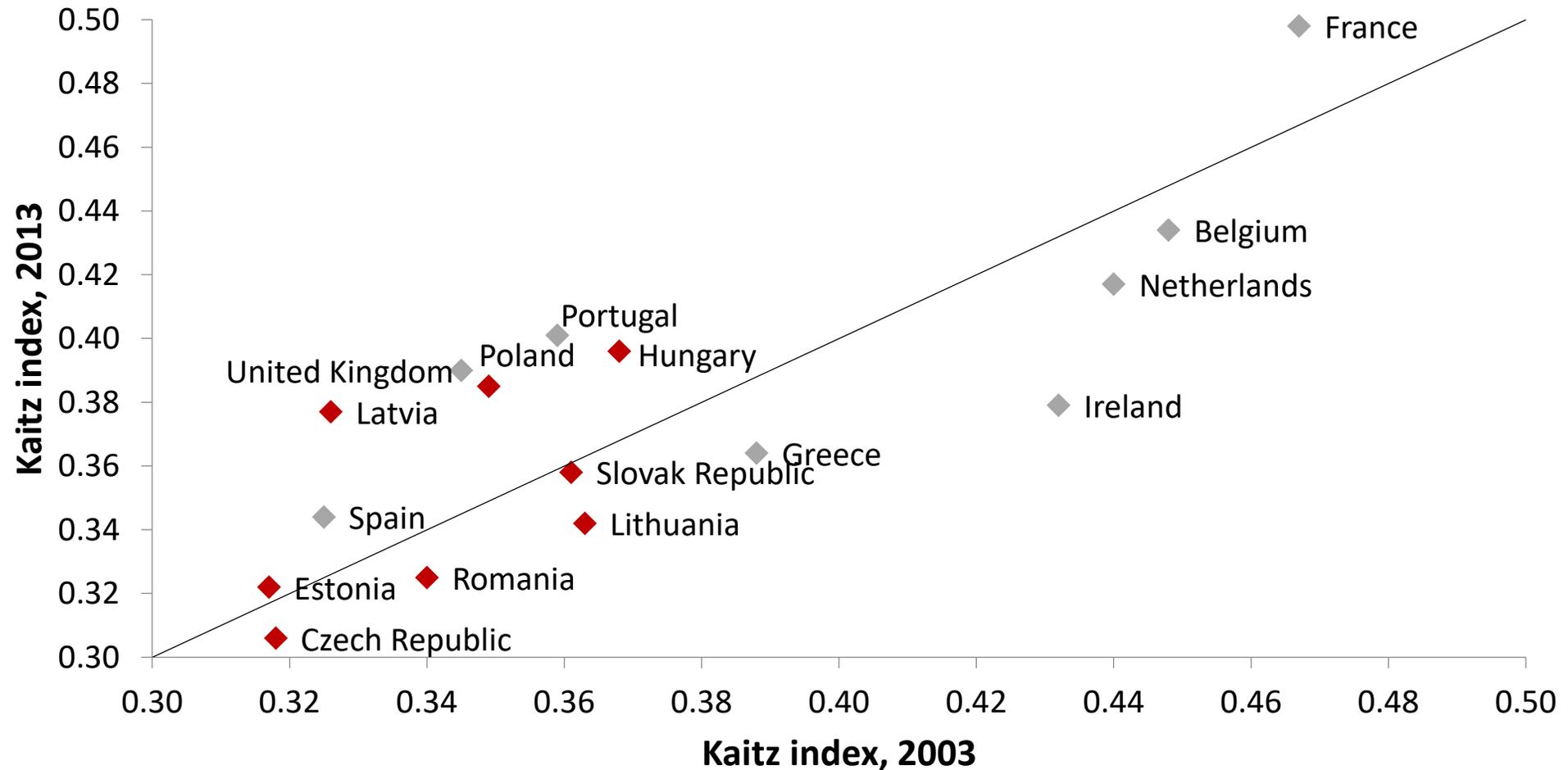


Minimum wage violation in Central and Eastern Europe

Piotr Lewandowski (IBS, IZA)

Karolina Goraus-Tańska (Warsaw Univ.)

All Central and Eastern European countries have national minimum wages since the transition in the 1990s



