

A Comparison of Approaches for Identifying Minimum Wage Workers: Direct Question Versus Administrative Earnings Data ^{1, 2}

Paul Redmond (ESRI, Trinity College Dublin), Elisa Staffa (ESRI), Seamus McGuinness (ESRI, Trinity College Dublin, IZA)

ESRI Research Bulletins provide short summaries of work published by ESRI researchers and overviews of thematic areas covered by ESRI programmes of research. Bulletins are designed to be easily accessible to a wide readership.

INTRODUCTION

Minimum wage policy is one of the most widely studied areas in labour economics. Of fundamental importance to this research is the ability to identify minimum wage workers in the first instance. This requires researchers to calculate an employee's hourly wage rate. This is often done using administrative wage data combined with data on hours worked that is either self-reported or based on average hours worked within a country. Inevitably, there will be some mismeasurement of hours worked, and this can lead to misclassification whereby a non-minimum wage worker could be misclassified as a minimum wage worker, and vice versa. This could potentially impact the accuracy of studies measuring the impacts of changes to minimum wage policy.

Ireland is unique in that it is the only country in Europe whose Labour Force Survey (LFS) contains administrative earnings data, self-reported hours worked, and a direct question that asks employees if they are on the minimum wage. By combining these features of the Irish data, we compare different approaches for

¹ This Bulletin summarizes the findings from: Redmond, P., Staffa, E. and McGuinness, S. (2025), A Comparison of Approaches for Identifying Minimum Wage Workers: Direct Question Versus Administrative Earnings Data. British Journal of Industrial Relations. Available at: <https://doi.org/10.1111/bjir.12886>.

* Correspondence: paul.redmond@esri.ie

² This research was funded by the Irish Low Pay Commission.

classifying minimum wage workers and evaluate the implications for minimum wage research.

DATA AND METHODS

We use Irish Labour Force Survey (LFS) data to classify minimum wage workers in two ways. First, we combine administrative wage data (from official Revenue sources) with self-reported hours worked to calculate an hourly wage rate. If the employee's hourly wage rate is equal to the minimum wage, they are classified as a minimum wage worker. For the second classification method, we use a question that directly asks employees whether they are on minimum wage.

We examine whether differences emerge between the two approaches when it comes to calculating the incidence and characteristics of minimum wage employment. Following this, we evaluate whether recent minimum wage increases in Ireland led to a change in hours worked for minimum wage employees. Again, we carry out separate analysis for both classification methods and compare the results.

RESULTS

We find that the incidence of minimum wage employment using the direct question is lower compared to the administrative approach. Specifically, using the direct question, we find that 7 per cent of employees are on minimum wage in Ireland, compared to 10 per cent using the administrative approach. There are also differences in the characteristics of employees. Minimum wage workers according to the direct question possess characteristics that more closely resemble the typical characteristics of low-paid workers. That is, they are more likely to have temporary contracts, low levels of education, work part-time and work in low-paid sectors and occupations.

Our results also show that recent increases in the minimum wage in Ireland led to a reduction in hours worked for minimum wage employees, and this is consistent across both classification methods. However, the size of the effect can differ depending on the approach used. For example, when using the direct question, we observe a reduction of approximately one hour per week following the 2020 minimum wage increase, compared to a reduction of approximately 1.8 hours per week using the administrative approach. Finally, we propose a classification approach that is based on employees that are consistently classified using the direct question and administrative data. We show that this can overcome some of the limitations associated with each of the two individual approaches.

CONCLUSIONS

Our research shows that the method used to categorize minimum wage employees matters when it comes to analysing and evaluating minimum wage policy. An

advantage of the Irish data is that it allows us to use different approaches to identify minimum wage employees. This potentially allows for a more reliable way of studying minimum wage employment. However, this is not available for other countries in Europe. As such, we argue for the introduction of a standardized minimum wage question across EU Labour Force Surveys. This would not only improve reliability of minimum wage research but would also facilitate comparative cross-country minimum wage studies – an area that is currently under-researched.