Economic Crisis and the Restructuring of Wage Setting Mechanisms for Vulnerable Workers in Ireland

THOMAS TURNER*
University of Limerick

MICHELLE O'SULLIVAN University of Limerick

Abstract: The Memorandum of Understanding negotiated with the EU/IMF in 2010 committed the government to reform the Joint Labour Committee (JLC) system covering low pay workers. A significant rationale for the proposed reform was the claim that JLC regulations unduly added to the cost of labour regarding overtime rates and particularly premiums for Sunday working. Using the 2007 National Employment Survey this paper examines the structure of earnings of workers likely to be covered by the JLC system and the extent to which low pay workers benefit from overtime earnings, shift allowances and bonuses in the private sector. The evidence does not support the argument that overtime payments including Sunday premiums in sectors covered by JLCs represent a major cost to employers in general. Few workers actually benefit from the JLC overtime rates. We argue that the removal of a floor on conditions of employment provided by the JLCs may not always be in the interests of the employer but may create a race to the bottom in low pay sectors of the economy.

I INTRODUCTION

While the economic crisis has severely affected the economic fortunes of countries globally, many have not responded with a significant reduction in their minimum wage. In fact, Schulten (2010) reports that none of the 23 countries he examined cut its minimum wages in nominal terms in 2009. Five EU countries froze their minimum wage and a majority had an increase in

E-mail addresses: tom.turner@ul.ie and michelle.osullivan@ul.ie

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minimum wages in real terms (Schulten, 2010). Most EU countries have a national minimum wage while some have sectoral or occupational minimum wages such as Austria, Denmark and Germany (Funk and Lesch, 2005). Ireland is somewhat unusual in having multiple minimum wage setting mechanisms: a statutory National Minimum Wage (NMW), some industry level minimum wage regulation set through voluntary collective bargaining in the form of Joint Industrial Councils (JICs) and statutory minimum wage regulation for vulnerable workers through Joint Labour Committees (JLCs). JLCs are tripartite statutory bodies with employer and union representatives and an independent chair. They propose minimum wage rates and conditions for workers which are made legally binding for areas where collective bargaining is poorly developed and pay relatively low such as in hotels, catering, security, contract cleaning and retail. JLCs have been the subject of significant public policy attention in the recession. As part of a financial aid package Ireland received in 2010 from the European Union and the International Monetary Fund, the government committed to reforming the NMW and carrying out an independent review of the JLC system ostensibly to increase flexibility and facilitate re-adjustment in the labour market. The then Fianna Fáil government reduced the NMW by €1 in February 2011 but this cut was reversed by the subsequent Fine Gael/Labour Party government in July 2011.

The debate on the JLC system has focused on either the elimination or structural reform of the system. Employers favouring the termination of the entire JLC system argue that it is "antiquated" in the modern economy and is both irrelevant and excessive given the protection already provided for low pay workers though the NMW and employment legislation (O'Sullivan and Wallace, 2011). Ireland's largest employer body, the Irish Business and Employers Confederation (IBEC) recommended the abolition of the JLC system in their submission to the Independent Review of Employment Regulation Orders (EROs) and Registered Employment Agreement (REA) Wage Setting Mechanisms as did other employer groups such as the Irish Tourist Industry Confederation and the Irish Farmers Association.² Calls

¹A second challenge to the JLC system has come from a group of fast food employers, who, in 2007, initiated a legal challenge against the JLC which sets minimum wages for the catering sector. In July 2011 the High Court found in favour of the employers' argument that the power of JLCs to set legally binding minimum pay and conditions is contrary to the Irish Constitution. This judgment has rendered the JLC unconstitutional and leaves the whole system in a state of "limbo" until Government action is taken.

² Not all employers favour abolition of the JLC system (O'Sullivan and Wallace, 2011). For example, some employer bodies in the security industry support the retention of the security JLC as they see it as measure to professionalise the industry (Higgins, 2011a). In addition, IBEC has supported the JIC/REA wage setting system of voluntary industry-level collective bargaining (Higgins, 2011b).

for reform rather than abolition of the JLC system have come from trade unions and from the Independent Review of the JLC system commissioned by the Government. Underlying much of the criticism of JLCs is the assumption that the conditions of employment they set unduly adds to the cost of labour particularly in domestic employments. Yet there is little available evidence about the extent of payments such as Sunday premiums, shift allowance and overtime payments to workers covered by JLCs. Apart from anecdotal stories from employers and individual employees regarding the cost and significance of such extras on top of basic earnings, there has been a general absence of any systematic and detailed empirical data. This paper addresses this lacuna by examining the structure of earnings of low paid workers and the extent to which low pay workers benefit from overtime earnings, shift allowances and bonuses. We also compare the rates of overtime, shift allowances and bonuses for workers likely covered by JLC rates with other higher earning workers in the private sector. The findings are based on the 2007 National Employment Survey (NES) covering over 40,000 employees in the private sector.