The existence of regulation doesn't mean compliance

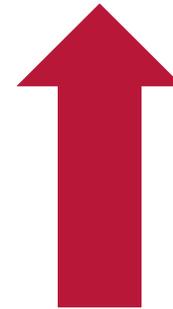
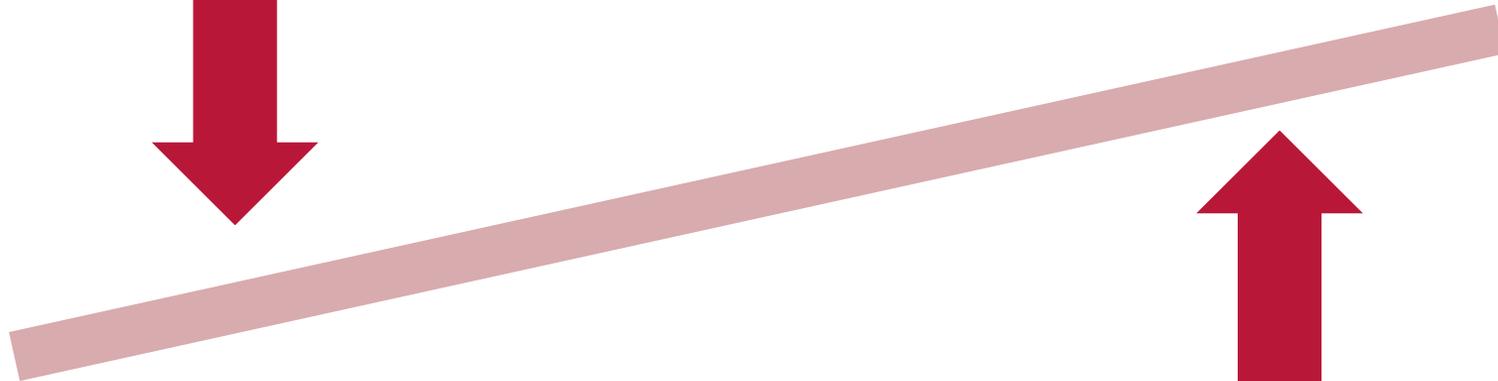


- Ashenfelter, Smith (1979) – probability of getting caught & fine if caught
- Basu, Chau, Kanbur (2010) – government turns a blind eye
- Bhorat, Kanbur, Stanwix (2015) – partial compliance
- Empirical studies:
 - Bhorat (2014), Rani et al. (2013) – on developing countries
 - Garnero, Kampelmann, Rycx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

Factors that *should* influence compliance



Complexity
(no. of schedules, exemptions)



Income / development level
Institutional enforcement capacity

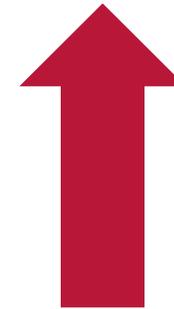
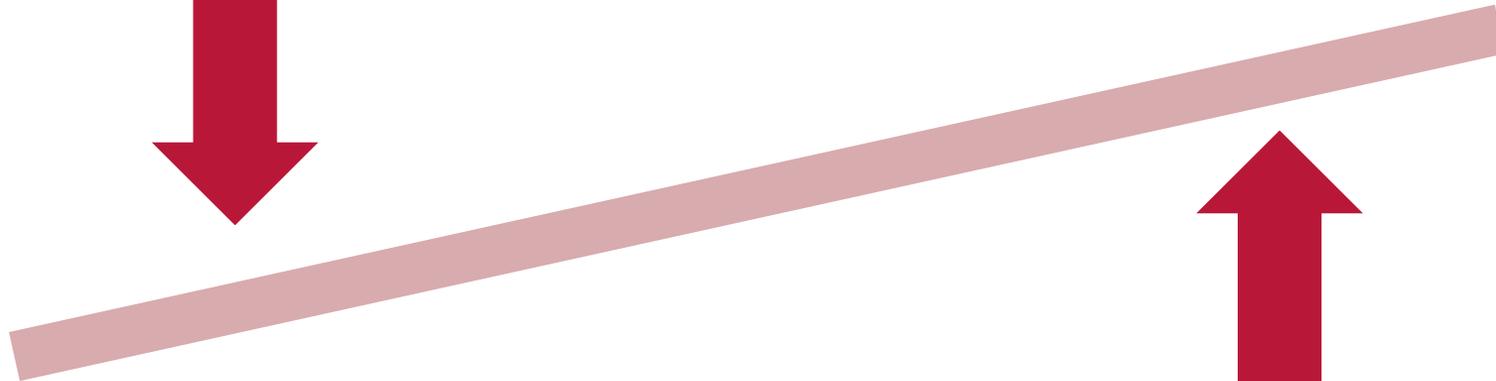
Factors that *should* influence compliance



Complexity
(no. of schedules, exemptions)



