

Conditions of Work and Employment Programme

What do we know about low-wage work and low-wage workers?

Analysing the definitions, patterns, causes and consequences in international perspective

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Preface

As most countries have witnessed growing income inequality, greater attention has been given to low-paid workers, especially in terms of the policy measures needed to improve their situation.

This report presents a timely review of international studies on low-wage work. It reviews the alternative definitions of low-wage work and explores cross-national patterns and trends. Its analysis of causes and consequences is informed by the argument that the labour market is not a perfectly competitive market and a worker's wage is thus not the result of an equal market exchange. Instead, pay is shaped by a complex mix of factors including institutions, economic conditions and the characteristics of employers, jobs and workers.

Two principles underpin the analytical approach. First, differences in national employment systems explain much of the variety in cross-national patterns of low-wage work; factors include institutions of collective bargaining, minimum wages and skill formation systems, as well as welfare policies that shape incentives of people to accept low-wage work. Second, gender segmentation and the resulting over-representation of women in low-wage work is not the result of women's under-investment in human capital, but reflects four key conditions present to a greater or lesser extent in all labour markets: undervaluation of women's work; women's lower reservation wage; gendered wage-setting institutions; and discriminatory workplace effects.

This report addresses these issues through reviewing empirical evidence from a selection of country studies. The final part of the report considers the relationship between low-wage work and quality of life by focusing on questions of job mobility, vulnerability and poverty.

It is hoped that this report will contribute to on-going efforts to develop effective policy measures which would secure decent living and working conditions for low-paid workers.

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Introduction

Low-wage work is a characteristic of labour markets in all regions of the world, developed and less developed, wealthy and poor. It can represent a first stepping stone towards better paid employment especially among young workers, but it can also describe the bulk of a person's working life whether through lack of opportunities for skill development, inability of the employer to pay more or wage discrimination. Some people face a higher risk of low-wage work simply by virtue of their sex, colour of skin, ethnicity or residency status. Others face a higher risk because of where their job is located, for example in the informal sector or agriculture, in a small firm or family-owned firm, in a sector facing intense international competition or a firm occupying the wrong place in a global value chain. Not all low-wage workers live in poverty since many can pool their income with other household members, or benefit from transfers from other family members or the state. But most low-wage workers experience a situation where their world of work is plagued by generally poor working conditions – a higher risk of the employer not paying for holidays and sick leave, for example, or not providing a pension plan or a permanent employment contract. So low-wage workers tend to be vulnerable workers and therefore justify the attention of social actors and policy-makers at national and international levels.

This report presents a review of many of the international studies on low-wage work. It does not pretend to be exhaustive and it is worth noting that the research background of the author relates to Europe and the United States, so that studies on less-developed countries are unfortunately under-represented. A key focus of the report is on country systems for regulating low-wage work. It does not report on the many economics studies that explore the underlying human capital explanations for low-wage work, since these arguments are well rehearsed in the literature. Instead, it takes as its starting point the argument that low pay ought not to be assumed to be a just reward for an employee's failure to invest in education or skills. The labour market is not a perfectly competitive market and a worker's wage is thus not the result of a market exchange where both sides have full information and share equal bargaining power. Instead, it is the result of a complex mix of factors, including the employer's ability and willingness to pay (the result of varying competitive conditions, business strategy and bargaining strength of trade unions), the influence of sector and national wage-setting institutions (including collective bargaining and a statutory minimum wage), welfare policies that shape incentives and disincentives of people to look for and accept low-wage work, and the ramifications of skill formation systems (especially concerning the quality of schooling and routes into vocational training). As such, the report emphasizes the cross-national variation in patterns, causes and consequences of low-wage work. Its aim is to appreciate the complex mix of country-level institutions, economic conditions and job characteristics that shape low-wage work, and to chart some of the experiences of workers employed in low-wage jobs. The report unfortunately does not include a review of some of the very recent studies that report empirical evidence on how different employer strategies influence the character and prospects of low-wage work. Such evidence provides an important supplementary argument for recognizing the firm as an important architect of the shape and character of low-wage work (e.g. Appelbaum et al., 2003; Gautié and Schmitt, 2010). In these studies, the firm mediates the impact and influence of wider institutions, economic conditions and employment policies.

The report is structured into three parts. Part One reviews the many definitional issues of low-wage work and explores inter-country patterns and trends. Part Two critically examines debates in the literature about what causes low-wage work. The analysis considers three issues: macro linkages with unemployment, the role of a country's institutions, and the influence of gendered structures and relations in the labour market.

Part Three assesses the wider quality of work and life of low-wage workers across the inter-related dimensions of mobility, vulnerability and poverty.

Part One: Definitions, patterns and trends

1. What is low-wage work? Definitional and measurement issues

A review of research on low-wage employment suggests that the most commonly used definition of low pay is a level equivalent to two-thirds of the median wage for all employees in the economy. This has become a standard benchmark following its use in OECD reports as well as in the agenda-setting publications from the European LoWER group.¹ Nevertheless, other definitions do appear in studies and are used in the monitoring of low-wage work in various countries. We therefore review the three basic alternative measures in this section. In the remainder of the report, however, we rely on the OECD definition in line with most current literature.

Different rationales underpin the alternative definitions of what constitutes low-wage work (for reviews, see also, Dex et al., 1994; OECD, 1996; Salverda, 2005). The three principal alternative measures are:

- (i) an *absolute wage* based on an estimation of what a household requires to earn above the income poverty threshold;
- (ii) a *relative wage* based on a percentage of the median or average wage for the economy; and
- (iii) a *fixed proportion* of the earnings distribution (e.g. the bottom 20 per cent of employees).

Use of an *absolute wage* measure is often adopted in studies investigating the relationship between low-wage work and household poverty. One goal of such studies is the estimation of a minimum weekly wage (or hourly wage assuming a given number of hours worked per week) required to avoid household poverty. Recent studies of the working poor adopt this kind of threshold. For example, in a study of low-wage work in South Africa, Altman (2006) documents the composition of low-wage workers below a specified monthly income level; the actual level was chosen in part because it is close to the minimum level below which workers are exempt from paying income tax, as well as in light of estimates of individual earnings needed to meet a threshold household poverty level (Altman, 2006, pp. 20-21). A study of the working poor in the United Kingdom (Cooke and Lawton, 2008, Table 5.1) investigates what hourly wage is required to lift a person out of poverty and simulates a range of hourly wage rates according to differences in household circumstances. Also, numerous studies of “living wages” in the United States campaign for a target hourly wage based on a calculation of what wage income is needed to support a worker’s family to maintain a healthy standard of living.

A focus on the absolute wage is therefore often a practical choice designed to provide policy-makers and campaigners with an identifiable wage, specified in the national currency, which people can compare to the price of a basket of goods and services needed to escape poverty. Nevertheless, it is not a practical measure for making cross-national

¹ Set up in 1996, the Low-Wage Employment Research (LoWER) network includes researchers from more than ten European countries. Publications from this group of scholars cover issues of low pay, low skill, minimum wages, wage inequality, earnings mobility, gender inequality and part-time work. Two books that compile early findings are Lucifora and Salverda (1998) and Marx and Salverda (2005).

comparisons. Currency conversions complicate the comparison of an absolute definition of a threshold. Also, the definition of what basket of goods is required to meet subsistence varies from one country to another, not to mention across different time periods. Moreover, this type of measure requires complex simulations of income requirements for different household types.

For the purpose of inter-country comparison, therefore, a *relative* measure of low pay is better. A relative measure captures a sense of the degree of social and economic inclusion among a country's workforce that is sensitive to societal notions of relative deprivation or relative disadvantage. Of course different countries may have different notions of what is relative disadvantage and, to the extent that this is true, a common relative measure applied across countries may be inappropriate for analysing the relationship between low-wage work and country indicators of poverty.

The choice of a relative measure raises several questions. First, what is the appropriate relative level? Alternative low-wage thresholds in academic and policy studies include the choice of two-thirds of the median wage, as well as three-fifths and three-quarters of the median wage (see the examples listed in Table 1). Most studies use the two-thirds measure and its use by the influential OECD reports lends considerable endorsement to this definition.

Table 1. Measures of low-wage work used in recent studies and research

Study/Report	Low-wage threshold	Earnings definition	Country coverage	Workforce coverage	Data source
Altman (2006)	R2,500 per month (US\$296)	Gross monthly earnings	South Africa	All employed, formal and informal	StatsSA, LFS 2004
Boushey et al. (2007)	$\frac{2}{3}$ of median of male employees	Gross hourly earnings	United States	---	Current Population Survey
Duryea and Pagés (2002)	\$1 per hour (adjusted for PPP)	Gross hourly earnings	12 Latin American countries	Males aged 30-50 in urban areas	National household surveys
EC (2003, Ch. 3)	75% of average of all workers	Gross hourly earnings	EU13 (excludes Luxembourg, Sweden)	Not specified	Eurostat ECHP data, 2000
EC (2004, Ch. 4)	$\frac{2}{3}$ of median of all employees (15+ hours per week)	Gross hourly earnings	EU13 (excludes Luxembourg, Sweden)	Employees working 15+ hours per week, excluding trainees/apprentices	Eurostat ECHP data, 1995-2001
Fernandez et al. (2004)	$\frac{2}{3}$ of median of all employees	Gross hourly earnings	Belgium, Denmark, Ireland, Italy, Spain and the United Kingdom	---	ESES
Howell, Okatenko and Diallo (2008)	$\frac{2}{3}$ of median of full-time employees	Gross hourly earnings	United States and France	All employees	CPS for US, 1979-2005, and Enquête Emploi for France, 1993-2005
Inter-American Development Bank (2008)	US\$2	Daily	16 Latin American countries	Workers aged 15-64 years old	Compiled dataset for 1990-2004
Marlier and Ponthieux (2000)	60% of median	Gross monthly wage	13 EU countries	Employees working 15+ hours per week	ECHP 1996
Muñoz de Bustillo and Antón (2007)	60% of median	Gross hourly earnings	Spain	---	ECHP (1994-2001) and SILC (2004)

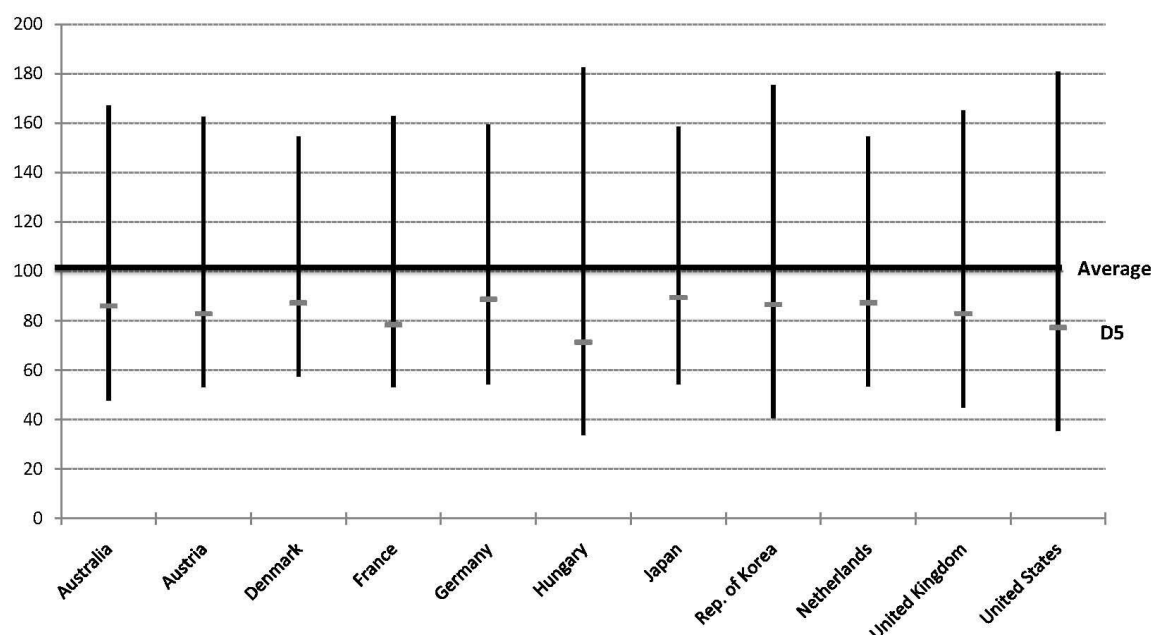
Study/Report	Low-wage threshold	Earnings definition	Country coverage	Workforce coverage	Data source
OECD (1996, Ch. 3)	$\frac{2}{3}$ of median of all full-time workers	Various depending on country data*	14 OECD countries	Full-timers only; country variation in sector coverage	OECD compilation of national data sources
OECD (2006)	$\frac{2}{3}$ of median of full-time employees	---	---	Full-time employees only	OECD compilation of national data sources
Pitts (2008)	Twice the 1970 federal/state minimum wage (inflation adjusted)	Gross hourly earnings	United States, plus detail for four metropolitan areas	All employees	2000 Census
Robson et al. (1997, 1999)	$\frac{2}{3}$ of median of male employees	Gross hourly earnings, including overtime hours and earnings	United Kingdom, Germany, Luxembourg, Spain, United States	Full-time and part-time workers	PACO (harmonized data from household panels from each country)
Russell Sage Foundation US-Europe project outputs (e.g. Gautié and Schmitt, 2010)	$\frac{2}{3}$ of median of all employees	Gross hourly earnings	United States, United Kingdom, France, Germany, Denmark, Netherlands	All employees	National data source
Salverda and Mayhew (2009)	$\frac{2}{3}$ of median earnings of all employees	Gross hourly earnings	EU13 plus United States	All employees	Eurostat ECHP and the CPS and PSID for the United States
Salverda et al. (2001)	$\frac{2}{3}$ of median of all employees (15+ hours per week)	Gross hourly earnings	EU11, plus more details for United States, France, Germany, Netherlands, United Kingdom, United States	Employees working 15+ hours per week	Eurostat ECHP and ESES, 1995; national datasets for four European countries and United States

Note: * Gross earnings for most, but also net earnings (Austria, France, Italy); annual earnings for most, but also weekly (Australia, United Kingdom) and monthly (Austria, France, Germany, Japan).

Source: Own compilation.

A second question raised by the choice of a relative measure is whether or not it is possible to set a universal relative wage threshold that carries the same meaning when applied to countries with different wage distributions. In cross-national comparisons of low-wage work, it is possible that differences in the choice of relative measure (two-thirds or three-quarters the median, for example) generate variation in the rankings of countries by low-pay incidence. The use of the median or average wage as a benchmark may also have different implications because of inter-country variation in the gap between average and median earnings – reflecting, again, different shapes of country wage distributions. Figure 1 plots the median wage for full-time employees for a selection of OECD countries against a standardized average wage of 100. The vertical lines represent the overall wage distribution from the top to the bottom decile wage. It is clear that the gap between the median wage and the average wage varies significantly. The gap is relatively narrow in Germany and Japan (a percentage gap of around 11 points) and is far wider in Hungary (29 points) and the United States (23 points).

Figure 1. Wage distributions (bottom to top decile) for a selection of OECD countries (male full-time employees, average wage standardized to 100)



Source: OECD earnings database, own compilation.

A third related question is what is the appropriate workforce group to be included in estimating the benchmark median (or average) wage? Should the standard benchmark be male workers only (as in the studies by Robson et al. or Boushey et al. – see Table 1), or both male and female workers? The issue is that if a country has a relatively wide gender pay gap and a high share of female workers, then this will exert a downward bias on the overall median wage and, as a result, generate an artificially lower estimate of the low-wage threshold compared to countries with a narrower gender pay gap. Similar reasoning applies to the choice of benchmark that covers all employees or is restricted to full-timers only, since countries with a large concentration of part-timers in low-wage work will also display a downwardly biased level of median earnings for all employees. These observations inform the use of two benchmark measures, one for all employees and another for full-timers only, in estimations of low-wage thresholds in some recent studies (e.g. Mason et al., 2008, Figure 2.1). Concerning part-time workers, Salverda (2005) also argues the case for careful consideration of whether or not part-time workers ought to be included on a headcount basis or as full-time equivalent controlling for hours worked.

