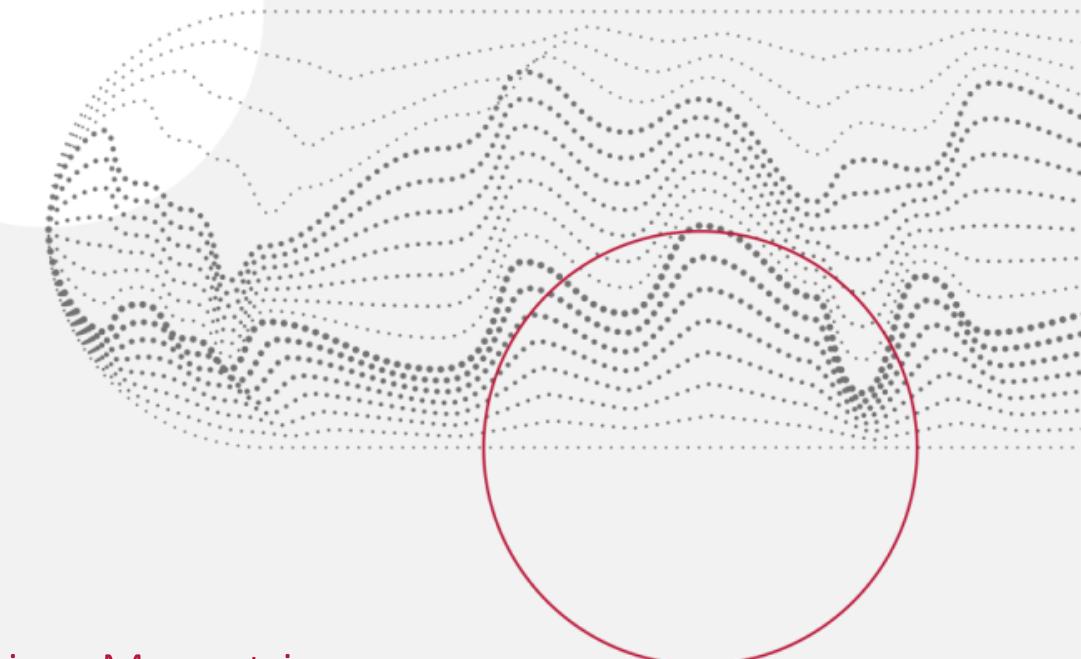




Minimum wage violation in Central and Eastern Europe

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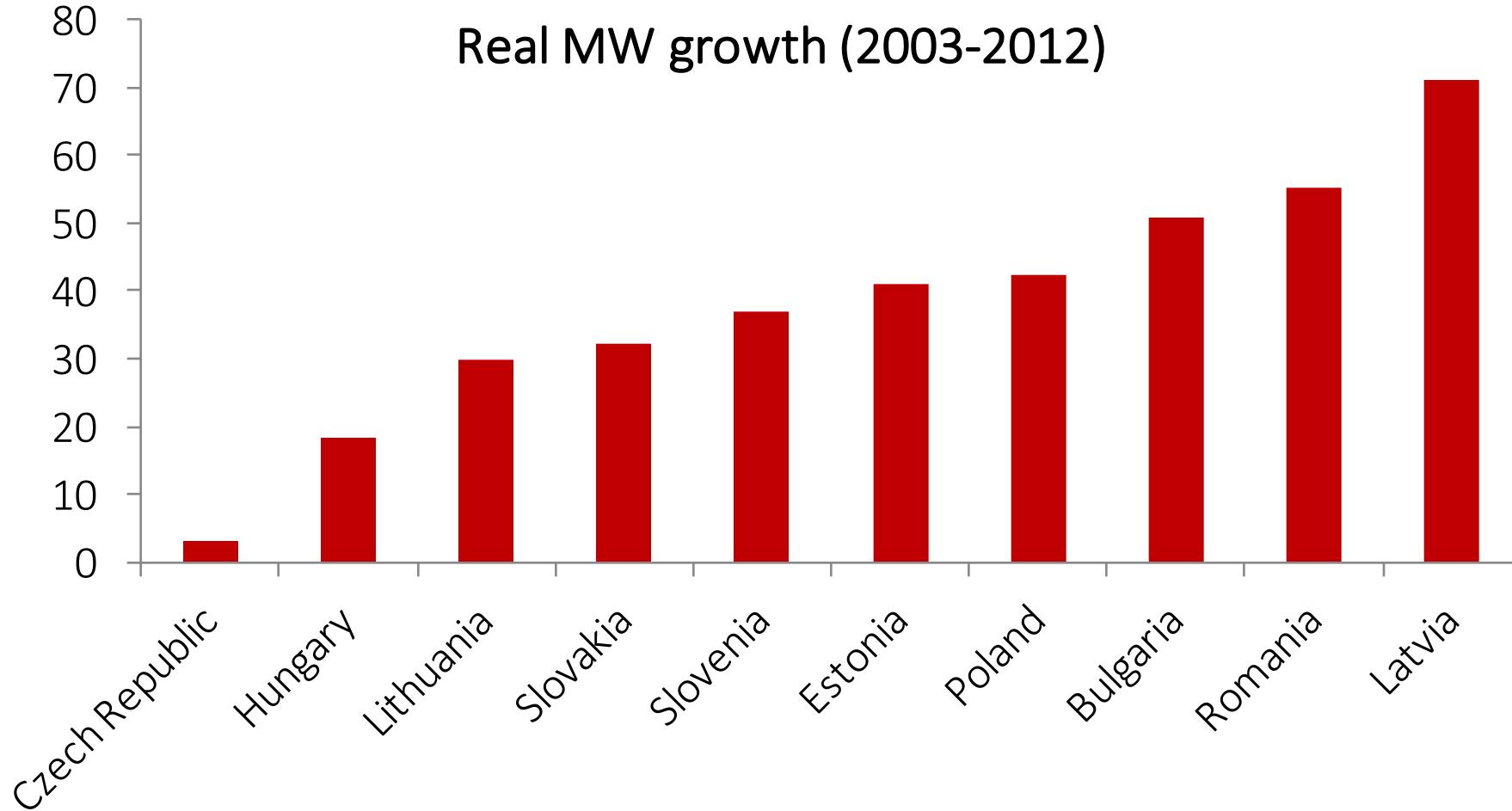
Motivation: Overlooked issue of compliance



- Research focused on employment/inequality effects of MW
- MW policies effective only if employers comply
- Few studies on MW violation in multi-country setting
- CEE countries interesting to analyse compliance:
 - Minimum wage established at the national level
 - Universal coverage of dependent workers

