



Research for new economic policies

NERI Working Paper Series

Employees on the Minimum Wage in the Republic of Ireland

Micheál L. Collins

July 2016

NERI WP 2016/No 37

For more information on the NERI working paper series see: www.NERInstitute.net

PLEASE NOTE: NERI working papers represent un-refereed work-in-progress and the author(s) are solely responsible for the content and any views expressed therein. Comments on these papers are invited and should be sent to the author(s) by e-mail. This paper may be cited.

Any part of this NERI Working Paper may be quoted using the following reference:

Collins, M.L. (2016), "A Profile of Those on The Minimum Wage", *NERI Working Paper 2016 No37*, Dublin, The Nevin Economic Research Institute.

Nevin Economic Research Institute (NERI)

31/32 Parnell Square
Dublin 1
Phone + 353 1 889 7722

45-47 Donegall Street
Belfast BT1 2FG
Northern Ireland
Phone + 44 28 902 46214

Email: info@NERInstitute.net
Web: www.NERInstitute.net

EMPLOYEES ON THE MINIMUM WAGE IN THE REPUBLIC OF IRELAND

Micheál L. Collins, NERI (Nevin Economic Research Institute), Dublin, Ireland*

Keywords: Minimum wage, low pay, Ireland, earnings distribution

JEL Codes: E24, J31, J38

ABSTRACT

This paper updates the profile of earnings and minimum wage workers released in July 2015 (Collins, 2015a). Based on an analysis of hourly earnings data for 2014, this paper estimates the number of workers on the minimum wage and further profiles these workers by gender, by the sector they work in and by their employment status. The data also allows an examination of the household/family circumstances of workers on the Minimum Wage.

Of the approximate 70,000 workers on the minimum wage, most are women (73%), most are aged in their 20s and 30s and large proportions of these employees work in sectors such as accommodation and food and wholesale and retail. Relative to employees in general, minimum wage workers are more likely to be on temporary contracts, work less than 20 hours per week, work part-time and be in the private sector. Overall, those on the minimum wage represent 5% of all employees, with 34,000 working full-time on the minimum wage.

Establishing a profile of the lowest paid workers in society facilitates a better understanding of the labour market and the socio-economic context of current considerations of changes to the minimum wage.

This version: 12th July 2016

* The author wishes to acknowledge the provision of SILC data from the CSO and comments regarding this research from NERI colleagues. The paper updates an analysis published in 2015. The usual disclaimer applies. All correspondents to mcollins@NERInstitute.net

EMPLOYEES ON THE MINIMUM WAGE IN THE REPUBLIC OF IRELAND

Micheál L. Collins, NERI (Nevin Economic Research Institute), Dublin, Ireland.

1. INTRODUCTION

This paper updates the profile of earnings and minimum wage workers released in July 2015 (Collins, 2015a). That analysis, and complementary assessments of earnings and low pay (Collins 2015b and 2016, NERI 2015a), reopened microeconomic examinations of earnings and low pay in the Republic of Ireland; a research area that had for the most part faded from the limelight since the turn of the century. Subsequently, papers from Holton and O'Neill (2016) and Logue and Callan (2016) have further deepened our understanding of the distribution and composition of direct income received by employees.

A Minimum Wage of €5.58 per hour (IR£4.40) was introduced for experienced adult workers in Ireland under the National Minimum Wage Act 2000. Since then the rate has changed on a nine occasions. The most recent change, an increase of 50 cent per hour, brought the rate to €9.15 from January 1st 2016. The increase, announced in Budget 2016, followed a recommendation from the Low Pay Commission (2015).

Based on an analysis of hourly earnings data, this paper estimates the number of workers on the minimum wage and further profiles these workers by gender, by the sector they work in and by their employment status (full-time, part-time, permanent, temporary etc). The data also allows an examination of the household/family circumstances of workers on the Minimum Wage.

Establishing a profile of the lowest paid workers in society facilitates a better understanding of the labour market and the socio-economic context of current considerations of changes to the minimum wage.

The paper is structured as follows. Section 2 outlines the background to the emergence of the minimum wage in Ireland and sets out the policy context for this paper's examination. The data used in the analysis are then outlined in Section 3. Next Section 4 examines the distribution of hourly earnings across all employees before Section 5 focuses on those earning the minimum wage, examining both the composition of those who are on the minimum wage and the risk of being in a job paying at this level which is faced by employees with different characteristics. Finally, Section 6 of the paper summarises the results before concluding.

2. BACKGROUND AND CONTEXT

The 1997 Programme for Government made a commitment to introduce a national minimum wage. The commitment was part of that Government's commitment to 'an inclusive society' where 'all citizens have the opportunity and the incentive to participate fully in the social and economic life of the country...and to share in the benefits of economic growth" (1997: 5). Subsequently, a National Minimum Wage Commission was established, in July 1997, and reported with a series of recommendations regarding the establishment of a statutory minimum

wage in March 1998.¹ The Government then appointed an inter-departmental implementation group to further assess the proposal and it reported during May 1999.² The National Minimum Wage Act 2000 was enacted in April 2000 and introduced a statutory minimum wage from April 1st of that year.

The National Minimum Wage is expressed as an hourly rate of pay and calculated over an employee's 'pay reference period' by dividing their gross reckonable pay by their hours of work. The Act and associated documentation from the Department of Jobs, Enterprise and Innovation provides a formal definition of reckonable pay which essentially covers basic pay plus shift premiums, productivity related piece rates and commissions, and values for employer provided board and lodgings. Reckonable pay does not include overtime, premiums for weekend and public holidays, compensation for unsocial hours, sick pay or any other benefit in kind.³ The benchmark rate applies to experienced adult workers and there are exemptions and lower rates for employees aged less than 18 years, persons employed by a close relative, apprentices and those on structured training schemes.

