



# **RAISING THE MINIMUM WAGE: THE EXPERIENCE OF ROMANIA**

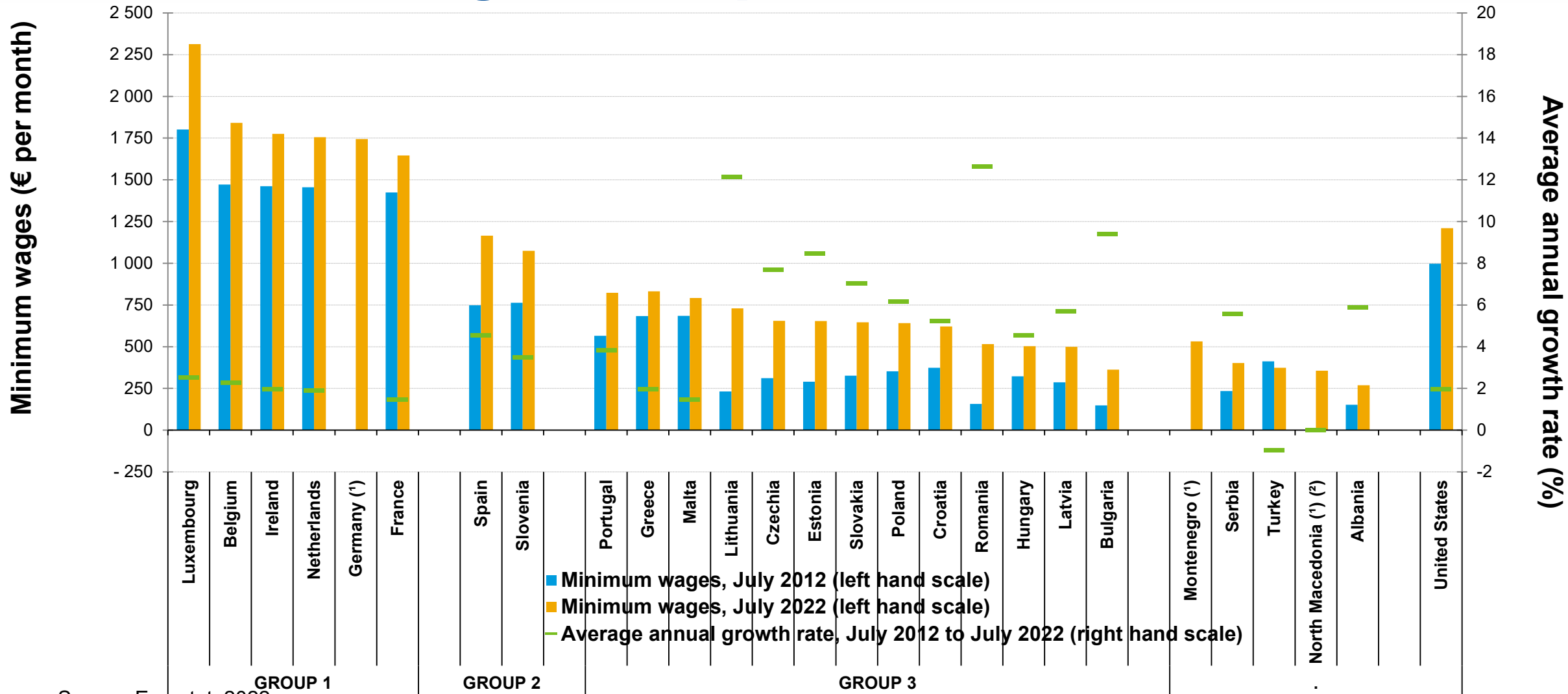
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# Fact: Romania had the largest increase of the minimum wage in Europe over the last decade



Source: Eurostat, 2022

# Very low starting point and many disincentives for employment

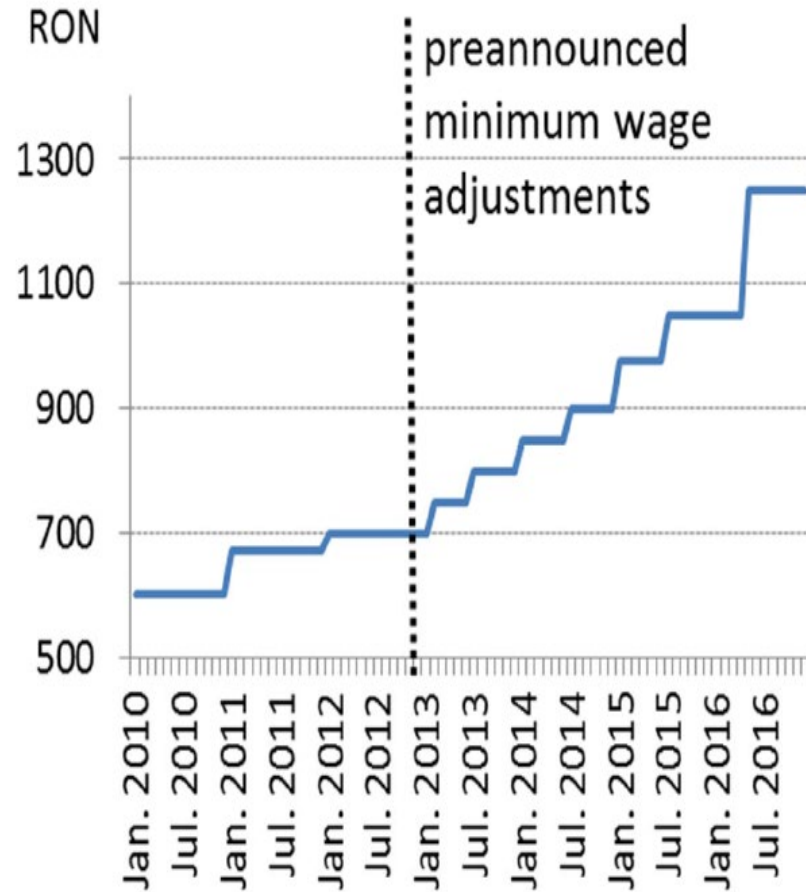
Context in 2012:

- 2<sup>nd</sup> lowest nominal minimum wage in Europe (157 Euro gross, 119 Euro net) and the lowest at PPS
- Large share of the underground economy
- High income inequality
- Flat tax regime (also quasi-flat marginal income tax)
- Very high wage differential to Western Europe led to massive emigration
- IMF/EC program focused on fiscal consolidation
- Change of government (large coalition)

# The Big Shift in 2013

- Decision taken (based on economic analysis) to double the MW in the next 4 years
- To achieve sustainability: gradual, pre-announced increases every six months
- The increase of the MW was agreed with the IFIs and EC, part of the Letter of Intent and MoU (2013-2014).
- To convince the IFIs: higher MW led to higher budget revenues, due to the skewed distribution of workers at MW (as 90% of them were in the private sector).
- To compensate the impact for the private sector, social contributions were cut by 5 pp. in 2014
- Between February 2013 and December 2016, the minimum wage was raised on 7 pre-announced occasions, by a cumulative 79% - the largest increase in the EU.
- Since 2017, more increases in the MW followed, less systematic and more fragmented across sectors, but also met with less opposition since the 2013-2016 experiment proved positive impact on the economy.

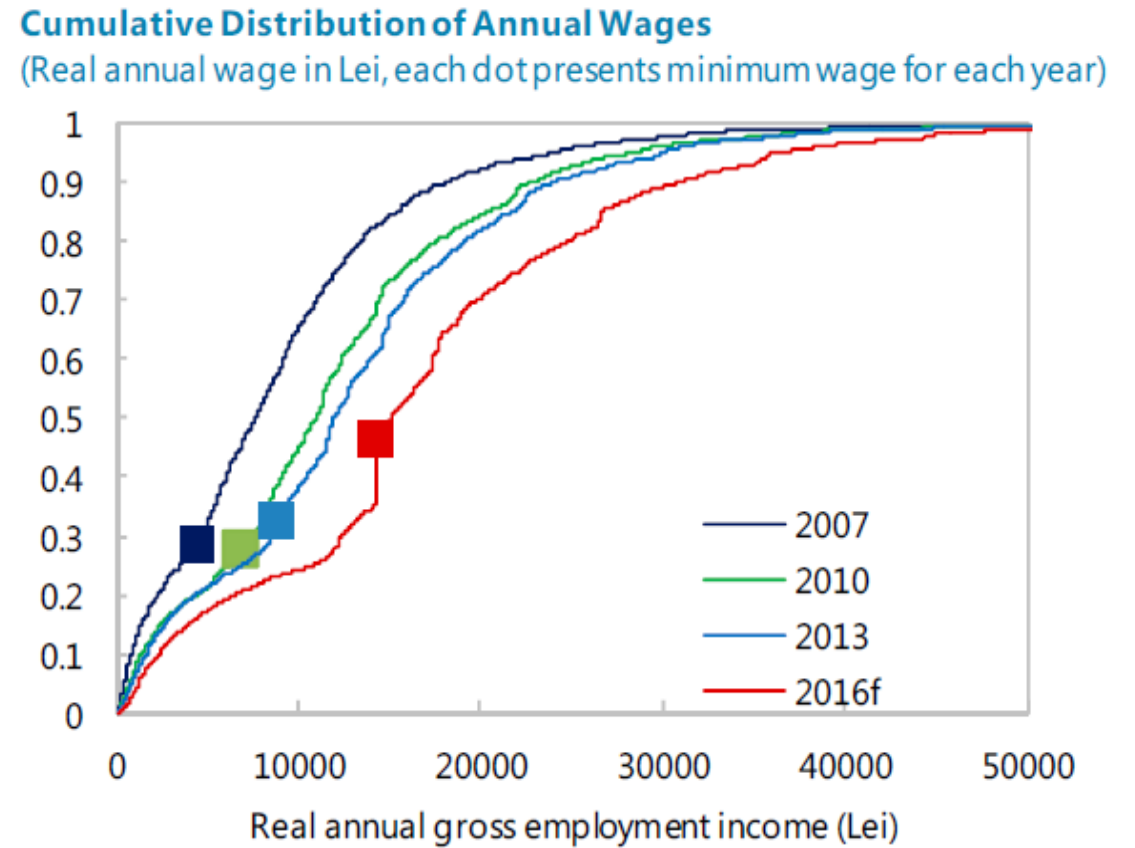
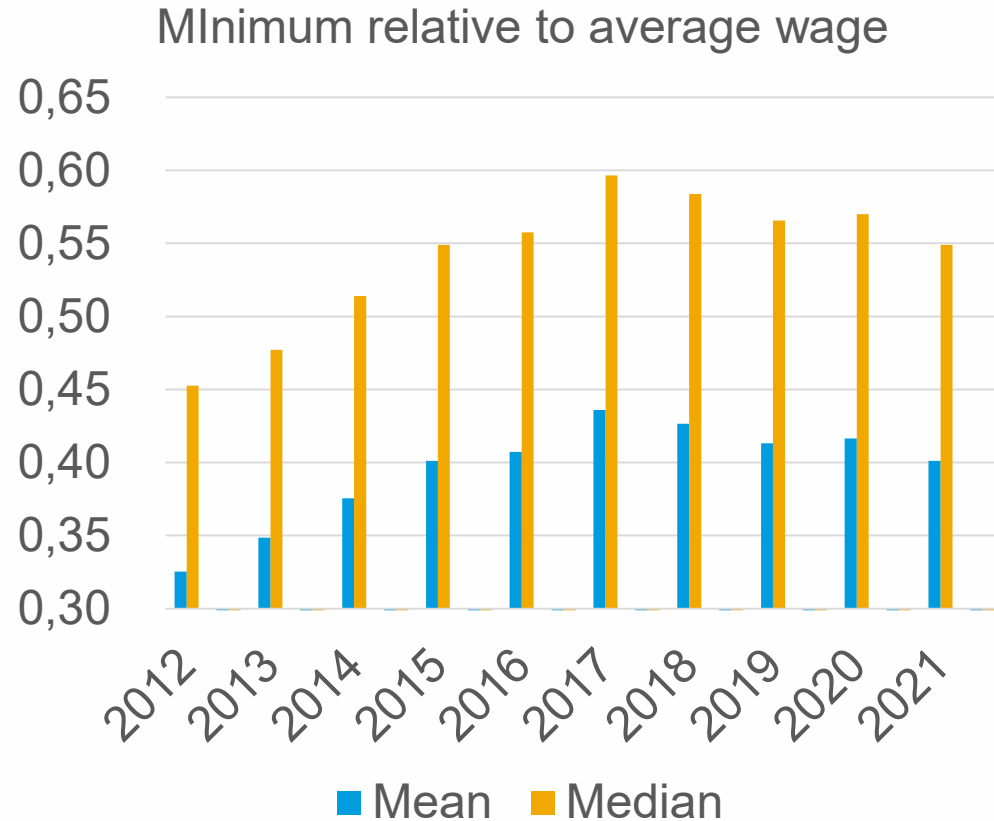
# Gross minimum wage – nominal, RON and Euro