A small number of studies opt for an alternative type of relative measure which defines the threshold as the wage below which a *fixed proportion*, say the bottom decile or quintile, of the workforce is paid. One rationale is that since all countries have low-skilled jobs, it is a valuable exercise to explore the country variation in relative level of pay in the bottom, say, 10 per cent of jobs. As we explore in section 2 (see Figure 3b below), this definition facilitates the tracking of the changing penalty of low-wage work over time and between countries. It also has an obvious drawback, however, since it does not enable the measurement of changes, or inter-country differences, in the incidence of low-wage workers.

Finally, for each of these different measures of low-wage work, researchers must choose between the use of weekly or hourly earnings. The decision to use weekly earnings fits with the goal of estimating what level of income is required to support basic subsistence of a given household, since this is typically conceived in terms of a daily or weekly income requirement. However, weekly earnings are highly dependent on the

number of hours worked, which may change over time and varies from one country to another and from one workforce group to another. Most research therefore uses hourly earnings in the study of low-wage work (see third column of Table 1). Importantly, this provides the most appropriate measure for comparing the earnings of part-time workers, who constitute a large share of low-wage workers in many countries (Dex et al., 1994; Fernández et al., 2004). Nevertheless, as Table 1 shows, the OECD's research on low pay continues to rely on a database that only includes full-time employees. This is surprising given a near consensus among other policy and academic institutes that the inclusion of all employees – full time and part time – is the best method to estimate low-wage work and to capture cross-country differences and trends over time. Moreover, as Fernández et al. (2004, p. 4) note, the OECD's decision to restrict its low-wage database to full-time employees only does not avoid problems of comparability. Some country data refer to annual earnings of full-time employees who worked all year, whereas other data define full-time earnings as the weekly earnings of those in work at the survey date.

More surprising than the OECD's choice of measure is the choice of a universal absolute daily threshold of US\$2 in the relatively high-profile studies of low-wage work undertaken by the Inter-American Development Bank (see IDB, 2008). The threshold is defined as the wage required by a worker to provide a per capita income in a family of average size and participation rates of US\$2 (IDB, 2008, p. 73). It is thus more precisely a measure of working poverty than low wages. The main problem, however is the impossibility of drawing conclusions from cross-national comparison given the very different levels of living standards between, say, Argentina and Bolivia.

Aside from these conceptual and measurement issues, in practice it is the quality and reliability of country and harmonized international data on pay that ultimately determine the choice of low-wage measure. A particular difficulty is that, while it is sensible to use gross earnings in cross-national comparisons (to preclude problems of country differences in taxation), some countries only collect net earnings data. A measure of low-wage work based on net earnings will be underestimated compared to a measure using gross earnings, since low-wage workers tend to be taxed less than higher paid workers; in other words, the distribution of net earnings is generally more compressed than that of gross earnings thanks to progressive income taxes. Another practical problem concerns use of hourly earnings. While this represents the best means of incorporating the earnings of part-time workers, many countries do not collect hourly earnings data directly, relying instead on estimations derived from weekly earnings and average working hours. Differences in country estimation methods inevitably compromise the level of comparability across datasets.

2. Where are the low-wage jobs and who are the low paid?

Evidence from a range of international and country studies shows that low-wage work can be found in all parts of the economy – in the public sector and the private sector, agriculture, manufacturing and services, formal and informal sectors. The risk of low-wage work is often higher in small firms, but is also present in larger organizations. Low wages are found in a wide range of jobs and these jobs include areas of work facing rising demand, such as care work or call centre work, as well as those facing stagnation or decline, such as agriculture or textile manufacturing in developed countries. Low-wage jobs are also unevenly distributed among different groups of the workforce. In many countries, there is a higher risk of low pay among the least educated and those with less work experience. However, this is not a universal rule. The research evidence provides many examples of low-wage employment where the relative wage level does not correspond to an employee's relative level of education or skill. The risk of an employee's level of skill and education outpacing the wage paid reflects to some extent the problem of exploitation, but also reflects the challenge employers face in adapting to rapid rises in education levels by upskilling jobs. As we explore further in this section (and section 5 below), the issue of a mismatch between worker skill and pay is of special concern for women in the labour market who are far more likely than men to experience undervaluation of their work.

In the following discussion, we describe country patterns and trends of low-wage work drawing on examples from international studies, as well as original estimations from international earnings data. A more rigorous treatment of these issues can be found in the major recent studies of low-wage work cited in Table 1. We start with a comparison of the incidence of low-wage work across countries, using the different measures described in section 1.

2.1 Country patterns of low-wage work

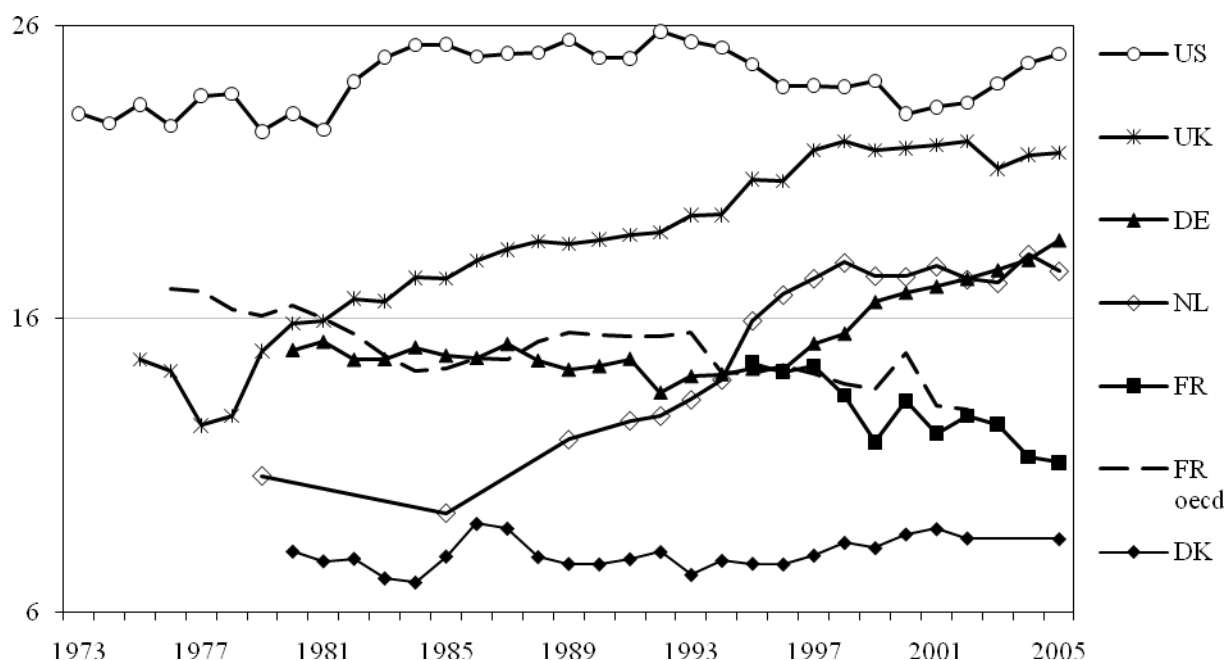
The two key findings from international research on low-wage work are first, countries display very wide variation in the incidence of low-wage work, even among countries that share relatively similar levels of GDP per capita; and second, countries have not experienced common trends in the share of low-wage employment in the last 15 to 20 years.

One good illustration of these findings is the recent high-profile research on low-wage work in Europe funded by the US-based Russell Sage Foundation. This international research programme was motivated by a concern to understand why the United States has a higher level of low-wage work compared to European countries with a similar level of economic development. The objective was to select those countries that provide the best opportunities for transferring policy lessons to the United States. As Robert Solow explains in his preface to each of the five country monographs published in 2008, “one wants countries with somewhat different but not radically different political and institutional histories; but they must be at the same level of economic development as the United States if lessons are to be learned that could be useful in the United States” (Solow, 2008, p. 4).

Figure 2 displays the changing cross-national patterns of low-wage work. Low pay is defined as two-thirds of median earnings for all employees and data derive from national sources. The picture confirms the view that low-wage work is more common among liberal market economies such as the United States and the United Kingdom (where 25 per cent and 22 per cent, respectively, of all employees earn a low wage) and far less common in the Scandinavian countries, represented here by Denmark, where 9 per cent of employees were low paid in 2005. A surprising finding, however, is the high share of low-wage work

in Germany, the archetypal coordinated market economy. This compares very unfavourably with France, where an 11 per cent share of low-wage employment is in fact much closer to Denmark.

Figure 2: Trends and patterns in the incidence of low-wage work in the United States and five European countries,^a 1973-2005 (low pay is defined as two-thirds of median earnings for all employees^b)



Notes: a. National data sources for all six countries, with additional OECD data for France (dotted line). b. All employees are covered, except for Germany and the OECD data for France, which only cover full-time employees.

Source: Mason and Salverda (2010, Figure 2.1).

Cross-national trends among these six countries show no evidence of convergence. The United States maintained a relatively stable high share of low-wage jobs throughout the period and, at the other extreme, Denmark also maintained a stable share albeit with a far lower incidence. A clear increase in low-wage work occurred in three countries with most expansion in the United Kingdom and the Netherlands occurring from the early to mid-1980s up to the late 1990s, and a later period of growth in Germany from the mid-1990s. By contrast, France records a declining share of low-wage jobs, especially pronounced just at the time Germany experienced its rise. These patterns and trends are confirmed by other studies that draw on alternative sources of data. These include the US-French comparison of Howell et al. (2008) and the statistical annex in the 2009 *OECD Employment Outlook* (Table H).

A similar picture of cross-national differences and diverging trends is documented in a chapter on low wages and exclusion in Latin America contained in the Inter-American Development Bank's 2008 report. Unfortunately, the report does not contain a table of data that might be usefully reproduced for our purposes. As such, Table 2 below reports approximate levels and trends in the incidence of low-wage work drawing on a chart presented in the IDB report. While a rough and ready reading of the data, it nevertheless serves to demonstrate the potential for wide differences in shares of low-wage work. However, the choice of definition of low-wage work – a wage below that sufficient to provide a per capita daily income in the worker's household of US\$2 – means that it is difficult to make reliable cross-national comparisons.

Table 2: Approximate trends and patterns of low pay in seven Latin American countries, early to mid-1990s to 2003/4 (definition of low-wage work unfortunately not specified in the original source)

	Approximate share of low-wage work		
	<i>Early to mid-1990s</i>	<i>2003/4</i>	<i>Trend in share of low-wage work</i>
Argentina	1%	7%	Slow rise during 1990s then rapid from 1999 to 2003
Brazil	33%	32%	Fluctuating trend: slight rise 1996-99, then small fall 1999-2003
Chile	20%	4%	Rapid decline during 1990-96, then much slower decline to 2003
Colombia	17%	18%	Decline in early 1990s, steady rise until 2000, then fluctuating until 2003
Mexico	18%	15%	Rapid rise 1992-96, then slower decline to 2004
Uruguay	10%	19%	Stable during 1994-97, then a decline in 1997-98, stable to 2000, then rapid rise 2000-03
Venezuela	15%	32%	Fluctuating during 1994-2001, then rapid rise during 2001-04

Note: It is important to emphasize that the data reproduced in the table are approximated from graphical representations in the IDB report. It has not been possible to obtain the earnings data nor is there any information in the IDB report about the choice of measure of low-wage work.

Source: Country data selected and adapted from IDB (2008, Figure 5.2).

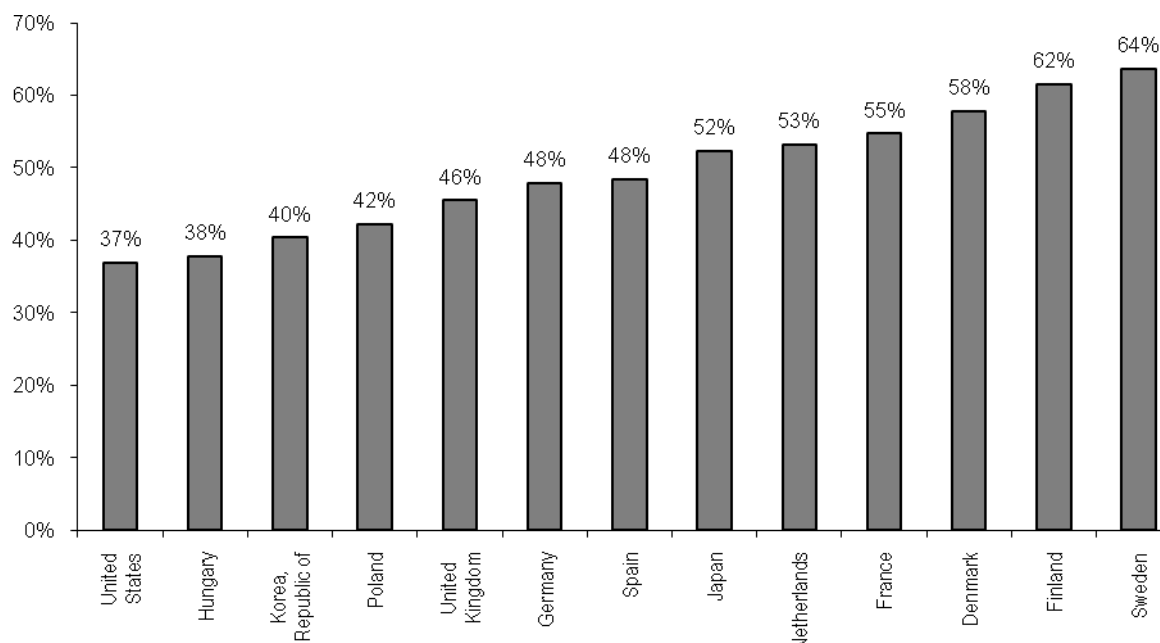
Argentina and Chile appear to have the lowest incidence of low-wage work among the countries shown, with fewer than one in ten employees in both countries. By contrast, low-wage work in Brazil and Venezuela, according to the data from this report, accounts for around one in three jobs. Trends are divergent. At the bottom of the scale, Argentina and Chile arrived at their respective positions in 2003/4 by different routes. Argentina witnessed a rise in low-wage work, especially from 1999-2003, while Chile experienced a rapid decline during the first half of the 1990s followed by several years of relative stability. Also, at the top end of the scale, Brazil appears to have reached its maximum low-wage share, while Venezuela showed signs of rapid catch-up, doubling its share of low-wage work from approximately 15 per cent to 30 per cent over the period. Limiting the trend comparison to the 2000 to 2003/4 period, we still find divergence: three countries exhibit a rise in low-wage employment (Argentina, Uruguay and Venezuela); three, a decline (Brazil, Chile and Mexico); and one country, relative stability (Colombia).

The picture of cross-country diversity can be further explored by adopting an alternative measure of low-wage work, as discussed in section 1. Here, we estimate the relative level of low pay at the lowest decile for each country – that is the level at which 10 per cent of employees earn a lower wage. Figure 3 draws on the OECD earnings database and therefore only covers full-time employees.

Figure 3a shows clearly that the lowest paid jobs, defined as the lowest 10 per cent of jobs in the economy, are considerably worse paid relative to average earnings in the United States than in Europe or Japan. In fact, only countries with a far lower GDP per capita – Hungary, the Republic of Korea and Poland – come close to the position of the United States in 2005. Figure 3b provides an illustration of how the penalties have changed over time. Once again, it shows considerable variety in trends between countries.

