

INTERNATIONAL Living hours under pressure: flexibility loopholes in the Danish IR-model

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Abstract

Purpose – The purpose of this paper is to investigate the effect of part-time work on absolute wages. The empirical focus is wages and working hours in three selected sectors within private services in the Danish labour market – industrial cleaning, retail, hotels and restaurants – and their agreement-based regulation of working time and wages. Theoretically, this analysis is inspired by the concept of living hours, which addresses the interaction between working hours and living wages, but adds a new layer to the concept in that the authors also consider the importance of working time regulations for securing a living wage.

Design/methodology/approach – The paper builds on desk research of collective agreements and analysis of monthly administrative register data on wages and working hours of Danish employees from the period 2008-2014.

Findings – This analysis shows that the de facto hourly wages have increased since the global financial crisis in all three sectors. This is in accordance with increasing minimum wage levels in the sector-level agreements. The majority of workers in all three sectors work part-time. Marginal part-timers – 15 hours or less per week – make up the largest group of workers. The de facto hourly wage for part-timers, including marginal part-timers, is relatively close to the sector average. However, the yearly job-related income is much lower for part-time than for full-time workers and much lower than the poverty threshold. Whereas the collective agreement in industrial cleaning includes a minimum floor of 15 weekly working hours – this is not the case in retail, hotels and restaurants. This creates a loophole in the latter two sectors that can be exploited by employers to gain wage flexibility through part-time work.

Originality/value – The living wage literature usually focusses on hourly wages (including minimum wages via collective agreements or legislation). This analysis demonstrates that studies of low-wage work must include the number of working hours and working time regulations, as this aspect can have a dramatic influence on absolute wages – even in cases of hourly wages at relatively high levels. Part-time work and especially marginal part-time work can be associated with very low yearly income levels – even in cases like Denmark – if regulations do not include minimum working time floors. The authors suggest that future studies include the perspective of living hours to draw attention to the effect of low number of weekly hours on absolute income levels.

Keywords Living hours, Low-wage workers, Private services, The Danish IR-model, Working time regulation

Paper type Research paper

Introduction

The scholarly debate around living wages and minimum wages have regained momentum in the last few decades as western economies have witnessed a rapid growth in low-wage work, earnings inequalities, in-work poverty and contracts other than full-time employment, particularly in private services (Garnero *et al.*, 2014; Parker *et al.*, 2016). However, much of the literature focusses on Anglo-Saxon countries – primarily the UK and the USA, where the living



wage debates often are organised around various wage-indicators, particularly the effects of minimum wages and national wage-setting systems on employment (Manning, 2016), low-wage work (Bosch, 2009), earnings inequalities, including gender gaps (Rubery *et al.*, 2005) and businesses practices (Bell and Machin, 2016). Less researched is the situation in the Nordic countries and the importance of variables other than pay such as weekly working hours and working time regulations for securing living wages. Indeed, most living wage calculations are based on the assumption of full-time work, even if recent research emphasises that full-time employment is no guarantee for many workers (Anker, 2011; Warren, 2015).

Based on monthly administrative register data on all Danish employees from the period 2008-2014, this paper offers new insights into the effects of working time, including working time regulations, on annual earnings in low-wage private services such as industrial cleaning, retail, hotels and restaurants. We built on the concept of living hours (Ilsøe, 2016) since it considers not only the hourly wage, but also the number of weekly working hours as important when evaluating employees' ability to uphold living wage. However, similar to other living wage research, the national working time regulations tend to be overlooked by Ilsøe (2016), although it seems just as pivotal as national wage-setting systems regarding employees' ability to secure living wages. Most national working time regulations, besides setting a strict threshold for the maximum length of the working week, also encounter various regulations on work scheduling and distribution of working time, but rarely include a minimum threshold for working hours (Berg *et al.*, 2004; Seifert, 2005).

Our analysis demonstrates that although the Danish collective bargaining system ensures a certain wage floor – often above the minimum hourly wages elsewhere in Europe – (Grimshaw *et al.*, 2014); a growing share of Danish private service workers struggle to secure a yearly income above the poverty line – defined as less than 60 per cent of the national median of gross hourly wages (Bosch, 2009). Their short hours and marginal part-time employment often force such employees to hold multiple jobs; and although part-time work is often considered a strategy to facilitate work-life balance among mothers in particular (O'Reilly *et al.*, 2014), this rarely is the case in Danish private services. Unlike young people, Danish parents, including mothers, are less likely to work within retail, hotels and restaurants compared to elsewhere in the Danish labour market, and if they do, parents often hold full-time positions or part-time contracts of longer hours. The working time regulations and wage-setting systems seem pivotal as to the incidence of marginal part-time work and the number of young people within Danish private services. Unlike industrial cleaning, the sectoral agreements within retail, hotels and restaurants fail to secure a threshold for minimum weekly working hours and furthermore they differentiate wages according to age with the agreed hourly wages for young people being nearly half of their older co-workers. This appears to contribute to increased segmentation and polarisation within Danish private services. Employers seem to exploit the various loopholes within the IR-system to curb costs and secure flexibility by offering contracts of limited hours and replacing older workers for cheap young labour – employment practices also seen elsewhere in Europe (Walsh, 1990; Grimshaw *et al.*, 2014; Schulten, 2016). Therefore, our paper calls not only for adding working time and national working time regulations to the discussions on what constitutes a living wage. It also points to that even in highly regulated labour markets with generous collectively agreed wage floors like Denmark, wide sector variations exist, even within private services regarding employee's ability to accrue enough work hours to secure a sufficient income. This indicates that similar to wage-setting systems, working time regulations play a key role in determining living wages.

The next section briefly engages with contemporary literature on living wages with a specific focus on studies stressing the importance of working time and sectoral institutions for securing living wages. We then present the data sets and methods used before outlining

the key features of how wages and working conditions are regulated in Denmark. Thereafter, the effects of part-time work on earnings in the selected private services industries – industrial cleaning, retail, hotels and restaurants – are examined and compared to the rest of the private labour market in Denmark. Finally, we discuss the findings in relation to concepts of low-wage work used in studies of other western economies.

