

Preventing in-work poverty, promoting low-wage employment or both?

Effects of benefits to low earners in international perspective.

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Background and research question

- ▶ Structural changes in labour markets are thought to increase downward pressure on wages, job insecurity and thus in-work poverty
- ▶ What role for welfare states?
 - ▶ Promote 'good work' or compensate households with lower earnings potential?
 - ▶ Focus on targeted intervention to prevent low wages and incomes or aim at a wider equalisation of labour market outcomes?
- ▶ How do public benefits influence in-work poverty risks? To what extent does this reflect effects on labour market risks or redistribution?

Household-level in-work poverty risks

Channels of explaining in-work poverty at the individual level (Crettaz 2011; Lohmann and Crettaz 2018):

- ▶ Low hourly wages
- ▶ Low work intensity
- ▶ High household needs
- ▶ Lack of access to sufficient public benefits

→ In-work poverty co-determined by labour market status, household composition and public benefits

The analyses treat low hourly wages and low work intensity as mediators of the effect of institutional context on in-work poverty. Public redistribution will not be assessed directly but is reflected in the direct effect of macro-level indicators on in-work poverty risks after accounting for labour market risks.

(How) do public benefits prevent in-work poverty?

Besides benefit generosity, the design and type of benefits matters for their effect on social inequality (Esping-Andersen 1990)

- ▶ **Unemployment benefits:** Higher replacement rates compared to previous earnings can contribute to an equalisation of labour market outcomes: improve bargaining power among employees and alleviate unemployment scarring (Biegert 2019; Gangl 2006; Lohmann 2009; Lohmann and Crettaz 2018). Potential negative effects on labour supply.
- ▶ **Minimum Income Benefits:** Strict means tests restrict the possibility to combine benefits with wages. Potential negative effects on labour supply, but strong demands on job search and requirements to take up low paid jobs. Stigma and social costs attached to benefits might weaken effects of higher benefits.
- ▶ **Benefits to low-earners** (including family benefits, social assistance top-ups, employment-conditional benefits): Topping up low earnings increases (extensive) labour supply incentives, but could decrease gross wages (Brewer and Hoynes 2019) and foster a segment of precarious work.

Expected effects of public benefit generosity on in-work poverty

	Total effect on poverty	Explanatory channels		
		Low pay	Low work intensity	Insufficient transfers
Unemployment net replacement rate				—
Minimum income benefits				0
Benefits to low earners				—

Expected effects of public benefit generosity on in-work poverty

	Total effect on poverty	Explanatory channels		
		Low pay	Low work intensity	Insufficient transfers
Unemployment net replacement rate			-/+	-
Minimum income benefits			?	0
Benefits to low earners			-	-

Expected effects of public benefit generosity on in-work poverty

	Total effect on poverty	Explanatory channels		
		Low pay	Low work intensity	Insufficient transfers
Unemployment net replacement rate	-	-/+	-	-
Minimum income benefits	?	?	?	0
Benefits to low earners	+	-	-	-

Expected effects of public benefit generosity on in-work poverty

	Total effect on poverty	Explanatory channels		
		Low pay	Low work intensity	Insufficient transfers
Unemployment net replacement rate	-	-	-/+	-
Minimum income benefits	0	?	?	0
Benefits to low earners	-	+	-	-

Expected effects of public benefit generosity on in-work poverty

	Total effect on poverty (change when accounting for LM risks)	Explanatory channels		
		Low pay	Low work intensity	Insufficient transfers
Unemployment net replacement rate	-(↑)	-	-/+	-
Minimum income benefits	0(?)	?	?	0
Benefits to low earners	-(↓)	+	-	-

Data and methods: Overview

Data: EU-SILC, OECD, ILO. 31 countries over maximum time-span 2003-2020, 490 country-years, >3 million individual observations.

Sample: Persons who worked for more than 6 months, aged 18 to 64, not self-employed

Macro-level controls: GDP/capita, unemployment rate, minimum wage

Micro-level controls: educational level, age, sex, migration, household type

Method: Linear Probability Models with fixed effects for countries, clustered SE.

