Minimum Wage Systems and Changing Industrial Relations in Europe:

Comparative Report

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October 2010

Prepared for the EC research project, *'Minimum wage systems and changing industrial relations in Europe'* VS/2009/0159.

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Contents

Introduction[1]

All European member states have some form of minimum wage system. Minimum wages may be applied using government legislation (currently found in 20 EU member states) or they may be a by-product of social partner collective agreements (found in seven member states) with supplementary statutory extension regulations in some cases. Within each of these two basic models of minimum wages, countries display an enormous variety of rules and conventions that shape the functioning, effectiveness and performance of a minimum wage. There is variety in the use of single or multiple rates, in the roles of social partners and government in minimum wage setting, in the value of the minimum wage and trends over time, its interaction with welfare policy and its distributive effects on wage structure, especially on the incidence of low pay and gender pay equity (Bazen 2000, Brosnan 2003, EC 2008, Eyraud and Saget 2005, Freeman 1996, Funk and Lesch 2006, Schulten et al. 2006, Vaughan-Whitehead 2009a). Recent country developments highlight the diverse functioning of minimum wages as well as their potential to spark conflict over policy intervention. For example, in Hungary there is continuing debate about its initiative to use multiple minimum rates differentiated by skill; in Germany there is vigorous debate over the need for a new minimum wage system to protect low wage workers; in Croatia social partners have conflicting views on a new uprating mechanism; trade unions and living wage campaigners in the UK have been lobbying for a higher minimum wage; and the government's ambition for a higher minimum in Spain is presenting potential challenges for collective bargaining.

No universal position on minimum wages or strategy towards the use of minimum wages can be said to be followed either by governments or social partners. This applies both across countries and within the same country across time periods. It is not even always the case that employers oppose and trade unions favour a rise n the minimum wage. Employers may in some circumstances be supportive of the introduction of or the raising of a statutory minimum wage because it fits with their desire to weed out unscrupulous firms or to establish a realistic benchmark in the labour market. In some circumstances, trade unions

[1] We are very grateful to Andrew Chapman from the European Commission for providing encouragement, advice and critical comments throughout this 12-month project. This comparative report also benefits from input and corrections of earlier drafts from members of each of the five country teams in this project, as well as research assistance from Claire Shepherd.

may be cautious about raising the minimum wage floor because if set too high it might erode their bargaining power in negotiating collectively agreed wages. Also, at particular points in time, governments may favour active intervention in minimum wage policy to further policy objectives of reducing wage inequality or addressing high levels of working poverty. This may apply even if the government still considers that increasing minimum wages may involve risks of inflation or job loss.

In order to improve our understanding of why different approaches are taken by governments and social partners across countries and over time this comparative research project set out to interrogate the different rules and functions of minimum wages in their country settings and to understand the interlinkages between a minimum wage system and a country's model of industrial relations. By shedding light on the way minimum wage systems interact with the pay bargaining strategies of trade unions and employers, the objective was to contribute to the Europe 2020 goals of more effective and sustainable policy development in this area, particularly with regard to fair labour market outcomes and enhanced processes of social dialogue.

The novelty of this project is its analysis of original comparative data on employer and union approaches to wage bargaining (in national, sector and organisation level collective agreements) in a context of developments in minimum wage policy. At the aggregate level we know both that countries with strong collective bargaining coverage are less likely than other countries to have a system of statutory minimum wage protection and that among those countries with statutory minimum wage protection, stronger models of collective bargaining (coordination and coverage) seem to support (or determine) a higher relative level of the minimum wage (EC 2008). Cross-national comparative data also demonstrate a strong negative relationship between the level of a minimum wage (relative to average earnings) and the incidence of low pay and size of gender pay gap in a country (Vaughan-Whitehead 2009b). However, we understand far less about how these results are articulated through the processes and outcomes of collective bargaining. For example, a rising minimum wage may dovetail with trade union strategies to compress the wage structure among members, generating an especially strong effect at the lower end by truncating the bottom tail of the pay distribution among organised workers (for the UK, see Metcalfe et al. 2001). Similarly, both employers and unions may seek to build on a minimum wage floor through complementary efforts to address gender pay equity through pay bargaining (Colling and

Dickens 1988, Dickens 2000). But how do wage bargaining strategies modify and shape the spillover, or 'ripple effect' (Pollin et al. 2008), associated with a rising minimum wage? Do social partners believe that the lowest paid in their particular sector or organisation ought to be paid higher than the legally binding minimum wage? If so, what is an appropriate pay gap - a 'legitimate differential' in Checchi et al.'s (2010) words - and ought this to be sustained even during a period of above-average increases in the minimum wage? And in cases where the base pay in a collective agreement is at or even below the legal minimum, what are the reasons for this and do social partners negotiate other pay supplements?

Our detailed empirical evidence is drawn from five countries – Croatia, Germany, Hungary, Spain and the UK – and supplemented by secondary data for four countries (Estonia, France, Ireland and Sweden). Five national reports were conducted as part of this research project by experts from each country[2]:

- Danijel Nestić and Ivana Rašić Bakarić for Croatia;
- Josep Banyuls, Ernest Cano and Empar Aguado for Spain;
- Gerhard Bosch and Claudia Weinkopf for Germany;
- László Neumann for Hungary; and
- Damian Grimshaw, Claire Shepherd and Jill Rubery for the UK

The results demonstrate the answers to such questions are shaped by the particular circumstances of country and sector systems of social dialogue, collective bargaining arrangements and product market conditions. Our choice of EU member states includes old, new and candidate countries. Moreover, the five country reports analyse developments in those sectors most relevant for minimum wage debates in the particular country. In this comparative report, in addition to summarising differences at the national level, we collate some of the key findings with respect to four sectors – retail, security, cleaning and construction. Our objective is to critically analyse how different country minimum wage systems function alongside union and employer wage bargaining strategies, how effective they are in protecting the low paid and what capacity they have to enhance social dialogue.

The report is organised as follows. Section 1 reviews the differences in rules and conventions governing minimum wage systems, as well as key moments of policy development, among the nine European countries selected for analysis. Section 2 assesses

[2] See the bibliography for full references. All reports available for download at http://www.mbs.ac.uk/research/europeanemployment/projects/minimum-wage.aspx.

inter-country patterns and trends in the relative value of the minimum wage, and covers European data on statutory minimum wages as well as data on the value of sector minima in Germany and Sweden. Section 3 draws on data for the nine European countries to elaborate the tensions and complementarities between minimum wage policy and the country model of industrial relations. It explores two issues: the approach of government, unions and employers to the minimum wage; and the interaction with the relative coordination and coverage of collective bargaining. Section 4 identifies – at an aggregate level - the redistributive effects of minimum wages (following Freeman 1996) on two measures of pay equity, the incidence of low pay and the gender pay gap. Section 5 compares and contrasts original empirical evidence on pay bargaining drawing on the analyses in the five national reports completed for this project. Finally, section 6 sets out four key issues for policy consideration.

1. Minimum wage policy and practice: a 9-country comparison

The fact that statutory minimum wage rules are applied in approximately 90% of countries signed up to ILO membership (ILO 2009) suggests there is a near international consensus on the value of this particular instrument of labour market intervention. Within Europe, 20 of the 27 member states have some form of statutory minimum wage. Among the seven countries without national legislation multiple minimum wage levels are instead agreed by social partners in sector-based collective agreements, albeit with varying coverage of the workforce. As with all labour market rules (see Freeman 1994), therefore, there is considerable variety in minimum wage policy and practice. This section reviews the key differences in approach, as well as moments of change, among the nine European countries selected for analysis (see table 1 and figure 1).

Seven of the nine countries have a statutory national minimum wage (MW). The two exceptions, Germany and Sweden, rely instead on different minimum rates negotiated in separate sectoral collective bargaining agreements; Germany also applies sector-wide minimum wages in several sectors through legally binding extensions. Among the group of seven countries, a statutory national MW is in fact a relatively recent intervention in five countries; it is only a little over a decade old in Croatia, Ireland and the UK and two decades old in Estonia and Hungary. Differences in the age of this form of wage regulation, however, do not appear to be related to the variety of rules in place today (table 1).

As well as a standard, or adult, national MW, many countries set alternative MW rates for categories of workers who may be perceived as meriting special consideration. In most cases, the categories are defined in objective terms. For example, France, Ireland and the UK each specify youth rates, typically for workers aged 16 and 17 years old. The position of the UK is notable given its notion of an adult worker as a person aged 21 years old and over rather than the more conventional definition of 18 years old.[3] In some cases, the exceptional categories are more susceptible to changing definitions. For example, separate rates for skilled and educated workers prevail in Hungary. During 2006-8 three tiers distinguished

[3] In fact, until 2010 the UK government considered an adult worker as aged 22 years old and above, despite persistent recommendations over ten years from the independent Low Pay Commission to change the limit to 21 years.

between a standard worker, a beginner-level skilled worker and a skilled worker with at least two years experience. But following employer criticisms, this was subsequently simplified in 2009 to just two rates. Given that the skilled MW is 22% higher than the standard rate there is a risk that employers may redesign jobs to reduce MW payments (Neumann 2010). The rules in Croatia are also of interest since they set a separate 'sub-minimum wage' in four industries that are singled out for special attention due to their difficult economic conditions. This temporary sub-minimum was established in 2008 in the textile, clothing, wood processing and leather industries and aims to reduce the possible job loss effects in these industries from a higher standard MW.

Figure 1. Key moments in rules shaping minimum wage-setting, nine countries, 2001-2010

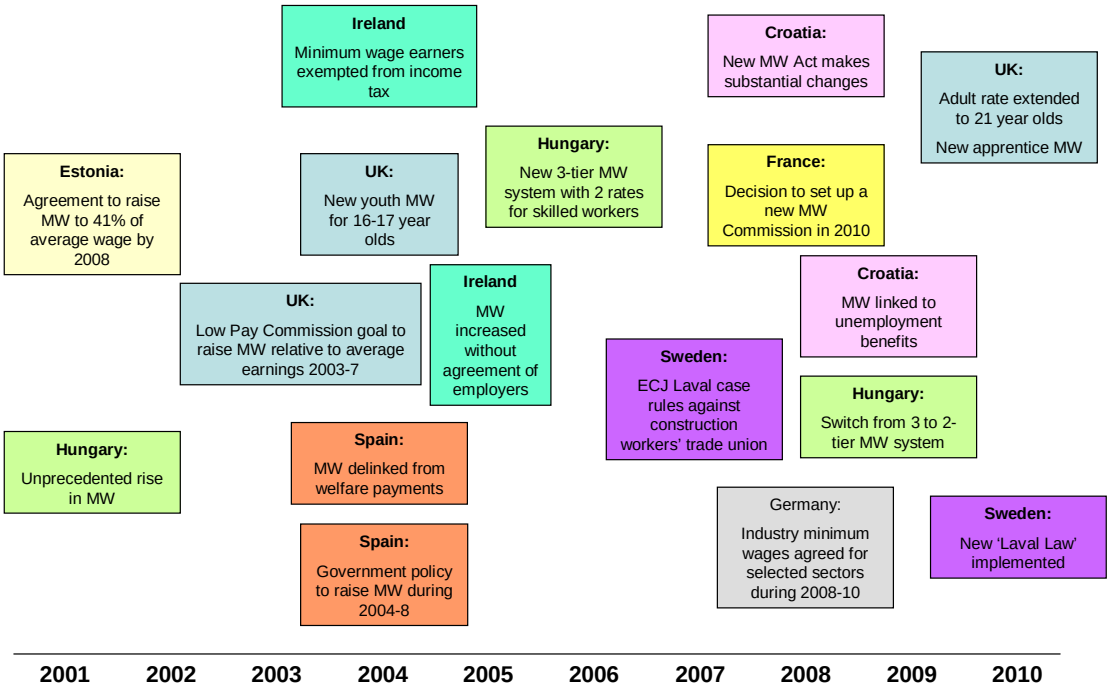


Table 1 also presents the different nominal levels of the MW. There is a wide range in hourly rates, from €1.46 in Hungary to €8.86 in France[4], which reflects both the cost of living of each country and the relative level of the wage floor compared to the average or median level of earnings, an issue we explore further below.[5] There are also important country

[4] Euro exchange rates applicable in July 2010.
[5] Country differences in prices can be controlled for by applying Purchasing Power Parities for household consumption expenditures, as presented in figure 3 of the Eurostat 'Statistics in Focus' (2008) publication.

differences in the conceptualisation of the minimum wage in terms of a monthly, daily or hourly income guarantee. A monthly standard arguably meets the policy goal of establishing a minimum basic wage income for a full-time worker, with pro rata conditions for part-time workers adjusted for hours of work. A monthly minimum can be found in Croatia, Estonia, Hungary and Spain; it is the most common form of payment in the EU (Eurostat 2009). Indeed, in the case of Spain the fact that the MW was at a very low level for many years is partly explained by its popular interpretation as a monthly minimum income to prevent extreme poverty rather than as a benchmark for wage-setting. In contrast an hourly MW applies an explicit notion that there ought to be a minimum reward for an hour's work. This applies in France, Ireland and the UK, as well as Estonia, which sets an hourly and a monthly minimum.

In Germany and Sweden, the absence of a statutory national MW means that it is not possible to report a single MW level. Instead there are multiple minimum wages set in the various sector-based collective agreements. We present detailed data on these minimum rates in section 2 below.

Our 9-country comparison,reveals a further variety of rules when we review the procedures for fixing a minimum wage (table 1). There are three issues of interest. The first is the timescale for adjusting the MW floor; all countries do this on an annual basis with the exception of Ireland. Since its introduction in 2000 the Irish MW has been uprated after a period of anywhere from 15 months to 20 months, such that the date of uprating also varies from one year to the next (Nolan 2009: table 9.5). In the other countries, the timing is fixed; although in 2010 the French government changed the month for uprating from July each year to January in order to establish a more useful precedent for collective bargaining at sector and company levels (Eironline 2010).

Second, there are differences in the use of automatic indexation. Among the seven countries with a statutory MW there is no automatic indexation in five countries. Even in the two countries with indexation, Croatia and France, in neither case can uprating be described as a scientific process; both sets of rules are in practice contingent upon, or supplemented by, political intervention. In Croatia, a new Act in 2008 intended to establish a rather complex automatic rule - that the MW would be uprated each year such that the percentage rise in the Kaitz index for the current year (defined as the ratio of the minimum wage to average

Table 1. Key characteristics of minimum wage systems in nine countries, 2010

	Year established	Number of rates	Standard rate/ (hourly rate in Euros)[1]	Wage fixing process: Frequency/ formula	Wage fixing process: Process
Statutory national minimum wage					
Croatia	1998[2]	Two: standard rate and 'subminimum' for 4 industries	HRK 2814 monthly *(€2.12)*	Annual Specific rule for uprating (but ambiguous)	Central Bureau of Statistics proclamation following automatic adjustment
Estonia	1991	One	EEK 4350 monthly and EEK 27 hourly (€1.73)	Annual No automatic formula	Government decree following bipartite agreement
France	1970[3]	Three: Adult; Youth (17 years); Youth (16 years)	€8.86 hourly	At least annual Automatic rise by CPI when inflation exceeds 2%, and half the rise of the PPP of manual workers' pay	Government decree following recommendation by new Commission of independent experts (since 2008)
Hungary	1991	Two: universal and skilled	Ft 73500 monthly *(€1.46)*	Annual, except 3-year arrangement in 2006-8 No automatic formula	Government decree following tripartite agreement
Ireland	2000	Four: adult; Youth (<18); trainees aged 18+; newly hired aged 18+	€8.65 hourly	Varies – 15-20 months No automatic formula	Government decree with or without agreement from social partners
Spain	1963	One	€633.30 monthly[4] and €21.11 daily *(€4.20)*	Annual No automatic formula	Government decree following consultation with main unions and employer bodies
UK	1999	Four: adult, youth (18-20), youth (16-17), apprentice	€6.97 hourly	Annual No automatic formula	Government decree following recommendation by independent Commission of experts
Collectively agreed sectoral minima					
Germany	n.a.	Multiple minimum rates by sector and by	n.a.	Frequency varies depending on the	Collective bargaining between unions and employers in some sectors; government makes

		skill/region		collective agreement	minimum rate binding in some sectors
				No formula	
Sweden	n.a.	Multiple minimum rates by sector and by age/experience/ occupation	n.a.	Annual (usually as part of 2-3 year pay deals)	Collective bargaining between unions and employers
				No formula	No legal extension to uncovered sectors

Notes: 1. 2010 gross value (Euro exchange rates applicable in July 2010). Italicised figures have been converted from the annual (Spain) or monthly (Hungary, Croatia) rates to an hourly rate using European LFS data for average actual hours worked in the main job by full-time employees, second quarter 2009.
2. A form of minimum wage preceded the 1998 legislation known as the 'guaranteed wage' and was in operation during the socialist period and early transition years.
3. The SMIC was preceded by a different minimum wage, the SMIG, 'Salaire Minimum Interprofessionnel Garanti' (see www.cerc.gouv.fr/rapports).
4. In Spain, the annual statutory minimum wage (€8866.20 in 2010) constitutes 14 monthly payments.

Source: National reports for Croatia, Germany, Hungary, Spain and UK;.Gautié (2009) for France; Masso & Krillo (2009) for Estonia; Nolan (2009) for Ireland.

earnings) matches the percentage rise in real GDP the previous year. Throughout 2009 and 2010, trade unions, employers and government arrived at different views as to what the formula implied, in large part caused by differences of interpretation of the Kaitz index of the current year. Also, when real GDP fell in 2009 there was debate over whether or not to cut the MW; in the end it was frozen (Nestić and Bakarić 2010). In France, an automatic rule links the MW both to the consumer price index (rises over 2%) and to at least half the annual rise in purchasing power of manual workers' average hourly pay. This automatic linkage to prices and earnings growth is supplemented by a legally defined discretionary role of government, known as the *coup de pouce*. During 1997-2005 the *coup de pouce* was instrumental in boosting the MW, but has played no role at all during 2007-2010 (Gautié 2009[6]; Eironline 2010).

The third issue is whether countries have institutionalised a process of social dialogue in uprating the MW – with variation in government involvement and engagement with social partners. Where, as in Germany and Sweden, there is no national statutory MW social dialogue is likely to be important in the setting of minimum wages at the sector level. In Germany only a few sectors have generally binding minimum wages but in all of these cases the MW was first negotiated through a collective agreement and then extended to all firms in the sector. The first sector to follow this path in Germany was construction. The collectively agreed MW rates were established as generally binding in 1996 under the Law on Posting of Workers. Following a political compromise agreed in 2005, other sectors followed suit during 2007-2010. In July 2007 a MW in commercial cleaning was introduced and in 2009 industry-wide minimum wages were agreed in industrial laundries and mining specialists. Further agreements were implemented in 2010 in the waste management sector and care services (Bosch and Weinkopf 2010). In each case, MW rates are agreed by social partners and the government declares them generally binding on the basis of the Law on Posting of Workers.

