

Minimum Wages in the EU: Evidence and Policy

Dr Paul Redmond

Senior Research Officer
Economic and Social Research Institute

Why do we have minimum wages?

- Minimum wages have become an increasingly common feature of modern labour markets.
- According to the OECD, 26 of its 34 members currently implement statutory minimum wages (OECD, 2015).
- The policy ensures a minimum level of pay for workers who may have low levels of bargaining power.
- Additional policy objectives may relate to the reduction of wage inequality and poverty.

Limitations / Potential Adverse Effects

- It has been argued that MW erode the competitiveness of firms by increasing labour costs.
- MW may have adverse effects on low-paid workers through job-loss (extensive margin) or declines in hours worked (intensive margin).
- MW policies have also been criticised as a relatively blunt tool to tackle poverty and income inequality.

Current Minimum Wage Policy in the EU

Currently, 22 of 27 EU Member States have a national minimum wage

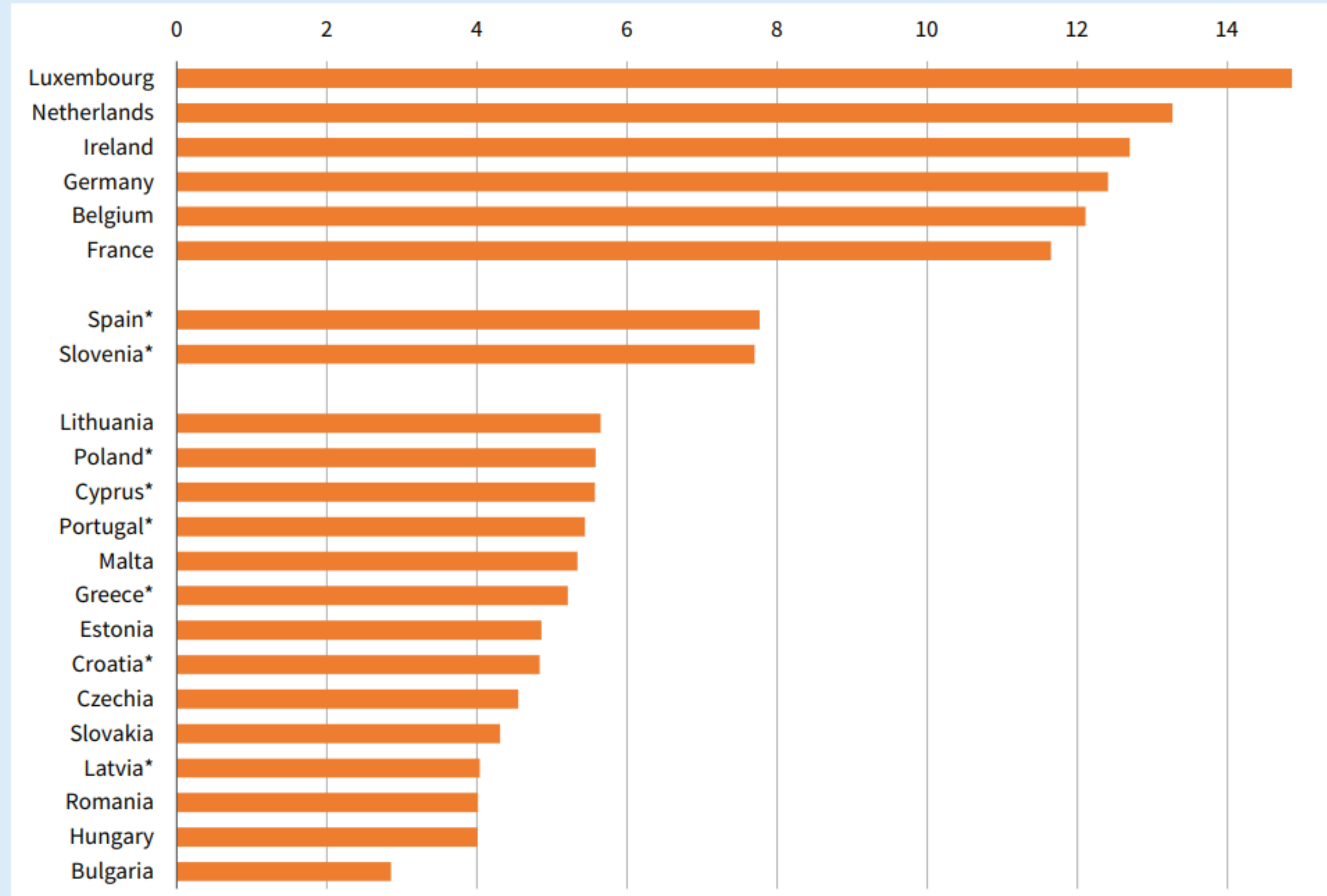
Other 5 member states have sectoral collective wage agreements

Why have a statutory minimum wage?

- Ensure that workers earn “adequate wages” to guarantee adequate working and living conditions (EU Directive on Adequate Minimum Wages)
- Set a minimum wage that is “fair and sustainable” (Irish Low Pay Commission)
- Redress a power imbalance between employers and employees to ensure employees are paid appropriately

Hourly Minimum Wages in the EU

Figure 1: Notable disparities between countries in gross hourly national minimum wages, 22 EU Member States, nominal terms, January 2024 (€)



Source: Eurofound
(2024)

Minimum Wages in
2024: Annual
Review

Hourly Minimum Wages in the EU

Graph on previous page shows minimum wages in nominal terms

What happens when you account for differing costs of living?