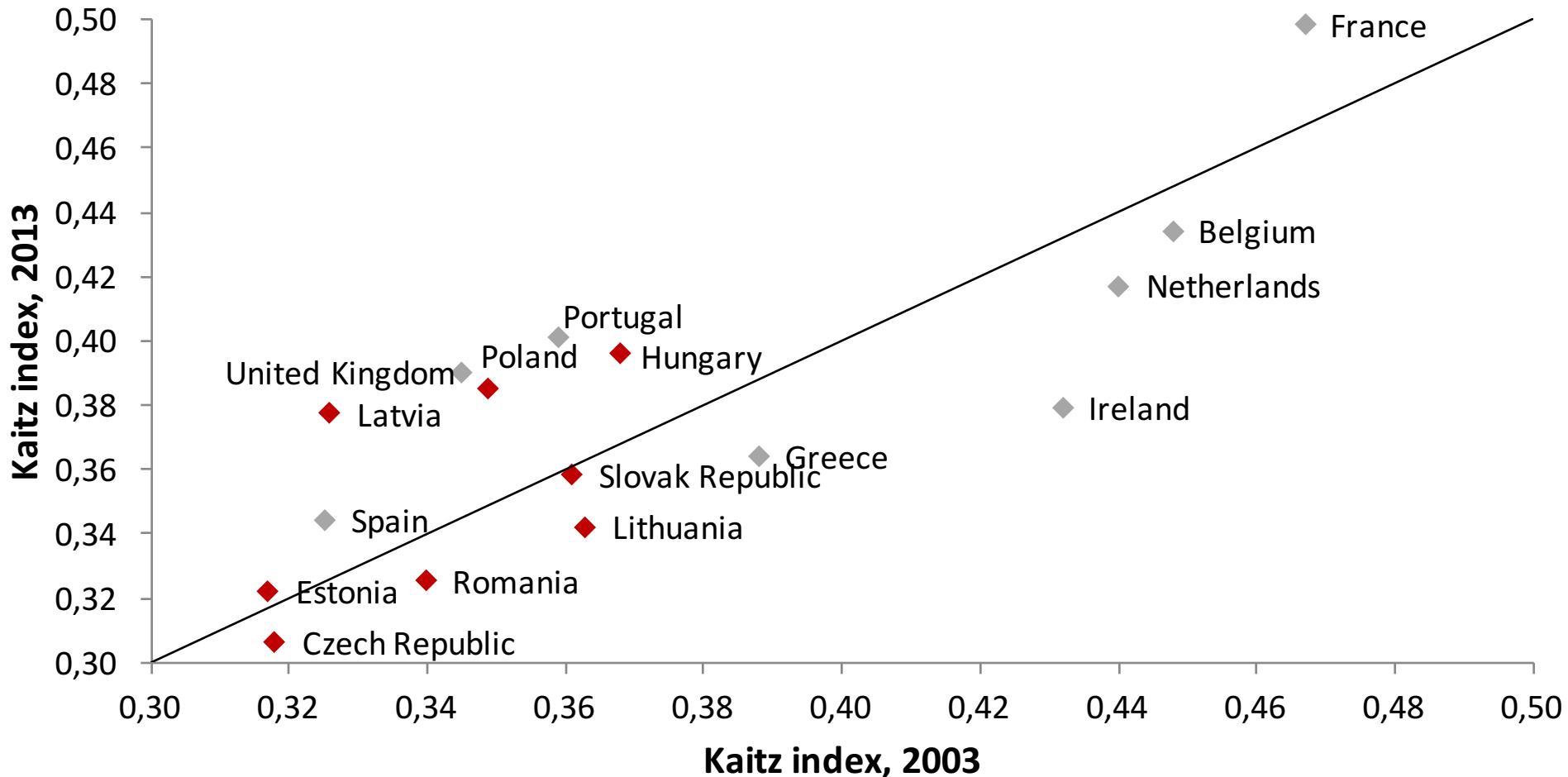
Minimum wages rose in real terms since early 2000s

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Diverse changes in minimum to average wage ratios

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Three measures of violation (Bhorat, Kanbur, Mayet 2013)

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- **Incidence of violation**

- Individual: $v_0 = \begin{cases} 1 & \text{if } w < w^m \\ 0 & \text{if } w \geq w^m \end{cases}$

- Overall: $V_0 = \frac{\sum_{\text{emp}} v_0}{\text{employment}}$; share of violated workers

- **Depth of violation**

- Individual: $v_1 = \frac{w^m - w}{w^m} \times v_0$

- Overall: $V_1 = \frac{\sum_{\text{emp}} v_1}{\text{employment}}$; depth of violation per worker