In CEE national MWs *should* cover
all dependent workers



Income / development level
Institutional enforcement capacity

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**

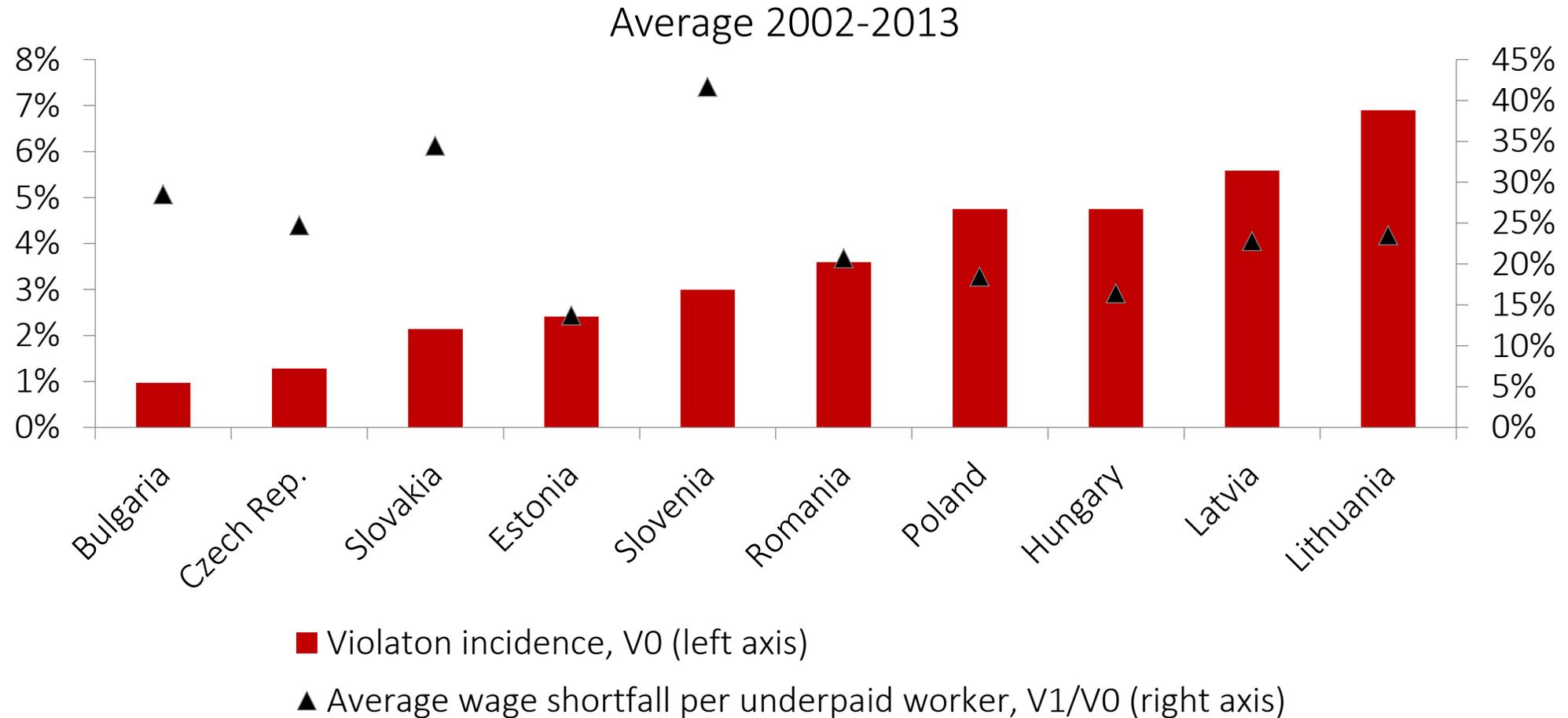
- V_1/V_0 ; depth of violation per underpaid worker

EU-Survey of Income and Living Conditions data, 2003-2012 (income reference period)