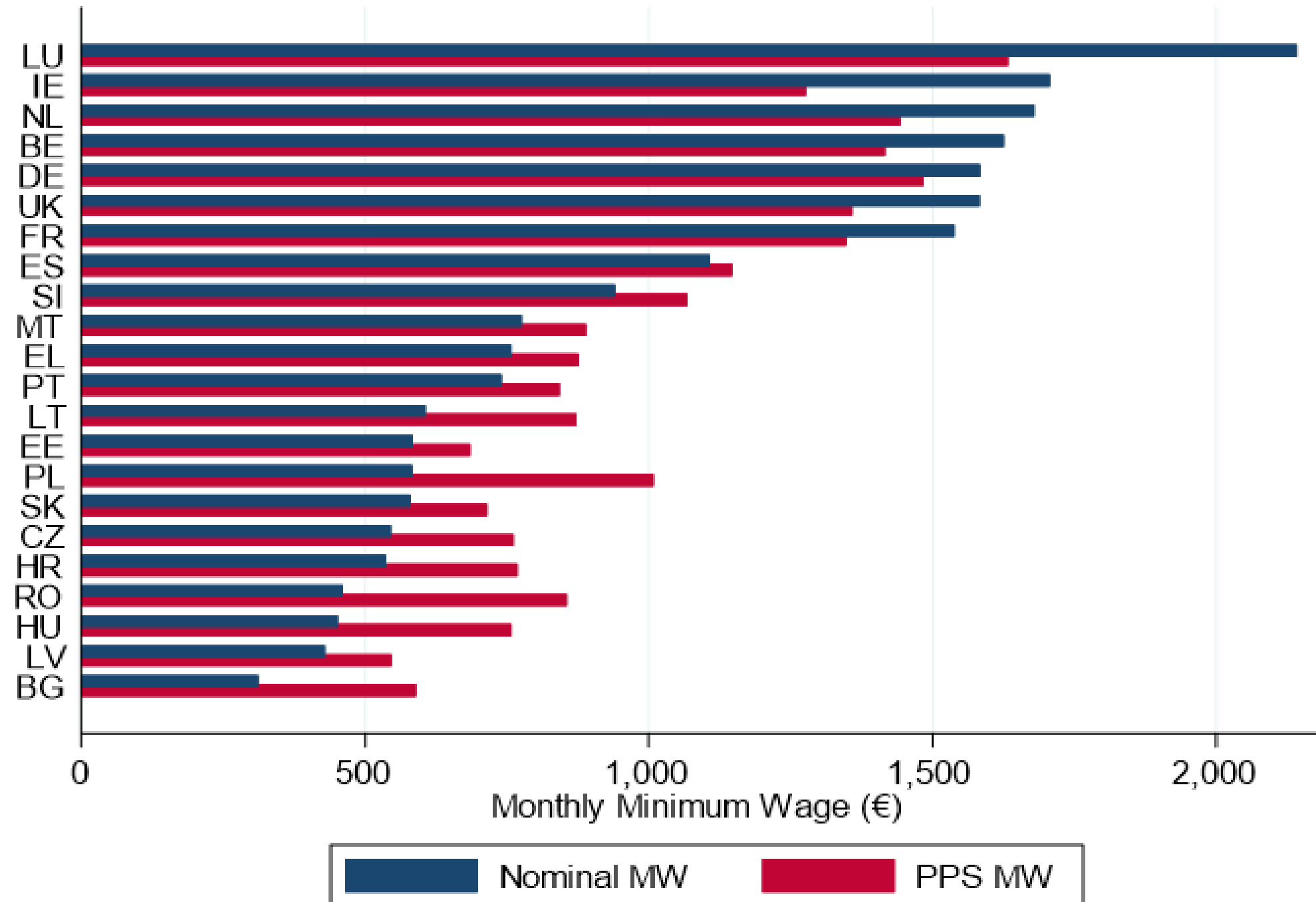
MW in Ireland is 6th highest, after Luxembourg, Germany, Netherlands, Belgium and France (*Source: Eurostat ([earn_mw_cur](#))*)

Greece ranks 12th

- According to Eurofound (2024), Greece tops the list of MW workers struggling to make ends meet (80%)

Hourly Minimum Wages in the EU

FIGURE 1 MINIMUM WAGE RATES IN THE EU (2020)



Source: Eurostat (online data code: earn_mw_cur)

Note: In the analysis that follows, we focus on Ireland (IE), Luxembourg (LU), Netherlands (NL), Belgium (BE), Germany (DE), United Kingdom (UK), France (FR), Spain (ES), Greece (EL), Portugal (PT), Estonia (EE), Poland (PL), Hungary (HU) and Latvia (LV).

How are Minimum Wages Set?

Some countries have an expert committee that recommends the MW rate

- Ireland, Greece, Croatia, Cyprus, France, Germany and Malta

In Ireland, we have the Low Pay Commission

- Formed in 2015
- Advise the Irish government each year on what the minimum wage should be
- The LPC state that, *“When appropriate the minimum wage can be adjusted to assist as many low-paid workers as possible without harming overall employment or competitiveness”*
- Their decision is aided by an ongoing ESRI / LPC research programme, that has been running since 2016

How are Minimum Wages Set?

Other countries use tripartite consultations to set a MW rate

- Bulgaria, Czechia, Latvia, Lithuania, Poland, Romania, Slovenia, Spain

In some cases, specific formulas are used to set the MW

- Belgium, France, the Netherlands, Poland Slovenia
- Most include some measure of inflation or cost-of-living in their calculations
- Eurofound (2024) contains an excellent overview of MW setting procedures across countries

Important Issues for MW Research

There is a vast literature looking at the impacts of minimum wage policy

Some of the key areas include

- Does increasing the minimum wage negatively impact employment?
- Does increasing the minimum wage negatively impact hours worked?
- What does a typical minimum wage workers look like (e.g., gender, age, sector, employment type, etc.)?
- Can a minimum wage affect income inequality and/or wage inequality?

Employment

Does increasing (or introducing) a minimum wage lead to job losses?

