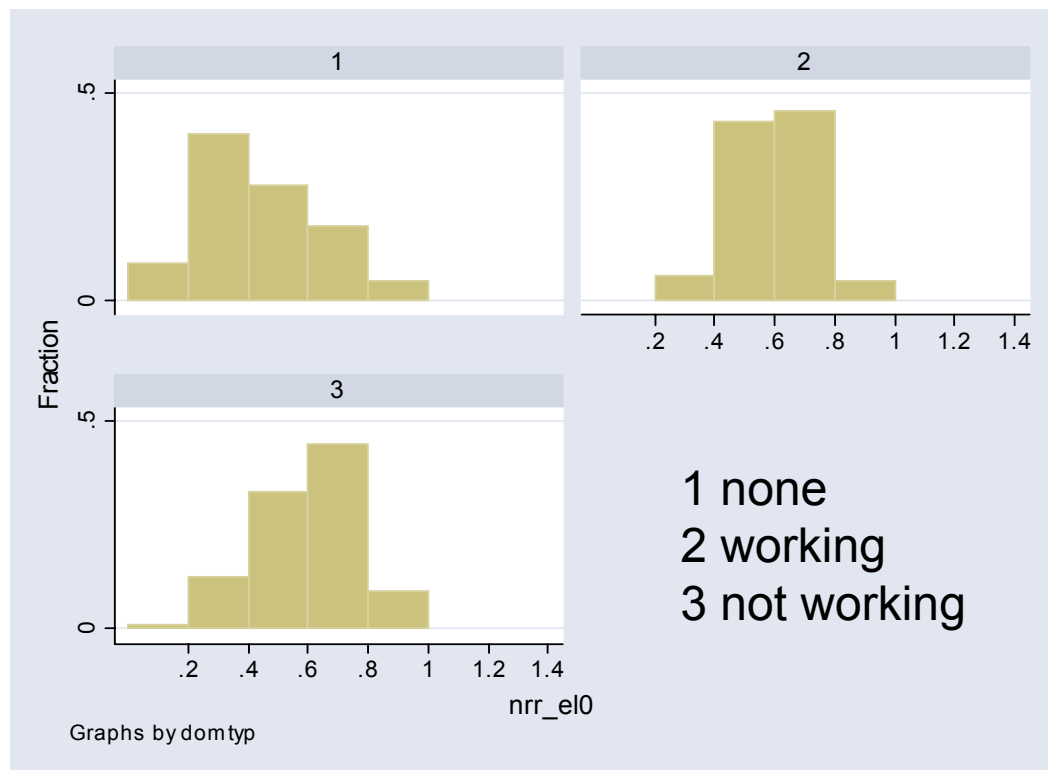
- Assumption on second earners, E->U(UB)



- good employment prospects for singles
- significant short-term unemployment traps especially in the case of working spouse ...