In Sweden, minimum rates are set in all sectors through collective agreements. High coverage of collective agreements – approximately 90% - ensures wide, national coverage of sector-based minimum wages, even in low wage sectors (Skedinger 2009: 358-360). The general stability of both country systems (notwithstanding the recent policy shifts in Germany) is demonstrated by Visser's (2009) scoring of the two countries in his

[6] Plus more recent personal communication with Jerome Gautié.

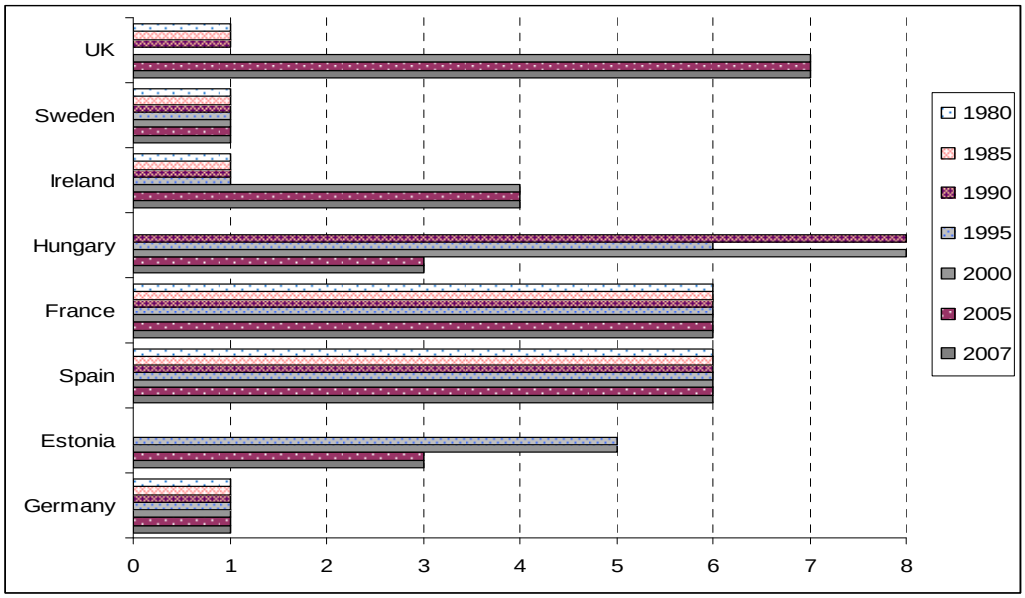
classification of minimum wage-setting mechanisms. Both Germany and Sweden score 1 on a scale of 0-8 throughout the 1980-2007 period, defined as 'minimum wages set by collective agreement or tripartite wage board in some sectors'; see the note to figure 2 for a full description of the different categories.

Croatia, Estonia and Hungary, like other former Communist countries, have had a variable history of social dialogue around minimum wage setting, reflecting the significant changes that have taken place in their minimum wage-setting rules (Kohl and Platzer 2007; Standing and Vaughan-Whitehead 1995). In Estonia and Hungary the statutory MW was initially introduced during the early transition as a successor to state wage-setting; it was used as an instrument of containing wage growth (Kohl and Platzer 2007), although wage restraint during this period was also strongly shaped by the economic conditions of recession and high inflation. However in Estonia, a change in state engagement with social partners occurred in 2001 with the signing of a bilateral agreement between the national employers' federation and the larger of the two main trade union confederations (Kohl and Platzer 2006). In Hungary, tripartite negotiations underpinned the government decision on the statutory MW during its first decade of life. There was a subsequent short period, 2000-2002, when the government acted unilaterally, but since 2002 it has been set through tripartite agreement (Neumann 2010). Croatia had a form of MW during its transition period – known as the 'guaranteed wage' – but the statutory national MW in place today was established later, in 1998, following the decision by a national collective agreement on low wages (Nestić and Bakarić 2010).

Ireland and the UK both introduced a national statutory MW only very recently, but have diverse rules concerning government engagement with social partners. In Visser's (2009) classification of MW systems (figure 2), Ireland scores 4 out of 8 and the UK 7.[7] The difference lies with the establishment of the Low Pay Commission in the UK - a permanent, statutory, independent public body that advises the government on the basis of expert opinion (unions, employers and academic an policy research) – and the reliance in Ireland on either national agreement from unions and employers, or, when there is no agreement, resolution through the Labour Court (Nolan 2009). In both countries, government reserves the right to exercise discretion.

[7] See the note to figure 2 for details of categories.

Figure 2. Change in minimum wage-setting mechanisms, Visser index scale 0-8, 1980-2007



Note: 0 = No national (cross-sectoral or inter-occupational) minimum wage; 1 = Minimum wages set by collective agreement or tripartite wage boards in (some) sectors; 2 = Minimum wages set by national (cross-sectoral or inter-occupational) agreement ('autonomous agreement') between unions and employers; 3 = National minimum wage is set by agreement (as in 2) but extended and made binding by law or Ministerial decree; 4 = National minimum wage set through tripartite negotiations; 5 = National minimum wage set on fixed rule (index-based minimum wage) after negotiations or consultations with social partners; 6 = National minimum wage is set by government but after (non-binding) tripartite consultations; 7 = National minimum wage set by judges or expert committee, as in award-system; 8 = National minimum wage set by government, without fixed rule.
Source: Visser (2009); no data available for Croatia.

Finally, in France and Spain, the MW is fixed each year by government following consultation with social partners; in the case of France, with the tripartite National Collective Bargaining Commission (Schmid and Schulten 2006) and in Spain following consultation with the main unions' and employers' organisations, as set out in the 1980 'Workers' Statute'. Alongside its commitment to social partnership, in 2008 the French government also established a new commission of independent experts (that excludes trade union representatives) with the remit to provide official advice to government and to the tripartite Bargaining Commission on the appropriate rate in light of economic conditions (that is, whether or not a *coup de pouce* is required). In 2009 and 2010 the expert commission voted unanimously against *coups de pouce* (Gautié, personal communication).

2. The changing value of the minimum wage

2.1. Country patterns

The Kaitz index provides a useful means of comparing the relative level of a country's MW, both over time and across countries. It is defined as the MW as a ratio of gross median earnings. Both the OECD and Eurostat provide estimations of the Kaitz index for European countries. Both datasets include estimations of the minimum as a ratio of median and mean earnings. Because countries have varying differentials between their median and mean earnings,[8] we present both sets of ratios here. However, despite its wider European country coverage, we do not present the Eurostat data because of doubts about its comparability across countries. The OECD database estimates the Kaitz index for 18 EU member states and uses gross earnings for full-time employees as the benchmark for median and mean earnings. The Eurostat database covers all 20 member states with a statutory minimum wage (it also includes Bulgaria and Malta) but unfortunately does not incorporate comparable earnings data; for some countries part-time workers' earnings are included and for others excluded, while for several countries it is not clear which groups of workers are included in the earnings estimation.[9]

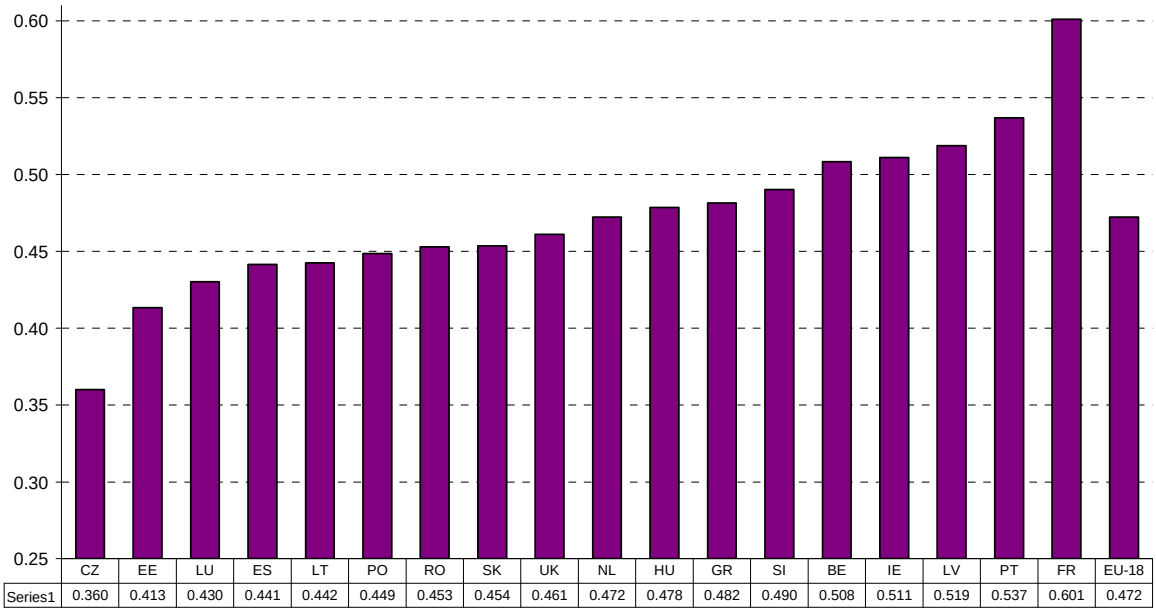
According to figure 3, the three countries with a high MW – both as a ratio of median earnings and mean earnings – are France, Belgium and Ireland. France stands significantly above the second ranked country in both charts, with a MW estimated at 0.60 of median earnings and 0.48 of mean earnings in 2009. Two countries register a high median wage as a ratio of median earnings (Latvia and Portugal) but close to an average level MW as a ratio of mean earnings. The reason is the large gap between median and mean earnings in these countries; median earnings are only 74.8% of mean earnings in Latvia and just 69.3% of mean earnings in Portugal (compared to 79.8% in France).

[8] For example, median earnings are 79.8% of mean earnings in France but 87.8% of mean earnings in the Netherlands (OECD earnings database).

[9] From the notes to the Eurostat (2009) publication the earnings estimates are for full-time employees only for Estonia, France and Hungary, but include full-time and part-time employees for Bulgaria, Czech Republic and Latvia. No information is provided for Ireland, Spain, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia and the UK.

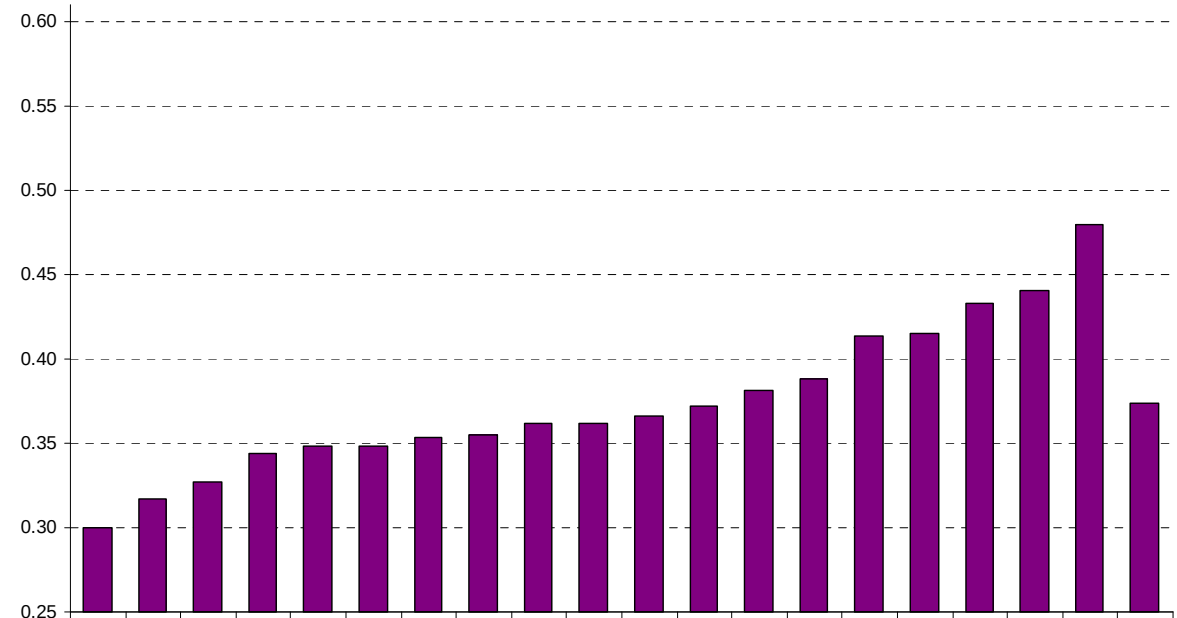
Figure 3. The value of the statutory minimum wage (Kaitz index), 2009

a. Minimum to median earnings



	CZ	EE	LU	ES	LT	PO	RO	SK	UK	NL	HU	GR	SI	BE	IE	LV	PT	FR	EU-18
Series1	0.360	0.413	0.430	0.441	0.442	0.449	0.453	0.454	0.461	0.472	0.478	0.482	0.490	0.508	0.511	0.519	0.537	0.601	0.472

b. Minimum to average earnings



	CZ	RO	GR	EE	HU	ES	LU	SK	LT	CR	PO	PT	UK	LV	SI	NL	IE	BE	FR	EU-19
Series1	0.300	0.317	0.327	0.344	0.348	0.349	0.353	0.355	0.362	0.362	0.366	0.372	0.381	0.388	0.413	0.415	0.433	0.441	0.480	0.374

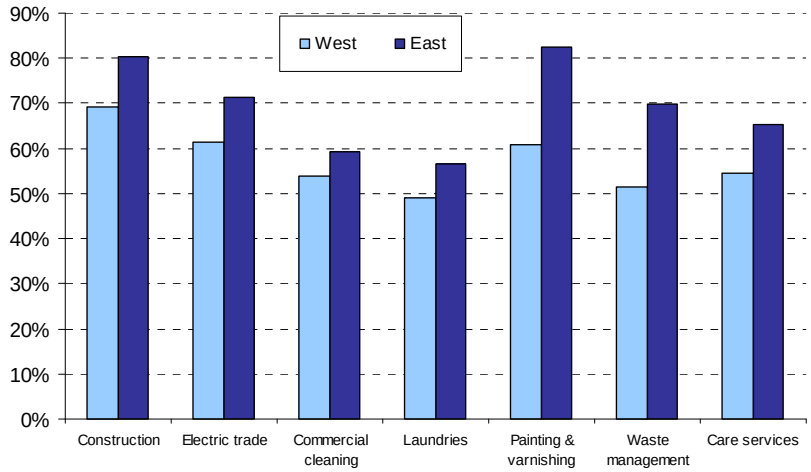
Notes: The estimation for the European average is a simple unweighted average for the 18 (19) countries included here. Average and median earnings refer to full-time employees only for all countries and generally include overtime and other supplementary pay. The OECD data for France refer to its hourly data and for the UK its Annual Survey of Hours and Earnings not the Labour Force Survey. Data for Croatia are not available on the OECD database and sourced separately.
Source: OECD earnings database, kindly provided by Mark Keese. Data for Croatia from Nestić and Bakarić (2010).

Countries with a consistently low value MW – again, both as a ratio of median and mean earnings - are the Czech Republic, Romania, Estonia, Luxembourg and Spain. For all five countries, the MW falls significantly below the average values for the 18 (19) countries shown, 0.45 or less of median earnings and 0.35 or less of mean earnings, compared to total country averages of 0.47 and 0.37, respectively. And again, two countries that rank very low as a ratio of mean earnings (Greece and Hungary) fare better as a ratio of median earnings, with a MW value marginally above the average.

Given their absence of a statutory MW, there is of course no Kaitz index for Sweden and Germany. It is nevertheless possible to estimate the level of collectively agreed MW rates for various sectors against average earnings for the economy. The data are not comparable with those presented in figure 3. However, they do give an interesting impression of the contrasting sectoral minima in these two countries.

The new binding collectively agreed minimum rates in the seven sectors shown in figure 4 include a lower rate for eastern Germany in five of the seven cases; a universal rate applies in the painting and varnishing and the waste management sectors (table 2). Nevertheless the Kaitz index for eastern Germany is higher at 57% to 83% compared to 49% to 69% of average gross hourly earnings in western Germany. Thus although average earnings in eastern Germany are significantly below those in western Germany (€11.50 compared to €15.62), the rates are set at a comparatively higher level in eastern Germany. In both regions, the lowest minimum rate is for the laundry sector, so this might therefore be taken as a proxy for the minimum wage floor so far agreed for the two regions of the German labour market – that is, 49% of average earnings in the west and 57% in the east. If we compare the minimum rates set for the two regions instead to the average earnings for the whole of Germany, the ratios are reversed (Table 2, third set of columns) with the sectoral minimum wages set for western Germany ranging from 51% to 72% of average German earnings while the minimum rates set for eastern Germany only account for 44% to 64% of average German earnings. The MW values for laundries, the lowest paid sector, are 51% for western Germany and only 44% for eastern Germany.

Figure 4. Relative value of sector-based minimum wages in eastern and western Germany, 2010



Note: Estimated in relation to separate average earnings data for eastern and western Germany; see note to table 2.
Source: Table 2.

Table 2. Alternative estimations of the value of sector-based minimum wages in Germany, 2010[1]

	Hourly minimum rates (€)		**Relative to separate West and East average earnings:**		**Relative to average earnings for Germany:**	
	West	East	West	East	West	East
Construction	10.8	9.25	69.2%	80.4%	72.4%	62.0%
Electric trade	9.6	8.2	61.5%	71.3%	64.3%	54.9%
Commercial cleaning	8.4	6.83	53.8%	59.4%	56.3%	45.8%
Laundries	7.65	6.5	49.0%	56.5%	51.3%	43.5%
Painting & varnishing	9.5	9.5	60.8%	82.6%	63.6%	63.6%
Waste management	8.02	8.02	51.4%	69.7%	53.7%	53.7%
Care services	8.5	7.5	54.4%	65.2%	56.9%	50.2%

Note: 1. Hourly minimum rates are those agreed and implemented in 2010. We have used the most recently available average earnings data which are for 2008.
Source: Bosch and Weinkopf (2010: table 1) and separate communication.

For Sweden, we draw on data provided by Per Skedinger that updates work already published (Skedinger 2009). Figure 5 presents the sector-based MW as a percentage of average earnings for the economy in seven diverse sectors. It is unfortunately not possible to draw a comparison with the results for German minimum wages since there is not a match of sectors, except for construction. For Sweden, the lowest sectoral minimum is 49% of average earnings (in local government) and the highest among the seven shown is 66% in the bakery sector. The value of the MW floor in the construction sector in Sweden is 53%, lower than the minimum in Germany for construction (see table 2).