Before we even look at the data, economic theory is ambiguous

In a labour market with lots of similar firms and lots of similar workers (perfect competition), theory predicts job losses

In a labour market with only one large firm that wields lots of power (monopsony), an increase in the minimum wage may even lead to an increase in employment

Lots of studies use data from various different countries to empirically test what happens to employment as a result of a minimum wage

Employment

The empirical evidence is mixed, and often conflicting

Difficult to state definitively whether a minimum wage increase adversely affects employment

Several attempts have been made to summarize the evidence

- Dube (2019): muted effects on employment, but cautions that we do not know enough about large MW increases
- Wolfson and Belman (2019): small negative impact on employment
- Belman and Wolfson (2014) & Doucouliagos and Stanley (2009): no negative employment effects

Hours Worked

In oral evidence to the UK Low Pay Commission, retailers indicated that managers often look to reduce hours to offset higher costs following a minimum wage increase (Metcalf, 2008)

Despite this, there is less evidence on hours worked compared to the evidence on the number of jobs (Wong, 2019)

Negative impacts on hours have been found for the UK (Stewart and Swaffield, 2008), Germany (Caliendo et al., 2017), the US (Neumark et al., 2004) and Ireland (Redmond and McGuinness, 2024)

The impact of a minimum wage increase on hours worked: heterogeneous effects by gender and sector

Paul Redmond^{1,2} | Seamus McGuinness^{1,2,3}

¹Economic and Social Research Institute

²Trinity College Dublin

³IZA Bonn

Correspondence

Paul Redmond, ESRI, Whitaker Square,
Sir John Rogerson's Quay, Dublin 2, Ireland
Email: paul.redmond@esri.ie

Abstract

A minimum wage increase could lead to adverse employment effects for certain subgroups of minimum wage workers, while leaving others unaffected. This heterogeneity could be overlooked in studies that examine the overall population of minimum wage workers. In this paper, we test for heterogeneous effects of a minimum wage increase on the hours worked of minimum wage employees in Ireland. For all minimum wage workers, we find that a 10% increase in the minimum wage leads to a one-hour reduction in weekly hours worked, equating to an hours elasticity of approximately -0.3 . However, for industry workers and those in the accommodation & food sector, the impact is larger, with elasticity -0.8 . We also find a negative impact on the hours worked among men on minimum wage, with no significant effect for women. This is due to the disproportionate number of men working in sectors that show the greatest impact on hours. In line with suggestions from the recent literature, we attempt to identify directly those in receipt of minimum wage using hourly wage data, while also studying the dynamic impact on hours worked over multiple time periods using a fully flexible difference-in-differences estimator.

Minimum Wage Policy in Ireland

Minimum wage introduced in 2000 at €5.58 per hour

Increased regularly up until 2007 - €8.65 per hour

Global financial crisis hit in 2008 – minimum wages stopped increasing

- In 2015, the MW was still €8.65 per hour

In 2015, Low Pay Commission was established

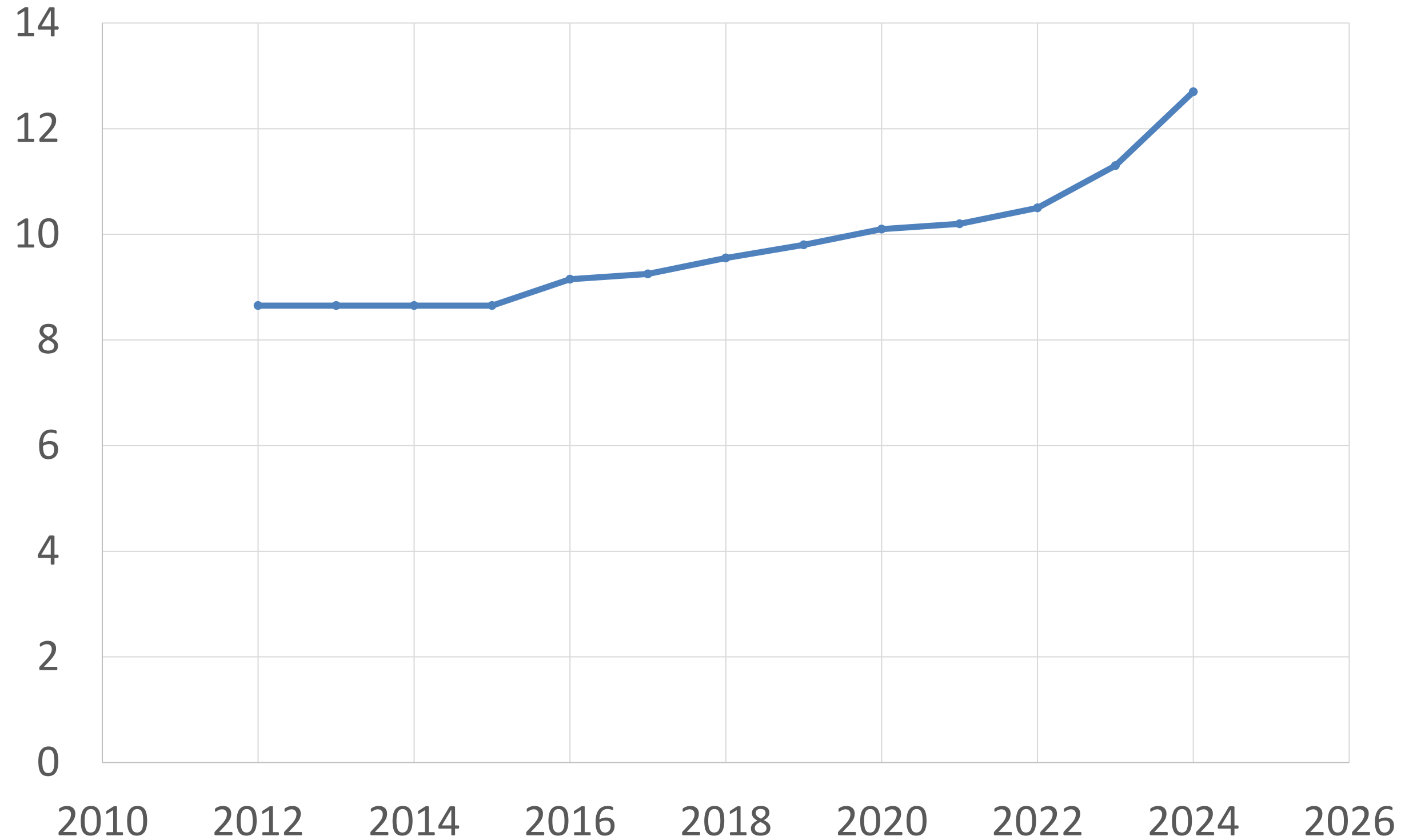
In 2016, MW increased from €8.65 to €9.15 per hour