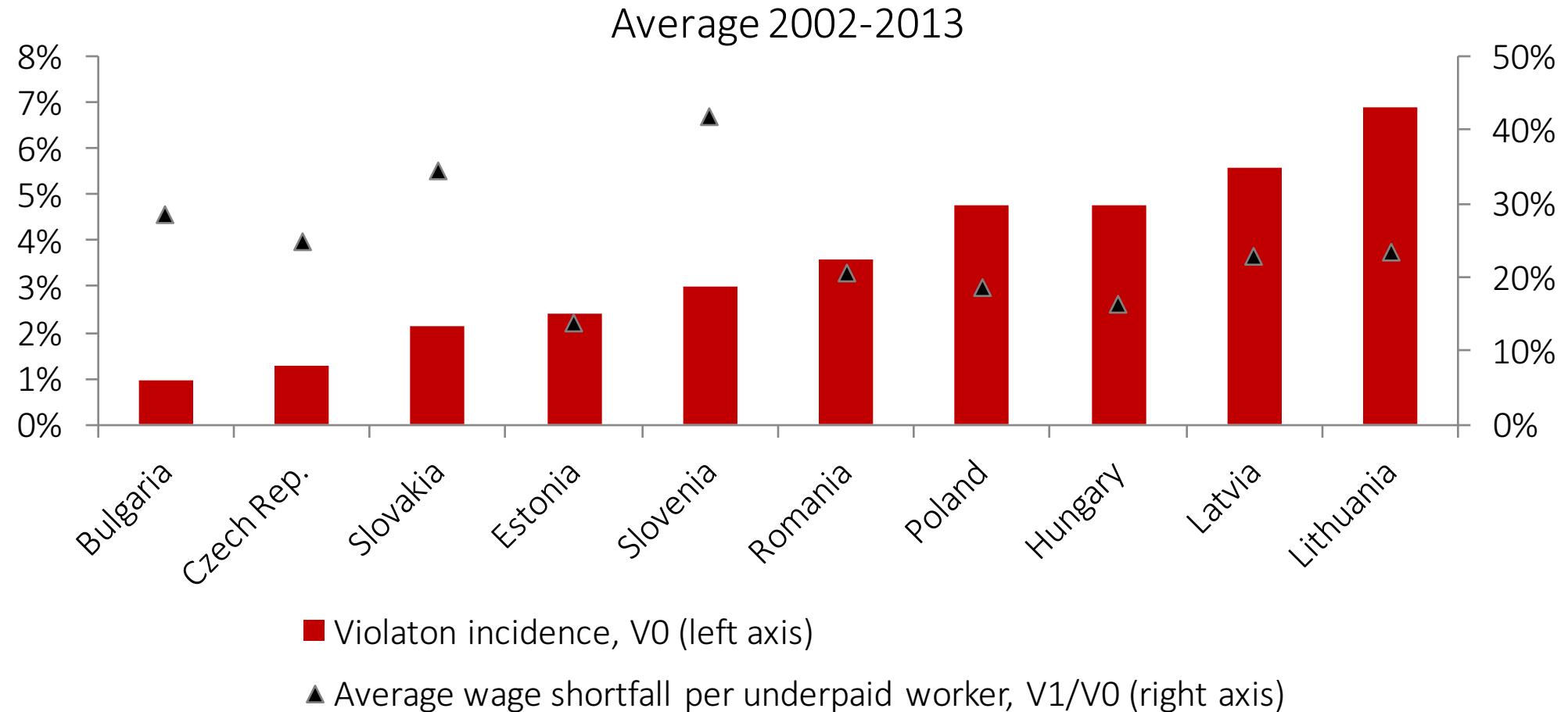
- **Average shortfall**

- V_1/V_0 ; depth of violation per violated worker

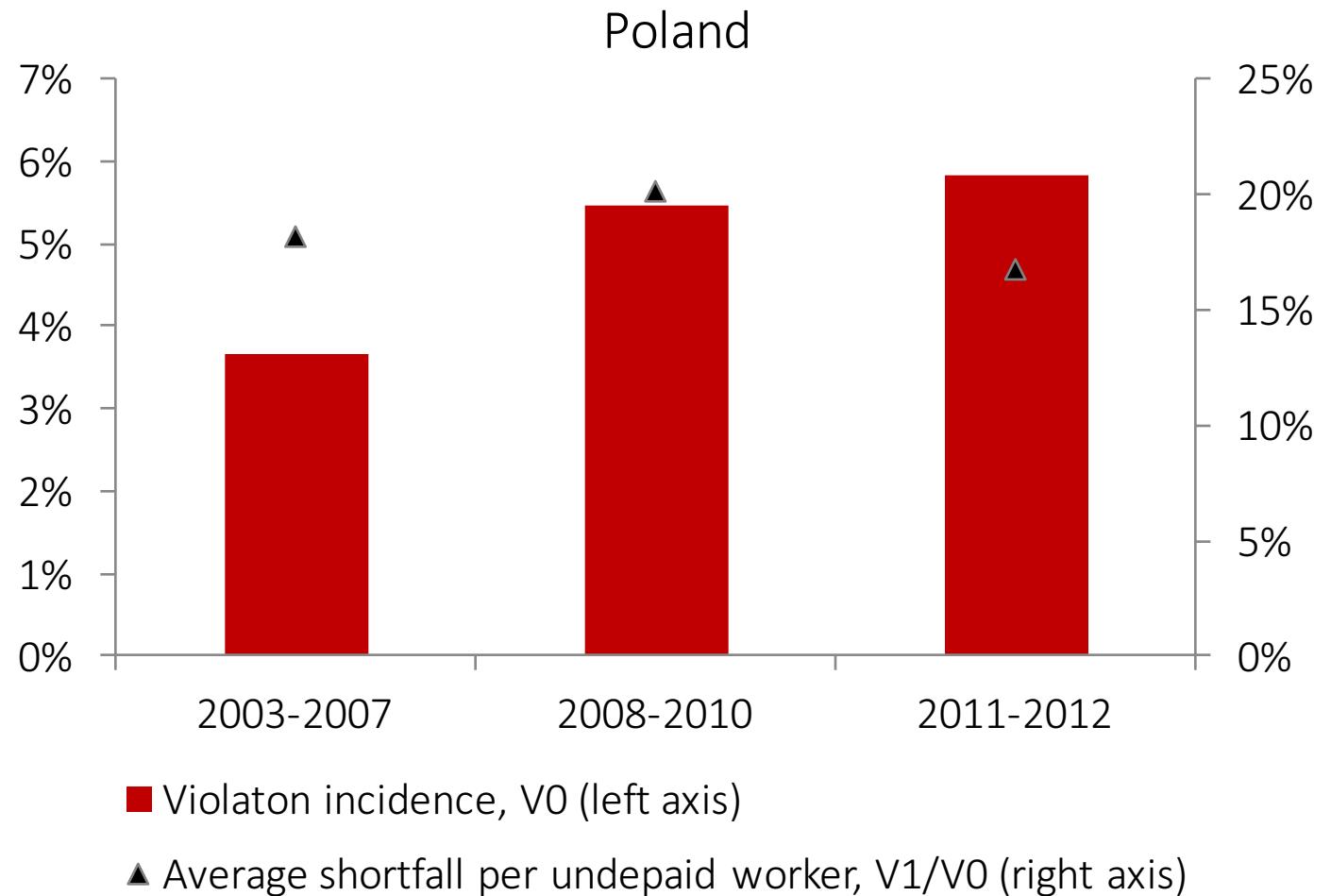
- Sample limited to workers aged 25+ who:
 - were employed full-time and worked at least 40 hours per week
 - had only one job
 - were employed full-time in all months of the previous calendar year
- Wages in our sample are consistent with other sources
- Robustness checks with 75% MW and 125% MW thresholds