# Determining factors III

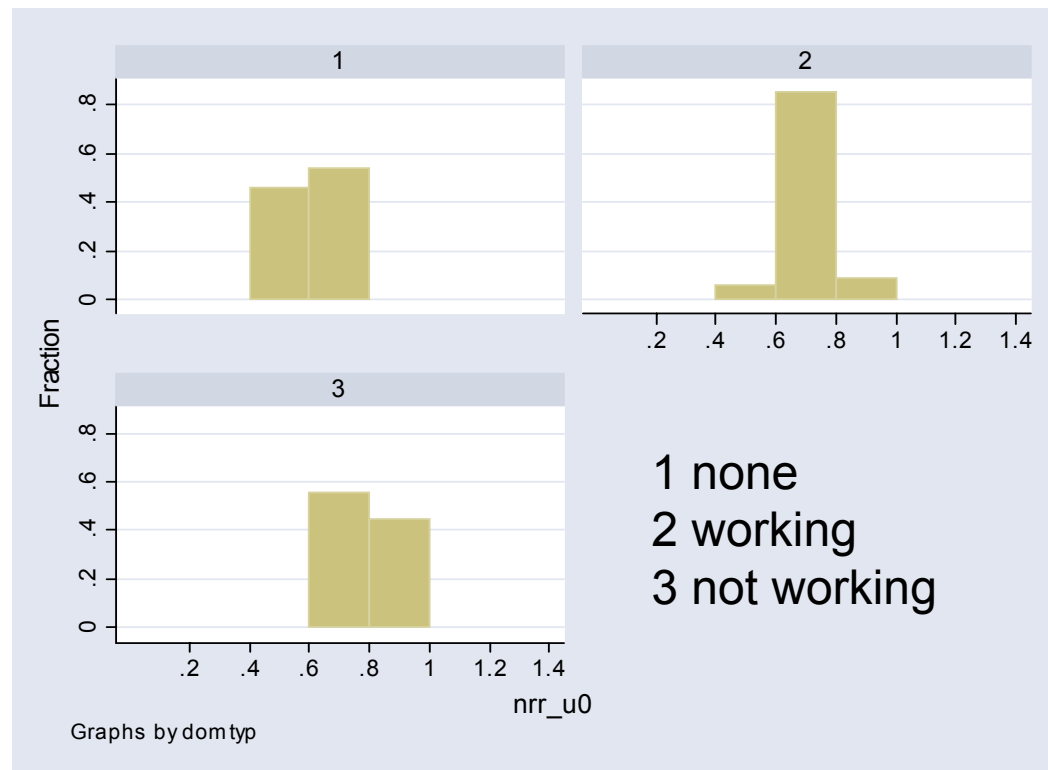
- Assumption on second earners,  $E \rightarrow U$  (no UB)



- ... but will probably return to work after UBs expire
- unemployment traps more significant for families than for singles

# Determining factors IV

- Assumption on second earners, U->E



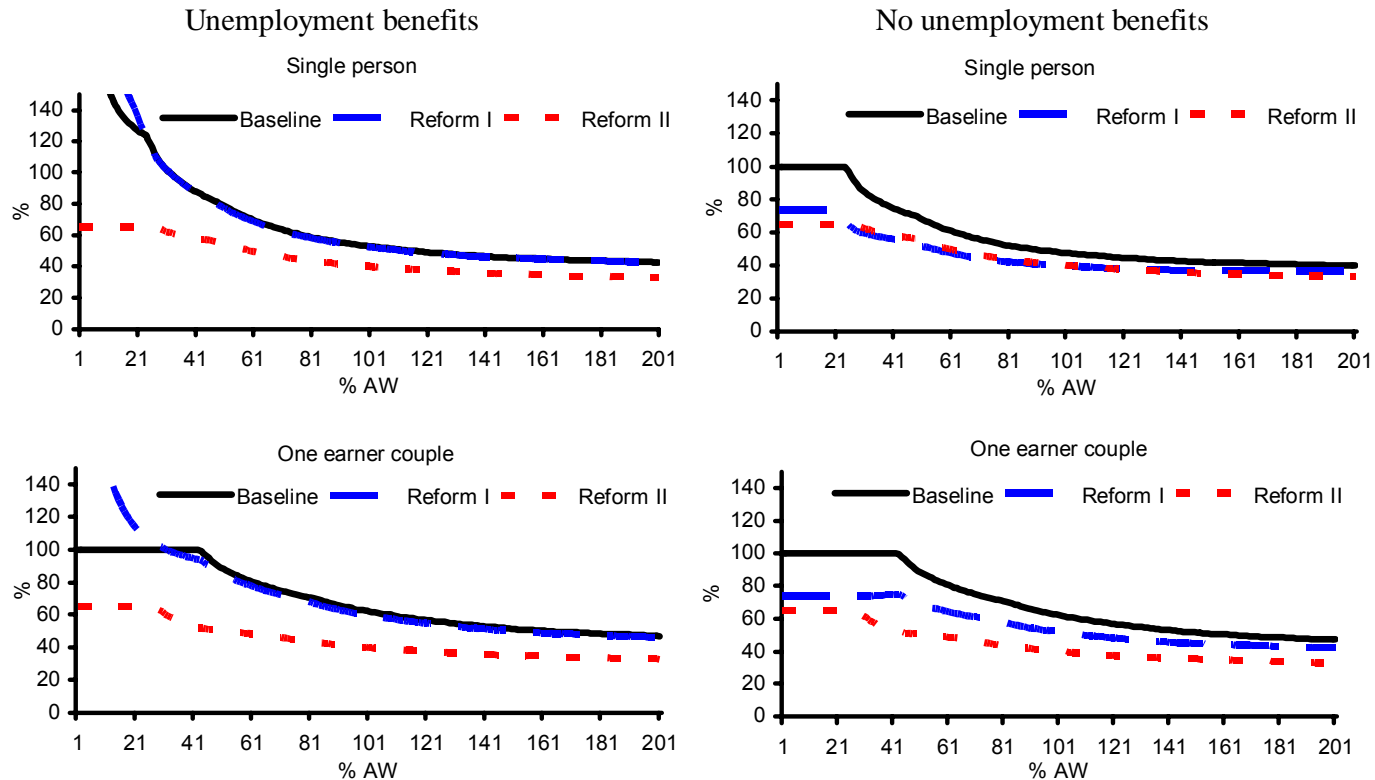
- among the pool of unemployed, persons with inactive spouse have weak incentives to job search
- unemployment affects whole families

