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miCROmod

THE DISTRIBUTIONAL IMPACT OF LOCAL SOCIAL BENEFITS IN CROATIA

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INTRODUCTION



Local social benefits (LB) in Croatia: > 3,000
LB Value: > 0,4% of GDP

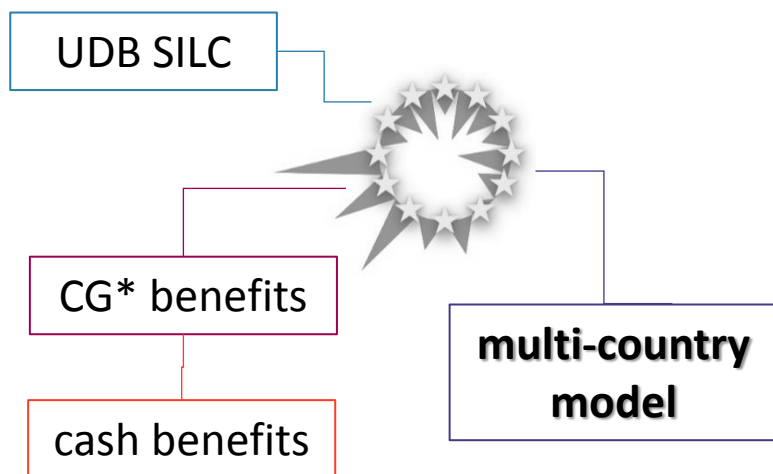
AIM

Analyse the distributional impact of five types of local social benefits of the four major Croatian cities – *Zagreb, Split, Rijeka and Osijek*

- Comparison of benefits and their generosity
- Income redistribution effects
- Poverty reduction effects
- Compensation of childrearing costs and child poverty

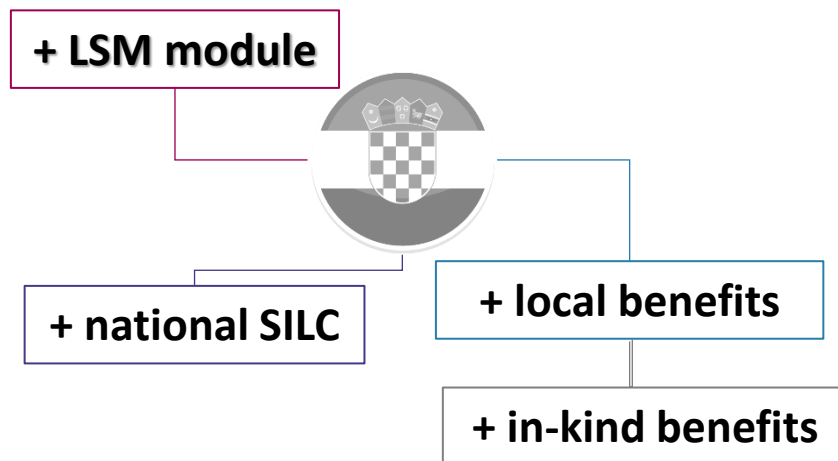
miCROmod

Croatian EUROMOD module (CEM)



miCROmod

All as CEM



Tax-benefit microsimulation model for Croatia based on EUROMOD's structure

**denotes Central Government*

LOCAL SOCIAL BENEFITS OF ZAGREB, SPLIT, RIJEKA AND OSIJEK



Housing benefits – means-tested benefit (GMB beneficiaries) for coverage of rent and utility bills; up to 50% of subsistence costs



Old-age income supplements – means-tested benefit for pensioners; monthly benefit and/or coupons for Christmas and Easter



Grants for a newborn child – universal benefit for residents; usually increases with the number of children – pronatalist measure



Kindergarten subsidies – universal benefit for parents; subsidy of the economic price; various additional discounts available