Figure 5. Relative value of sector-based minimum wages in Sweden, 2009

Note: Hourly minimum wage as a percentage of average total earnings for all employees.
Source: Personal communication with Per Skedinger; see, also, Skedinger (2009).

2.2. Country trends

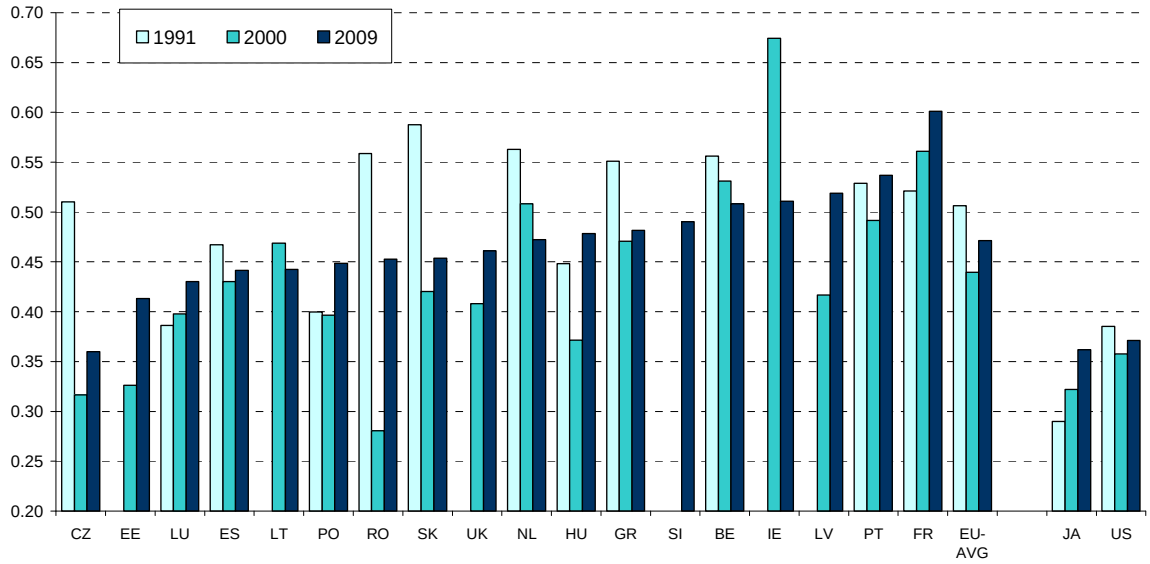
As documented in other studies, for many countries in Europe the decade preceding the recession saw increases in the relative value of the MW (Vaughan-Whitehead 2009b), marking a change from the 1990s when the general pattern was one of decline (Rubery et al. 2005). This change in fortunes can be demonstrated drawing on the OECD MW database which covers 18 EU countries using average earnings for all full-time employees as the harmonised reference wage (figure 6). Between 1991 and 2000, the Kaitz index (median earnings) fell in 10 of the 12 countries included in the dataset, by more than ten percentage points in Romania, the Czech Republic and Slovakia, and by 7 points for the 12-country average. Then, from 2000 to 2009 falls were recorded in only 4 out of 18 countries and the average unweighted Kaitz index for the 18 countries increased from 0.439 to 0.471. For the restricted sample of 12 countries included in the dataset in 1991, the average Kaitz index (median earnings) fell from 0.506 to 0.431 during the 1990s and then recovered, albeit partially, to 0.472 by 2009. The Kaitz index measure using mean earnings (figure 6b) shows a similar reversal of trends, with again only France and Luxembourg experiencing a rising MW value in the 1990s and the majority of countries experiencing a rising MW in the 2000s.

The 2008-2009 recession does not appear to have upset overall trends. For all 18 countries, the value of the MW relative to median earnings increased from 0.450 to 0.472 from 2007 to 2009. However, there is evidence of more mixed effects across countries with five

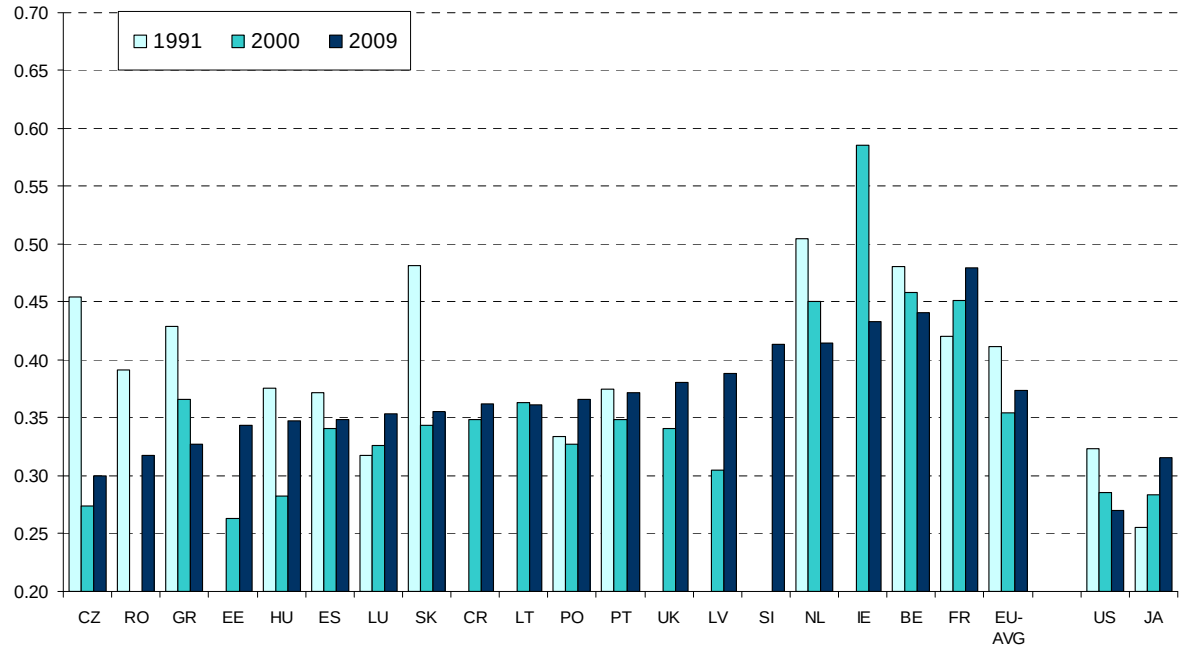
registering a fall in their MW, ten a rise and three marginal change (less than half a percentage point).

Figure 6. Trends in the value of the minimum wage (Kaitz index), 1991-2000-2009

a. Minimum to median earnings



b. Minimum to mean earnings



Note: The Kaitz index is estimated as the minimum wage as a percentage of median (chart a) and average (chart b) gross earnings for full-time employees.
Source: OECD earnings database kindly provided by Mark Keese. Data for Croatia from Nestić and Bakarić (2010).

As well as an overall upward trend, there is some evidence of convergence during the last decade around the mean Kaitz indices of 0.471 (median earnings) and 0.374 (mean earnings) for 2009. The standard deviation among the 17 European countries for which we have both 2000 and 2009 data has certainly reduced, from 0.094 to 0.053 (median earnings definition). Part of the difference can be explained by the changing values of two outlier countries in 2000 – Ireland and Romania (see figure 6a); if we exclude these countries from our estimates, we still find a significant fall in variation, from 0.068 to 0.055. There are nevertheless countries that do not fit the pattern of convergence. In France the already high value MW has continued to rise, in Spain a low MW failed to rise more than the average percentage point rise and the MW in Lithuania a low value MW fell.

Japan and the US provide examples of opposing trends throughout the 1991-2009 period with Japan consistently increasing its MW relative to median and mean earnings, albeit from a very low value, and the US experiencing a fluctuating trend relative to median earnings and a persistent drop in value relative to mean earnings. In 2009 the US ranks bottom among the 20 OECD countries included in the dataset relative to mean earnings with a MW to mean earnings ratio of just 0.270.

Alternative data provided by Eurostat confirm the positive general trend in the Kaitz index. In Vaughan-Whitehead's (2009b) assessment, a combination of Eurostat and national data sources suggest that 10 out of 22 EU countries witnessed a rise in the Kaitz index of one percentage point or more from the late 1990s to 2007 period, compared to 7 countries with a decline of one point or more (op. cit.: figure 1.4).

An estimation of trends using separately collected national earnings data for the seven countries with a statutory MW selected for this report provides complementary evidence for the 2000-2009 period. Figure 7 presents the national earnings data with the value of the minimum wage presented in relation to average gross earnings. Data trends are comparable to the OECD data for five countries (Estonia, Hungary, Spain, France, UK), quite different for Ireland, and they provide additional data for Croatia that are absent in the OECD database. Our intention here is to assess the trends in more detail in light of the changing context of minimum wage policy developments and economic and labour market conditions.

A first finding is that the upward trend in the value of the MW in five of the seven countries is the clear result of an explicit policy objective; these changes can not be interpreted as

unintended outcomes of some sort or other or even as an indirect result of other policies (although France is an exception in this respect). Indeed, although in some cases the policy change was driven by government, in most cases the change was brought about through agreements among social partners and ratification by government. The periods during which we can identify explicit efforts to uprate the relative level of the MW are associated with the main increases shown in figure 7. The improvements in the Kaitz index and particular periods of policy intervention for each country are as follows:

- Spain - 3 percentage points during 2004-8;
- UK - 4 points during 2003-7;
- Croatia - 4 points during 2007-9;
- Estonia - 5 points during 2001-8; and
- Hungary - 12 points during 2000-2.

Hungary is the clearest example of a unilateral government decision to increase the MW in a bid to strengthen its relevance in the labour market (Neumann 2010: 6). Following a steady decline during the 1990s from around 36% to 29% of average gross earnings (national data, 1992-2000), the then centre-right government took the unprecedented decision to increase the MW from HUF25,500 to HUF40,000 in January 2001. The Kaitz index increased by ten percentage points, with a further raise in 2002 bringing the MW to 41% of average earnings (figure 7). The Spanish case is similarly rooted in government policy; this time a newly elected centre-left government had the objective to improve conditions for low wage workers. The goal set in 2004 was to raise the MW to 60% of average earnings over an undefined medium term.[10] Over a four-year period, the government raised the MW each year by an amount significantly above inflation (starting with an increase of 11.4% in 2005 when inflation was at 3.4%). However, the Kaitz index did not increase as much as anticipated (from 33.6% to 36.5%), largely because this was a period of rapid growth in the economy and rising real average earnings.

Croatia, Estonia and the UK provide examples where the active policy intervention arose out of combinations of trade union campaigns, social dialogue and government support. In Croatia, tripartite discussions gave rise to a new Act in 2008 that substantially improved the relative level of the minimum wage – a nominal rise of 19.5% (12.5% in real terms),

[10] The 60% target was ostensibly selected in line with the European decency threshold which is defined in the Social Charter. However since 1994 this threshold has referred to net earnings and is as such difficult to estimate.

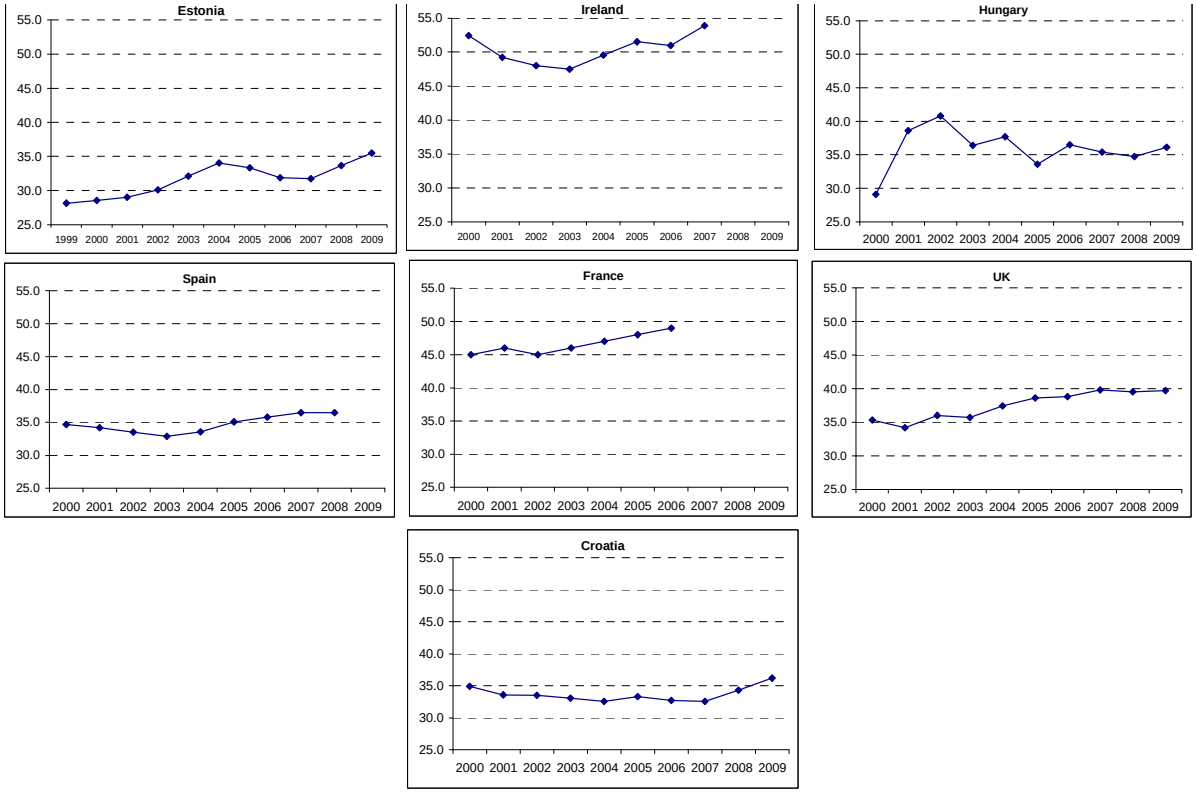
compared to a 1% rise in real average earnings in the Croatian economy, bringing the Kaitz index up to 36.2% in 2009, from 32.6% in 2007. In Estonia, a period of rising real earnings led employers and unions in 2001 to agree to raise the MW to 41% of the national average wage by 2008 (a substantial hike from its 2000 level of 28.5%).[11] This setting of an actual target for the Kaitz index to guide policy (Masso and Krillo 2009) was in part motivated by an objective of aligning the MW with the average EU level. Although a significant upward trajectory was established during 2001-4, the target was not reached (only 34% by 2008) in part because 2005 and 2006 witnessed higher than expected increases in average earnings caused by favourable economic conditions and labour scarcity (op. cit.: 119). The UK scenario is similar. The independent Low Pay Commission changed its approach in 2003 and for four years recommended rises in the MW that were purposefully designed to improve its level relative to average earnings. No target was set, but through this approach the Kaitz index rose four points from 35.7% to 39.8% during 2003-7. There is no evidence, however, that LPC members believed that the UK ought to be able to pay a MW at a level closer to the EU average. However, the LPC did publish its view that a series of increases were consistent with its aim 'to have a minimum wage that helps as many low paid people as possible without any adverse impact on the economy' and that the alternative approach of recommending a series of rises in line with inflation would instead 'lead to a steady withering of the minimum wage' (LPC 2003: 173).

France and especially Ireland do not fit this pattern of explicit and transparent policy intervention. The increases in the MW in France registered up to 2006 were in part a result of government *coups de pouce* (under both left-wing and right-wing governments during 1997-2005), which might be described as reflective of a government desire to use the MW to boost conditions of low wage workers. However, unlike the five countries reviewed above, the *coups de pouce* were not guided by a strategic approach towards the MW uprating nor were they responsive to a negotiated agreement among social partners. Moreover, an alternative assessment of the earnings data suggests that it was in fact the reduction in working time following the Aubry laws I and II (and not the *coups de pouce*) that generated, indirectly, most of the rise in the Kaitz index during the first half of the 2000s (Gautié 2009: 153, 176). The case of unintended outcomes is even more pronounced in Ireland. The fluctuating trend in figure 7 is partly a result of the uneven frequency of upratings. For

[12] A controversial decision since the Treaty on the Function of the European Union states that the legal competence of the EU does not extend to the field of labour law with regard to pay and labour relations (Alber 2010).

example, following a 9.3% increase in May 2005, the next rise was announced some 20 months later in January 2007, thus explaining the drop relative to average earnings during 2006 (Nolan 2009). There is no evidence that the net gain over the 2003-7 period was part of an explicit approach.

Figure 7. Trends in the value of the minimum wage (Kaitz index) 2000-2009



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estonia	28.2	28.5	29.0	30.1	32.1	34.0	33.3	31.9	31.8	33.7	35.5
Ireland	--	52.4	49.2	48.0	47.5	49.6	51.5	51.0	53.9	--	--
Spain	--	34.7	34.2	33.5	32.9	33.6	35.1	35.8	36.5	36.5	--
France	45.0	45.0	46.0	45.0	46.0	47.0	48.0	49.0	--	--	--
Hungary	29.1	29.1	38.6	40.8	36.4	37.7	33.6	36.5	35.4	34.7	36.1
UK	36.7	35.3	34.2	36.0	35.7	37.4	38.6	38.8	39.8	39.5	39.7
Croatia	33.0	34.9	33.6	33.5	33.1	32.6	33.3	32.7	32.6	34.3	36.2

Notes: The Kaitz index here is estimated in relation to gross average earnings for all employees for Croatia, Spain, Estonia, France (assuming a 35-hour week), Ireland and the UK, but for full-timers only for Hungary.
Source: Research project team members for Spain, Hungary, UK and Croatia; Brian Nolan (personal communication) for Ireland; Jerome Gautié (2009: table 5.3) for France; and Jaan Masso (personal communication) for Estonia.

A second finding from our national reports is that for policy interventions to be accepted and sustained it is important for procedures for fixing the minimum wage to be widely accepted. Croatia provides the clearest case of a breakdown of consensus among social partners following its newly implemented 2008 Act. Its uprating rule (see above) has proven to be

ambiguous and open to multiple interpretations; social partners have sought legal advice on the issue and the government established a special working group. In France, increasing conflict among government, unions and employers about the appropriateness of the discretionary government interventions led to the setting up of a new independent commission which since 2009 reviews each year the effectiveness of the index links and the need for a *coup de pouce*. However, disagreement persists about the role of the minimum wage as a tool of active incomes policy or simply as a floor to the wage structure (Gautié 2009: 176). By contrast, the UK appears to have a relatively strong set of foundations for its approach to MW policy intervention. One ex-member (and academic) makes the case that the institutional arrangement for setting the MW (the Low Pay Commission) is both reflective and constitutive of a new industrial relations settlement, characterised by more confident unions and more pragmatic employers – the ingredients for a consensus approach (Brown 2000, 2009). However, the response to the recession has revealed the fault-lines to this new consensus; 2008 saw recommendations for a MW freeze from employers and strong appeals from unions to ignore such requests (Grimshaw 2010: 11-12).