Non-compliance low to moderate; shortfall noticeable

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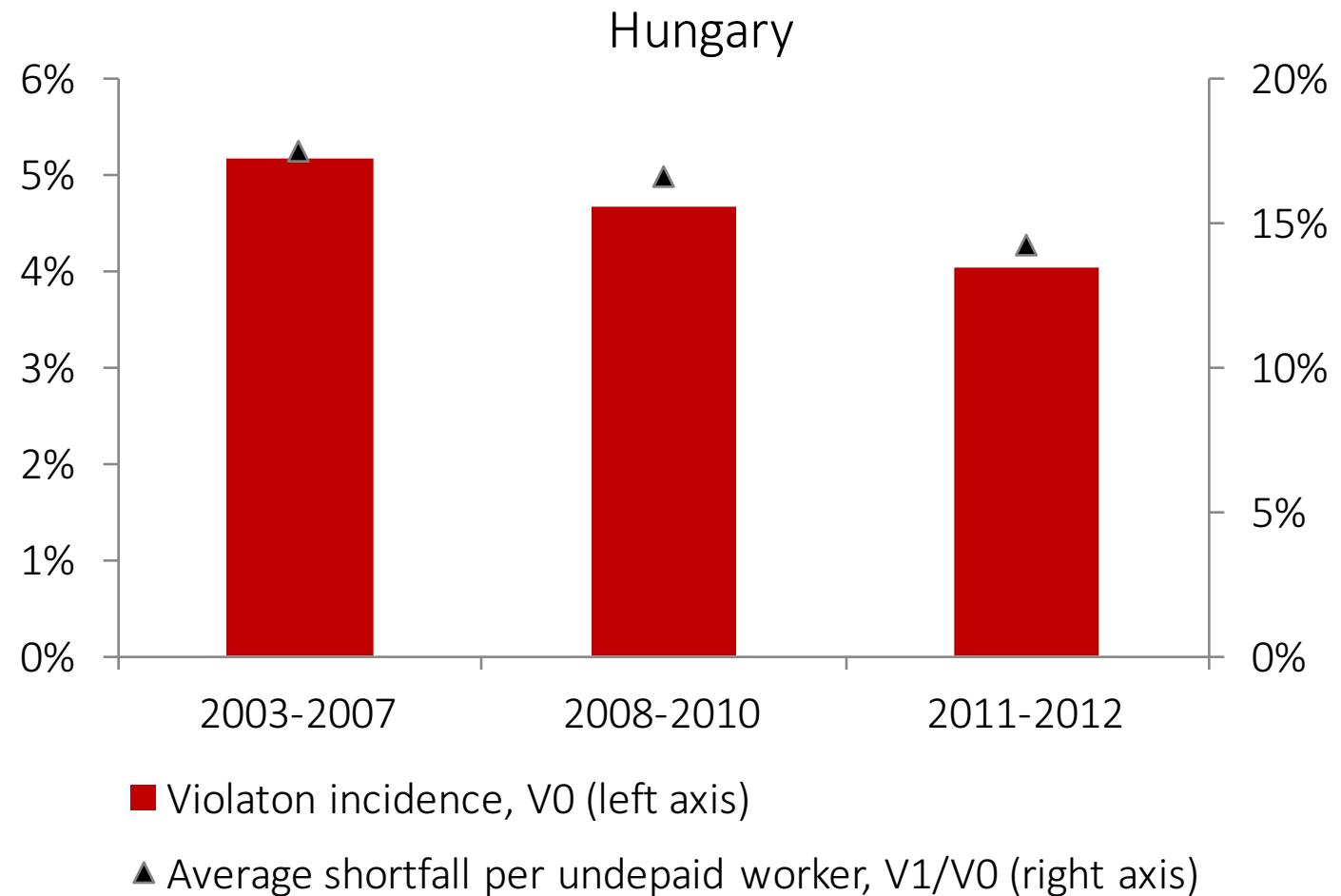