Securing a living wage in private services – a literature review

Distinct strands of literature have documented that industrial cleaning, retail, hotels and restaurants are highly labour intensive industries dominated by fierce price competition, and employers' needs for a highly flexible workforce to match demands (Walsh, 1990; Bosch, 2009; Kalleberg, 2011; Schulten, 2016). Studies also point to a deterioration of employment conditions with a rapid growth in contracts other than full-time employment and low-wage work – characterised by wages significantly below average wages on the labour market (Bosch, 2009; Larsen and Møiland, 2014). The risks of employees struggling to secure a living wage seem greater within the aforementioned sectors than elsewhere on the European labour markets, even if the concept of living wage is highly contested and often vary depending on the national context, the theoretical, the methodological and the empirical approach (Parker *et al.*, 2016; Anker, 2011). In this context, living wages are often defined as a country-specific measure, which calculates the hourly pay rate that a full-time employee needs to earn to support a family of four at the poverty line (Anker, 2006, 2011). However, such calculations tend to concentrate mainly on wage-setting indicators, particularly minimum wage levels and national wage-setting systems' importance for securing living wages (Grimshaw *et al.*, 2014). Variables other than pay such as weekly working hours and working time regulations are often ignored in such calculations as they typically are built around the notion of full-time work, although early living wage research and more recent studies, stress that full-time employment is no guarantee for many workers (Rubery, 2015; King and Rueda, 2008; Anker, 2011; Warren, 2015). Likewise, much working time literature concentrate on long work hours, whilst the effects of too "few hours" are less researched, even if it may have just as severe implications for the individual in the short and long term (Warren, 2015, p. 194).

Living hours

To encounter these shortcomings within the literature, we seek in this paper to build on the concept of living hours by Ilse (2016). The concept of living hours draws on the ideas by King and Rueda (2008) who argue that there exist two types of low-wage work; standard (open-ended full-time employment) and non-standard (part-time, temporary employment). Employers in a given national setting will often rely on one or the other type of low-wage work with countries such as the USA and the UK demonstrating a high incidence of standard cheap labour. By contrast, Nordic countries like Denmark display similar, or even higher levels of non-standard low-wage work in parts of the labour market such as private services work compared to the UK and the USA (Ilse, 2016, p. 43; King and Rueda, 2008). Therefore, the concept of living hours by Ilse (2016, p. 43) considers not only the hourly wage, but also the number of weekly working hours and suitable work schedule – i.e. unsocial work hours – as important when evaluating employees' ability to secure a living wage. In this context, although overlooked by Ilse (2016), the national working time regulations can be argued to play equally as an important role as national wage-setting systems in employees' ability to secure living wages. Most national working time regulations, besides setting a strict threshold for the maximum length of the working week, also encounter various regulations on work scheduling and distribution of working time, but often fail to include a minimum floor for the number of weekly working hours (Berg *et al.*, 2004; Seifert, 2005; Grimshaw *et al.*, 2014).

Institutional factors: working time and wage regulations

The living wage literature often deals with working time in relation to how minimum wages affect employment with some studies reporting of reduced earnings inequalities, particularly for part-timers and low-wage workers (Rubery *et al.*, 2005; Garnero *et al.*, 2014) and limited negative effects on employment (Manning, 2016). Others document that employers' adjust employment and business practices to counteract minimum wage increases by relying on contracts of limited hours (Schulten, 2016) casual employment (Arpaia *et al.*, 2017), outsourcing of services (Grimshaw *et al.*, 2014; Bell and Machin, 2016), cheaper young labour and migrants rather than older workers (Neumark and Wascher, 2006) and/or being less generous with aspects of the employment contract, which are open for interpretation such as fringe benefits and further training, etc. (Croucher and White, 2010). Such research suggests a close link between wages and working time. However, the impact of national working time regulations on living wages is rarely researched, but seems pivotal as such regulations may add another layer of institutionalised polarisation and segmentation on the labour market. Indeed, working time regulations may lead to some employees struggling to secure a living wage, particularly as working time – similar to wages – are regulated differently across European countries (Eichhorst, 2017; Eurofound, 2016; Grimshaw *et al.*, 2014).

The role of working time outcomes for employees' wages highly depends on the institutional settings for regulating working time. Eurofound (2016) identifies four types of national working time regimes based on the role of legislation, scope of collective bargaining and agreements, the decentralisation of bargaining powers to lower institutional levels and the importance of individual employers in determining working time standards. Denmark belongs to the so-called “negotiated working time regime”, where working time is primarily regulated through collective agreements, which can be further complemented by company-based bargaining, although legislation also sets the legal framework for working time negotiations (Eurofound, 2016). Therefore, the Danish institutional setting gives social partners considerable latitude to adjust working time standards in terms of the length, scheduling and distribution of working hours at sectoral and company levels. In fact, unlike most national wage-setting systems, including the Danish, which set strict wage floors for the hourly pay rate, most national working time regimes rarely guarantee a minimum number of weekly working hours (Grimshaw *et al.*, 2014; Garnero *et al.*, 2014). Ample research reveals an increased fragmentation of the work day with a rapid growth in marginal part-time work, zero-hour contracts, unsocial work hours, various forms of casual employment along with a rescheduling of hours to when workers are most productive. This indicates that employers often exploit the loopholes in existing working time regulations to curb costs and secure flexibility to match demands with the inherited trade-offs that workers struggle to accrue enough hours to secure a living wage (Warren, 2015; Cornick and Jacobs, 1996; Heyes *et al.*, 2017; Rubery, 2015; Campbell and Price, 2016; Katz and Krueger, 2016). In addition, numerous work-life balance studies envisage part-time work as a strategy facilitating employees', especially mothers' and students' ability to organise work around care-giving or study activities during periods of childrearing or active student life (O'Reilly and Fagan, 1998; Price *et al.*, 2011; Warren, 2004). In this context, the national working time regulations attribute to employees' possibilities to work reduced hours as they provide different leeway for flexible working that may consider the needs of both employers and employees. Part-time employment is often considered beneficial to both sides of industry in terms of facilitating work-life balance for employees (Warren, 2004), whilst securing flexibility and cost curbing for employers. However, the inherited trade-offs may entail increased risks of precariousness for employees and for employers involve less committed workers, high employee turnover and difficulties in attracting qualified staff (Walsh, 1990; Grugulis and Bozkurt, 2011; Price *et al.*, 2011). Therefore, working time

regulations, including weekly working hours, appear pivotal to secure a flexible workforce and living wages, particularly in countries, where employers and employees opt for part-time work for various reasons.