# Options for reform

- Reform I
  - less generous social assistance
  - introduce tax credit for each child in the household instead of child allowance
- Reform II
  - flat tax rate
  - higher allowances (for person, non-employed spouse, children)
  - negative income tax replacing unemployment benefits, family benefits, social assistance

# Average effective tax rates: previous wage at 2/3 of the average wage

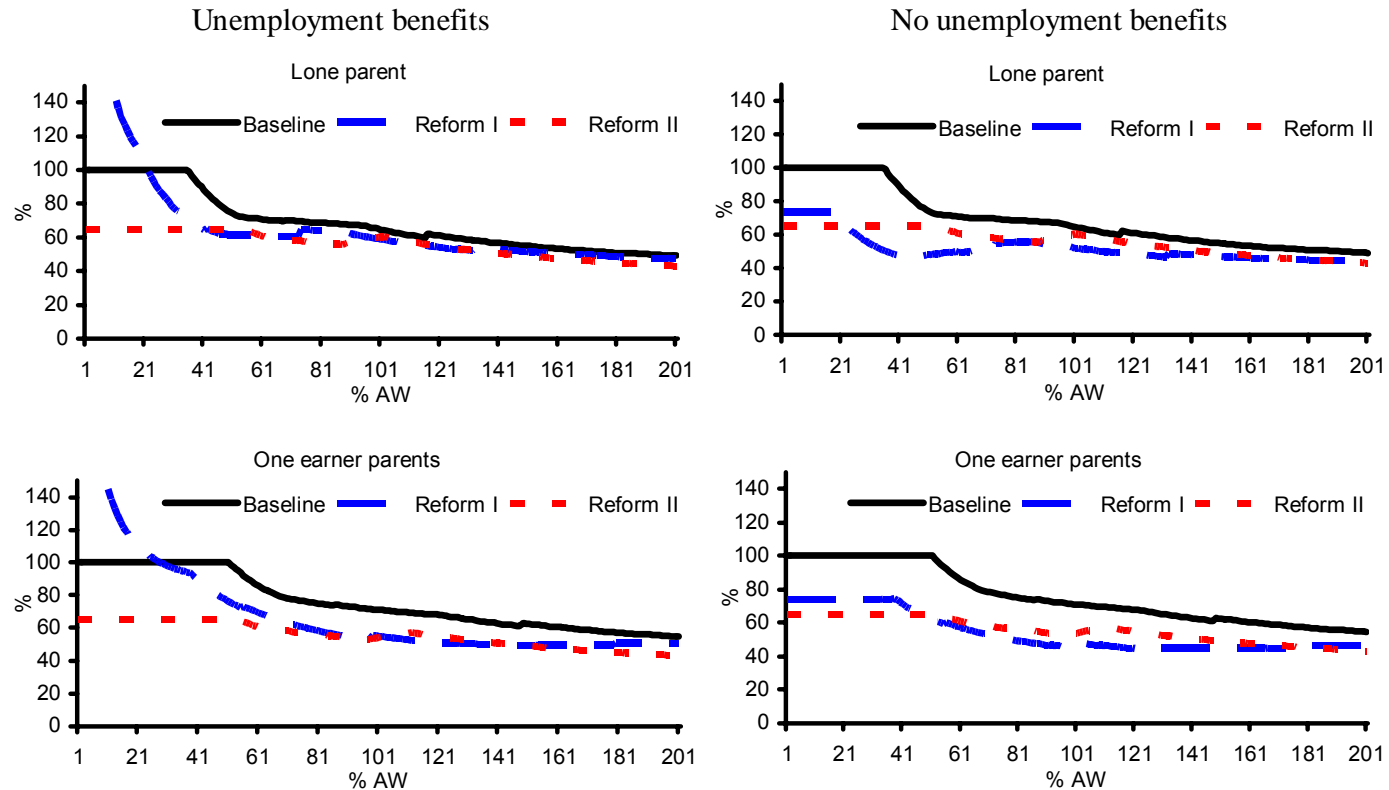
## I. Childless households



- Reform I reduces AETRs for childless inactive persons and couples (the effect of less generous social assistance)
- Reform I does not reduce AETRs for short-term unemployed
- Reform II reduces AETRs in all childless cases

