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4 The Pay Equity Effects of Minimum
5 Wages and Pay Bargaining
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14 **Introduction**
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16 The over-riding objective of a minimum wage is to redistribute earnings
17 to the lower paid (Brosnan 2001, Freeman 1996). Unions, employers
18 and governments in different countries at different points of time
19 may emphasize other related goals – such as increased labour market
20 participation (by providing better incentives), controlled wage growth,
21 improved social dialogue, reduced informal employment, higher income
22 tax revenues and lower welfare and in-work tax benefits (Koçer and
23 Visser 2009, Recio 2006, Saget 2008) – but it is the social goal of improv-
24 ing the position of low-wage workers that underpins policy design.

25 The economic logic of this policy position remains controversial. The
26 notion that a labour market intervention is justified by its long-term
27 distributive consequences is contested by those who claim the actual
28 consequences will in fact be precisely the contrary of what is intended
29 (for a critical review, see Heery 2000); disemployment effects will reduce
30 the share of earnings to the low paid, it is claimed, since while insid-
31 ers may benefit from greater pay equity this will be offset by a growing
32 share of outsiders.² However, as is now well known, investigation of
33 the impact of minimum wage rises finds broadly neutral employment
34 effects (see further Chapter 4, this volume).

35 Alternative theoretical models identify small positive employment
36 effects, explained by the ability of employers to exercise a degree of
37 monopsony power (Manning 2003). Empirical evidence from the
38 United States – considered significant since it is generally perceived to
39 best approximate the competitive labour market of economics text-
40 books – finds no evidence of disemployment effects (Card and Krueger
41 1995; Dube, Lester and Reich 2010). Also, a recent assessment of the first

1 decade of a statutory national minimum in the United Kingdom reports
2 no overall significant effect on employment and in fact a positive
3 effect on employment growth in those local labour markets with
4 a high share of minimum wage workers (Dolton, Rosazza-Bondabine
5 and Wadsworth 2010). Moreover, in the relatively more institutional-
6 ized labour market of Germany there is further empirical evidence of
7 no disemployment effects resulting from the introduction of legally
8 binding minimum wages in eight industries (Möller 2012).

9 Recent years have witnessed a shift in thinking that has renewed
10 interest in the pay equity effects of minimum wage systems, especially
11 their impact on the incidence of low-wage employment, gender pay
12 inequality and the degree of wage compression in the lower half of the
13 wage structure. Of particular relevance for this chapter are the findings
14 of cross-national, comparative investigations, since these illuminate
15 how the different rules of countries' minimum wage systems shape pay
16 equity in conjunction with a variety of industrial relations conditions,
17 especially collective bargaining and the strength of trade unions (EC
18 2008, Lucifora, McKnight and Salverda 2005, OECD 1998, Pontusson,
19 Rueda and Way 2002, Salverda and Mayhew 2009).³ Building on this
20 work, our research sought to interrogate whether an ostensibly similar
21 regulatory change – namely a minimum wage rise – has a similar
22 effect on pay equity in different country settings. As described in the
23 introduction to this volume, the full range of socio-economic effects of
24 regulatory reforms are unlikely to map neatly against a universal equa-
25 tion of cause and effect since each regulatory function within a country
26 operates in concert with other institutions and is further tempered by
27 the varying strategies and tactics of social actors (such as government,
28 employer associations and trade unions). The notion of 'regulatory
29 indeterminacy' (Deakin and Sarkar 2008) is therefore a valuable analyti-
30 cal tool. It captures ideas from comparative employment studies that
31 institutional rules: are embedded in their societal context (e.g., Maurice,
32 Sellier and Silvestre 1986); respond to conditions and policies of eco-
33 nomic development (Bosch, Lehndorff and Rubery 2009); undergo
34 change and transformation over time (shaped by but not limited to
35 a country's historical trajectory) (Streeck and Thelen 2005); and have
36 significant but variable effects on social and economic conditions in
37 different countries and sectors. In the analysis of the pay equity effects
38 of minimum wage rules, regulatory indeterminacy arises out of the
39 important institutional interactions between a country's minimum
40 wage system and its model of collective bargaining. In this chapter we
41 argue that the endeavour in many cross-national analyses of minimum

1 wages to unearth a single, universal pay equity effect is misguided as
2 in practice the variety of effects on the shape of the wage distribution
3 are contingent upon the wider arrangements for collective bargaining –
4 that is, on the approaches of government and social partners to
5 minimum wage policy, on coverage levels of collective bargaining and
6 on the degree of overlap between a minimum wage and base rates in
7 collective agreements.

8 The chapter has two further analytical points of interest. The first is
9 a focus on pay equity effects among jobs at the bottom end of the labour
10 market. In line with Dunlop's (1957) notion of wage contour, such jobs
11 can be usefully characterized as 'minimum wage contour' jobs in the
12 sense that the statutory minimum wage is a key external wage that
13 influences long-run wage changes and brings rates in a variety of firms
14 and sectors into connection with each other (see Rodgers, Spriggs and
15 Klein 2004). We know from evidence of the ripple effects of minimum
16 wages that there are significant differences across countries in the degree
17 to which wages further up the wage structure adapt to minimum wage
18 rises (Gautié 2010; Koubi and Lhommeau 2007; Stewart 2010; Wicks-Lim
19 2008). The second point of interest is the interrogation of the practice
20 of pay bargaining – at sector and company levels – that shapes the pay
21 equity effects of minimum wage changes. While a minimum wage may
22 provide the enabling conditions for pay equity outcomes, there is a gap
23 in the literature with respect to what strategies and responses of govern-
24 ments and trade unions are effective or otherwise in shaping pay equity
25 (see, also, Grimshaw, Bosch and Rubery 2013).

26 The research on which this chapter draws was designed to interro-
27 gate the interaction between minimum wage policy developments and
28 collective wage agreements in key sectors of employment, particularly
29 to identify unions' efforts to pursue egalitarian pay bargaining in
30 a context of changing minimum wage policy. This chapter draws on
31 some of the key results of this research project (Grimshaw 2013).⁴ It
32 involved five country teams in Europe, each of which collected original
33 interview data and interrogated collective agreements in key sectors of
34 employment that were significantly influenced by, or contributed to,
35 developments in minimum wage policy. We begin by addressing the
36 question of the pay equity effects of a minimum wage.

37 38 **Does a higher minimum wage improve pay equity?**

39
40 Investigation of the redistributive effects of a minimum wage tend to
41 focus on the relationship between the presence and relative level (or

1 generosity) of a minimum wage and indicators of pay equity.⁵ The
2 standard measure for the minimum wage level is the Kaitz index, which
3 expresses the value of the minimum wage as a percentage of median
4 earnings; median full-time earnings are typically used in comparative
5 studies and median earnings for all employees in single-country stud-
6 ies for reasons of data availability. Indicators of pay equity in these
7 studies tend to focus on one or more of the following: the incidence of
8 low-wage employment (defined as the proportion of workers earning
9 less than two-thirds of median earnings); the gender pay gap (the per-
10 centage difference between women's and men's average pay); women's
11 risk of low pay compared to men's; overall wage inequality (the gap
12 between the highest and lowest decile wage levels – D9/D1); and
13 inequality in the bottom half of the wage distribution (the gap between
14 the lowest decile wage and median earnings – D5/D1). Most start with
15 the argument that the introduction, or increase of the level, of the
16 minimum wage is likely to have a significant pay equity effect for one
17 or more of the following reasons:

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- 19 i) it ought to reduce the share of workers earning below the minimum
20 (subject to non-compliance rates);
- 21 ii) it may generate a spike (or truncation) at the level of the minimum
22 wage in situations where employers respond by uprating workers'
23 pay instead of making them redundant;
- 24 iii) it is likely to have disproportionate effects on certain workforce
25 groups where there is segregation in low-wage sectors; and
- 26 iv) it may have additional 'spillover effects' characterized by further
27 increases in wages for jobs paid above the minimum.
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29 Several studies find systematic evidence (through application of wage
30 regressions or graphical representations) of a positive effect of the pres-
31 ence and level of a minimum wage on pay equity. The OECD's (1998)
32 review of single-country studies conducted in the 1990s (comprising
33 of four US studies, two UK and two Canadian studies – see Annex
34 Table A5.2 D1) found broad support for the wage compression effects
35 of minimum wages in direct relation with its presence and relative
36 level. Also, comparative analysis of data for 12 OECD countries finds
37 a positive association between the Kaitz index and the D5/D1 ratio, as
38 well as the incidence of low pay (op. cit: chart 2.3). More recent data
39 analysis confirms these results. For 23 OECD countries over the period
40 1985–2005, Sniekers (2010) finds that the presence of a minimum
41 wage (in 15 of the 23 countries) had an increasingly effective impact in

1 containing wage inequality in the bottom half of the wage distribution
2 since the late 1990s; the inclusion of time-varying effects is a novel
3 contribution to the literature. Furthermore, among countries with
4 a minimum wage, higher levels compress wage inequality at the bottom
5 and there is even evidence that a higher level compresses wage inequal-
6 ity at the top (by raising median wages through spillover effects).⁶
7 Also, Lucifora, McKnight and Salverda's statistical analysis finds
8 multiple evidence of a significant negative effect of the Kaitz index on
9 the incidence of low pay for 20 OECD countries – both in the form of
10 bi-variate correlations and factor analysis (2005, tables 5 and 6).