3. Minimum wages and collective bargaining: complementarities and tensions

The setting of a statutory MW is one of a number of instruments of public policy at the disposal of governments - along with maximum working hours and minimum paid holidays, for example - to set basic legal standards in the labour market. As the ongoing debate in Germany demonstrates, however, such standard setting is not always supported by social partners who may perceive the government to be stepping outside its boundaries of public policy into areas of regulatory responsibility controlled by unions and employers (see, also, Hassel 2006: ch3). Nor is a statutory wage floor always supported by government. For some political parties government intervention in wage-setting is seen as impeding the private activities and decisions in the labour market by individual and collective bodies. This position was deployed to great effect in the UK during the 1980s and early 1990s and resulted in the abolition of wages councils that set sector-specific minimum wages. These arguments also accounted for the low rates of minimum wages set in the transition economies in Europe in the early 1990s. However it is important not to focus only on debates for and against government regulation in explaining MW developments; developments in Germany and in other European countries demonstrate that the wider country system of industrial relations matters enormously in understanding the role and effectiveness of MW policy. In this section of the report we draw on our data for nine European countries to elaborate on the possible tensions and complementarities between MW policy and the country model of industrial relations. We explore two issues:

- the approach of government, unions and employers to the MW; and
- the interaction between the MW and the strength of collective bargaining coverage.

3.1. Government, social partners and the minimum wage

While a majority of countries in Europe have established a statutory MW, the operationalisation of the policy is likely to be a continuing source of conflict and tension. Indeed across Europe the continuing change in the direction of MW policy and the regular debates and conflicts over the appropriate uprating of the minimum demonstrate the raft of

tensions among the interests of government, unions and employers and their approaches to the MW. Table 2 sets out the main tensions and complementarities for each of the three social actors.

One source of such tensions is the perceived potential conflicts between a statutory MW and other objectives of government policy: for example, there may be a fear that it will price low-skilled workers out of the labour market and lead to firms closing where low levels of productivity are not aligned with a higher wage floor. However the perception of such risks may have decreased after the early 1990s work in the US (eg. Card and Krueger 1995) and the UK (Machin and Manning 1994) that appeared to refute the longstanding expectation among economists that a MW necessarily causes significant negative employment effects. A second major risk that governments may perceive is that of inflation caused by a rising MW coupled with large spillover effects, or ripple effects, further up the wage structure. The size of this risk depends, however, on the level of the MW and its interaction with the country model of wage-setting. Freeman (1996: 645) argues that in countries with a MW at a low-to-medium level and a pattern of weak collective bargaining 'it is difficult to see how a minimum could set off general wage inflation'. Alongside these potential tensions there are several possible areas where complementarity between minimum wages and government policy goals can be identified. Where a government seeks a more equal society, with a narrower gap between the rich and poor, a MW can contribute by raising the wage floor (Heymann and Earle 2010). A MW also establishes a transparent floor to wage competition among firms and reduces (or prevents, depending on the level) the risk of workers living below subsistence income levels. The fewer the number of workers living below subsistence, the less pressure on government to top up household income through means-tested benefit payments, such as in-work tax credits for example (Freeman 1996: 644-5, Sachdev and Wilkinson 1998). A higher MW can also contribute to 'making work pay' and reducing incentives to remain on unemployment benefits.

The principle of a statutory MW can also be said to both complement and conflict with trade unions' general approaches to wage bargaining. On the one hand it potentially dovetails with union strategies to compress the wage structure among members (Turner 1952) and chimes with both the Webbs' notion of a common rule to wages and US unions' strategy of 'wage standardisation' (Metcalfe et al. 2001). It may also fit with a union's strategic approach to wage equality. For example, unions may seek to boost low pay by negotiating 'bottom-

loaded wage agreements' that truncate the wage structure (Heery 2000: 59), or may campaign for 'living wages' defined at a level above the statutory wage floor (Erickson et al. 2002). MW policy also complements union efforts to improve gender pay equity through gender equality bargaining (Dickens 2000), especially in light of women's over-representation among the lowest paid (Rubery et al. 2005). On the other hand, MW policy may also conflict with trade unions' approach to wage bargaining if it is perceived to undermine collective bargaining and to inhibit its spread among unorganised workers. A statutory wage floor pitched too low may generate concerns among unions that it could pull down higher minimum rates negotiated in collective agreements. And where workers perceive a national MW is effective in providing protection it may act as a disincentive among those in low wage jobs to join a trade union.

Table 2. Minimum wage policy and the interests of government, unions and employers

	Potential tensions	Potential complementarities
Government	- fear of job loss and the pricing out of long-term unemployed - risk of inducing wage-led inflation - increases labour costs in public sector - not the best instrument to tackle poverty - not the best instrument to raise productivity	- fits with goal of income redistribution - prevents bidding down of labour costs below subsistence level and reduces risk (and costs to government) of working poverty - can be used as part of a policy of wage restraint to guide inflation - raises tax revenue (more income tax and lower in-work benefits) and reduces risk of poverty traps by decreasing reliance on means-tested benefits - encourages low productivity firms to improve standards - chimes with gender equality objectives - makes work pay
Unions	- undermines voluntarist model of collective bargaining of wages - reduces incentive among low paid to join a union	- fits with a 'common rule' approach to wage-setting - 'bottom-loaded' wage agreements and living wage campaigns can build on the statutory wage floor - complements a gender equality approach
Employers	- Tends to truncate the wage structure, so that wages do not reflect productivity differences - reduces competitiveness in tradeable sectors - unable to pass on wage increases in prices to customers/clients - unable to raise worker performance/productivity in line with pay - risk of firm closing	- limits free-riding by informal, 'cowboy' competitor firms - sets a realistic benchmark in the labour market to attract suitable recruits - improves workers' perceptions of fairness and contributes to better performance - provides a catalyst for skill development

Finally, while employers are often assumed to be resistant to MW legislation the opposite may also be the case. The bulk of employers may in fact welcome a properly enforced system of minimum standards that makes it difficult for low cost firms to compete on the basis of very low wages and/or informal payment methods. Also, in line with studies of experimental labour markets (Falk et al. 2005), they may anticipate that a MW should improve norms of fairness among workers, raising their commitment and contribution to firm performance. And employers may also perceive a MW as a necessary component in their 'quality enhancing' approach to work organisation with investment in training and higher pay the ingredients for lower staff turnover and high productivity (McLaughlin 2010). But several conflicts with employer interests may still be present. Employers may be unwilling to accept any constraints on a voluntarist or market-led process of wage-setting which in their view enable them to match pay with individual productivity. Employers may also worry that it introduces pressures outside their control to pass on price rises to their base of customers. Many low-wage sectors are characterised by intense cost competition. Where this involves international competition, dependence on powerful customer firms or competition with firms operating illegally, employers may experience real difficulties passing on the costs (Grimshaw and Carroll 2006).

Evidence from five countries

The five country reports reveal contrasting approaches to MW policy among government, trade unions and employers (table 3). In the four countries with an already established statutory MW, governments espouse a generally supportive approach albeit for different reasons. Perhaps the most active policy support and guidance from government is apparent in Spain where a newly elected social democratic government in 2004 has sought to use the MW as an instrument to improve low incomes and strengthen social cohesion. The Spanish government has argued for a medium-term rise in the MW up to a level of 60% of average earnings, which would make it by far the highest MW in Europe. In Hungary and Croatia, it is widely assumed that employers in the grey economy pay workers a MW topped up by an 'envelope payment' in order to minimise tax payments. These inter-relationships with the practice of informal, 'envelope' payments therefore figure quite significantly in each government's assessment of the statutory MW. In this context a rise in the MW may be an effective way to increase tax receipts. In both countries, the government has to balance this incentive to use minimum wages to raise taxes with the disincentives that stem from the fact that a higher MW also implies higher welfare payments; in Croatia the MW is linked to

unemployment benefits and in Hungary to unemployment benefits, sickness benefits and others. The only government in our sample of five countries explicitly opposed to a statutory minimum is in Germany. It argues that a MW would drive out jobs, that it is not an appropriate activity for public policy and that wage-setting ought to be governed by the private actions of private employers and unions.

Table 3. The outlook of unions, employers and government towards minimum wage policy

	Trade unions	Employers	Government
Statutory national minimum wage			
Croatia	Progressive: -Favour steady uprating of MW relative to average earnings -Largest union association (UATUC) opposes sectoral differentiation but favours skill differentiation	Conservative: -Do not favour raising the Kaitz index measure -Wish to use MW as bottom rate in collective agreements	Cautious: -Seeks to balance union and employer views -Focus on net impact of MW policy on government tax and spending (informal/ envelope payments; links with unemployment benefits)
Hungary	Progressive: -Emphasise the social policy meaning of the MW (link to subsistence level) -Bargained successfully for skilled worker MW -Oppose automatic uprating mechanism -Campaign for a higher MW (up to 60% of average wage)	Conservative: -Emphasise competitiveness and adverse job effects -Oppose multiple MW rates by skill -Oppose automatic uprating mechanism	Constructive: -Uses the MW to reduce informal economy, make work pay and increase income tax revenues -3-year deal good for stability
Spain	Supportive: -Favour the delinking from welfare payments -Limited attention to MW due to its low level	Conservative: -Oppose high MW increases proposed by government -Limited attention to MW due to its low level	Progressive: -Uses the MW to improve the spending power of low wage workers and enhance social cohesion -Goal of 60% Kaitz index
UK	Progressive: -Recognise importance of MW in context of weak role of unions in wage-setting -Most unions campaign for increase in relative level of MW -Some unions work to build on MW in collective agreements	Pragmatic: -Support the principle but increasingly emphasise the cost pressures on firms -Active in consultative/partnership process of Low Pay Commission	Supportive: -Supports independent role of Low Pay Commission and generally accepts recommended rates
Collectively agreed sectoral minima			
Germany	Supportive: -Service sector unions especially supportive of a new statutory MW	Supportive: -Many employers support new binding minimum wages in several sectors - Predominantly unsupportive towards a new	Cautious: - Pragmatic support for binding sector minima - Argue a new national statutory MW would drive out jobs

national statutory MW

Source: Five national reports: Banyuls et al. (2010), Bosch and Weinkopf (2010), Grimshaw et al. (2010), Nestić and Bakarić (2010) and Neumann (2010).

Unions are supportive in all five countries and can be said to offer progressive, or strongly interventionist, support in three countries – Croatia, Hungary and the UK. Union support in Germany is a relatively recent phenomenon, with a public joint demand for a statutory MW by the German Trade Union Confederation only voiced in 2006, following longer-running campaigns by the service sector unions. A similar delay in support for a national MW occurred among British unions as it became clear in the 1970s and 1980s that falling collective bargaining coverage did not provide appropriate protection for workers in low wage sectors (Blackburn 1988). Today unions in the UK are strongly supportive of the statutory MW and most campaign for a significant increase in its level, particularly the unions Unison (the largest public services union) and the Public and Commercial Services union, the fifth largest union in the UK. Trade unions in Hungary, although facing shrinking bargaining power, have been active in shaping MW policy, most notably with their successful lobbying for the introduction of an additional statutory minimum for skilled workers in 2006, pitched at around 20% higher than the standard MW.

Employers are not explicitly opposed to a statutory MW in Croatia, Hungary, Spain and the UK and instead lobby in a conservative, or pragmatic, style for changes in policy to fit with an emphasis on cost-based competitiveness and an approach that keeps the MW as a wage floor rather than a redistributive tool. Only in Germany are most employer associations openly opposed to a legally enforced country-wide MW, arguing that it would make Germany's labour costs internationally uncompetitive. Nevertheless, employers in Germany have supported the binding coverage of minimum wages in several sectors. The caution exercised by employers and government in Germany contrasts with their counterparts in the relatively liberal market environment of the UK which, according to one former member of the Low Pay Commission and industrial relations expert, adopted a pragmatic approach to social partnership with unions in light of the newly introduced MW (Brown 2009); on many issues of MW policy development, Brown argues that it would be difficult for an outside observer to identify the allegiance of a member of the Low Pay Commission to the union or employer side. There are interesting exceptions in Germany, such as the employer body for the cleaning sector (*Bundesinnungsverband des Gebäudereiniger*-Handwerks, BIV), which

not only supports a binding collectively agreed MW for the sector but also lobbies for a statutory national MW on the basis of equality and fairness so as to prevent social dumping across sectors (Bosch and Weinkopf 2010):

> *While employers in the cleaning sector are obliged to pay minimum wages that are above usual pay rates in several other industries, other companies around the corner in sectors without minimum standards can pay [cleaners] much lower wages. This is not fair and even endangers the acceptance of and compliance with the minimum wages in the cleaning sector* (BIV representative cited in Bosch and Weinkopf 2010: 30).

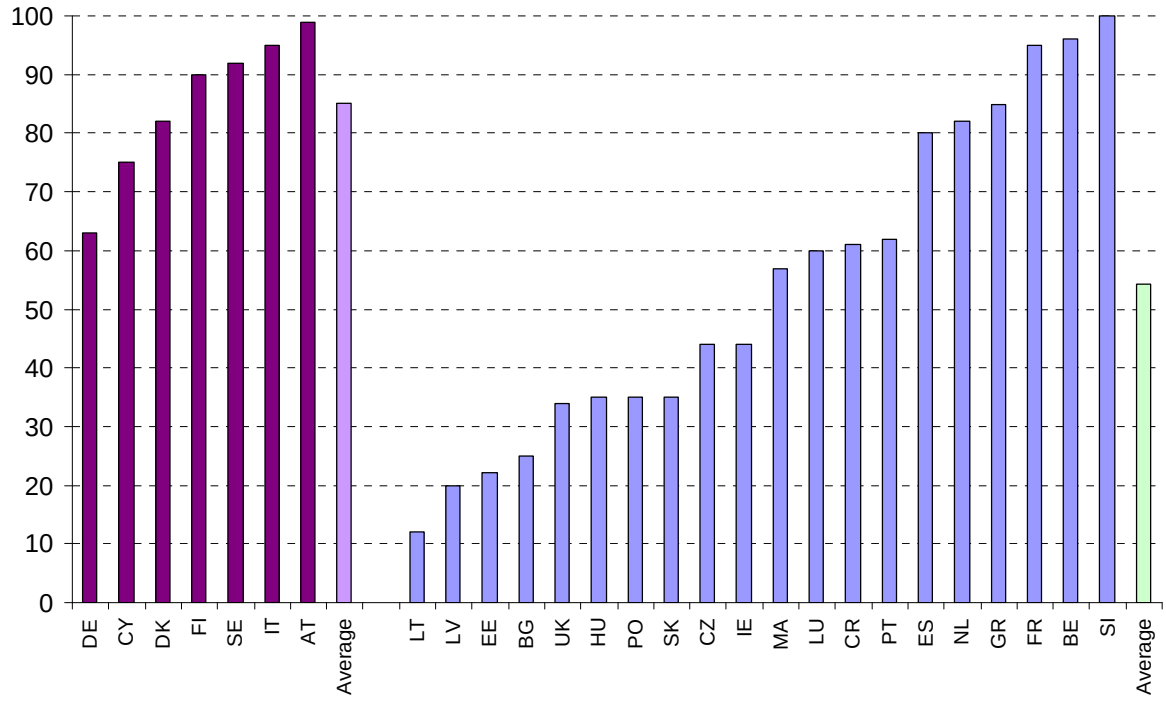
3.2. Interaction between the minimum wage and collective bargaining

Previous comparative studies make two general observations about the inter-relationship between a statutory MW and the model of collective bargaining (EC 2008: chapter 3, Schulten 2006, Vaughan-Whitehead 2009a). First, countries with strongly coordinated collective bargaining and high levels of coverage tend not to have a statutory MW. The group of European countries without a statutory MW includes Austria, Denmark, Germany, Finland, Italy, Cyprus and Sweden. Austria implemented a new MW in 2009 (a gross monthly wage of €1,000 or €14,000 per year accounting for the 14 monthly payments) as part of a national, cross-sectoral agreement negotiated by social partners. It is not a statutory requirement and this has raised questions regarding lack of coverage of workers in sectors and regions where social partners have not concluded a collective agreement (Hofbauer and Adam 2009). Also, while collective bargaining coverage in five of the six countries shown in figure 8 is at least 80%, this is not true of Germany, thus largely explaining why the issue of a statutory MW has now risen to the top of the industrial relations agenda. For the others, strong collective bargaining has traditionally provided a functional equivalent to statutory MW protection, ensuring the lowest paid receive adequate protection (Schulten 2006: 12).

However, as other studies show (Bosch and Kalina 2009, Bosch and Weinkopf 2010, Skedinger 2009, Woolfson and Sommers 2006, Woolfson et al. 2010), a trend towards liberalisation of the European services industry coupled with increased labour migration present challenges to this model of collectively bargained protection for the lowest paid. In 2007 the European Court of Justice ruled that a Latvian construction firm (Laval un Partneri) could not be forced to enter into collective negotiations with a Swedish union on rates of pay

for its posted workers. Moreover, in a controversial legal decision, the strike was ruled illegal because it was said to have precluded the company's freedom to provide services with its posted employees.[12] The decision affirmed the criteria of the Posted Workers Directive which requires firms from other member state countries to comply with a national MW set through legislation. As with the rulings in the Viking and Rűffert cases, a minimum rate established through collective bargaining that is not extended nationally is not considered as a minimum rate of pay by the ECJ, thus leading to the claim that the Court's rulings are not neutral concerning the different institutions of member states but are biased against collective agreements (Alber 2010: 28). In a context of increasing numbers of posted workers, these rulings pose a serious dilemma for labour relations and wage bargaining in those countries without either a statutory MW or extended collective agreements.