In sum, four main questions arise from this brief literature review:

- (1) How are weekly working hours regulated in the collective agreements covering industrial cleaning, retail, hotels and restaurants in the Danish labour market?
- (2) What are the effects of weekly working hours – marginal part-time work in particular – on annual income levels within industrial cleaning, retail, hotels and restaurants?
- (3) Do we see different employment practices across the three selected sectors as to the incidence of part-time work and its implications for service workers' annual income?
- (4) To what extent do working time regulations affect part-time workers' annual levels within private services in Denmark?

Methods and used data sets

Our strategy of analysis is twofold. First, we examine the regulation of wages and working hours in the sector-level agreements covering industrial cleaning, retail, hotels and restaurants. Here, we compare minimum hourly wages, wage supplements for unsocial hours and minimum floors of working hours. The second part of our analysis builds on Danish register data covering everyone in the Danish labour market with any form of official taxable income in a Danish company; as such, it represents the entire population of workers in Danish companies in the Danish labour market. Drawing on information from the tax filings of the individual employers, data provide information on individuals' employment relationships at the level of the individual workplace in terms of, e.g. length of employment, monthly income and monthly working hours as well as on demographic characteristics, etc. Administrative register data are ideal for analysing labour market-related research questions as they contain detailed information on every employment relationship, an individual has had each month. Employment in specific sectors is often calculated based solely on the primary job, the number of employment relationships is therefore often underestimated. This is especially the case in private services, as a comparatively large share of the employees in the sector due to the low number of working hours hold more than one job. We, therefore, include the variable multiple job holdings in our analysis.

We define, service sector employment using the NACE classification as employment relationships in retail trade (47.00-48.99), hotels and restaurants (55.00-56.99) and industrial cleaning (81.21-81.23).

Total labour market-related income in private services is measured as the total income related to the individual's job(s) in the specific sector.

Working hours' categories are defined using the average weekly working hours in industry job(s) in periods of employment which is measured as the total number of working hours in one or more jobs in the industry divided by the number of weeks worked.

Our strategy of analysis regarding the register data falls in four steps. First, we examine the development of the actual hourly wages since the crisis (2008-2014) in the three selected sectors compared to the private sector average. Second, we analyse the share of full-time (30+), part-time (16-30) and marginal part-time (0-15) workers in the selected industries in 2014. Third, we compare the actual hourly wage among full-time (30+), part-time (16-30) and marginal part-time (0-15) workers the three sectors in 2014. Finally, we calculate the yearly job-related income among full-time (30+), part-time (16-30) and marginal part-time (0-15) workers in the three sectors compared to the private sector

average. Finally, we compare our findings with the regulation of weekly working hours in retail, hotels and restaurants and cleaning to evaluate the effect of the regulations on working time practices and income levels.

Regulating low-wage work in Denmark: the Danish IR-system and collective agreements on wages and working time

The Danish retail, industrial cleaning, hotels and restaurant sectors differ in many respects from other parts of the Danish labour market, but share some commonalities with similar sectors in other European countries (Westergaard-Nielsen, 2008). The three sectors employ 18 per cent of the Danish workforce – most in retail – and are dominated by an overrepresentation of young people, women, migrants, low-skilled workers without any educational credentials and high levels of part-time work. The figures vary slightly across the three sectors, but are somewhat higher compared to the rest of the Danish labour market (Danish Statistics, 2017a). However, parents – both fathers and mothers – are less likely to take up employment within retail, hotels and restaurants compared to industrial cleaning and elsewhere in the Danish labour market (Danish Statistics, 2017a), indicating that the high incidence of part-time work in Danish private services may not necessarily be down to work-life balance concerns only.

Retail, industrial cleaning, hotels and restaurants are also highly labour intensive industries and are dominated by fierce price competition and small companies – notably self-employed and a few large players (Danish Statistics, 2017b). They also have a relatively high turnover among employees and companies and particularly industrial cleaning has witnessed an increased outsourcing of cleaning services to private contractors (DI, 2016).

The Danish collective bargaining model appears relatively weaker within private services as union densities, collective agreement coverage and shop steward presence are lower than in other sectors (Toubøl *et al.*, 2015; Larsen *et al.*, 2010). However, similar to other parts of the Danish labour market, wages and working conditions are regulated primarily by collective agreements signed by social partners at sectoral and company levels within private services. In areas of private services without collective agreement coverage or Danish labour law, wage and working conditions are regulated by the individual arrangements and practices of the private company and may not necessarily offer similar wage and working conditions as outlined in the collective agreements, which recent studies, court rulings and media reports also confirm (Larsen and Mailand, 2014; Korsby, 2011; Andersen and Felbo-Kolding, 2013).

The collective agreements within private services allow for company-based bargaining, but are rather detailed regarding wages and working conditions compared to other sectors such as manufacturing and construction (Ilsoe and Larsen, 2016). When looking at selected aspects of the wages and working time regulations, we find that the collective agreements within private services differ depending on the sector, type of contract and employee group under consideration. For example, the collectively agreed minimum wages are less generous in retail followed by hotels and restaurants and industrial cleaning. In addition, the collective agreements often differentiate wages according to age, where the agreed hourly wages for young people within retail, hotels and restaurants are nearly half of their older co-workers, whilst the wage gap is somewhat narrower within industrial cleaning (Table I).