11 Updating these analyses using the most recent data, simple correlation
12 tests for those OECD countries and Central and Eastern European
13 countries for which data are available suggest weak to moderately
14 strong evidence of a relationship between the value of a country's
15 minimum wage and measures of pay equity.⁷ Figure 5.1 presents the
16 relationship between the Kaitz index (the value of each country's mini-
17 mum wage relative to median earnings of full-time workers) and two
18 selected measures of pay equity – the incidence of low pay (defined as
19 above, albeit limited to full-time employees because of data availability)
20 and women's risk of low pay compared to men. The country measures
21 of the Kaitz index and low-pay incidence are averaged over three years
22 (2006–08) to reduce possible data problems reported in a particular year,
23 although only one year of data (2008) is reported for the gender differ-
24 ences in low-pay incidence due to data availability. Figure 5.1 reports
25 data from the OECD earnings database. A fuller account that also
26 reports the evidence from the European Structure of Earnings Survey is
27 provided elsewhere (Grimshaw and Rubery 2013).

28 For the sample of 16 countries reported in Figure 5.1(a), the data sug-
29 gest a negative and moderately strong relationship between the Kaitz
30 index and the incidence of low-wage employment (correlation index
31 is -0.58). There is, therefore, support for the statement that countries
32 with a higher minimum wage relative to median earnings are more
33 likely to have a lower incidence of low-wage work than countries with
34 a low-value minimum wage. Nevertheless, there is considerable variation
35 within the contours of this general pattern. For example, the minimum
36 wage is considerably higher in Ireland than in Spain (Kaitz measures of
37 51.1 and 44.1, respectively), but Ireland has a higher not lower incidence
38 of low-wage work than Spain (estimated at around 21 per cent and 16
39 per cent, respectively). The extreme positions of France and the United
40 States best typify the negative relationship. However, France is also
41 often cited as illustrative of the risks of exceeding the upper threshold to

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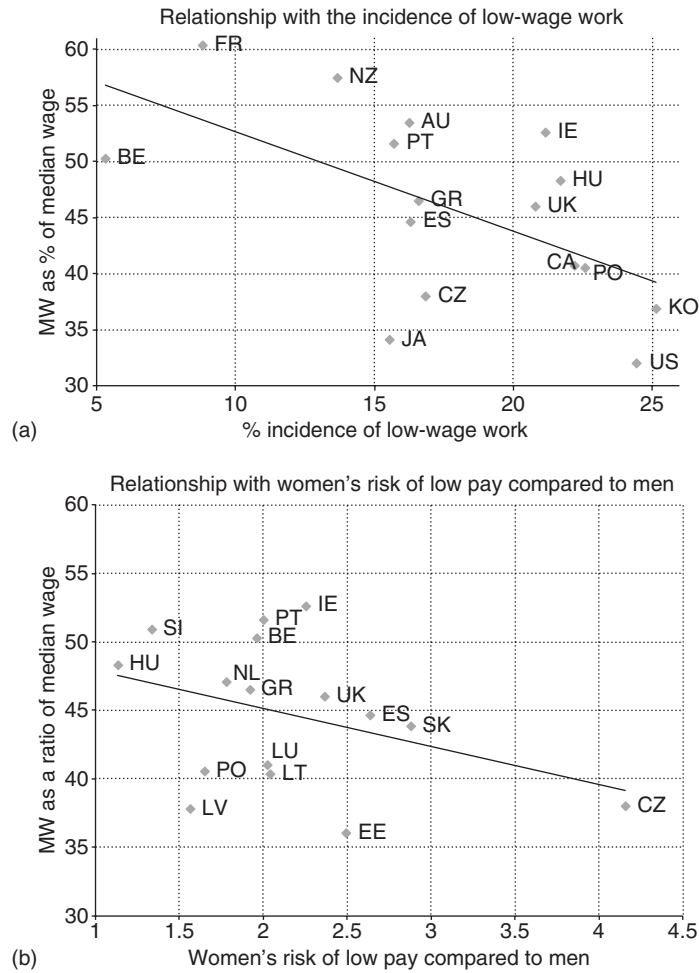


Figure 5.1 Relationship between the Kaitz index (2006–08) and two measures of pay equity

Note: Selection of countries differs in each chart because of data availability. All earnings data refer to full-time workers only. The Kaitz index in both charts is averaged over 2006–08, OECD low-pay data also for 2006–08, but the ESES data in the lower chart refer only to 2008. Low wage data for France is missing from the OECD data reported in the upper chart and therefore is replaced by ESES data reported in the Eurostat publication ‘Statistics in Focus’ (March 2010); France is also missing from the EU-SILC data (lower chart) and excluded here. Source: OECD earnings database for minimum wages and low wage incidence. EU-SILC data (2008) for low wage incidence by gender (kindly provided by Anthony Rafferty, EWERC, University of Manchester).

1 the minimum wage beyond which it undermines redistributive effects.
2 Pitched too high, the minimum wage may displace low-wage workers
3 from employment and therefore reduce their share of earnings. Also, as
4 we explore below, a high minimum wage may encroach on the freedom
5 of social partners to set wages and address low pay through collective
6 bargaining. These issues are central to the French experience where, in
7 recent years, the high level of the statutory minimum has been blamed
8 by some commentators for the persistent high rate of unemployment
9 and crowding out of collective bargaining (Gautié 2010); these risks are
10 weighed against the gains of the reduced incidence of low-wage work.

11 The minimum wage level appears to be less strongly associated with
12 country differences in gender pay equity. Figure 5.1(b) displays a weak
13 to medium-sized, negative relationship (a correlation measure of -0.37),
14 such that the higher the minimum wage the lower the gender gap in
15 incidence of low-wage employment. Slovenia and Hungary are illustra-
16 tive of countries where a relatively high value minimum appears to be
17 a preventive measure against women incurring a very high relative
18 risk of low pay; in these countries women's risk of low pay is con-
19 tained below one and a half times that of men's. Conversely, countries
20 where women face the highest gender bias in the distribution of low-
21 wage work are among those with the lowest value minimum. This
22 includes the Czech Republic, where women face a four-fold risk of
23 low-wage work, and Estonia, Slovakia and Spain, where women's risk
24 of low-wage work is at least two and a half times that of men's and the
25 minimum wage is among the lowest.

26 Given the scope for variability in the relationship between the
27 minimum wage level and low-pay incidence it is perhaps unsurprising
28 that a small number of comparative studies, in fact, find an ambiguous
29 effect. Salverda and Mayhew's (2009, p. 147) analysis of ten countries
30 finds 'no obvious relationship' between the minimum wage (in this case
31 expressed as a percentage of the low-pay threshold) and the incidence
32 of low pay. Also, analysis of 16 OECD countries by Pontusson, Rueda
33 and Way (2002) suggests the generosity of a minimum wage has no
34 effect on compression of wages in the bottom half of the distribution.
35 Their analysis is distinctive in purporting to capture the minimum wage
36 level effect by assuming it is positively associated with left-oriented
37 governments; this is clearly less persuasive than direct use of the Kaitz
38 index given the experience of several right-wing governments in Europe
39 raising statutory minimum wages (see the case of Hungary below).
40 Nevertheless, the study usefully argues for closer inspection of distinc-
41 tive minimum wage effects across countries with centralized versus

1 decentralized wage formation systems in light of the finding that the
2 greater is bargaining centralization, the smaller are (assumed) minimum
3 wage raising effects of left government since unions with greater
4 bargaining power are more successful in boosting the wages of low-paid
5 workers (Pontusson, Rueda and Way 2002, pp. 305–7); the study thus
6 makes a valuable contribution to our understanding of the factors that
7 shape regulatory indeterminacy.