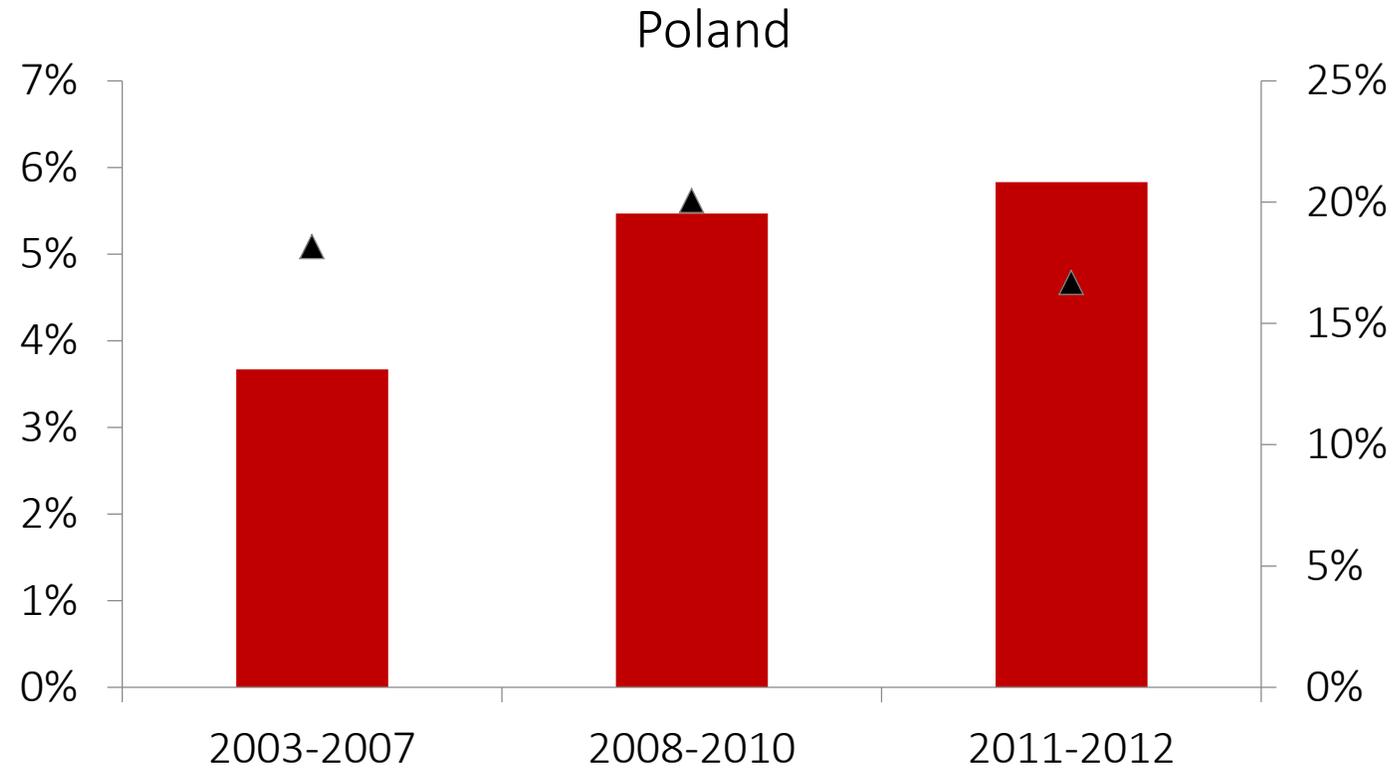


- Sample limited to workers aged 25+ who:
 - were employed full-time and worked at least 40 hours per week
 - had only one job
 - were employed full-time in all months of the previous calendar year
- So probably we estimate the lower bound of non-compliance
- Wages in our sample are consistent with other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

Non-compliance low to moderate; shortfall noticeable



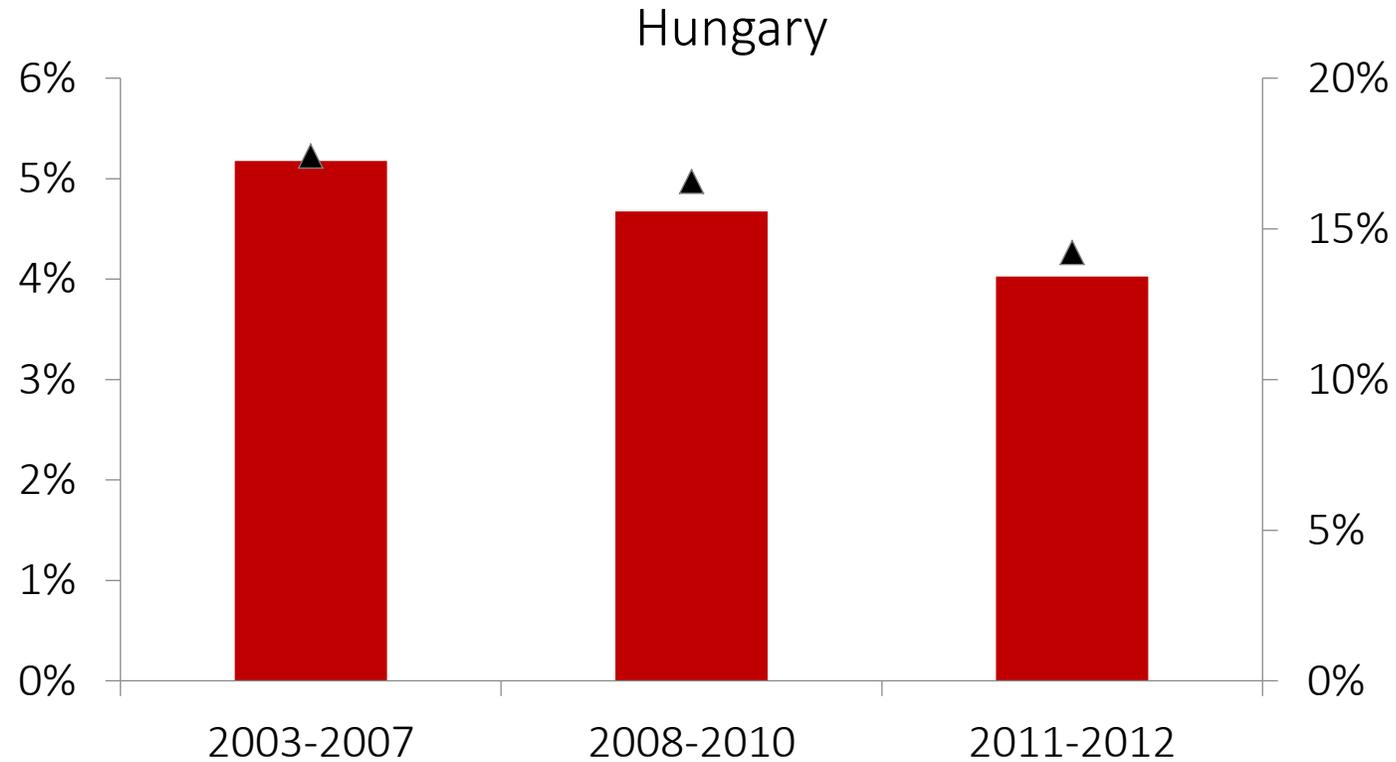
Latvia, Poland, Slovenia – increasing violation