Figure 8. Collective bargaining coverage in countries with and without a statutory minimum wage, 2006 (EU-27 plus Croatia)



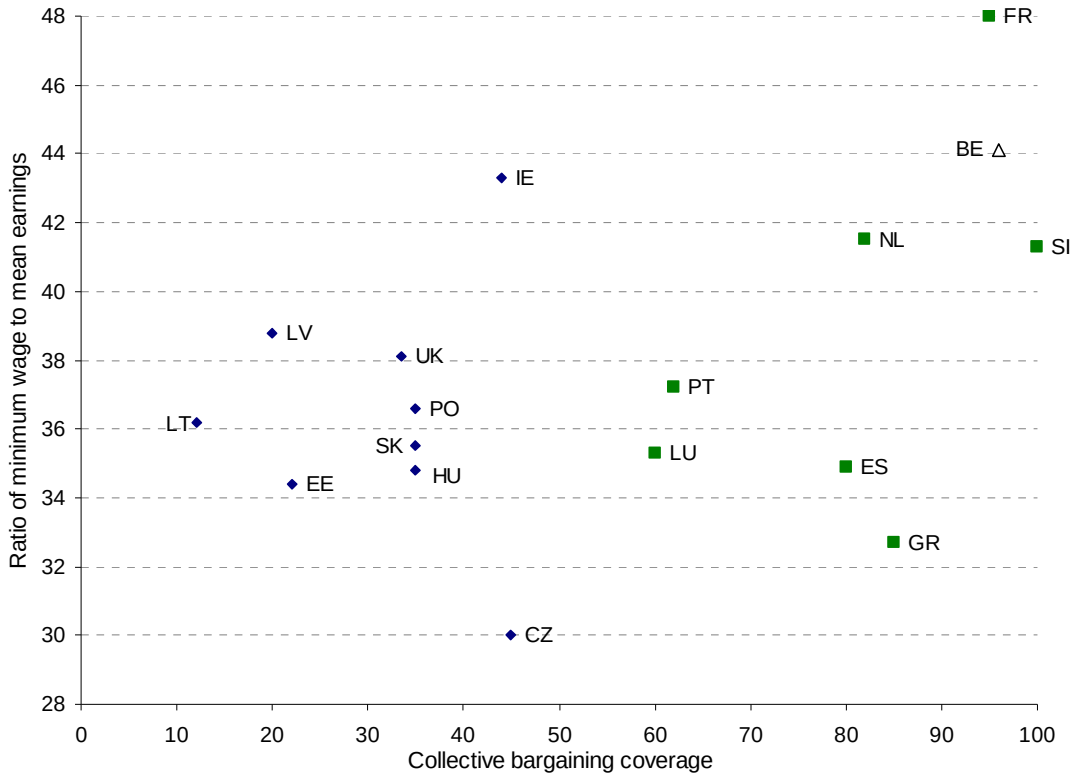
Note: Data for Romania missing. 2006 data except Greece and Hungary (2005).
Source: ICTWSS (Visser 2009); except Croatia (Nestić and Bakarić 2010) and Ireland (eironline 2007); see appendix table A1.

A second general observation about the relationship between minimum wages and collective bargaining is that among countries with a statutory MW, the stronger the collective

[12] A controversial decision since the Treaty on the Function of the European Union states that the legal competence of the EU does not extend to the field of labour law with regard to pay and labour relations (Alber 2010).

bargaining the higher the relative value of the MW (see figure 9). The two institutions thus appear to be complementary. The estimated correlation between the two variables shown in figure 9 is moderately positive (0.457). Countries classified as having either an 'inclusive' or 'dual' model of industrial relations (following the definitions set out in Gallie 2007; see, also, Visser and Checchi 2009) tend to be in the upper right-hand corner of the graph with above-average collective bargaining and an above-average value of the MW. Other countries classified as having an exclusive industrial relations model are more likely to be located in the bottom left-hand corner of the graph. There are exceptions to this pattern. In particular, both Spain and Greece have relatively high levels of collective bargaining coverage but sustain a relatively low value of their statutory MW.

Figure 9. The value of a statutory minimum wage and the level of collective bargaining coverage



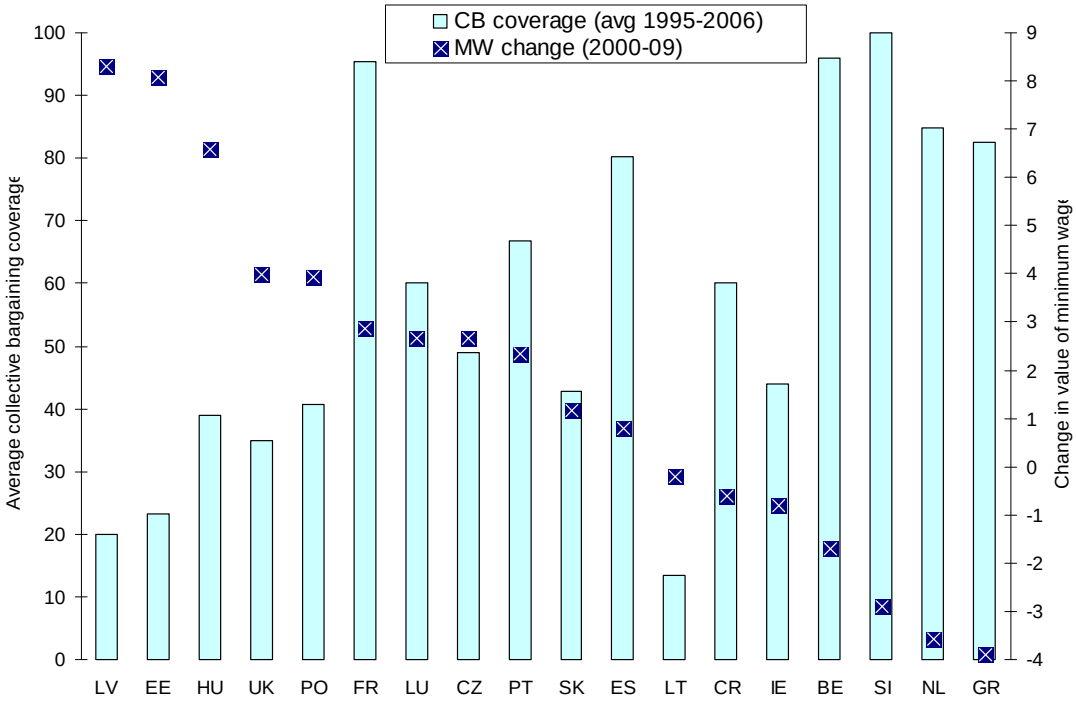
Note: Correlation between the variables of 0.457;
Countries are colour coded to fit type of collective bargaining: blue diamond = exclusive; green square is dual; and white triangle is inclusive;
Collective bargaining data refer to 2006, except 2007 for Ireland and 2005 for Greece and Hungary.
Minimum wage data refer to 2009.

Source: OECD minimum wage database for ratio of minimum wage to mean earnings; Collective bargaining data from ICTWSS (Visser 2010) except Ireland collective bargaining data from eiro.online.

One reason for the positive relationship is that strong collective bargaining coverage is associated with a more compressed wage distribution, which in principle raises the relative level of low wages. This compression in bargained rates is likely to have an upwards effect on the setting of the MW level as well (EC 2008: 83). It is also possible that social partners are in a stronger position to argue for a higher national MW – either because this suits their pay equity strategy or, as the EC (2008) study argues, because it avoids low wage competition which might damage centralised wage agreements.[13]

However, there is also a dynamic feature to these cross-national patterns, which may alter the positioning of countries. This concerns a third less well-known observation that the value of the MW has tended to increase more in those countries with weak collective bargaining (figure 10).

Figure 10. Change in minimum wage value (2000-9) and strength of collective bargaining coverage (averaged over 1995-2006)



Note: Correlation between variables of -0.648;
The level of collective bargaining coverage is averaged over the period 1995-2006, except Croatia which refers to an estimate for 2010 (Nestić and Bakarić 2010);
The change in the minimum wage level refers to the difference in percentage points between the Kaitz index in 2000 and in 2009 – except Ireland, 2001-2009, and Slovenia, 2005-2009.

Source: OECD minimum wage database plus data for Croatia from (Nestić and Bakarić 2010); Collective bargaining data from ICTWSS (Visser 2009) except Croatia (Nestić and Bakarić 2010) and Ireland (eironline).

[13] Our findings complement the EC (2008) study which report various statistically significant correlations between the Kaitz index and industrial relations variables including employer density (0.741), union density (0.600) and bargaining centralisation (0.581).

The data plotted in figure 10 suggest a relatively strong negative relationship between the change in MW value during 2000-2009 and the strength of collective bargaining coverage (averaged over the 1995-2006 period); the estimated correlation between variables is -0.648. Seven out of eleven countries that experienced a rising MW were countries with an exclusive model of industrial relations – that is, weak (and generally uncoordinated) collective bargaining coverage. It appears that governments and/or social partners have intervened to improve the statutory MW in a context of weak collective bargaining strength. France, Luxembourg and Portugal are the main exceptions, combining dual models of industrial relations with a rising MW. On the other hand, countries that have experienced declines in the MW value during 2000-2008 tend to have a relatively high level of collective bargaining coverage. This group of countries includes Belgium (with its inclusive model of industrial relations) and the dual models of Slovenia, the Netherlands and Greece. As such, mirroring our comments in section 2 above, we can conclude that there is evidence of convergence trends in the level of the MW, albeit with notable country exceptions.

4. Redistributive effects of the minimum wage on wage structure

A MW can play an important role in achieving greater equality in the labour market and thus contribute to the goals of Europe 2020 to improve social cohesion across Europe. The findings of international comparative research have consistently identified a strong positive relationship between the strength of wage bargaining institutions, including the presence and level of a MW, and the degree of wage equality. In a recent detailed study of the impact of labour market institutions on earnings inequality in OECD countries, Sniekers (2010) finds the Kaitz index measure of a MW has had an increasingly negative effect on wage inequality at the bottom of the wage structure over the last two decades. Other studies support this general conclusion with respect to the particular measures of gender pay equity (eg. Rowthorn 1992, Blau and Kahn 1992, Rubery and Fagan 1995) and the incidence of low pay (eg. Bosch et al. 2010, Grimshaw 2010, Lucifora et al. 2005, Salverda and Mayhew 2009). In this section we identify the redistributive effects of MWs (following Freeman 1996) on these two measures of pay equity, the incidence of low pay and the gender pay gap.

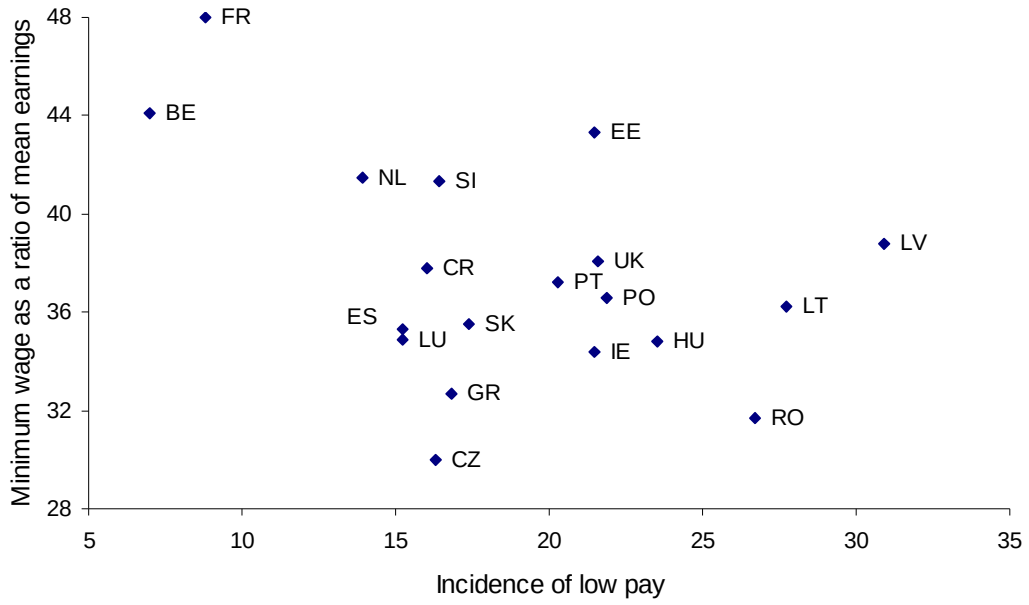
4.1. The effect on low pay

The empirical evidence suggests a negative relationship between the value of a country's MW and the incidence of low wage employment, defined as the percentage of employees earning less than two thirds median earnings. Data for 19 European countries are graphically presented in figure 11. The estimated correlation index is -0.432. Countries with a higher MW relative to average earnings, such as Belgium and France, generally have a lower incidence of low wage work than countries with a low value MW. There is of course some variation. For example, Spain and Lithuania have a similar relative value of the statutory MW, at around 35% of the average wage, but Spain has only half the incidence of low wage work among full-timers as does Lithuania, 15% and 28%, respectively.

But the general pattern is a negative relationship. Indeed, it appears that a necessary condition for a low incidence of low wage work (for instance less than 15% of the full-time

workforce) is the maintenance of a high value MW, of at least 42%. This only prevails in three countries – Belgium, France and the Netherlands.

Figure 11. The value of the minimum wage and the incidence of low pay (full-timers)



Note: Full-timers only covered in the definition of low wage work, 2006 data; 2009 minimum wage data using minimum wage as a ratio of mean earnings.
Source: OECD minimum wage database. Structure of Earnings Survey (2006) for low wage incidence. Croatia data from Nestić and Bakarić (2010).

But there may also be an upper threshold to the value of the MW beyond which it encroaches on other aspects of labour market performance, such as job creation, or on the freedom of social partners to set wages and address low pay through collective bargaining. This kind of argument is central to the French experience where in recent years the high level of the statutory MW has been blamed for the persistent high rate of unemployment and crowding out of collective bargaining (Gautié 2009), despite its welcome effect in reducing the incidence of low wage work. However, few countries enjoy the comfort of debating how to adjust a MW in a scenario where the statutory minimum is valued at around half average earnings and the incidence of low wage work is less than 10% of the full-time workforce. Unlike France, in most countries it would appear there is still a lot more to be gained by improving the value of the MW and thereby reducing the socio-economic costs associated with a high volume of low wage work.

Aside from its direct impact in raising the pay of low wage workers, a MW can also have 'ripple effects', or wage spillover effects, that improve the pay of many low wage workers

earning just above the MW level. Ripple effects refer to wage increases at levels of pay above the statutory MW introduced to restore, at least partially, pay differentials between workers earning the MW and those earning somewhat above the minimum (for the US, see Pollin et al. 2008). Such differentials may underpin differences in job status, seniority or skill and may be vital for the collective sense of fairness which feeds into workers' morale and their commitment to good performance. At the same time, however, if all pay differentials are perfectly restored all the way up the wage scale then a MW rise fails in its redistributive objective and the incidence of low pay remains the same (Freeman 1996).

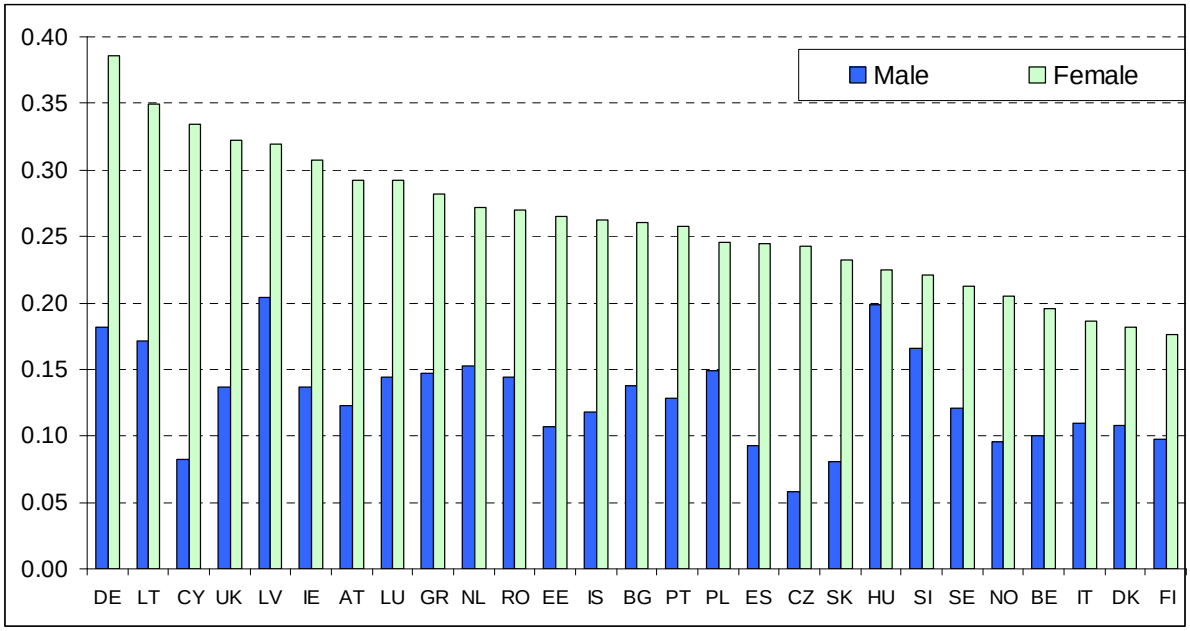
Unlike MW rises, ripple effects are not mandated. One of the major uncertainties, therefore, in understanding the consequences of MWs for low wage employment, relates to the variation in size of ripple effects. We can expect country differences. For example, in countries where workers' pay tends to be covered by collective bargaining it is likely that ripple effects are significant since trade unions (and employers) can negotiate changes to a formal pay structure and may be particularly interested in building on the advantage presented by a MW rise and arguing for the restoration of wage differentials that relate to differences in experience, job responsibility, skill or qualification or the profitability of the enterprise or sector. Conversely, in countries without the protection of joint regulation of wages ripple effects are likely to be considerably smaller.

In her analysis of the effects in the retail industry in the United States, where the MW has a strong bite, Wicks-Lim (2008: table 11.1) found that the ripple effect extended up to the 40th wage percentile at a point where the wage is 25% higher than the MW (incorporating both an immediate and a lagged effect in the calculations). The wage elasticity at this level was 0.14, equivalent to a 1.4% rise for a 10% rise in the MW. As such, the estimates point to a strong compression effect of a rising MW among the lowest deciles of the wage distribution (op. cit.). How do these findings relate to efforts of policy-makers and/or social partners to reduce low wage employment? One issue concerns the balance between raising the wage floor relative to the median and the risk of increasing the concentration of workers paid at or only slightly above the MW. In the absence of ripple effects, raising the MW will not contribute much to reducing the share of low wage workers, unless of course the MW is raised above the low wage threshold (two thirds of the median wage). But what is the optimum size and distribution of ripple effects needed to maximise the redistributive effect of a rising MW?

4.2. Gender pay equity

Women are more likely than men to benefit from the protection afforded by a MW because they are over-represented in low wage employment. Better protection for female low wage workers can potentially improve women's total average earnings and therefore contribute to a narrowing of the gender pay gap (Rubery et al. 2005; Grimshaw 2010). New estimates from the EU-SILC data for full-time equivalent hourly earnings show that for all 27 countries (including Norway and Iceland but not France and Malta) women consistently face a higher risk of low wage employment than men (figure 12). In 23 countries, the share of low wage employment among women exceeds 20% but this is only true for men in one country, Latvia. The average share of low wage employment among women across countries (unweighted) is 26.9%, while for men it is 12.9% (and 19.2% for all workers in the 27 countries).