8 Differences in results are to some extent a consequence of differences
9 in definitions, data sets, statistical techniques, time periods and country
10 samples. It is notable, however, that where studies find limited effects
11 of the generosity of a statutory minimum wage, other wage-setting
12 variables, such as collective bargaining coverage or union density, take
13 up the explanatory power. What is clear, therefore, is that wage-setting
14 institutions are significant factors in shaping pay equity. In most of the
15 econometric studies cited, the models aim to separate out the effect
16 associated with the minimum wage value. However, the statistical
17 techniques used to disentangle the direct effect of a statutory minimum
18 wage on pay equity, while controlling for other factors, provide only
19 one means of interrogating its redistributive function. The consider-
20 able cross-national variation in results suggests it may be fruitful to
21 explore country effects in closer detail and, in particular, that it may be
22 necessary to drop the assumption of standard effects (see, also, Schmitt
23 and Mitukiewicz 2012). The following section argues that the specific
24 role and effectiveness of minimum wage policy in improving pay equity
25 is best investigated through the lens of the wider national model of
26 industrial relations, especially concerning the strategies of the main
27 social actors and the form of wage-setting designed and implemented
28 through collective bargaining.⁸

30 Interaction effects

31
32 Like other labour market regulations, the possibility of multiple forms
33 of institutional interactions makes a priori predictions of minimum
34 wage effects very difficult (see Chapter 1). The effects of a minimum
35 wage on pay equity cannot be disentangled from a country's model
36 of industrial relations. In the first instance, we need to recognize that
37 most European countries characterized by an inclusive system of indus-
38 trial relations do not have a national statutory minimum wage, in part
39 because joint regulation of wages for the most part provides reasonable
40 protection for low-wage workers – a functional equivalent to statutory
41 minimum wage protection (Schulten 2006, p. 12; see Appendix 2).⁹

1 Among countries with a statutory minimum, the evidence suggests
2 that higher value minimum wages, which tend to support greater pay
3 equity, are more likely to be found in industrial relations models that
4 have a dual or inclusive character; that is, stronger collective bargaining
5 appears to complement a higher value minimum wage. Also, analysis
6 of the dual institutional features of minimum wage system and collec-
7 tive bargaining coverage shows that a country's institutional character
8 serves as a relatively robust indicator of pay equity outcomes. However,
9 the cross-national pattern is not systematic and recent trends point
10 to evidence of government intervention to raise the minimum wage
11 value in several countries where exclusive industrial relations models
12 have caused a spiralling of low-wage employment (Vaughan-Whitehead
13 2010). Agency therefore matters, suggesting the need to analyse the
14 particular approaches of government and social partners towards the
15 shaping of minimum wage policy and the associated pay equity effects.

16
17 **Do more inclusive industrial relations models support**
18 **higher value minimum wages?**

19 Existing studies provide two good reasons for the proposition that
20 a higher value minimum wage is complemented by strong collective
21 bargaining coverage (defined as the proportion of workers whose pay
22 is set by collective agreement between unions and employers). First,
23 dualist and inclusive models of collective bargaining (following Gallie's
24 2007 application of the terms¹⁰) are associated with a more compressed
25 wage distribution, which in principle raises the relative level of low
26 wages. This compression in bargained rates is likely to have an upwards
27 effect on the setting of the minimum wage level as well, thereby facili-
28 tating strong pay equity effects. The second reason is closely related.
29 In countries with strong collective bargaining coverage, it is likely that
30 social partners are in a better position to argue for a higher national
31 minimum – either because this suits their pay equity strategy or, as the
32 EC (2008) study argues, because it avoids low wage competition which
33 might damage centralized wage agreements (see, also, Schulten 2006).

34 We can test the veracity of these two arguments against available data.
35 Figure 5.2 provides partial support for the notion that, among coun-
36 tries with a statutory national minimum, countries with an inclusive
37 model – represented here as having higher levels of collective bargaining
38 coverage – tend, on average, to have a higher Kaitz index than countries
39 with exclusive models such as the United States and Japan. The selection
40 of countries is larger than that included in Figure 5.1 above since more
41 data are available. The Kaitz index for countries with an above-average

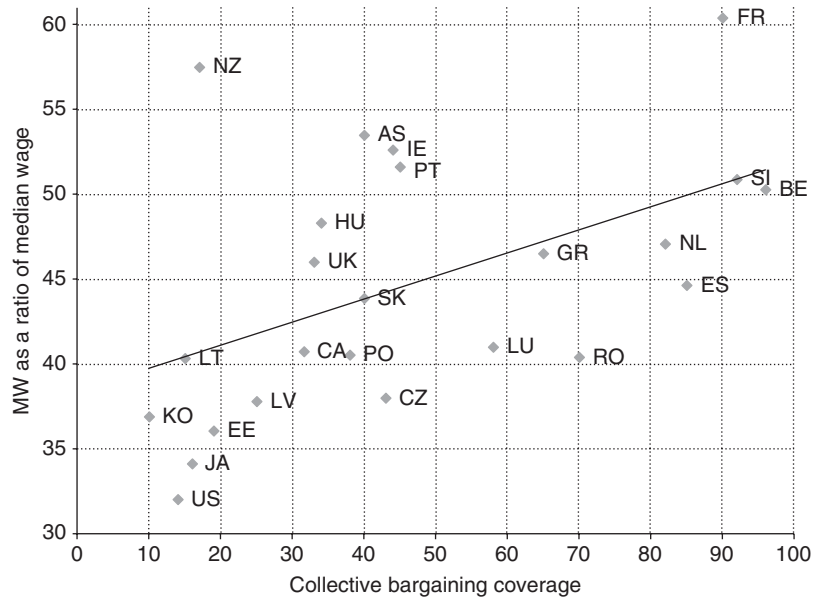


Figure 5.2 Relationship between the Kaitz index and collective bargaining coverage

Note: Countries selected on the basis of data availability. Collective bargaining data refer to either 2008 or 2009, except for Australia and New Zealand (2007). Minimum wage data refer to the average for 2006–08, as in Figure 5.1.

Source: OECD minimum wage database for ratio of minimum wage to median earnings of full-time employees. Collective bargaining data from ICTWSS (Visser 2011).

level of collective bargaining is on average 48 and for those with weaker collective bargaining coverage it is 43 (averaged over the 2006–08 period); moreover, the correlation index is moderately strong and positive (0.50). The institutions of minimum wages and collective bargaining thus appear to be complementary in so far as a high value minimum wage does not preclude inclusive bargaining and vice versa.¹¹

There is an important possible objection to the argument so far which concerns the relationship between inclusive bargaining models and the share of the working population in employment. If inclusive bargaining models are associated with lower rates of employment then the pay equity effects enjoyed by those in work are offset by lack of job opportunities. However, the empirical evidence does not support this objection; a statistical test of association between the Kaitz index and employment rates for OECD countries reveals very weak measures of correlation and, in fact, for

1 core-age female workers and for both males and females with less than sec-
 2 ondary education the relationship is positive, not negative (Appendix 1).

3 What about the level of minimum wage floor in inclusive coun-
 4 tries, such as Sweden, or dualist countries, such as Germany, without
 5 a statutory national minimum wage? It is not possible to estimate
 6 a single Kaitz index for these countries, but analysis of base wage rates
 7 in sector collective agreements provides a useful point of comparison. In
 8 Germany, the new binding collectively agreed sectoral minimum rates
 9 (shown here for seven sectors) suggest a relatively high value minimum
 10 wage (Figure 5.3(a)). The lowest minimum rate is for the laundry sector,
 11 so this might therefore be taken as a proxy for the minimum wage
 12 floor so far agreed for the two regions of the German labour market; it
 13 equates to around 49 per cent of average earnings in the west and 57
 14 per cent in the east.¹² For Sweden, the lowest sectoral minimum is 49
 15 per cent of average earnings, set in local government (Figure 5.3(b)),
 16 so again we find a relatively high minimum wage, although, of course,
 17 in both cases it is not possible to compare a sector minimum with
 18 a national wage floor given obvious differences in workforce coverage.

19
 20 **What are the combined effects of minimum wages and collective**
 21 **bargaining on pay equity?**

22 Given the possibility of complementary institutional interlinkages,
 23 what are the combined pay equity effects of country systems of mini-
 24 mum wages and collective bargaining? Figure 5.4 classifies 29 OECD
 25 and Central and Eastern European countries into four groups as having
 26 either strong or weak collective bargaining coverage and either a high
 27 or low/absent minimum wage. The incidence of low-wage employment
 28 is shown in the left-hand vertical column. On average, countries with
 29 strong collective bargaining coverage and a high value minimum wage
 30 (first country column) experience the lowest incidence of low-wage
 31 employment (12.6 per cent). Countries with strong collective bargain-
 32 ing and either a low-value minimum wage or no statutory national
 33 minimum also enjoy a relatively low incidence of low-wage employment
 34 (12.8 per cent). By contrast, both groups of countries with weak collective
 35 bargaining – whether or not the minimum wage is of a high value, a low
 36 value or absent – score a higher incidence of low-wage employment on
 37 average; moreover, no individual country scores an incidence of less than
 38 14 per cent, which is greater than the average for the other two groups of
 39 countries with strong collective bargaining coverage.