■ Violaton incidence, V0 (left axis)

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

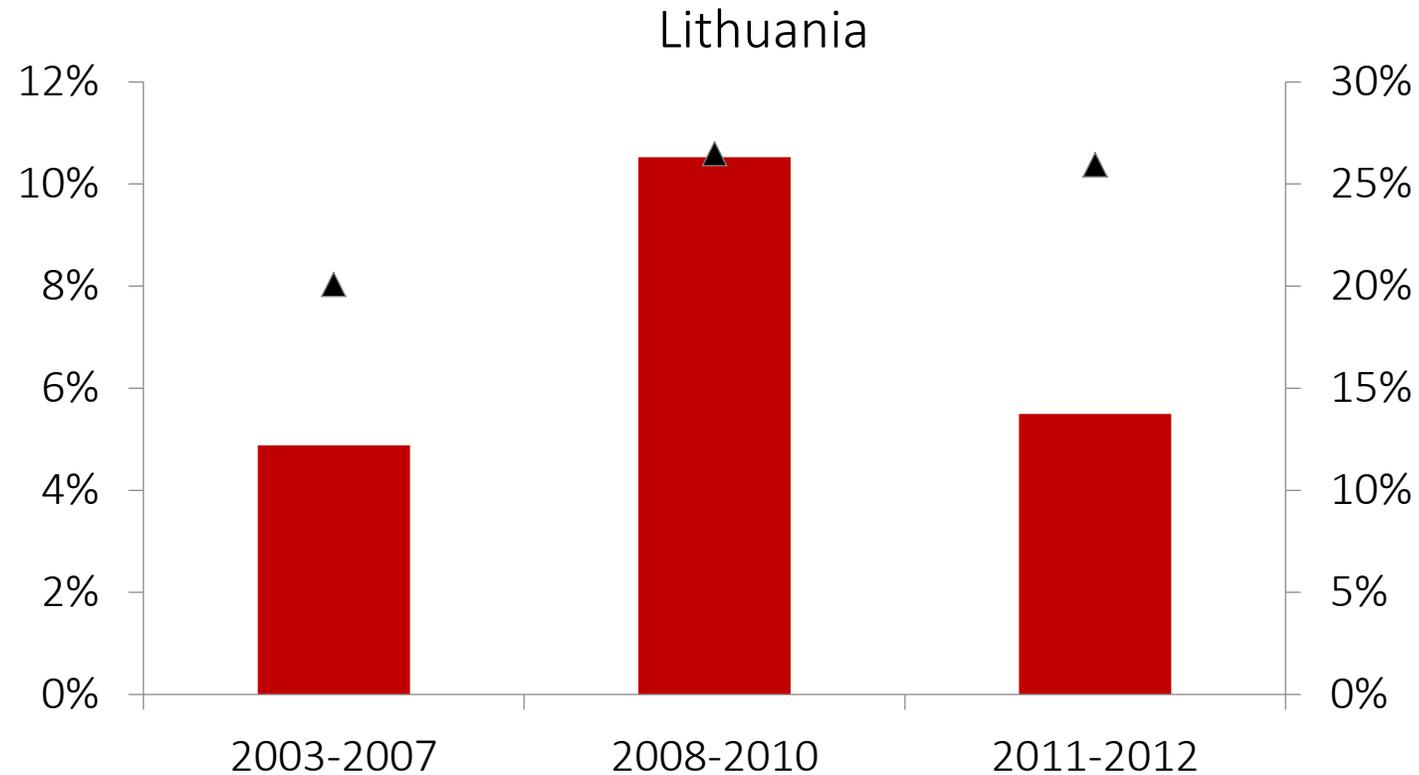
Czech Republic, Estonia, Hungary – decreasing violation



■ Violaton incidence, V0 (left axis)