Figure 3: Patterns and trends in the relative pay of the bottom decile jobs in OECD countries

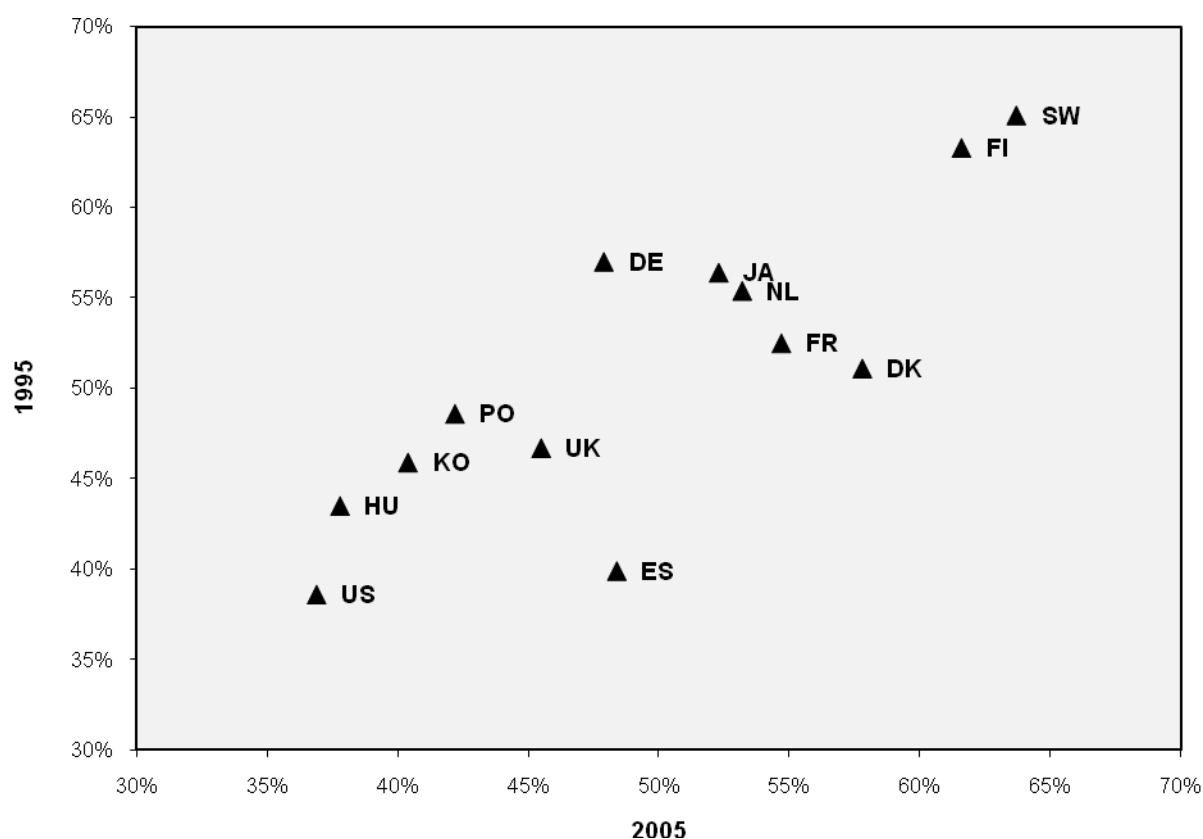
a: Ratio of first decile to mean earnings for full-time employees in the United States compared to other developed countries, 2005^a



Note: a. 2002 data for Spain and 2004 data for Sweden.

Source: OECD earnings database, full-time employees only, own compilation.

b: Change in the relative wage at the first decile compared to mean earnings, 1995^a-2005^b



Notes: a. 1996 data for Denmark. b. 2002 data for Spain and 2004 data for Sweden.

Source: OECD earnings database, full-time employees only, own compilation.

In some countries, the wage penalty for the worst paid 10 per cent of jobs has increased considerably (those positioned to the left of the diagonal line in Figure 3b); Germany is illustrative with a shift from 57 per cent of mean wages to 48 per cent in just ten years. In others, the relative position of the lowest paid improved significantly over the period – for example, Spain and Denmark. In most countries, however, there has been little change, illustrated by the six or so countries positioned close to the diagonal line.

Overall, therefore, the data point to wide-ranging experiences across countries, both in the share of the economy reliant on low-wage work and the medium-term trend. Nevertheless, despite variation in the aggregate level of low-wage work, countries do share some important similarities in the characteristics of low-wage work – notably with respect to the sectors of employment and the attributes of the workers employed in these jobs, as we discuss below.

2.2 Where are the low-wage jobs?

While low-wage jobs can be found in all sectors of a country's economy, they tend to be concentrated in a small number of sectors. In less developed countries, agriculture is a major employer of low-wage workers, and this is also reflected in data showing disproportionate shares of low-wage work in rural areas of a country compared to the urban areas (e.g. IDB, 2008, Figures 5.3, 5.4). Data for South Africa, for example, show that nearly all workers involved in commercial and subsistence agricultural activities are low paid (shares of more than 90 per cent) and account for around 17 per cent of all low-wage workers in the economy (Table 3; see Altman, 2006, for more detail). The informal sector is also host to a large concentration of low-wage jobs – with evidence of their over-representation in Latin American countries, for example, and a growing risk from the early 1990s to 2004 in all countries except Venezuela, El Salvador and Colombia (IDB, 2008, pp. 79-80). As Table 3 shows, close to 90 per cent of workers in the informal sector in South Africa are low paid and account for 22 per cent of all low-paid workers.

Table 3: Concentration and share of low-wage work^a in South Africa by sector, 2004

Sector	Very low-wage work (R 1,000 maximum)		Low-wage work (R 2,500 maximum)	
	Concentration ^b	Share ^c	Concentration	Share
Formal	25.9	14.6	47.2	44.4
Commercial agriculture	16.5	78.5	11.5	91.4
Subsistence agriculture	8.5	95.6	5.2	98.0
Informal	28.9	69.6	22.0	88.7
Domestic	19.9	87.0	13.6	99.1

Notes: a. Low-wage work is defined as monthly earnings below R 2,500. b. "Concentration" refers to the number of low-wage workers in the sector as a share of all low-wage workers in the total economy. c. "Share" refers to the number of low-wage workers in the sector as a share of all workers in the sector.

Source: Adapted from Altman (2006, Tables 7, 8).

Aside from the specific circumstances of agriculture and the informal economy, low-wage employment is also concentrated in key sectors of industry – common in developed and less developed countries – typically including the retail trade, hotels and restaurants, transport, social services (including household activities) and some areas of manufacturing, such as food processing and textiles. The OECD's early comparative study of low-wage work found that, in most of the 14 OECD countries investigated, more than half of low-wage employment was concentrated in the two major services sectors, retail and wholesale trade and personal services; the exception to this pattern was in fact Japan, which was the only country with an over-representation of low-wage employment in manufacturing (OECD, 1996, Table 3.2). Using its standard definition of low-wage employment and limited to full-time employees (see Table 1), the OECD analysis identified a share of low-wage work among retail employees of between 11 per cent and 40 per cent (ranging from Finland to Canada and the United States) and shares in personal services ranging from 7

per cent to 25 per cent (Finland and the United States, respectively). More detailed country analyses corroborate this general picture. For example, a recent analysis of the Spanish labour market by Muñoz de Bustillo and Antón (2007, Table 3) finds that the shares of low-wage employment in the wholesale and retail trade and in hotels and restaurants fluctuated around 20 to 28 per cent during 1994 to 2004, making them among the top low-paying sectors along with “other services”, which includes social services and household activities.

More detailed disaggregation of the data by industry and occupation is necessary to reveal the true picture regarding the risk of low-wage work in key areas of the economy. A comparison of France and Germany is interesting given the divergent aggregate trends in the incidence of low-wage work (Figure 2 above). Table 4 presents low-wage data for these two countries for a selected group of sectors and occupations for the years 1995 and 2003. The data are by no means perfectly comparable since they derive from national sources and, moreover, the German data only include full-time employees. Nevertheless, both sets of data use a common definition of low-wage work – namely, two-thirds of the median of all employees.

Table 4: Low-wage work in Germany and France by sector and occupation, 1995-2003

a: Germany

	1995 (%)	2003 (%)
Food	33.4	34.3
Producer of meat products and sausage	31.3	34.8
Manufacturer of sugar, confectionary goods or ice cream	39.0	40.2
Retail	22.0	33.1
Sales assistant or sales clerk	36.9	41.5
Cashier	48.9	36.8
Hotels and restaurants	67.9	72.0
Other guest attendant	81.2	82.0
Housekeeper	89.2	88.3
Cleaning staff	91.0	91.7
Health	19.7	23.5
Nursing assistant	9.6	25.3
Cleaning staff	22.4	43.3
Total economy	14.2	17.3

b. France

	1995 (%)	2003 (%)
Food processing	23.04	11.6
Meat artisans	35.1	21.8
Meat processing	13.4	7.2
Pastry artisans	34.5	14.1
Retail (general stores)	20.1	18.0
Food vendors	25.1	20.4
Cashiers	36.8	29.1
Supermarkets	24.2	26.4
Hotels	19.3	20.4
Low-skilled employees	23.4	26.7
Hotels with restaurant	21.1	17.9
Health (private sector)		
Hospitals	5.5	3.5
Total economy	5.1	6.2

Source: Own compilation from Bosch and Kalina (2008, Table 1.8) and Caroli et al. (2008, Table 2.10).

In three of the four sectors, we see a divergent pattern of trends. In Germany, the share of workers paid a low wage has increased in all four sectors, while in France low-wage work only increased in the hotel sector and declined in the other three. In Germany, the deterioration of earnings was especially pronounced in the health sector where cleaning staff experienced a doubling of the share of low-wage jobs and, more surprisingly, nursing assistants experienced a major rise from 10 per cent to 25 per cent over the relatively short eight-year period. In France, by contrast, while several occupational groups displayed similar levels of low-wage work as found in Germany in the year 1995, the situation changed significantly such that, by 2003, workers classified as meat artisans and pastry artisans in the food processing industry enjoyed substantial reductions in the incidence of low-wage work.

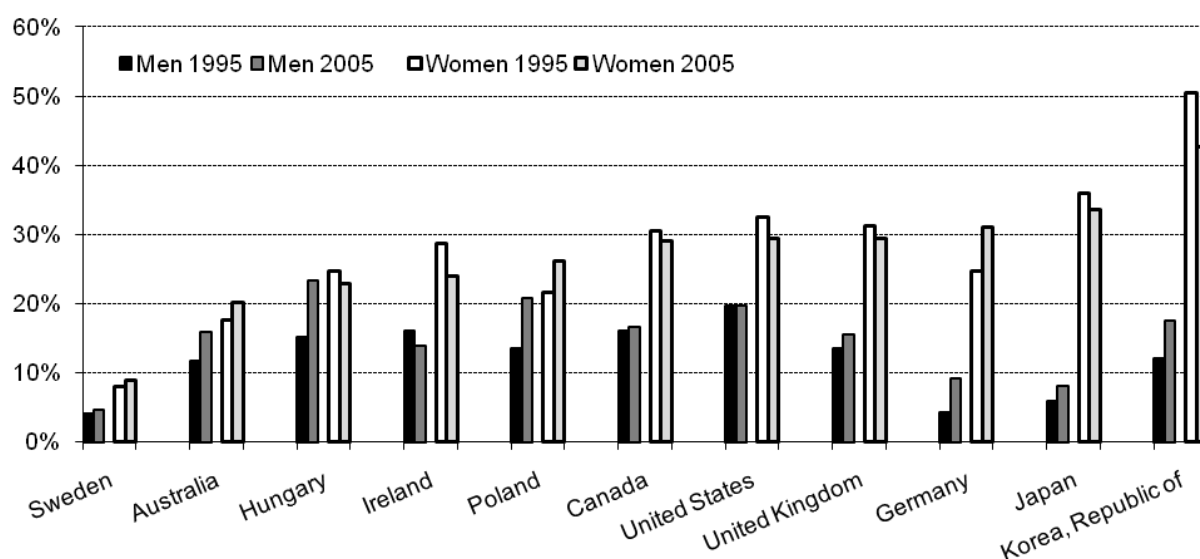
2.3 Who are the low-wage workers?

A review of international studies of low wages reveals that workers in low-wage jobs are disproportionately female, often tend to be young, have low levels of education, and are more likely to be members of a disadvantaged ethnic minority, racial or immigrant group in the particular country. We explore each of these patterns in turn.

The over-representation of women in low-wage jobs seems to be a universal characteristic of countries' labour markets, whatever definition is adopted. Wage data for Latin America, for example, show that women are more likely than men to be employed in a low-wage job in all 16 countries investigated (four countries are not covered in the report), although the gender gap has narrowed in ten of the 16 countries since the late 1990s (IDB, 2008, pp. 74-75). Various analyses of European countries paint the same picture. Using the 1995 European Structure of Earnings Survey data, a comparison of six countries shows a significantly higher risk of low pay for women than men in all cases, with a threefold risk in Italy and the United Kingdom, and a fourfold risk in Belgium (Fernández et al., 2004, Table 2). Also, the analysis of 11 countries by Salverda et al. (2001) finds a consistent pattern of women's higher incidence of pay – again especially high in Belgium, Italy and the United Kingdom, but also in other countries not included in the Fernandez et al. study, Austria and Portugal; Austria in fact registers the highest gender gap with just 4 per cent of male employees in low-wage work compared to 25 per cent of women (Salverda et al., 2001, Table 2). Drawing on 2001 ECHP data, the 2004 *Employment in Europe* report similarly finds that the incidence of low pay across the EU is twice as high for female employees than for male employees, and is most pronounced in the United Kingdom, the Netherlands and Austria (EC, 2004, p. 168).

Figure 4 illustrates the pattern of gender inequality for a selection of 11 OECD countries in 1995 and 2005. Low pay is defined as two-thirds of the median for full-time employees. In 2005, women's risk of low-wage work was higher than men's in ten countries and approximately the same in Hungary. It is in fact more than 20 percentage points higher than men's in Germany, Japan and the Republic of Korea. This contrasts with a gender difference of less than 5 percentage points in Sweden, Australia and Hungary. A notable result from this cross-national analysis is that those countries with a smaller gender gap in low-pay incidence are also the countries with the lowest incidence of low-wage work among women. Overall, the OECD data suggest women experience very high shares of low-wage employment; at least 30 per cent of women are employed in low-wage jobs in six countries – the three liberal market economies, the United Kingdom, the United States and Canada; two coordinated economies, Japan and Germany; and, at the upper extreme, the Republic of Korea, where 43 per cent of women are low paid.