Continued to increase on a yearly basis

- Target is 60% of median income

Minimum Wage Policy in Ireland

Minimum Wage



What we do in this paper

Examine whether three consecutive minimum wage increases (from 2016 to 2018) impacted the hours worked of minimum wage workers

We investigate whether the effect varied by sector and gender

We use a methodology called “difference-in-differences”

This involves comparing the change in hours worked of minimum wage workers to a change in the hours worked of higher paid workers that are not affected by the minimum wage policy change

The higher paid workers are the “control group”. They represent the “counterfactual” outcomes

Results (I)

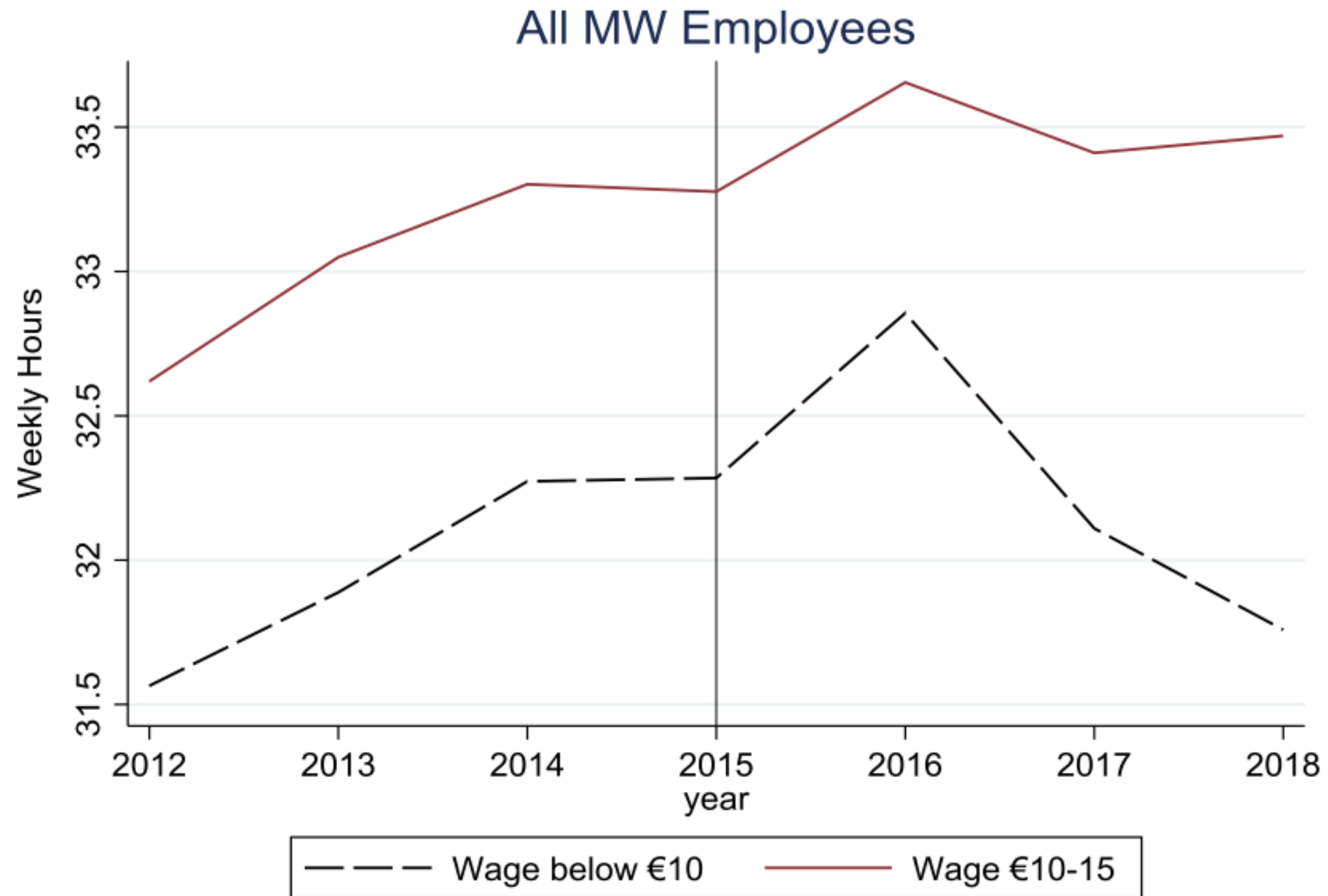


FIGURE 1 Average weekly hours worked (2012–18). *Notes:* Authors' analysis based on LFS EAADS data.