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

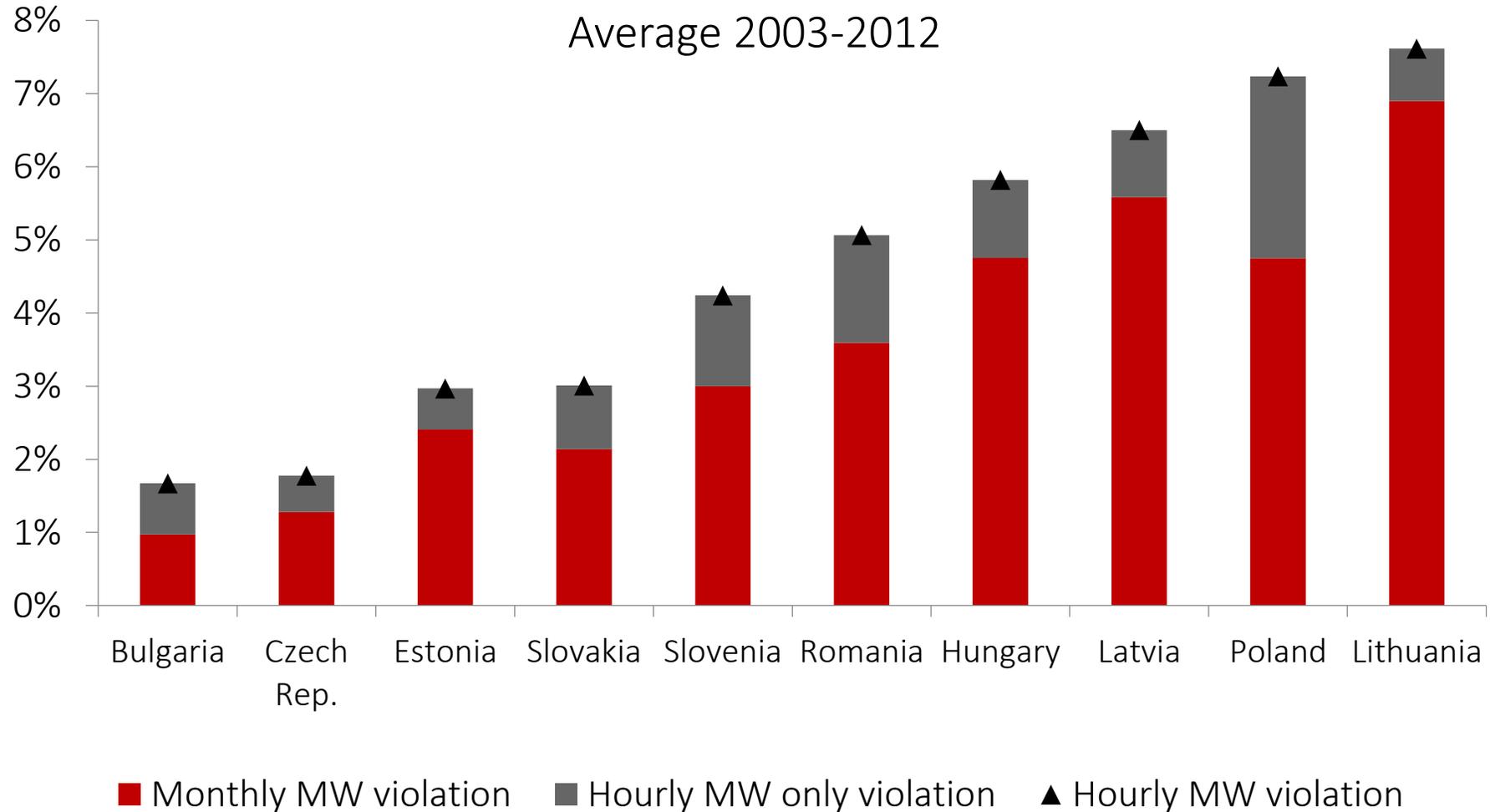
Bulgaria, Lithuania, Romania, Slovakia – violation rose in the crisis