Besides regulating wages, the collective agreements also include various working time regulations regarding the length (weekly working hours, part-time work, overtime, etc.), scheduling (shift work, weekend work, on-call duties, etc.) and distribution of work hours (flexi-time, varied weekly working hours, time-off, etc.). In this context, only industrial cleaning guarantee all employees, including young people, a minimum number of weekly working hours and secure overtime payment, even if it is voluntary and exceed

Table I.
Minimum hourly wages and specific working time regulations in selected collective agreements covering industrial cleaning, retail, hotels and restaurants in Denmark

	Industrial cleaning	Retail	Hotels and restaurants
Union density	54	32	33
Collective agreement coverage (by number of companies)	40-50	57	–
Local bargaining	Yes	Yes	Yes
<i>Collective agreed minimum hourly wages</i>			
General	122.48 DKR	112.42 DKR	120.77 DKR
Young people	104.66 DKR	63.86 DKR	71.81 DKR
<i>Minimum wage supplements for unsocial hours</i>			
General	13.82 DKR	25.20 DKR	18.08 DKR
Young people	–	12.6-0 DKR ^b	12.99 DKR
Maximum weekly working hours	48 hours per week	45 hours per week	48 hours per week
Full-time work	30 hours per week	37 hours per week	37 hours per week
Possibilities for flexi-time	No specific rules	Yes – local bargaining	No specific rules
<i>Guaranteed weekly working hours</i>			
General	15 hours per week	None	2-4 hours per week
Young people			2 hours per day
<i>Thresholds for variable part-time work^a</i>			
General	15-37 hours	None	10-37 hours
Young people ^b			7.5-37 hours
Notes: ^a The threshold for weekly working hours are typically distributed over a four-week period; ^b young people defined as employees under 18 years – exception retail covers also students under 25 years with max. 15 weekly working hours			
Sources: Toubøl <i>et al.</i> (2015), Larsen <i>et al.</i> (2010), Larsen and Mailand (2014), Horesta and 3F (2014a, b), DI, 3F and Serviceforbundet (2014) and Danish chamber of commerce and HK Retail (2014)			

7.5 working hours per day. In retail, hotels and restaurants overtime payment only applies when induced by employers and when exceeding a specific threshold of weekly working hours, which is less restrictive than the one applied within industrial cleaning (Table I). These variations may, along with the wage differentials for distinct employee groups affect employment practices across the three sectors with employers having greater incentive to rely on part-time work within retail, hotels and restaurants and less industrial cleaning due to differences in the collectively agreed standards and thereby implicitly the institutional set-up.

Actual hourly wages and yearly income levels – full-time workers and part-time workers compared

When comparing collective agreements across the Danish labour market, it becomes evident that the three selected sectors for this study – industrial cleaning, retail, hotels and restaurants – have some of the lowest agreed hourly wages in Denmark (see previous section). This picture is repeated when comparing the actual hourly wages in the three sectors with the private sector in general. In 2014, the de facto average hourly wage in the Danish private sector was DKR212 (€28), but somewhat lower in industrial cleaning (DKR166 – €22) and lowest in retail, hotels and restaurants (DKR140 – €19), even if the average hourly wages are higher than the collectively agreed minimum wages within the three sectors (see Figure 1 and Table I). That the average hourly wages are higher than the collective agreed standards within private services is not surprising as the sectors are characterised by a preponderance of unsocial hours, which entitle workers to certain wage supplements (Ilsøe, 2016).

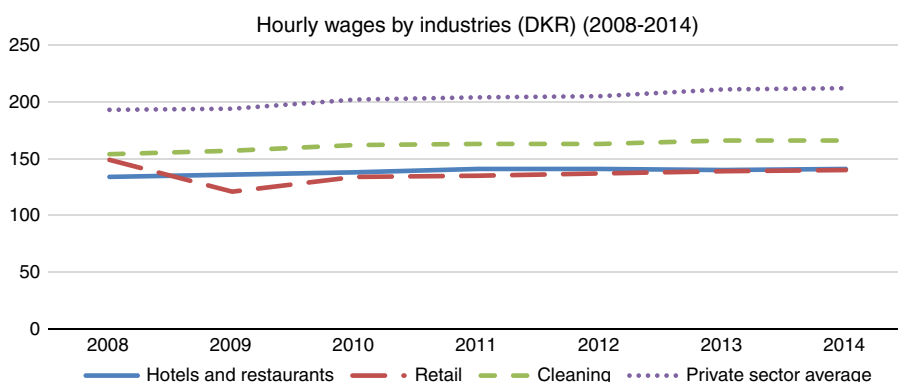


Figure 1.
Hourly wages (DKR)
in selected industries
in the Danish labour
market (2008-2012)

Figure 1 also reveals that the de facto average hourly wage has increased in the private sector since the global financial crisis (GFC) hit the Danish economy in 2008/2009. Interestingly, this has also been the trend in industrial cleaning, retail, hotels and restaurants, which may be down to the annual wage adjustments dictated in the collective agreements that cover large parts of the three sectors as mentioned earlier (Figure 1). In addition, the employees not covered by collective agreements may have benefited from these moderate wage increases as collective agreements can act as norm setting, even for work not covered by collective agreement in low-wage private services.