Results (II)

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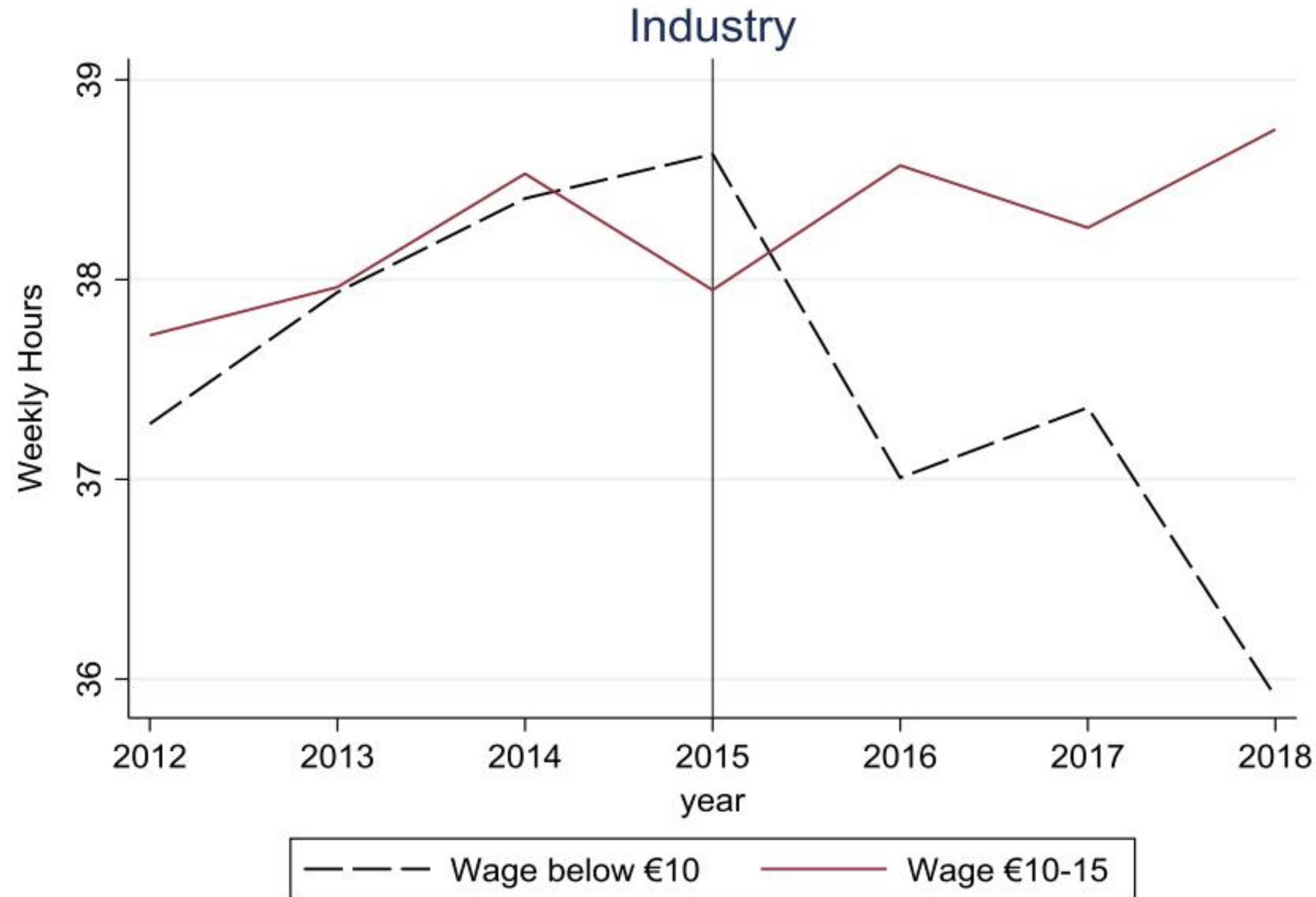


FIGURE 2 Average weekly hours worked for industry sector employees (2012–18). *Notes:* Authors' analysis based on LFS EAADS data.

Results (III)