40 There are nevertheless several countries that do not fit the general
 41 patterns thus far described. First, countries such as Spain and Luxembourg

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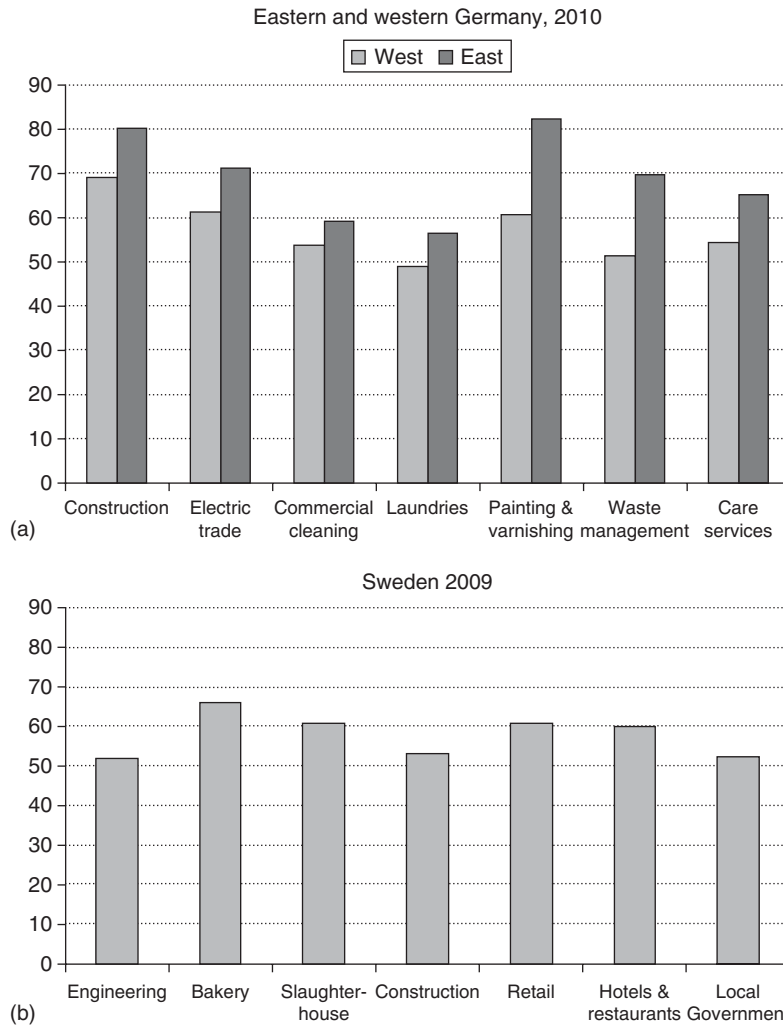


Figure 5.3 The value of sector-based minimum wages in Germany and Sweden (relative to average earnings) (%)
 Note: (a) Hourly minimum rates are those agreed and implemented in 2010. We have used the most recently available average earnings data which are for 2008. (b) Data kindly provided by Per Skedinger; see, also, Skedinger (2010).

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| % low paid | Strong collective bargaining coverage | | Weak collective bargaining coverage | |
|------------------------|---------------------------------------|-----------------------------------|-------------------------------------|----------------------------|
| | High minimum wage | Low or absent minimum wage | High minimum wage | Low or absent minimum wage |
| 28–31 | -- | -- | | Latvia |
| 25–28 | -- | -- | -- | Lithuania |
| 22–25 | -- | -- | Hungary | Canada, US |
| 19–22 | | Germany | Ireland, Portugal, UK | Poland, Estonia |
| 16–19 | Greece, Slovenia | | Australia | Czech Rep., Slovakia |
| 13–16 | Netherlands | Austria, Italy, Spain, Luxembourg | New Zealand | Japan |
| 10–13 | | Sweden | -- | -- |
| <10 | Belgium, France | Denmark, Finland | -- | -- |
| Country average | 12.6 | 12.8 | 19.5 | 22.0 |
| % low paid | | | | |

Figure 5.4 Combined effects of collective bargaining and minimum wages on the incidence of low-wage employment

Notes: Categories of collective bargaining coverage defined as: strong coverage if 50 per cent plus; weak if less than 50 per cent. Categories of minimum wage Kaitz values defined as: high value if greater than 0.45 (country average for the averaged 2006–08 period) and low value if equal to or less than 0.45.

Source: OECD minimum wage database for ratio of minimum wage to median earnings of full-time employees; collective bargaining data from ICTWSS (Visser 2011); low-pay incidence data from two sources: European Structure of Earnings Survey (Eurostat ‘Statistics in Focus’ (March 2010)) and OECD database for Australia, Canada, Japan, New Zealand, United States.

register a low-value minimum wage that is out of kilter with their strength of collective bargaining (see Figure 5.2). Among the countries listed in Figure 5.4, Spain ranks seventh in its strength of collective bargaining coverage but 12th in the value of the minimum wage. There are specific reasons for this apparent disconnect. One is the legacy of using the minimum wage as a monthly income standard for various welfare and pension payments (Recio 2006), which inevitably proved an obstacle for many years to increasing the level. Despite their apparent strength in the labour market, Spanish unions have thus traditionally disregarded the minimum as a wage fixing instrument and concentrated instead on raising minimum pay rates in the hundreds of regional collective agreements (Cebrián *et al.* 2008). Matters changed in 2004 when the welfare

1 links were abolished and the government set a goal to increase the
2 minimum wage relative to average earnings (Banyuls, Cano and Aguado
3 2010). This policy generated an uplift in the Kaitz index during 2004–07
4 by around four percentage points; nevertheless, at just 44.1 in 2009 the
5 Kaitz measure is still below the European average of 47.2.

6 A contrasting situation applies in the case of New Zealand, Ireland and,
7 to a lesser degree, Hungary, which arguably have a higher than anti-
8 cipated minimum wage value given their weak collective bargaining
9 coverage. In these countries, minimum wage policy developments to
10 some extent reflect a wider international pattern of change. If we inter-
11 rogate the relationship between change in minimum wage value and
12 strength of collective bargaining coverage then, for European countries,
13 we find a relatively strong negative relationship – a correlation measure
14 of -0.65 between the change in minimum wage value during 2000–09
15 and the strength of collective bargaining coverage averaged over 1995–
16 2006 (see Figure 5.6 below). In other words, in this period countries in
17 Europe with weak levels of collective bargaining coverage were more
18 likely than countries with high levels of coverage to have experienced
19 increases in the Kaitz index. Of the top ten countries with the largest
20 rise in the minimum wage during 2000–09, seven were countries with
21 an exclusive model of industrial relations – that is, weak and generally
22 uncoordinated collective bargaining coverage. Hungary is illustrative.
23 Following a steady decline in the minimum wage during the 1990s –
24 a decline in the Kaitz index from 0.43 to 0.37 during 1992–2000
25 (OECD data¹³) – a centre-right government unilaterally hiked up the
26 minimum from HUF25,500 to HUF40,000 in 2001, followed by a fur-
27 ther significant rise in 2002 (Neumann 2010). OECD data suggest the
28 Kaitz index improved from 0.37 (2000) to 0.51 (2001) and then to 0.57
29 (2002). At the same time, however, the intervention was allied with
30 a reform of the minimum wage fixing process that undermined
31 tripartite negotiation and established a new unilateral government
32 competence (Neumann 2010).

33 A third exceptional case is Germany, alone, in describing a unique
34 position (among the 29 countries in Figure 5.4) of an above-average inci-
35 dence of low-wage employment and an above-average level of collective
36 bargaining coverage. Its incidence of low-wage work is estimated at 19.6
37 per cent (ESES data), above the average 17.1 per cent. Part of the problem
38 is Germany's falling collective bargaining coverage. While Sweden has
39 enjoyed a stable level of collective bargaining coverage in the last two
40 decades and Denmark a rising coverage, Germany has witnessed a fall
41 from around 75 per cent in the late 1980s to less than two-thirds coverage

1 today (ICTWSS data). Its system of joint wage regulation, coupled with
2 a refusal by employers to apply extension mechanisms and the practice
3 of increasing numbers of German companies to outsource activities to
4 non-covered companies, therefore no longer provides an effective func-
5 tional equivalent to statutory minimum wage protection. Moreover, as
6 with other countries that use collective bargaining as the basis for provid-
7 ing protection for the low paid, Germany has faced serious challenges as
8 to the effectiveness of its institutions because of the liberalization of the
9 European services industry and increased labour migration (Woolfson,
10 Thornqvist and Sommers 2010). The European Court of Justice rulings
11 on the Laval, Viking and Ruffert cases mean that a minimum rate estab-
12 lished through collective bargaining that is not extended nationally is
13 not considered as a minimum rate of pay.¹⁴ Alber (2010, p. 28) argues
14 the legal basis for these rulings is questionable and can be interpreted as
15 a non-neutral assessment of those member states that have established
16 wage protection through collective agreement rather than legislation. In
17 a context of increasing numbers of posted workers, these rulings have
18 posed a serious dilemma for labour relations and wage bargaining and
19 prompted the development of new legally binding agreements in several
20 sectors of the German economy.