Figure 4: Evolution of the incidence of low-wage work for men and women,^a selected OECD countries, 1995^b to 2005^c



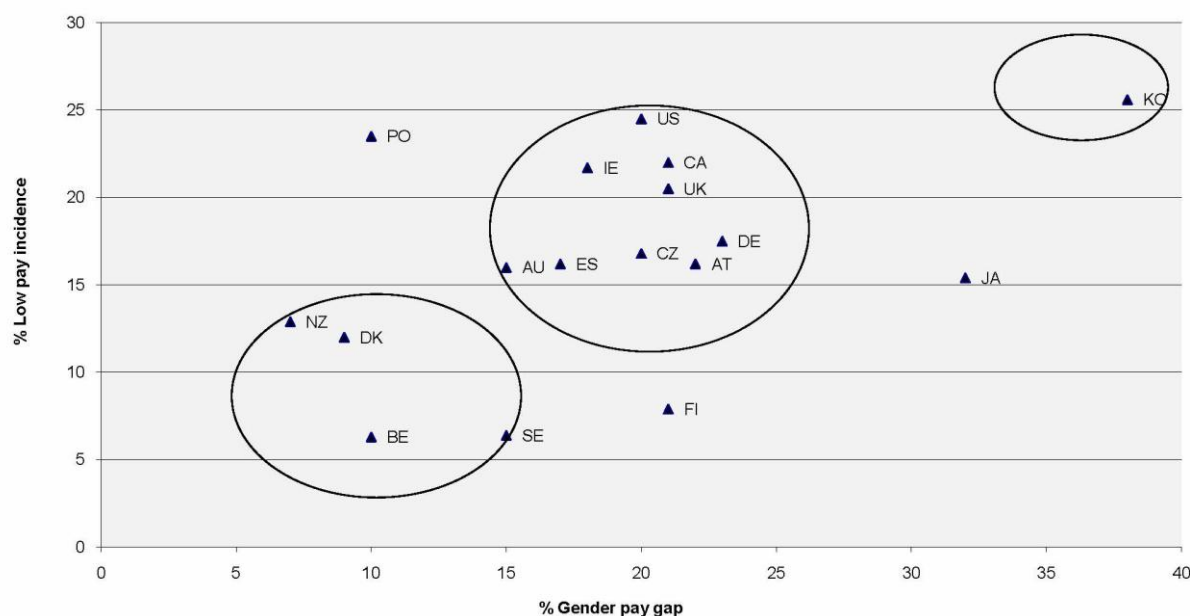
Notes: Countries ranked by incidence of low-wage work (two-thirds of median earnings) among female employees in 2005. a. Full-time employees only; b. 1997 for Canada, Ireland and Sweden; c. 2004 for Ireland, Poland and Sweden.

Source: OECD earnings database, own compilation.

As with general trends in low-wage work, country trends for women and men diverge. In fact, while men's incidence of low-wage work increased over the decade in all countries except Ireland and the United States, Figure 4 shows that for women the measure of low-wage work fell in seven of the 11 countries. The distinctive trends among men and women resulted in a narrowing of the gender gap in low-wage employment in all countries shown except Sweden, where there was little change, and Germany, where the gap widened.

A further indication of the significance of women's over-representation among low-wage work concerns evidence of the strong association between the overall incidence of low pay in a country and its average gender pay gap. In Figure 5, a bottom cluster of four countries is characterized by a below-average incidence of low pay and a below-average gender pay gap. A second group of nine countries combines a level of low pay and gender pay gap at or above the average for all countries, and a third group is represented by the Republic of Korea, which has an extreme level in both variables. Country exceptions to this pattern include Poland, which has a narrower gender gap than expected owing to the relatively high representation of men among low-wage work (see Figure 4), and Finland, where the gender pay gap is surprisingly wide given its overall low incidence of low-wage work.

Figure 5: Comparison of low-pay incidence and the average gender pay gap,^a 14 OECD countries, 2007^b



Notes: a. Full-time employees only. b. 2002 for Spain, 2004 for Poland and Sweden, 2005 for Germany and 2006 for Belgium.

Source: OECD earnings database, own compilation.

A second common attribute of low-wage workers in many countries is their youth. The 2006 *OECD Employment Outlook* finds the risk of low pay among youth more than twice the risk among prime-age workers, ranging from a share of close to one in five young workers in Portugal to two-thirds in the Netherlands (OECD, 2006, p. 175). Comparing the risk of low pay between youth (less than 25 years old) and prime-age workers (25-54 years), Fernández et al. (2004, Table 5) highlight the variation in relative risk. For example, in the United Kingdom and Denmark the share of low-wage work among young people is exactly the same, some 40 per cent, but among adults it is 16 per cent in the United Kingdom and only 4 per cent in Denmark. This comparison provides clear evidence of the importance of labour market transitions out of low-wage work for young workers, which are far more prevalent in the Danish economy than the British economy. Incidentally, the authors also note the very high incidence of low-wage work among older workers (more than 54 years old) in the United Kingdom, a pattern not apparent in the other European countries investigated. The same pattern for youth workers is found in Latin American countries. The IDB 2008 Report reveals an over-representation of youth (15-24 years) among low-wage employment, although tempered by a declining trend compared to prime-age workers (25-49) in all countries except Argentina and Chile (IDB, 2008, p. 75).

A useful representation of the unequal risk shouldered by young workers is presented in a recent publication by Mason and Salverda (2010), which also distinguishes by gender. We adapt their representation in Table 5. The data clarify the significantly greater risk of low pay among young workers and also reveal that the risk is relatively evenly shared among men and women among this age group. It is among adult workers where the gender gap opens up, in all countries but especially in the United Kingdom. It is notable that the incidence of low pay is relatively high among young workers in Denmark, compared to young workers in the other countries shown. However, Denmark has by far the highest mobility out of low-wage work among these countries. After seven years, only 2 per cent of workers in a low-wage job in 1995 were still in low-wage employment, and, restricting the sample to workers who had been in a low-wage job for three consecutive years, only 6 per cent were still in low-wage employment seven years later (Westergaard-Nielsen, 2008, Table 2.11).

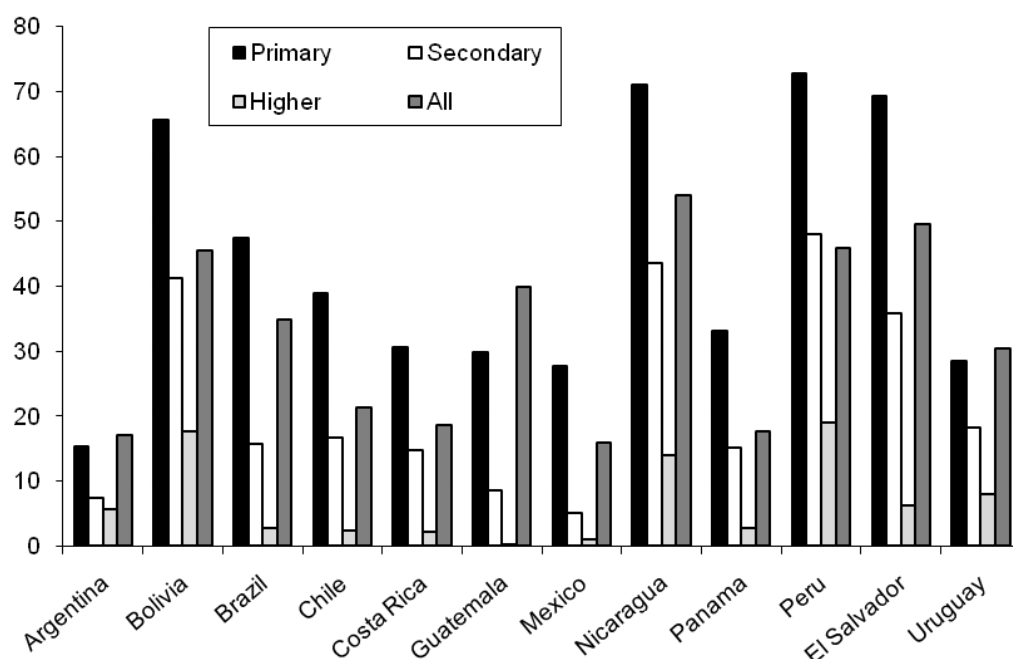
Table 5: Incidence of low pay by age and sex in the United States and five European countries, 2001

	Denmark	France	Germany	Netherlands	United Kingdom	United States
Total	100	100	100	100	100	100
Young women	474	369	296	331	247	258
Young men	576	366	305	332	198	216
Adult women	57	108	111	100	119	96
Adult men	28	49	44	37	36	51

Source: Mason and Salverda (2010, Table 2.2).

A third characteristic of low-wage workers in many countries is their relatively low level of education and skill. Across the European Union, for example, there is a strong association between a worker's skill and the risk of low pay. In 2001, aggregate EU data suggest the incidence of low pay among high-skilled workers was around 8.3 per cent and increased to 15.0 per cent for workers with medium skills and up to 20.9 per cent for those with low skills (EC, 2004, p. 168). Similarly in South Africa, level of education is a strong indicator of the risk of low pay. Those who have not successfully completed compulsory schooling (that is, failed their Grade 12 national matric exam) account for around 78 per cent of all workers employed in low-wage jobs, defined as less than R 2,500 (Altman, 2006, p. 39). Across Latin America, as Figure 6 shows, there is also a stronger risk of low pay among workers with only primary education compared to those with secondary schooling and with higher education. The incidence of low pay among the least educated exceeds 60 per cent in Bolivia, Nicaragua, Peru and El Salvador.²

Figure 6: Incidence of low-wage employment by education in Latin America (urban males, age 30-50; low wages defined as less than \$1 per hour)



Source: Duryea and Pagés (2002), own compilation.

A fourth group of worker characteristics that is associated with a differential risk of low-wage work concerns race, ethnicity and migrant status. In the United States, there is

² Note that the different studies adopt contrasting definitions of low pay and are therefore not comparable.

evidence that black workers are far more likely to experience low wages than white workers. Pitts (2008) shows that the incidence of low-wage employment among all black workers in full- and part-time employment was 57 per cent in the year 2000, compared to 44 per cent among whites (using the unorthodox definition of twice the 1970 minimum wage adjusted for inflation, see Table 1 above). Among full-time workers, the difference is even more striking: 54 per cent of black full-timers earned a low wage compared to 39 per cent of white full-time workers (Pitts, 2008, p. 10). In the United Kingdom, the results in Mason et al. (2008, Table 2.2) show that certain ethnic minority groups experience higher shares of low-wage work than the average for all workers (which was 21 per cent in 2005), especially those classified as Bangladeshi (a 30 per cent share), Pakistani (27 per cent), “other Asian” (26 per cent) and black African (23 per cent). In Denmark, immigrants from non-Western countries face almost double the risk of low pay than non-immigrants, shares of 9 per cent and 5 per cent, respectively (Westergaard-Nielsen, 2008, Table 2.12).

Part Two: What causes low pay

There is deep disagreement about the causes of low pay, as well as about the appropriate conditions and policies needed to address it. At the root of the debate is a conflict over the theory of pay and the key questions concerning what determines pay, what are the causes of pay differentials, what is the association between pay and productivity, and what is the function of pay in an economy? Different views are associated with the wider theoretical approaches of mainstream neoclassical economics, non-mainstream (or heterodox) economics, industrial relations and sociology.³ In this part of the report, we review three areas of debate where there have been valuable developments in the last decade or so, mostly from an inter-disciplinary perspective, to our understanding of low-wage work.

- Macro issues: Does low-wage work trade off with unemployment?
- Institutions: How do institutions influence the incidence of low-wage work?
- Gender: Why are women over-represented in low-wage jobs?

3. Macro issues: Does low-wage work trade off with unemployment

Low-wage work for a long time has been considered by most economists and many policy-makers an unfortunate, but necessary, outcome in order to meet the objective of strong labour market performance characterized by low unemployment and steady job growth. The argument (consistent with the standard neoclassical economics supply-and-demand model) is that flexibility in a country's wage structures, at both the upper and lower ends, is needed to facilitate adaptation to exogenous shifts in labour demand, such as those caused by new information technologies and increased international competition.

During the 1990s, these ideas informed models showing that the skill-bias of labour-saving technical change had shifted labour demand away from least-skilled workers towards higher-skilled workers (e.g. Berman et al.'s 1994 study of US manufacturing; Krueger, 1993). The argument was that given the supply-demand skill mismatch in the short to medium term, those countries with flexible wage structures would adapt to the shifted job structure with an increase in low-wage employment caused by a widening of wage inequality between high-skilled and low-skilled workers. By contrast, countries with "rigid" wage structures (that is, a set of wage differentials shaped by non-market institutions such as collective bargaining or minimum wage legislation, for example) would retain a similar level of wage inequality but pay the price in terms of slow job growth among the low skilled and high unemployment. In other words, the former countries would enjoy strong job growth coupled with an increasing share of low-wage (and high-wage) jobs, while the latter would witness laggard job growth with little change in the incidence of low-wage work. Similar conclusions are arrived at in studies that point to the role of trade and international outsourcing (offshoring) of low-skill activities as the prime motivator of the relative demand shift for skilled workers (e.g. Borjas and Ramey, 1994).

³ For contributions that compare disciplinary perspectives, see, for example, Figart et al. (2002), Bryson and Forth (2006), Grimshaw and Rubery (2003, 2007a).

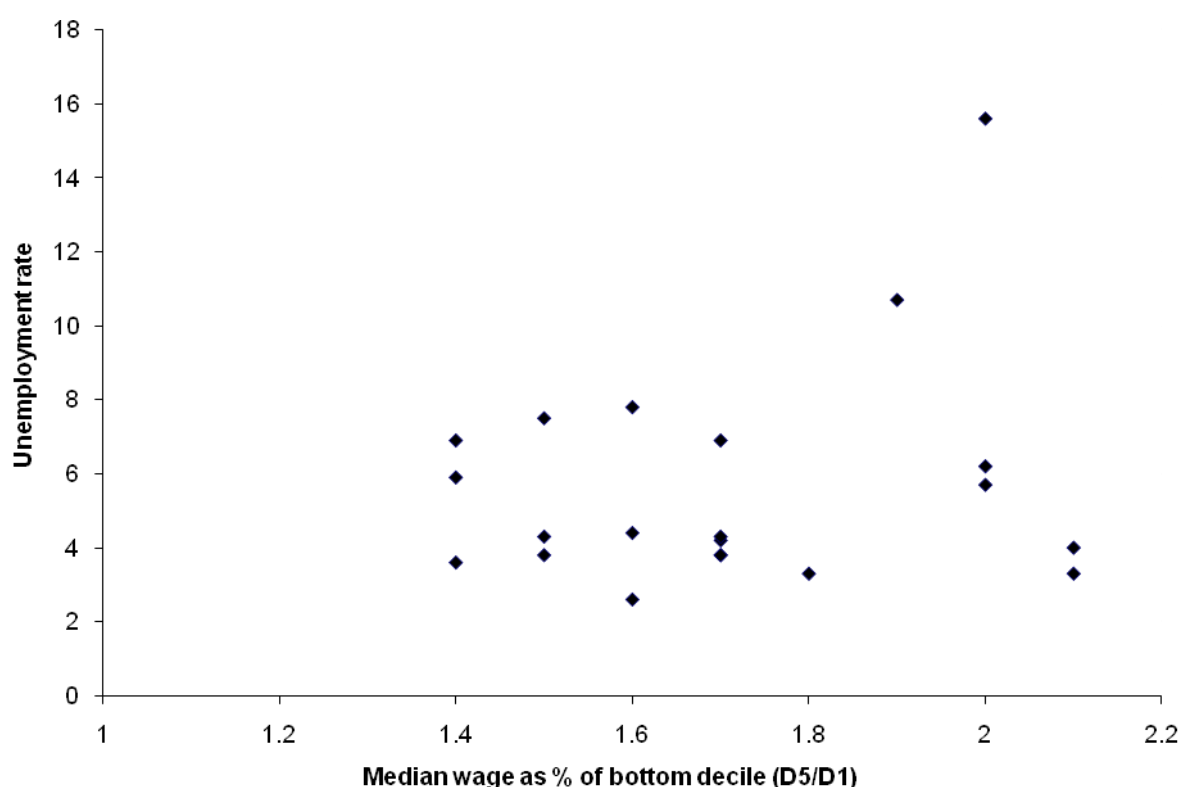
This argument was applied to a highly influential critique of European labour market performance, as compared to the US economy, during the 1990s (OECD, 1994). The advice to policy-makers was that the objective of job growth required greater flexibility of wage structures, especially at the lower end (see Siebert, 1997).⁴ The costs to the economy of generating low-wage, low-productivity jobs, so the argument goes, ought therefore to be weighed against the costs of unemployment caused by institutions that overly compress the earnings distribution and minimize the incidence of low wage employment.