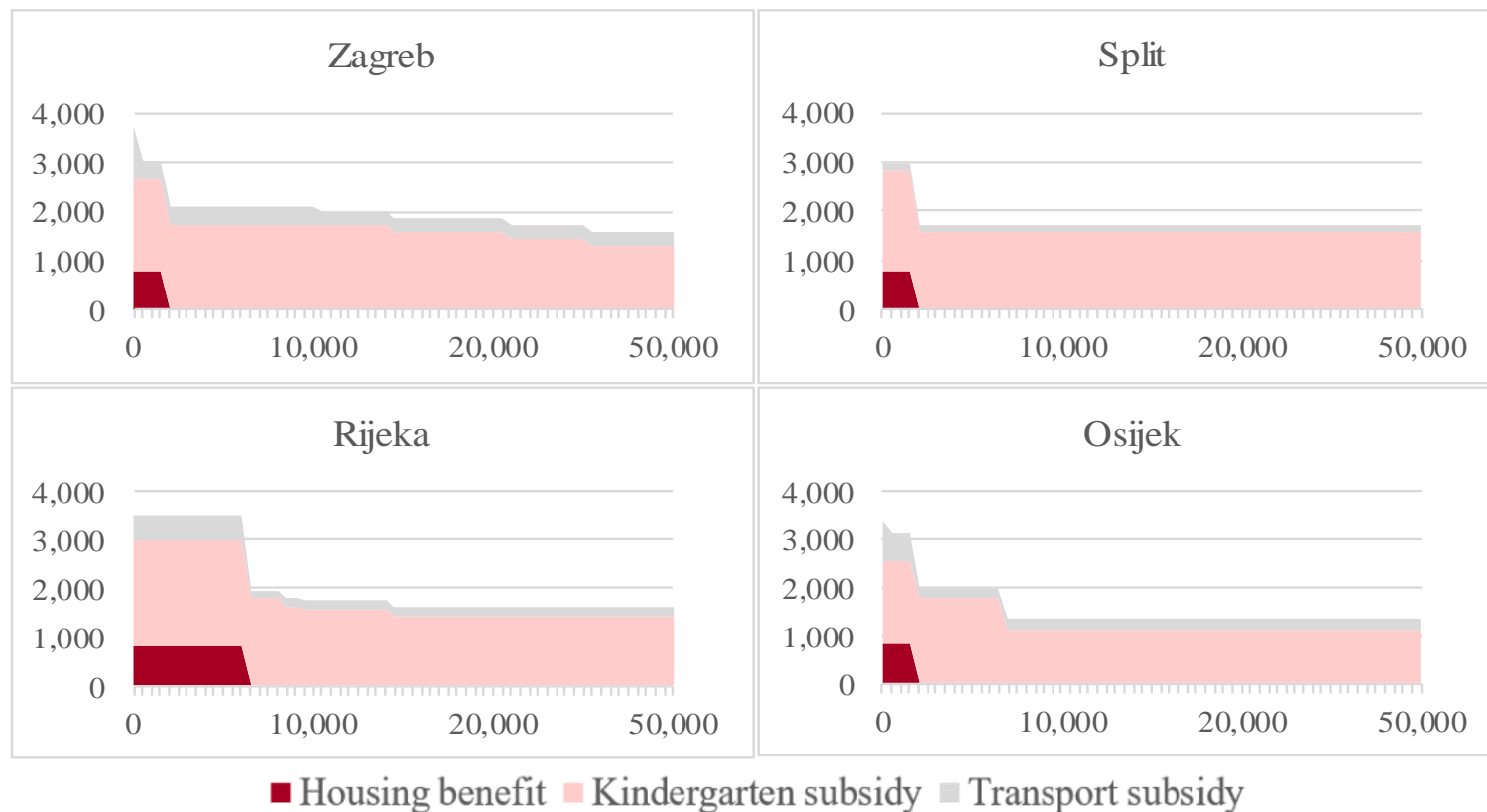
City transport subsidies – subsidy of monthly/yearly fares for pupils, students, pensioners and low-income households

DATA, METHODS & ASSUMPTIONS

Data	UDB and national SILC 2015 & 2016
Policies	Valid on 30 June 2017
Assumptions	<i>Full take up of benefits</i>
	All surveyed individuals <i>reside in the same city</i> (due to lack of residence data) – capturing <i>only policy effects</i>
Methods	Hypothetical households and real data
	FGT indices; poverty line at 60% median EHDl
	Modified OECD equivalence scale
	Compensation indices (Urban & Pezer, 2018; Verbist and Van Lancker, 2016)
	Child contingent payments (Corak et al., 2005; Figari et al., 2011); CHC (Urban & Pezer, 2018)
	Poverty threshold and child costs fixed at Central Government level