21 These country examples provide valuable case studies of the agency
22 of government intervention in shaping minimum wage policy with
23 varying degrees of support and pressure from trade unions in response
24 to the problem of low-wage employment. The institutional character
25 of the industrial relations model is therefore not the only determi-
26 nant of the minimum wage value, nor do the combined institutional
27 effects of collective bargaining and minimum wage system necessar-
28 ily generate the expected pay equity effects. Actions and responses of
29 social actors towards minimum wage policy vary over time and across
30 countries. In addition, across a variety of country models of industrial
31 relations trade unions can develop distinctive strategies as part of col-
32 lective pay bargaining that enhance the pay equity impact of a rising
33 minimum wage. We investigate these issues in the following section.

34 35 **Pay equity outcomes and the role of institutions and actors**

36
37 The above analysis supports the widely held view that wage-setting
38 institutions – including features such as the degree of bargaining
39 centralization, the strength of union bargaining power and the level
40 of minimum wages – exert a considerable influence on measures of
41 pay equity. This result is important since it means for a given level

1 of skill composition (influenced by education, technology and trade)
2 the different characteristics of wage-setting institutions can have deter-
3 mining effects on wage structure. However, as we hinted above, an
4 institutionalist perspective requires an understanding of country
5 specificity and the particular actions and strategies of social actors,
6 especially government and trade unions in the case of minimum
7 wage policy and collective bargaining. Moreover, institutions are not
8 static. They are responsive to the changing strategies and actions
9 of government and social partners. In this section we investigate
10 the diverse pay equity outcomes of minimum wage policy with
11 the aim of identifying and articulating the strategies and actions of
12 collective bargaining actors that are likely to impact upon pay equity
13 outcomes. Figure 5.5 illustrates how different pay equity outcomes can
14 be associated with different pay bargaining actions, sector conditions
15 and minimum wage policy development.

16 The first pay equity effect – a high and relatively stable wage floor –
17 is associated directly with the relative value of the statutory minimum
18 wage and/or the relative value of binding minimum standards set
19 through sector collective bargaining. The former route is most likely
20 to materialize where unions enjoy a relatively strong labour market
21 presence and are able to make a positive input into the minimum
22 wage fixing process. In the OECD in general and the country cases
23 in particular the minimum wage value is positively associated with
24 strength of collective bargaining and countries with strong collective
25 bargaining and high value minimum wages are most likely to enjoy
26 a low incidence of low-wage employment. Furthermore, presence of
27 trade unions (and/or works councils) is critical to ensuring compliance
28 by employers with the statutory wage rules.

29 Evidence from the alternative route to a high wage floor – that of
30 setting binding sectoral standards – suggests unions have been effective
31 in establishing a relatively high wage floor, again supporting the notion
32 that dual and inclusive bargaining models are conducive to high value
33 minimum standards. In Germany, we showed earlier that the lowest
34 collectively agreed minimum wage (found in the laundry sector) would
35 appear to be relatively high. In fact, at 49 per cent (in western Germany),
36 it is far higher than the European average minimum wage level of 37
37 per cent and approximately on a par with the French minimum wage
38 at 48 per cent (expressed as a percentage of average earnings). However,
39 the experience of Germany suggests this route of institution building is
40 lengthy and cumbersome. The idea for the strategy came from bilateral
41 agreements in the early 1990s between the German federal government

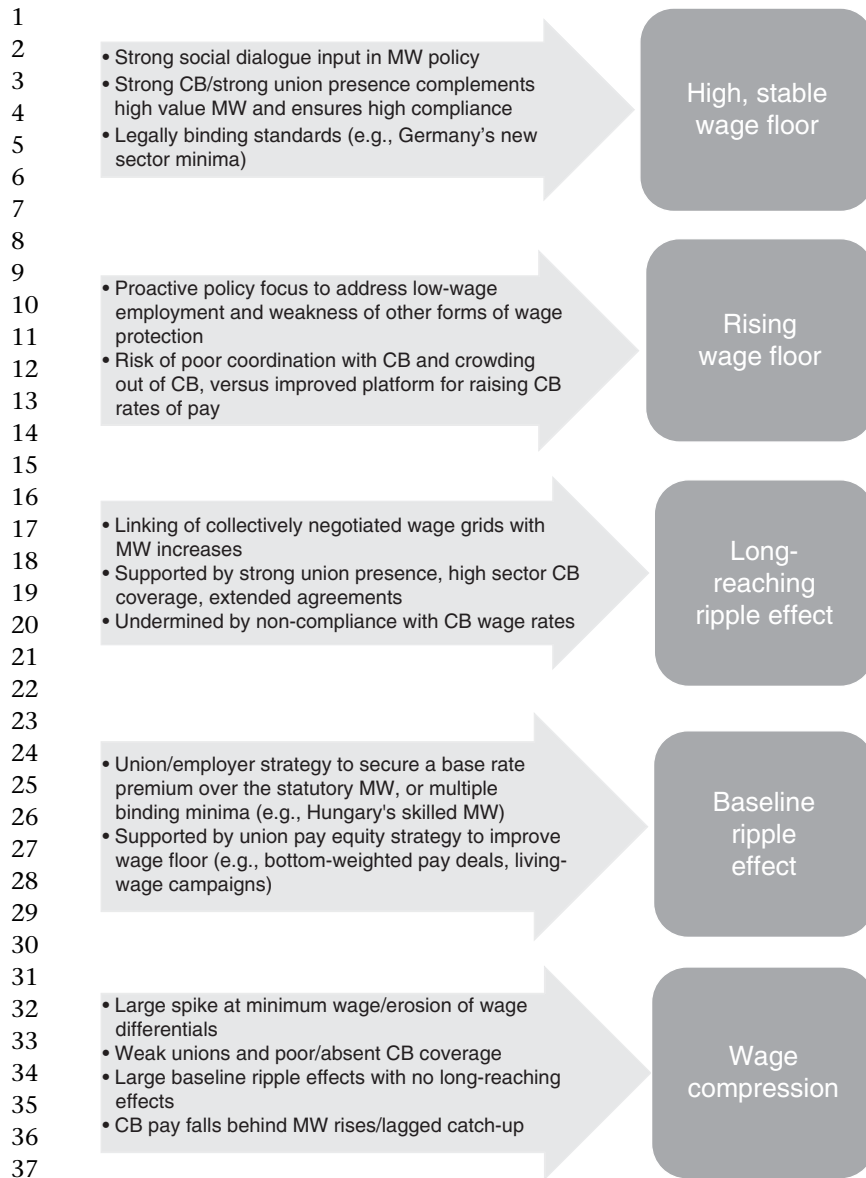


Figure 5.5 Diverse pay equity outcomes of minimum wage and collective bargaining interactions

1 and Central and Eastern European countries that set quotas for the
2 temporary deployment of posted workers. Its use was especially marked
3 in the construction sector, up to a peak of 188,000 posted workers in
4 1996 (Bosch and Zühlke-Robinet 2003). According to EU law, terms and
5 conditions of employment could be set in accordance with the country
6 of origin principle, subject to generally binding agreements or other
7 statutory wage protection in the host country (Bosch and Weinkopf
8 2013, Cremers, Dølvik and Bosch 2007). In the German construction
9 sector, while the collective agreement was binding at this time, the wage
10 clause was not, leading to a pattern of social dumping and undermining
11 of the collectively agreed pay rates. The employers' association and the
12 trade union (IG BAU) responded by agreeing a system of legally bind-
13 ing minimum wages for the sector, set out in the Posted Workers Act
14 1996, after successfully overcoming opposition from the Confederation
15 of German Employers Federation (Bosch and Kalina 2010). Following
16 a political compromise that removed the need for sectoral social part-
17 ners to win the approval of the employers' confederation, other sectors
18 have followed suit. During 2007–13, twelve sectors established a legally
19 binding minimum wage on the basis of the German Posted Workers
20 Act (*Arbeitnehmerentsendegesetz*). In most of these sectors postings from
21 other EU countries did not play a role. But since Germany did not have
22 a legal mechanism to set minimum wages the German Posted Workers
23 Act is increasingly used to regulate domestic wage competition. A fur-
24 ther difficulty with this pay equity approach is coverage, since many
25 low-wage workers in Germany are employed in workplaces and sectors
26 where union presence is weak or absent.