II MINIMUM WAGES: THEORY AND PRACTICE

A basic premise of mainstream economics is that any mandatory system that sets a price floor such as standard wage rates, minimum wage rates and additional costs like premiums and overtime rates above the equilibrium or market clearing wage should cause unemployment (McConnell et al., 2008). This assumes that the higher the costs of labour, the fewer hours an employer will demand of an employee. As labour costs rise it becomes more expensive for firms to hire workers and so firms hire fewer workers (or hire them for fewer hours). In addition, as wages are set above the equilibrium price, more labour will be willing to be provided by workers than will be demanded by employers, creating a surplus of labour and increased unemployment (Ehrenberg and Smith, 1994). Essentially this model predicts that raising the equilibrium wage through setting artificial wage rates and conditions of employment helps workers who are covered by such mechanisms and hurts people who are seeking employment or lose their jobs because firms cut back on employment. In more sophisticated models that allow for more complex labour markets, the prediction of a reduction in labour demand "applies unambiguously" only to less skilled workers whose wages are directly raised by a minimum wage (Neumark and Wascher, 2008, p. 51). Conversely a minimum wage can be expected to increase the employment of more skilled workers who are good substitutes for minimum wage workers.

A number of studies on minimum wages produced results in line with this economic argument though the impact is generally relatively modest (Kim and Taylor, 1995; Neumark and Wascher, 2008). Nevertheless, this perspective provides much of the substantive arguments for the abolition of minimum wage mechanisms. In the UK, prior to the abolition of the Wages Councils in 1993, the Employment Department described them as a system that "... imposes a burden of bureaucracy on employers, distorts the labour market and destroys jobs" (Clement, 1993). In a similar vein, IBEC claimed that JLCs were putting firms in jeopardy, pushed up costs and prices and called for greater wage flexibility to protect jobs and increase working hours (Sweeney and O'Brien, 2011; Wall, 2011a). Indeed the details for the reform of JLCs proposed by the Minister for Jobs, Enterprise and Innovation, Richard Bruton, are based on the assumption that changes to the JLC system will create employment opportunities (Wall, 2011b).

However, the employment effects of a minimum wage are disputed both theoretically and empirically in labour economics (Kaufman, 2009, p. 308; Bhaskar and To, 1999). A substantial literature questions the presumed negative employment effects of minimum wages predicted by the orthodox economic view. It has been argued that assumptions such as equality of market power between buyers and sellers of labour, search costs, information costs, imperfect mobility and the "personal" element of labour markets are unrealistic. Numerous studies show that minimum wages have had little negative impact on employment or competitiveness and have even resulted in positive employment effects (Bröckerman and Uusitalo, 2009; Card and Kreuger, 1995) or have led to both positive and negative employment effects (Fang and Gunderson, 2009). In Ireland, the introduction of a NMW in Ireland in 2000 appears to have had little impact on employment levels or competitiveness (O'Neill et al., 2006). In the UK, the evidence is that minimum wages, set either through the former Wages Councils or the NMW, had little effect on employment (LPC, 2003; Metcalf, 2008). Dickens et al. (1999, p. 20) found "strong evidence" that the minimum wages set by British Wage Councils compressed the distribution of earnings and no evidence of reduced employment in the period 1975 to 1992.

Yet, despite the mainstream economic perspective many employers are willing to pay wages above the market equilibrium rate. The incomplete and open ended nature of the employment contract in a market society in relation to effort levels and productivity creates significant possibilities in the labour process (D'Art and Turner, 2006). Even after its purchase, labour power unlike other factors of production remains a potential not a realised asset (Storey, 1980, p. 57). No employment contract can specify precisely in advance the exact amount of effort to be expended (Edwards, 1986, p. 32). This

indeterminate nature of the contract provides an efficiency rationale for employers to raise wages and working conditions above the equilibrium rate to avoid these problems and incentivise workers to go beyond contract (Fox, 1974; Edwards, 1986; Thompson, 2004, p. 135). Moreover workers often acquire skills and knowledge of an idiosyncratic nature that are specific to the firm pertaining to equipment, processes and communications that act to ensure efficient production in the firm (Williamson et al., 1975). Efficiency wages can minimise labour turnover as workers are less likely to quit reducing the cost of replacement including search, recruitment and training costs (Akerlof and Yellen, 1990). Consequently it may be in the interests of employers either individually or in the aggregate to offer wages and conditions above the equilibrium or competitive level to their employees because it increases their productivity and efficiency (Akerlof and Yellen, 1990; Gregory and Romer, 1991). Indeed the evidence from a large survey of Irish firms indicated that they avoided imposing wage cuts or wage freezes in order to maintain worker effort levels and morale and to retain the best employees (Keeney and Lawless, 2010). Finally, employers may pay wages above the market clearing rate due to sociological factors such as norms of fairness, reciprocity, custom and practice, commitment and firm loyalty. Experimental evidence supports the relationship between increased levels of reciprocity, effort levels and effort higher wages and consequent large efficiency gains (Fehr et al., 1997; Berg et al., 1995).

However, this "efficiency-wage theory" may be less evident in the low-wage sector in the absence of minimum wages as employers become "... trapped in a 'productive system' that competes on low cost rather than quality" (McLaughlin, 2009, p. 329). In this scenario, good employers will be driven out of the market creating a race to the bottom not just for workers but also for consumers in terms of the quality of goods and services delivered. The concern over the practice of undercutting was famously raised by Winston Churchill in the early 1900s and was one of the reasons for the introduction of selective minimum wage protection in the UK and Ireland in the form of the trades boards – the predecessor to the JLC system. It is expected then than statutory minimum wages can encourage employers to invest in technology and training to increase in productivity (McLaughlin, 2009). The ability of minimum wages to produce more efficient firms has long been an argument of minimum wage proponents (Webb and Webb, 1909). Even if minimum wages led to some negative employment effects, this was viewed as a necessary cost as it was in the interests of society to have more efficient firms (Deakin and Green, 2009). Prior to the introduction of the NMW in the UK, the Low Pay Commission (1998, p. 15) pointed to the potential role the NMW could play in boosting employee commitment and investment in training. However Grimshaw and Green (2006) note that there have been negligible results in regard to training investment.