The minimum wage was introduced at a rate of IRL£4.40 per hour (€5.58) for experienced adult workers from April 2000. The initial rate derived from the recommendations of the aforementioned National Minimum Wage Commission based on research for that Commission by Nolan (1998). The initial threshold was determined as the updated (to 1997) value of two-thirds of the median earnings for all employees. The figure was based on the results from the 1994 ESRI Living in Ireland Survey where two-thirds of median earnings were estimated at IRL£4.00 per hour and an assumption that average hourly earnings for all employees "rose by about 10% between 1994 and 1997" (Nolan, 1998: 8).

Since 2000 the rate has changed nine times (see Table 1). For the most part the mechanism for changing the rate was through Labour Court reviews where these were initiated by requests from organisations such as the Irish Congress of Trade Unions. The Labour Court, having invited submissions on the issue from various interested parties, would make a recommendation to Government (the relevant Minister or Junior Minister) who would subsequently make an order, if appropriate, amending the minimum wage.

The changes since 2000 include one reduction to the minimum wage, introduced on the 1st February 2011. The reduction was flagged in the National Recovery Plan 2011-2014 (2010:35-36), initiated as part of the Financial Emergency Measures in the Public Interest Act 2010 and was justified in the context of the bailout programme Ireland had entered into in late 2010. However, the reduction, which only applied to new earners on the minimum wage, was short-lived and reversed by a new Government in July 2011. Neither the reduction nor restoration followed the previous Labour Court adjustment mechanism.

Ireland's economic recovery slowly emerged across 2014 as growth became more established and the domestic economy picked up; driven by recovery in household consumption and domestic investment (NERI, 2015b). In terms of earnings, late 2014 marked the first period of economy wide recovery in pay, with average weekly earnings increasing by 1.9% and average hourly earnings increasing by 1.4% between Q4 2013 and Q4 2014 (CSO, 2015). The 2014

¹ The report of the Commission was published on 5th April 1998.

² See <http://www.djei.ie/publications/employment/1999/nationalminimumwagereport/>

³ See for example DJEI (2011).

earnings growth marked a reversal of a trend of decreasing earnings since 2009. Over the period from Q4 2008 to Q4 2014 average weekly earnings decreased by 2.6%; with the reduction in the public sector (4.8%) being greater than that in the private sector (0.4%).⁴

Table 1 Ireland’s Adult Minimum Wage Rate, 2000-2016

Date	€ per hour	IRL£ per hour
1 st April 2000	€5.58	£4.40
1 st July 2001	€5.97	£4.70
1 st October 2002	€6.35	£5.00
1 st February 2004	€7.00	
1 st May 2005	€7.65	
1 st January 2007	€8.30	
1 st July 2007	€8.65	
1 st February 2011	€7.65	
1 st July 2011	€8.65	
1 st January 2016	€9.15	

Source: Holton and Collins (2016: 3)

Notes: The Euro was introduced on the 1st January 2002. The exchange rate between the IRL£ and € is £1=€1.27. The rates for July 2001 (pre Euro introduction) and October 2002 (post Euro introduction) were set in IRL£s by Ministerial order on 30th June 2000. The rate set on 1st January 2016 was the rate in place at the time of this papers publication (July 2016).

The emergence of a recovery in pay levels shifted a focus to a need to revisit the minimum wage and re-establish a process to determine changes to its level. In its Statement of Government Priorities 2014-2016, in effect a mid-term revision of the programme for government, a commitment was made to deliver “a new deal on living standards to ensure that the economic recovery is felt by low and middle-income working families”. Among the commitments made the Government stated that:

We will establish a Low Pay Commission on a statutory basis as an independent body to make annual recommendations to the Government about the appropriate level of the minimum wage and related matters (2014: 4).

The Commission was established under the National Minimum Wage (Low Pay Commission) Act 2015 with its members appointed for terms of three years. While the Commission is tasked with examining broader issues relating to the conditions of workers, in particular those experiencing precarious employment patterns, it is also tasked with making an annual recommendation on any revision to the minimum wage. A move to annual assessments, and possible changes to the minimum wage, reflects the experience of other countries where relatively small and frequent changes have been found to be less disruptive than occasional relatively large changes (Nolan et al, 2003:10).

⁴ Note, the recovery in private sector earnings commenced earlier than that in the public sector with the latter’s average adjustment heavily influenced by targeted decreases in during 2013 as part of the Public Service Stability Agreement 2013-2016 (Haddington Road Agreement).

The ongoing considerations by the Low Pay Commission serve as the context for this paper. Having an up-to-date insight into the number of people on the minimum wage, where they are within sectors and occupations, and what their personal and family/household characteristics are, is an important context for any revision and facilitates a better understanding of the labour market and the socio-economic context of current considerations of changes to the minimum wage.

3. DATA

The analysis in this paper draws from an examination of the micro data from the latest Central Statistics Office (CSO) Survey on Income and Living Conditions (SILC). This survey is part of an annual Europe wide household living standards survey and collects income and living standards information from a representative national sample. The latest data, for 2014 comprises responses from 14,078 individuals in 5,486 households.

The appendix to this paper includes comparisons with the 2013 results published in Collins (2015a). That data comprised responses from 12,663 individuals in 4,922 households and covered a total of 3,369 employees.

Like all survey data sources, the SILC dataset, and consequently any analysis drawn from it, is subject to some caveats. In particular, income surveys tend to experience lower response rates from high income households. Similarly, successful sampling can be challenging among low-income households and minorities while those in institutions are excluded from the sample.⁵ While the data includes a probability weight variable to correct for under-representation and non-response, and these weights are used in the analysis, deficits at both ends of the distribution remain. However, the collected income data is reconciled by the CSO with administrative tax and welfare records in an attempt to ensure its accuracy. Overall, the SILC data remains the most detailed and robust data source available for Irish individual and household income.

