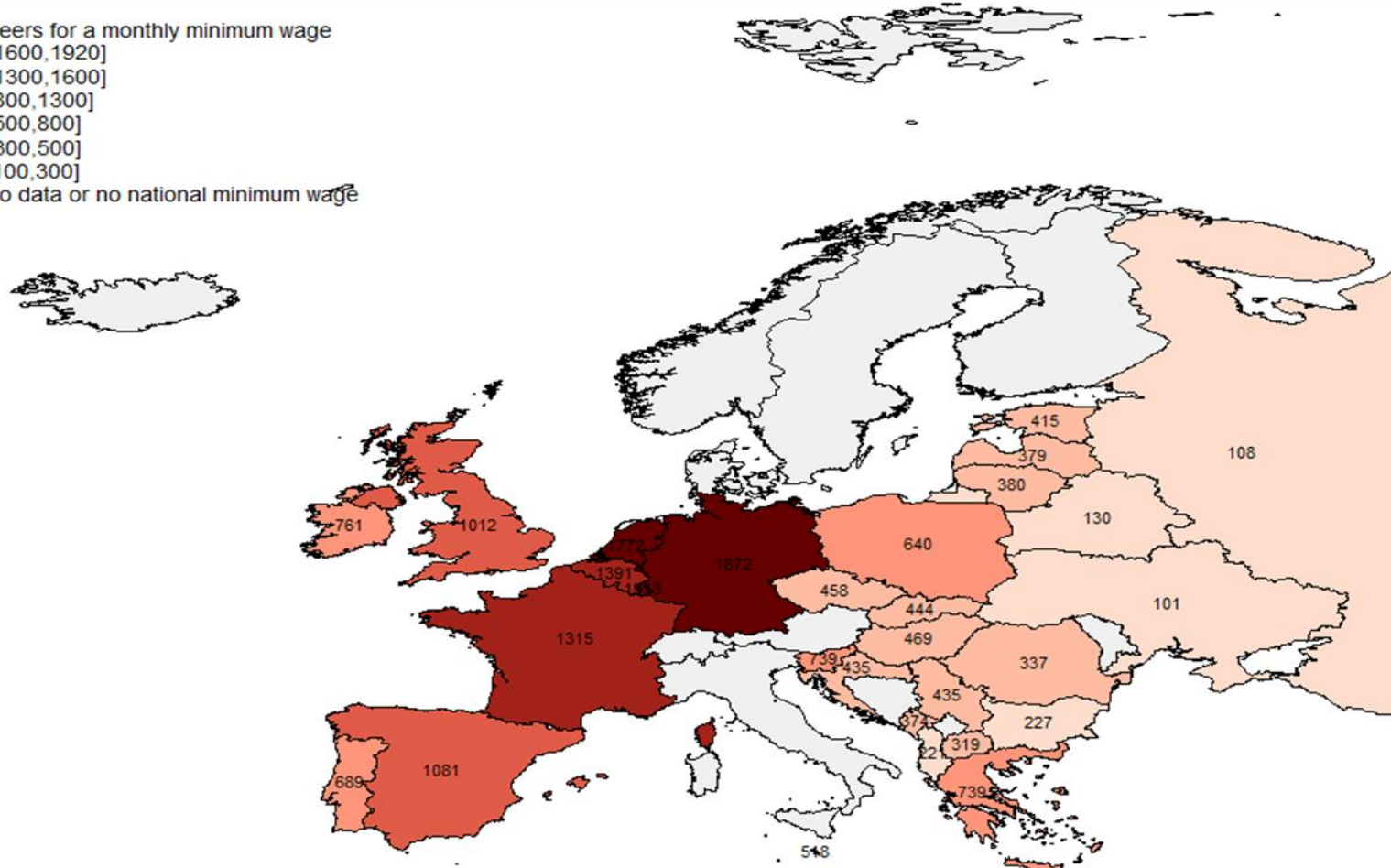
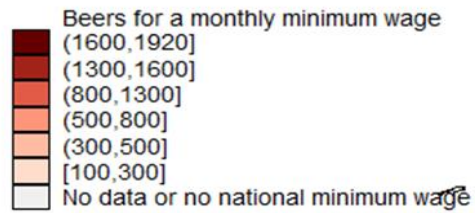


Minimum wage violation in Central and Eastern Europe

Piotr Lewandowski (IBS, IZA)

Karolina Goraus-Tańska (Uof Warsaw)

Minimum wages – the NeverEnding Story



IBS calculations based on Eurostat and wageindicator.org data on minimum wages, 2015 GoEuro Beer Price Index and numbeo.com data on beer store prices

The existence of regulation doesn't mean compliance

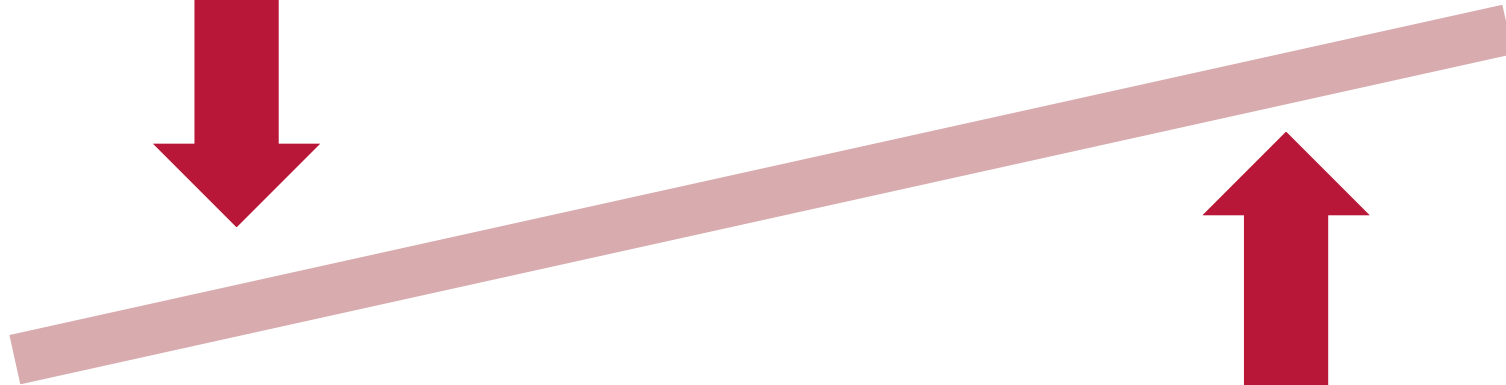


- Ashenfelter, Smith (1979) – probability of getting caught & fine if caught
- Basu, Chan, Kanbur (2010) – government turns a blind eye
- Bhorat, Kanbur, Stanwix (2015) – partial compliance
- Empirical studies:
 - Bhorat (2014), Rani et al. (2013) – on developing countries
 - Garnero, Kampelmann, Rycx (2015) – coverage & compliance in some EU MS