So does the empirical evidence support the trade-off argument? If true, we would expect cross-country data to show a negative association between the share of low-wage work and the rate of unemployment.⁵ The simple graphical analysis in Figure 7 suggests the relationship is far from straightforward. Countries that share a relatively low rate of unemployment nevertheless display a wide range of D5/D1 values, from 1.4 to 2.1. For example, the Republic of Korea and Norway have similar rates of unemployment (3.3 per cent and 3.6 per cent, respectively), but very different penalties for the lowest paid – the median wage is only 40 per cent higher than the bottom decile wage in Norway but 110 per cent higher in the Republic of Korea (D5/D1 measures of 1.4 and 2.1, respectively). The correlation between the two variables for the 21 countries shown is positive but weak (0.22) and is not therefore suggestive of a strong relationship. Moreover, if we exclude Poland from the dataset because of its outlying high unemployment rate, then we produce a correlation of -0.01.

⁴ It is worth remembering that such studies usually couch their results in the short run. In the long run, it is expected that the supply side of the economy (that is, the supply of skilled/educated individuals) ought to adjust in response to the growing premium of skilled labour so that wage differentials return to their prior level. Johnson (1997) makes the following assertion: “If this story were correct [the skill-bias story], the rise in inequality would be a relatively temporary event – that is lasting perhaps another decade or two – that might not require policy intervention” (p. 52).

⁵ Given the US-European context of the political debate, the following examples refer to OECD countries only.

Figure 7: Low wages and the unemployment rate in 21 OECD countries, 2005



Note: Unemployment data for all workers aged 25-64 years old for 2005. D5/D1 earnings data for 2005, except 2004 data for Finland, Ireland, Poland and Switzerland, and 2002 data for Norway, Spain and Sweden.

Source: OECD database, own compilation.

A similar finding is found in the 2005 *Employment in Europe* report with no evidence of a strong relationship between unemployment and the more general inter-decile (D9/D1) measure of wage dispersion (EC, 2005, p. 191). Also, a more sophisticated and thorough treatment of the mainstream argument is presented in Howell and Huebler (2001). Analyses of changes in unemployment and measures of wage inequality find no statistically significant relationship. Also, comparing unemployment rates between the high skilled and low skilled, their study finds that, in fact, the United States has the highest unemployment inequality and the highest earnings inequality – that is, low-skill workers in the United States are doubly penalized by low pay and poor job opportunities. The pattern holds true for the 1980-1995 and 1989-1998 periods (Howell and Huebler, 2001, pp. 18-19).

The fact that the empirical evidence does not support the idea that low-wage employment moves inversely with the rate of unemployment has, for the most part, changed the thinking about the trade-off argument, especially as presented in OECD and EC employment reports. That is not to say, however, that mainstream thinking has been radically modified, nor that the debate has irreversibly shifted. Examples of assertions of a trade-off relationship continue to be made, despite the absence of clear evidence, as the following quotation illustrates:

‘Thus, although in a given country increases in unemployment are associated with higher incidences of low-wage work, countries with higher unemployment rates have lower incidences of low-wage employment compared to other countries. Most likely, countries with high unemployment are those whose institutional environment or labor policies reduce the incidence of low-wage work. ... The data also suggest a possible trade-off between lower unemployment and a higher incidence of low-wage jobs across countries’ (IDB, 2008, p. 89).

Moreover, ongoing analysis of earnings and employment data is continuously refining techniques and exploring new patterns and trends. The 2006 *OECD Employment Outlook* reports that the trade-off once again holds true for 13 countries (but not for six) based on trends after the mid-1990s (OECD, 2006, p. 162). Economists will undoubtedly persist in identifying a solid connection between institutions and job performance, but the range of evidence to date is, as Freeman puts it,

‘... that institutions reduce inequality but have uncertain or time varying impacts on other aggregate outcomes, including those likely to be affected by wages’
(2007, p. 23).

Instead, it now appears that through attention to policy interactions and complementarities, countries can seek to achieve job growth without the adverse consequences for income inequality. This brings us to a discussion of the effects of institutions on low-wage employment.

4. Institutions: How do institutions influence the incidence of low-wage work?

The need to consider institutions in an analysis of low pay is rooted in a broader appreciation of the nature of the employment relationship in labour markets and wider society, and here the work of sociologists and industrial relations research is especially insightful. In an economics account of wage determination, market forces of supply and demand play a central role and fulfil an allocative, transactional function by ensuring the matching of pay with the productivity-related character of each worker. But for the industrial relations scholar, pay reflects the outcome of a range of institutions – formal and informal rule-making processes – in the labour market:⁶ in other words, *pay is a rule* not simply a price of a commodity. Important institutional factors include the influence of norms of fairness (the rate for the job, pay differentials by status, or seniority), government intervention (including the statutory minimum wage, use of extension mechanisms, welfare policies such as in-work benefits, or levies on training), the degree of collective worker organization and the relative balance of bargaining power between worker and employer. Taking institutions seriously also means that pay can not be conceived as operating as a well-functioning market signal which guides the allocation of labour, since the concept of the labour market itself is seen as problematic. As Hyman states, wages are a product of potentially conflicting social, political and economic forces, including:

‘the forces of supply and demand which economists conventionally regard as alone significant; the policy interventions of governments, which are essential at a minimum to guarantee the routine operation of market relations; and the social norms which influence market actors, often in ways which cannot be comprehended in terms of simple material self-interest’ (2001, p. 13).

⁶ At a more general level, labour is a “peculiar” commodity and, as such, its price reflects a range of social, historical and political factors (Polanyi, 1957).

While mainstream economists have advanced their modelling in recent years through attention to institutional variables, it is the insights from comparative research among sociologists, industrial relations and political science that perhaps best provide a basis for an understanding of how institutions shape low pay. Here we consider four institutional factors which have an especially important influence on low pay (see Table 6). We appraise some of the relevant international empirical evidence in section 4.

Table 6: Four institutions and their potential effects on low-wage work

Institution	Relevant features	Potential effects on low pay
1. Minimum wage legislation	Method of uprating Level relative to average earnings Coverage and strictness of enforcement Use of multiple minimum rates	• Direct increase in basic pay • Increase in weekly earnings, providing employers do not cut hours of work to offset higher hourly pay • Wage spillover, or “ripple”, effects on pay further up the wage distribution to restore pay differentials by skill, seniority, qualification, etc. • Virtuous cycle of higher pay, better incentives for skill development, higher productivity and higher pay • Increased labour costs encourage negative employer adjustments to working time, training budget, other non-pay costs
2. Collective bargaining	Strength of coverage Degree of formal or informal coordination Degree of centralization of bargaining level Strength of trade unions Wage equity principles (including gender equity) of trade unions	• Multi-employer bargaining can “take wages out of competition” • Inclusive industrial relations systems integrate new firms, new workforce groups and protect against fragmentation • Strong trade unions can foster solidaristic wage policy, spreading gains from productive sectors to non-productive sectors • Difficult to sustain and continuously renew multi-employer bargaining, especially with internationalized product markets, entry of foreign-owned multinational companies • Gender bias of wage-setting institutions may hinder women’s pay progress
3. Welfare institutions	Level of unemployment benefits Duration of unemployment benefits Entitlement rules for unemployment benefits/assistance Restrictiveness of definition of a “suitable job” Generosity of in-work benefits (e.g. tax credits, wage subsidies) Family policies including child care, maternity leave (duration and payment), working time flexibility	• Benefit levels and duration, plus in-work benefits, shape incentives/disincentives of individuals to accept low-wage employment • Period of eligible job search can improve quality of potential job matches • Welfare systems may exclude many female low-wage workers from unemployment benefits/assistance because of a “male breadwinner” bias • Generous family policies act to reduce the lifecycle wage penalty women experience due to labour market interruptions for childrearing and other care

Institution	Relevant features	Potential effects on low pay
4. Skill formation systems	Quality of compulsory schooling Infrastructure for vocational training (role of social partners, financial resources, degree of coordination) Reputation and quality of skill credentials/qualifications Investment in colleges for education in general skills Employer willingness to provide training and develop skills in-house versus poaching of skilled workers	• Basic numeracy/literacy skills boost pay prospects and raise efficiency of training investment by firms • Coordinated inter-firm systems of vocational training match pay with qualifications for skills, protect against low pay/undervaluation of skill (through links with industry wage bargaining) • Risk of poor schooling leading to declining wage premium for high school graduates • Risk of downwards spiral of weak training, low skill, low value-added product strategy and low wages, especially where commitment to vocational training is weak

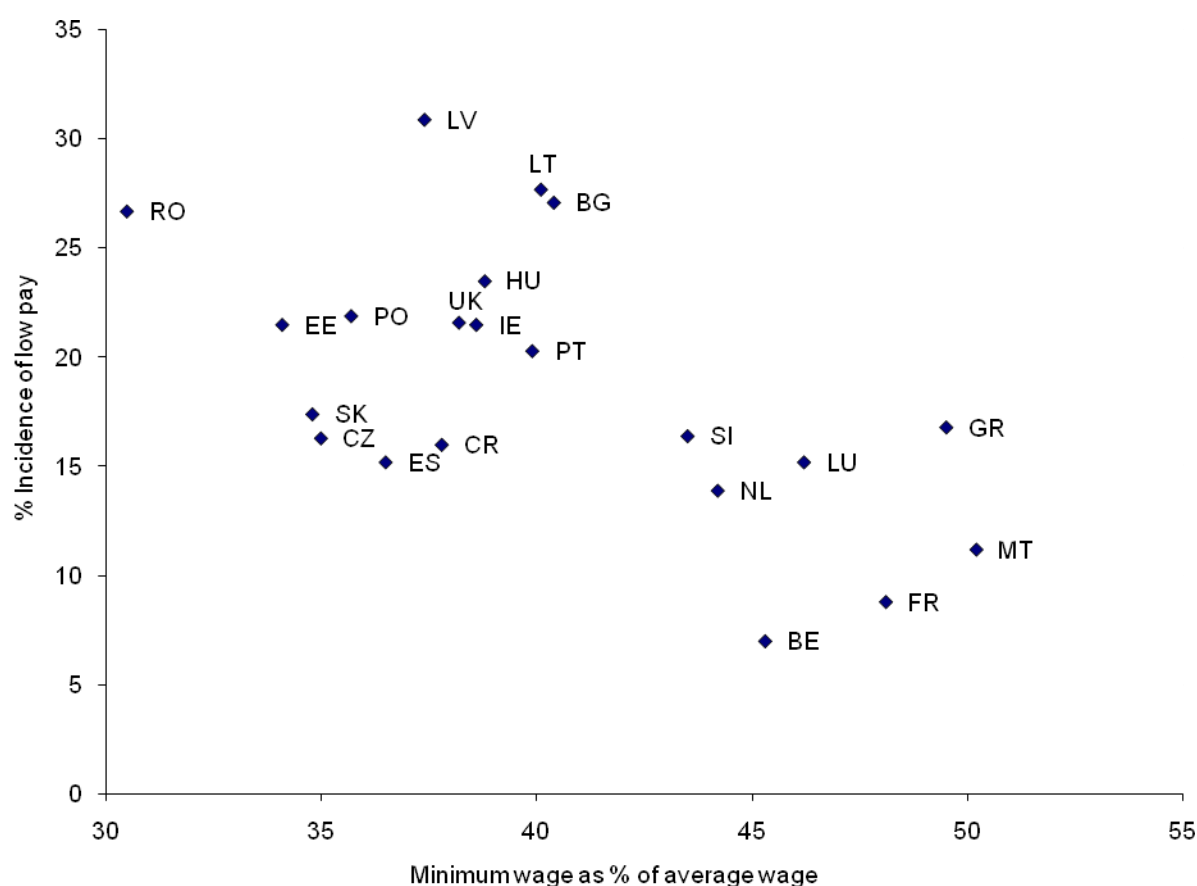
4.1 Minimum wage legislation

Use of a statutory minimum wage as a tool for redistributing income and improving the pay of low-wage workers has become an increasingly acceptable policy intervention, in part thanks to studies in “the new economics of the minimum wage”, associated with Card and Krueger (1995), Freeman (1996) and Prabsch (1996). These studies questioned the then-received wisdom that minimum wage legislation always causes job loss. Recent research has adopted an alternative focus and extended knowledge about country variation in minimum wage rules and their associated impact on low pay (Bazen, 2000; Brosnan, 2003; Eyraud and Saget, 2005; Funk and Lesch, 2006; Rubery, 2003; Schulten et al., 2006; Vaughan-Whitehead, 2008). In brief, a statutory minimum wage can be expected to have five inter-related effects on pay for low-wage workers, contingent on its method of uprating, relative level, coverage and enforcement (Table 6).

While potential adverse effects on employment are of course still a vital consideration in policy decisions about minimum wage rates and annual settlements, especially during periods of recession and high unemployment, there is also evidence that policy-makers are more confident in viewing the statutory minimum wage as an instrument for shaping socio-economic outcomes, such as addressing low pay and using pay improvements as a spur for skill development. Examples of national policy attention include the debate in Germany about introducing various types of statutory minimum wages to protect vulnerable workers (see Bosch, 2008), the initiative in Hungary to use multiple minimum rates differentiated by skill and work experience (Köllő, 2008), efforts in the United Kingdom to use the newly introduced national minimum wage to address low pay and the gender pay gap (Grimshaw, 2008), and a proposal for the EU (Schulten and Watt, 2007) to establish criteria for a coordinated approach to setting a common floor to the wage structure.

The empirical evidence appears to support the policy goal of using the minimum wage to reduce the share of low-wage employment. Eurostat data for 21 European countries are graphically presented in Figure 8. There is a relatively strong negative relationship between the value of the minimum wage and the incidence of low pay; the correlation index is -0.59. Countries with a higher minimum wage relative to average earnings generally have a lower incidence of low-wage work than countries with a low value minimum wage. There is, of course, some variation; for example, both Spain and Latvia have a similar relative value of the statutory minimum wage, around 37 per cent of the average wage, but Spain has only half the incidence of low-wage work among full-timers as does Latvia. But the general pattern is a negative relationship. Indeed, it appears that a necessary condition for a low incidence of low-wage work (less than 15 per cent of the full-time workforce) is a high minimum wage, of at least 44 per cent. This only prevails in four countries: Belgium, France, Malta and the Netherlands.

Figure 8: The value of the minimum wage and the incidence of low pay, Europe, 2008



Note: Full-timers only covered in the definition of low-wage work.

Source: Eurostat data, own compilation. Structure of Earnings Survey (2006) for low-wage incidence.

But there may also be an upper threshold to the value of the minimum wage 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 minimum wage has been blamed for the persistent high rate of unemployment and crowding out of collective bargaining (Gautié, 2008), despite its welcome effect in reducing the incidence of low-wage work. However, few countries enjoy the comfort of debating how to adjust a minimum wage 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 per cent 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 minimum wage and thereby reducing the socio-economic costs associated with a high volume of low-wage work.

Despite such evidence for developed countries, the policy context for less-developed countries is different. Here, the focus is very much on the job loss effects rather than a consideration of how a minimum wage can be an instrument in reducing the incidence of low pay. Statutory minimum wages are generally targeted by international institutions – the World Bank and the Inter-American Development Bank – in programmes of labour market deregulation required by structural adjustment policies (Burki and Perry, 1997; Maloney and Nunez, 2001). Such policies are supported by studies that argue minimum wage intervention causes the displacement of workers from low-wage jobs (Bell, 1995; Feliciano, 1998). There is counter-evidence, however, that the minimum wage is not a

significant factor in explaining labour market performance, but is significant in shaping wage equality (Cortez, 2001; Forteza and Rama, 2001; Lemos, 2004; Saget, 2001), with other studies pointing to the need to balance employment effects with wage compression effects (e.g. Angel-Urdinola, 2004).