Data on earnings is available for all those in the dataset indicating that their principal economic status is 'at work' and who are employees. The data includes values for the gross monthly earnings of employees in their main job and a value for the number of hours employees usually work in their main job. Taken together these allow an estimation of the average hourly wage rate for an employee in their main job. Overall, the 2014 SILC sample includes hourly earnings data for a sample of 3,944 employees.

To assess the representativeness of the SILC data, Table 2 compares values generated from that data with other labour market indicators published by the CSO for the reference year. Overall, the SILC data compares well to the other labour market indicators. There are challenges comparing the SILC results with measures of the number of employees in the Quarterly National Household Survey (QNHS). The latter uses the International Labour Office (ILO) method of

⁵ These sampling challenges, common to all households surveys, are explored further in: Groves and Couper (1998), Fitzgerald et al (1998), Goyder (1987), Nathan (1999), Cheesbrough (1993), Lynn and Clarke (2002) and Uhrig (2008).

measuring those who are at work, capturing all those working for pay, profit or in a family business for more than one hour a week as employed. Conversely, the SILC data is based on a measure of a person’s principal economic status, the main thing that the person does. As a person may be employed for a few hours per week, for example working part-time, but may regard themselves as principally a student, retired, unemployed or working in the home, estimates of the total number of employees using these two approaches are likely to differ fairly substantially. In an attempt to take account of this, the table compares the number of individual with any employee income (from SILC) with the QNHS measure of employees.

Table 2 Representativeness of the SILC Labour Market Estimates, 2014

Indicator	CSO Labour Market Data 2014	SILC 2014 Analysis
Annual average earnings	€36,090	€35,553
Average hourly earnings	€20.54	€20.65
Average weekly hours	€31.73	€33.58
Employees / Any Employee Income	1,581,950	1,551,160
Employees % male	49.2%	47.9%
Employees % female	50.8%	52.1%

Notes: CSO labour market data is for 2014 and where data is quarterly it is averaged over the four quarters to provide an annual figure. Average annual earnings is from the *Earnings and Labour Costs Annual*. Hourly earnings and hours worked data is from the *Earnings and Labour Costs Quarterly Survey*. Employee estimates are from the *Quarterly National Household Survey*. SILC values for annual average earnings and hourly earnings are calculated for the sample of employees for whom hourly earnings data is calculable.

As the SILC data is focused only on those whose principal economic status is ‘at work’ and who are employees, the number of workers represented by the hourly earnings analysis below is a smaller figure than the total number with any employee income.

4. THE HOURLY EARNINGS DISTRIBUTION

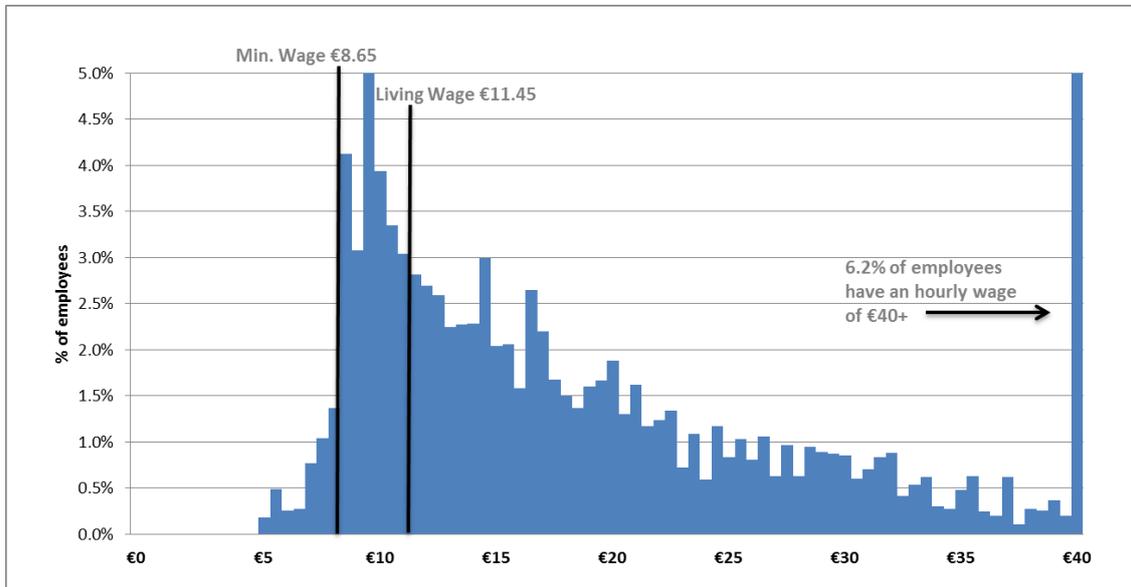
This section focuses on the 2014 distribution of employee hourly income and in particular those at the bottom of that distribution. An hourly earnings value is established for all those in the SILC dataset whose principal economic status is ‘at work’ and who are employees. Overall, the data is representative of 1,396,489 employees.⁶ Of these employees, the mean hourly earnings is €20.65 per hour although 50% of employees earn less than €16.23 per hour (the median earnings level).

Chart 1 presents a profile of the hourly earnings distribution in the Republic of Ireland. The chart also includes markers for two earnings thresholds. These include the *minimum wage*

⁶ This total represents the weighted value of the final sample size which was also cleaned to exclude variables with missing or spurious monthly earnings / unusual hours data.

which stood at €8.65 per hour in 2014 and the *Living Wage* for that year which stood at €11.45 per hour.⁷

Chart 1: Distribution of Hourly Earnings and Selected Pay Thresholds, Ireland 2014 (% employees)



Note: The small proportion of earners with hourly rates below the minimum wage include legitimate exemptions (those under 18 years, persons employed by a close relative, apprentices and those on structured training schemes), non-compliance and a degree of measurement error.