Figure 12. Incidence of low wage employment by gender (full-time equivalent), 2008



Note: Low wage employment defined in the usual way as two thirds of median earnings. Average hourly full-time equivalent earnings data estimated from annual earnings corrected with monthly data on full-time and part-time employment status along with ELFS average working hours for full-timers and part-timers for each country. Weighted estimates.
Source: EU-SILC (2008). Data compiled and provided by Anthony Rafferty, EWERC, Manchester Business School.

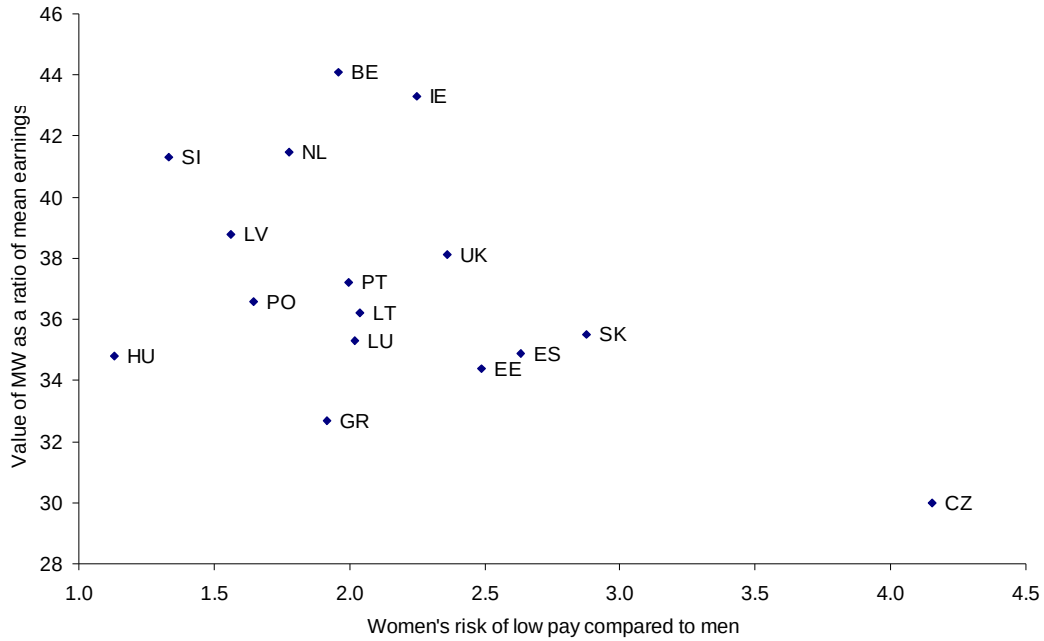
The incidence of low pay among female employment is highest in Germany: close to four in ten women in employment are low paid according to the EU-SILC 2008 data. This may be somewhat surprising in light of its long-established model of collective bargaining, but the data fit with recent studies on low wage employment in Germany which point to the fast-

rising incidence of low wage work and the strong gender divide (Bosch and Weinkopf 2008, Gauié and Schmitt 2010). Women's very high risk of low pay in Germany, more than double that of men, is the result of a mix of factors: there is no statutory national MW; there is evidence of gendered sectoral variation in collectively bargained minima (eg. lower minima in cleaning and hospitality sectors); there is also gendered bargaining coverage with coverage in female-dominated activities in the private sector tending to be lower or absent altogether; and many part-time workers fall outside the protection of collective bargaining largely due to difficulties of enforcing agreements in areas with many mini-jobs (Bosch and Weinkopf 2010).

Other studies have investigated the relationship between the presence and level of a MW and women's incidence of low-wage employment. Rubery et al.'s (2005) cross-national comparative analysis suggests there are benefits for gender pay equity associated with improvements in the relative level of a country's statutory MW. We might expect that raising the MW floor would compress the bottom half of the wage distribution (Sniekers 2010) and thereby level out some of the differences between women's and men's propensity to be low paid. We provide a simple test of this proposition in figure 13 by comparing country measures of the value of the MW (as a percentage of average earnings) and the percentage difference between women's and men's incidences of low wage employment.

There is a moderately strong negative relationship between the two variables (a correlation measure of -0.49), such that in general the higher the MW the lower the gender gap in incidence of low wage employment. Slovenia, the Netherlands and Belgium are illustrative of countries where a relatively high value MW appears to act is a preventive measure against women incurring a very high low wage penalty; in these countries women's risk of low pay is contained at or below twice that of men's. Also, the countries where women face the highest gender bias in the distribution of low wage employment are among those with the lowest value MW. This includes: the Czech Republic where women face a four-fold risk of low wage work (according to the EU-SILC full-time equivalent earnings data) and the level of the MW is the lowest in Europe (see figure 3 above) and Estonia, Slovakia and Spain where women's risk of low wage work is high compared to men and the MW is among the lowest.

Figure 13. The value of the minimum wage and women's risk of low pay compared to men, 2008



Notes: Low wage data as in figure 12 above. The correlation measure between variables is -0.489.
Source: EU-SILC (2008) for low wage incidence (provided by Anthony Rafferty) and OECD minimum wage database.

Among the seven European countries without statutory MW protection there is a polarisation of outcomes. In Italy and the three Scandinavian countries (Denmark, Finland and Sweden) women's risk of low pay compared to men is low – less than twice the risk. The reason lies in part with the high minimum rates in collective bargaining agreements and the low dispersion of minima by sector, as well as a comparatively compressed wage structure that includes narrow gender wage differentials at the lowest quintile wage (Rubery et al. 2005). In contrast to these countries, women in Germany, Austria and Cyprus face higher penalties compared to men, 2.1, 2.4 and 4.0, respectively. As we saw in section 2 above there is a high dispersion of minimum rates in collective agreements with female-dominated sectors the least likely to enjoy high minima. In west Germany, the female-dominated commercial cleaning, laundries and care services sectors have sector-based minimum rates of between 49-54% of average earnings, whereas the male-dominated painting and varnishing and waste management have minima of 51-61% (table 2 above).

5. Minimum wages and distributive pay bargaining: Evidence from four sectors in five countries

Building on the comparative, country level insights presented in the above sections, this section compares and contrasts original empirical evidence from five countries on the way MW systems interact with pay bargaining strategies of trade unions and employers. The general aim is to understand better how the kinds of patterns detected in our country-level comparative analysis – between presence of a statutory MW, MW levels, strength of collective bargaining and pay equity measures – are articulated through sector and company levels of pay bargaining. As we explored in section 3.1 above, government, unions and employers have varying (and often conflicting) views about MW rules. Here, we are concerned to understand how concrete developments in MW policy inter-relate with the processes and outcomes of collective bargaining. Several inter-related questions are addressed in the course of our analysis, including:

- Does a rising MW complement or conflict with trade union and employer pay strategies?
- How does pay bargaining modify and shape the gap between collectively bargained base rates (at sector or company levels) and the statutory MW?
- Do unions and employers have an explicit approach, or set of strategies, to raise the position of low paid workers covered by their pay agreement?
- Is there evidence that MW developments can be a positive influence on social dialogue?
- What are the pay strategies in situations where the level of the statutory MW exceeds base rates of pay in collective agreements?

Our analysis draws directly on selected findings from the country reports produced for this project for Croatia, Germany, Hungary, Spain and the UK. Details of research methods – the number of interviews with social actors, sources of data on pay agreements, and so on – are included in each country report and are summarised in an appendix to this report (table A2). We begin by reviewing the characteristics of four sectors and then analyse the detailed evidence of pay bargaining strategies.

5.1. The characteristics of four sectors

The character of pay bargaining and its inter-linkages with MW policy developments are influenced to a great extent by the general characteristics of each sector of economic activity. We selected four sectors for comparative analysis in this report and for each sector we draw on empirical evidence from between two and four countries, as follows:

- Cleaning: Germany, Spain and the UK
- Security: Hungary and the UK
- Retail: Croatia, Hungary, Spain and the UK
- Construction: Croatia, Germany and Hungary

The reason our choice of four sectors does not cover evidence from all four countries is because the research design required each country team to select three sectors that suited both the particular country context and the need for comparative data. For example, the Croatia team investigated the retail and construction sectors to meet the comparative agenda of the project, as well as the clothing sector since this is the largest low wage sector in the country. As such, each country researched a unique mix of sectors. The choice of cleaning, retail, security and construction sectors for this comparative report includes sectors that cover large numbers of low-wage workers and/or are closely related to MW policy developments. Also, the four sectors cover both female-dominated and male-dominated economic activities, varying use of part-time and full-time employment contracts and different types of product market environments. It is possible to identify certain general features of each sector that hold true to a greater or lesser extent, in all four countries for which we report data. A summary of key features is provided in table 4.

The cleaning and retail sector are female-dominated and are more likely to organise employment into part-time jobs than is the case for the economy as a whole. In Spain, for example, the retail sector has a 63% female share and cleaning a 65% share, compared to the national average of 44%. Part-time work is especially over-represented among cleaning jobs; in Germany, 80% of the cleaning sector workforce are part-timers with 53% classified as ‘mini-jobbers’ paid a monthly wage less than €400. In Hungary, where the national average share of part-timers is only between 5% and 7% - there is still an over-representation of part-time work in cleaning, of 19% among manual workers.

By contrast, security and construction are male-dominated activities and regular hours are longer, especially in the security sector where guards may be required to cover long shifts, such as the traditional Friday evening to Monday morning shift. In Hungary it is in fact legal for employers to set a 60-hour week in jobs requiring 'stand-by' duty on agreement between employer and employee. Unions are campaigning to have the stand-by element removed from the job description since it conflicts with the 174 hours standard defined in the MW regulations. The main challenge in the construction sector is the high use of contingent employment contracts, involving the coordination of networks of self-employed, casual and temporary personnel.

Table 4. Employment and product market characteristics of four sectors

	Cleaning	***Security***	***Retail***	***Construction***
Male/female composition?	Female-dominated	Male-dominated	Female-dominated	Male-dominated
Use of full-time/part-time?	High part-time use; very short hours common	Long full-time hours (although reduced during recession)	High part-time use	Full-time standard
Contingent employment contracts?	--	Some fixed-term employment contracts (to match client contracts)	--	High share of self-employed; High use of casual/ informal contracts
Sector structure?	High share of small firms but growth of specialist contract cleaning firms	Very high share of small/micro firms Informal practices	High share of small firms (and informal practices) but global firms dominate	Complex networks/chains of contractors and dominant lead firms
Product market type?	Domestic market Competitive cost-led bidding for contracts with clients	Domestic market Competitive cost-led bidding for contracts with clients	Domestic market Competition for market share	Domestic market Competitive price-led bidding for contracts
Competitive pressures?	Multinational services firms expanding market share	Opportunities to upgrade technologies to offer higher value services Downgrading risk of informal/grey economy competition	Small firms squeezed out by growing oligopoly retail chains	Especially strong negative impact of recession Vulnerable to competition from posted workers

Note: These characteristics are generally true of all five countries covered in this section with some exceptions
Source: Five national reports.

The structure of firms has certain distinctive features in each of the four sectors. Dominant large firms are most evident in retail and construction. In retail, for example, large domestic

and multinational chains tend be enjoying growth in their market share at the expense of the smaller retailers. In Croatia, for example, the leading Croatian retailer, Konzum, increased its market share from 8% to 24% during 2001-2008 and other chains such as the German-owned Kaufland and Lidl have established a new presence with a combined market share of 11% in 2008. Medium and large-sized specialist firms are also evident in the cleaning and security sectors and have experienced fast growth as a consequence of outsourcing by firms of so-called periphery activities in the last two decades. Nevertheless, there remains a large pool of small and micro-sized companies and an associated feature of informal (and illegal) business practices.

A domestic product market prevails in all four sectors. The construction sector has been hardest hit by the recession since 2008 and is the sector that faces the most difficult challenge of adapting to competition from posted workers. Firms in the cleaning and security sectors operate in a context of strong price-led bidding for contracts for services provision. The client business typically plays a very important role in setting the boundaries on the quantity and quality of services provision and, in the absence of certain forms of product market regulation or sectoral wage agreements, may place downwards pressure on unit prices and encourage informal business practices. In Hungary, for example, Neumann (2010: 50) reports that, 'The format for procurement takes the service fee as the only criterion and forces companies to undertake commissions at such low prices that they can not cover the MW, or the related social contributions.' Finally, in all four sectors there is evidence of firms relying upon networks of suppliers and contractors. The 'lead firms' (Gereffi 2005) are more likely to agree higher rates of pay and in some cases to recognise unions, whereas the smaller firms at the wrong end of the network offer worse conditions under more competitive pressures.

Unlike the commonalities found in the general employment and product market features of the four sectors across countries, the prevailing collective bargaining arrangements in the four sectors are reflective of the country context rather than being sector specific. Among the five countries investigated there is a fundamental difference between negotiations in countries with multi-employer wage bargaining compared to those with single-employer wage bargaining (Traxler et al. 2001). Where a sector agreement is in place, collective bargaining potentially takes place at both sector and company levels. Where one is not in

place then only the company level is relevant. Table 5 sets out the general arrangements for collective bargaining in the five countries.

Table 5. General arrangements for collective bargaining in five countries

	Sector level	Company level	Collective bargaining coverage[1]
Croatia	Several examples but weak compliance outside public sector	Predominant arrangement	61%
Germany	Predominant arrangement	Strongly shaped by sector level agreement	63%
Hungary	Several examples but weak compliance outside public sector and utilities	Predominant arrangement	35%
Spain	Predominant arrangement	Only partially governed by sector agreement	83%
UK	Not used outside public sector	Predominant arrangement	34%

Source: National reports and supplemented by Traxler et al. (2001); 1. ICTWSS database and for Croatia the project national report (Nestic and Bakarić 2010).

Sector-level bargaining provides a potentially important forum for social dialogue and wage-setting. It is the predominant arrangement in Germany and Spain, of moderate/limited use in Hungary and Croatia and non-existent outside the public sector in the UK. Sector agreements may cover the whole country or be limited to a particular region or province. Spain has the most complex and varied pattern of sectoral agreements with dozens of agreements for each sector, each covering a particular province and also a particular segment of the sectoral activity. There is a similarly strong tradition of sector agreements in Germany and, as we described above, several of these have provided the foundations for new legally binding sector-specific MWs, established under the Law on the Posting of Workers. Company bargaining is the predominant arrangement in Croatia, Hungary and the UK. The interaction between sector- and company-level agreements depends on the procedural provisions that govern interaction between the two levels. These interactions tend to have a strong influence in Germany but a weak influence in Spain, Croatia and Hungary. This arises largely because the responsibilities of the different actors is not well defined in some sectors (Arrowsmith and Marginson 2008; national reports). The position of unions on company versus sector level bargaining is complex. They may seek to discourage company pay bargaining and lobby instead for new agreements to be negotiated at the sector level. Or, as our data for the

five countries appear to suggest, they may seek to establish improvements in conditions at a company level because negotiations at a sector level are more difficult and at risk of delays.

Arrangements for collective bargaining in the four selected sectors reflect to a large extent the national patterns (table 6). In Croatia, while there are sector agreements in both the construction and retail sectors there is varying quality of social dialogue. The construction sector was the first sector during the transition to conclude a sectoral collective agreement (in 1991) and both union and employer representatives report favourably on the practice of social dialogue at the sector level and have regularly agreed revisions to the agreement. By contrast, the retail sector is characterised by less participative activity among social partners; the agreement was first concluded in 1998 and has only been amended once in 2005. Both sector agreements have been declared legally binding with the support of social partners who view extension as the best means of minimising unfair competition. Indeed employer members of the retail employers' body appear to express stronger support than their trade union counterparts, arguing that all companies ought to operate under the same rules in the sector so as to prevent unfair competitive advantage. Company bargaining has been a key goal of unions in the retail sector because there has been a failure to regularly update the sector agreement.

In Germany, there are sector agreements in both the cleaning and construction sectors. Extension of these agreements is the way by which sector-wide MWs are established in Germany. During the 1990s construction boom of unified Germany, the high labour cost construction sector was the target of firms using posted workers employed on their home country terms and conditions. Construction employer and union bodies lobbied for extension of a collectively agreed minimum and, with help from the Federal Ministry of Labour, successfully overturned the refusal by the BDA, the National Federation of German Employers' Associations, to make the agreement legally binding. Industry-specific minimum wages for construction have been declared binding since 1996 and continue to attract support by employers and unions, although somewhat less among employers in eastern Germany.

The picture in Hungary is quite fragmented with sector agreements in construction (legally binding) and security (not currently legally binding) and a mix of company and multi-employer bargaining in retail (some 100 single company agreements and 56 multi-employer agreements). The conditions that led to the extension of the agreement in the construction sector included the presence among the social partners of both an employer organisation

with a relatively strong reputation of legitimacy and a long-established trade union coupled with active intervention by the government in the interest of combating illegal activities. In security, an extension procedure was initiated in 2009 but came to a halt in May 2010 due to conflicts among employer bodies and an insufficiently supportive government. Union density is weak in all three sectors and this raises significant problems of compliance, as well as presenting problems of bargaining power at the company level. Unions are not present in the majority of companies and therefore they face strong challenges of improving mobilisation. Moreover, compared to sector agreements, there is a greater risk at company level that a weak trade union is unable to establish a sufficient countervailing authority when bargaining with a large employer. For their part, employers may view the capacities and resources of unions at company level as below the level required for professional negotiations.

In Spain, the cleaning and retail sectors are typical of all sectors in Spain in that they have dozens of multi-employer agreements each covering a particular province and, in some cases, a particular segment of the sectoral activity. For example, in retail in the province of Valencia there is a specific agreement for meat products, as well as for textile, iron and furniture products. There is little evidence of formal coordination. One of the employer representatives in the retail sector is quoted as stating, 'Each collective agreement in retail is discussed in its own context. … We just look for our own interests. ... What is happening in other retail activities is not my business' (cited in Banyuls et al. 2010: 22). Aside from the lack of formal coordination there is nevertheless some evidence of processes and outcomes in one agreement being used informally to influence those in another. A union official in the cleaning sector is reported as arguing, 'We need to use those workplaces where we exercise some power to achieve broader targets. By making a comparison [with other workplaces] we try to extend these conditions, using it as a reference' (cited in Banyuls et al. 2010: 28).