Another societal benefit of minimum wage mechanisms is to reduce income inequality by compressing wage differentials at least in the lower part of the income range (Lee, 1999). A further likely effect is to increase the opportunity cost of not working and lessen the attraction of social welfare benefits. Wage compression was a central policy of the Swedish economic model from the late 1930s and generated the most egalitarian distribution of wages and salaries in the world (Moene and Wallerstein, 2006). Wage compression directly encouraged the movement of capital from less productive to more productive activities and over time the gains in efficiency were substantial (Hibbs and Locking, 2000).

III CHALLENGES TO THE JOINT LABOUR COMMITTEE SYSTEM

The trades boards were introduced in Ireland under the Trade Boards Act 1909 and changed to Joint Labour Committees in 1946 with wider powers to set minimum conditions of employment and pay rates other than basic pay. JLCs propose a set of minimum pay and conditions which are drafted into an Employment Regulation Order (ERO) by the Labour Court, and become law when promulgated by the Minister for Jobs, Enterprise and Innovation. However, the terms and conditions set in EROs are legally binding on all employments defined by them. Enforcement is through the labour inspectorate of the National Employment Rights Authority and employers may be prosecuted in the civil courts for breaches of an ERO. The majority of minimum pay rates set by JLCs are within 10 per cent over and above the NMW (O'Sullivan and Wallace, 2011). The JLC system was retained when the NMW was introduced in 2000 and a debate on their pay rates has only arisen in recent years. While the legal case taken by the fast food employers against a JLC centred on the constitutionality of their powers, the trigger for the case was the dissatisfaction amongst employers over the overtime pay rates set by JLCs (O'Sullivan and Royle, 2009). Employers have argued that JLC overtime rates, and the Sunday premium rates in particular, are excessive and costing jobs. Improved enforcement of JLC pay rates in the late 2000s led to high levels of non-compliance with JLC regulations being discovered in the catering industry and employers were becoming increasingly liable to criminal prosecution and payment of large sums of money for underpaid wages (O'Sullivan and Royle, 2009). Employers' concerns were echoed more recently when the Department of Jobs, Enterprise and Innovation expressed concerns regarding the major cost differences between EROs and NMW rates (DJEI,

2011a). The "greatest differences" arose, it argued, from additional costs such as the power of JLCs to set minimum overtime rates including premium pay for Sunday and unsocial hours rates (O'Sullivan and Wallace, 2011). Despite employer arguments, the independent review of the JLC system commissioned on foot of the IMF/EU Memorandum of Understanding concluded that the basic framework of the current JLC system should be retained subject to a "radical overhaul" to make it more responsive to changing economic circumstances and labour market conditions (Duffy and Walsh, 2011, p. 2). The culmination of the developments (the legal case, IMF/EU deal and independent review) of the last two years has been a set of proposals on the future of the JLC system by the Minister for the Department of Jobs, Enterprise and Innovation, published in July 2011. The Minister has proposed to retain the JLC system but remove its powers to set Sunday premium pay or any other conditions covered by existing legislation and the standardisation of benefits in the nature of pay, including overtime (DJEI, 2011b). In proposing minimum pay rates, JLCs will now have to consider factors such as competitiveness, average hourly rates set in comparable sectors in Ireland's main trading partners and employment rates – factors which JLCs previously did not have to incorporate in decision making. Thus, while JLCs have been retained, the Minister has responded to employer arguments regarding Sunday premium. In the absence of objective data to date, the following sections examine the proportion of employee earnings that are accounted for by overtime and other additional earnings.

IV DATA AND MEASURES

The analysis in the paper is based on the National Employment Survey (NES) carried out by the Central Statistics Office (CSO) in February 2008 with the reference month for data being October 2007. The CSO has undertaken more recent NES's but the 2007 NES was the only data base that CSO released at the time of commencing the study of JLCs and, in any case, there appears to be no theoretical or empirical rationale to expect significantly different results from either the 2008 or 2009 surveys. The NES covers all sectors of the economy and replaces the Structure of Earnings Survey which was last carried out in 1996. The purpose of the NES is to provide information on the distribution of individual employee earnings and on the factors which influence earnings levels. It allows results to be broken down by sector, occupation, age, sex, educational attainment as well as many other individual employee circumstances. Participating employers are requested to supply a sample of employee names. The survey is composed of two parts: the employer

is required to complete a questionnaire with basic organisational details and practices and certain payroll-type details for the sample of employees. These details relate to gross earnings including overtime and shift allowances in a pay period together with hours worked in that period. An employee questionnaire is completed separately by each of the employees in the sample chosen. The measures used here are sourced from the combined matching in one database of the employer and employee surveys.