The data in Chart 1 are summarised in Tables 3 and 4. Of all the employees examined in the data, 5.3% have an income below the statutory minimum wage – these include those exempted by the structure of the minimum wage including young workers under 18 years old, persons employed by a close relative, apprentices and those on structured training schemes. Using the hourly Living Wage as a threshold, the analysis finds that 26.4% of employees have an hourly wage rate of less than €11.45. These findings imply that almost 200,000 employees earn less than €10.00 per hour and almost 370,000 employees earn less than €11.45 per hour.

Looking above these low-pay categories, more than 40% of employees have an hourly rate of between €15-€30; 9.6% lie between €30-€40 and 6.2% have an hourly rate above €40 per hour. Consequently, irrespective of the threshold used, almost 70% of employees are not formally classified as low paid.

⁷ Note, the Living Wage has been estimated for a single-person working full-time and as such the hourly figure does not necessarily capture employees who face different costs and circumstances (couples with children etc). As the figure is an hourly one derived from an assumption of full-time work, employees at or above the Living Wage but working less than a full-week (voluntarily or involuntarily) may also be unable to achieve a weekly living wage (see Living Wage Technical Group, 2014).

Table 3: Distribution of Hourly Earnings, Ireland 2014 (% employees)

From	To	% of employees
minimum	€8.64	5.3%
€8.65	€9.99	8.9%
€10.00	€11.44	12.2%
€11.45	€12.19	4.4%
€12.20	€14.99	13.8%
€15.00	€19.99	18.7%
€20.00	€24.99	12.3%
€25.00	€29.99	8.7%
€30.00	€34.99	6.2%
€35.00	€39.99	3.4%
€40.00+		6.2%
		100.0%
Mean	€20.65	
Median	€16.23	

Notes: See notes to Chart 1. A comparison of the 2013 and 2014 results is included in Table A1 of the appendix.

Table 4: Distribution of Hourly Earnings by Selected Pay Thresholds, Ireland 2014 (% employees)

Threshold	% above	% below
€8.65	94.7%	5.3%
€9.15	91.1%	8.9%
€10.00	85.8%	14.2%
€11.45	73.6%	26.4%

Notes: See notes to Chart 1. A comparison of the 2013 and 2014 results is included in Table A2 of the appendix. The €9.15 threshold is included as this was the minimum wage rate in place when this paper was completed - see Table 1.

5. EMPLOYEES ON THE MINIMUM WAGE

This section of the paper narrows the focus to those employees who earn the minimum wage. As mentioned, the SILC data provides figures for usual hours worked and usual gross monthly pay and using these two numbers an estimate of average hourly earnings is established. However, given the calculation approach, it is likely that those who are found to have earnings near to the minimum wage rate are in fact on this rate and in recognition of this the cohort of earners on the minimum wage are identified as those whose hourly earnings are +/-5% from the €8.65 threshold. Measuring in this way minimises unnecessary errors and offers a more robust insight into the proportion and composition of employees who are on the minimum wage.

Table 5 revisits the distribution of hourly earnings using this approach. Those with hourly earnings of between €8.22 and €9.08 per hour are classified as being on the minimum wage. The analysis finds that there are approximately 70,000 employees on the minimum wage –

equivalent to 5.0% of all employees. This group are highlighted in Chart 2. The estimated average hourly earnings of those in this group is €8.73, suggesting that the approach gives a good insight into those at the minimum wage level. Over 50,000 employees are classified as earning less than the minimum wage and a total of 8.6% of employees (approximately 120,000) earn the minimum wage or less than the minimum wage.

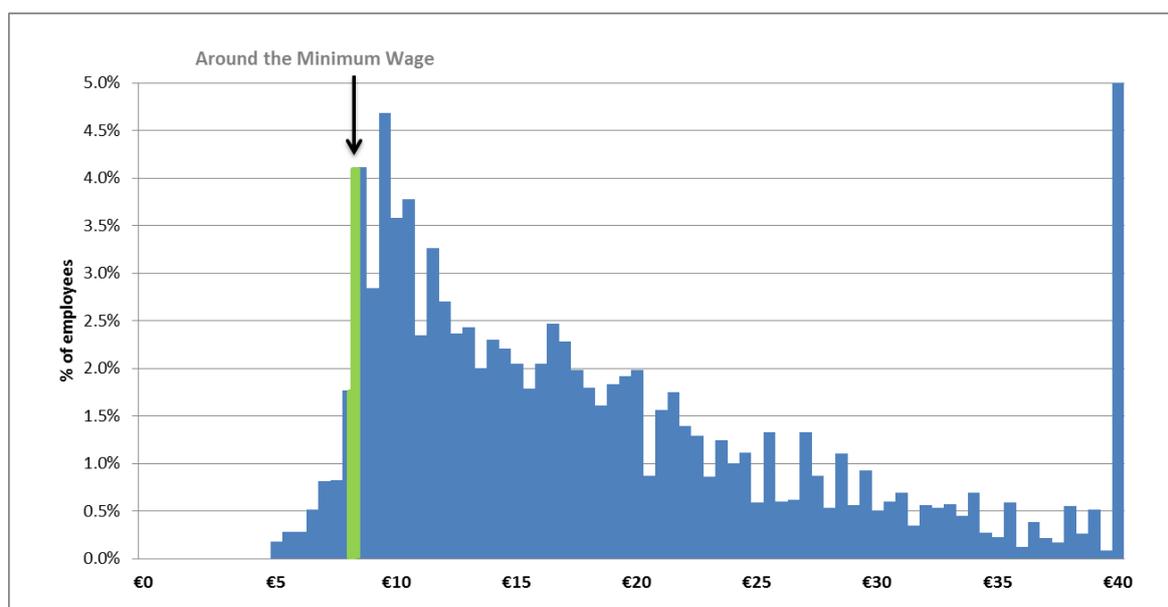
Table 5: Distribution of Hourly Earnings, Ireland 2014 (employees)

From	To	No. of employees	Mean hourly earnings	% of employees	Cumulative % of employees
minimum	€8.21	50,364	7.16	3.6%	3.6%
€8.22	€9.08	69,294	8.73	5.0%	8.6%
€9.09+		1,276,830	21.83	91.4%	100.0%
Overall		1,396,489		100.0%	

Notes: Those on the minimum wage are classified as employees with earnings +/-5% from €8.65 (i.e. between €8.22 and €9.08).
The small proportion of earners with hourly rates below the minimum wage include legitimate exemptions (those under 18 years, persons employed by a close relative, apprentices and those on structured training schemes), non-compliance and a degree of measurement error.