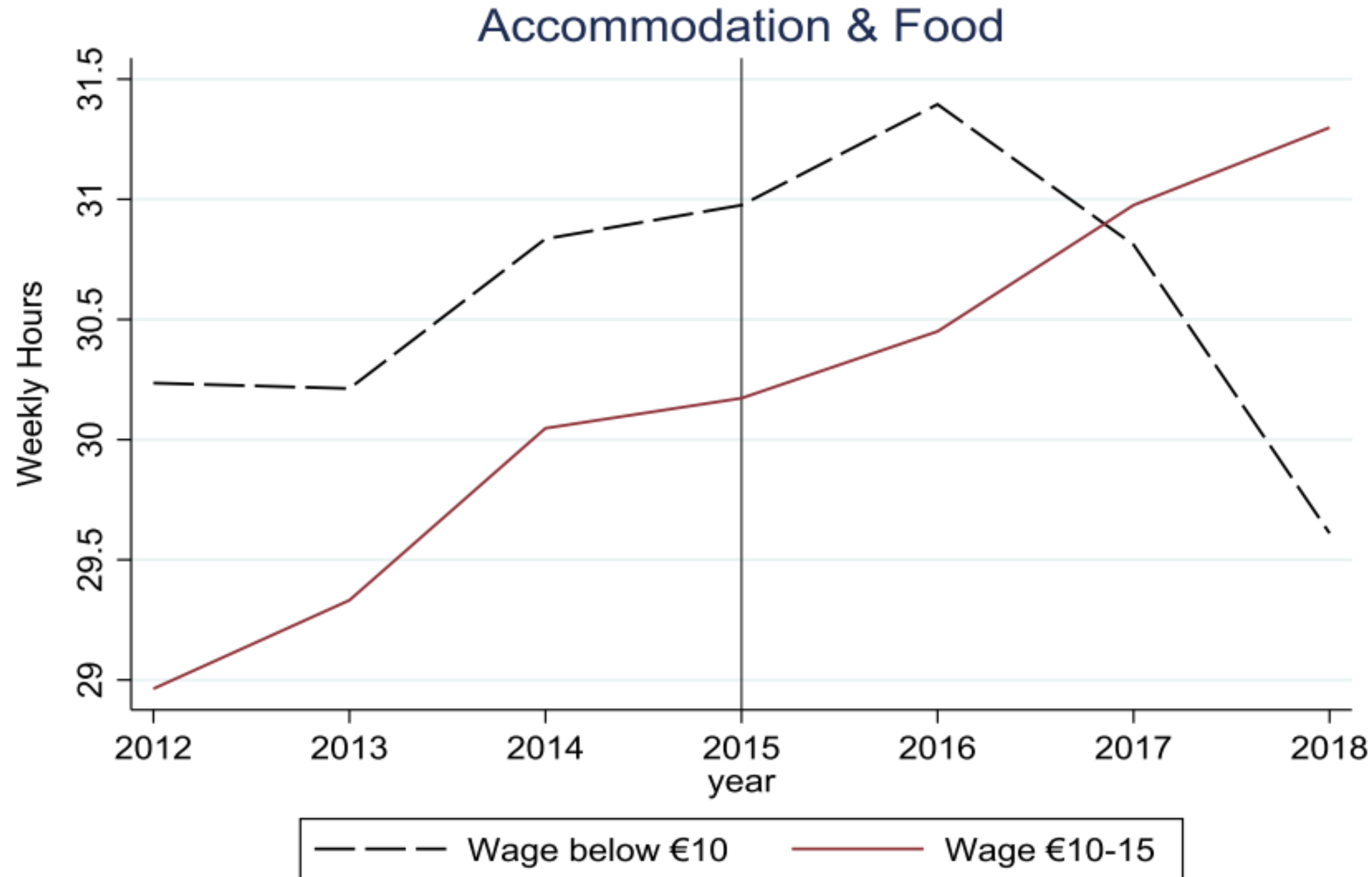


FIGURE 3 Average weekly hours worked for accommodation & food sector employees (2012–18).
Notes: Authors' analysis based on LFS EAADS data.

Results (IV)

FIGURE 4 Average weekly hours worked for men on the minimum wage (2012–18). *Notes:* Authors' analysis based on LFS EAADS data.



Why the sectoral differences?

There are a number of potential explanations

1. Minimum wage jobs or tasks replaced by new technology
 - Lordan and Neumark (2018) find that minimum wage workers in the manufacturing sector in the US are susceptible to job loss following a minimum wage rise. Suggest that in response to a MW rise, some workers are replaced by robots or new technologies

Why the sectoral differences?

We investigate the potential for technological replacement using data from the European Skills and Jobs Survey

- Estimate the percentage of workers in each sector that is at risk of losing their job due to new technologies

TABLE 5 Percentage of employees susceptible to technological replacement.

Sector	<i>N</i>	Susceptible to technological replacement
Manufacturing	77	16%
Accommodation & food	49	14%
Administrative & support	47	13%
Wholesale & retail	69	12%
Health & social activities	102	10%

Source: Cedefop 2021 European Skills and Jobs Survey, and authors' own calculations.

Why the sectoral differences?

There are a number of potential explanations

2. Differences in monopsony power across sectors

Some sectors may be characterised by perfect competition – lots of similar employers and similar employees

Some sectors may be characterised by monopsony – few large employers with lots of market power

Evidence for Ireland suggests that the accommodation and food sector resembles perfect competition (Devereux and Studnicka, 2023)

Why the sectoral differences?

There are a number of potential explanations

3. Differences in ability to increase prices

In response to a minimum wage rise, some firms may be able to increase prices and pass on the extra cost to consumers

Existing evidence shows that export-oriented firms cannot pass on price increases

In Ireland, many manufacturing firms are export-oriented

Wage and Income Inequality

The impact of a minimum wage change on the distribution of wages and household income

By Paul Redmond^a, Karina Doorley^{a,b}, and Seamus McGuinness^{a,b}

^aEconomic and Social Research Institute, Sir John Rogerson's Quay, and Trinity College Dublin, Dublin, Ireland; e-mail, paul.redmond@esri.ie

^bIZA, Bonn, Germany

Abstract

We use distribution regression analysis to study the impact of a 6% increase in the Irish minimum wage on the distribution of hourly wages and household income. Wage inequality, measured by the ratio of wages in the 90th and 10th percentiles and the 75th and 25th percentiles, decreased by approximately 8 and 4%, respectively. The results point towards wage spillover effects up to the 30th percentile of the wage distribution. We show that minimum wage workers are spread throughout the household income distribution and are often located in high-income households. Therefore, while we observe strong effects on the wage distribution, the impact of a minimum wage increase on the household income distribution is quite limited.

JEL classifications: J31, J38, K31

Wage Inequality

A six percent increase in the Irish minimum wage led to a reduction in wage inequality

- 8 percent reduction in the P90 / P10 ratio
- 4 percent decline in the P75 / P25 ratio