27 A second pay equity effect is associated with a rising wage floor. While
28 a high wage floor is still, on average, associated with a country's strength
29 of collective bargaining coverage and presence of trade unions, this
30 association does not apply to an analysis of changes in the minimum
31 wage level over time. During the 2000s, as we noted above, several
32 countries with relatively weak collective bargaining coverage uprated
33 their minimum wages quite considerably, albeit for a variety of reasons.
34 Figure 5.6 presents this pattern of change for European countries. In the
35 United Kingdom, through what is believed to be an effective process of
36 social dialogue (see Brown 2009), the tripartite Low Pay Commission
37 recommended a series of minimum wage upratings during 2003–06
38 explicitly designed to lift its position in the wage distribution in order to
39 improve conditions for low-wage workers. In other countries, the state
40 has taken the lead. For example, Hungary uprated its minimum wage
41 more than any other country during 2000–09 despite being among

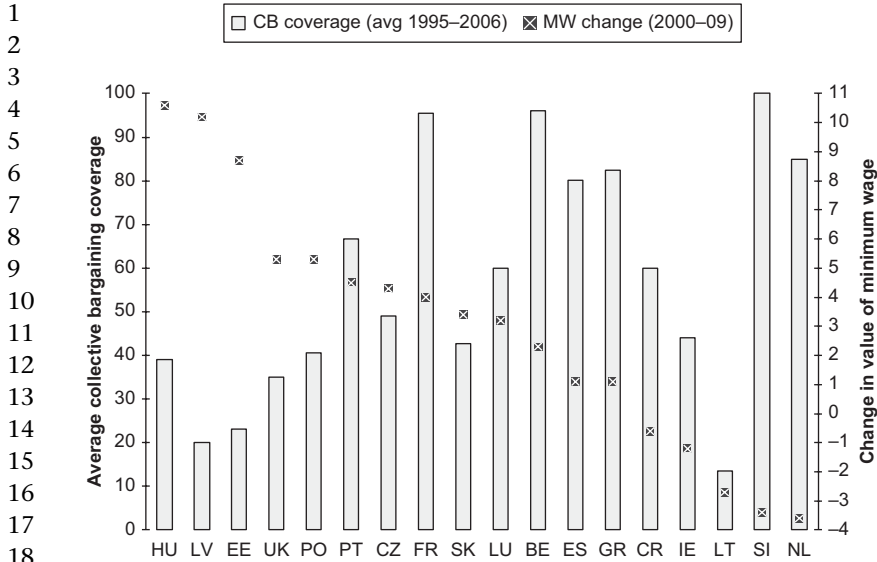


Figure 5.6 Change in minimum wage value (2000–09) and strength of collective bargaining coverage (averaged over 1995–2006)

Note: 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, 2001–09, and Slovenia, 2005–09.

Source: OECD minimum wage database plus data for Croatia from (Nestić and Bakarić 2010); Collective bargaining data from ICTWSS (Visser 2011), except Croatia (Nestić and Bakarić 2010) and Ireland (eironline). Reproduced from Grimshaw and Bosch (2013, figure 3.7).

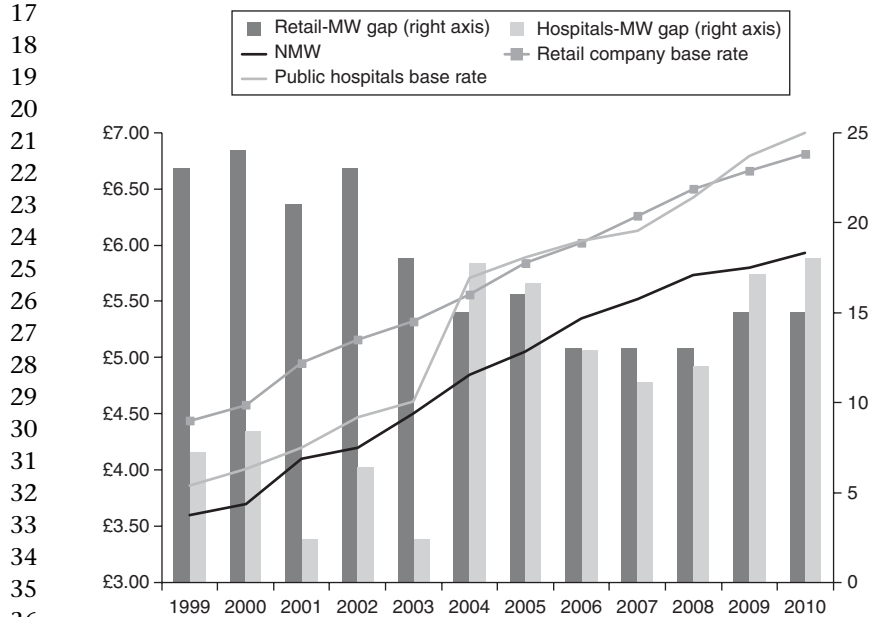
the group of countries with weak collective bargaining. However, the risk is that low-wage workers come to depend almost entirely on this one strategy to improve their pay prospects and employers look to the minimum wage as the best source of information about the going rate of wages in a range of low-paying sectors. While any uprating of a minimum wage has the welcome effect of lifting the relative position of lowest-paid workers and raising the societal norm regarding what is considered exploitative pay, in different economic contexts it may tie low-paid workers to the minimum in periods when minimum wage rises are below average wage growth. It also raises a question about whether or not it crowds out union mobilization. As Figure 5.6 shows, France appears to be an exception to the recent pattern as its increase in the minimum wage and the coverage of collective bargaining are both high. However, increases in the minimum wage are linked to

1 a specific formula that is said to have compensated, to some extent,
2 for weak trade unions and the quality of collective bargaining, par-
3 ticularly in low-wage sectors (Schmid and Schulten 2006; Gautié 2010,
4 pp. 168–71).

5 In the context of either high or rising minimum wage floors, the
6 overall effects on pay equity depend on the size and nature of the ripple
7 effects. These in turn depend on context and strategies. One of the
8 major uncertainties, therefore, in understanding the pay equity effects of
9 a rising minimum wage relates to variation in ripple effects (Pollin *et al.*
10 2008). As Freeman argued (1996, p. 645), we might anticipate country
11 and sector differences due to varying systems of collective bargaining.
12 Where the minimum wage acts as a key rate determining the base rates
13 in inclusive collective agreements – in France, for example – then pay
14 differentials are likely to be at least partially restored following minimum
15 wage rises because unions (and employers) seek to restore differentials
16 related to experience, job responsibility, skill and/or qualification.¹⁵
17 Also, in Hungary, Neumann's (2010, table 17) analysis of pay rates in
18 the construction sector agreement (2006–10) shows that the rate of pay
19 for semi-skilled workers retained a pay differential of between 9 per cent
20 and 12 per cent, with unskilled pay pegged to the national minimum
21 wage, thus ensuring close to a 100 per cent ripple effect for semi-skilled
22 workers. Where this type of pay bargaining and protection of pay dif-
23 ferentials occurs, we can expect 'long-reaching' ripple effects as mini-
24 mum wage rises extend up the pay scale for higher-paid workers. In the
25 United States and the United Kingdom, by contrast, weaker unions and
26 lower collective bargaining coverage generate weaker ripple effects from
27 a minimum wage rise (Stewart 2010; Wicks-Lim 2008, table 11.1). In
28 practice, this may mean that only the lowest-paid worker earns a rise in
29 line with the minimum wage or even that workers paid at the next higher
30 grade experience a pay cut (a negative ripple effect) so that the employer
31 can offset the higher minimum wage costs. Certain types of ripple effects
32 may be legally binding, such as Hungary's second statutory national
33 minimum wage that applies to jobs requiring skilled workers and is set
34 at a fixed differential of 20 per cent above the standard minimum wage.
35 Nevertheless, the coverage of this legally binding ripple effect is contin-
36 gent upon what jobs are defined to require skilled workers, which has
37 become controversial. For example, powerful retail employers have suc-
38 cessfully lobbied government for the declassification of cashiers as skilled
39 staff, thereby evading the ripple effect (Banyuls *et al.* 2013).

40 Ripple effects can be expected to fluctuate in size over time in a con-
41 text of shifting product and labour market conditions as well as unions'

1 effectiveness in pay equity bargaining. Empirical evidence from two pay
 2 agreements in the United Kingdom is illustrative. In one retail company
 3 pay agreement (a leading supermarket chain), the union won a series
 4 of bottom-weighted pay deals favouring the low paid and thereby
 5 improved the internal position of the lowest paid relative to higher-
 6 paid colleagues. However, a poorly formulated pay equity strategy and
 7 a weak bargaining position relative to the retail company meant that
 8 the positive premium over the national minimum wage fell by over
 9 a third over the 11-year period (Figure 5.7). By contrast, the public
 10 hospitals sector agreement (known as 'Agenda for Change') achieved
 11 a considerable improvement in the premium of the base rate paid to
 12 hospital cleaners over the national minimum wage, from 7 per cent to
 13 18 per cent. A better defined union strategy of pay equity, coupled with
 14 a stronger potential for worker mobilization in the health sector, led to
 15 the negotiation of a one-off 24 per cent increase in the bottom rate of
 16



37 *Figure 5.7* Changing ripple effects of a rising minimum wage on the bottom rate
 38 in two UK collective agreements, 1999–2010 (%)

39 *Note:* Pay data refer to the base rates in the public sector hospitals agreement ('Agenda for
 40 Change' for 2004–10 and the Whitley Council agreement for ancillary services workers up
 41 to 2003) and the retail company agreement.

Source: Grimshaw, Shepherd and Rubery (2010, tables 11 and 16).

1 pay at the original signing of the agreement in 2004, followed by the
2 elimination of bottom grades (in 2009) and higher pay settlements for
3 the lowest paid (2007 and 2010).