Aside from its direct impact in raising the pay of low-wage work, a minimum wage can also have “ripple effects”, or wage spillover effects, that improve the pay of many low-wage workers earning just above the minimum wage level. Ripple effects refer to wage increases at levels of pay above the statutory minimum wage introduced to restore, at least partially, pay differentials between workers earning the minimum wage and those earning somewhat above the minimum. 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 the minimum wage rise fails in its redistributive objective and the incidence of low pay remains the same (Freeman, 1996).

Unlike minimum wage rises, ripple effects are not mandated. One of the major uncertainties, therefore, in understanding the consequences of minimum wages for low-wage employment, relates to the variation in size of ripple effects. We can expect clear 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 minimum wage rise and arguing for the restoration of wage differentials that relate to differences in experience, job responsibility, skill or qualification. Conversely, in countries without the protection of joint regulation of wages, ripple effects are likely to be considerably smaller (see Box 1 for the case of the United Kingdom).

Ripple effects have been investigated in detail in the recent collection of research studies on minimum wages and living wages in the United States (Pollin et al. 2008). In her analysis of the effects in the retail industry, where the minimum wage has a strong bite, Wicks-Lim (2008: table 11.1) finds that the ripple effect extends up to the 40th wage percentile where the wage is 25% higher than the minimum wage (incorporating both an immediate and a lagged effect in the calculations). The wage elasticity at this level is 0.14, equivalent to a 1.4% rise for a 10% rise in the minimum wage. As such, the estimates point to a strong compression effect of a rising minimum wage among the lowest deciles of the wage distribution (op. cit.). How do these findings relate to policy efforts to reduce low wage employment? One issue for policy consideration is 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 minimum wage. In the absence of ripple effects, raising the minimum wage will not contribute much to reducing the share of low wage workers, unless of course the minimum wage 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 minimum wage? More research is needed on this question.

Box 1: Evidence from the United Kingdom of the effects of a statutory minimum wage on low pay

Detailed research in the United Kingdom – much of which has been undertaken with funding from the Low Pay Commission – has investigated the multiple effects of the statutory minimum wage on pay among low-wage workers. Key pieces of evidence include the following:

i. Direct increase of basic hourly pay?

Estimates suggest that 1.2 million employees (approximately 5 per cent of employees) had their pay increased as a result of the newly introduced minimum wage in April 1999 (Metcalf, 2002, p. 568). The percentage of women affected was far higher than men – 9.7 per cent and 3.4 per cent, respectively. Also, of all employees affected, 55 per cent were women in part-time jobs (Metcalf, 2002, Table 1). Subsequent analyses continue to identify a significant “bite” of the minimum wage. Around 0.7-0.8 million employees were affected by the 2005 uprating and 1.1-1.2 million by the 2006 uprating (LPC, 2007, Tables 2.5, 2.6). If young employees are also included (aged 16-21) then it is estimated that around 1.3 million employees were affected by the 2006 uprating, representing 1 in 20 jobs in the United Kingdom (5.1 per cent).

ii. Increase in weekly pay?

Early evidence on employers changing hours to reduce weekly wage costs is contradictory. One study finds that of those employees whose pay increased to meet the minimum wage, 9 per cent believed their hours of work had been reduced. However, Connolly and Gregory (2002, p. 629) find “no evidence that the hours worked amongst subminimum wage workers have changed significantly differently from those in the comparator group whose pay was unaffected”.

iii. Wage spillovers?

Early studies following the 1999 introduction of the minimum wage found little evidence that workers paid just above the minimum wage experienced pay rises, nor evidence of restoration of pay differentials following the 2000 and 2001 upratings (Dickens and Manning, 2003, p. 206). This fits with Freeman’s prediction that the absence of formalized pay structures in many British firms (reflecting limited collective bargaining coverage and weakly organized workers) would limit the knock-on impact of a statutory minimum wage: “hardly the circumstances in which wage increases for largely part-time women in small shops is likely to set off general inflation” (1996, p. 645).

A more recent detailed survey of pay structures (IDS, 2007) shows a narrowing of pay differentials between team members and supervisors in many fast food outlets, pubs and restaurants. Similarly, a detailed study of 25 firms in the hospitality, retail and personal services sectors found that 11 firms did not restore differentials among all workers following the 2005 minimum wage uprating (Denvir and Loukas, 2007). Instead, employers eliminated pay scales for low-paid jobs and introduced single spot rates; for example, the Co-operative supermarket chain consolidated the four pay rates for non-supervisory sales staff into a single rate (from a range of £4.53 to £4.85 in 2003–4 to a single flat rate of £5.00 for 2004–5) (Denvir and Loukas, 2007).

iv. Virtuous cycle of higher pay, skills and productivity?

While there is some evidence of a positive effect on the amount and quality of training provision, the majority of firms in most surveys report no change (Arulampalam et al., 2002; Heyes and Gray, 2003; Miller et al., 2002). Bullock et al. (2001, Tables 21, 23), reporting the results of a specially commissioned CBR survey of firms in the cleaning and security sectors, found that of those firms paying some workers the NMW only 7 per cent increased training provision (and 19 per cent managed with higher staff turnover and 13 per cent of firms substituted capital for labour). The Low Pay Commission (2003), reporting on its survey of mainly small and medium-sized enterprises in low-paying sectors (3,783 respondents), found that just one in six firms increased training in response to the October 2001 increase (and one in seven reduced training provision). And Dickerson’s (2007) analysis using the Labour Force Survey found no evidence that employers had responded to the minimum wage by either increasing or reducing the volume of training provided at the workplace. A possible cause relates to the United Kingdom’s well-known problems with vocational training. A case survey of 36 low-paying small firms (Grimshaw and Carroll, 2006) shows that even those firms operating in quality-led, niche markets refused to provide employees with certified training because of disillusionment and poor past experience with National Vocational Qualifications. Moreover, there has been no discernible impact of the NMW on productivity in the United Kingdom (Forth and O’Mahony, 2003; LPC, 2003, pp. 56–57).

Source: adapted and updated from Grimshaw and Rubery (2007b, pp. 89-90) and Grimshaw (2008, pp. 470-471).

Ripple effects have been investigated in detail in the recent collection of research studies on minimum wages and living wages in the United States (Pollin et al., 2008). In her analysis of the effects in the retail industry, where the minimum wage has a strong bite, Wicks-Lim (2008, Table 11.1) finds that the ripple effect extends up to the 40th wage percentile where the wage is 25 per cent higher than the minimum wage (incorporating

both an immediate and a lagged effect in the calculations). The wage elasticity at this level is 0.14, equivalent to a 1.4 per cent rise for a 10 per cent rise in the minimum wage. As such, the estimates point to a strong compression effect of a rising minimum wage among the lowest deciles of the wage distribution (Wicks-Lim, 2008). How do these findings relate to policy efforts to reduce low-wage employment? One issue for policy consideration is 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 minimum wage. In the absence of ripple effects, raising the minimum wage will not contribute much to reducing the share of low-wage workers, unless of course the minimum wage 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 maximize the redistributive effect of a rising minimum wage? More research is needed on this question.

The minimum wage can also exert a more wide-ranging transformation on low-wage work through its indirect effects on skill, training provision and productivity. There are conflicting claims in the literature. On the one hand, there is a body of work that argues raising minimum wages actually reduces training investment (e.g. Leighton and Mincer, 1981; Neumark and Wascher, 1998; Rosen, 1972) since firms seek to offset labour costs in other areas of HR policy. However, other studies suggest that different firms choose varying combinations of wage and training strategies depending on the size of firm-specific rents and the costs and returns to training, as well as other HR policies such as job turnover and fringe benefits (Acemoglu and Pischke, 2001; Arulampalam et al., 2002; Fairris and Pedace, 2003). An important conclusion from these latter studies is, as Fairris and Pedace put it, that “firm policy and firm-level variables matter” in shaping the response to minimum wage changes (2003, p. 7).

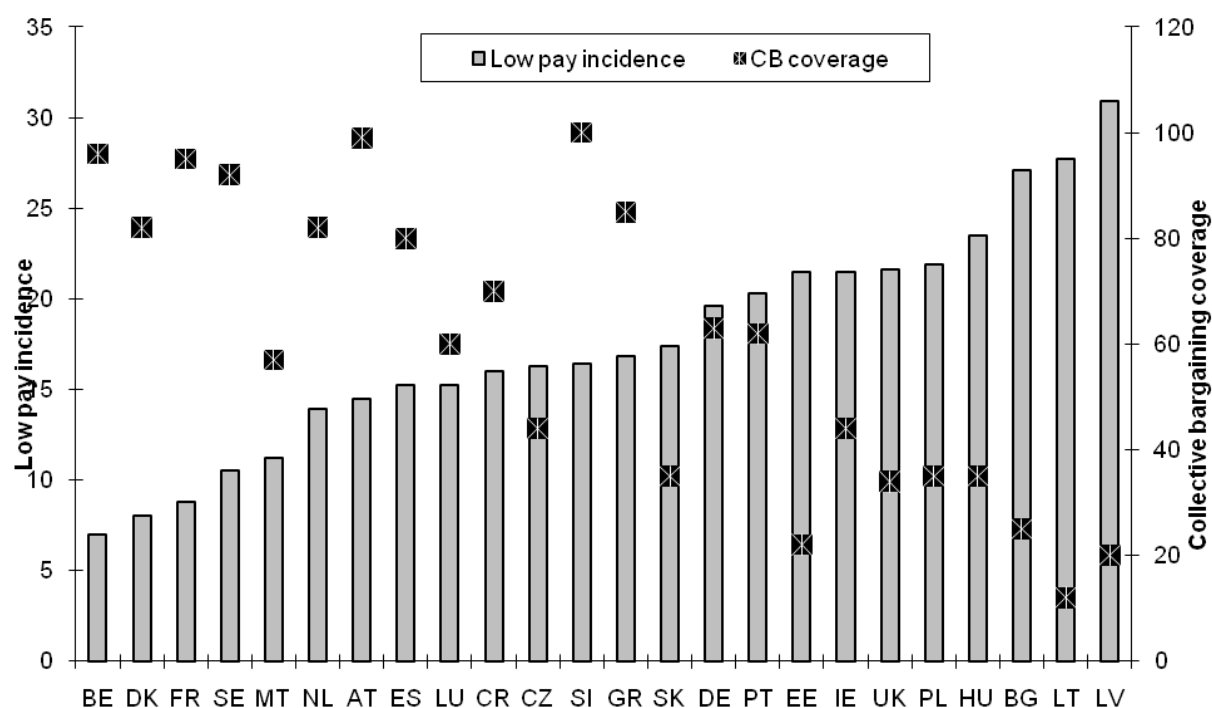
4.2 Collective bargaining

A second important institutional influence on low pay is collective bargaining. This claim builds on research in the 1990s that tested the relationship between overall wage dispersion and a country’s system of collective bargaining – especially its strength of coverage, the degree of coordination and centralization, and overall strength of trade unions. In its 1993 report, for example, the OECD found that trends to decentralize wage bargaining were one factor in explaining the marked increase in wage inequality and the rising incidence of low pay throughout the 1980s. In Mexico, increased wage inequality during the 1990s is said to be largely explained by changes in the share of unionized workers (and a falling minimum wage) (Cortez, 2001). Also, in his innovative study Rowthorn (1992) demonstrated a positive relationship between the degree of decentralization of bargaining (defined according to the Calmfors-Driffil index) and the coefficient of variation for earnings in the manufacturing sector. The relatively centralized economies of Norway, Denmark and Sweden registered low wage dispersion, while the decentralized systems of the United States, Canada and Japan register high wage dispersion (Rowthorn, 1992, Table 1). For Latin America, Marshall (1999) provides a similar type of assessment. These early studies have been updated, and confirmed, in academic and official reports in recent years (e.g. EC, 2005, Chapter 4; OECD, 2004, Chapter 3).

A simple test of the impact of collective bargaining coverage on the incidence of low-wage employment is presented in Figure 9. This suggests a relatively strong negative relationship (correlation coefficient of -0.82) between the two variables. As with the relationship with the institution of minimum wage legislation, while there is some variation, it would appear that there is a minimum threshold for collective bargaining coverage of around 80 per cent necessary for maintaining the share of low-wage work below 15 per cent (with the exception of Malta). Conversely, countries with collective bargaining coverage below 40 per cent are almost certain to have more than 20 per cent low-wage employment. Most variation in the bi-variate relationship can be observed in the

middle range of countries. Slovenia, Greece and – to a lesser extent – Germany and Portugal all stand out because they combine an above-average measure of collective bargaining coverage with a higher than expected incidence of low-wage employment. The potential for country variants calls for interrogation of particular constellations of institutional arrangements and their effects on low pay; in other words, while useful, quantitative indicators of collective bargaining are not able to fully explain cross-national patterns of low wage employment.

Figure 9: Patterns of collective bargaining coverage and incidence of low pay, EU countries, 2006



Note: 2006 data for bargaining coverage except 2005 data for Greece and Hungary, and 2007 data for Ireland from EIRO.

Source: Eurostat Structure of Earnings Survey (2006) for low wage incidence. ICTWSS data for collective bargaining coverage (database on Institutional Characteristics of Trade unions, Wage setting, State intervention and Social pacts in 34 countries between 1960 and 2007) from Visser (2010). Own compilation.

Detailed country studies have interrogated in more detail the simple mechanistic model presented in Figure 9 showing a negative relationship between collective bargaining coverage and incidence of low pay. A range of country-specific factors play a role, including macroeconomic conditions and union bargaining strategies in particular. In Austria, for example, its particular brand of conservative social corporatism was traditionally associated with a tendency to preserve traditional power relationships and social inequalities (Therborn, 1992), such that trade unions displayed greater concern to preserve jobs than to pursue a Nordic-style solidaristic wage policy (Zweimüller and Barth, 1994). In Italy, it was the particular impact of the “*scala mobile*” wage indexation system applied temporarily that accounted for the then egalitarian outcomes of an otherwise decentralized system of collective bargaining (Bettio and Villa, 1993). Also, research in the Nordic countries highlights the significance of particular principles of equality and fairness adopted by trade unions, such that fair norms around low pay were not always the dominant convention shaping wage bargaining. Høgsnes (1996) identifies four inter-related principles that generate different types of wage equality: principle of need; general wage equalization; inter-sectoral wage disparities (especially concerning private-public sector comparisons); and gender wage equity. Hibbs (1991) offers another interesting variant for Swedish trade unions, highlighting the shift from principles of “equal pay for all work” in the 1970s and early 1980s to the principle of “different pay for different work” during the late 1980s and the associated reversal of trends in wage inequality.

Bringing together these insights, it is therefore a logical step to suppose that cross-national differences in a raft of variables associated with collective bargaining, including the form and strength of collective bargaining, trade union bargaining power and types of wage bargaining strategies, play a major role in determining country patterns of low-wage employment. It is likely that countries with a high level of collective bargaining coverage, strong trade unions and a strong degree of coordination and/or centralization of wage bargaining engender relatively low levels of low-wage employment. This is supported by the contemporary evidence. Lucifora et al.'s (2005) review of evidence for 20 OECD countries points to strong negative correlations between low-wage employment and several variables that measure the regulatory strength of wage-setting institutions. These variables include union density (share of workers who are union members), union coverage (union density adjusted for effect of extension mechanisms), centralization of collective bargaining and the Kaitz index (the level of minimum wage relative to average earnings) (see Table 7). For the 20 countries covered, the simple one-variable regressions show that an increase of 1 per cent of union density is associated with a 1.5 per cent reduction in low-wage incidence, and an increase in the centralization ranking of the country by one place reduces the low wage incidence by 6.9 per cent.