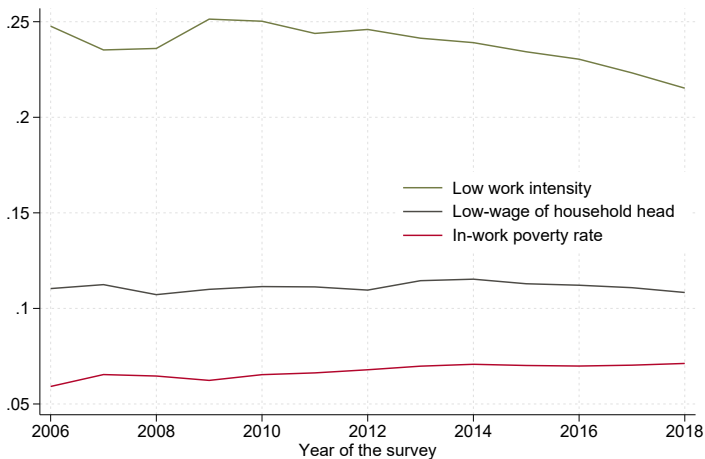
Data and methods: Mediators and outcome

Household work intensity (full-time equivalent months of work per adult below 7 months): full-time months plus half of part-time months worked by all adult household members divided by the number of adults in the household

Low wage employment of household head (individual hourly wage of household head below 2/3 of median wage): hourly wages are calculated based on yearly individual 'cash or near cash income from employment' (PY010G), usually worked hours per week (PL060, PL100), and the number of months worked during the reference year (PL070 to PL076)

Household poverty (disposable household equivalent income below 60% of national median income)

Development of in-work poverty, low-wage risks, and low work intensity



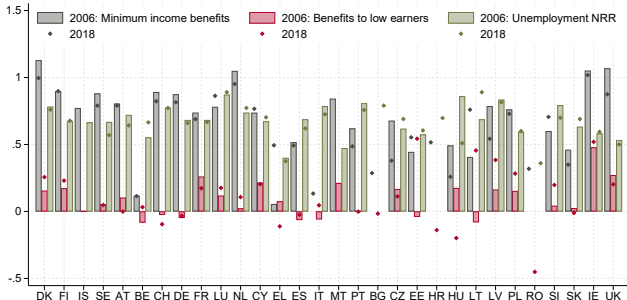
Data: EU-SILC. Weighted average over countries who continuously contribute data.

Data and methods: Public benefits

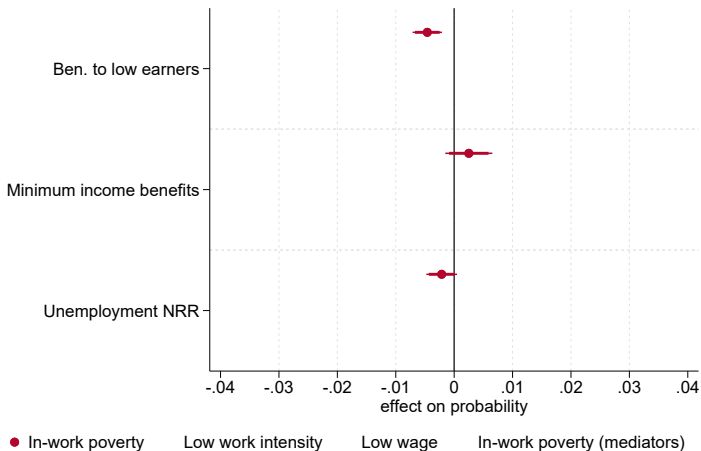
Minimum income benefits: Simulated benefit for households who are not employed as a share of the national poverty line.

Benefits to low earners: Average simulated benefit for employed households over 4 earnings levels between 40 and 70 % of average wage as a share of the national poverty line (includes social assistance, family, employment-conditional benefits and also income deductions).

Unemployment net replacement rate: Net replacement rate for person who earned the average wage before unemployment.