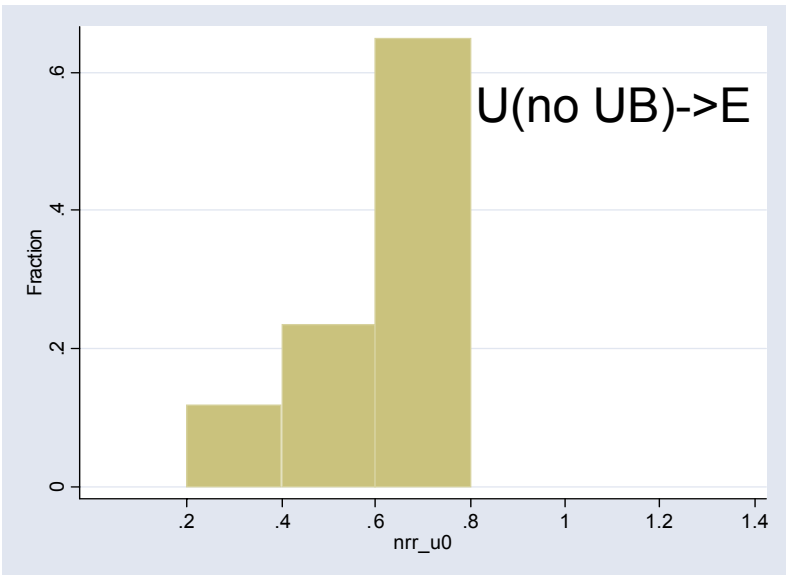
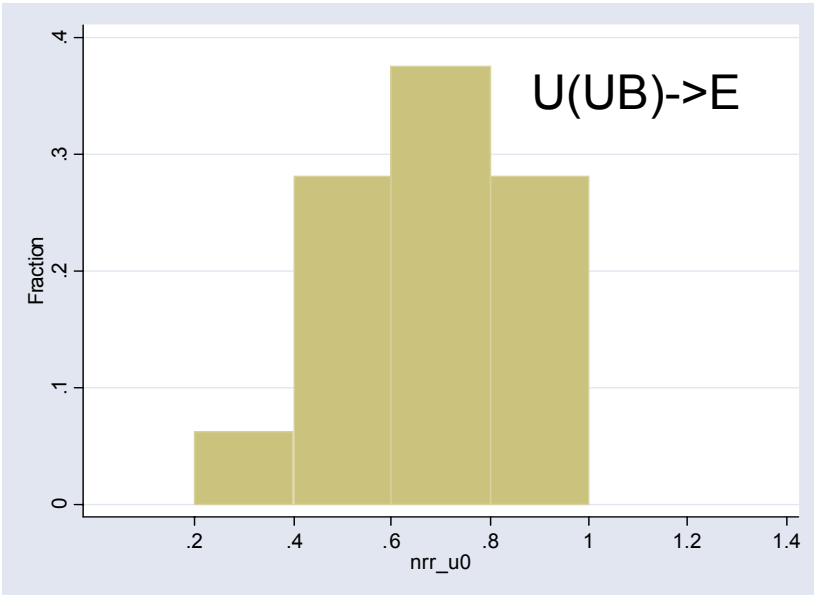
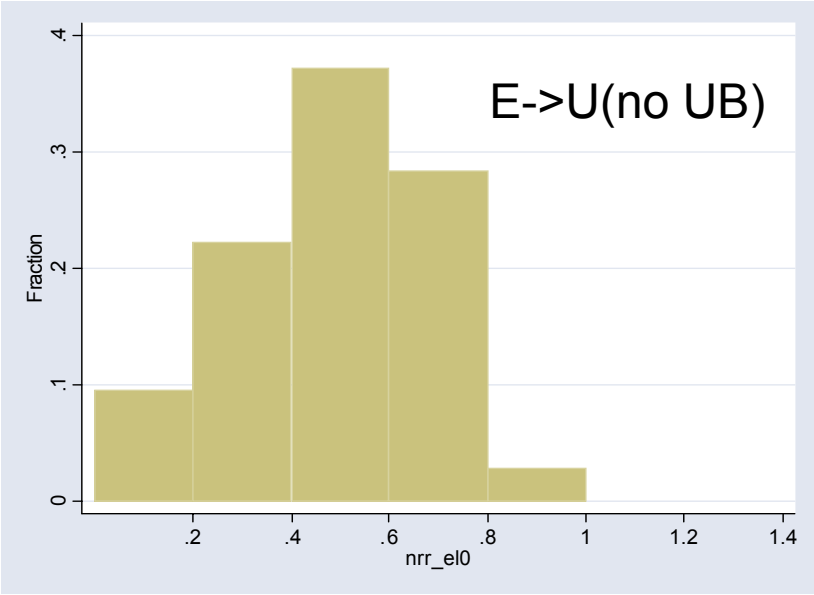