Table 7: Wage-setting institutions and incidence of low-wage work in 20 OECD countries

	<i>Bivariate correlations</i>	<i>Simple univariate regression, dependent variable log (low-wage incidence)</i>		
		<i>Constant</i>	<i>Coefficient on independent variable</i>	<i>R² (adj)</i>
Union density	-0.68**	3.23	-0.015**	0.44
Union coverage	-0.60**	3.33	-0.010**	0.33
Centralization	-0.72**	3.20	-0.069**	0.50
Kaitz index	-0.64**	4.07	-0.028**	0.38

Source: Adapted from Lucifora et al. (2005, Table 5).

There are two good reasons for these negative correlations. First, such systems have an “inclusive” characteristic such that they are able to extend the wage agreements of the relatively powerful groups of workers to those in less strong positions (Bosch et al., 2010). Through either active coordination of wage agreements or government use of extension mechanisms, inclusive systems spread the benefits of collective bargaining agreements to firms across an entire sector, therefore potentially encompassing firms where union membership is weak, or workplace productivity is relatively low, and discouraging business strategies, such as outsourcing to non-union firms to save on labour costs.

Second, the high level of collective bargaining “takes wages out of competition”, thus encouraging domestic competition among firms on the basis of quality rather than price and, consequently, dampening pressures on firms to restrain wage growth. Inclusive systems generally imply wage determination at the sector level, possibly with further coordination among sectors. At this higher level, social partners are able to negotiate wage and job rules that relate to the wider occupational identity of the workforce, limiting employer (and union) influence on pay within the workplace (Brown, 2010). Nevertheless, there are limits to how far such a model can protect against low-wage employment. Contemporary globalization and internationalization of product markets make it increasingly difficult “to take wages out of competition”, given the obstacles to forming cross-national wage settlements. Industry wage agreements also depend upon employer membership of associations which can be difficult to enforce and sustain, especially where leading firms in a sector may be foreign-owned firms with home-country oriented wage-bargaining strategies.

Moreover, as with the earlier 1990s research on collective bargaining and trade unions, it is also important to recognize the supplementary role played by trade union strategy in shaping low-wage employment. Thus, for example, although much of wage

bargaining in Denmark takes place increasingly at a relatively decentralized level, there persists a strongly coordinated, solidaristic strategy that has successfully reduced inter-industry wage differentials and also inspired the 2005 agreement that no wage agreement ought to have a minimum rate below €13.80 (including holiday payment) (Westergaard-Nielsen, 2008, p. 38). Other countries with sector-level bargaining, such as France and Germany, have been less effective at spreading the gains from high-productivity sectors to low-productivity sectors (Bosch et al., 2010).

4.3 Welfare institutions

A third institutional variable that is high on the list of explanations about cross-national variation in low-wage work concerns welfare institutions, in particular the level of unemployment benefits and duration of unemployment assistance, since these are said to directly shape the incentives and disincentives of individuals to accept low-wage employment. Conventional reasoning around this issue underpins calls for reducing benefit levels and increasing net wages through in-work subsidies (tax credits, say) in order to increase the available labour supply for low-wage service jobs. But, in fact, the empirical evidence for such assertions is mixed at best. Several studies find that net replacement rates (the ratio of unemployment benefits to previous wage earnings) have no or mixed effects on unemployment rates and unemployment duration and therefore no clear impact on the generation of low-wage jobs (see Schettkat, 2002 for a review).

One of the difficulties in such analyses is how to control for changes in welfare policy that respond to changing macroeconomic conditions. In the current recession, for example, countries may lengthen the period of eligibility for unemployment benefits in light of evidence that it is very difficult to find employment and this may therefore correlate with sluggish job growth, but for reasons almost entirely related to the decline in aggregate demand. Also, as research on the United States suggests, longer periods of income assistance for the unemployed may reduce the risk of repeat spells of unemployment, since longer job search can improve the job match (Gangl, 2002, cited in Schettkat, 2002, p. 20) and thereby potentially establish a more stable job position from which a worker may pursue skill development and enjoy pay progression out of low-wage work.

A further problem with efforts to analyse the links between unemployment assistance and the quantity of low-wage employment is that many unemployment insurance systems have been designed with a strong “male breadwinner” bias and, as a result, exclude many low-wage workers, especially women as we discuss in section 5. Eligibility requirements, such as minimum weekly earnings, or minimum social security contributions over a continuous period of months, can act to exclude low-wage workers who may be new entrants or returners to the labour market, have erratic employment histories, or have not paid sufficient contributions. Several other features of welfare institutions shape low-wage employment (see Table 6), but are more directly concerned with women’s employment. We consider these in detail in section 5 below.

4.4 Skill formation systems

Because many low-wage workers tend to be among the least educated among the workforce, with no or limited qualifications, there is a clear need to account for the impact of country institutions of skill formation, namely schooling and vocational training. In the United States, where the infrastructure for vocational training is comparatively limited, the wage prospects of workers are very strongly shaped by education. Indeed, the first piece of empirical evidence that is interrogated in a recent compilation of research on low-wage work in the United States is the relative wage premia of college and high school graduates (Appelbaum et al., 2003, Figure 1.1). A large part of the story of why the American economy has a persistently high share of low-wage work concerns the fortunes of high

school-educated workers who are often not provided further vocational training within waged employment and therefore find it difficult to develop a career path with steady pay progression.

The quality of a country's skill formation system is taken in policy circles as a measure of the potential for skill upgrading as a route out of low-wage work and into job positions (or new sectors of employment), requiring workers with intermediate skills and paying a higher wage. The persistent high share of low-wage work in the United Kingdom, for example, owes much to the country's under-developed and under-resourced skill formation system outside of higher education. There are problems with deficiencies in skills from compulsory schooling, including numeracy and literacy. Employers spend relatively high amounts on firm training, but it tends to be of short duration, low level and is unevenly distributed, such that lower-skilled, part-time workers receive limited training (Mason et al., 2008, p. 71). Moreover, many British employers demand no qualifications among new recruits (Felstead et al., 2002) and employers unsurprisingly perceive that only a small proportion of their non-managerial workforce are skilled (see Table 8).

Table 8: Perceptions of employers in the United Kingdom about the share of skilled employees among their non-managerial workforce, 1998

	% of workplaces with no skilled employees	% of workplaces with 1-25% skilled employees	% of workplaces with 26-50% skilled employees	% of workplaces with > 50% skilled employees
Manufacturing	4	40	20	37
Electricity, gas and water	2	8	21	68
Construction	19	12	14	54
Wholesale and retail	40	38	10	12
Hotels and restaurants	21	61	9	8
Transport and communications	33	42	9	15
Financial services	57	23	13	7
Other business services	12	18	23	47
Public administration	27	31	13	29
Education	0	2	42	55
Health	22	33	23	22
Other community services	17	36	16	31
All workplaces	19	31	20	30

Source: Adapted from Culley et al. (1999, Table 3.4).

Matched firm comparisons across the United Kingdom and Germany – in clothing, food processing and automotive – point to the complex interlinkages between poor training provision in British firms and adoption of business strategies that target the production of less technically complex products, lower investment in new technologies and lower value-added revenue streams (Steedman and Wagner, 1989). Recent data also point to the strong association between product strategy and skill level in British establishments (Mason, 2004), although detailed case studies of low-wage firms do suggest there is more scope for employer choice than often assumed in discussions of the low-wage, low-skill equilibrium (Edwards et al., 2009). When combined, these results confirm the importance of the wider skill formation system within which the single firm is embedded in addressing low-wage work.

There are some, not many, studies that explore directly the relationship between country systems of training and wage inequality. The most well-known is possibly the contribution of Estevez-Abe et al. (2001, Figure 4.3), who show a clear negative relationship between the share of a cohort engaged in vocational training and the inter-decile ratio of wage inequality. They argue that countries that specialize in offering industry-specific skills are able to generate demand for young school leavers who are not academically inclined, but who are interested in developing industry-based careers and acquiring valuable skills. By contrast, countries with general skills systems generate

limited such demand and instead sustain the type of “low skill equilibrium” that Finegold and Soskice identified in the United Kingdom in the 1980s, where “most early school leavers end up as low-paid unskilled employees for most of their working lives” (Estevez-Abe et al., 2001, p. 177).⁷ Much of these institutional effects play out through interaction with the wage-setting institutions, thanks to the strong association between presence of industry-level wage bargaining and emphasis on industry-specific skills.

5. Gender: Why are women over-represented in low-wage jobs?

Section 2 above presents evidence of women’s over-representation in low-wage employment in the bulk of countries for which we have data. In many countries, women’s risk of low pay is in fact more than double that of men’s; among OECD economies, this is true in Japan (a fourfold relative risk), Germany, the Republic of Korea, the Netherlands, Finland and Denmark.⁸ Despite their over-representation, however, there tends to be still only limited interest in many policy documents to understanding the gendered structuring of the labour market. A first step requires that earnings (and employment) data are disaggregated by sex. A second step requires serious engagement with the ideas and arguments presented in feminist sociology and economics. Here, we highlight four key contributions that illuminate the gendered construction of the low-wage labour market (summarized in Table 9).

⁷ It is worth noting that general skill formation systems deliver benefits also, including a comparative advantage in radical product innovation, since firms can draw on general knowledge among university-educated entrants to the labour market.

⁸ OECD earnings database, own calculations.

Table 9: Arguments and key principles that explain the gendered structure of low-wage work

Argument	Key principles	Implications for low-wage work
1. Women's work is undervalued	Low valuation of skill and status Low valuation because women assumed to be second earners Low valuation because women concentrated in low-paying firms in the secondary labour market Low valuation because women's lives perceived to follow different patterns to men's, obliging non-commensurate forms of work (e.g. part time)	Women's skills in caring work treated as "natural", deriving from women's role as mothers/carers; low pay therefore justified by high job satisfaction of women in caring jobs Women's low pay results from concentration in low value-added industries Women's low pay justified as "pin money", since male partner's wage accounts for bulk of household income Women's low pay in part-time jobs reflects a notion that part-time work is non-commensurate with men's work
2. Women have a lower reservation wage than men	Gender bias in eligibility rules for unemployment benefits and assistance (e.g. hours/earnings thresholds, duration of employment, etc.) Gender inequality in dependence on family income (especially during periods of child-rearing)	Lower reservation position [through weaker claims to unemployment benefits/assistance, as well as lower payments due to proportionality between earnings (lower for women) and benefits] weakens women's wage-bargaining position compared to men Low wages for women in part-time work especially influenced by their limited eligibility to unemployment benefits/assistance Presumption of family income pooling (transfer of income from male employed partner) seen to justify discriminatory notions of women's low pay as "pin money"
3. Wage-setting institutions have uneven gendered effects	Hierarchy of collective agreements promote pay in male-dominated sectors Female-dominated sectors and occupations more likely to be excluded from coverage Statutory national minimum wage more likely to benefit women's pay than men's Positive impact on gender pay equity in the more centralized public sector wage systems	Women's low pay in female-dominated sectors shaped by inclusion/exclusion from collective bargaining coverage Collective agreements in female-dominated sectors may have lower minimum rates than in male-dominated sectors Female part-timers most likely to be excluded from collective bargaining coverage, weakens pay prospects Women's low pay uplifted (and gender pay gap narrowed) by raising the statutory minimum wage
4. Women are disadvantaged by independent workplace effects	Ability and willingness of employer to pay differs by the gender composition of workplace Monopsonistic employer power Barriers to women's mobility exposes their risk of exploitation Inter-firm contracting and cost minimization in female-dominated private services	Women's low pay may result from concentration in firms with less economic rent Low pay reinforced by strong monopsonist employers, e.g. for care work, unqualified nursing Risk of low pay may be higher in female-dominated (and part-time-dominated) workplaces Cost-minimizing outsourcing of low-skill activities put downwards pressure on female-dominated, low-wage jobs (e.g. cleaning, catering) despite profitability of large client firms

5.1 Undervaluation of women's work

There is an international consensus – evident in ILO labour standards and EU employment law – that women should receive (a) equal pay for the same work as men and (b) equal pay for work of equal value. These two principles constitute the two main types of undervaluation: that women are paid less than men for the same efficiency within a given job or occupation, and that they are concentrated in jobs or occupations which are themselves undervalued. Examples of the first type include different starting salaries for men and women or differential access to bonuses. Examples of the second type include cases where female-dominated occupations are lower paid than male-dominated occupations, despite requiring higher qualifications and more complex work.

From the perspective of employers, undervaluation of women's work – whether arising from within a job or from the job category – grants access to a higher quality of labour for a given wage (Grimshaw and Rubery, 2007b). Higher quality labour may take various forms, in each case changing the balance of expected labour quality for a given wage. Alternative forms of labour quality include variables associated with worker effort, commitment, reliability, voluntary exercise of initiative, and demands on emotions or stress. In each case, women are penalized by not receiving appropriate reward for their labour. Moreover, there is a cost to society related to the underutilization and underdevelopment of women's potential where women workers are unable to demonstrate their undervalued labour quality.

While undervaluation can, in principle, affect all groups of women in the labour market, those in low-wage jobs are especially at risk since low pay may be due to non-recognition of skills and experience; there may be few opportunities for skill development; or there may be an absence of mechanisms and channels for collective representation to improve pay.

Care work is the archetypal example of undervalued, low-wage women's work and is the activity that has perhaps received most attention from feminist scholars investigating the complex interaction between gender relations, family structure, emotional labour and employment relations (e.g. England, 2005; Folbre, 2001; Wharton, 1999; Zelizer, 2002). Research into the nature of care work illuminates the inter-related aspects of undervaluation. It is devalued, in part, because it is associated with discriminatory notions of "women's work", where care work is denigrated even among friends and family of female care workers (e.g. Lee-Treweek, 1997). It is also undervalued because employers know they can pay less for care work because female employees care, despite evidence from the United States that emotional work is psychologically stressful (Hochschild, 1983). Polly Toynbee, journalist with the British newspaper, *The Guardian*, spent some months in a variety of low-wage service sector jobs around London and argued that her experience as a care worker demonstrated that:

'Women's work is still treated as if it should be given almost free, a natural function. Any woman can do it because we are born to it, trained to it from infancy. ... Things your mother did for you she did freely out of love, and there is an unspoken expectation that all women at work should be society's mothers, virtually for free. The low value put on their labour springs from a deeply ingrained belief that they do these jobs because they love them' (Toynbee, 2003, p. 204).

5.2 Women's lower reservation wage⁹

The interaction of family, employment and welfare regimes results in different labour supply conditions for men and women (Lewis, 1992), and this shapes women's relatively high vulnerability to low pay. While country systems differ quite considerably, the general tendency is for women's reservation wage to be lower than men's, and this both diminishes women's wage bargaining power and reduces the disincentive to enter low-wage work. There are two reasons for women's lower reservation wage (Rubery and Grimshaw, 2009). First, they tend to receive less support from the state in the form of unemployment benefits. Second, they may be at least partially dependent on family income and therefore may only expect (or be expected by employers) to make a partial contribution to household income.

In their study of five Central and Eastern European countries, Spain and the United Kingdom, Lasasosa et al. (2001) find that the targeting of benefits is "unambiguously worse for women than men", such that unemployed women are less likely to receive benefits than men. The gender difference is highest in the United Kingdom, where unemployed men were almost twice as likely to receive benefits as unemployed women (Lasasosa et al., 2001, Table 1). Similar results are reported in Azmat et al. (2004) for 13 EU countries, where the gap between the share of unemployed women in receipt of benefits and unemployed men ranges from 7 per cent in Belgium to 54 per cent in Spain. The one exception to the pattern is Germany, where unemployed women are slightly more likely to receive unemployment benefits than men (shares of 69.4 per cent and 68.7 per cent, respectively).