The dependent variables in this study come from the employer survey response dealing with earnings, weekly hours worked, overtime hours, shift allowances and bonuses for the sample of employees chosen. Our critical dependent measure is earnings per hour. While earnings per week is also available we believe that earnings per hour is a more appropriate measure given the extent of part-time and short time working among low pay workers. Average hourly earnings are provided in the database by the CSO and are derived by dividing estimates of the gross monthly earnings by estimates of the total hours paid in the month at the level of the individual employee. In total 9,002 enterprises were sampled and 4,395 enterprises responded - a response rate of 49 per cent while 72,712 employees were sampled and 60,022 completed the questionnaire – a response rate of 83 per cent. Approximately 25 per cent (15,161) of respondents worked in the public sector and 75 per cent (44,861) in the private sector. To ensure that the NES is representative of the national labour force, a comparison is made with the National Quarterly Household Survey (CSO, Standard Report on Methods and Quality for NES)³ and a survey weight is provided by CSO that allows the NES to be grossed up to the employed labour force of approximately 1.7 million employees.

Using the accepted definition of low pay work as two thirds of median hourly earnings, workers earning ≤ 10.86 or less can be categorised as low pay workers (median hourly earnings are ≤ 16.29). Based on this hourly rate, 19.5 per cent (335,067) of all employees can be classed as low pay workers. Since the private sector accounts for 97 per cent of all low pay workers, the analysis in this paper is confined to private sector workers. In the private sector 25 per cent of workers (323,912) are in the low pay category, that is, with hourly earnings at or below ≤ 10.86 . As there are no accurate data available on the numbers of workers covered by JLC Employment Regulation Orders, our task is to estimate the proportion of workers in the low pay category who are likely to be covered by JLCs. Based on a selection of hourly JLC rates in 2007,4 we

³ see www.cso.ie/surveysandmethodologies/surveys/.../nes_quality_report.pdf

⁴ This range is based on the hourly rates from the following JLCs: Aerated Waters; Agri; Cleaning exc Dub; Cleaning Dub; Handkerchief; Security; Tailoring; Women's Clothing; Shirt making; Provender Milling; Retail; Hotels; Catering Dublin; Catering Sept 07. We have omitted The Law Clerks hourly rates and Hairdressing rates as the former at €13.13 is an outlier and the latter at €6.85 is well below the NMW rate.

estimate a range from the mean of these rates plus two standard deviations – this covers 95 per cent of workers likely to fall within a range of hourly earnings from ≤ 8.23 to $\leq 9.68.^5$ As Table 1 indicates, 52 per cent (168,092) of low pay workers fall within this JLC range. This figure compares relatively closely to Duffy and Walsh's (2011, p. 25) estimate of total employment between 150,000 and 205,000 in the JLC sectors in 2009 and the National Minimum Wage Commission (1998) estimate of 162,000 covered by the JLC system. It is possible that this range underestimates the number of workers covered by the JLC range proposed here. It may be the case that a proportion of those earning less than €8.23 per hour but this is likely to be small as this rate falls below the legal NMW rate of €8.65 from July in 2007. A more likely source of error in our estimated range is workers on hourly earnings between €9.68 and €10.86. The average JLC rate in our estimate is approximately 4 per cent above the NMW compared to Duffy and Walsh's (2011, p. 42) estimate of a positive differential of about 10 per cent. However, the method used to calculate the likely range covered by JLCs is we believe reasonably sound with a relatively low error margin and represents a best estimate. Much of the following analysis compares workers covered by the JLC range with all other workers in the private sector but exclude workers with hourly earnings less than ≤ 8.23 (32,666).

	Percentage of Low Paid in Private Sector (%)	Percentage of Private Sector (%)	N
Less than €8.23	10	2.5	32,666
JLC: €8.23 to €9.68	52	13	168,092
€9.69 to €10.86	38	9.5	123,154
N	100	25	323,912

Table 1: Hourly Low Pay Earnings and the JLC Range

Other measures derived from the employer survey are the hours worked and number of overtime hours per week and the value of weekly shift allowances and bonuses. In addition, firm size and industrial sector are sourced from the employer survey. While the employer survey does not seek specific details on the payment of Sunday premiums to workers, such a

⁵ Workers in this range and outside the range may also have their wages regulated by the NMW or the minimum wages set by REAs, though the latter generally do not regulate low paying employments.

payment is necessarily returned either in the form of overtime hours or as a shift allowance payment. Sunday premiums refer to extra payments above the basic rate of pay and are usually calculated as overtime hours using a formula such as time and a half or double time. Since *all* extra payments to employees above the basic pay including overtime, shift allowances and bonuses are provided by the employer for each employee surveyed, Sunday premiums are then captured in the data provided to CSO. The variables included from the employee survey are age; gender; educational level; occupation; part-time or fulltime employment; nationality and union membership.

V RESULTS

As Table 2 indicates women make up 63 per cent of workers in the JLC range despite being less than half (44 per cent) of the employed labour force and account for 41 per cent of employees earning above the JLC range. There is a clear relationship between levels of education and probability of being covered by the JLC range. Employees with primary and secondary level education are over-represented while those with a third level qualification are under-represented. Not surprisingly perhaps, young workers under 25 years, service/manual workers, part-time workers and non-nationals are all more likely to be covered by JLCs. Workers under the age of 25 account for 43 per cent of those covered by the JLC range but only 19 per cent of employees in the labour force. Service/manual workers are more likely to be covered by JLCs than professional/managerial workers and make up 75 per cent of all workers covered. Part-time workers are over three times more likely to be covered by a JLC than full-time workers, making up 43 per cent of those covered by JLCs but only 18 per cent of the labour force. Non-nationals in general are almost twice as likely to be in the JLC range and account for 25 per cent of workers covered.