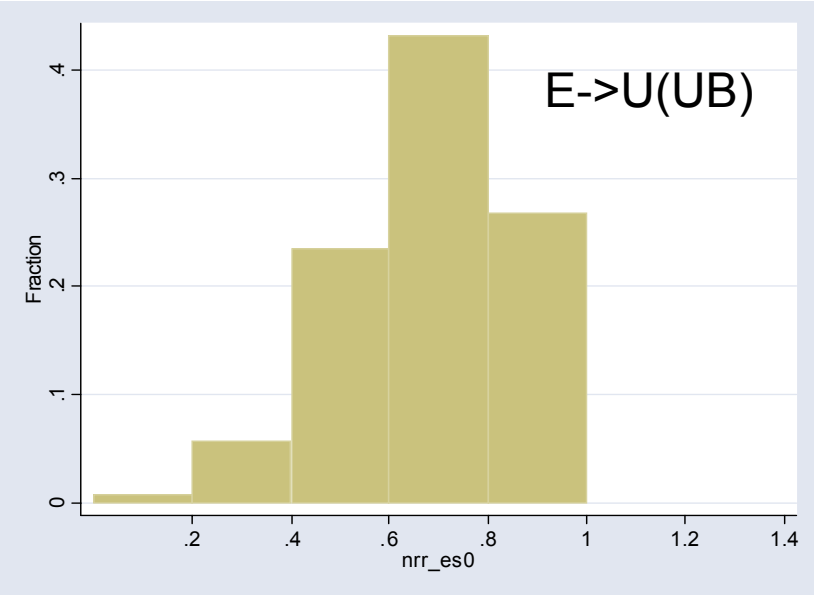
# Average effective tax rates: previous wage at 2/3 of the average wage