The remainder of this section profiles the approximate 70,000 employees earning the minimum wage. It splits into two parts. First, we examine the composition of this group of earners and assess their risk of being on the minimum wage faced. Subsequently the paper examines the household characteristics of those who are on the minimum wage.

Chart 2: Employees on the Minimum Wage, Ireland 2014 (% employees)



Notes: See notes to Chart 1.

Who is on the Minimum Wage?

Table 6 examines those classified as on the minimum wage. As a comparison, the distribution of all employees (both on the minimum wage and otherwise) is presented in the first column.

Women represent over 70% of all those on the minimum wage. When examined by age group, the data show that more than half are aged less than 30 years, almost one-in-five are in their 30s with 12.7% aged in their 40s and the remainder (11.6%) aged more than 50 years. Relative to the composition of employees in general, those on the minimum wage are most heavily concentrated below the age of 30. When examined by completed education level, minimum wage workers are found across all levels with almost half having completed no more than secondary education.

The sectoral profile of employees on the minimum wage shows that more than one-quarter (26.3%) are in wholesale and retail trade with a similar proportion (23%) in the accommodation and food sector. Relative to the size of these sectors (13.8% and 7.4% of all employees respectively), the prevalence of workers on the minimum wage is high. Just under 10% of minimum wage workers are in industry while 11.6% work in the health and social work sector. When employees on the minimum wage are examined by the occupation they have (not shown in table), 26.4% are found to work in sales and 14% in personal and protective services.

Almost one-third (31.2%) of minimum wage workers work less than 19 hours per week while almost four-in-ten (approximately 27,000 employees) work more than 35 hours per week. Similarly, almost half (48.9%) of these workers are full-time workers on the minimum wage – some 34,000 workers. Most minimum wage workers hold a permanent contract of employment (83.4%) although temporary contracts of employment are more common among minimum wage workers than they are among employees in general.

Who is most likely to be on the Minimum Wage?

One-in-twenty employees in Ireland work at the minimum wage. Of all male employees 2.8% earn the minimum wage whereas the risk more than twice this for female employees at 7% (one in every fourteen). The risk of being on the minimum wage declines with age, with 14.1% of all workers under 30 years being on the minimum wage. The risk falls to 3.6% for employees in their 30s and to 2.5% for employees in the 40s.

The concentration of minimum wage workers in particular sectors of the labour market is also detailed in Table 6. The highest statistically significant risk of being on the minimum wage is for employees in the accommodation and food sector where one in six employees (15.5%) are on the minimum wage. Within wholesale and retail, 9.4% of all workers are on the minimum wage. Both figures offer an insight into the degree of exposure such sectors would have to any further changes to the minimum wage.

Table 6: Employees on the Minimum Wage, 2014

	% of all employees	% of all those on Minimum Wage	% of group on Minimum Wage	Number on Minimum Wage
All	100.0	100.0	5.0	69,294
Gender				
Male	47.9	26.6	2.8	18,500
Female	52.1	73.4	7.0	51,000
Age Group				
18-29	18.5	52.4	14.1	36,000
30-39	31.1	22.4	3.6	15,500
40-49	25.6	12.7	2.5	9,000
50+	24.4	11.6	2.4	8,000
Highest Completed Education				
Primary or below	-	-	-	-
Lower secondary	9.9	12.7	6.4	9,000
Higher secondary	21.6	34.1	7.8	23,500
Post leaving cert	13.9	16.6	5.9	11,500
3 rd level non degree	18.1	16.3	4.5	11,000
3 rd level degree & above	30.6	14.7	2.4	10,000
NACE Sector				
Agri., forestry/ fishing	-	-	-	-
Industry	16.0	9.3	2.9	6,500
Wholesale and retail	13.8	26.3	9.4	18,000
Accom. and food	7.4	23.0	15.5	16,000
Admin/support services	-	-	-	-
Health & social work	14.7	11.6	3.9	8,000
Pub Adm/Defence/Edu.	-	-	-	-
All Others	25.0	20.1	4.0	14,000
Sector of Employment				
Public	-	-	-	-
Private	69.0	89.8	6.5	62,000
Hours Worked per week				
1-19hrs	13.0	31.2	11.9	21,500
20-34.9hrs	22.4	30.0	6.6	21,000
35hrs+	64.6	38.8	3.0	27,000
Work status				
Full-time	72.7	48.9	3.3	34,000
Part-time	27.3	51.1	9.3	35,500
Contract Type[#]				
Permanent	89.8	83.4	4.4	58,000
Temporary	10.2	16.6	7.7	11,500
Urban/rural location[#]				
Urban	68.9	72.4	5.2	50,000
Rural	31.1	27.6	4.4	19,000

Notes: Highest completed education excludes employees who did not state their level. Sectors are NACE sectors where Industry includes construction while 'all others' include: transportation and storage; information and communication; financial insurance and real estate activities; professional, scientific and technical; and those classified by the CSO as 'other NACE activities'. Population figures have been rounded to the nearest thousand. Rounding may affect totals. All decompositions are statistically significant with $p < 0.001$ except those marked #: Contract Type ($p < 0.05$) and Urban/Rural where the decomposition is insignificant.
 - = sample too small to report (i.e. less than 20 cases in the sample data)

Overall, employees in the private sector carry a 6.5% risk of being on the minimum wage – relative to the overall employee figure (public and private) of 5%. The risk of minimum wage work is also much higher for employees on low hours (less than 20 hours per week). They face a risk at more than twice the general level for employees (11.9%) whereas the risk is much lower for employees working more than 35 hours per week (3%) or in full-time jobs (3.3%). Employees on permanent contracts carry a below average risk of being on the minimum wage (4.4%) whereas those on temporary contracts face a 7.7% risk.