RESULTS

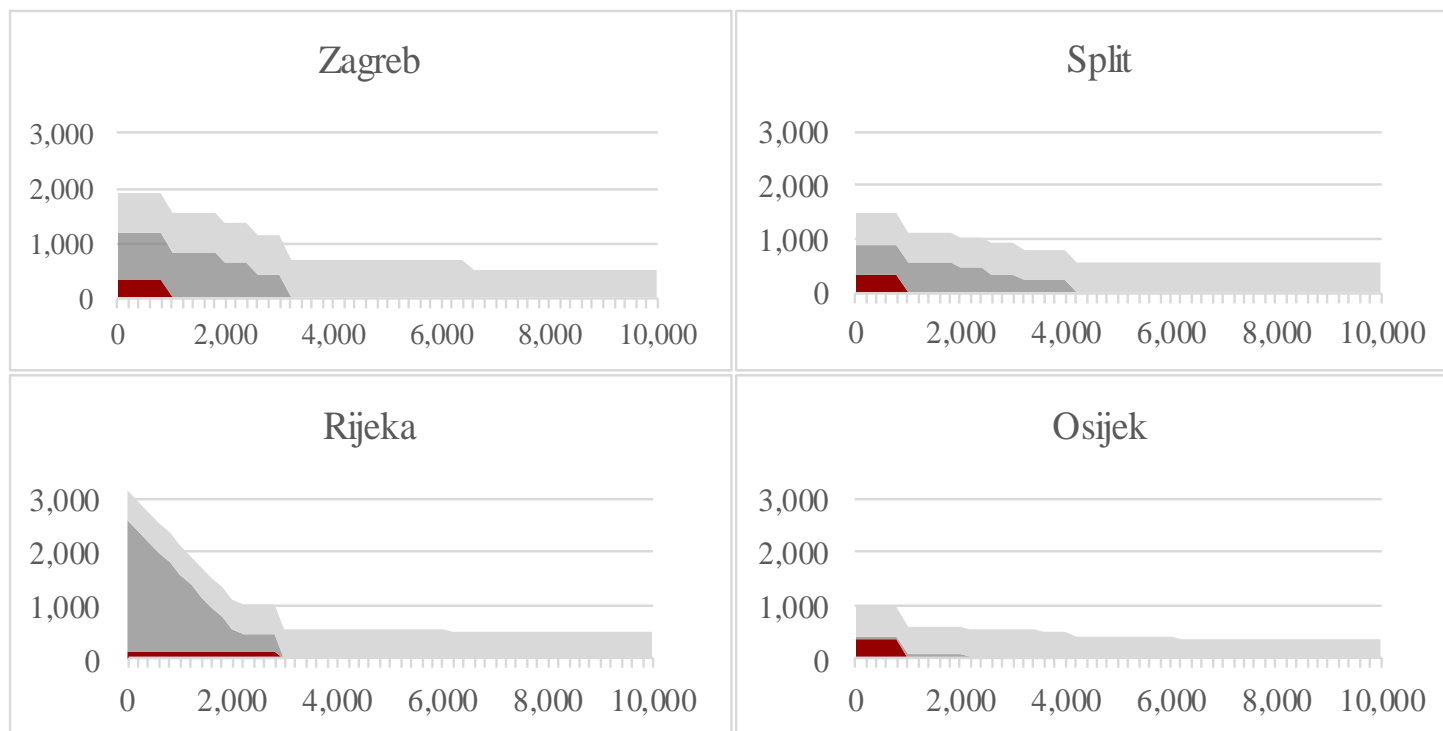
**Hypothetical households - benefits by income level;
monthly (HRK); 2 adults & 2 children**



Source: authors' calculations based on miCROmod output

Notes: x axis: households gross wage (average 8.055 HRK); y axis: amount of benefits