Turning to firm level characteristics, workers in small firms (under 50) are more likely to be in the JLC range but the difference with larger firms while statistically significant is relatively modest. Workers' length of service is significant — workers with less than 5 years service are more likely to be covered by a JLC accounting for 72 per cent of all workers in the JLC range and 52 per cent of the employed labour force. Non-union workers, those working in the hotels/restaurant and whole/retail sectors are also more likely to be covered by the JLC wage range.

Table 3 compares hours worked, overtime hours and earnings and shift allowances between workers in the JLC range and those above these rates. There is a statistically significant difference (using a T-Test) between the two groups on all measures. On average workers on the JLC range work fewer

Table 2: Characteristics of Workers with Hourly Earnings in the Private Sector (Each Separate Measure Sums to 100 Per Cent)

Individual Characteristics	Distribution of Employees Covered by the JLC Range	Distribution of Employees Above The JLC Range	Distribution of Employees in the Labour Force
	%	%	%
Women	63	41	44
Men	37	59	56
Education	J.	30	
Primary	13	9	10
Lower Secondary	17	14	15
Upper Secondary	40	31	32
Technical/Diploma	19	24	23
Degree/Higher	11	22	20
Age	11	22	20
Under 25 Years	43	14	19
25 to 35 Years	$\frac{43}{24}$	38	35
36 to 45 Years	15	23	$\frac{35}{22}$
Over 46 Years	18	$\frac{25}{25}$	23
	16	20	۷5
Occupation Prof/Managerial	6	29	26
WC/skilled	19	29 30	26 29
Service/Manual	19 75		$\frac{29}{45}$
	79	41	40
Status	40	1 4	10
Part-time	43	14	18
Full-time	57	86	82
Nationality	25	1.4	15
Non-national	25 75	14	15
National	75	86	85
Firm level	99	10	10
Under 10	22	18	19
11 to 50	37	31	32
51 to 200	19	21	20
+200	23	30	29
Service	2.2		4.0
Under 2 Years	23	11	13
2 to 5 Years	49	38	39
5 to 15 Years	$\frac{21}{2}$	34	32
+15 yrs	7	17	16
Union			
Non-member	86	73	75
Member	14	27	25
Sector		_	
Industry	16	37	34
Wholesale/retail	33	19	20
Hotels-restaurants	21	7	9
Finance/Administratio		22	21
Transport/Other	15	16	15

hours per week, fewer overtime hours and these overtime hours amount to a smaller proportion of their hours worked per week. More starkly the mean overtime earnings per week for workers covered by the JLCs is ≤ 6 compared to ≤ 26 for those on earnings above the JLC range. A similar pattern is evident in the payment of weekly shift allowances and bonuses. However, employee responses to a question on shift work indicate that workers in the JLC range are significantly more likely to report working shifts; 31 per cent compared to 24 per cent of those above the range. To test for any variations across industrial sectors four distinct sectors were analysed. While there is some variation it is relatively small (see Appendix).

Table 3: Hours, Overtime and Shift Allowancesa Above and Below JLC Hourly Earnings

	Hourly earnings	Mean	St.Dev.	T-Test
Hours Worked Per Week	JLC range	29.87	13.2	***
	Above JLC range	35.86	10.0	
Number of Overtime	JLC range	0.5	1.9	***
Hours Per Week	Above JLC range	1.1	2.9	
Overtime Hours as Percentage	JLC range	1.6%	5.9	***
of hours worked weekly	Above JLC range	2.6%	6.9	
Weekly Overtime Earnings	JLC range	€6.20	21.3	***
	Above JLC range	€25.70	73.4	
Shift Allowance Per Week	JLC range	€0.70	6.6	***
	Above JLC range	€10.50	45.0	
Bonus Earned Per Week	JLC range	€0.90	8.0	***
	Above JLC range	€21.3	212.7	
Work A Shift?	JLC range	31.4%	0.5	***
	Above JLC range	24.2%	0.4	

N = 168,092 (JLC range) and 111,8692 (Above JLC range).

^{*} P<0.05 ** P<0.01 ***P<0.001

^aNote on the above measures: The employer questionnaire sought information on the specific employees surveyed in each establishment regarding hours worked, overtime hours, earnings for overtime, shift allowances and bonuses for a reference period focused around the month of October 2007. Employers were allowed to choose from four time periods: 4 weeks, a month, 5 weeks and 6 weeks. Each response was coded accordingly for every employee case. We have coded a month as equivalent to a reference period of 4 weeks. The final measures are reduced to a weekly basis in Table 3 by dividing the relevant measure such as number of overtime hours by the particular reference period used by the employer.

⁶ Using the Statistics in Income and Living Conditions for 2007-2009 (SILC) survey, Duffy and Walsh (2011, p. 41) argued that it was "difficult to believe that workers covered by EROs and REAs earn substantial premiums over similar workers in uncovered jobs" nor did they find any indication of differences in the likelihood that ERO/REA workers will be paid more overtime compared to similar workers in similar jobs across other sectors.