4 A fifth pay equity effect is an outcome of weak ripple effects, namely
5 a spike at the minimum wage and wage compression among the low-
6 est paid. In countries and sectors with weak trade unions and low
7 collective bargaining coverage, a pay bargaining practice of pegging
8 wages to the statutory minimum is associated with a compression of
9 wage differentials during a period of minimum wage rises. In the United
10 Kingdom, weak ripple effects are one of the main reasons why during
11 the 2003–07 period, when the minimum wage increased relative to
12 average earnings, the incidence of low-wage work remained at a high
13 and stable level, around 21–22 per cent. With only a limited propor-
14 tion of workers benefiting from pay bargaining that can restore pay
15 differentials, there are insufficient ripple effects to lift pay above the
16 low wage threshold, which at two-thirds of median earnings remains
17 substantially above the level of the national minimum wage. The share
18 of minimum wage earners is highest in the sectors of hairdressing, hos-
19 pitality, cleaning and retail (ranging from 15 to 27 per cent – LPC 2007,
20 Figure 2.12), where coverage of collective bargaining is very low, just
21 6 per cent, for example, in hospitality (Achur 2010). The significance
22 of the practice of using the minimum wage as a going rate in the United
23 Kingdom is supported by case study and survey evidence: for example,
24 Lloyd, Mason and Mayhew (2008) report that six of eight hotels inves-
25 tigated paid room attendants at or only slightly above the national
26 minimum wage, four of the eight retail case study firms set entry pay
27 only a few pence above the minimum and all six food processing firms
28 investigated paid agency workers at the minimum wage. Moreover, the
29 increasing share of minimum wage workers in the retail case studies
30 reported in Mason and Osborne (2008) is associated with revised con-
31 tracts that reduce pay enhancements for weekend working and public
32 holidays as well as opportunities for bonuses.

33 In Croatia also, the evidence shows a tendency towards wage compres-
34 sion but this time as a result of bottom-weighted pay bargaining which
35 has done little more than ensure that total earnings for the low paid
36 are at least equal to the statutory minimum wage in a context of an
37 unstable minimum wage policy environment where collective bargaining
38 wage increases have constantly fallen behind minimum wage increases.
39 Between 2005 and 2009, the bottom rate of pay agreed in the extended
40 retail sector collective agreement fell from 23 per cent to 43 per cent below
41 the national minimum wage (Banyuls *et al.* 2013, p. 212). The situation

1 has become something of a convention since it is expected that employees
2 receive additional pay (seniority and other enhancements – similar to
3 the practice in France), which counts towards the minimum wage.
4 Nevertheless, the level of basic pay is now so low that social partners have
5 had to regularly agree special lump-sum allowances (bottom-weighted)
6 to ensure that low-wage workers' total wage meets minimum wage rules.
7 Company-level pay bargaining provides higher base rates for some, but
8 there are few agreements (just 11 in the retails sector in 2009, for exam-
9 ple). Thus, the need for pay negotiators to continuously try to catch up
10 has resulted in a more compressed wage distribution (Banyuls *et al.* 2013).

11

12 **Conclusions**

13

14 This chapter addresses the pay equity effects of minimum wages through
15 interrogation of pay bargaining processes and strategies within different
16 country models of industrial relations. It contributes to several recent
17 comparative studies that generate mixed evidence concerning the impact
18 of minimum wages (largely associated with the value relative to median
19 earnings) on pay equity measures such as the gender pay gap and the inci-
20 dence of low wage-work. Our review of European wage data lends support
21 to those studies that find a negative association between the value of a
22 minimum wage, on the one hand, and, on the other, the incidence of low-
23 wage work and the risk of low-wage work faced by women compared to
24 men. Nevertheless, the specificity of country patterns calls for further inter-
25 rogation of the processes of wage determination and pay equity outcomes
26 within the context of country and sector models of wage bargaining. The
27 chapter therefore contributes to the broader argument made in this book
28 that labour market regulations have non-determinant effects by analysing
29 how the aggregate level institutional interlinkages are articulated through
30 processes and outcomes of pay bargaining drawing on the results of
31 a European research project.

32 We identify five pay equity outcomes associated with varying indus-
33 trial relation systems and specific bargaining strategies. First of all,
34 the setting of a high wage floor through a high minimum wage is in
35 many countries a reflection of strong collective bargaining. High values
36 of minimum wages are also associated with collectively agreed and
37 extended binding standards at sector level – as in Germany – but these
38 high floors only provide limited sectoral coverage. A second pay equity
39 outcome is that of a rising minimum wage floor. On the one hand,
40 a rising minimum wage may be required in many countries to lift the
41 wage floor to a suitable level in a context where rates of pay for many

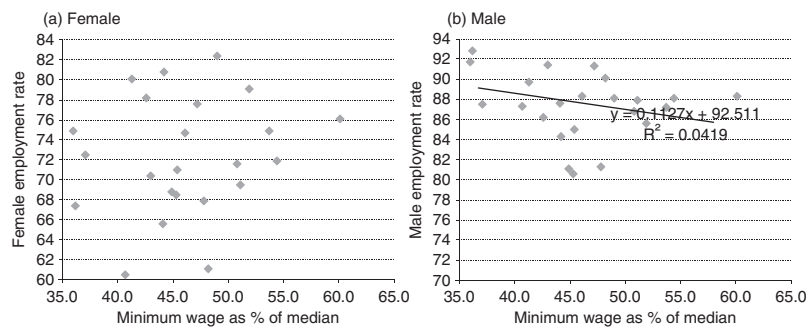
1 jobs have fallen below acceptable standards of living. On the other
2 hand, in circumstances where either social dialogue is not effectively
3 incorporated into the procedures for minimum wage setting, or unions
4 have very limited presence in low-wage sectors, the unintended effect
5 may be the displacement of collective agreements in setting minimum
6 rates in some sectors, which may leave these workers exposed to any
7 reversal of a policy of improving minimum wages in line with or faster
8 than other rates. A third pay equity outcome is where a high or rising
9 minimum wage gives rise to strong ripple effects. This is likely where col-
10 lective bargaining is able to peg either the sector minimum or the whole
11 wage grid to increases in the minimum wage, and as a consequence the
12 spillover effect of rising minimum wages on low-paying sectors will be
13 long-reaching. However, the ability of unions to ensure long-reaching
14 ripple effects depends both on their organization and influence and on
15 their strategies and commitments to pay equity outcomes. A common
16 union pay bargaining strategy in recent years has been to focus on
17 securing a fourth pay effect, referred to as a 'baseline ripple effect' – that
18 is, to uplift the bottom rate of pay in the collective agreement to secure
19 a positive gap above the minimum wage. This strategy places less strate-
20 gic emphasis, however, on restoration of pay differentials and therefore
21 can be viewed as facilitating a potentially costless win–win outcome for
22 employers who are able to offset costs by freezing pay for those workers
23 on higher pay grades. This may be one reason why the living-wage cam-
24 paign in the UK has proven popular among both right and left political
25 commentators in recent years (Featherstone *et al.* 2012).

26 Where unions are weak and/or pay bargaining strategies are poorly
27 formulated, the likely effect of a high or rising minimum wage is a more
28 compressed wage structure in the bottom segment of the labour market,
29 our fifth pay equity effect. The rising Kaitz index in countries like the
30 United Kingdom and Hungary is not an indicator of an improved position
31 of the class of low-wage workers but is, in fact, entirely consistent with
32 their falling behind higher-paid workers as the entire wage distribution
33 becomes more and more skewed towards the left (in statistical terms,
34 positively skewed with a high peak). The risk, during the austerity period
35 of polarized job growth in Europe (Hurley, Fernández-Macías and Storrie
36 2013), is that this trend continues and we will witness a bifurcation of
37 the wage and job structure with especially severe implications for women
38 in employment who account for the majority of workers in the bottom
39 half of the distribution. Nevertheless, while economists highlight the
40 so-called exogenous forces of technology and internationalization of
41 production and trade, our analysis points to the endogenous factors that

1 shape the relative wages negotiated in different sectors and countries.
 2 Further research would be welcome both to interrogate in more detail
 3 the country and sector contingencies and to collect more detailed pay
 4 data over time associated with a wider range of pay agreements. Trade
 5 unions still, on the whole, display a tendency for improving pay equity
 6 through their approach to pay bargaining (see Visser and Checchi 2009
 7 for a review), but further research is needed to improve our understand-
 8 ing of the conditions that underpin their success in a context of changing
 9 minimum wage policy, uncertain macroeconomic conditions and varying
 10 strength of unions in shoring up collective bargaining coverage.
 11