Hypothetical households - benefits by pension level, monthly (HRK); 2 pensioners



■ Housing benefit ■ Old-age supplement ■ Transport subsidy

Source: authors' calculations based on miCROmod output

Notes: x axis: households gross pension; y axis: amount of benefits

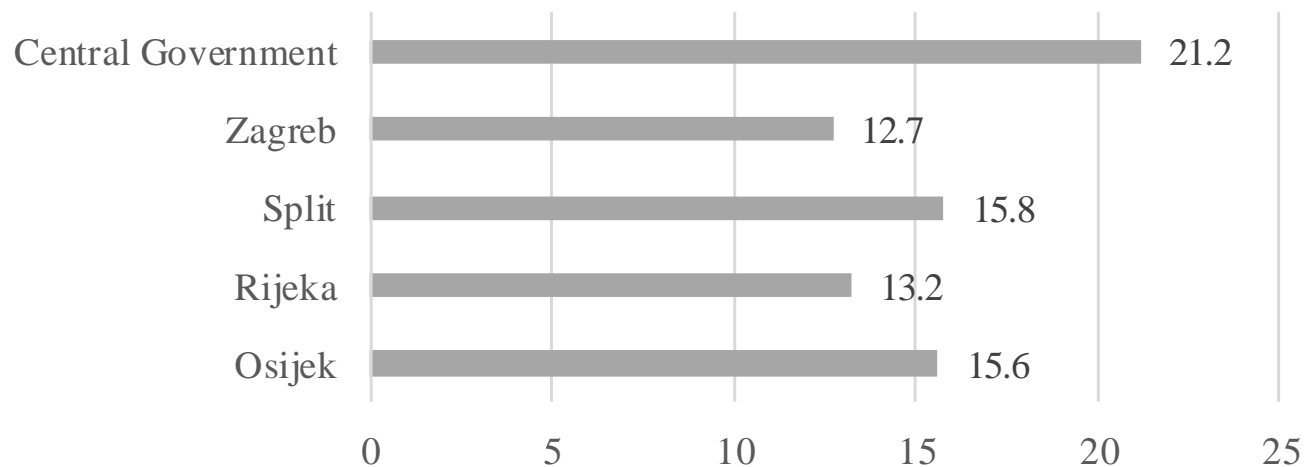
Distributional impact of the local benefits on EHDI

Decile group	CG benefit system EHDI (HRK)	Change in mean EHDI relative to Central Government (CG) (in %)			
		ZAGREB	SPLIT	RIJEKA	OSIJEK
1	811	46.4	23.3	39.7	29.1
2	1,302	24.9	14.9	23.6	15.5
3	1,565	20.6	12.2	14.1	12.7
4	1,881	16.0	9.7	9.1	9.8
5	2,169	11.1	7.1	6.1	7.3
6	2,521	7.8	5.7	4.9	5.9
7	2,892	6.0	4.4	3.6	4.5
8	3,428	5.0	4.1	3.4	4.0
9	4,109	3.6	3.4	2.7	3.0
10	6,303	1.4	2.3	1.4	1.7
All	2,724	8.5	5.9	6.1	5.9

Source: authors' calculations based on miCROmod output

Note: based on 2015 SILC data

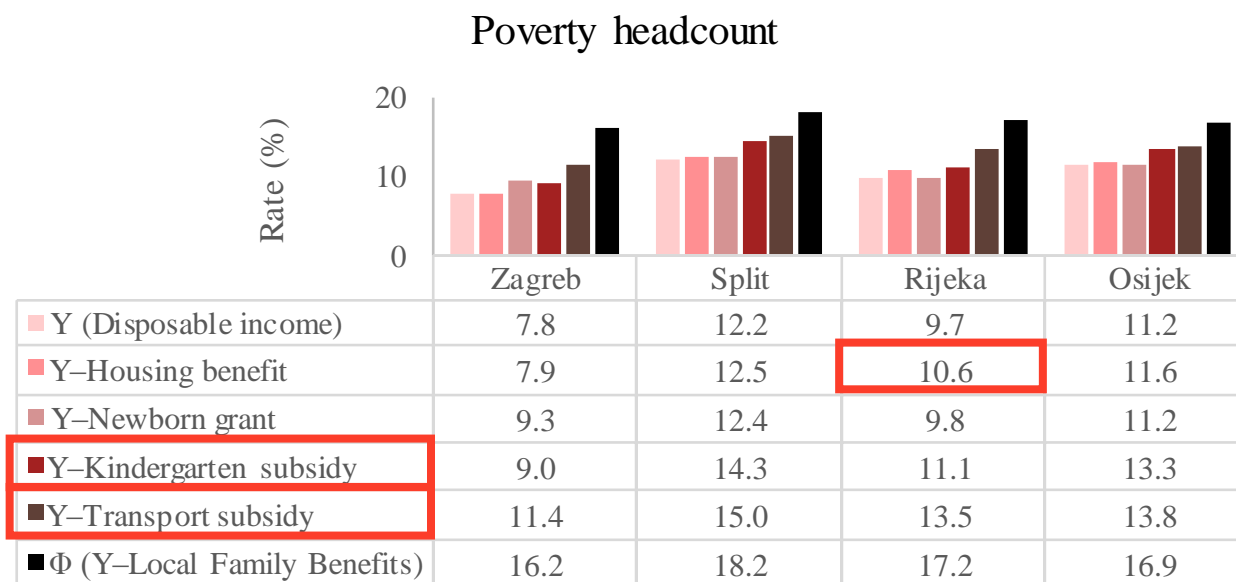
At-risk-of-poverty rate (%) before and after the introduction of local benefits