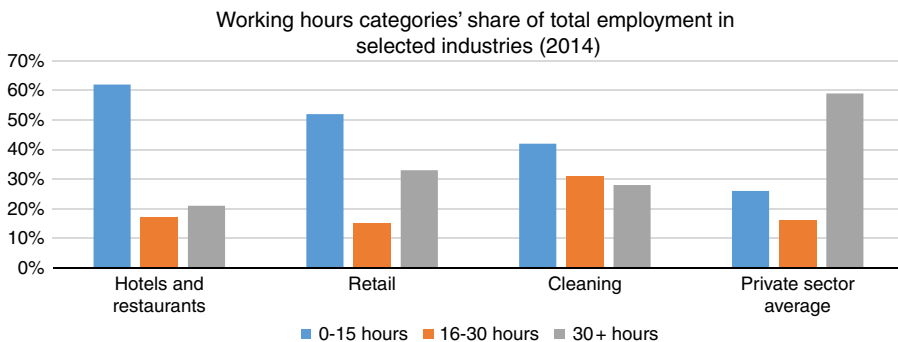
Besides demonstrating moderate wage increases, Figure 1 also suggests that there hardly are any problems of non-compliance with the collectively agreed minimum wages within industrial cleaning, retail, hotels and restaurants as employers often pay higher hourly wages than the collectively agreed standards. Therefore, it seems that even within low-wage private services the problems of working poor are almost non-existent when focussing solely on the de facto hourly wages. However, further analysis of the wage levels among distinct employee groups across the three service sectors, reveal that young people's actual earnings are lower than their older peers. The earnings gap is less severe within industrial cleaning (11 per cent) whilst young people under 18 years earn half of their older co-workers in retail (51 per cent), hotels and restaurants (49 per cent). This combined with the relatively high incidence of young people under 18, particularly within retail (21 per cent), hotels and restaurants (13 per cent) compared with industrial cleaning (7 per cent) indicate that the institutional settings, in terms of the differentiated collectively agreed wage levels, encourage distinct employment practices across the sectors. Danish employers appear more likely to opt for cheap young labour in retail, hotels and restaurants than industrial cleaning, where the collectively agreed wage difference between young people and their older co-workers is narrower (Table 1). The importance of sectoral institutions seem even more evident when looking at the share of part-time work, which historically has been high in all three sectors (Bosch and Lehdorff, 2005; Walsh, 1990) and this continues to be the case in the Danish labour market (Figure 2). More than two-thirds of the workforce are part-timers with a working week of less than 30 hours within industrial cleaning and retail, whilst the share is even higher within hotels and restaurants (79 per cent). The largest group of workers within these sectors work less than 15 hours per week and this is particularly widespread within retail, hotels and restaurants, where more than half of the workers work marginal part-time hours (Figure 2). It is particularly young people that work part-time – typically on contracts of few hours. In total, 82 per cent of marginal part-timers in retail and 68 per cent in hotels and restaurants are young people that often work during their studies. The share of young people among marginal part-timers is considerably lower within industrial cleaning (35 per cent), where a

larger share of employees (27 per cent) reconcile a cleaning job with childrearing responsibilities for small children under 12 years compared to retail (22 per cent), hotels and restaurants (18 per cent). Further analysis also suggests that Danish employees – both fathers and mothers – are less likely to work within private services during periods of childrearing and if they do take up employment within private services, both fathers and mothers typically combine childrearing with a full-time position or long part-time contracts. This suggests that the high incidence of marginal part-time work seldom is to ease parents’ work-life balance struggles.

That many service workers hold multiple jobs, particularly among marginal part-timers (64 per cent in retail, 67 per cent in industrial cleaning and 47 per cent in hotels and restaurants) but also among part-time workers with longer hours (51 per cent in retail, 47 per cent in industrial cleaning and 42 per cent in hotels and restaurants) suggest that the high incidence of part-time work is merely a necessity rather than a choice. The share of full-time employees with multiple jobs is somewhat lower across the three service sectors examined (27 per cent in retail, 33 per cent in industrial cleaning and 20 per cent in hotels and restaurants), but considerably higher than elsewhere in the Danish labour market (12 per cent). Such findings suggest that while private service employers seem to adhere to the collectively agreed minimum wages, they appear to utilise the fact that there are no guaranteed weekly working hours within the collective agreements covering retail, hotels and restaurants to secure a highly flexible workforce. The lower incidence of marginal part-time work within industrial cleaning may be attributed to the fact that the sectoral collective agreement set a threshold for minimum weekly working hours, but allows for derogations from the working time guarantee. This may also explain why we witness a large share of marginal part-timers within industrial cleaning.

The Danish working time regulations combined with the lower collectively agreed wages for young people seem to contribute to the high levels of marginal part-time work, particularly among young people in retail, hotels and restaurants. By contrast, the sectoral agreement covering industrial cleaning with its guaranteed minimum working hours and more generous wages for young people appears to cushion the spread of low-wage work and marginal part-time employment within the sector. Such findings also point to that although marginal part-time work may entail a “win-win” situation for both employers and employees – especially for young people in that it allows them to combine work with their studies whilst securing flexibility and cost curbing for employers – this may not always be the case. That the majority of service workers hold multiple jobs and parents are less likely to work within private services indicate the difficulties in securing a living wage from one service job alone and question the notion of part-time work being optional. In this context, the key question arise how these working time patterns affect wages – in particular how part-time work patterns affect not only the hourly wage, but also the absolute wages.

Figure 2.
Share of employment with full-time (30+), part-time (16-30) and marginal part-time (0-15) weekly working hours in selected industries in the Danish labour market (2014)



Working part-time, and especially marginal part-time work, has severe implications for employees' hourly wages. Part-time workers are paid less by the hour than their peers in full-time positions, even if Danish collective agreements in principle guarantee part-time workers similar wages and working conditions (see Figure 3). This is true for both the private sector in general and private services in particular and may be attributed to the fact that young people often are overrepresented among part-time workers and are guaranteed a lower collectively agreed wage than their older peers, although variations exist across the three service sectors (Table I). These institutional differences may explain why the hourly wage gap between full-time and part-time workers is somewhat narrower in industrial cleaning (full-time workers earn 13 per cent more than part-timers and marginal part-timers), retail (17, 30 per cent), hotels and restaurants (15, 22 per cent) compared to the rest of the private labour market, where full-time workers earn 22 per cent more than part-time workers and 26 per cent more than marginal part-time workers (Figure 3).