Factors that *should* influence compliance



Complexity
(no. of schedules, exemptions)



Income / development level
Institutional enforcement capacity

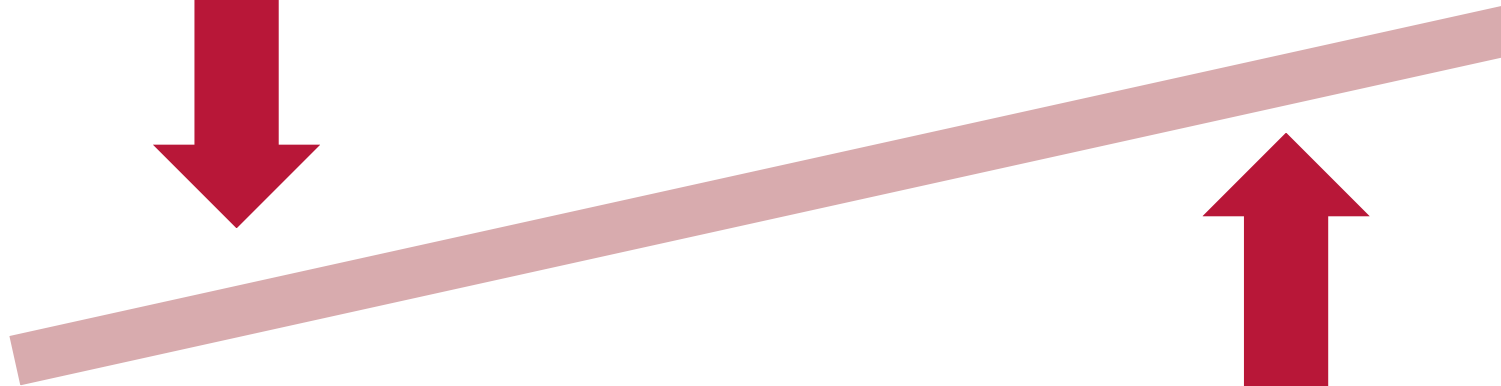
Factors that *should* influence compliance



Complexity
(no. of schedules, exemptions)