Collective bargaining coverage nationally is weakest in the UK among our five countries. It is the only country with no sector agreement among those selected for investigation and, furthermore, there are few company agreements. An interesting development has occurred in the private cleaning sector as the result of new extensions of public sector collective agreements to private firms that contract for outsourced ancillary services. However, the procedures for translating sector conditions to a company level are weak. Moreover private companies typically do not seek to establish a single company agreement for the provision of

public cleaning services, preferring instead a raft of different agreements for each public sector client (hospital, local authority, etc.). The three company case studies analysed in the UK national report illustrate the complexity of collective bargaining in a context of weak unions and weak employers' associations. In the security company, for example, there are dozens of pay agreements between the union and this single employer because it is the client that enjoys power in setting the price for the contracted services and thus the pay. The report cites a range of £5.80 to £7.50 basic wage for the same job employed on contracts with different clients. A senior HR manager from the case-study security firm explained the reasoning as follows, 'It's all contract led. We have no national [company] pay negotiations because we can't. Because one client might give us a 2% pay rise and another client may give us a 10% pay increase so we can't apply a 5% increase across the board.' (cited in Grimshaw et al. 2010: 36).

Table 6. Features of collective bargaining in four sectors investigated in five countries

	Cleaning	Security	Retail	Construction
Croatia	--	--	Sector agreement Legal extension Low union density and weak union bargaining power	Sector agreement Legal extension Strong reputation of social dialogue
Germany	Legally binding sector MWs (indoor/outdoor cleaning) 5% union density 45% CB coverage (business cleaning services)	--	--	Legally binding sector minimum wages (skilled/standard, east/west) 72% CB coverage
Hungary	--	Sector agreement but extension procedure halted. Weak unions & employer bodies 26% union density 11% CB coverage	Weak social dialogue/ no sector agreement Company bargaining predominant. Weak unions 10% union density 12% CB coverage	Legally extended sector agreement (although problems of compliance) 6% union density 25% CB coverage
Spain	National sector agreement (for job categories not wages) & multiple provincial agreements	--	Multiple agreements by province, retail product, company	--
UK	Limited bargaining except extended public sector agreement to private contractors	Weak union density Few company collective agreements Complex contract-led company bargaining	Weak union density, 12% Few company collective agreements	--

Note: Some cells are blank since the country report did not investigate this particular sector. For Hungary, union density and CB coverage figures are for companies employing more than four people.
Source: Compiled from the five country reports.

The intensification of cost-led competition for contracted services in the cleaning, construction and security sectors appears to have encouraged a new mobilisation among employers to lobby for, or to support, the extension of sector agreements. The rationale is that this can provide a basis for the coordination of prices both to shift the focus to non-price factors and, by raising the bar, to discourage informal/illegal company activities. In Hungary, for example, employers in the security and construction sectors argue that the solution to improving conditions lies in limiting price competition by setting a minimum floor for the basic hourly fee. And in the UK, employers in the private cleaning sector supported the 'Two Tier Code' that extended public sector terms and conditions to private sector contractor firms. However, it is also important to recognise limitations to the practice of extending a sector agreement in a context where the unbundling and outsourcing of firm activities often blurs simple lines of sector differentiation. For many jobs, there is a mix of in-house and specialist contractor provision that produces competition across sectors. For example, a cleaning job may be internally organised by a manufacturing firm or by a specialist cleaning company. In this case, a binding collective agreement for the cleaning sector only sets a minimum common floor for cleaning companies and does not prevent the organisation of in-house cleaning on a potentially cheaper basis that undercuts sector standards. Such is the case in Germany where there are some examples of public sector organisations bringing outsourced cleaning services back in-house because it is in fact cheaper. This kind of example helps explain why the employer body for the cleaning sector now campaigns for a national statutory minimum wage[14]. The opposite scenario applied to the UK for many years. Public sector organisations were regulated by sector agreements but no such agreement existed among cleaning companies, which therefore enjoyed an unfair cost advantage to bid for the outsourcing of cleaning services. After several years of trade union campaigns, this problem was addressed by a government decision in 2005 to extend the pay and employment conditions of public sector agreements to private and voluntary sector contractors, thus providing a more level playing field. At the time of writing it is not clear how durable this extension is as a legally binding agreement in a context of a newly elected Conservative government determined to cut public expenditures by at least 25% over the next four years.

[14] The situation is more complex than this. Cleaning employers assume there is a need for a binding MW but realise that the sector is likely to fail the required target of 50% collective bargaining coverage as a precondition for a sector-wide MW according to the Law on Posting of Workers.

5.2. Pay bargaining and the minimum wage

A key question for our analysis is the extent to which pay bargaining is influenced by developments in the MW. For four countries this means changes in the level of the statutory national MW and for Germany it means developments in legally binding sector minimum wages. In this section we explore the patterns of differentials, or wage gaps, between collectively bargaining base rates of pay (for a particular sector or company) and the MW. Our concern is to compare and contrast country and sector differences in this wage gap in a general effort to appreciate the strength of interaction between MW policy and collective bargaining in the different contexts. The analysis also contributes to an understanding of variations in the spillover or ripple effect of a rising minimum at the bottom of the wage structure. In the following section 5.3 we explore some of the conditions underpinning the variation by focusing on particular pay bargaining strategies. We report the evidence for the four selected sectors reviewed above drawing on details from the five national reports.

What is striking from the case studies presented in the national reports is the diversity of patterns characterising the collectively-agreed base wages relative to the statutory MW (we discuss four countries with national minimum wages here and return to the case of Germany below). There are examples of base rates negotiated at levels far below the statutory national MW, examples of base rates set at a rate equivalent to the minimum and examples (the majority) where base pay is set higher than the statutory minimum. Table 7 sets out the basic details, distinguishing by sector and country case study (including sector and company bargaining agreements).

From the various sector and company case studies, there is one notable example – that of the retail sector agreement in Croatia – where the base wage is set at a level significantly lower than the statutory MW. The lowest base wage was set at 23% less than the MW when the sector agreement was first concluded in 2005. Then, in the context of the raising of the statutory minimum in 2008, the negative gap widened to 43% by 2010. Pay bargaining at company level does not appear to impact upon this negative gap very much. The case-study company reported in the national report negotiated a base wage at 40% less than the statutory minimum in 2010. So how (and why) is the negative gap sustained?

Table 7. Examples of gaps between the statutory national minimum wage and collectively bargained base wages (sector and company levels)

	Base wage < MW	Base pay = MW	Base pay > MW
Cleaning	--	--	Spain – sector/province agreements UK – case-study company
Security	--	Hungary – sector agreement	UK – case-study company
Retail	Croatia – sector agreement Croatia – company agreement	--	Hungary –case-study company agreement (but below the skilled MW) Spain – sector/province agreements UK – case-study company
Construction	--	Hungary – sector agreement Croatia – sector agreement	--

Source: Compiled from the four national reports. Germany is excluded from the table since it dos not have a statutory national minimum wage. The base wage refers to the basic rate excluding pay enhancements for unsocial hours, seniority, performance, and so on.

The analysis in the national report suggests three reasons. First, as in other sectors in Croatia, the base wage is enhanced by a number of pay supplements, in this case especially for seniority and for difficult working conditions, as well as unsocial working hours. Because the MW in Croatia applies to total remuneration not the basic wage, these supplements generally lift the pay of workers in low skilled jobs above the statutory MW (especially in large companies) and where this is not the case the company must comply with the legislation. However, these pay supplements appear to have been an easy target during the recession and unions report drops of up to 30% in the total wage as a result. The second factor is the MW increase in 2008 which massively outpaced changes in the sector base wage and caused a significant widening of the negative wage gap. And thirdly, weak unions (a combination of low union density and weak bargaining power) have failed to exert sufficient pressure on employers to uplift base wage rates. The result of these three conditions is a falling value of the total wage packet compared to the statutory minimum, eroding the wage premium that used to be enjoyed by a standard sales assistant. Applying the relevant coefficients to the base wage for a sales assistant with 5 years experience and eligible for the standard bonuses and allowances demonstrates that at the case-study company the premium above the MW has shrunk considerably from close to 30% in 2005 to

less than 10% in 2010 (see box 1 for a comparison with the UK case study company agreement).

Box 1. Shrinking gaps between the wage for sales assistant jobs and the statutory national minimum wage, Croatia and the UK

Although both examples of retail company agreements for Croatia and the UK display a positive gap between the wage paid to a sales assistant and the statutory MW, the gap has declined significantly in recent years. In the Croatian company agreement the base wage for a sales assistant is estimated as the base rate in the collective agreement (set below the MW) multiplied by a coefficient for the job of sales assistant. The gap with the MW has declined considerably from 50% in 1999 to 8% in 2010. Similarly, in the UK company agreement, there has been a steady trend decline in the wage premium enjoyed by a sales assistant, from a 23% gap in 1999 to 15% in 2010.

	CROATIA (monthly wage data)			**UK** (hourly wage data)		
	MW	Company base rate	***% Gap***	MW	Company base rate	***% Gap***
1999	1500	2252	***50.1***	£3.60	£4.44	***23%***
2000	1700	2252	***32.5***	£3.70	£4.58	***24%***
2001	1700	2252	***32.5***	£4.10	£4.95	***21%***
2002	1800	2477	***37.6***	£4.20	£5.16	***23%***
2003	1859	2477	***33.2***	£4.50	£5.32	***18%***
2004	1951	2601	***33.3***	£4.85	£5.56	***15%***
2005	2081	2731	***31.2***	£5.05	£5.84	***16%***
2006	2170	2731	***25.8***	£5.35	£6.02	***13%***
2007	2298	2866	***24.7***	£5.52	£6.26	***13%***
2008	2441	2866	***17.4***	£5.73	£6.50	***13%***
2009	2747	3026	***10.2***	£5.80	£6.66	***15%***
2010	2814	3026	***7.5***	£5.93	£6.81	***15%***

Source: adapted from national reports.

Table 7 lists three examples where the collectively agreed base rates are equivalent to the statutory MW - the construction sector in Croatia and Hungary and the security sector in Hungary. The construction sector agreement is legally binding in Croatia and Hungary and in both countries the base rate has been set at a level at, or close to, the statutory MW. In Croatia annual rises in the base rate have closely followed developments in the MW, and in 2007 the link was in fact made explicit in an annex to the agreement; since then the two rates have been equivalent. Given the large hike in the national MW in 2008 this linkage has benefited the lowest paid in the construction sector and raised the wage level relative to average earnings. And in Hungary, the lowest base wage for unskilled workers when introduced in 2005 was set at a level approximately equal to the statutory MW. During 2006-2010 the gap has fluctuated marginally between 0% and 4%.

If the base rate is tied to the statutory MW, then it raises the question as to whether or not wage rates for higher paid job categories defined in the collective agreement increase by a

similar amount each year or whether there is evidence of compression of wage differentials. The data for the Hungarian construction sector suggest there has been some compression among the bottom two grades, unskilled and semi-skilled, but the differentials between unskilled and skilled categories have widened over the 2006-2010 period (table 8). Pay bargaining in Hungary must also contend with a statutory minimum for skilled workers. Analysis of the construction sector agreement suggests a shrinking gap. The lowest skilled base rate in the sector agreement (skilled with less than two years' experience) started with a 14% wage premium, dipped to 2% below in 2009 and regained a 6% premium in 2010 (table 8). Company bargaining provides some positive wage drift. For example, at the case-study company in the Hungarian national report the rate for unskilled jobs is 13% higher and for semi-skilled 21% higher than the sector base rates.

Table 8. Trends in collectively bargaining wage rates relative to the statutory minimum wage, Hungary, construction sector, 2006-2010

		2006	2007	2008	2009	2010
Unskilled	% of standard MW	100.8	102.3	104.3	100.7	100.3
	--	--	--	--	--	--
Semi-skilled	% of standard MW	112.0	114.5	115.9	111.9	108.8
	% of unskilled rate	111.1	111.9	111.1	111.1	108.5
Skilled with less than 2 years experience	% of skilled MW	114.2	111.0	102.7	97.7	106.1
	% of unskilled rate	119.0	119.4	118.1	118.1	128.9
Skilled with at least 2 years experience	% of skilled MW	116.3	119.4	120.8	114.9	111.7
	% of unskilled rate	127.0	134.3	138.9	138.9	135.7
Master skilled worker	% of skilled MW	145.3	152.5	157.0	149.4	145.3
	% of unskilled rate	158.7	171.6	180.6	180.6	176.4

Source: adapted from Neumann (2010: table 17).

In most cases, the collectively agreed base wages are higher than the statutory MW. This is true of agreements for both sectors reported for Spain. In part, this is a reflection of its relatively low statutory MW rather than the high level of collectively agreed base rates. There were improvements in the MW during 2004-2008 (see above) but over the 2000-2009 these were outpaced by upratings in Croatia, the UK and Hungary (see figure 3b above). For the Valencian province, the gap with the MW in 2009 was 35% in the building cleaning sector agreement and 26% in the general retail agreement. As with other sectors, there is significant variation by province, with a gap of 25% in the building cleaning agreement for Alicante for example, and by sub-sector, with a gap of 10% in the meat retail agreement for Valencia-Castellón for example. For the most part, base rates in the Spanish agreements did

not keep up with the improvements in the MW during 2004-2008: compared to an average increase of 5.6% in the statutory MW the average annual increase in the base rate for an experienced grocery assistant in the Valencia province was 3.4% and for a cleaning labourer in Valencia 4.4%. Trade unions recognise their inability to restore the larger gap with the MW floor and this has been accentuated by the crisis when unions are less able to make credible threats of strike action.

In the UK, both case study company agreements, for cleaning and security, also have base rates higher than the statutory MW. In cleaning, this is very untypical; the Low Pay Commission reports the cleaning business as the sector with the highest share of workers paid the MW, estimated at around 22% in 2008 (LPC 2009). The case study reveals the significant impact of the 2005 'Two Tier Code' in raising the base rate paid by the private company in its contract for outsourced services with public sector hospitals. Prior to the code, cleaners employed by private firms were typically either paid the MW or the collectively agreed wage if they had transferred from the public sector organisation under TUPE (Transfer of Undertakings Protection of Employment) regulations. The new code harmonised wage payments and by 2010 had established a gap of 18% above the statutory MW. However, this base rate is not agreed as part of a company-wide collective agreement. It only applies to those workers employed to deliver services to the particular public sector client. In contracts with private sector clients, the same company pays workers a range of different wage rates. It is a peculiar approach to wage setting (and is also mirrored in the security sector case study) that grants a determining role to the financial value and profit margin of each contract for services.

A final example of a positive wage gap is the case study of a company agreement in the Hungarian retail sector. Unlike the construction and security sectors there is no retail sector agreement so it is very likely that the statutory MW serves as the going rate in smaller retail companies. In addition, the introduction of a statutory MW for skilled workers in 2006 (22% higher than the standard minimum) had a major impact on retail companies because cashiers and various other job positions required particular qualifications and were therefore considered skilled workers. Wage differentials became more compressed and employers lobbied against the application of the skilled MW. The dispute with trade unions contributed to a breakdown in social dialogue on wages at a sector level. In response, the government intervened to cancel the qualification requirement for various retail jobs in particular

branches of the retail business (amounting to around 10% of the retail workforce). Employers are confident this will act as a catalyst to the cancellation of qualifications for many other sales assistant job positions and therefore the application of the standard rather than the skilled MW. In the case-study company, the majority of employees are classified as unskilled. For their part, unions emphasise the damaging effect this change poses for the reputation of the sector:

> *It will lead to the further devaluation of the profession and of vocational training in commerce and eventually to the worsening of the situation of all employees in this field. .. It will disadvantage buyers too; employing unskilled labour will lead to more consumer protection problems* (cited in Neumann 2010: 34).

In terms of the wage gap at the case study company, the base rate of pay was set at a level above the skilled MW when it was first introduced in 2006, then at the same level of the skilled minimum in 2007, and during 2008-2010 it was negotiated at a level below the skilled MW.

The examples of sector agreements for Germany are distinctive since there is no backdrop of a statutory national MW. It is of course the sector agreement that sets the legally binding MW for construction and cleaning companies. There is therefore no 'gap' of the sort described for the other four countries. Nevertheless, there is interesting variation in the influence of the collectively agreed (and extended) minimum base rate across companies, compared to the use of higher base rates for skilled workers. The results of a survey of construction trade union members (from *IG Bau*), for example, show that the minimum base rate acts as the going rate for companies in eastern Germany but plays only a minor role in western Germany. More than three in four employees surveyed in eastern Germany were paid the minimum base rate or a wage closely linked to the minimum, while in western Germany less than one in three employees were paid such rates (Bosch and Weinkopf 2010: figure 8). It appears there is a serious problem among companies in eastern Germany where many skilled workers are not paid the collectively bargained rate for their skill and qualifications.

Extensions of the collective agreements in the German cleaning sector have a long tradition, but only in 2004 were uniform wage rates established for the two western and eastern regions of Germany. This was a controversial development since employers pressured for the reduction in wage rates in high paying states (in Bavaria, for example). The new

agreement contains nine wage rates for different job positions, with separate rates for west and east. There are two MW rates, one for indoor cleaning and another for outdoor cleaning. Most workers – an estimated two thirds - earn the MW for indoor cleaning.

5.3. Features of an egalitarian pay bargaining approach

Various pay bargaining strategies, at company, sector and national levels, shape the observed interaction between collectively bargained base rates of pay and developments in the MW. As we showed above, pay bargaining is not always effective in establishing and sustaining a positive gap with the statutory MW. Social dialogue between employers and trade unions bolsters efforts to protect the low paid, but it is not always easy to build upon areas of agreement and cooperation. Nevertheless, there appear to be certain features of a pay bargaining approach that protect and/or improve the position of the lowest paid. These features are not universal but it may be that examples from one sector in a particular country context can provide lessons for application in other contexts. In this section, we identify five different features that can be said to characterise an egalitarian pay bargaining approach.

i) Establishing binding standards

The case study of a UK cleaning company providing outsourced services to public hospitals best illustrates the power of an extension agreement to protect and improve the position of low wage workers. It is an unusual example for the UK and represents the first type of wage extension for around 25 years, since the abolition in 1983 of the Fair Wage Resolution (which required companies contracting with public authorities to meet the terms and conditions set in national collective agreements). The new extension agreement was implemented in 2005 after many years of trade union campaigns, with strong involvement by the public services union, Unison, as well as the peak organisation, the TUC. The focus of campaigns was on improving low pay in private sector contractor companies. Unions collected and disseminated evidence of a ‘two-tier workforce’, collected data on numbers earning less than £5 per hour and balloted for strikes (Grimshaw 2004). Moreover, the TUC made the introduction of a new Fair Wage Resolution a key objective. On the employer side, there were mixed views. The employer body for business services firms adopted a pragmatic approach and recognised the need to break out of the price-led competition for contracts. However, the peak employer body, the CBI, opposed any new regulation (op. cit.). Ultimately, the union view won. As the Unison representative explained:

> *We went to the government and said not only is it unfair but also severely destabilising that you have the employed staff of the National Health Service on [collectively agreed pay rates]*

> *and outsourced workers who are doing essential work but are on minimum wage and in fact a few cases are being paid below the National Minimum Wage* (cited in Grimshaw et al. 2010: 31).