Latvia, Poland, Slovenia – increasing violation

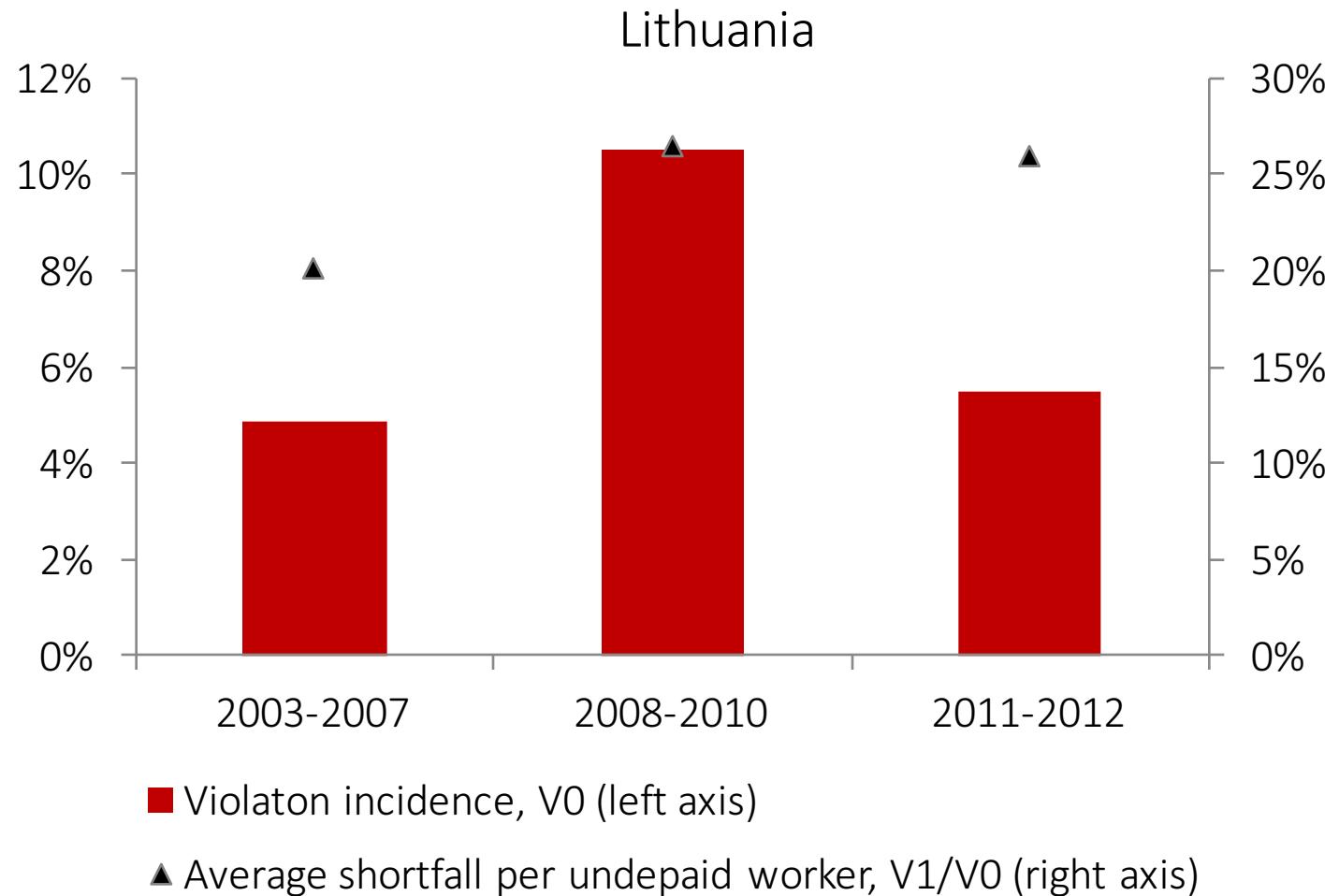


Czech Republic, Estonia, Hungary – decreasing violation

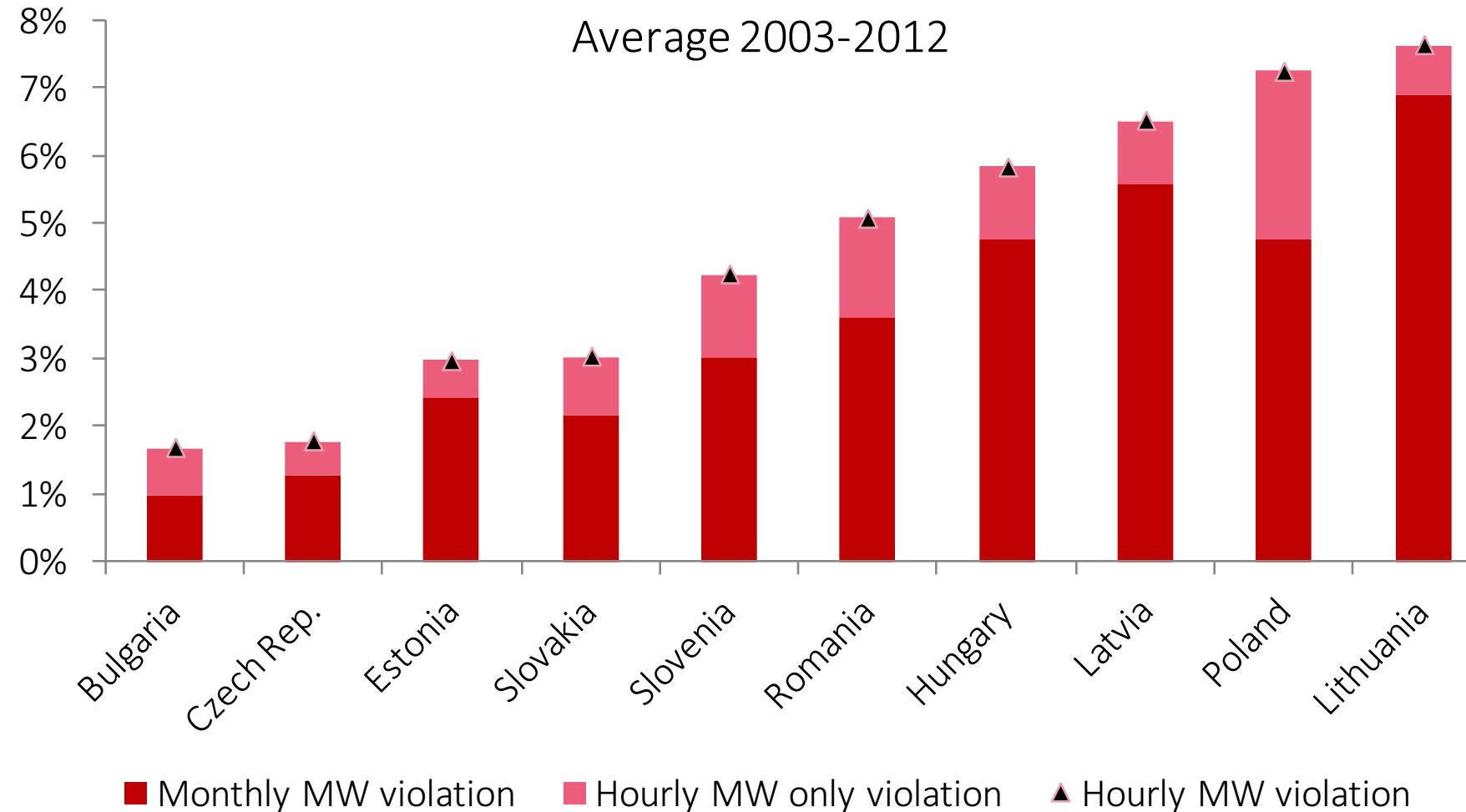
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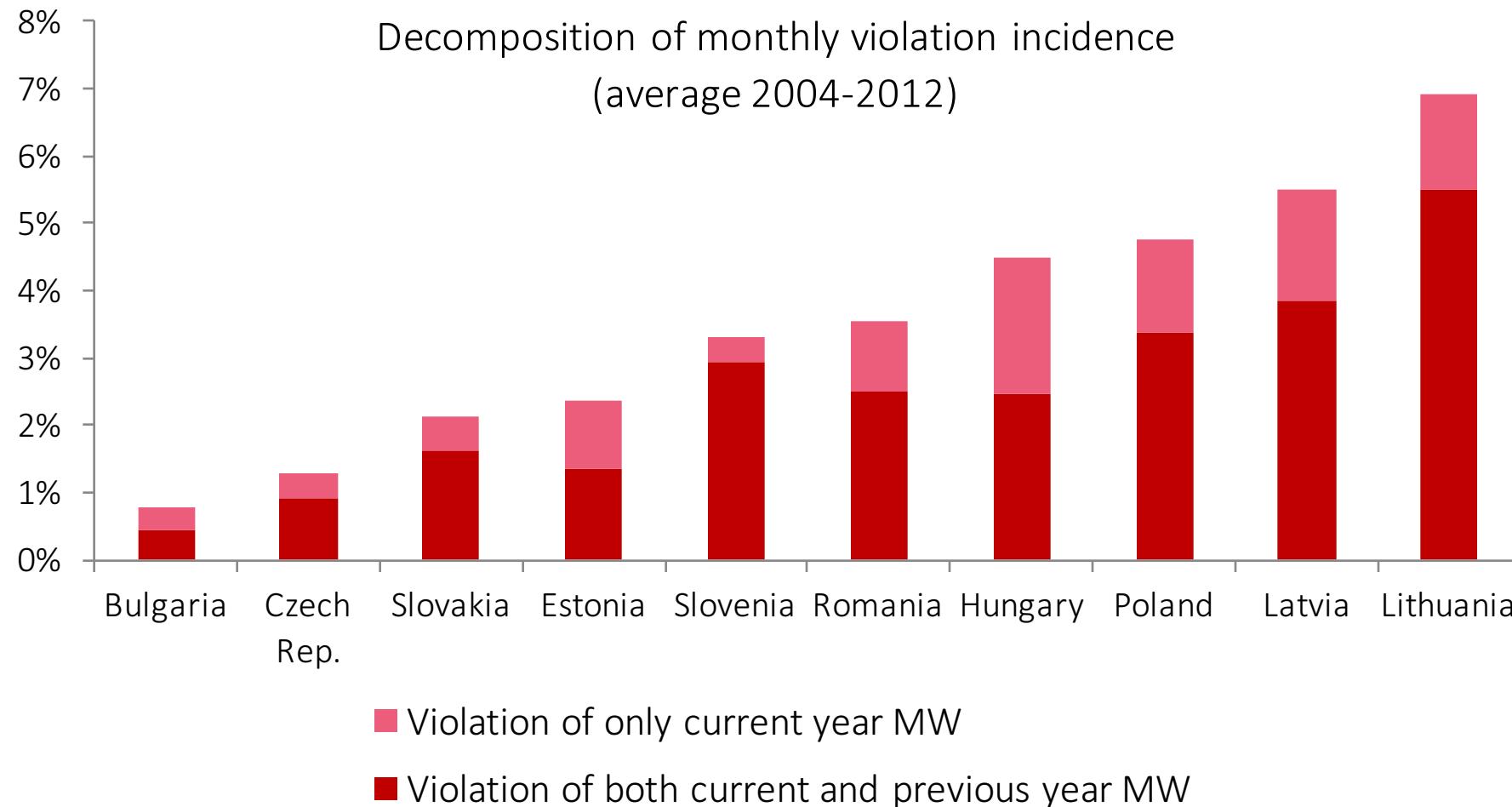
Bulgaria, Lithuania, Romania, Slovakia – violation rose in the crisis