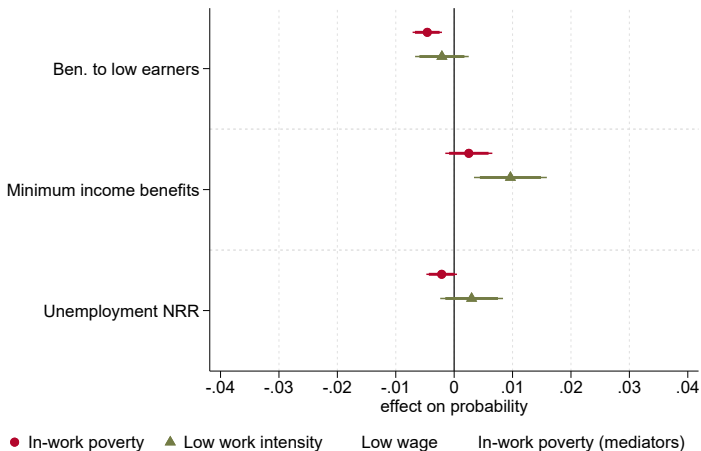


Public benefits: Effects on in-work poverty, low wages, and low work intensity



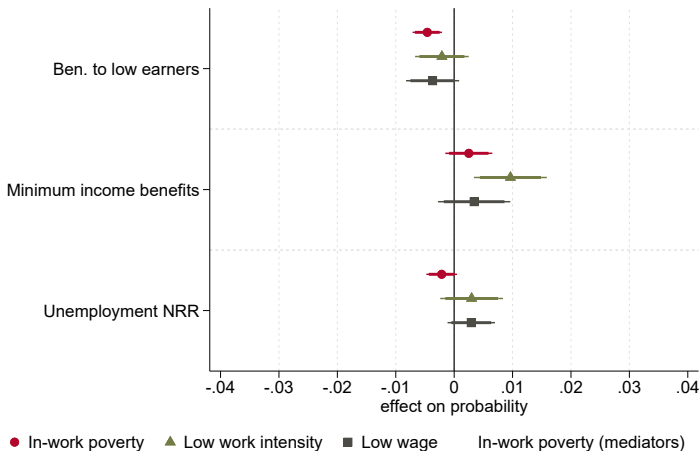
Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include individual-level controls, controls for GDP/capita, the unemployment rate, and minimum wage, as well as country and year fixed-effects.

Public benefits: Effects on in-work poverty, low wages, and low work intensity



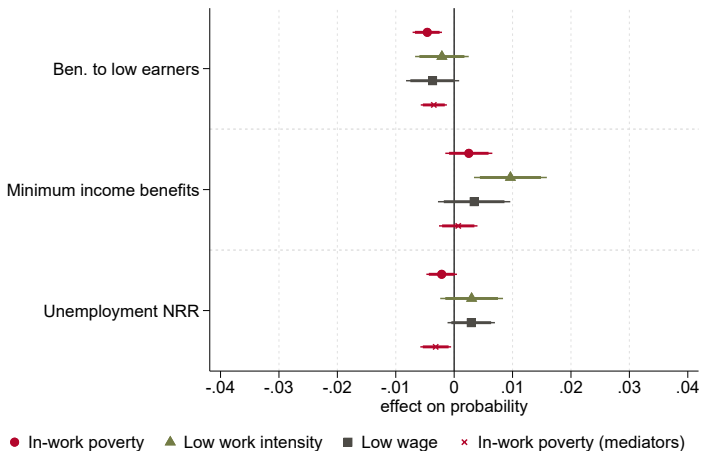
Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include individual-level controls, controls for GDP/capita, the unemployment rate, and minimum wage, as well as country and year fixed-effects.