Source: Heemskerk, Voinea, Cojocaru, 2018

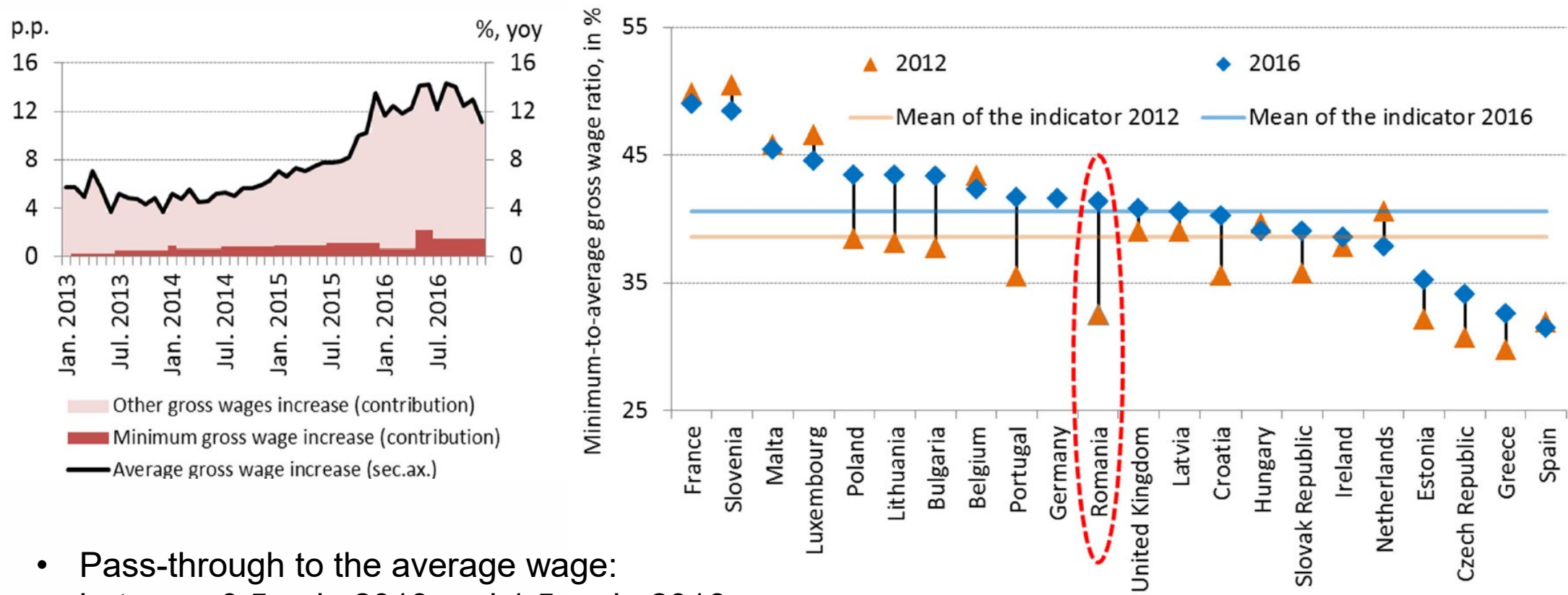


# Impact on inequality: more fair income distribution



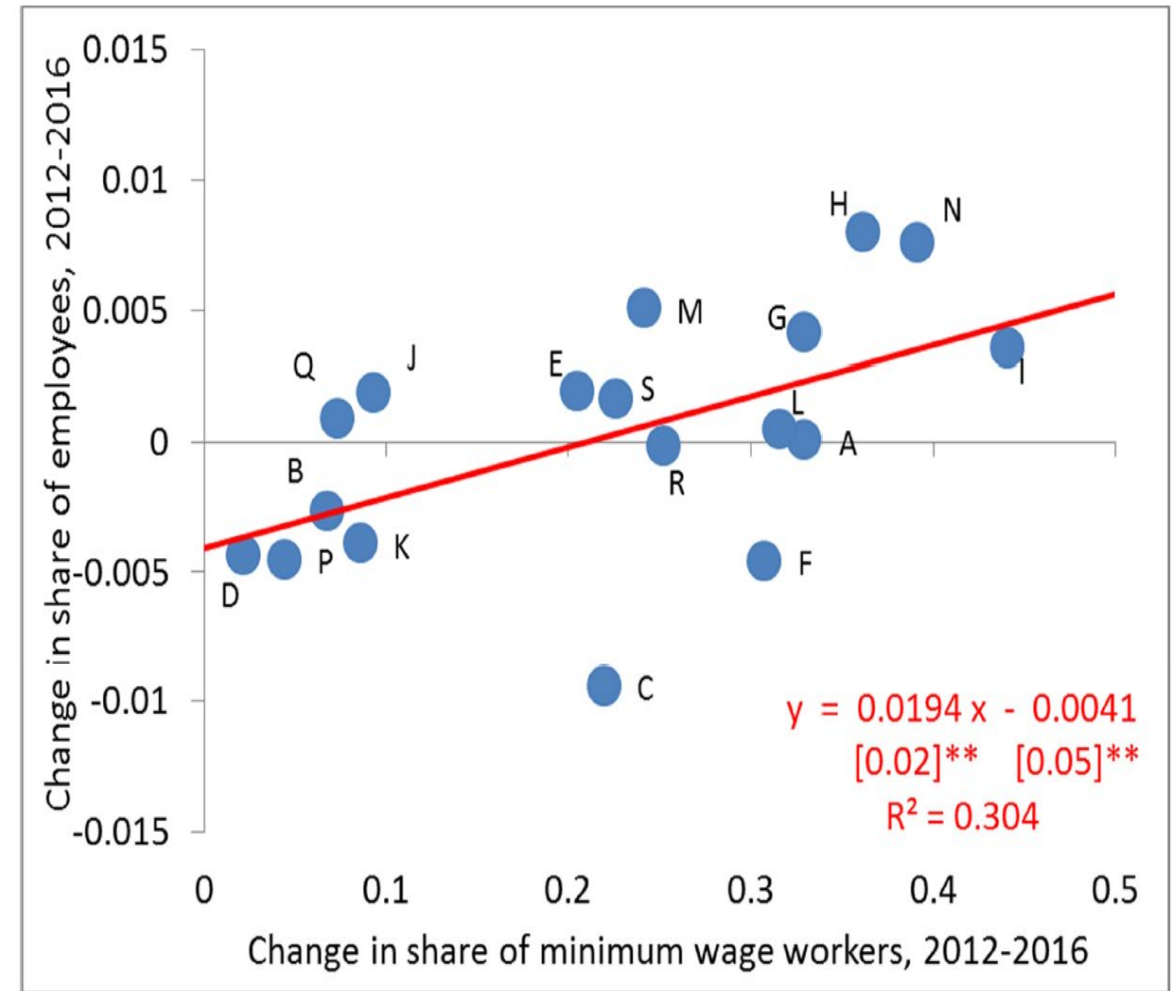
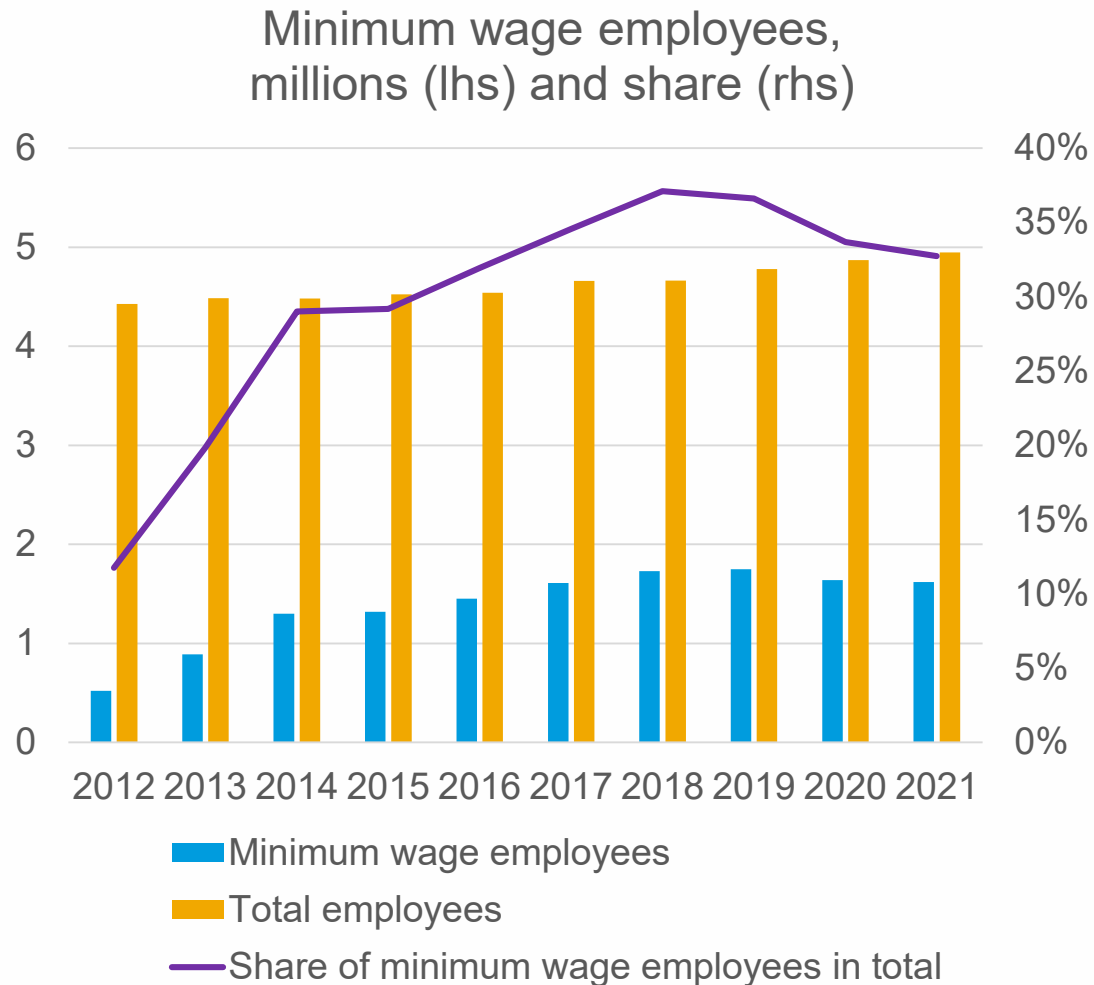