The Household Characteristics of Minimum Wage Workers

A particular advantage of using the SILC data is that it allows an examination of the employees in their household context – a perspective that is often lacking in assessments based on earnings surveys. As such, it allows us to establish greater details of the financial and family context that minimum wage workers live in.

Although the size of the SILC sample inhibits the establishment of statistically significant results for some decompositions, a number stand out. Looking at tenure status, minimum wage workers are less likely to be owner-occupiers than is the case for employees in general, but they are much more likely to be renters or in rented accommodation at below the market rate (often social or Government supported housing). In almost 30% of cases, workers earning the minimum wage are the only earners in their household.

Given the information collected in the SILC data, it is also possible to gain an insight into the living standards of these workers. Being on the minimum wage does not, in and of itself, imply that a worker will experience a sub-optimal standard of living. Living standards are derived from the overall income and living conditions of households and include not just the employment income of the minimum wage employee, but also the income of others (if any) in the household, entitlements to welfare income and supports, the structure of the income taxation system, the provision of state services and living expenses. Consequently, an employee with an hourly income well above the minimum wage could be experiencing less than ideal living standards given the demands on their income and the limited if any income received by others in their household. However, given that earnings from employment income tend to be the major source of income for households, the association between those on the minimum wage and issues such as poverty, debt and deprivation is of obvious interest.

Some 38% of minimum wage workers have a full medical card – more than twice the rate for employees in general. 58.8% of these employees are in households that would be unable to afford an unexpected expense of €1,085 – again a figure which is larger than that for all employees (46%).

Among employees overall, 20.6% experience deprivation, defined as being unable to afford two or more of eleven basic items.⁸ Among those who are on the minimum wage the proportion is 27.6%. Similarly, the proportion of minimum wage workers in poverty (15.5%) is more than three times that of all employees (4.3%). Minimum wage workers spread across the entire

⁸ The full list of items is included in table A3 of the appendix.

income distribution with one-in-ten living in households located in the top fifth of the distribution and 40% of these workers in households in the bottom two quintiles.

Table 7: The Household Characteristics of Minimum Wage Employees, 2014 (%)

	% of all employees	% of all those on Minimum Wage	% of group on Minimum Wage
All employees	100.0	100.0	5.0
Household Composition			
1 adult aged 65+	0.2	-	-
1 adult aged <65	6.7	-	-
2 adults, at least 1 aged 65+	1.4	-	-
2 adults, at least 1 aged < 65	20.5	15.1	3.7
3 or more adults	18.2	30.8	8.4
1 adult with children	3.3	-	-
2 adults with 1-3 children	36.4	22.2	3.0
Other households with children	13.4	19.8	7.3
Tenure Status			
Owner-occupied	70.8	49.1	3.4
Rented at the mkt rate	18.7	31.2	8.3
Rented < mkt rate/ rent free	10.5	19.7	9.4
No of household members at work			
1	30.3	29.9	4.9
2	54.9	39.0	3.5
3	14.8	31.1	10.5
Medical card			
Medical card (full)	17.4	37.7	10.6
GP visit card	2.7	-	-
None	79.8	57.7	3.6
Location in Income Distribution			
Bottom quintile (20%)	5.6	18.3	16.2
2	11.4	21.3	9.3
3	21.0	27.8	6.6
4	27.8	21.7	3.9
Top quintile (20%)	34.2	10.9	1.6
At risk of poverty status - household			
No	95.7	84.5	4.4
Yes	4.3	15.5	18.1
Ability to make ends meet - household#			
With difficulty or great difficulty	28.2	32.2	5.7
Otherwise	71.9	67.9	4.7
Ability to afford unexpected expenses - household#			
Able	54.0	41.2	3.8
Unable	46.0	58.8	6.3
Household in Debt for ordinary living expenses over last 12 months#			
No	84.6	81.3	4.8
Yes	15.4	18.7	6.0
Deprivation (of 2 or more items of 11 items)#			
Not-experiencing	79.4	72.4	4.5
Experiencing	20.6	27.6	6.7

Notes: See notes to table 6. The at risk of poverty measure is based on whether an employee lives in a households whose equivalised disposable income is less than 60% of the median. Difficulty making ends meet, inability to afford unexpected expenses (€1,085 without borrowing) and going into debt for ordinary living expenses are variables answered by the head of each household and that answer has been applied to each employee in the household. Deprivation, or the deprivation rate, is measured as being classified as deprived of 2 or more of 11 basic items listed in Table A3 of the appendix. All decompositions are statistically significant with $p < 0.001$ except those marked #: unexpected expenses ($p < 0.01$), deprivation ($p < 0.05$); the decompositions for ends meet and debt for ordinary expenses are insignificant. - = sample too small to report (i.e. less than 20 cases in the sample data)

The final column of Table 7 examines the risk of being on the minimum wage faced by employees with various household characteristics. The results identify higher than average risks of being on the minimum wage faced by employees who: are renters at and below the market rate; are in receipt of a full medical card; are in the bottom half of the income distribution; are in a household experiencing deprivation; and are in a household living on an income that is below the poverty line.