Figure 3 also reveals that the average hourly wages for part-time workers and marginal part-time workers are above the so-called poverty line (Bosch, 2009). In this context, the institutional settings within the three service sectors, particularly the collectively agreed wage levels seem decisive for reducing the risks of in-work poverty. Industrial cleaners' actual hourly wages are considerably above the poverty line, even for marginal part-timers, compared to their peers in retail, hotels and restaurants – two sectors with highly differentiated collectively agreed wage levels for young people and older workers. Therefore, although the high incidence of marginal part-time work in private services often is associated with some degree of earnings penalties, most service workers' earnings are above the poverty line – even if cross-sector variations exist – when focussing solely on the average hourly wages. However, the picture changes significantly when using employees' annual income rather than their average hourly wages when analysing the effects of working time on service workers' earnings (Figure 4).

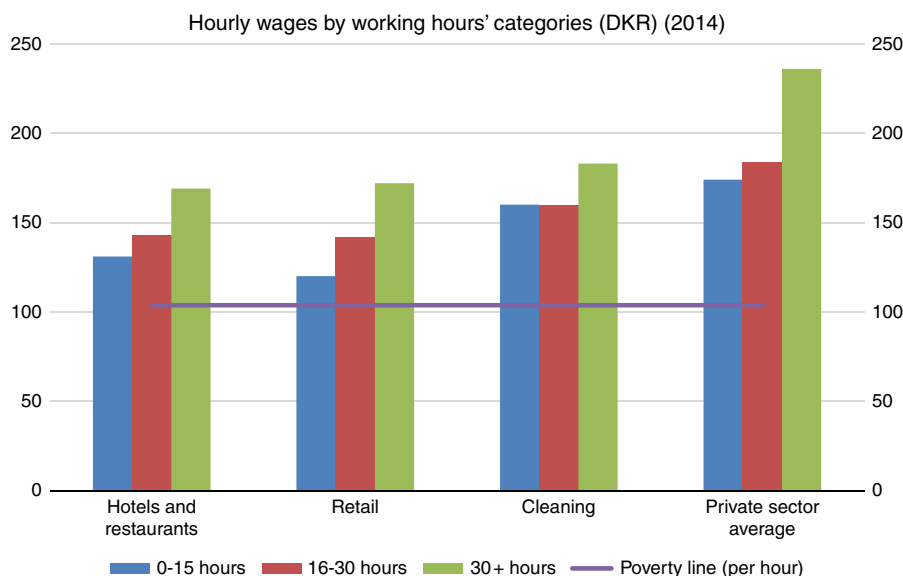
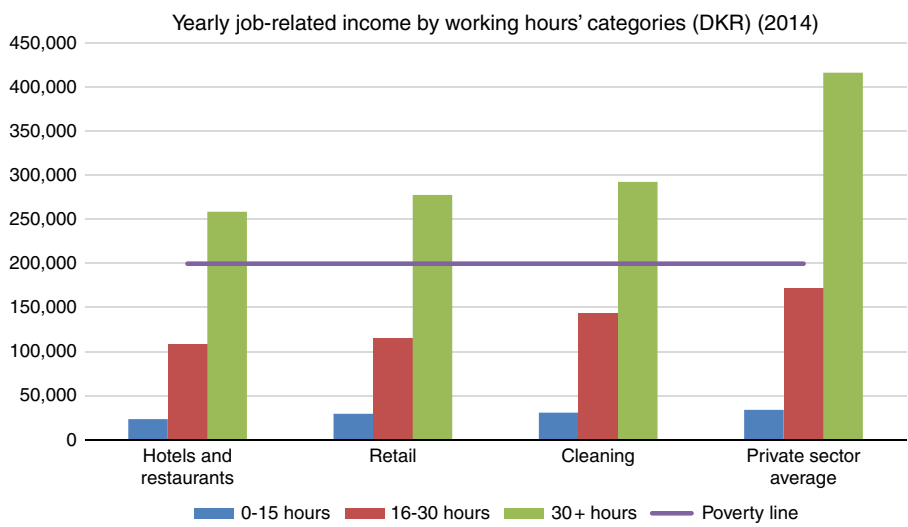


Figure 3.
Hourly wages among
full-time (30+),
part-time (16-30) and
marginal part-time
(0-15) workers in
selected industries in
the Danish labour
market (2014)

Figure 4. Yearly income among full-time (30+), part-time (16-30) and marginal part-time (0-15) workers in selected industries in the Danish labour market (2014)



Working part-time and particularly marginal part-time work seem to have a much more dramatic effect on yearly wages than hourly wages (Figure 4). Unlike full-time employees, the earnings of both marginal part-time workers and part-time workers with long hours are below the poverty line. Marginal part-time workers in particular are at risk of being working in poor conditions. Their yearly job-related income is often below the poverty line, indicating that they face great difficulties in securing a living wage, even if their hourly wages are in line or even above the minimum collectively agreed hourly wages. This is somewhat unsurprising (fewer hours mean less pay), but the full effect is striking although the different institutional settings seem to cushion the risks of in-work poverty. Slightly more part-timers working in hotels and restaurants are at risk of in-work poverty compared to their peers in similar positions in retail followed by industrial cleaning, where the collectively agreed wages are higher, even for young people, and the collective agreement guarantee a specific number of weekly hours. That many marginal part-time workers hold multiple jobs in each of the three service sectors just underline the struggles to secure a living wage from a low-wage part-time job; 67 per cent of industrial cleaners, 64 per cent of retail workers and 47 per cent of employees within hotels and restaurants in marginal part-time employment have more than one job. These figures are slightly lower for their peers holding part-time contracts of longer hours (47 per cent industrial cleaning, 51 per cent in retail and 42 per cent in hotels and restaurants) or full-time positions (33 per cent industrial cleaning, 27 per cent in retail and 20 per cent in hotels and restaurants). However, such findings also indicate that even with a full-time job, it can be difficult to secure a living wage within low-wage service work. Thus, our findings corroborate not only the argument by Ilsøe (2016) that both hourly wages and the number of weekly working hours are pivotal to secure a living wage. Our analysis also reveals that the institutional settings in particular working time regulations are equally as important as the collectively agreed wages when it comes to secure a living wage.