In Table 4 we examine the pattern of hours and earnings using the more significant individual and firm level characteristics for workers in the JLC hourly earnings range. Within this group men on average work longer hours with a mean of 34 compared to 28 for women. Workers in the 25 to 45 year age group, non-nationals, full-time workers, union members and workers in industry tend to work more hours. A total of 15 per cent of workers in the JLC range worked more than 40 hours a week and 6 per cent worked over 47 hours.⁷

The mean number of overtime hours worked per week is higher among men, younger workers, non-nationals, full-time workers, the wholesale retail sector and particularly union members. Yet among these workers the mean level of overtime hours worked per week is still relatively low and only in the case of union members is it above one hour on average per week. This is reflected in the low mean weekly earnings from overtime ranging from a high of $\in 14$ for union members to $\in 4$ for part-time workers. Shift allowances per week and bonuses for workers covered by the JLC range are also quite modest. In the former case, mean weekly shift allowances range from $\in 1.8$ in the transport industry to 20 cent in the wholesale/retain sector. Shift allowances and mean bonuses are slightly higher on average for women, non-nationals and full-time workers.

Overall table 4 indicates that workers in the JLC range on average work little overtime and that mean weekly earnings from overtime, shift allowances and bonuses are extremely modest. However, the trends reported here are based on mean figures for the various measures and may disguise the importance of such payments for specific groups of workers such as nonnationals. Even so, as Table 5 indicates, the proportion of workers covered by the JLC range with overtime earnings, shift allowances and bonuses earned is relatively small. Indeed up to 86 per cent of workers in the JLC range seemingly do not work any overtime hours (as reported in the employer survey) with only 4 per cent working over five hours per week. Only 3 per cent of workers covered by the JLC range receive a shift allowance or a bonus payment. A majority of those who do receive a shift allowance receive a weekly total of €15 or less. Since over 50 per cent of workers covered by the JLC range are employed in either the hotel/restaurant or the whole sale/retail sectors, it may be the case that overtime hours or shift allowances are more heavily concentrated in these sectors than finance/administration, transport and

⁷ The submission of the Department of Jobs, Enterprise and Innovation to the Independent Review of EROs sets out examples of differences in pay received by workers covered by EROs and those covered by the NMW based on a 48 hour week that includes rates for overtime, Sundays and unsocial hours. Yet only a minority of workers (6 per cent) covered by JLC rates work over 47 hours.

Table 4: Selected Characteristics of Workers Covered by JLC Rates by Mean Hours, Overtime and Shift Allowances (N=168,092: Means Reported for All Measures)

	Hours Worked Per Week	No. of Overtime Hours Per Week	Overtime Earnings Per Week	Shift Allowance Per Week	Bonus Earned Per Week
Women	28	0.5	€5.0	€0.8	€1.0
Men	34	0.7	€8.4	€0.6	€0.7
Age					
Under 25 Years	28	0.6	€6.1	€0.6	€1.0
25 to 35 Years	34	0.7	€8.4	€0.8	€1.4
36 to 45 Years	32	0.4	€5.4	€1.1	€0.5
Over 46 Years	28	0.4	€4.2	€0.4	€0.3
Nationality					
Non-national	35	0.8	€10.1	€1.2	€1.7
National	28	0.4	€4.9	€0.5	€0.6
Status					
Part-time	20	0.4	€3.9	€0.5	€0.3
Full-time	37	0.7	€7.9	€0.9	€1.3
Union					
Non-member	29	0.5	€4.9	€0.7	€0.9
Member	33	1.1	€14.0	€0.8	€0.6
Sector					
Industry	36	0.7	€9.9	€0.7	€0.7
Wholesale/Retail	29	0.8	€9.3	€0.2	€0.5
Hotels-restaurant	28	0.2	€2.7	€0.7	€0.1
Finance/Administration	n 25	0.2	€2.6	€0.6	€0.6
Transport/Other	32	0.5	€4.1	€1.8	€3.3

industry. The evidence indicates that workers in the hotel/restaurant sector are even less likely to work overtime and receive shift allowances or bonuses. Alternatively workers in the wholesale/retail sector are more likely to work overtime (22 per cent) though only 5 per cent work over five hours overtime. Those in wholesale/retail are less likely to get a shift allowance or bonus.

Mean overtime earnings account for 3 per cent of weekly earnings among workers in the JLC range while shift allowances and bonuses make up less than 1 per cent (Table 6). Such payments are also very low in the hotel/restaurant and wholesale/retail sectors. These extra earnings make up a greater proportion of weekly earnings for workers on earnings above the JLC range. Overall Tables 5 and 6 show the relative modest levels of overtime earnings and shift allowances both absolutely and as a proportion of weekly earnings particularly among workers covered by the JLC range.

	Above the JLC Range	In the JLC Range	Hotel/ Restaurant at the JLC Range	Wholesale/ Retail at the JLC Range
	%	%	%	%
Workers with any weekly overtime hours and earnings	21	14	6	22
Worker paid any shift allowance per week	9	3	5	3
Workers paid any bonus earnings per week	8	3	2	3

Table 5: Workers With Overtime, Bonuses and Shift Allowances

^{*} Mean overtime earnings are calculated as follows: weekly overtime earnings/(weekly earnings –overtime earnings). Similarly for shift allowances and bonuses.