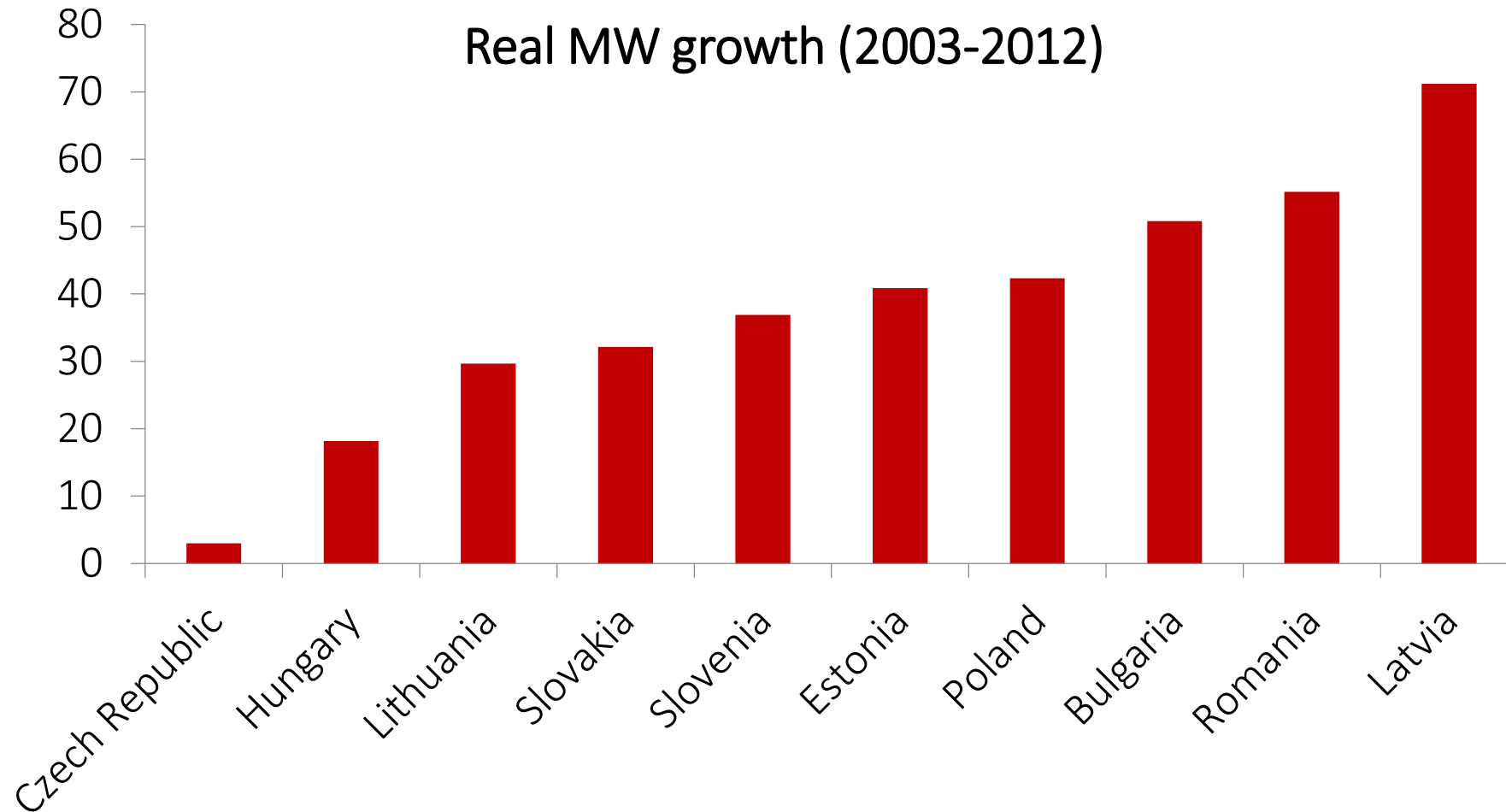


In CEE national MWs *should* cover
all dependent workers

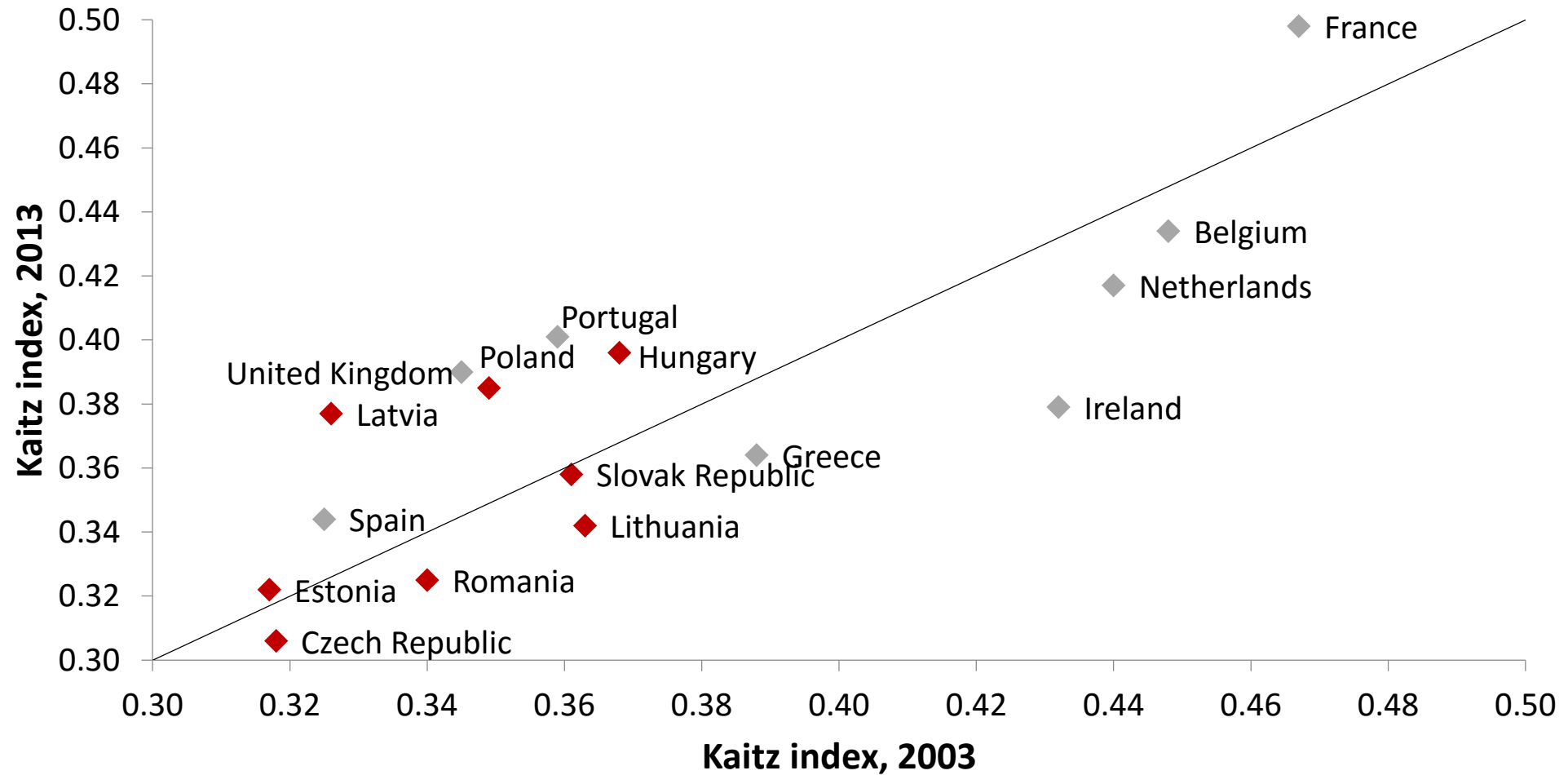


Income / development level
Institutional enforcement capacity

Minimum wages rose in real terms since early 2000s



Diverse changes in minimum to average wage ratios



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



- **Incidence of violation**

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

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

- **Depth of violation**

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