Source: IMF, Romania. Selected Issues, 2016

# Pass-through to the average wage



- Pass-through to the average wage: between 0.5pp in 2013 and 1.5 pp in 2016

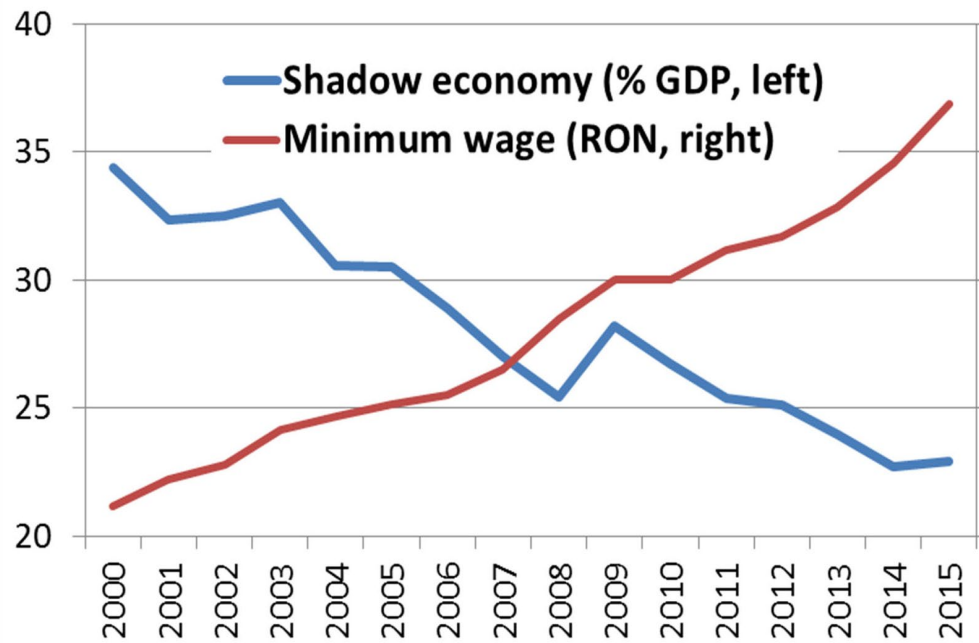
# Impact on employment: more minimum wage and total employees