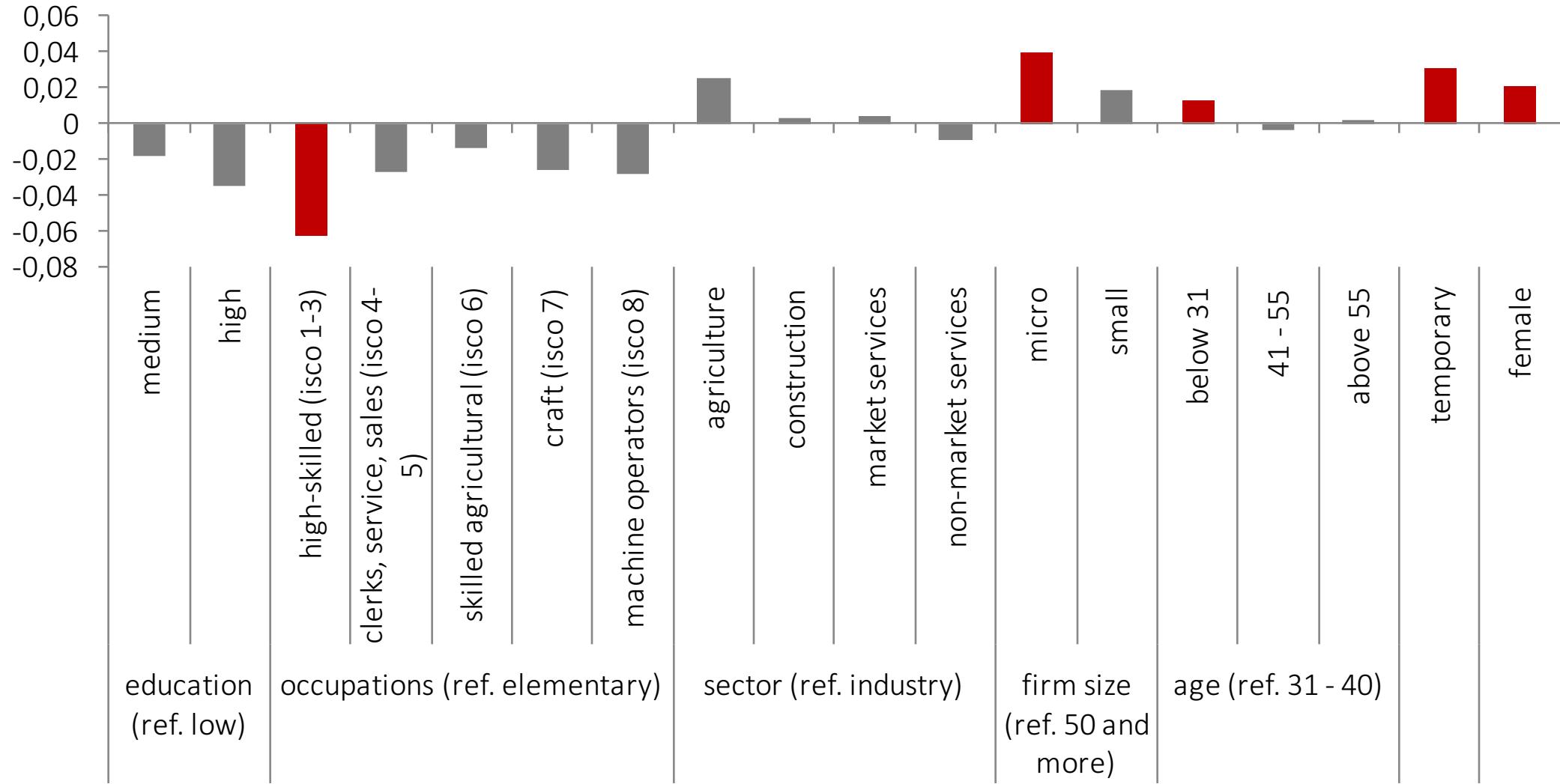
Non-compliance via extra hours most common in Poland and Romania