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

- **Average shortfall**

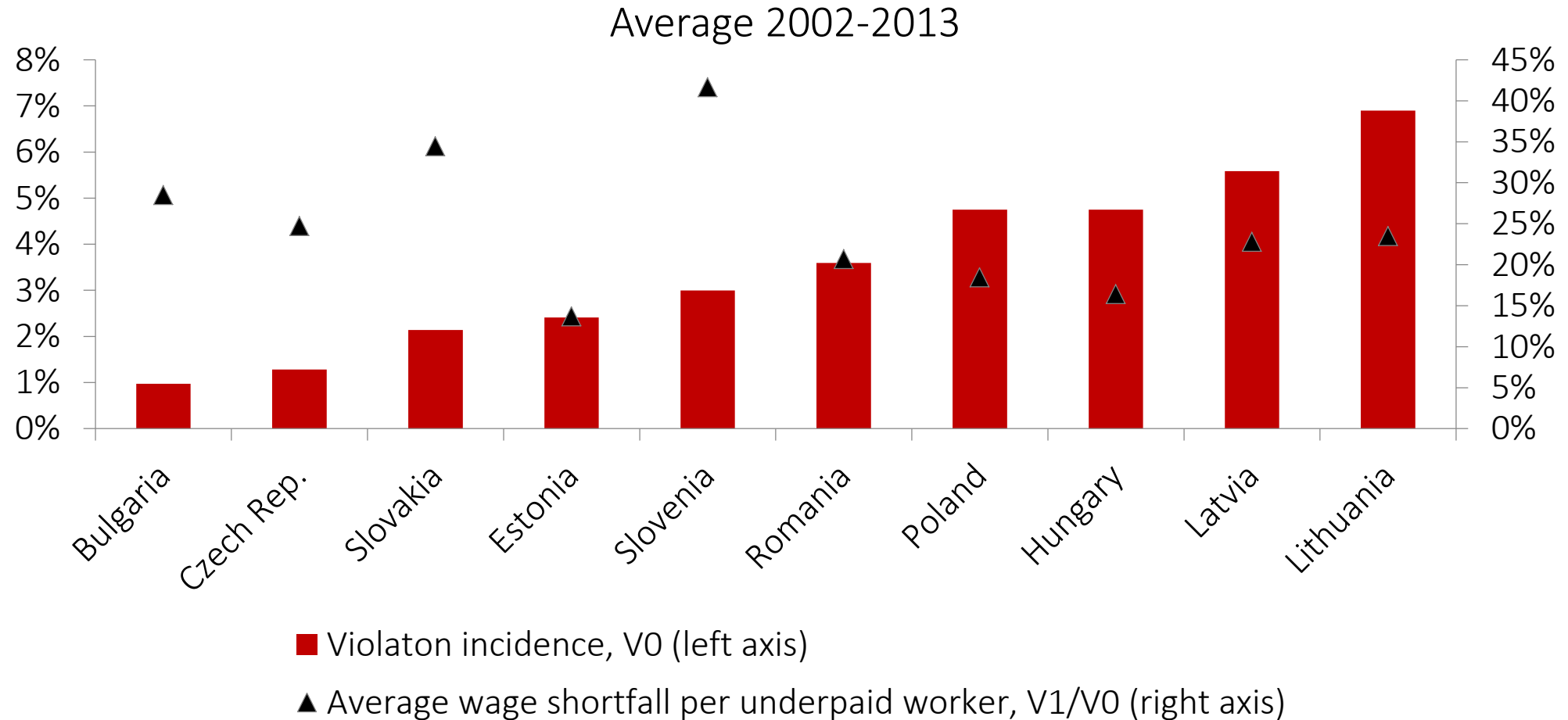
- V_1/V_0 ; depth of violation per underpaid worker

EU-SILC data for 2003-2012 (income reference period)

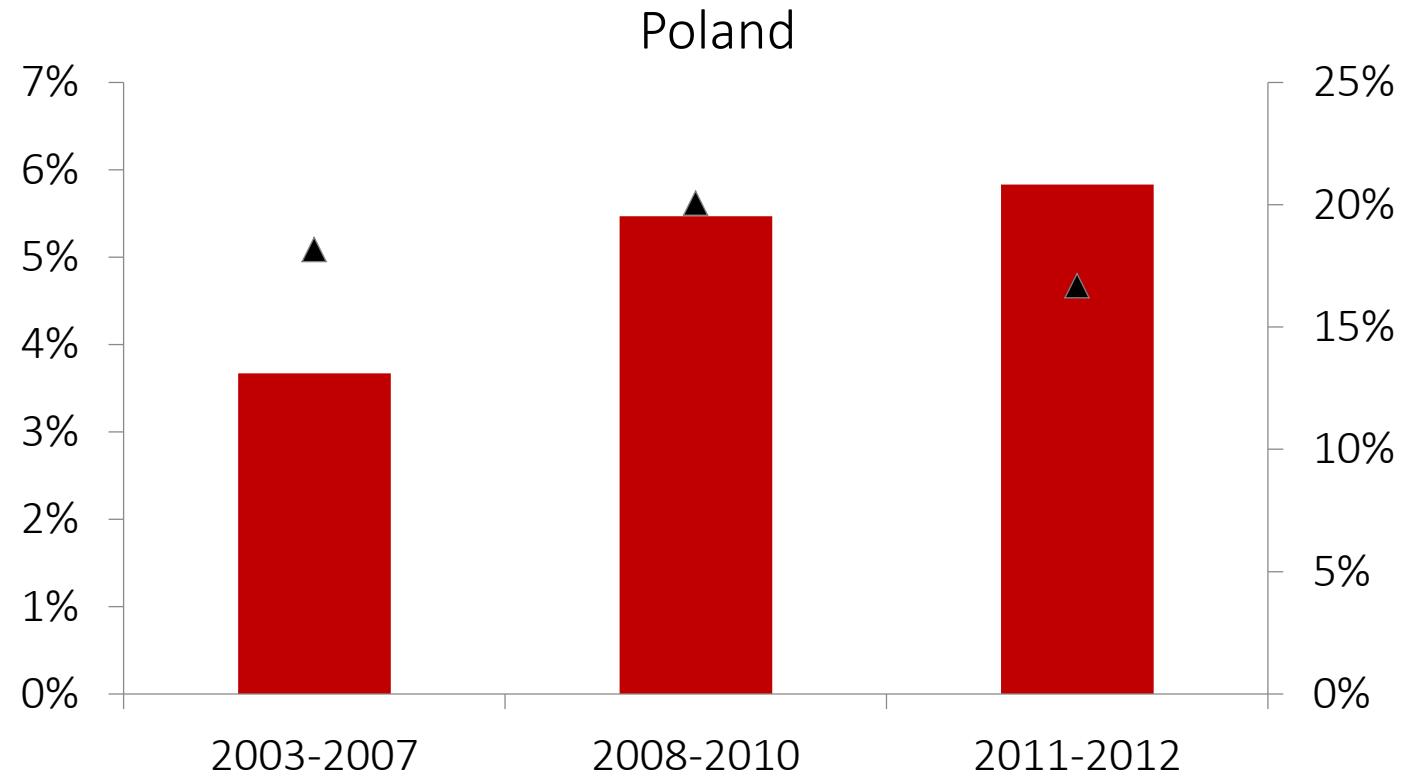


- Sample limited to workers aged 25+ who:
 - were employed full-time and worked at least 40 hours per week
 - had only one job
 - were employed full-time in all months of the previous calendar year
- Wages in our sample are consistent with other sources
- Robustness checks with 75% MW and 125% MW thresholds