12 **Appendix 1**

13
 14 Drawing on data for a sample of OECD countries and new EU member
 15 states, the following four graphs plot the relationship between the Kaitz
 16 index (value of minimum wage relative to median earnings) and the
 17 employment rates for specific groups of workers. Figure A5.1 covers
 18 male and female employment rates for workers aged 25–54 years old.
 19 Figure A5.2 covers male and female workers with less than secondary
 20 school education. For core-age workers, the association between vari-
 21 ables is very weak. Interestingly, however, it is positive for women (0.171)
 22 and negative for men (−0.205). For workers with less than secondary
 23 school education the correlation measures are positive for both women
 24 and men, 0.136 and 0.138, respectively.
 25
 26



27
 28 **Figure A5.1** The Kaitz index and employment rates for core-age workers
 29 Note: Data for 18 OECD countries, plus five new EU member states.
 30 Source: OECD minimum wage database, 2009 data; OECD *Employment Outlook*, 2007 data;
 31 EC *Employment in Europe*, 2007 data, for Latvia, Slovenia, Romania, Lithuania and Estonia.
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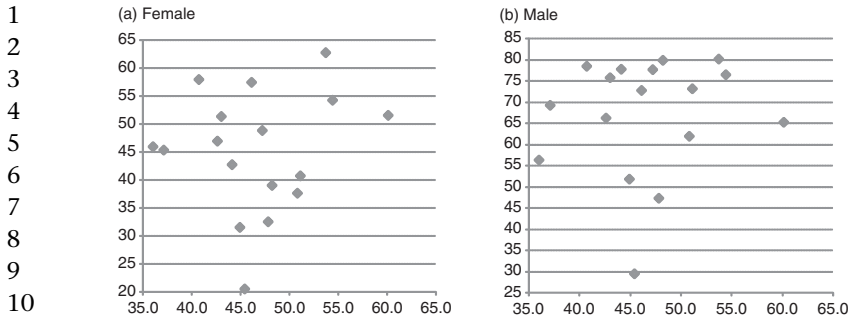


Figure A5.2 The Kaitz index and employment rates for workers with less than secondary school education

Note: Data for 17 OECD countries.

Source: OECD minimum wage database, 2009 data; OECD Employment Outlook, 2007 data.

Appendix 2

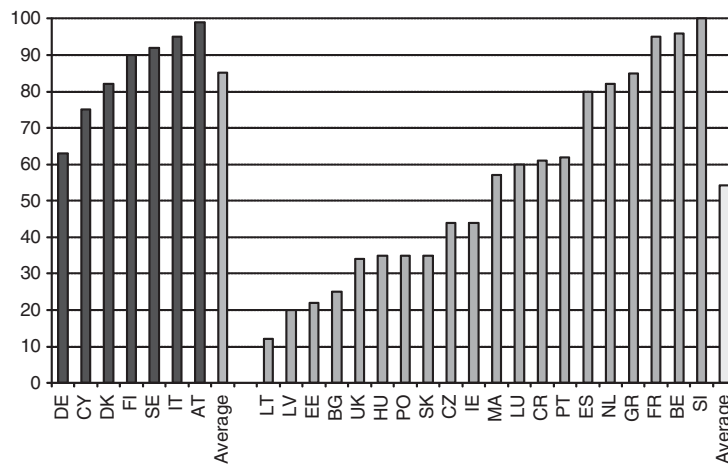


Figure A5.3 Collective bargaining coverage in countries with and without a statutory minimum wage, 2006 (EU-27 plus Croatia)

Note: Data for Romania missing. 2006 data, except Greece and Hungary (2005).

Source: ICTWSS (Visser 2011); except Croatia (Nestić and Bakarić 2010) and Ireland (eironline 2007); see Appendix Table A1.

Notes

- 1 1. Damian Grimshaw and Jill Rubery are Co-irectors of the European Work
2 and Employment Research Centre (EWERC) and Professors at the University
3 of Manchester, Manchester Business School. Gerhard Bosch is Professor of
4 Sociology and Director of the Institute for Work and Skills at the University
5 of Duisburg-Essen, Germany.
- 6 2. As Heery (2000) observes, this counter-claim is a classic example of what
7 Hirschmann (1991) refers to as the 'perversity thesis', which involves
8 a method of argument that seeks to demonstrate that the end result is abso-
9 lutely the opposite of what was intended by the policy intervention.
- 10 3. The findings from these studies confirm the more general observation that
11 cross-national variation in wage structures (e.g., inter-decile inequality,
12 gender pay gap and low wage incidence) are shaped over the long term by dif-
13 ferences in collective bargaining centralization and coverage, union density
14 and level of minimum wages (Fortin and Lemieux 1997; Whitehouse 1992).
- 15 4. The authors were members of a five-country project coordinated by Damian
16 Grimshaw: 'Minimum wage systems and changing industrial relations in
17 Europe', VS/2009/0159 (EWERC, University of Manchester). The project
18 is funded by the European Commission, DG Employment, Social Affairs
19 and Equal Opportunities, Social Dialogue Unit during 2009–10. This chap-
20 ter draws extensively on the results of this project, which are available in
21 the form of five national reports and a comparative report on the EWERC
22 website – for Croatia (Nestić and Bakarić 2010), Germany (Bosch and Weinkopf
23 2010), Hungary (Neumann 2010), Spain (Banyuls *et al.* 2010), the United
24 Kingdom (Grimshaw, Shepherd and Rubery 2010) and the comparative report
25 (Grimshaw and Rubery 2010) – and in an edited book (Grimshaw 2013).
- 26 5. The degree of enforcement of a minimum wage is also an important factor
27 but data on employer compliance with minimum wage legislation is not
28 widely available. A notable exception is a study using Korean data that shows
29 non-compliance rates (rising since 2004 and more than 10 per cent during
30 2006–10) were a significant factor during 1993–2008 in explaining variation
31 in the low-pay incidence and in fact, neither the level of the minimum wage
32 nor collective bargaining coverage were significant variables during the 2002–
33 08 period (Hwang and Lee 2011).
- 34 6. The coefficients of the Kaitz index in both wage regressions are statistically
35 significant to 1 per cent, but the size of effect is larger for the lower half of
36 the wage distribution measured by D5/D1 (Sniekers 2010).
- 37 7. The data derive from multiple sources: estimates of the Kaitz index for 2009
38 derive from the OECD minimum wage database; the incidence of low pay
39 (full-timers only) is taken from the European Structure of Earnings Survey;
40 and the relative risk of women's low pay compared to men derive from EU-
41 SILC data.
8. The lens of analysis is widened further in some recent studies (Rubery and
Grimshaw 2011; Salverda and Mayhew 2009) to include interaction effects
with the institutions of employment protection and welfare benefits, on the
one hand, and economic conditions relating to aggregate demand and industry
competition, on the other.

- 1 9. There are seven EU Member States without a national statutory minimum
2 wage: Austria, Denmark, Finland, Italy, Cyprus, Sweden and Germany.
3 Austria implemented a new minimum wage in 2009 (a gross monthly wage
4 of €1,000 or €14,000 per year accounting for the 14 monthly payments) as
5 part of a national, cross-sectoral agreement negotiated by social partners.
6 However, it is not a statutory requirement and this has raised questions
7 regarding incomplete coverage of workers in sectors and regions where
8 social partners have not concluded a collective agreement (Hofbauer and
9 Adam 2009).
- 10 10. Gallie defines these employment regimes as follows: inclusive regimes
11 design policies to extend employment and employment rights as widely as
12 possible, while dualist regimes focus less on overall employment levels and
13 more on providing strong rights to a core workforce at the expense of poor
14 conditions for a peripheral workforce (2007, p. 17).
- 15 11. Our findings complement the EC (2008) study which reports various statisti-
16 cally significant correlations between the Kaitz index and industrial relations
17 variables including employer density (0.741), union density (0.600) and
18 bargaining centralization (0.581).
- 19 12. The Kaitz index for eastern Germany is higher than in western Germany –
20 a range of 57–83 per cent compared to 49–69 per cent. Thus, although
21 average earnings in eastern Germany are significantly below those in western
22 Germany (€11.50 compared to €15.62 in 2008), the rates are set at a compara-
23 tively higher level in eastern Germany.
- 24 13. These figures are supported by national earnings data which suggest a drop
25 in the relative level of the minimum as a share of average earnings from 36
26 per cent to 29 per cent during 1992–2000 (Neumann 2010).
- 27 14. In 2007, the European Court of Justice ruled that a Latvian construction firm
28 (Laval un Partneri) could not be forced to enter into collective negotiations
29 with a Swedish union on rates of pay for its posted workers. Moreover, in
30 a controversial legal decision, the strike was ruled illegal because it was said
31 to have precluded the company's freedom to provide services with its posted
32 employees. The decision affirmed the criteria of the Posted Workers Directive
33 which requires firms from other member state countries to comply with
34 a national MW set through legislation.
- 35 15. In France, Koubi and L'Hommeau (2007) report a relatively strong ripple
36 effect in a representative sample of firms during 2000–05 up to a wage level
37 equivalent to twice the SMIC, with a 100 per cent ripple effect for wages
38 between 1 and 1.1 of the SMIC (cited in Gautié 2010, p. 158).

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