Table 6: Overtime,	$Bonuses\ and$	$Shift\ Allowances$	as a Proportion of	
	Weekly	Earnings		

	Above the JLC Range	In the JLC Range	Hotel/ Restaurant at the JLC Range	JLC Range
	%	%	%	%
Mean overtime earnings as percentage of weekly earnings*	5	3	1	5
Mean shift allowances as percentage of weekly earnings	2	0	0.7	0.6
Mean bonus as percentage of weekly earnings	6	0.3	0.5	0.3

^{*} Mean overtime earnings are calculated as follows: weekly overtime earnings/(weekly earnings –overtime earnings). Similarly for shift allowances and bonuses.

The low proportion of workers receiving a shift allowance is somewhat surprising as 31 per cent of workers in the JLC range and 24 per cent of those above the range reported working shifts (Table 7). Altogether, using the grossing weight, 25 per cent (322,881) of workers in the private sector report

that they work shift work8 yet only 27 per cent of these appear to receive a shift allowance. For workers covered by the JLC range the figures are indeed stark with only 6 per cent who work shifts receiving a shift allowance compared to 31 per cent of workers earning above the JLC range (Table 7). It seems from these figures that the payment of a shift allowance is restricted to a small minority of low pay workers including those covered by JLC rates. How can we account for these results? It may be the case that employees misinterpret overtime hours as a form of shift work or that the "shift work" is only occasional and does not fit into the reference period of 4 to 6 weeks guiding the employers' responses. There is some evidence that employees conflate overtime hours and shift work as the overall weekly mean for all workers in the private sector who report working shift work is almost twice as high, 1.6 overtime hours compared to 0.8 hours for those not working shifts. Similarly for workers in the JLC range it is 0.8 overtime hours weekly compared to 0.4. Yet even allowing for some confusion in employee responses it is not likely to significantly change the above patterns.

NWorkers on Shift Workers on Shift Work Work ond Not and Receiving Receiving an an Allowance Allowance% % Above the JLC range 31 69 100% (270,166)At the JLC range 6 94 100% (52,715)Total N 27 73 100 (87,230)(235,651)(322,881)

Table 7: Shift Work and Shift Allowances

Where employers pay their workers a Sunday premium in the of form of extra pay – ranging from time and a third to double pay depending on the particular JLC ERO – it is bound to be reported by the employer either as

⁸ Respondents completing the employee survey are asked to tick the following question: "Are you required to do shift work?" No further information is provided. The term "shift work" is generally assumed to include any arrangement of daily working hours other than the standard daylight hours of 7/8am to 5/6pm. Thus, we can only assume that respondents interpret shift work as working hours outside of standard daytime hours in the range 7.00am to 6.00pm.

overtime hours or as a shift allowance. In any case the purpose of the financial details section of the NES employer survey is to capture all extra payments to employees in an establishment above basic hourly and weekly pay. From the data shown in Tables 3 to 7 only a minority of workers covered by JLCs seem to work any overtime hours and actual weekly earnings from overtime, shift allowances and bonuses appears quite negligible. Consequently, it is difficult to see how such payments to workers covered by the JLC range could be considered a significant cost to employers at least at the aggregate level. Undoubtedly, there may be examples of employments where such costs are not negligible but these are likely to be the exception rather than the rule. Similarly for many workers covered by the JLC rates, overtime rates, Sunday premiums, shift allowances and bonuses appear to be a chimera.

VI MULTIVARIATE ANALYSIS

Finally we examine the differences between workers covered by the JLC range and those above the range on a number of individual characteristics, workplace characteristics and working time. Multivariate analysis allows us to identify the impact or intensity of a particular measure while controlling for the likely effects of other measures. The dependent variable is "at and below the JLC". All the measures have been constructed to indicate the likelihood of being covered by the JLC range.

In Table 8 odds ratios are reported. Controlling for all measures, young workers are three times more likely to be covered by a JLC rate. Workers with no more than primary level education are twice as likely compared to those with post-secondary levels education to fall within the JLC range. Manual and routine service workers are six times more likely than managerial/professional to be in the JLC range while non-nationals and part-time workers are twice as likely. Similarly, low levels of employment service and being non-union are also associated with being covered by JLC rates. Workers in small firms and those employed in hotels/restaurants and whole/retail sectors are more likely to be covered by JLCs. Workers who receive no shift allowance are twice as likely to be in the JLC range even though such workers are twice as likely to work shifts while workers who receive no bonuses are three times more likely to be covered by a JLC. In the main these multivariate results tend to confirm the findings from our earlier descriptive tables.

Table 8: (Multivariate Analysis: Binary Logistic Regression. Odds Ratios (Exp(B)) Reported, Standard Errors in Parentheses). Dependent Variable: JLC Hourly Pay Rates: 1=At JLC Pay Range; 0=Above the JLC Pay Range

Individual Characteristics	
Females	1.9***
Under 25 years	2.9***
25 to 35 years	1.0ns
36 to 45 years	$0.9 \mathrm{ns}$
Reference group: Over 46 years	
None/primary education	2.1***
Secondary education	1.4***
Reference group: Higher education	
Manual/service	6.1***
White collar/skilled/technical	2.2***
Reference group: Manage/professional	
Non-nationals	2.1***
Part-time workers	2.1***
Workplace characteristics	
Under 10 employees	1.6***
11 to 100 employees	1.5***
Reference group: greater 100 employees	
Under 2 years' service	1.8***
2 to 5 years' service	1.4***
Reference group: Over 5 years	
Non-union workers	1.6***
Transport/others	$0.9 \mathrm{ns}$
Finance/administration	1.2*
Hotels/restaurants	1.9***
Wholesale/retail	1.4***
Reference group: Industry	
Working time	
Work no overtime hours	1.7***
No shift allowance	2.0***
Work shifts	1.3***
No bonuses	3.1***
Chi-sq	
9	6,296***
Nagelkerke pseudo R ²	0.3
N	39,018

^{*} P<0.05 ** P<0.01 ***P<0.001.