Conclusion and discussion

Our analysis has demonstrated that the actual hourly wages in industrial cleaning, retail, hotels and restaurants have increased since the GFC hit the Danish labour market.

Furthermore, the de facto hourly wages are higher than the collective agreed minimum wages – most likely due to various wage supplements for unsocial hours. However, the majority of workers in the three selected service sectors work part-time or marginal part-time. These workers are paid a slightly lower hourly wage than their peers in full-time positions, but more importantly, they earn a much lower yearly income than their full-time colleagues. Marginal part-time workers earn less than a fifth of poverty line earnings.

The obvious implication for these workers is that they cannot secure a living wage from a marginal part-time job. The number of weekly working hours is, therefore, decisive for securing a living wage. Such workers often supplement their service job with other jobs – which most of them do – or combine sources of income (for instance with student allowances). However, it can also have other implications. The Danish occupational pension funds and unemployment funds are organised around the main job or source of income as well as the number of weekly working hours. Therefore, these two forms of income security can be destabilised, if the income is sparse or stems from a range of different sources. This makes the individual worker vulnerable in the long term, particularly if being trapped in marginal employment; and it can thus contribute to increasing expenses and less funding for the welfare state, as the state must step in to secure workers without occupational pensions and unemployment insurance.

Therefore, our findings call for a need to consider working time, including national working time regulations, in discussions on living wages. More specifically, it seems that minimum thresholds for weekly working hours by collective agreement have a protective effect on not only the number of weekly working hours, but also annual earnings of employees, i.e. to secure a living wage. This might have policy implications for unions, employers' organisations and the state.

Conceptually, our findings might also have implications within labour market research and industrial relations. The historical focus on the hourly wage for low-wage workers such as living wages or minimum wages (regulated via legislation or collective agreement) potentially miss out on the impact of working hours and working time regulations on absolute wages. These concepts have been fruitful when fighting for wage floors for low-wage workers, but have been less successful regarding the regulation of working hours. Our analysis of collective agreements, weekly working hours and yearly income for workers in selected sectors in private services demonstrates that working time regulation can be both a loophole which employers exploit to secure flexibility and curb labour costs and a facilitator of work-life balance strategies for employees to organise their work hours around childrearing and study activities, although parents are less likely to take up employment in private services, and if they do they typically work full-time or long part-time hours. The preponderance of part-time and marginal part-time workers delivers a flexibility for employers and employees alike, but has the consequence that the yearly job-related income for workers are way below the poverty line.

We therefore call for the integration of working hours – and regulation of working hours – into the analyses of low-wage work and the discussion on living wages. The concept of living hours by Ilsøe (2016) addresses the fact that workers should have enough weekly hours to make a living, but tend to overlook the importance of national working time regulations. Industrial cleaning is the only service sector of the three analysed that guarantees a minimum number of 15 weekly working hours within their collective agreement which seems to have some positive spin-off effects as the share of marginal part-time workers is somewhat lower within industrial cleaning compared to retail, hotels and restaurants, which have no (retail) or much lower (hotels and restaurants) collective agreed floor of minimum weekly working hours. However, the

threshold within industrial cleaning is unable to secure a living wage as most industrial cleaners – similar to their peers in retail, hotels and restaurants – boost their income by holding multiple jobs. This indicates a need to include a higher minimum threshold for working hours within existing labour market regulation to secure service workers a living wage as working time regulations otherwise may indirectly contribute to increased segmentation or polarisation in the labour market.

References

- Andersen, S.K. and Felbo-Kolding, J. (2013), *Danske virksomheders brug af østeuropæisk arbejdskraft*, FAOS, Det Humanistiske Fakultet, Copenhagen University, Copenhagen.
- Anker, R. (2006), "Living wages around the world", *International Labour Review*, Vol. 145 No. 4, pp. 308-338.
- Anker, R. (2011), "Estimating a Living Wage", Conditions of Work and Employment Series No. 29, International Labour Organisation, Geneva.
- Arpaia, A., Cardoso, P., Kiss, A., Van Herck, K. and Vandeplas, A. (2017), "Statutory minimum wages in the EU", IZA Working Paper No. 124, IZA, Bonn.
- Bell, B. and Machin, S. (2016), "Minimum wages and firm value", CEP Discussion Paper No. 1404, London School of Economics, London.
- Berg, P., Appelbaum, E., Bailey, T. and Kalleberg, E.L. (2004), "Contesting time", *Industrial Labor Relations Review*, Vol. 57 No. 3, pp. 331-349.
- Bosch, G. (2009), "Low-wage work in five European countries and the United States", *International Labour Review*, Vol. 148 No. 4, pp. 337-356.
- Bosch, G. and Lehndorff, S. (Eds) (2005), *Working in the Service Sector: A Tale from Different Worlds*, Routledge, Oxford.
- Campbell, I. and Price, R. (2016), "Precarious work and precarious workers", *The Economic and Labour Relations Review*, Vol. 37 No. 3, pp. 314-332.
- Cornick, J.C. and Jacobs, J.A. (1996), "A cross-national analysis of wages of part-time workers", *Work Employment and Society*, Vol. 10 No. 1, pp. 1-27.
- Croucher, R. and White, G. (2010), "The impact of minimum wages on the youth labour market", Report for the Low Pay Commission, Middlesex University and University of Greenwich.
- Danish Chamber of Commerce and HK Retail (2014), *Butiksoverenskomsten 2014-2017*, HK Retail, Copenhagen.
- Danish Statistics (2017a), *Register Data from 2008-2014*, Statistics Denmark, Copenhagen.
- Danish Statistics (2017b), *Firmastatistikken*, Statistics Denmark, Copenhagen.
- DI (2016), *Servicebranchens årsrapport*, DI, Copenhagen.
- DI, 3F and Serviceforbundet (2014), *Serviceoverenskomsten 2014-2017*, DI, Copenhagen.
- Eichhorst, W. (2017), "Labour market institutions and the future of work", IZA Working Paper No. 122, IZA, Bonn.
- Eurofound (2016), "Working time developments in the 21st century: work duration and its regulation in the EU", Publications Office of the European Union, Luxembourg.
- Garnero, A., Kampelmann, S. and Ryck, F. (2014), "Minimum wage systems and earnings inequalities", IZA Working Paper No. 8419, IZA, Bonn.
- Grimshaw, D., Bosch, G. and Rubery, J. (2014), "Minimum wages and collective bargaining", *British Journal of Industrial Relations*, Vol. 52 No. 3, pp. 470-498.
- Grugulis, I. and Bozkurt, Ö. (Eds) (2011), *Retail Work*, Palgrave Macmillan, Basingstoke.