Note: letters denote NACE sectors of activity  
 Source: Heemskerk, Voinea, Cojocaru 2018

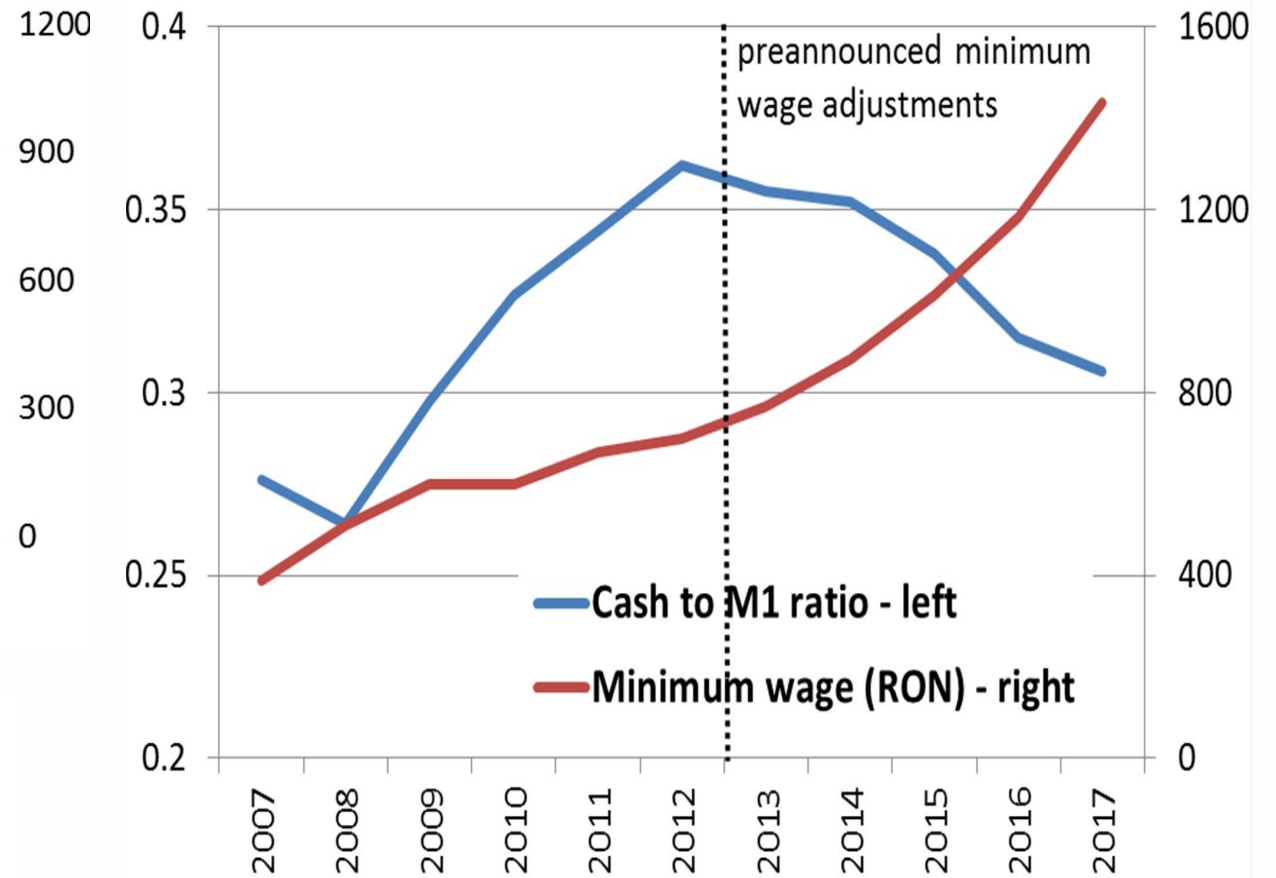


# Impact on the shadow economy: “Efeito Farol” confirmed



Correlation coefficient	t-statistic	p-value
-0.9451***	-10.8250	0.0000

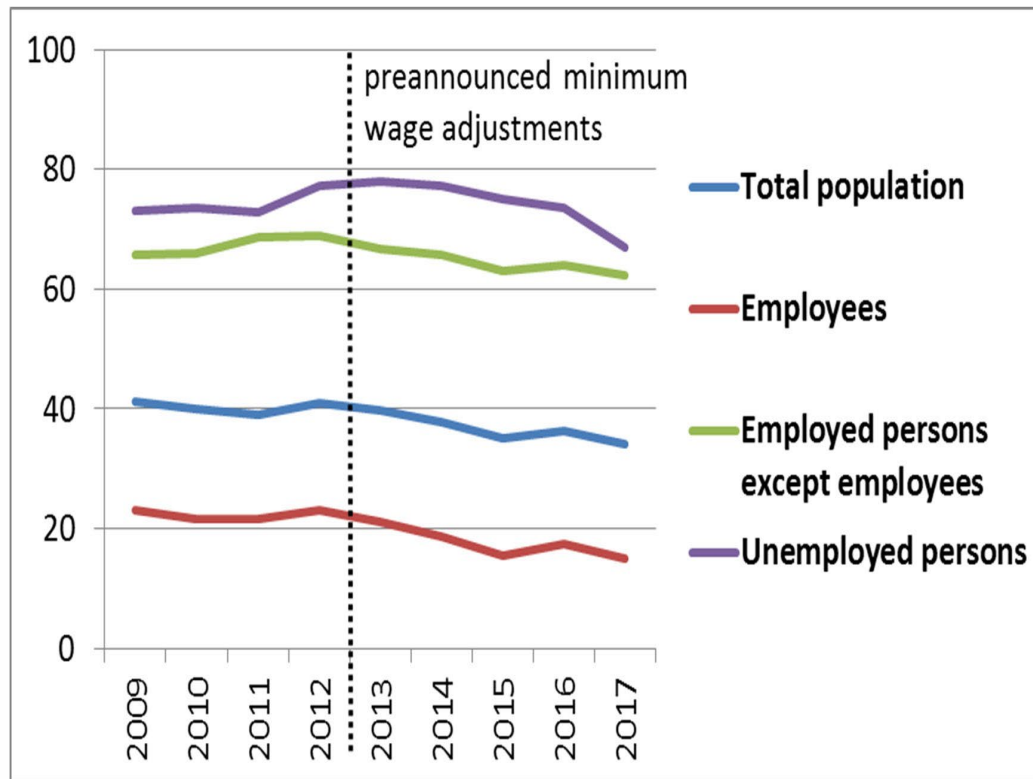
Source: Heemskerk, Voinea, Cojocaru 2018