Source: authors' calculations based on miCROmod output

Note: based on 2015 SILC data

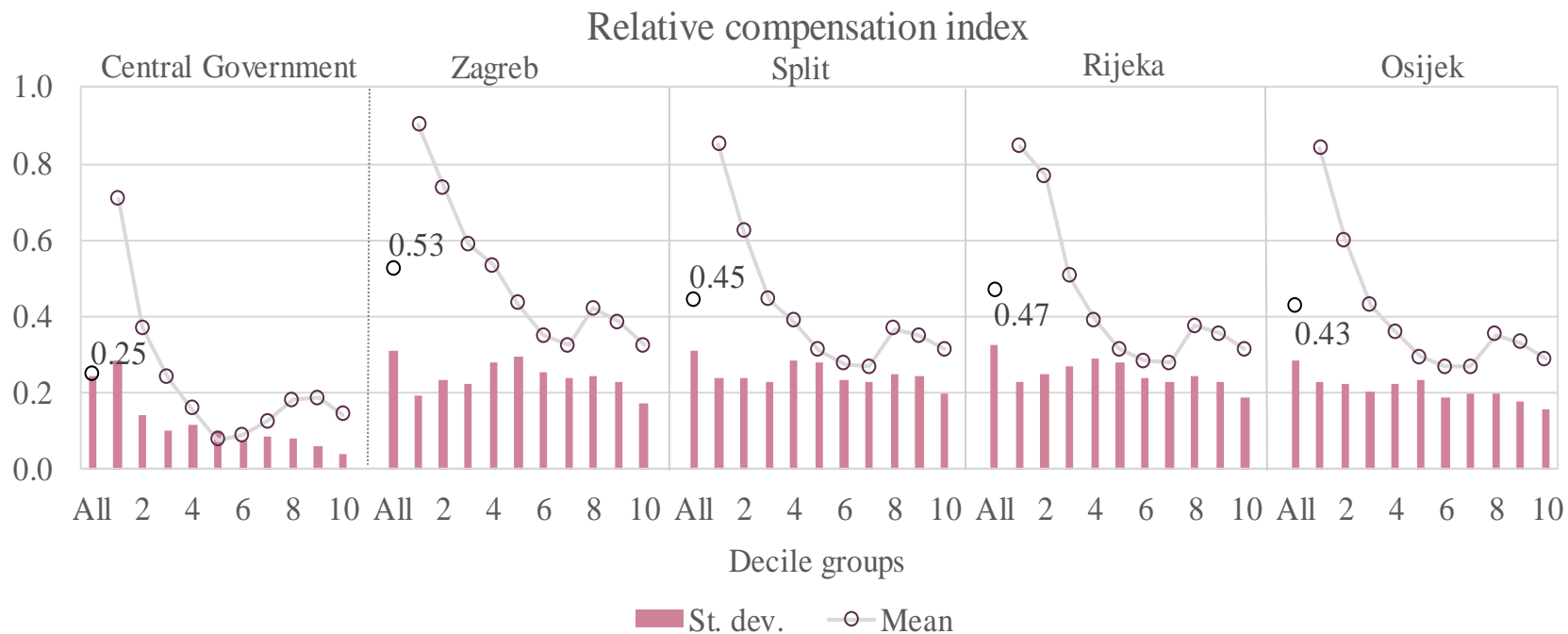
Child poverty headcount reduction



Source: authors' calculations based on miCROmod output

Note: **Child poverty headcount at Central Government level is 19%**; 2016 SILC data; Φ denotes income without complete family support of local government

Compensation of child-rearing costs



Source: authors

Note: 2016 SILC data, pre-fiscal income decile groups

CONCLUSION

Local benefits have an important **impact on disposable incomes** of all decile groups, **complementing CG benefits**.

The **anti-poverty** effectiveness of local benefits and their contribution to **coverage of child-rearing costs** is unquestionable.

Microsimulation techniques can take account of the diversity in existing local benefit systems to **assess the magnitude and anti-poverty effectiveness of policies with similar goals**.

Analyses based on miCROmod can be **further extended** to provide useful estimates of budget expenditure, work incentives, as well as to assess the inequality reduction effects for other specific groups and for the population as a whole.

ACKNOWLEDGEMENT

This research emerges from the project "**Application of Microsimulation Models in the Analysis of Taxes and Social Benefits in Croatia**" (AMMATSBC), that is financed by the **Croatian Science Foundation** (UIP-2014-09-4096).

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