## II. Households with children



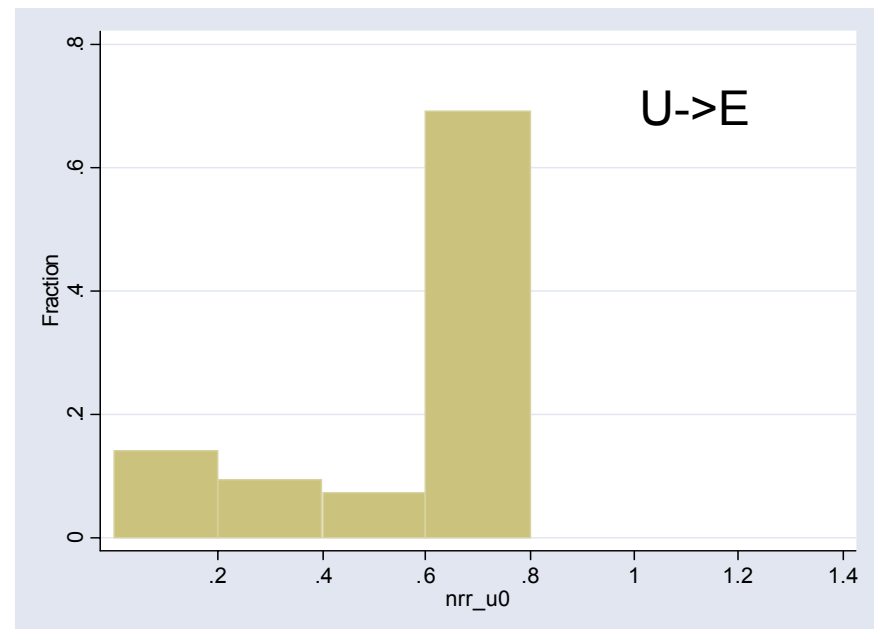
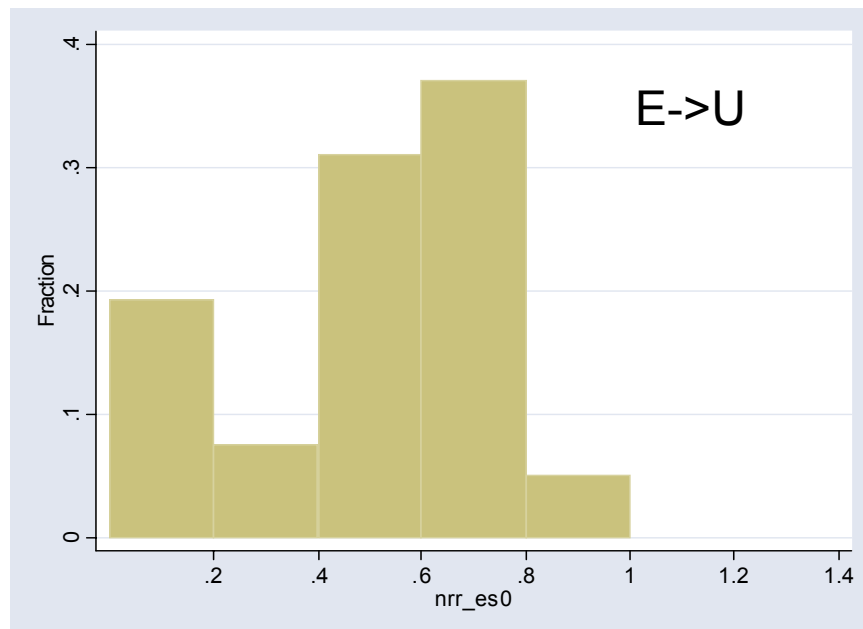
- For households with children, both reforms improve work incentives by reducing AETRs, at least for low entry wages

# Reform I: high NRRs reduced to a limited extent (for no UB)



## Reform II

- very high NRRs reduced markedly
- for transitions from unemployment, both reforms leave about 70% of (long-term) unemployed with NRRs between 60 and 80%





# Conclusions

- Relying on simplistic assumptions, we provide evidence on the extent and determining factors of unemployment traps emanating from the system of taxes and benefits.
- Potential effects of particular policy measures should be examined using make-work-pay indicators and their distributions across households.