The wording of the new extension brings the UK position close to the ILO Labour Clauses (Public Contracts) Convention No. 94. It requires private contractors to provide new recruits with terms and conditions of employment which are 'no less favourable' than those of workers employed in the public sector. As a result, where private contractors typically paid the MW to cleaning staff, they now pay a wage premium of 18% to those cleaning public hospitals - a significant improvement.

Legally binding standards are also especially notable in the case of Germany where they provide the basis for sector minimum wages following the application of both social partners. In each collective agreement, the MW provides a base point in the wage grid. In western Germany, in all cases except construction, the sector minima fall below the usual threshold for low wage work (two thirds of median earnings for all employees). Nevertheless, they are far higher than the level of statutory national minimum wages which, as we saw in section 2, average at around 47% of median earnings for full-time employees across Europe (OECD data). Moreover, comparing the extended sector minimum for cleaning in Germany with the extended public sector agreement that covers cleaning in the UK shows that the German minimum is higher relative to average earnings for the economy – 54% in western Germany and 49% in eastern Germany compared to 47% in the UK.

ii) Passing on higher wage costs to clients

Two of the four sectors examined, cleaning and security, are low wage business services sectors and a third, construction is composed of fragmented networks of contractors that bid for work through a series of contracts. A key obstacle to improving pay in these conditions is the absence of a framework of rules through which organisations share an approach towards the passing on of higher labour costs to clients. Client organisations do not always attach value to non-core activities such as cleaning and security and while they may operate in high value-added markets of the economy, they may nevertheless be willing to select a specialist contractor on the basis of most competitive price per unit of service. Unlike other pay bargaining strategies, this issue very often unites employers and unions, albeit in opposition to representatives from the client side.

In the Hungarian security business, the employer body and the professional chamber have agreed a minimum level of service fees that ought to be charged to client organisations. A minimum hourly fee of HUF900 enables payment of the skilled MW (HUF515) and associated tax and social security contributions. Nevertheless, there is limited compliance and the employer and trade bodies lack the power to exercise sanctions. The going rate for security services is estimated at around HUF600-700. According to the head of the employer body for the security sector (MBVMSZ) this is insufficient for a profit-making company to provide legal employment. A similar recommendation was established for the construction sector by the Hungarian collective body of contractors (ÉVOSZ). Jointly with trade unions, ÉVOSZ recommends its members to establish a minimum hourly service fee of HUF1900-2000 in order to avoid illegal employment. Again, despite this recommendation being published in a bulletin on procurement guidelines, compliance is believed to be weak.

Similarly, in the UK, where there are few pockets of effective social dialogue among social partners, the case-study employer established a strong partnership approach with the GMB union in an effort to encourage clients to accept higher prices for contracted services as wages have increased. One of the senior managers explained their approach:

> *We have been working with our union to see how we can increase our pay rates for the employees in that division [security services], how we can get those [clients] buying security to see the value of it and get them to pay a reasonable amount of money for it* (cited in Grimshaw et al. 2010: 34).

But to date, the UK security company has had limited success. Some clients pay low fees, others high fees and the company argues this means they have to discriminate in the wages paid to security guards. On some contracts, security guards earn close to the MW whereas on other contracts pay is significantly higher as a result of the client pressuring for programmes of skill development and uprating of pay. The result is an extreme fragmentation of pay rates for the same job within the same company.

iii) Bottom-weighted pay strategies

A bottom-weighted pay settlement involves a larger pay increase for the lowest paid compared to higher paid groups. While this strategy may be the direct result of an effort by one or both social partners to redistribute pay, our empirical evidence from the five countries suggests in recent years it has been a response to the rising statutory MW and the need to restore differentials at the bottom.

In Croatia, the falling base rates in sector agreements, relative to the rising statutory MW, have led to the increasing use of lump-sum allowances to ensure that workers' total wage is at least equivalent to the MW. Among the lowest paid workforce, this practice has resulted in a more compressed wage distribution. In the Hungarian retail sector a bottom-weighted pay strategy was implemented in response to both a higher MW and changes in tax rules that adversely affected workers earning less than a particular monthly threshold. Also, in an investigated series of company wage agreements, the unions have successfully negotiated bottom-weighted agreements in five successive years that award low wage employees a percentage raise and higher paid employees a relatively smaller lump sum payment. In the 2010 agreement, this was modified, such that the lowest paid were awarded a lump-sum and higher paid employees no pay rise. Moreover, the trade union favours imposing a maximum limit to pay increases for senior managers and redistributing the income to the lowest paid.

Finally, in the UK, use of bottom-weighted pay deals was evident in the cleaning, security and retail case study companies. In the cleaning and retail cases, unions pressed for elimination of bottom pay grades as a direct means of raising the pay for the lowest paid. And in the cleaning and security case study companies, the pay agreement included various examples of lump sum deals for the lowest paid that exceeded the pay settlement for other workers.

In each case, while the lowest paid benefit at the expense of higher paid colleagues, there is a risk that such a strategy leads to a compression of the pay structure among the lowest paid workers rather than a redistribution of income from the highest to the lowest paid. The case-study retail company in the UK is illustrative. As a direct result of its bottom-weighted pay bargaining approach (the successive elimination of bottom grades), the retail sector trade union, Usdaw, is now grappling with the consequences of having a broad mix of jobs from cleaners and trolley staff to check-out workers employed at the same rate of pay. Company managers say this meets their 'one team', multi-skilling approach and requires all new employees to be trained in the different roles. But the union argues that multi-skilled staff ought to win a pay enhancement.

iv) Union mobilisation and industrial action

The background to some of the changes in pay bargaining for the low paid has involved industrial action and/or recruitment of new trade union members in an effort to strengthen bargaining power. In the German cleaning sector, for example, the main trade union (*IG*

Bau) organised a surprisingly effective strike action in response to a highly controversial pay bargaining round in the summer of 2009. The union viewed the employers' pay offer as too low and organised a successful strike – referred to as a 'rebellion of the invisibles' - that was significant in winning popular support from the German media. Thus, despite union density of less than 10% in the sector, the union won the strike and established the grounds for the successful negotiation of the sector agreement later that year. It is also notable that the employer body (BIV) did not denounce the strikes but instead argued they ought to be viewed as an 'effective public demonstration'.

In the UK security sector, the GMB union set out to increase union membership as an explicit precondition for gaining the bargaining power needed to raise low rates of pay among security guards. The union trained a special team of 25 representatives (the 'GMB at Work Team') in the art of winning new members and each attended induction sessions for new recruits at the case-study company. A 90% success rate in signing new recruits increased the 20% union membership to 50% from 2007 to 2010. The employer contributed to the success both by facilitating time off for union representatives to undertake four days of training in recruitment methods and in inviting them to induction sessions to meet new recruits to the company.

v) Changing the balance of pay enhancements

The final feature to an egalitarian pay bargaining approach involves attention to pay enhancements that can provide a considerable uplift to low basic rates of pay. The case-study data suggest this is an especially important issue in Croatia where collectively bargained base wages fall below the statutory MW and workers therefore rely on the application of a range of pay enhancements to raise their total pay. In the construction sector, for example, the seniority bonus alone is estimated to add an average 12.5% to a worker's base wage; all combined the various enhancements can add up to 30-35% and are significant even for an inexperienced worker employed in a relatively unskilled job.

However, in this and other cases it appears that pay enhancements are often more exposed to the risk of cuts. In Croatia, the balance of basic pay and pay enhancements is a contested terrain among construction unions and employers. In past negotiations employers proposed raising the basic rate in exchange for eliminating the seniority bonus, but this was not accepted by unions possibly because of a perceived risk that it would set a precedent for other sectors. Also, in the UK retail case-study company pay enhancements for unsocial

working hours have been reduced or eliminated altogether in line with the employer's goal of simplifying the pay structure; employees in this case have therefore witnessed a shrinking wage premium relative to the MW and loss of pay enhancements, including the loss of a 50% overtime premium and a reduced Sunday and public holiday premium from 100% to 50%.

6. Conclusion: Key policy issues

The complex interaction between MW systems and industrial relations goes some way to explaining the diverse country experiences in the functioning, effectiveness and performance of its MW. This report has reviewed much of the data for Europe on trends and patterns in the level of the MW, the aggregate interaction with models of collective bargaining and the implications for wage equity measures – namely, the incidence of low wage work and the gender pay gap. It also reports findings from a novel analysis of collective bargaining in selected sectors in five European countries where developments in minimum wages have had a significant impact in recent years. A summary of our key findings can be found in the Executive Summary to this report. Here, we conclude the report by discussing some of the key policy issues that arise from our analysis.

The first issue concerns prospects for MW policy. All five countries have witnessed key moments of policy development in the last decade. For the four countries with statutory MW protection such developments are indicative of policy renewal and adaptation in light of changing socio-economic conditions as well as changing political goals – not least the desire by government and/or social partners to use the MW to improve the status of low wage work. Croatia reinvigorated its MW with a new Act in 2008, Hungary has instigated large one-off upratings and introduced a new MW for skilled workers, Spain raised the MW in a direct effort to improve the Kaitz index and similarly in the UK the Low Pay Commission raised the MW over a four-year period in an effort to address doubts about its 'bite' in the labour market. The economic crisis has stalled further policy development and it is unclear whether or not government and social partners will revisit objectives to raise the relative level of the MW. The Spanish government, for example, set a target to raise the monthly MW to €800 by 2012 but given that it only increased from €600 to €633 during 2008-2010 the authors of the national report for Spain argue this target will almost certainly not be met. Yet the level of the statutory MW in all four countries remains relatively low – all below the European average of 41% as a percentage of average earnings (figure 3a above). And the share of low wage workers is relatively high – ranging from 15% in Spain to almost 25% in Hungary (EU-SILC data in figure 11 above).

Germany is of course in the midst of the most controversial set of MW policy developments with strongly conflicting positions among social partners about the appropriate path of institutional development, between maintaining the status quo of autonomous collective bargaining on the one hand and, on the other, implementing new forms of wage protection in sectors with weak (or no) collective bargaining. Not all employers oppose statutory intervention; the employers' body representing companies in the cleaning sector (*BIV*) supports the introduction of a statutory national MW. To date, the process of establishing sector-based minimum wages in Germany has not been straightforward. The authors of the German national report predict slow progress in the coming years:

> *'The institutional mechanisms devised for the implementation of industry-specific minimum wages provide numerous intended and unintended possibilities for politics, employers and competing unions to block their practical application. Minimum wages in Germany are thus very slow in their realisation and a patchwork of different minimum wages together with large unregulated zones of wage-setting without binding minimum standards will be the result in the short to medium term'* (Bosch and Weinkopf 2010: 37).

A second key policy issue concerns compliance. Enforcement of the MW is especially challenging in Croatia and Hungary, but the empirical evidence point to problems in the other three countries also. The evidence from Hungary identifies problems with enforcing the statutory MW in small firms using illegal labour, as well as issues in larger firms where employers redefine jobs as unskilled in order not to comply with the higher skilled MW rate. Similarly in eastern Germany the evidence for the construction sector points to the possibility that companies can redefine jobs (or redesign work organisation) to shift the composition of workers from high wage skilled rates to low skilled minimum rates. In Hungary, the problem lies partly with intensive price-led competition for contracts, which encourage bidding at unrealistic unit prices that make compliance with MW regulations difficult. The author of the national report for Hungary calls for a regulatory intervention that would 'guarantee service fees that cover the MW and prevent the evolution of economically unjustified subcontracting chains' (Neumann 2010: 53-54). In Croatia, the evidence suggests many employers register the payment of minimum wages to their employees and top up the wage informally with 'envelope payments' so as to avoid payment of social security contributions on a higher rate of pay. In Spain union representatives from the retail sector complained about weak compliance among the many small shops and suggested that workers paid less than the national MW are in a weak position to complain about their employer in a

context of high unemployment (Banyuls et al. 2010: 30). And in Germany interviews with representatives from the inspection body (*FKS*) reveal dissatisfaction with the resources made available for monitoring and enforcement of sectoral minimum wages. Moreover, the role of Works Councils is limited by their small presence among the large number of small companies, especially in the construction sector (Bosch and Weinkopf 2010: 29).

The third policy issue is that an active MW policy appears to be beneficial for social dialogue. In Germany, where an industry minimum standard has been established the empirical evidence in the national report suggests that social dialogue has been strengthened. And especially in the UK, with its tradition of adversarial industrial relations, the 11 years experience of a statutory national MW demonstrates that an independent tripartite body, the Low Pay Commission, can command a strong reputation among all social partners and, it is claimed, generate a positive spillover effect for social dialogue more generally. Professor William Brown, a founder Member of the Low Pay Commission (1999 until 2007), claims the Low Pay Commission has functioned as a successful forum for social dialogue between unions and employers and has made a positive contribution to social partnership in the UK (Brown 2000). The strongly consultative style of the Low Pay Commission and its reputation as a leading exemplar of evidence-based policy making means that active policy developments in MW regulation in the UK enjoy relatively stable foundations.

The fourth issue concerns the links with pay equity policy goals. Many studies identify a relatively strong set of inter-linkages between MW policy (especially concerning the relative level of the MW), the model of collective bargaining and pay equity measures such as the gender pay gap and the incidence of low wage work. Our review of European wage data (section 4) provides further confirmation of a relatively strong negative relationship between the level of the MW and the incidence of low wage work and a moderately strong negative relationship with the risk of low wage work faced by women compared to men. The data at the company and sector levels analysed in section 5 provide some indication as to how these aggregate inter-linkages are articulated through processes and outcomes of pay bargaining. In Spain, for example, the authors of the national report call attention to widespread undervaluation of jobs that are female-dominated, resulting in low pay for 'female skills'; *'Jobs in retail, hospitality and cleaning are considered to be low skill activities that largely reflect 'female skills' and which are not reflected in professional skills. This social construction of skill is what has traditionally made these activities low wage activities'*

(Banyuls et al. 2010: 30). The German cleaning sector collective agreement provides a valuable illustration of the gender bias in pay grading. Unlike most other sector-specific minimum wages in Germany it contains two minimum wages, which appear to have been designed in part to account for the gender difference among workers employed to clean indoors and outdoors. In 2010, the male-dominated job of 'outdoor cleaning' (eg. windows and shopfronts) earned a minimum hourly rate of €11.13 and the female-dominated job of 'indoor cleaning' a rate of €8.40 (rates for western Germany) – a gender pay gap of 25%. Remarkably, the gap is even wider (29%) among supervisors of the respective jobs with rates of €14.20 and €10.04, respectively.

The UK data provide further clues as to why the rising statutory national MW during 2003-2007 did nothing to reduce the incidence of low wage work: bottom-weighted pay deals in some cases overly compressed pay differentials among the low paid rather than redistributing income from the highest to lowest paid; and the power of clients in contracting for low paid business services sometimes frustrated employer-union efforts to upgrade pay and skills. Finally, in Germany, while in principle a rising sector MW ought to generate a strong ripple effect due to the collectively bargained wage grid, in practice a smaller ripple effect occurs because of problems with compliance and the changing classification of jobs so as to pay lower wage rates.

Appendix

Table A1. Union membership and collective bargaining coverage, 2006

Inclusive model			Dual model			Exclusive model		
	Union density	CB coverage		Union density	CB coverage		Union density	CB coverage
Belgium	54	96	Austria	32	99	Czech Rep.	21	44
Denmark	69	82	Germany	21	63	Hungary	18	35
Finland	72	90	Greece	23	85	Ireland	31	44
Sweden	75	92	Spain	15	80	Lithuania	14	12
			France	8	95	Latvia	16	20
			Italy	33	80	Poland	14	35
			Netherlands	22	82	Slovakia	24	35
			Portugal	18	62	UK	29	34
			Slovenia	41	100	Estonia	13	22
			Luxembourg	40	60			
			Croatia	34	61			
Average	*68*	*90*	***Average***	*26*	*80*	***Average***	*20*	*31*

Source: ICTWSS dataset (Visser 2010), except Croatia (Nestic and Bakarić 2010) and Ireland (eiro data).

Table A2. Summary of interviews undertaken by the five country teams

	Sector	Employer/trade bodies	Trade unions	Companies/local unions	Other
Croatia	***Construction:***	Construction employers' association (HUP-UPG)	Trade union of construction industry (SGH)		
	Clothing:	Textile and leather industry employers' association (HUP-UTKI)	Croatian trade union for textile, footwear, leather and rubber (TOKG)	ClothCo	
	Retail:	Employers' trade association (HUP-UT)	Commercial trade union (STH)	RetailCo	
	Total number of interviews: 12				
Germany	***Construction:***	Construction employer associations (HDB, ZDB, ZVOB, BVMB)	Construction trade union (IG BAU)		
	Cleaning:	Cleaning sector employer association (BIV)	Cleaning trade union (IG BAU)		
	Temp agency:	Temp agency employer associations (BZA and IGZ)	German federation of trade unions (DGB)	Large temp agency company (round table with several managers and works council)	
	Total number of interviews: 16				
Hungary	***Retail:***	National Commerce Federation (OKSZ)	Trade Union of Commercial Employees (KASZ)	Local union at Retailco	
	Construction:	National Federation of Hungarian Contractors (EVOSZ)	Federation of Building, Wood and Material Workers' Unions (ÉFÉDOSZSZ)	BuildCo manager Small business owner Local union at BuildCo	
	Security:	Employer Association of Hungarian Security Companies (MBVMSZ)	National Alliance of Property Security Trade Unions (VSZOSZ)	Two security firms Local union at SecurityCo	
	Total number of interviews: 13				
Spain	***Retail:***	Valencian retail employers' association (FEMEVAL, FEDACOVA, COVACO)	Retail trade union representatives (CCOO and UGT)		Union representative in the Economic and Social Council (CES)
	Hospitality:	Valencian hospitality employers association (FEHV)	Hospitality trade union representatives (CCOO and UGT)		Research centre on tourism in Valencia
	Cleaning:	Valencian cleaning employers' association (APELVA), National employers association (ASPEL)	Cleaning trade union representative (CCOO)		
	Total number of interviews: 13				

UK	***Retail:***	--	Usdaw, Senior pay negotiator	RetailCo, Senior HR manager
			Usdaw, Research team leader	
	Cleaning:	British Institute of Cleaning Science, Chief Accreditation Officer	Unison, Senior pay negotiator (NHS)	CleanCo, Senior HR manager
			Unison, Senior pay negotiator (private contractors)	ServiceCo, Senior HR manager
				SMECleanCo, Managing Director
	Security:	British Security Industry Asociation, General manager	GMB, Senior pay negotiator	SecurityCo, Senior HR manager (Europe region)
				SecurityCo, Senior HR manager (UK)
				SecurityCo, Senior HR manager (security services division)
				SMESecureCo, Managing Director
	Total number of interviews: 15			

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(All reports available at: www.mbs.ac.uk/research/europeanemployment/projects/minimum-wage.aspx.)

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