Non-compliance low to moderate; shortfall noticeable



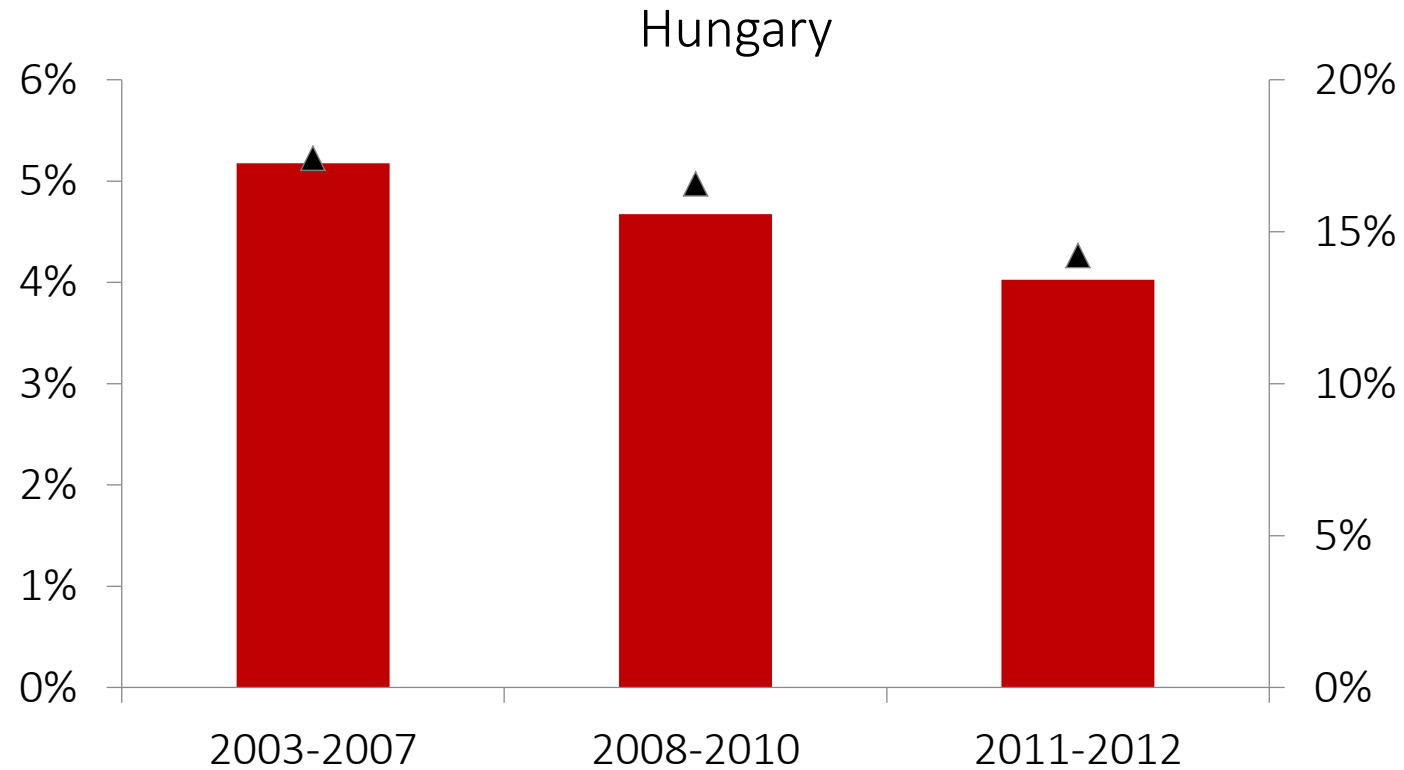
Latvia, Poland, Slovenia – increasing violation



■ Violaton incidence, V0 (left axis)

▲ Average shortfall per undepaid worker, V1/V0 (right axis)