Wage spillover effects to workers above the minimum wage

- Workers likely care about their position in the wage distribution

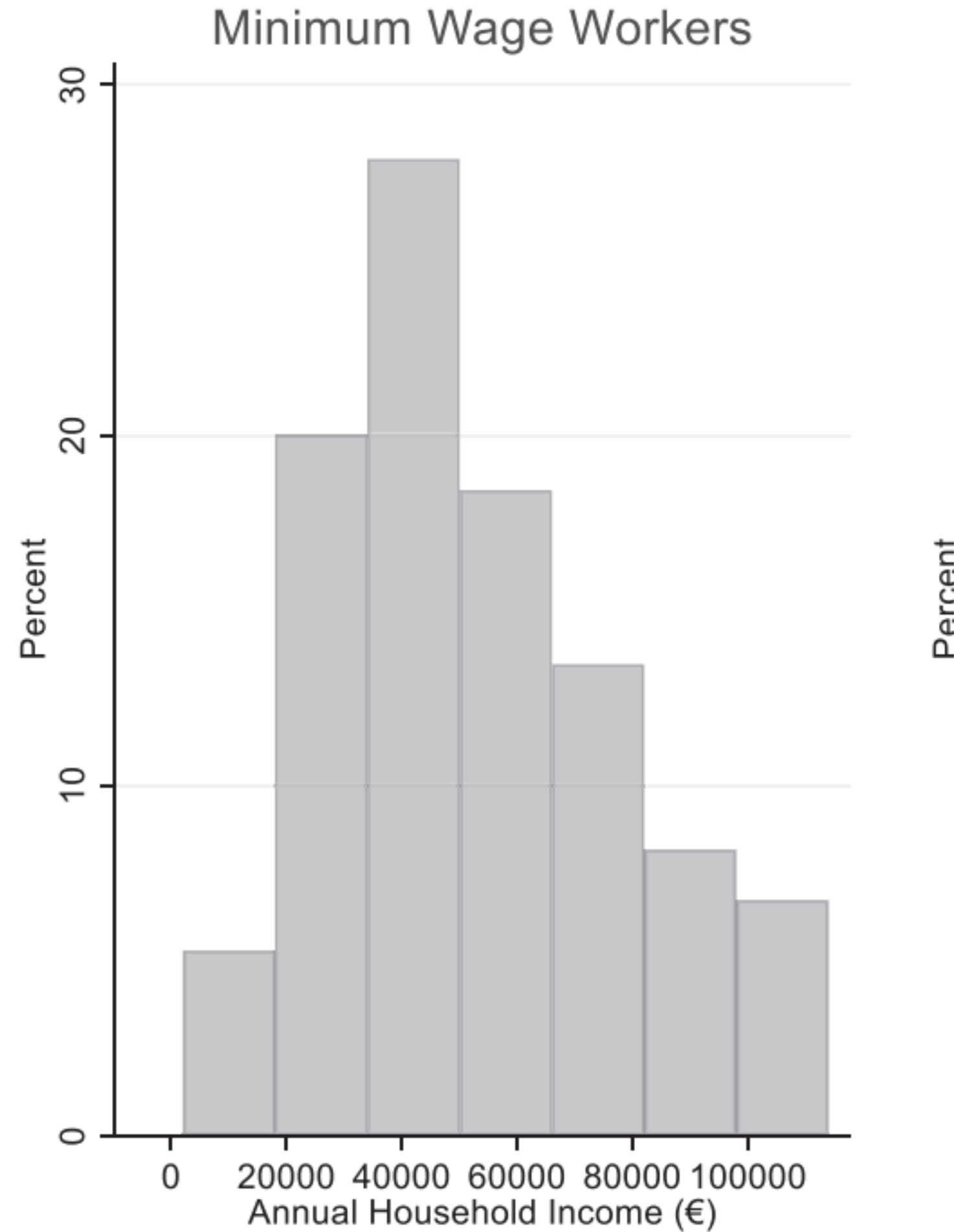
Income Inequality

Limited impact of minimum wage increase on household income inequality

Why?

- Minimum wage workers are spread throughout the household income distribution
- Often in high income households