Public benefits: Effects on in-work poverty, low wages, and low work intensity



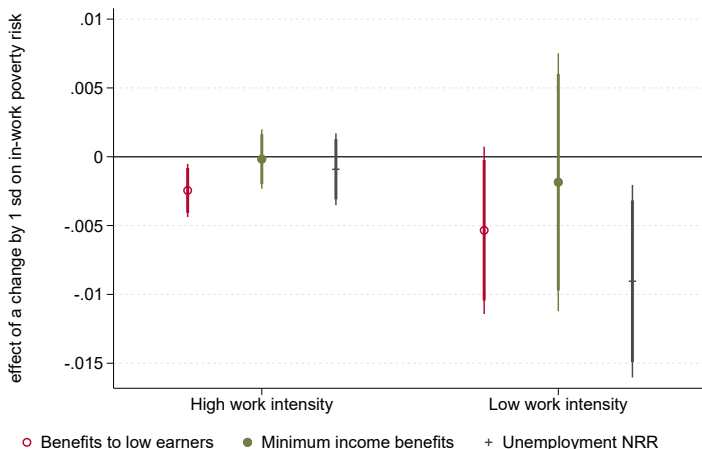
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Public benefits: Effects on in-work poverty, low wages, and low work intensity



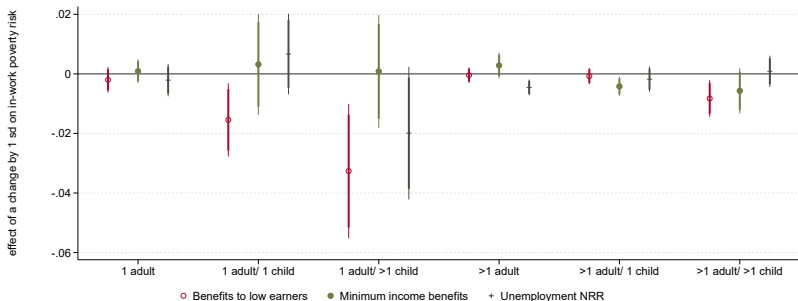
Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include individual-level controls, controls for GDP/capita, the unemployment rate, and minimum wage, as well as country and year fixed-effects.

Results: Moderation by household work intensity - Public benefits



Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include individual-level controls, as well as country and year fixed-effects and their interaction with household work intensity.

Results: Moderation by household types - Public benefits



Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include individual-level controls, as well as country and year fixed-effects and their interaction with household type.

Discussion and conclusion

- ▶ Both, unemployment benefits and benefits to low earners can reduce in-work poverty.
- ▶ Effects robust to different model specification and estimation techniques
- ▶ Direct effect on redistribution most important. Effects on labour market risks not in the expected direction
- ▶ Benefits to low earners reduce poverty among households with higher work intensity and multiple children. Unemployment benefits mainly reduces poverty among couples.
- ▶ Outlook: Positive effect of benefits to low-earners seem to rather be due to family benefits, not social assistance and employment-conditional benefits

Thank you very much for your attention!

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References I

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References II



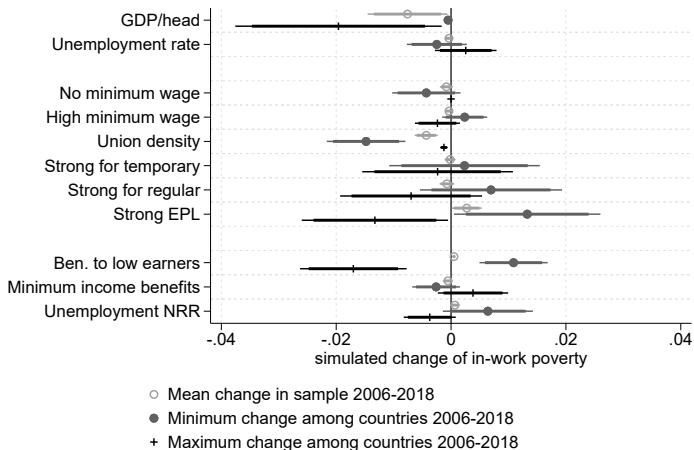
Lohmann, H. and E. Crettaz (2018). “Explaining Cross-Country Differences in in-Work Poverty”. In: *Handbook on In-Work Poverty*. Ed. by H. Lohmann and I. Marx. Cheltenham, UK ; Northampton, MA, USA: Edward Elgar, pp. 50–69.