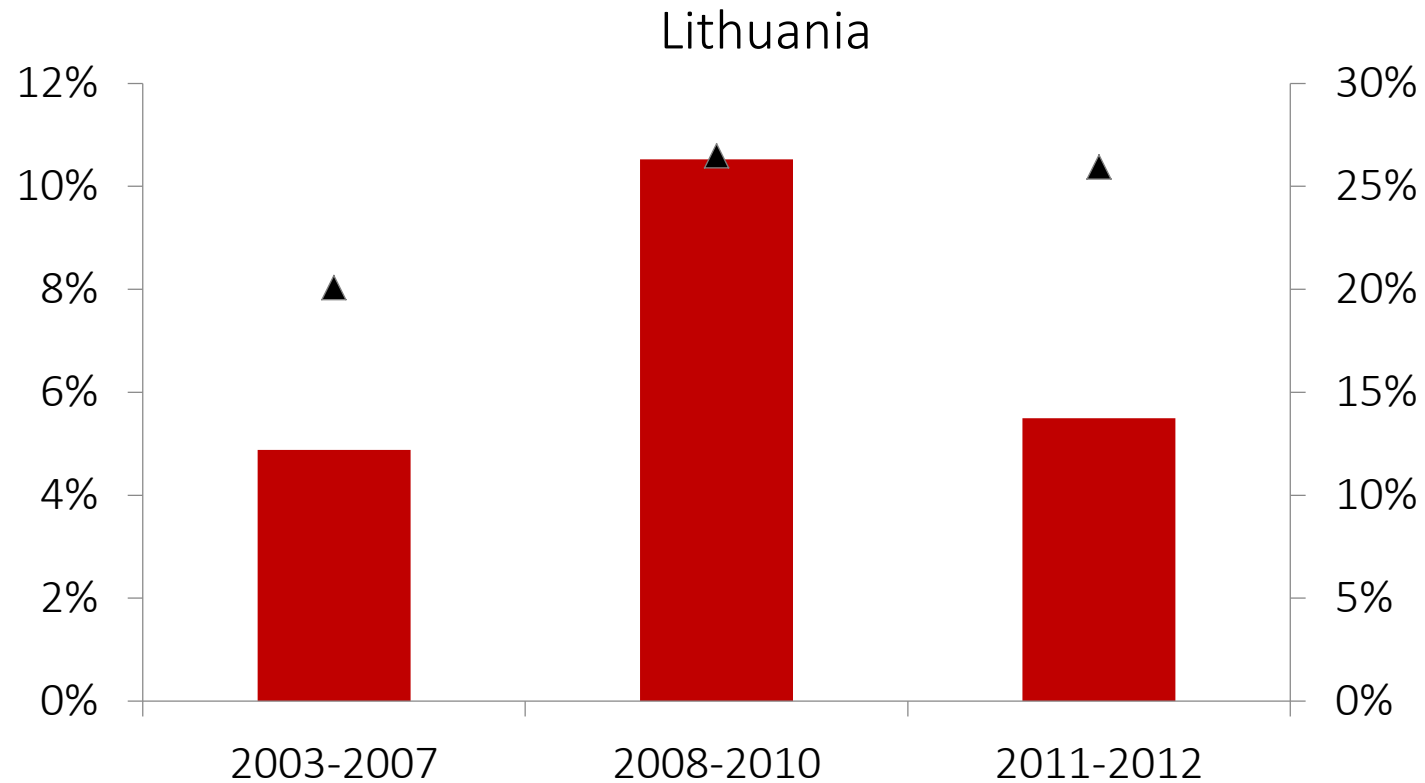
Czech Republic, Estonia, Hungary – decreasing violation



■ Violaton incidence, V0 (left axis)

▲ Average shortfall per unpaid worker, V1/V0 (right axis)

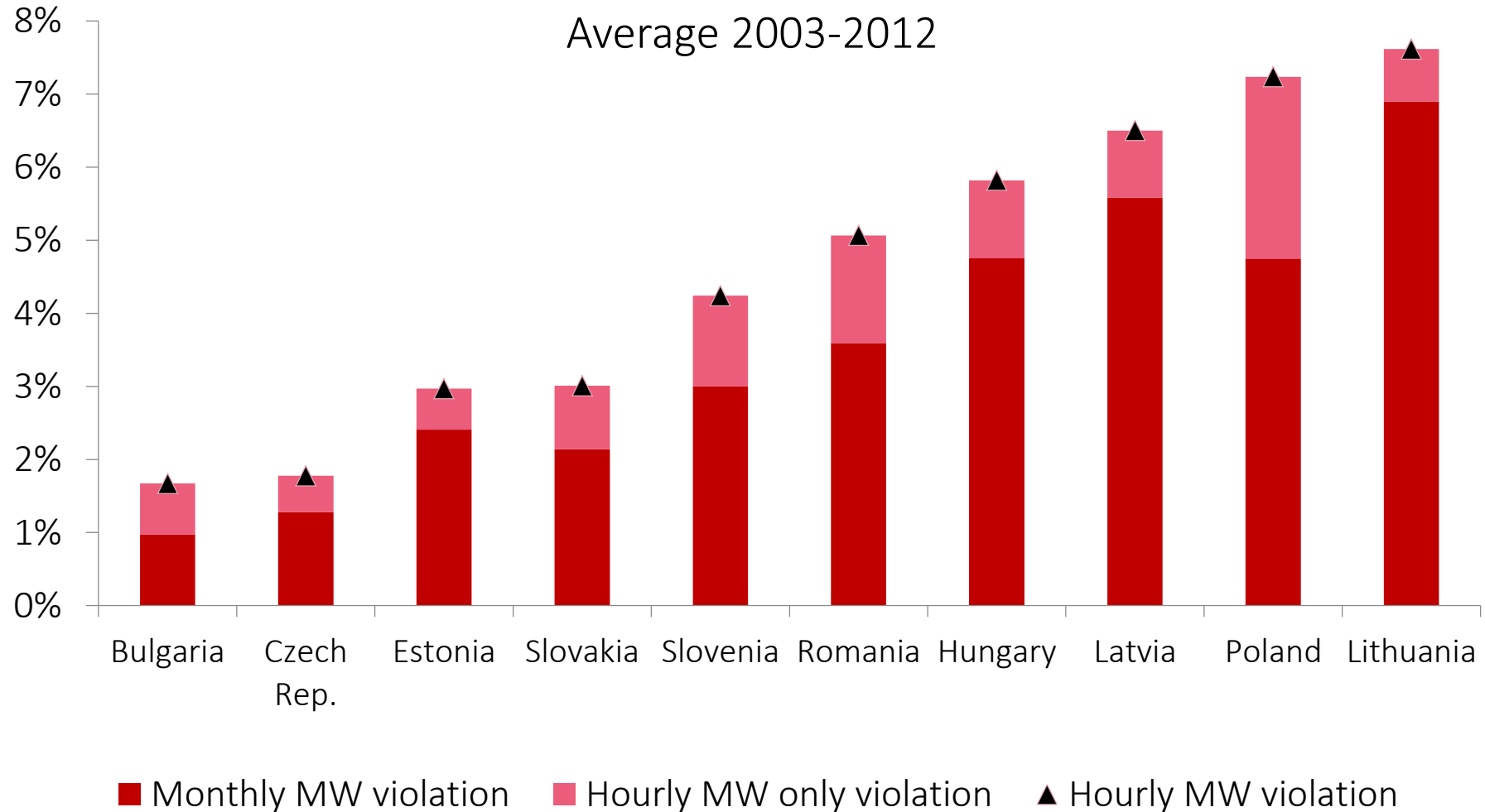
Bulgaria, Lithuania, Romania, Slovakia – violation rose in the crisis