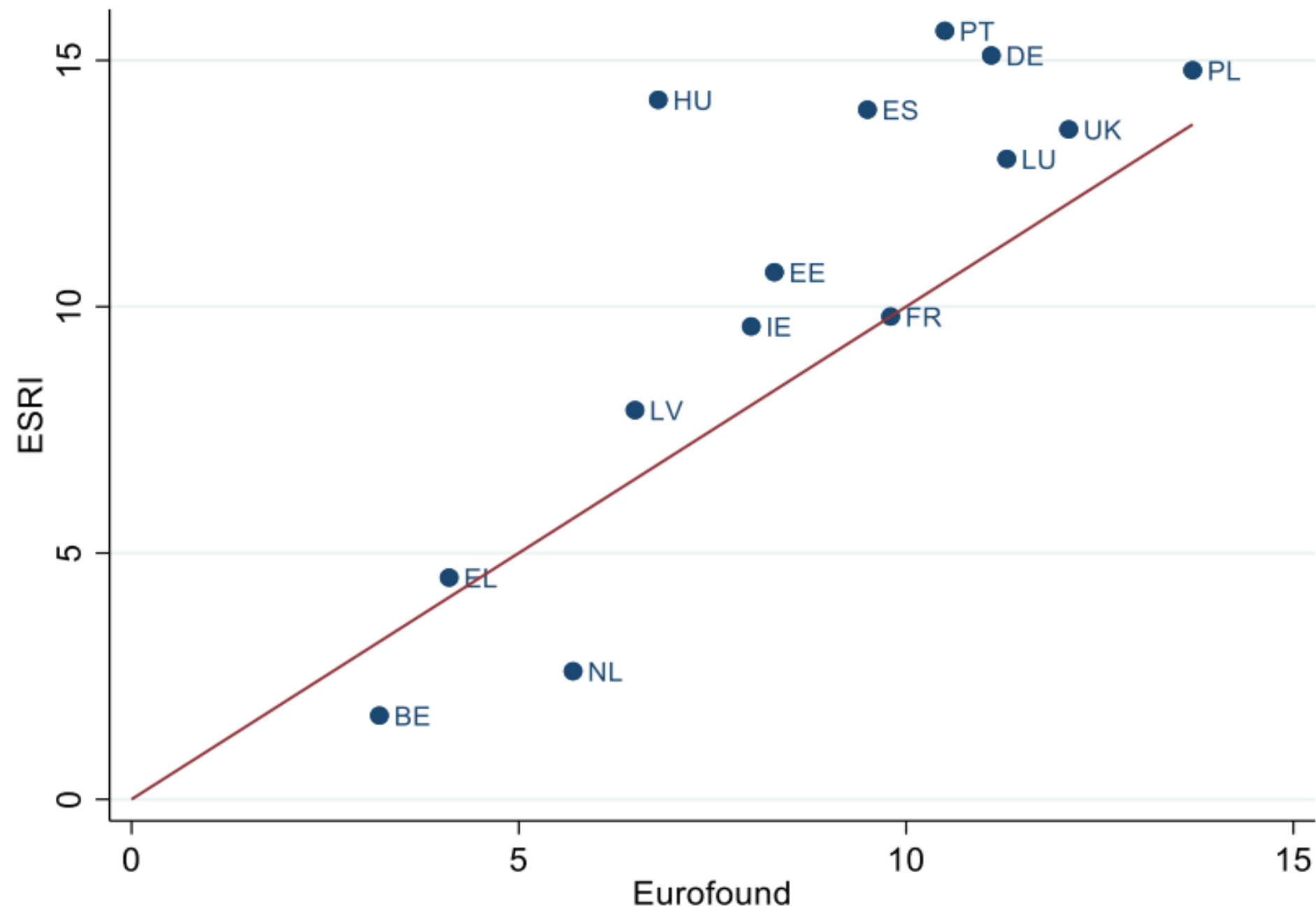
Income Inequality



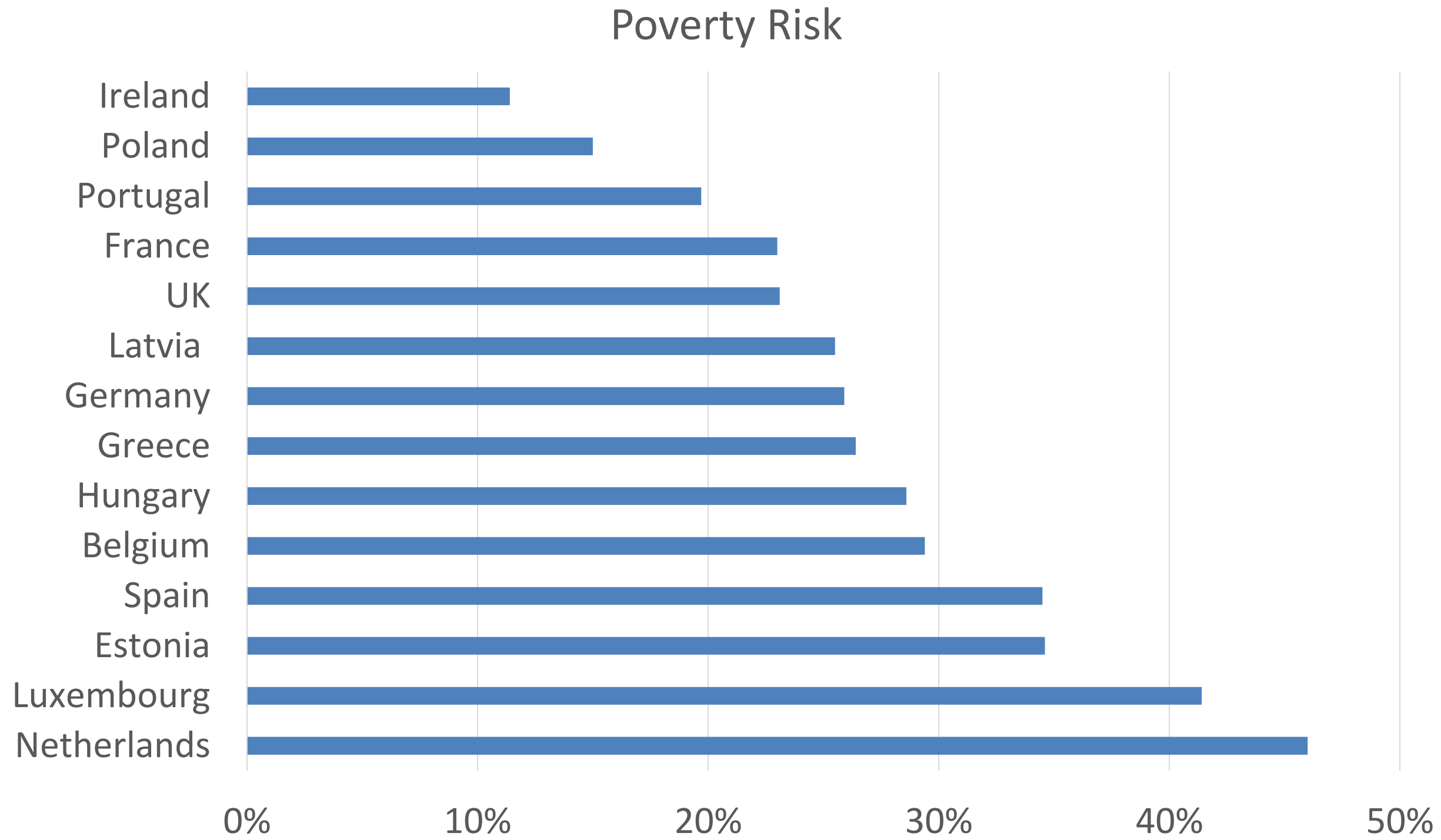
Cross country differences

There are differences across countries when it comes to minimum wage employment (Redmond et al., 2021)

FIGURE 2A ESRI AND EUROFOUND ESTIMATES OF INCIDENCE OF MINIMUM WAGE EMPLOYMENT (%)



Cross country differences



Cross country differences

Broad consistency across countries in the characteristics of the typical minimum wage worker

- Younger
- Low level of education
- Students
- Wholesale and retail / accommodation and food sectors
- Temporary contract
- Part-time
- Female

Labour market transitions

Redmond et al. (2018) examine labour market dynamics of minimum wage workers

- After 3 months – half still on MW and 28% moved to higher pay
- After 1 year – half moved to higher pay and one-third still on MW
- The majority of MW workers that move to higher pay do so with same employer
- MW employees five times more likely to move to economic inactivity
 - However, the majority of these are students

Conclusion

Statutory minimum wages are common in the EU

They are designed to ensure a fair wage to low-paid workers that may have low bargaining power

Reduce wage inequality, but the effects on poverty and income may be more limited

The evidence on employment is mixed

- The effect on employment tends to be relatively modest, or in some studies nonexistent
- The evidence on hours worked appears to be more consistent, indicating a reduction in hours following MW increase

Thank you

paul.redmond@esri.ie



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