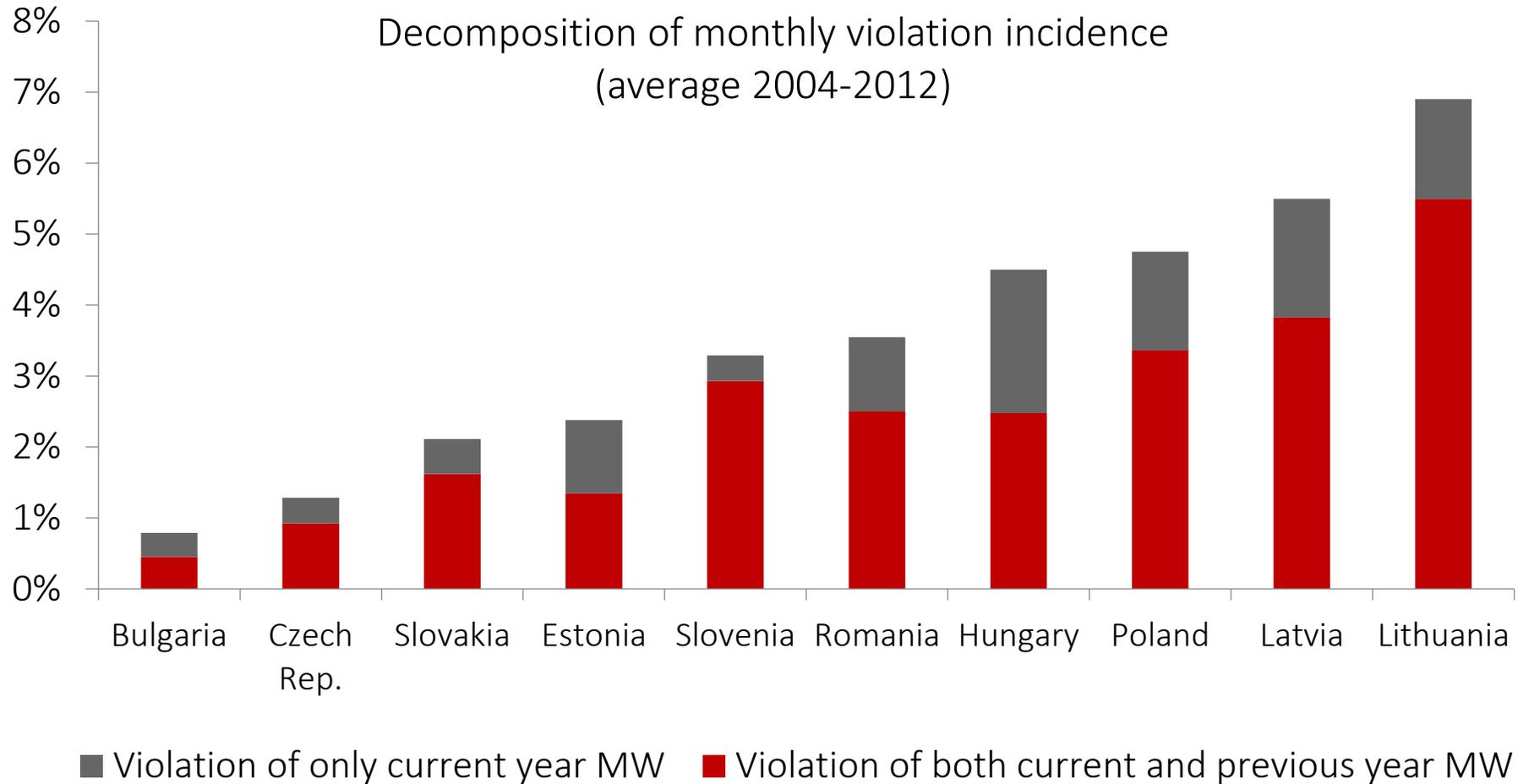
■ Violaton incidence, V0 (left axis)

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

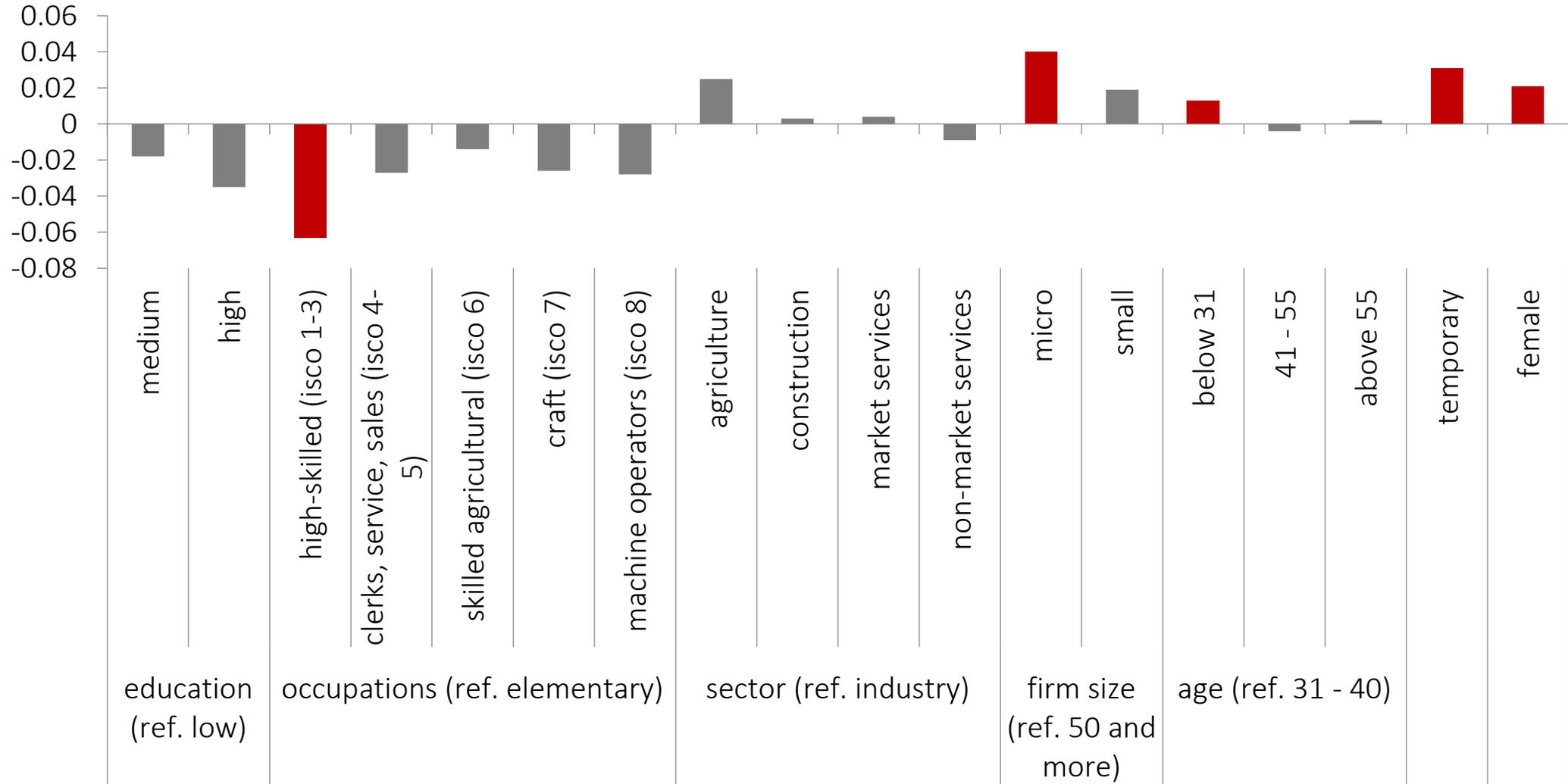
Non-compliance via extra hours most common in Poland and Romania