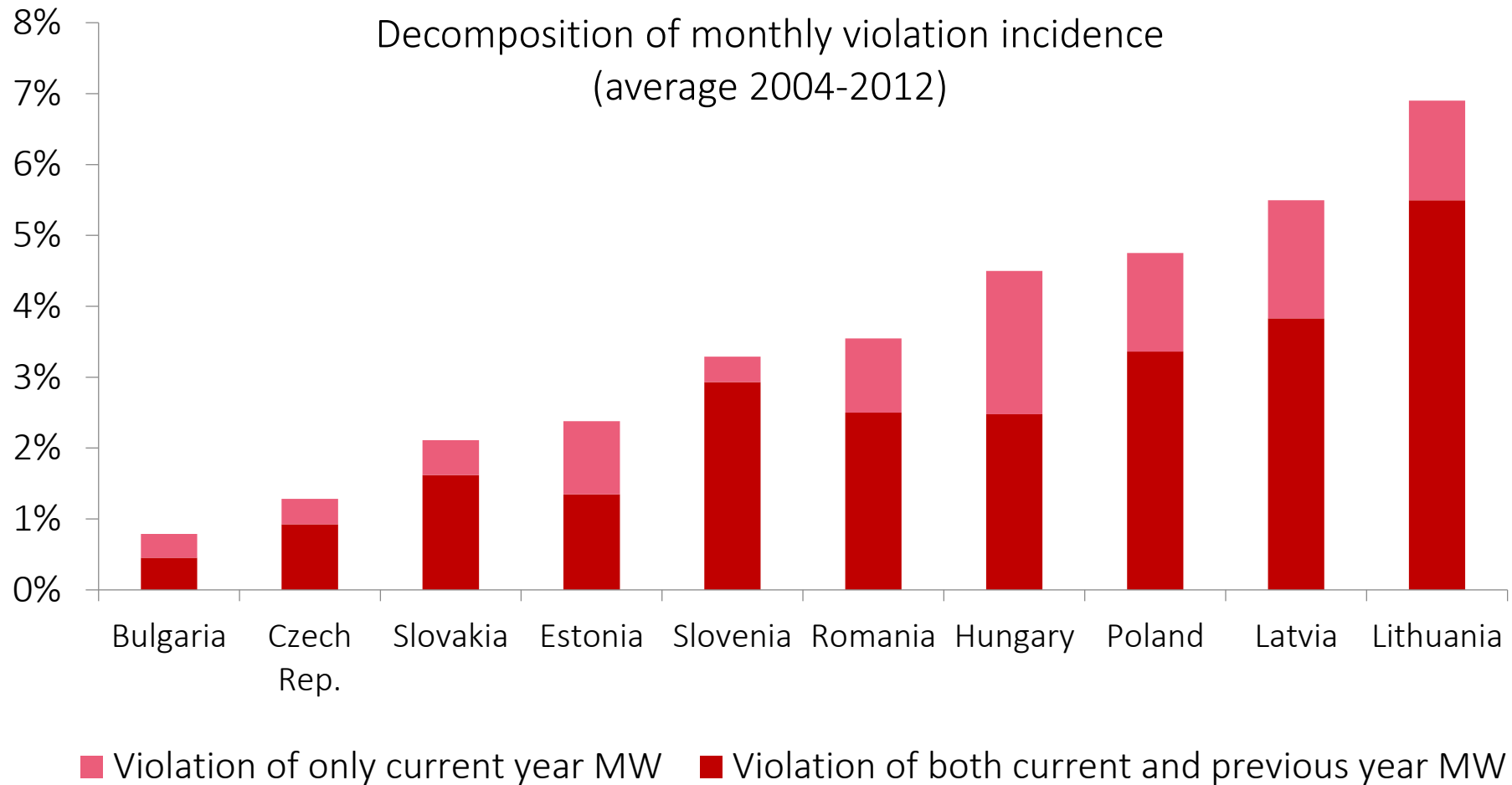
■ Violaton incidence, V0 (left axis)

▲ Average shortfall per unpaid worker, V1/V0 (right axis)

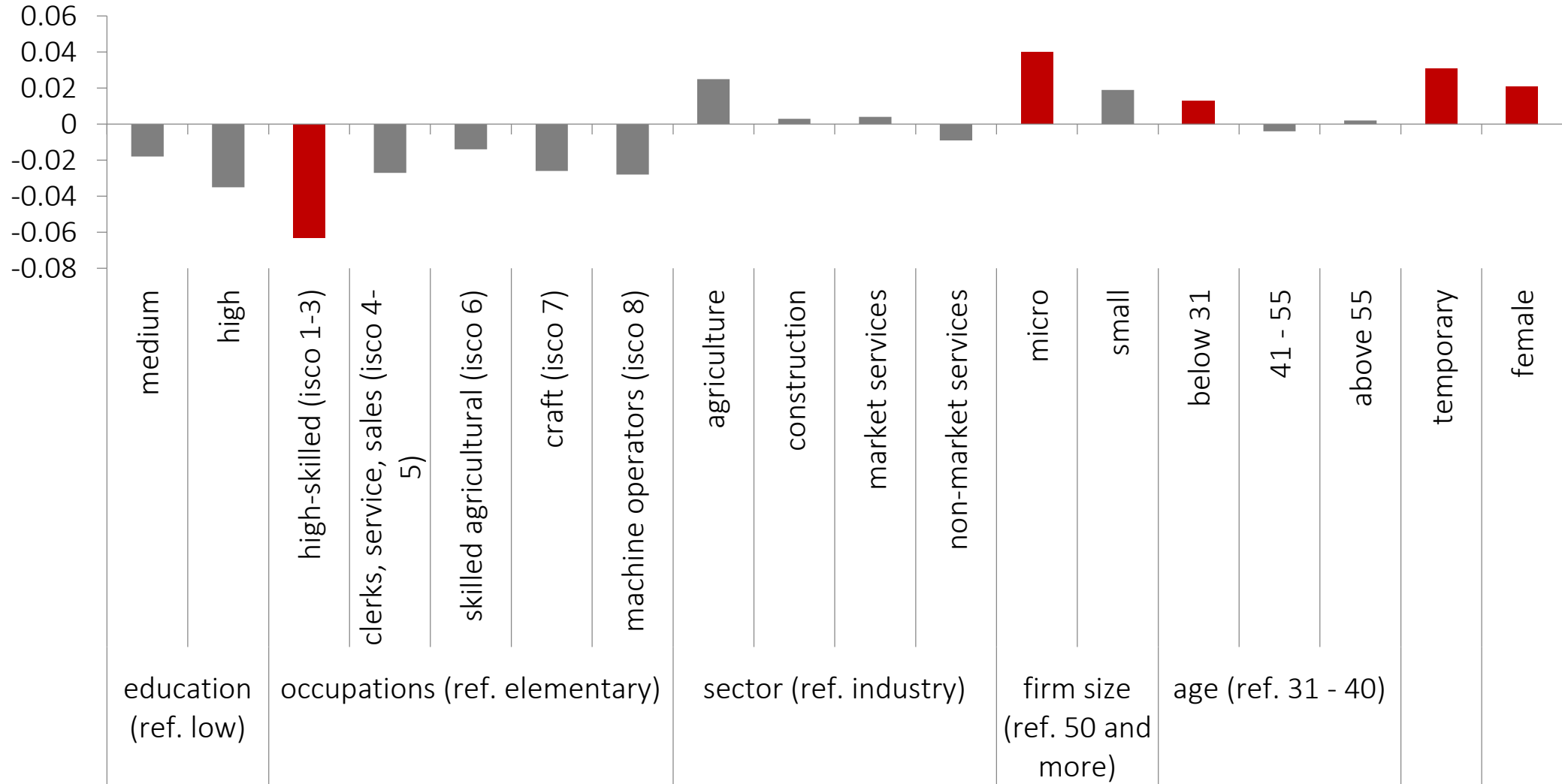
Non-compliance via extra hours most common in Poland and Romania