Source: Heemskerk, Voinea, Cojocaru 2018

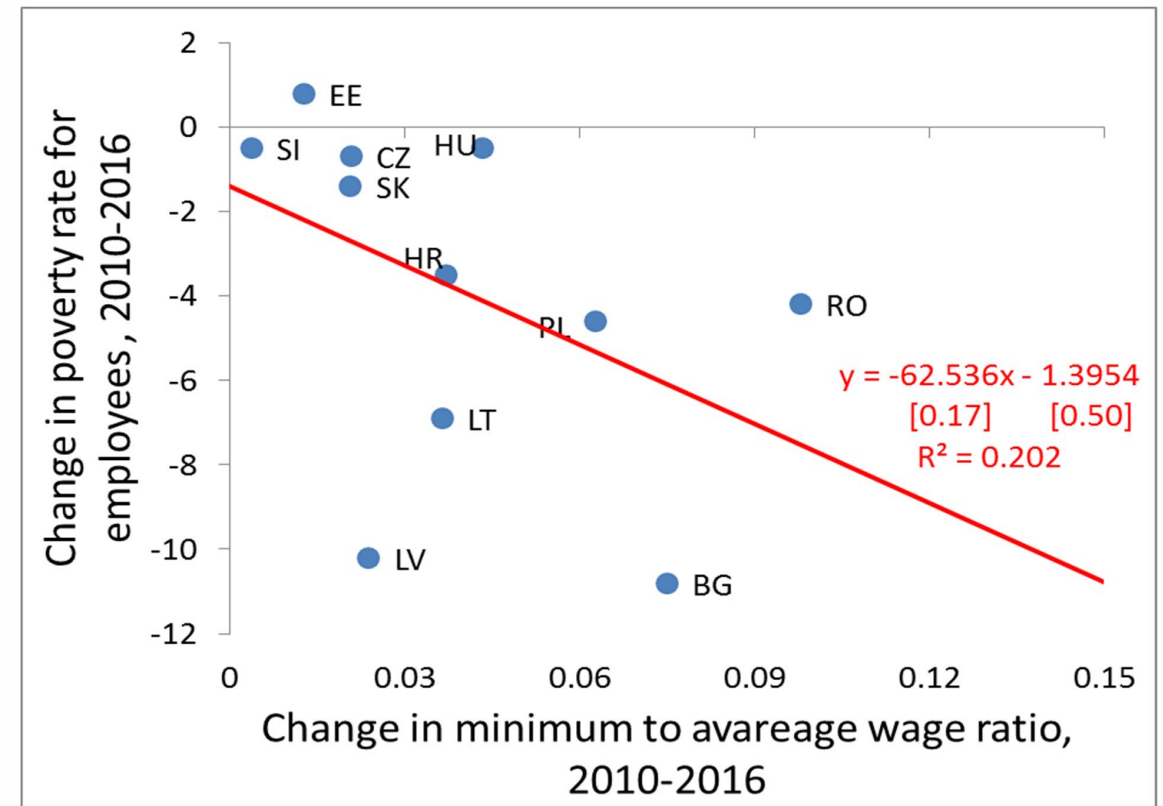
# Impact on poverty: somewhat lower poverty rate

Poverty rate (share of people at risk of poverty or social exclusion by activity status), Romania



Source: Heemskerk, Voinea, Cojocaru 2018

Correlation between change in poverty rate and change in minimum to average wage ratio, CESEE