- Heyes, J., Tomlinson, M. and Whitworth, A. (2017), "Underemployment and well-being in the UK before and after the great recession", *Work, Employment and Society*, Vol. 31 No. 1, pp. 71-89.
- Horesta and 3F (2014a), *Restaurantoverenskomsten 2014-2017*, Horesta, Copenhagen.
- Horesta and 3F (2014b), *Hotelooverenskomsten 2014-2017*, Horesta, Copenhagen.
- Ilse, A. (2016), "From living wage to living hours", *Labour and Industry*, Vol. 26 No. 1, pp. 40-57.
- Ilse, A. and Larsen, T.P. (2016), "Fleksibilitet gennem stabilitet. Institutionaliseringsen af lokalearbejdstidsforhandlinger i industrien", in Larsen, T.P. and Ilse, A. (Eds), *Den danske model set udefra*, DJØF publishing, Copenhagen, pp. 147-178.
- Kalleberg, A.L. (2011), *Good Jobs, Bad Jobs*, Russell Sage Foundation, New York, NY.
- Katz, L.F. and Krueger, A.B. (2016), "The rise and nature of alternative work arrangements in the United States, 1995-2015", NBER, Harvard University, Harvard, MA.
- King, D. and Rueda, J. (2008), "Cheap labor: the new politics of 'bread and roses' in industrial democracies", *Perspectives on Politics*, Vol. 6 No. 2, pp. 279-297.
- Korsby, T.M. (2011), *Menneskehandel i Rengøringsbranchen?*, Servicestyrelsen, Odense.
- Larsen, T.P. and Mailand, M. (2014), "Bargaining for social rights in sectors", FAOS Forskningsnotat, No. 141, Copenhagen University, Copenhagen.
- Larsen, T.P., Navrbjerg, S. and Johansen, M.M. (2010), "Tillidsrepræsentanten og arbejdspladsen", LO-dokumentation, Rapport 1, LO, Copenhagen.
- Manning, A. (2016), "The elusive employment effect of the minimum wage", CEP Discussion Paper No. 1428, London School of Economics, London.
- Neumark, D. and Wascher, W. (2006), "Minimum wages and employment", Working Paper No. 12663, National Bureau of Economic Research, Cambridge.
- O'Reilly, J. and Fagan, C. (1998), *Part-Time Prospects: An International Comparison of Part-Time Work in Europe, North America and the Pacific Rim*, Routledge, London.
- O'Reilly, J., Nazio, T. and Roche, J.M. (2014), "Compromising conventions: attitudes of dissonance and indifference towards full-time maternal employment in Denmark, Spain, Poland and the UK", *Work, Employment and Society*, Vol. 28 No. 2, pp. 168-188.
- Parker, J., Arrowsmith, J., Fells, R. and Prowse, P. (2016), "The living wage: concepts, contexts and future concerns", *Labour and Industry*, Vol. 26 No. 1, pp. 1-7.
- Price, R., McDonald, P., Bailey, J. and Pini, B. (2011), *Young People and Work*, Ashgate, Farnham.
- Rubery, J. (2015), "Change at work", *Employee Relations*, Vol. 37 No. 6, pp. 633-644.
- Rubery, J., Ward, K., Grimshaw, D. and Beynon, H. (2005), "Working time, industrial relations and the employment relationship", *Time and society*, Vol. 14 No. 1, pp. 89-111.
- Schulten, T. (2016), "Danish, German and European perspective on statutory minimum wages", in Larsen, T.P. and Ilse, A. (Eds), *Den danske model set udefra*, DJØF publishing, Copenhagen, pp. 85-102.
- Seifert, H. (Ed.) (2005), *Flexible Zeiten in der Arbeitswelt*, Campus Verlag, Frankfurt.
- Toubøl, J., Ibsen, C.L. and og Larsen, A.G. (2015), "Udviklingen i den faglige organisering på det segmenterede danske arbejdsmarked 1995-2012", FAOS forskningsnotat No. 147, FAOS, University of Copenhagen, Copenhagen.
- Walsh, T.J. (1990), "Flexible labour utilisation in the private sector", *Work Employment and Society*, Vol. 4 No. 4, pp. 517-530.
- Warren, T. (2004), "Working part-time", *British Journal of Sociology*, Vol. 55, No. 1, pp. 99-122.

Warren, T. (2015), "Work-time underemployment and financial hardship", *Work Employment and Society*, Vol. 29 No. 2, pp. 191-212.

Westergaard-Nielsen, N. (Ed.) (2008), *Low Wage Work in Denmark*, Russell Sage Foundation, New York, NY.

Further reading

Ilse, A. and Felbo-Kolding, J. (2014), *Samarbejde om arbejdstid og uddannelse*, FAOS, Department of Sociology, University of Copenhagen, Copenhagen.

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