Data and methods: Macro-level indicators

	mean	min	max	sd	$sd(\bar{x} - x_i)$	ctry-year	ctry	mean(06)	mean(18)
GDP/head ^a	3.8	1.1	12	1.7	.76	520	32	3.1	4.7
Unemployment rate ^b	.083	.02	.28	.044	.029	520	32	.081	.066
No minimum wage ^b	.33	0	1	.47	.088	499	31	.38	.19
Low minimum wage ^b	.35	0	1	.48	.3	499	31	.46	.49
High minimum wage ^b	.32	0	1	.47	.29	499	31	.16	.32
Union density ^b	.33	.045	.92	.22	.027	371	26	.27	.24
Weak EPL ^a	.21	0	1	.41	.13	389	27	.18	.21
Strong temporary ^a	.064	0	1	.25	.16	389	27	.022	.094
Strong regular ^a	.45	0	1	.5	.21	389	27	.41	.51
Strong EPL ^a	.27	0	1	.45	.22	389	27	.39	.19
Ben. to low earners ^c	.078	-.48	.56	.16	.085	490	31	.08	.063
Min. income ben. ^c	.66	0	1.3	.29	.087	490	31	.7	.64
Unemployment NRR ^a	.66	.29	.91	.12	.045	490	31	.67	.63

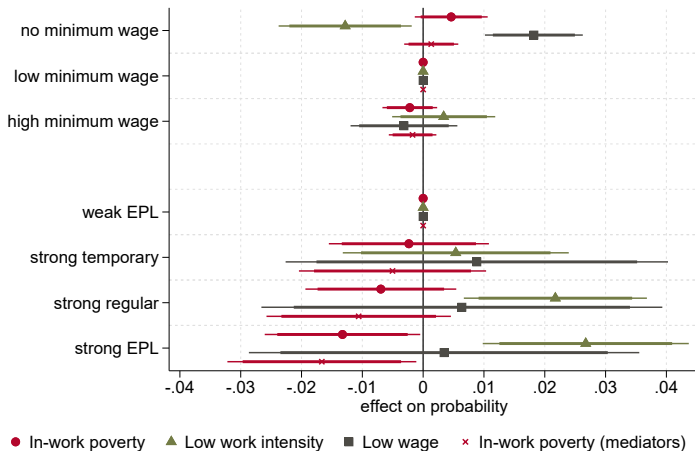
Source: ^a: OECD database; ^b: ILO database; ^c: Own calculation based on OECD tax-benefit model

Additional results: Simulated changes in in-work poverty as a result of observed changes in predictors



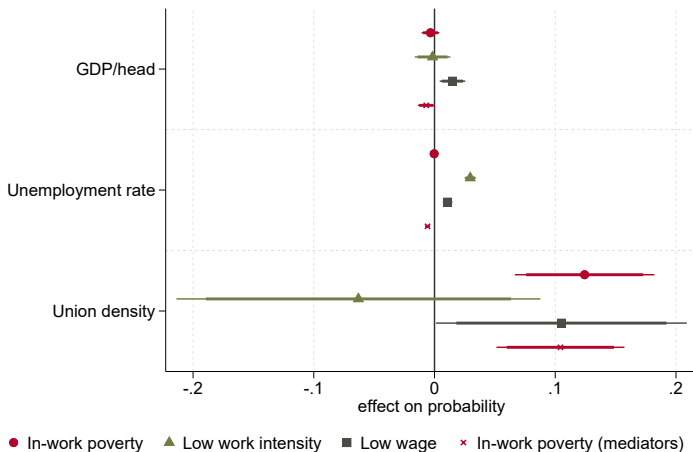
Data: EU-SILC. Changes in macro-level predictors calculated only over countries with continuous observations between 2006 and 2018.

Additional results: Labour market institutions (restricted country sample)



Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include country and year fixed-effects.

Additional results: Economic context and union density (restricted country sample)



Data: EU-SILC, OECD, ILO. Multi-level linear probability models. Models include country and year fixed-effects.