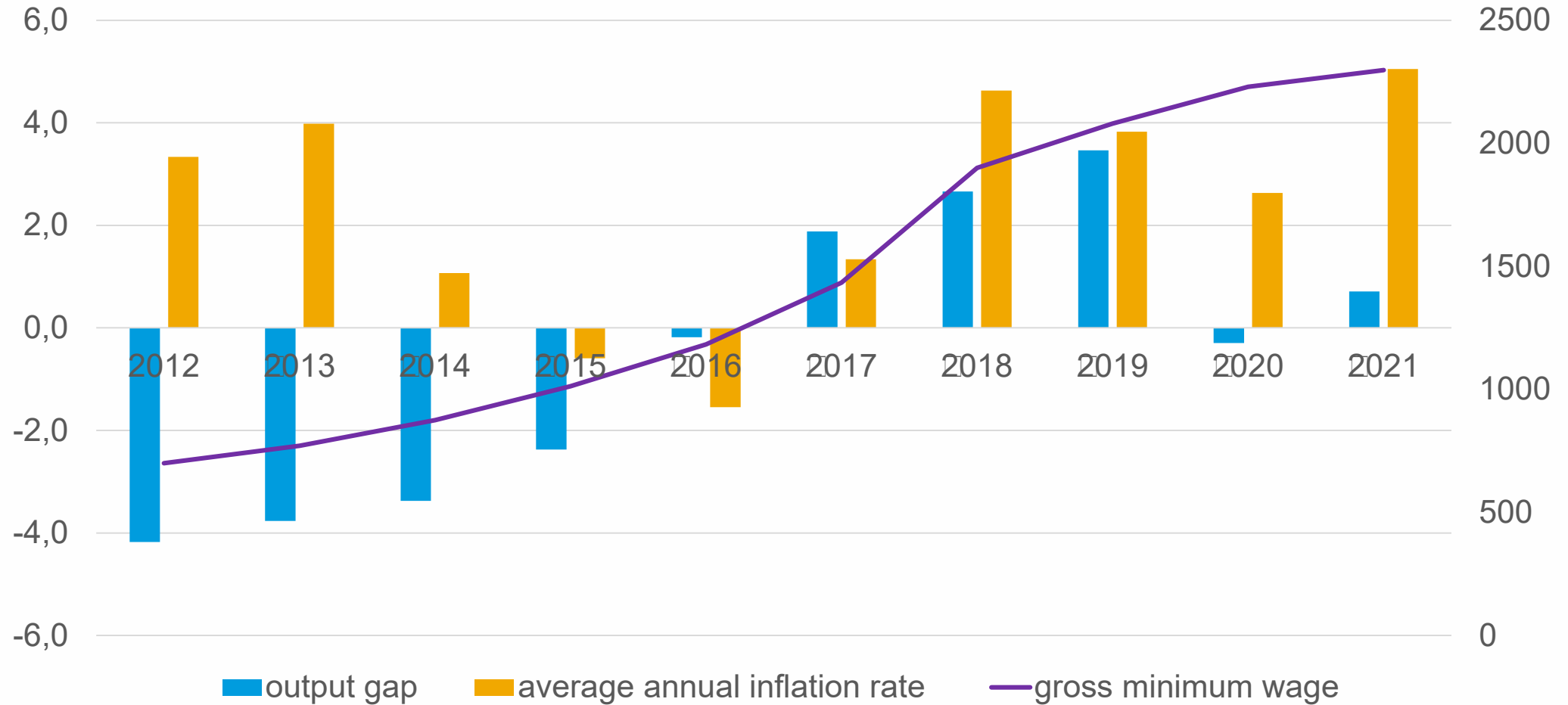


Source: Heemskerk, Voinea, Cojocaru 2018

## Impact on competitiveness: mixed

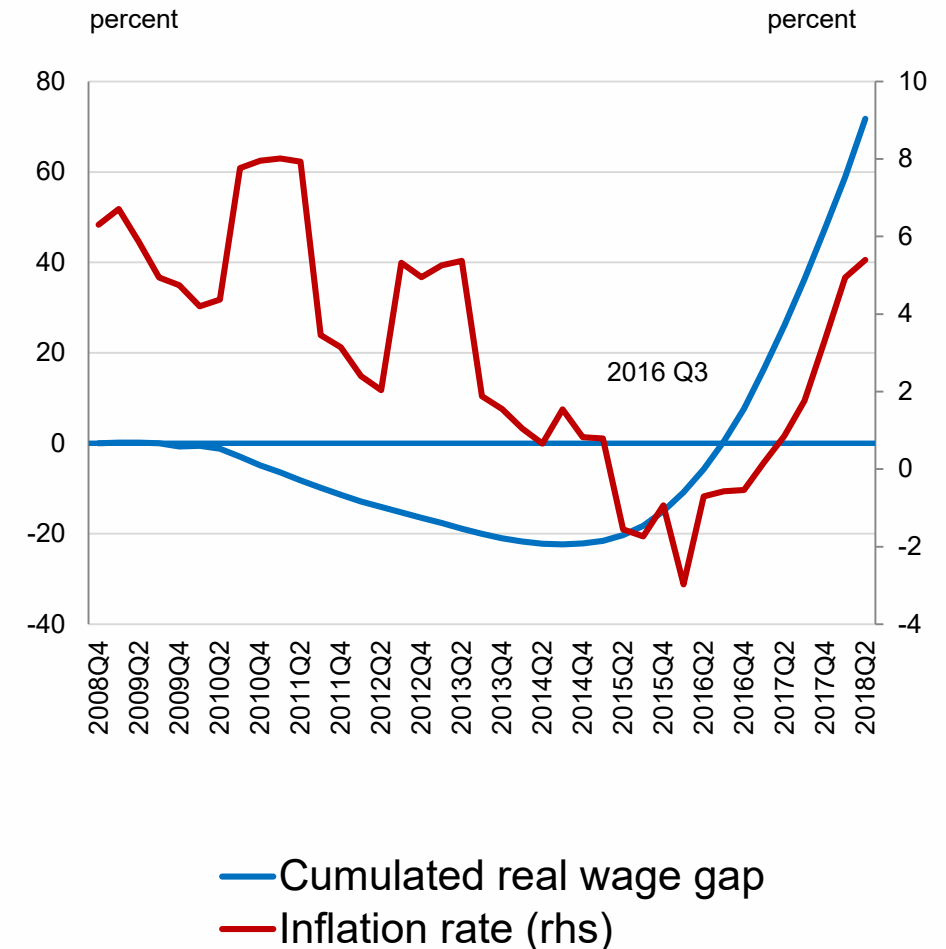
- Sectors with above average minimum wage workers saw a decrease of their exports' share in total turnover, compensated by the domestic market.
- Sectors with below average minimum wage workers increased their share of exports in total turnover. They also have a higher value added.
- Net profits were largely unaffected by the increase of the MW.
- The current account deficit adjusted sharply from 4% of GDP in 2012 to 1% in 2013-2015, on the backdrop of rising domestic demand, part of which was supported by the MW increase (however, most important contribution to the CA deficit adjustment was the fiscal consolidation – the pass-through being recently estimated by the IMF at 0.66)
- The MW increase shifted the income distribution. Lower-income households gained more purchasing power; they bought increasingly from domestic supply (eg. Dacia not Ferrari), while the economy was growing.