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



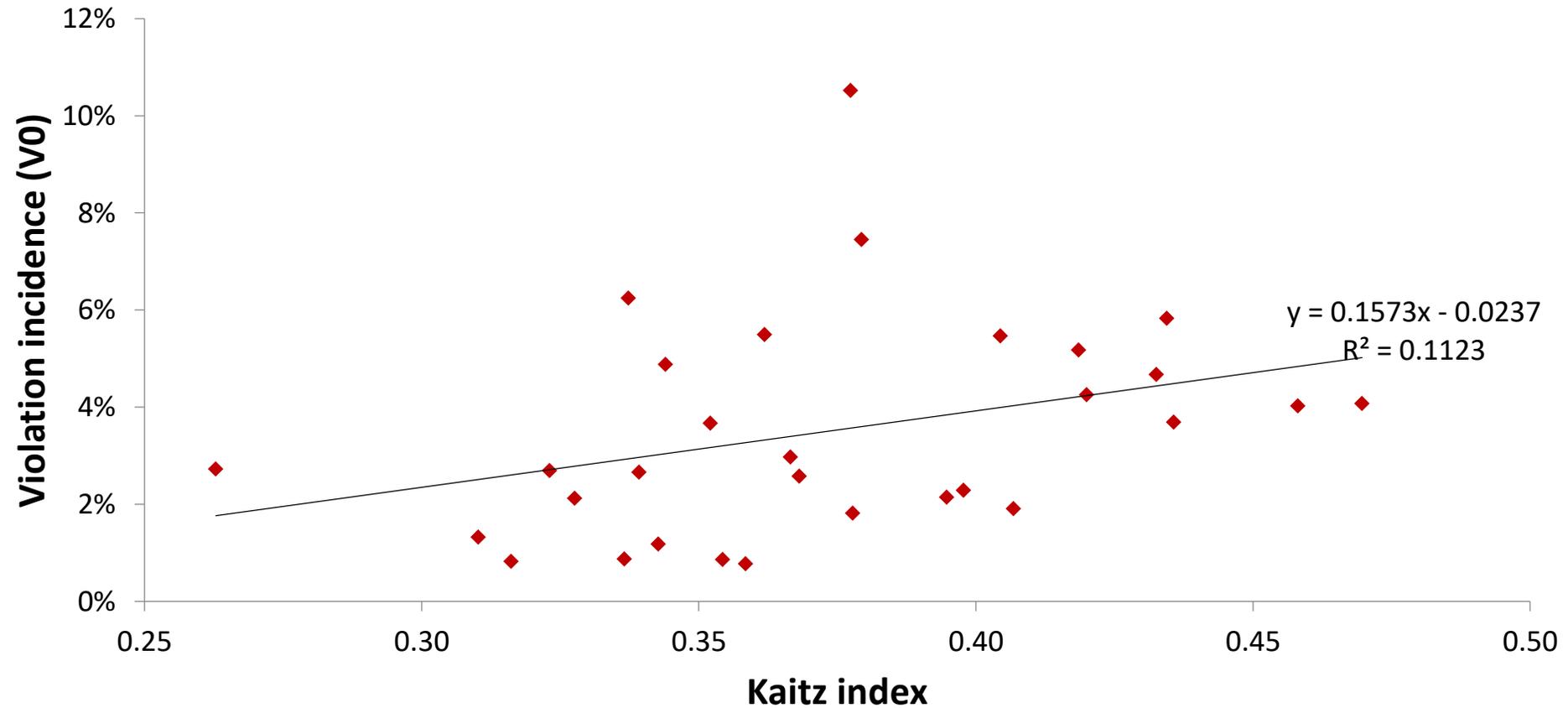
Odds of non-compliance higher for weaker workers



Marginal effects from probit. 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 ↑ non-compliance in all specifications

Higher trade union density and bargaining coverage associated with lower incidence of non-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 the most recent hike
- Weaker workers more likely to be affected
- Balance needed between MW level, violation risk & enforcement costs

Thanks for listening

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