Violation usually deeper than non-compliance with the most recent hike



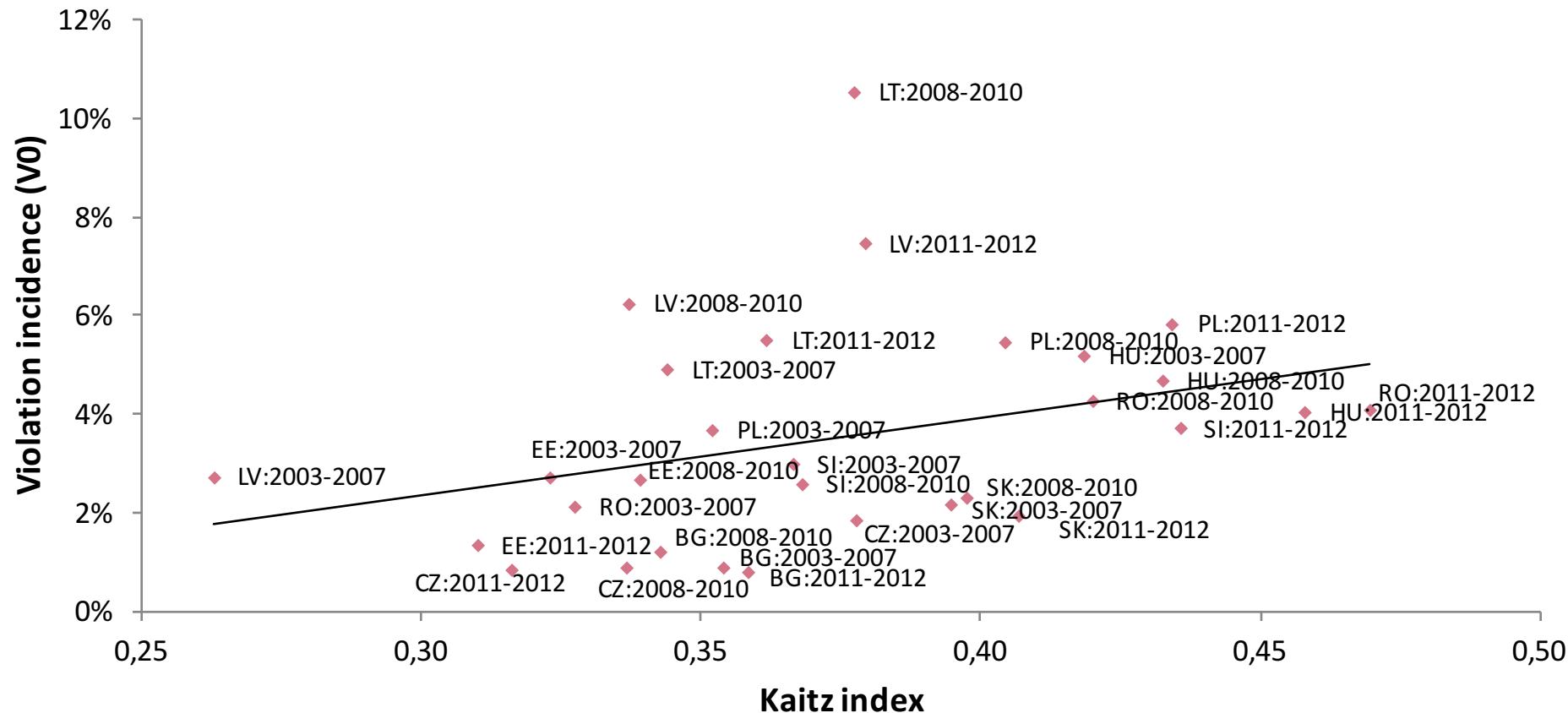
Probability of non-compliance higher for vulnerable workers



Marginal effects. All presented coefficients significant at 1% level. Country dummies, and time trend included.

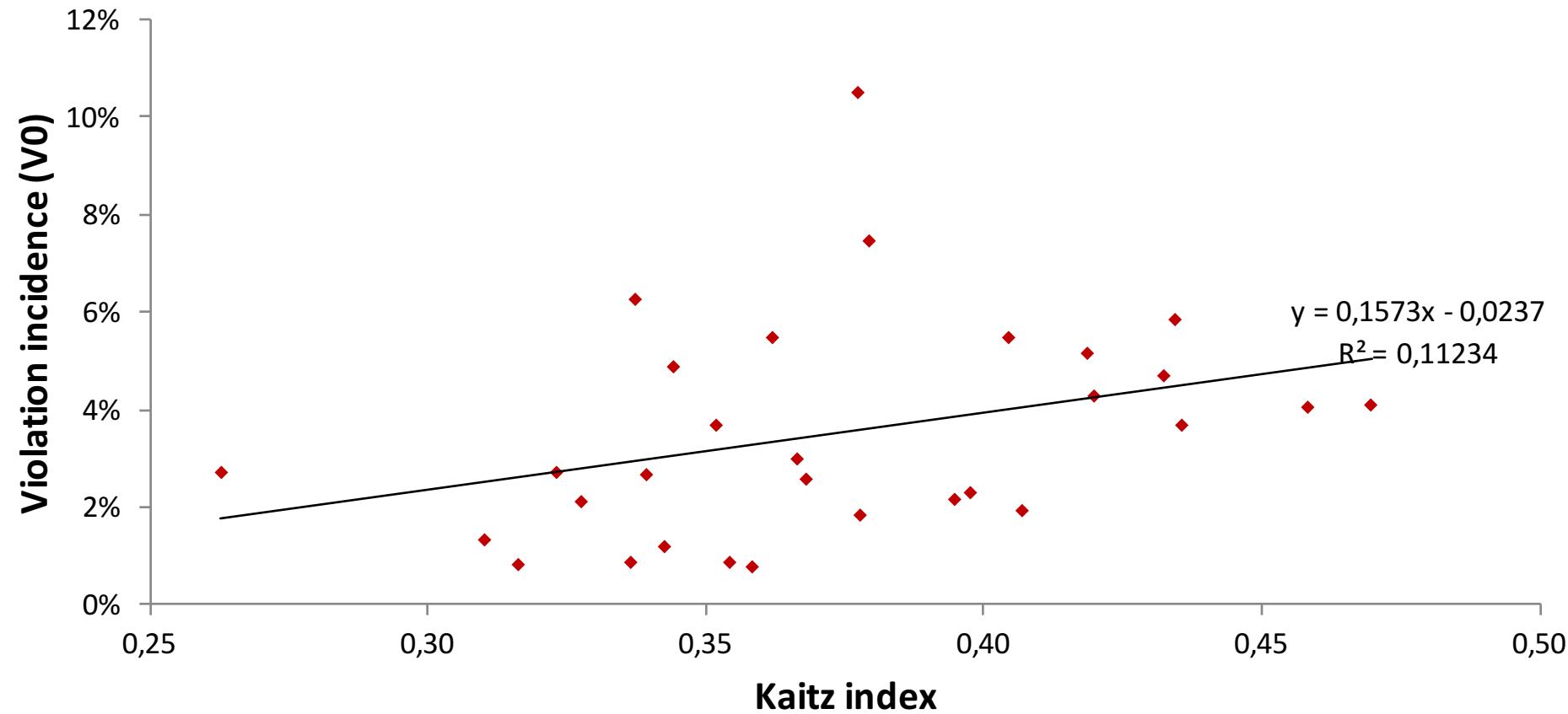
Positive relation between violation incidence and Kaitz index . | :