VII CONCLUSION

A significant rationale for the proposed reform of the JLCs focuses on those EROs that are claimed to unduly add to the cost of labour regarding overtime rates including premiums for Sunday working. The aim of this paper was to assess the evidence for the extent of such extra payments as Sunday premiums, shift allowance and overtime payments using the 2007 NES. Low pay workers covered by JLC rates are more likely to be female, less educated, part-time, under 25 years of age, non-nationals and work in manual or routine service type work. At firm level workers in the JLC range are less likely to be in a trade union, have low levels of employment service and work predominantly in the hotels/restaurant and whole/retail sectors.

There is a statistically significant difference between those covered by the JLC rates and workers above the JLC range regarding their work patterns. On average workers in the JLC range work fewer hours per week, fewer overtime hours and these overtime hours amount to a smaller proportion of their hours worked per week. Among the workers covered by JLC rates men, nonnationals, full-time workers, union members and workers in industry tend on average to work longer hours. The relationship between specific employee characteristics, working and payment patterns for workers covered by JLC rates noted in Tables 3 to 7 is generally confirmed in our multivariate analysis. When all measures are controlled for, young workers are three times more likely to be covered by a JLC rate, manual/service workers six times more likely and non-nationals and part-time workers twice as likely. Low employment service and being non-union are also associated with being covered by JLC rates. However, workers in the JLC range on average work a small number of overtime hours and earn relatively little from overtime, shift allowances and bonuses. Indeed overtime hours, overtime earnings, shift allowances and bonuses earned are confined to a small proportion of workers covered by the JLC range. Although up to 31 per cent of workers on JLC rates report working shift work only a minority of these receive any paid shift allowance. Low pay workers in particular are more likely to be in precarious employment that is uncertain and unpredictable (Kallenberg, 2008). However it seems for many in the private sector working time now extends beyond standard daytime hours with few receiving any compensation for working shifts.

Overall the evidence from the 2007 NES does not support the argument that extra payments in the form of overtime payments that include Sunday premiums, shift allowances or bonuses to workers covered by JLC EROs represent a major cost to employers in general. Indeed such payments are likely to have further declined in the aftermath of the financial and fiscal crisis

of 2008. Thus, it might be argued that few workers covered by JLCs actually benefit from the EROs covering Sunday work and overtime rates.

Nevertheless, for the few who do benefit the removal of these rights to basic working conditions likely represents a considerable diminution in their conditions of employment. Yet not all employers are likely to undercut existing arrangements and conditions at least not in the short term for existing employees. This reflects the thrust of the efficiency wage arguments that there are significant efficiency advantages motivating employers to pay wages and offer working conditions above minimum wage rates and conditions. Even so in a competitive market the removal of a floor on conditions of employment provided by the JLCs may act to promote those firms with lower labour costs and disadvantage firms who offer wages and working conditions above the minimum creating a race to the bottom in low pay sectors of the economy.

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- ⁹ For example, in the absence of EROs since the legal case on JLCs, employers and unions in the contract cleaning industry have negotiated an agreement and have sought to make it legally binding as a Registered Employment Agreement.

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APPENDIX

Mean Hours, Overtime and Shift Allowances Above and Below JLC Hourly

Earnings for Four Sectors (Data Weighted)

		All Sectors (Table 3 in Paper)	Manu- facturing	Wholesale/ Retail	Hotels/ Restaurants	Business Services
Hours worked p/wk	JLC range Above JLC range	29.87 2 35.86	33 39	29 34	27 32	22 35
Overtime hours p/wk	JLC range Above JLC range	0.5 e 1.1	0.36 2.0	$0.71 \\ 0.51$	$0.16 \\ 0.24$	$0.06 \\ 0.49$
Overtime hours as % of hours p/wk	JLC range Above JLC range	1.6% 2.6%	0.7% 4.4%		0.5% 0.7%	0.13% 1.1%
Overtime earnings p/wk	JLC range Above JLC range	€6.20 e €25.70	€3.9 €49.1	€5.9 €13.8	€1.96 €4.2	€0.75 €11.8
Shift allowance p/wk	JLC range Above JLC range	€0.70 e €10.50	€0 €33.4	€0.2 €1.6	€1.6 €2.3	€0.22 €3.7
Bonus earned p/wk	JLC range Above JLC range	€0.90 e €21.3	€0.2 €20	€0.5 €21	€0.06 €4.2	€0 €27.4
N	JLC range Above JLC range	4,466 e 39,643	115 9,053	1,303 7,505	605 1,889	145 7,180

Notes: Manufacturing sector JLC rate: €8.61 to €8.69 (range used in table: €8.59 to €8.8); Wholesale/retail sector JLC range: €8.45 to €9.59; Hotels and restaurants sector JLC range: €8.36 to €9.44; Business services sector JLC rate: €9.05 (range used in table: €9.0 to €9.1).