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



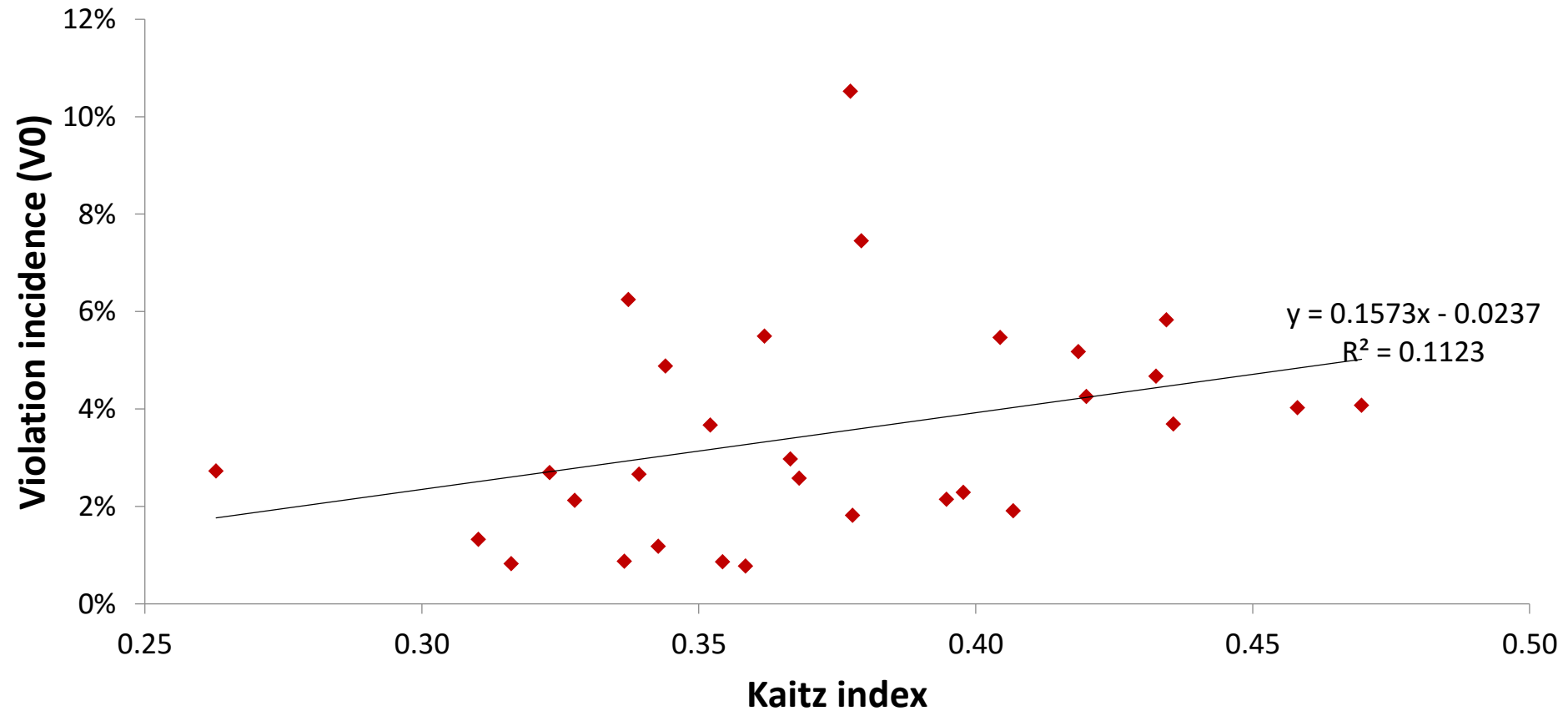
Odds of non-compliance higher for weaker workers



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. the Kaitz index: descriptive



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

Monthly MW violation incidence (V0) 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***
R2	0.08	0.66
10 countries, 85 observations		

Main findings from panel regressions



Kaitz index \uparrow non-compliance in all specifications

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

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
- Weaker workers more likely to be affected
- Balance needed between MW level, violation risk & enforcement costs
- Easy & anonymous reporting plus automatic fines for repeated breaches

Thank you for your attention

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