6. CONCLUSION

Establishing a profile of those who are on the minimum wage facilitates a better understanding of the labour market and the socio-economic context of current considerations of changes to the minimum wage. The results outlined above are not particularly surprising and reflect a similar picture to that established for the 2013 data (Collins, 2015a).⁹

Of the approximate 70,000 workers on the minimum wage, most are women (73%), most are aged in their 20s and 30s and large proportions of these employees work in sectors such as accommodation and food and wholesale and retail. Relative to employees in general, minimum wage workers are more likely to be on temporary contracts, work less than 20 hours per week, work part-time and be in the private sector. Overall, those on the minimum wage represent 5% of all employees, with 34,000 working full-time on the minimum wage.

Linking earnings data to household income and living standards data, it is also possible to identify that employees on the minimum wage, while not necessarily living in poverty, tend to struggle financially.

This paper's profile of the earnings distribution also points towards the effectiveness of the minimum wage in setting a floor on pay in the Irish labour market. However, despite its effectiveness there remains large numbers of employees with income above the minimum wage but below the hourly rate identified as a living wage (€11.45).

⁹ The findings do not differ substantially from the trends identified by earlier researchers on the minimum wage including Nolan (1998), Nolan et al (2002), Nolan and O'Neill (2002), Nolan et al (2003) and Nolan et al (2006).

REFERENCES

- Central Statistics Office (2015), *Survey on Income and Living Conditions, 2014*, Dublin, Stationery Office.
- Central Statistics Office (2016), *Earnings and Labour Costs Annual 2015*, Dublin, Stationery Office.
- Central Statistics Office (various), *Earnings and Labour Costs Quarterly Survey*, Dublin, Stationery Office.
- Central Statistics Office (various), *Quarterly National Household Survey*, Dublin, Stationery Office.
- Cheesbrough, S. (1993), 'Characteristics of Non-Responding Households in the Family Expenditure Survey', *Survey Methodology Bulletin*, 33: 12-18.
- Collins, M. (2015a), "Earnings and Low Pay in the Republic of Ireland: A profile and Some Policy Issues", *NERI Working Paper No.29*, Dublin, The Nevin Economic Research Institute.
- Collins, M. (2015b), "A Profile of Those on The Minimum Wage", *NERI Working Paper 2015 No.27*, Dublin, The Nevin Economic Research Institute.
- Collins, M.L. (2016) 'Earnings and Low Pay in the Republic of Ireland'. *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 55 2016. (in press)
- Department of Jobs, Enterprise and Innovation (2011), *Detailed Guide to the National Minimum Wage*. Dublin, Stationery Office.
- Department of the Taoiseach (1997), *Action Programme for the Millennium – Programme for Government by Fianna Fail and the Progressive Democrats*. Dublin, Stationery Office.
- Department of the Taoiseach (2014), *Statement of Government Priorities, 2014-2016*. Dublin, Stationery Office.
- Fitzgerald, J., Gottschalk, P. and Moffitt, R. (1998), 'An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics', *The Journal of Human Resources*, 33(2): 251- 299.
- Government of Ireland (2000), *National Minimum Wage Act 2000*. Dublin, Stationery Office.
- Government of Ireland (2010), *Financial Emergency Measures in the Public Interest*. Dublin, Stationery Office.
- Government of Ireland (2010), *National Recovery Plan, 2011-2014*. Dublin, Stationery Office.
- Government of Ireland (2013), *Public Service Stability Agreement 2013-2016 (Haddington Road Agreement)*. Dublin, Stationery Office.
- Government of Ireland (2015), *National Minimum Wage (Low Pay Commission) Act*. Dublin, Stationery Office.
- Goyder, J. (1987), *The Silent Minority - Nonrespondents on Sample Surveys*. Cambridge: Polity Press.
- Groves, R. M. and Couper, M. P. (1998), *Nonresponse in Household Interview Surveys*. New York, John Wiley & Sons.
- Holton, N and M.L. Collins (2016) 'Modelling the Impact of an Increase in Low Pay in the Republic of Ireland' *NERI Working Paper*, 2016/36. Dublin, The Nevin Economic Research Institute.

Holton, N. and D. O'Neill (2016). 'The Changing Nature of Irish Wage Inequality from Boom to Bust'. *Paper to the Irish Economics Association Annual Conference*, Galway.

Inter-Departmental Group on Implementation of a National Minimum Wage (1999). *Final Report of the Inter-Departmental Group on Implementation of a National Minimum Wage*. Dublin, Stationery Office.

Living Wage Technical Group (2014), *Living Wage Technical Document: Calculating a Living Wage for the Republic of Ireland*. Dublin, Living Wage Technical Group.

Logue, C. and T. Callan (2016) 'Low Pay, Minimum Wages and Household Incomes: evidence from Ireland', ESRI Budget Perspectives Paper – June. Dublin, ESRI.

Low Pay Commission (2015), '*Recommendations for the National Minimum Wage*' Dublin, Low Pay Commission.

Lynn, P. and Clarke, P. (2002), 'Separating Refusal Bias and Non-Contact Bias: Evidence from UK National Surveys', *Journal of the Royal Statistical Society Series D (The Statistician)*, 51(3): 319- 333.

Nathan, G. (1999), 'A Review of Sample Attrition and Representativeness in Three Longitudinal Surveys (The British Household Panel Survey, the 1970 British Cohort Study and The National Child Development Study)', *Government Statistical Service Methodology Series*, No. 13. London: GSS.

National Minimum Wage Commission (1998), *Report of the National Minimum Wage Commission*. Dublin, Stationery Office.

NERI (2015a), *Quarterly Economic Observer – Spring 2015*. Dublin, The Nevin Economic Research Institute.

NERI (2015b), *Quarterly Economic Observer – Summer 2015*. Dublin, The Nevin Economic Research Institute.