Violation incidence (v0) vs Kaitz index: descriptive



Positive relation between violation incidence and Kaitz index . | :

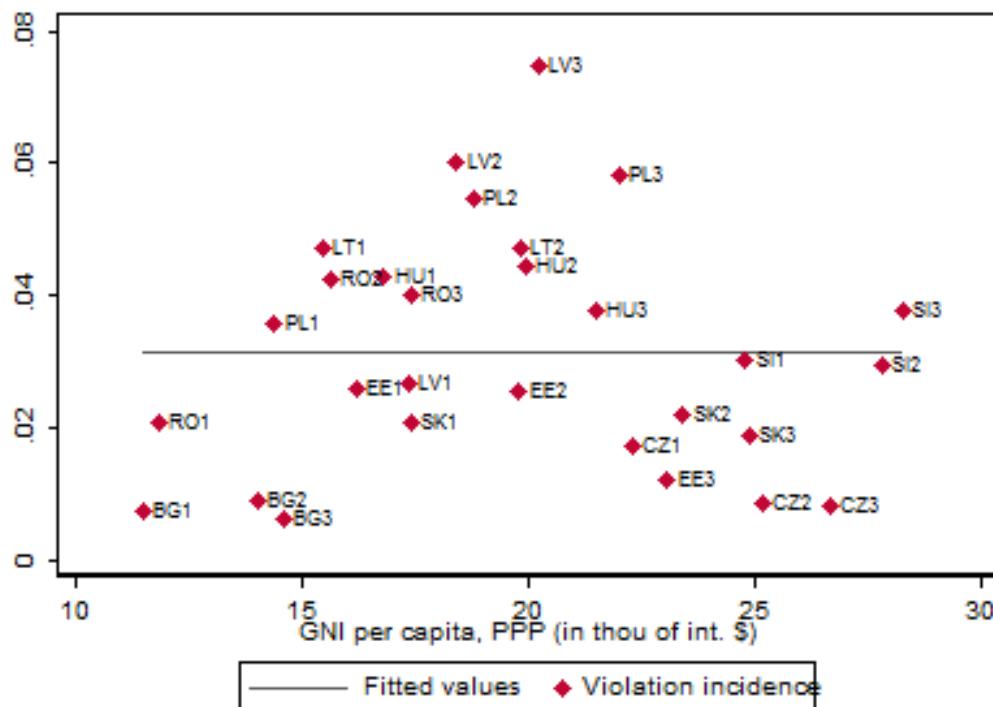
Violation incidence (V0) vs. the Kaitz index: descriptive



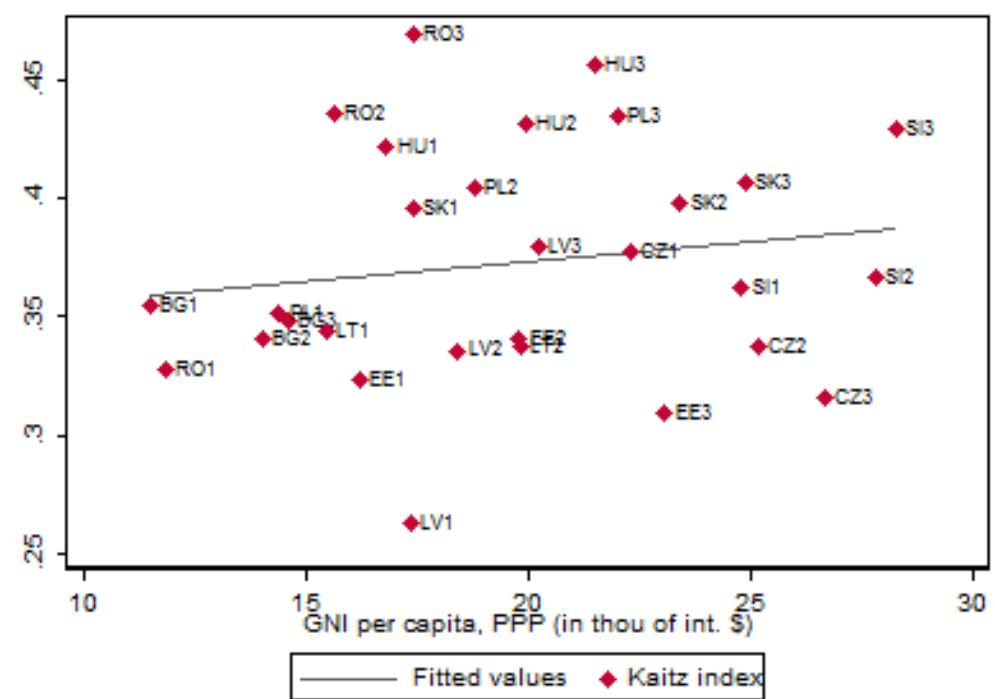
No visible relation between GNI and violation? Due to rising Kaitz index.



Violation incidence (V_0) vs GNI per capita (in PPP): descriptive



Kaitz index vs GNI per capita (in PPP): descriptive



Higher Kaitz and lower GNI associated with higher violation . | :

Monthly MW violation incidence (V_0) vs. GNI per capita and Kaitz index:
panel regression

	Between-effects	Fixed-effects
GNI per capita, PPP (in int. \$k)	-0.001	-0.002***
Kaitz index	0.063	0.314***
Constant	0.0205	0.059***
R-squared	0.08	0.66
10 countries, 85 observations		

Main findings from panel regressions



Kaitz index ↑ non-compliance in all specifications

Higher trade union density and bargaining coverage associated with higher incidence of compliance (Kaitz index controlled)

No relationship between average shortfall and Kaitz index or GNI

Conclusions



- MW violation in CEE low to moderate but happens also via hours
- Higher MW associated with higher incidence of violation...
- ... but non-compliance usually goes beyond most recent hike
- Vulnerable workers more likely to be affected
- Balance between MW level, avoidance and enforcement costs

Thank you for your attention

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