# Timing matters: minimum wage impact depends on the economic cycle



# The cumulative wage gap also matters

- The cumulative wage gap is an alternative measure of economic slack (Voinea, 2021). It is calculated as the cumulative difference between current real wages and the last peak real wage prior to an episode of income loss.
- It generally takes longer to close a cumulative wage gap than an output gap.
- Increasing the minimum wage at a time of income loss can help closing the cumulative wage gap faster.
- Romania started the MW increase as it was recovering from the GFC and the CWG was at a low.
- Increasing the minimum wage after the cumulative wage gap closes may fuel inflationary pressures



## Pass-through to inflation: NKPC

- An augmented NKPC to include the growth rate of the average wage, survey-based inflation expectations, slack (output gap / unemployment gap), imported inflation (HICP / growth rate of an effective external price index / growth rate of euro area export deflator / growth rate of Romanian unit value of imports)

$$\pi_t = c + \beta_{1(t)}\pi_{t-1} + \beta_{2(t)} * \pi_t^e + \beta_{3(t)} * x_t + \beta_{4(t)} * \pi_t^{imp} + \beta_{5(t)} * \pi_t^{wages} + \varepsilon_t$$

- Quarterly frequency, 2000-2016. Least-square method for fixed coefficients. Bayesian method for time-varying coefficients.
- Results: impact of 1 pp increase in average wage on core inflation is 0.05-0.15; impact on CPI inflation is 0.03-0.1.
- For the MW (using its pass-through to AW), the cumulated impact over 2013-2016 was in the range 0.1 – 0.4 pp (very low).

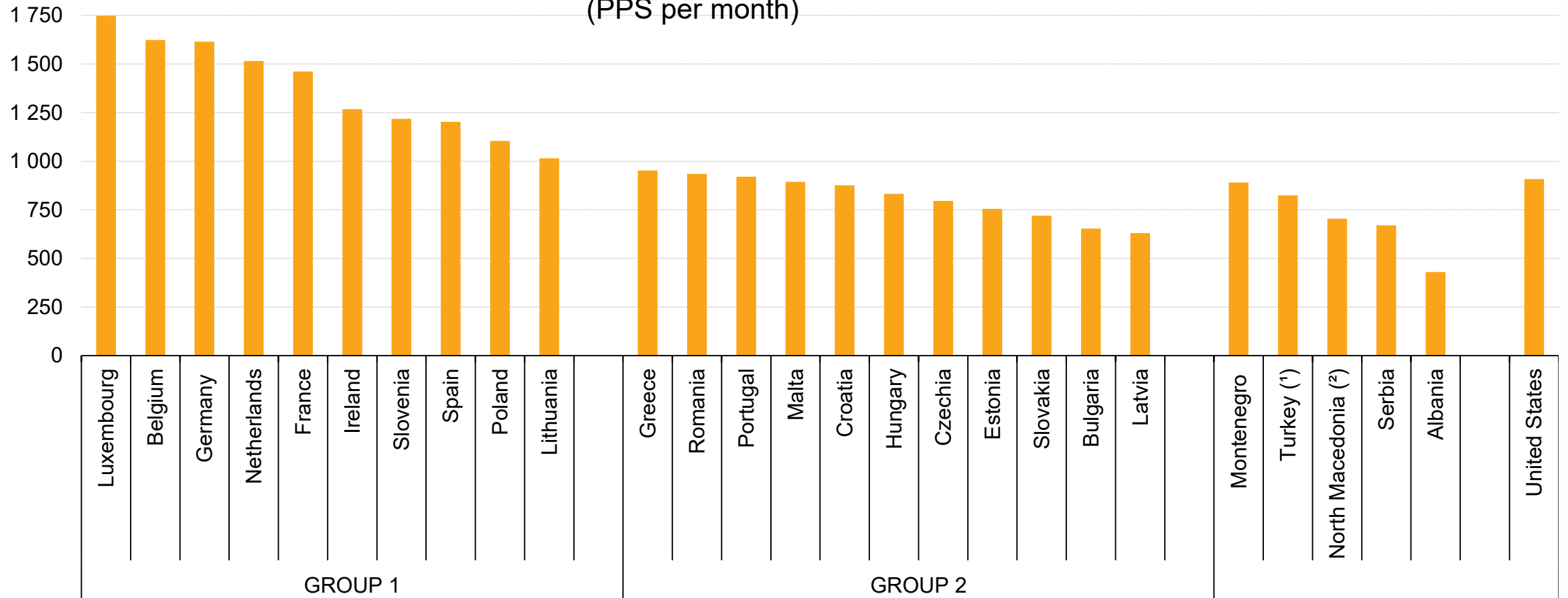
# Pass-through to inflation: semi-structural model

Small-scale, 3 equations, Bayesian method.

- Augmented NKPC (core inflation, expectations, output gap, growth rate of average wage);
- IS Curve (aggregate demand): broad monetary conditions (real interest rates for bank deposits, RON real effective exchange rate, real interest rates on RON and foreign currency loans), foreign demand cycle (weighted measure of external output gap based on Romania's export markets), fiscal impulse (change in structural balance). Except for fiscal impulse, all variables are defined as deviations from long term equilibria
- Okun's law (unemployment and production, both as deviations from long-term equilibria).
- Result: impact on core inflation of a 1pp increase in average wage: 0.05-0.12 (0.03-0.07 on CPI). Minimum wage impact for 2013-2016 on core inflation: 0.1–0.4 pp. (same result, very low).

# After 10 years: catching-up fast

Minimum wages, July 2022  
(PPS per month)



Source: Eurostat



## Final remarks

- Romania raised the minimum wage at the right time, from a very low level, in a gradual and predictable way (at the beginning).
- The minimum wage almost doubled in first 4 years (2012-2016), during a period of negative output gap, and negative cumulative wage gap. The impact on inflation was therefore very small.
- The impact on employment was large and positive. It helped reduce the underground economy and inequality.
- Overall, it has not affected productivity – that discussion is too simplistic when the starting point is very low, and emigration is an option.

## Final remarks (cont.)

- Romania moved up to the 11<sup>th</sup> place in the EU in terms of the minimum wage at PPS.
- MW in Romania is now at 55% of the median wage. However, one third of the employees are paid the minimum wage, meaning that a qualitative shift is needed towards better paid jobs.
- Minimum wage increases can be used as a mechanism for redistribution, in the absence of automatic fiscal stabilizers.
- At the current juncture of high inflation, the decision on further raising the minimum wage (in Romania and elsewhere) should be based on multiple factors, including: the economic cycle (output gap/ cumulative wage gap), inflationary expectations and the risk of a wage-price spiral, fiscal space (depending on public/private distribution), need to target vulnerable households, labor market tightening, etc.