Nolan, B. (1998), 'Low Pay in Ireland'. *Vol. 2, Report of the National Minimum Wage Commission*, Dublin: Department of Enterprise, Trade and Employment.

Nolan, B. and D. O'Neill (2002), 'Evaluating the Impact of a National Minimum Wage: evidence from a new survey of firms', *Royal Economic Society Annual Conference 2002 – paper 151*.

Nolan, B., D. O'Neill and J. Williams (2002), *The Impact of the Minimum Wage on Irish Firms*, Policy Research Series Paper No. 44, Dublin, The Economic and Social Research Institute.

Nolan, B., J. Williams and S. Blackwell (2003), 'New Results on the Impact of the Minimum Wage on Irish Firms' - *Special Article in the ESRI Quarterly Economic Commentary, Winter 2003*. Dublin, The Economic and Social Research Institute.

Nolan, B., J. Williams and S. Blackwell (2006), *The Minimum Wage and Irish Firms in 2005*. Dublin, The Economic and Social Research Institute.

Uhrig, Noah (2008), The Nature and Causes of Attrition in the British Household Panel Survey. *ISER Working Paper 5/2008*. Essex, ISER.

APPENDIX

Table A1: Distribution of Hourly Earnings, Ireland 2013 and 2014 (% employees)

From	To	2013	2014
minimum	€8.64	5.5%	5.3%
€8.65	€9.99	8.3%	8.9%
€10.00	€11.44	11.8%	12.2%
€11.45	€12.19	4.7%	4.4%
€12.20	€14.99	12.5%	13.8%
€15.00	€19.99	19.6%	18.7%
€20.00	€24.99	13.6%	12.3%
€25.00	€29.99	8.4%	8.7%
€30.00	€34.99	5.4%	6.2%
€35.00	€39.99	3.1%	3.4%
€40.00+		6.9%	6.2%
		100.0%	100.0%
Mean		€20.63	€20.65
Median		€16.62	€16.23

Table A2: Distribution of Hourly Earnings by Selected Pay Thresholds, Ireland 2013 and 2014 (% employees)

Threshold	2013		2014	
	% above	% below	% above	% below
€8.65	94.4%	5.5%	94.7%	5.3%
€10.00	86.2%	13.8%	85.8%	14.2%
€11.45	74.3%	25.6%	73.6%	26.4%
€12.20	69.7%	30.3%	69.2%	30.8%

Table A3: The 11 items used to measure Deprivation in SILC 2014

Without heating at some stage in the last year;
Unable to afford a morning, afternoon or evening out in the last fortnight;
Unable to afford two pairs of strong shoes;
Unable to afford a roast once a week;
Unable to afford a meal with meat, chicken or fish every second day;
Unable to afford new (not second-hand) clothes;
Unable to afford a warm waterproof coat;
Unable to afford to keep the home adequately warm;
Unable to afford to replace any worn out furniture;
Unable to afford to have family or friends for a drink or meal once a month;
Unable to afford to buy presents for family or friends at least once a year.

RECENT NERI WORKING PAPERS

The following is a list of recent research working papers from the NERI. Papers are available to download by clicking on the links below or from the NERI website:

<http://www.nerinstitute.net/research/category/neriworkingpaperseries/>

Number	Title/Author(s)
37	Employees on the Minimum Wage in the Republic of Ireland –Micheál L. Collins
36	Modelling the Impact of an Increase in Low Pay in the Republic of Ireland – Niamh Holton and Micheál L. Collins
35	The Economic Implications of BREXIT for Northern Ireland – Paul Mac Flynn
34	Estimating the Revenue Yield from a Financial Transactions Tax for the Republic of Ireland – Micheál L. Collins
33	The Fiscal Implications of Demographic Change in the Health Sector – Paul Goldrick-Kelly
2015:	
32	Understanding the Euro Crisis: Causes and Fixes – Thomas A. McDonnell
31	Cultivating Long-Run Economic Growth in the Republic of Ireland – Thomas A. McDonnell
30	Incomes in Northern Ireland: What's driving the change – Paul Mac Flynn
29	Earnings and Low Pay in the Republic of Ireland: a profile and some policy issues – Micheál L. Collins
28	Internal Devaluation and Labour Market Trends during Ireland's Economic Crisis - Thomas A. McDonnell and Rory O'Farrell
27	A Profile of those on the Minimum Wage – Micheál L. Collins
25	Taxes and Income Related Taxes Since 2007 - Micheál L. Collins
24	A New Industrial Policy for Northern Ireland - Paul Mac Flynn
23	The Better is Yet to Come: a social vision and an economic strategy for Ireland in the 21st Century – Tom Healy
22	Outsourcing in the Public Sector: a value for money perspective – Aoife Ní Lochlainn and Micheál L. Collins
2014:	
21	Assessing Funding Models for Water Services Provision in Ireland - Thomas A. McDonnell
20	Modelling the Distributive Impact of Indirect Taxation Changes in the Republic of Ireland - Micheál L. Collins
19	The Distributive Effects of Recent VAT changes in the Republic of Ireland - Micheál L. Collins
18	Total Direct and Indirect Tax Contributions of Households in Ireland: Estimates and Policy Simulations - Micheál L. Collins
17	Hours and Earnings in the Northern Ireland Labour Market - Paul Mac Flynn
16	Pension Policy in Ireland: an evaluation – How we Might Better Achieve its Stated Aims – Eamon Murphy
15	An Overview of the Irish Labour Market – Rory O'Farrell
14	We Need to Talk About Higher Education – Austin Delaney and Tom Healy
13	The Impacts and Challenges of a Living Wage For Ireland – Micheál L. Collins
12	A Living Wage for Ireland: some considerations and initial estimates – Micheál L. Collins

For earlier NERI Working Papers see <http://www.nerinstitute.net/research>