The reasons for women's lower coverage by unemployment benefit support lies with the tendency for welfare regimes to retain a traditional focus on full-time permanent employment forms with further biases related to means-testing of household position of the unemployed position. Eligibility to unemployment insurance and assistance typically involves some combination of the following rules: hours or earnings thresholds, minimum contributions, means-testing, and proportionality between earnings and benefits [see Leschke's (2007) analysis of Denmark, Germany, Spain and the United Kingdom]. Women are likely to be more disadvantaged than men with respect to all four rules. First, greater involvement in part-time work and low-wage work means many will not pass the hours/earnings threshold. Second, female part-timers may require longer duration of social contributions than full-timers, and interruptions due to care work or children also present a disadvantage. Third, income from an employed male partner may eliminate rights to means-tested unemployment assistance. And fourth, the gender pay gap in wages will be reproduced as a gender gap in benefits where benefits are paid as a percentage of past wages (Leschke, 2007, p. 1). Overall, part-time employment and the impact of household means-testing are key reasons for women's lower unemployment benefit coverage than men's.

5.3 Gendered wage-setting institutions

The impact of wage-setting institutions on low-wage employment (section 3.2 above) also needs to be interrogated through a gender-sensitive lens of analysis. While gender pay equity potentially benefits from more centralized and coordinated wage-setting institutions, combined with a statutory national minimum wage (Asplund et al., 1993; Blau and Kahn, 1992; Rubery et al., 2005; Whitehouse, 1992), it is also important to recognize that national institutional conditions do not necessarily have even impacts across diverse

⁹ The argument in this sub-section borrows from Rubery and Grimshaw (2009).

sectors of employment (see Box 2). And where men and women are segregated across sectors, then inter-sectoral diversity of wage-setting institutions (related to coverage and differential minimum levels) may reinforce gender wage differences, potentially offsetting the positive effect of relatively centralized wage-setting on gender pay equity.

Several studies point to the uneven impact of collective bargaining on male and female earnings distributions. Commenting on their findings for Germany, for example, Robson et al. (1999, p. 204) argue:

'Despite Germany's strong collective agreements which determine minimum rates for different sectors, full-time and in particular part-time women workers experienced a considerably greater incidence of low pay than men, a result which continues to hold after controlling for employment sector, occupation, type of employer, contractual situation, or size of firm.'

Women's higher risk of low pay than men's is, in part, a result of Germany's varied sectoral minimum wage rates; Germany has no statutory national minimum wage. The highest incidences of low pay in Germany tend to be in the female-dominated industries, especially cleaning (78 per cent share of low-wage work) and hospitality (61 per cent share), where the bargained minima tend to be lower than in other sectors (Bosch and Weinkopf, 2010). A very similar set of results appears to apply to Finland, which also does not have a statutory national minimum wage and has a hierarchy of collective agreements: Laine's (2008) research shows that sex segregation across sectors, combined with differential rates in collective agreements, were an increasing cause of the gender pay gap. Also, analysis of the determinants of wages in six European countries finds that the location in a specific sector is a more important determinant of the probability of earning a low wage for women than for men (Fernández et al., 2004, Table 12), again pointing to the gendered effects of wage-setting institutions by sector.

Box 2: Review of an early cross-national study of the gendered impact of wage-setting institutions on low pay in Europe

In research published in the late 1990s in the *European Journal of Industrial Relations* (Robson et al. 1999) and *Work, Employment and Society* (Dex et al. 1999), Paul Robson, Shirley Dex, Frank Wilkinson and Olga Salido Cortes analyse the way different wage-setting institutions shape the incidence of low-wage work with special attention to the distribution across industries and occupations, and the disaggregated consequences for men and women and for full-time and part-time workers. For the five countries examined, they formulate and then test the following propositions:

- The strength of collective bargaining in Germany and the associated minimum rates agreed for each sector (and/or region) ought to generate a low incidence of low pay, albeit with the potential for wide variation across sectors/regions
- Spain and Luxembourg share a pattern of weak and uneven collective bargaining coupled with a relatively low statutory minimum wage, thereby generating a medium incidence of low pay
- The weak and uneven collective bargaining in the United Kingdom, combined with the then absence of a statutory minimum wage, would generate a relatively high incidence of low pay
- A low level statutory minimum wage in the United States and weak collective bargaining generates a high incidence of low pay

The findings confirmed these general propositions, but also pointed to some important cross-country results concerning gender differences and sectoral variation:

- countries with deregulated labour markets and uneven collective bargaining had the widest inter-sectoral variation in low pay
- the highest rates of low pay in Germany were in the female-dominated industries, such as retail and hospitality, where the sector-based collectively bargained minima were lower than in other sectors
- countries with higher shares of service sector employment (United States and United Kingdom) also had a higher incidence of low pay among women
- low pay was especially high among female part-timers in all five countries
- occupations with a high incidence of low pay for men were characterized by a high female employment share
- public sector employment displayed a lower incidence of low pay than in the private sector in all countries except Germany, where there was little difference
- the incidence of low pay in all countries decreased with firm size

Overall, the research argues that, while the benefits of strong collective bargaining and effective minimum wage policy are important in disentangling cross-country differences in the incidence of low pay, they **“are not equally distributed equally between men and women or between full-time women and part-time women”** (Robson et al., 1999, p. 204).

The concentration of women among low-wage workers also means that the coverage and enforcement of minimum wage regulation has particular importance. The level at which it is set has the largest positive impact on women’s low pay, and cross-national studies suggest there is a strong association between the share of women in low-wage work and the relative level of a country’s statutory national minimum wage (Rubery et al., 2005). Detailed data for selected European countries show that women are more likely to be beneficiaries of a national minimum wage than men (see Table 10). It is notable, however, that the overall share of direct beneficiaries from a minimum wage varies considerably across countries – compare Spain with France, for example. An important issue is the degree to which female (and male) workers get stuck in minimum wage jobs. Evidence in section 6.1 below shows that women are less likely than men to move out of low-wage work into higher paying jobs.

Table 10: Shares of male and female workers who earn the national minimum wage, selected European countries

Country	Level of statutory minimum wage relative to average earnings (2008) ¹	Share of workers paid the minimum wage ²	
		Share of male workers	Share of female workers
Belgium	45.3%	42% of minimum income guarantee recipients (no data on minimum wage-earners)	58% of minimum income guarantee recipients (no data on minimum wage-earners)
Greece	49.5%	6.7% in lowest decile of earnings (no data on minimum wage-earners)	16.7% in lowest decile of earnings (no data on minimum wage-earners)
Spain	36.5%	0.64%	1.33%
France	48.1%	9.9%	19.9%
Ireland	38.6%	2.7%	7.3%
Luxembourg	46.2%	13.0%	22.0%
Netherlands	44.2%	3.0% (and 5.5% on 110% of minimum wage)	5.6% (and 10.4% on 110% of minimum wage ⁹)
Portugal	39.9%	4.2%	9.3%
United Kingdom	38.2%	30% of beneficiaries men	70% of beneficiaries women

Source: 1. Eurostat data (minimum wage as percentage of average monthly earnings). 2. Adapted from Rubery et al. (2005, Table 7).

5.4 Gendered workplaces

A final important reason for women's over-representation among the low paid is their greater tendency than men to be employed in organizations where the employer is either less able or less willing (because of an absence of trade unions, for example) to pay a decent wage. In a sex-segregated labour market, where women are also disadvantaged by the constellation of family and welfare system effects, men may be more able than women (a) to access jobs at the top of the job queue where employers enjoy economic rent, and (b) to extract a sharing of economic rent from their employer; in countries where women are less likely than men to be members of trade unions, then men will benefit more from the union wage premium negotiated.

Employer willingness to pay is also shaped by their degree of monopsonistic power. If they have power in the labour market as wage fixers, they may be less willing to raise wages even if this means operating with job vacancies, since the costs of extending the wage rise to all employees may be perceived as too great (Card and Krueger, 1995). Evidence in support of the influence of monopsonist employers holding down women's pay can be found in studies of the female-dominated care sector (e.g. Draca et al., 2006 for the United Kingdom). Eborall (2003) shows clearly that the terms and conditions for the social care workforce in the United Kingdom have been deteriorating despite the sector recording increasingly severe problems of labour shortage and high turnover. Also, many areas of the female-dominated public sector may exhibit a degree of monopsony. In several countries, for example, the wages of nurses do not exhibit rises despite the challenges of chronic labour shortage (e.g. Nowak and Preston, 2001 for Australia).

These differences in employers' wage-setting behaviour (see also Holzer, 2005) are likely to reflect differences in the barriers to male and female worker mobility and their access to different jobs – resulting both from external obstacles caused by gendered effects of family and welfare systems, for example, and the internal segmentation of jobs resulting from employer policy and practice (Grimshaw and Rubery, 2007b). Dual labour market studies argue that imperfect worker mobility between primary and secondary labour markets prevents workers from competing perfectly for jobs in response to changes in relative wages (Bulow and Summers, 1986; Doeringer and Piore, 1971). Thus, employers can exploit women's weaker mobility conditions and dampen wage gains in female-dominated sectors and occupations. There is indeed evidence for the importance of gender

segregation at the workplace in influencing women's pay relative to men's, after controlling for differences in human capital. For example, Forth and Millward's (2001) econometric study of low-wage workplaces in the United Kingdom finds that high concentrations of women and of part-time employees in a workplace increase the incidence of low pay; that is, there is an independent positive effect on women's risk of low pay simply by being employed in a workplace that employs a large share of women or of part-time employees. Similar results are found for the six European countries investigated by Fernández et al., who find that, "There is consistently a positive relationship between the proportion of the workforce who are women and the likelihood of having a substantial proportion low paid" (2004, p. 22).

The emphasis on understanding the ability and willingness of employers in shaping women's vulnerability to low pay needs to be extended to consider how many women in low-wage work (and men) find themselves in a job where their employer may be unable to pay more, but this is largely because they have negotiated a strongly cost-constrained contract for a piece of outsourced or subcontracted work from a more profitable client firm. An important constraint on wages for many low-wage workers is therefore the market for contracts, which is in many cases driven by cost reduction rather than a search for specialist skills and management expertise (Marchington et al., 2005). It is precisely for this reason that living wage campaigns in the United States have been successful in lifting the wage floor by targeting the politics of public-private contracting (Pollin et al., 2008). Thus, analysis of low-wage employment has to encompass a broader conception of the employment relationship than usually defined (that is, confined to a single employing organization) and understand the changing politics of markets for low-wage services contracts (types of subcontracting relations, production network linkages, wage and employment protection for outsourced workers, etc.).

Part Three: Quality of working life

6. The quality of work and life for low-wage workers

The level of pay is only one factor that shapes a person's employment and living conditions, and it is important to understand the extent to which low wages are associated with other factors that have a positive or negative effect on a person's living and social conditions. Evidence that people are taking on low-wage jobs for a temporary period of time as a route into higher paid work, or as a short-term measure to pay for higher education, presents a different scenario for policy than evidence that people in low-wage jobs are caught in a dead-end trap. Also, if low wages are compensated by other employment conditions, such as high quality training provision, control over working hours and high task discretion, then an approach that considers a wider bundle of job quality indicators may serve as a better instrument to guide policy than a simple targeting of low-wage employment. However, the possibility that low wages may be indicative of a raft of poor employment conditions would alternatively suggest the need to tackle low pay as a catalyst to spurring progress in other areas of the employment relationship. Finally, because policy-makers typically have a strong concern to address poverty, it is important to disentangle the linkages between low pay and poverty. Many low-wage workers are poor, even in wealthy developed countries, primarily because their level of waged income is too low to support a decent standard of living. Of course, some low-wage workers avoid poverty because they live in households with other earners and by pooling income can enjoy a decent standard of living. Also, governments intervene in many countries to top up wage income through a variety of means-testing income distribution mechanisms. Nevertheless, because waged work plays such an important role in conferring a sense of identity and inclusion in society for such workers (Sennett, 1998), it is important to improve the functioning of labour markets so that people at the bottom of the wage structure can earn a wage that provides for individual financial independence, independent of state and family support.

In this final section of the report, we address these important dimensions of the quality of work and life of low-wage workers. We consider three inter-related themes:

- *Mobility: Are workers in dead-end or transitory low-wage jobs?*
- *Vulnerability: Is low pay compensated by other job attributes?*
- *Poverty: Are low-wage workers poor?*

6.1 Mobility: Are low-wage workers in dead-end or transitory jobs?

The welfare consequences of low-wage employment depend a great deal on whether or not such jobs are a stepping stone to higher paid employment or not. For those who do not progress up the wage hierarchy, the alternative can involve continuation in low-wage employment as well as the difficulties associated with job loss and/or repeated spells of unemployment, inactivity and low-wage work. Thus, any analysis of low-wage work needs to consider the static and dynamic implications for the individual, economy and society. Moreover, in low- and middle-income countries, transitions into and out of low-wage jobs are an especially important issue in a context of limited safety nets for those who lose jobs and the rapid economic transformations associated with structural reforms. Also, being trapped in a low-wage job in a less developed country may be indicative of not being able to surmount the obstacles to entering better paid employment in the formal sector (Duryea et al., 2006).

The evidence for European countries reveals a number of interesting patterns. First, 12-month transitions out of low-wage and into more highly paid jobs are only experienced by one in three workers. Around half of low-wage workers are still in a low-wage job the following year, and close to one in five move into a type of labour market status with no pay (inactivity or unemployment) (Table 11). The latter transition is especially pronounced for low-wage workers compared to medium- and high-wage workers.

Secondly, transitions are not distributed evenly among individuals and vary quite considerably by sex, age and qualification. On average, transitions out of low pay are fewer for women than for men. Women therefore not only face a higher incidence of low-wage work than men, but also face a more difficult task escaping into higher paid employment. Some 37.7 per cent of men in low-wage jobs made the transition into higher wage work after 12 months, on average over the 1994-2001 period, but only 26.1 per cent of low-wage women (Table 11). By age group, as might be anticipated, younger workers are more likely to enjoy mobility out of low-wage jobs than older workers. Less than half of workers aged 16-24 and 25-34 years old remained in a low-wage job after 12 months (47 per cent and 47 per cent, respectively), compared to 56 per cent of the cohort aged 35-54 years and 56 per cent of 55-64 year olds (EC, 2004, Table 53). And by qualification, again the data support expectations that low-wage workers with low qualifications are far less likely to progress into a high paid job the following year – some 29 per cent – compared to low-wage workers with high qualifications – 37 per cent (EC, 2004, Table 53).

Table 11: Pay transitions for low-wage, medium-wage and high-wage workers, EU, pooled data 1994-2001

	Year t + 1			
	No pay	Low pay	Medium pay	High pay
All workers				
No pay	88.2%	4.9%	6.0%	0.9%
Low pay	18.2%	51.1%	29.5%	1.2%
Medium pay	6.9%	5.4%	79.3%	8.4%
High pay	4.4%	0.4%	14.5%	80.6%
Male workers				
No pay	84.1%	5.6%	8.9%	1.4%
Low pay	16.5%	45.9%	35.9%	1.7%
Medium pay	6.4%	4.6%	79.3%	9.7%
High pay	4.1%	0.4%	13.8%	81.8%
Female workers				
No pay	90.4%	4.6%	4.4%	0.6%
Low pay	19.4%	54.5%	25.3%	0.8%
Medium pay	7.5%	6.5%	79.2%	6.8%
High pay	5.0%	0.6%	16.2%	78.2%

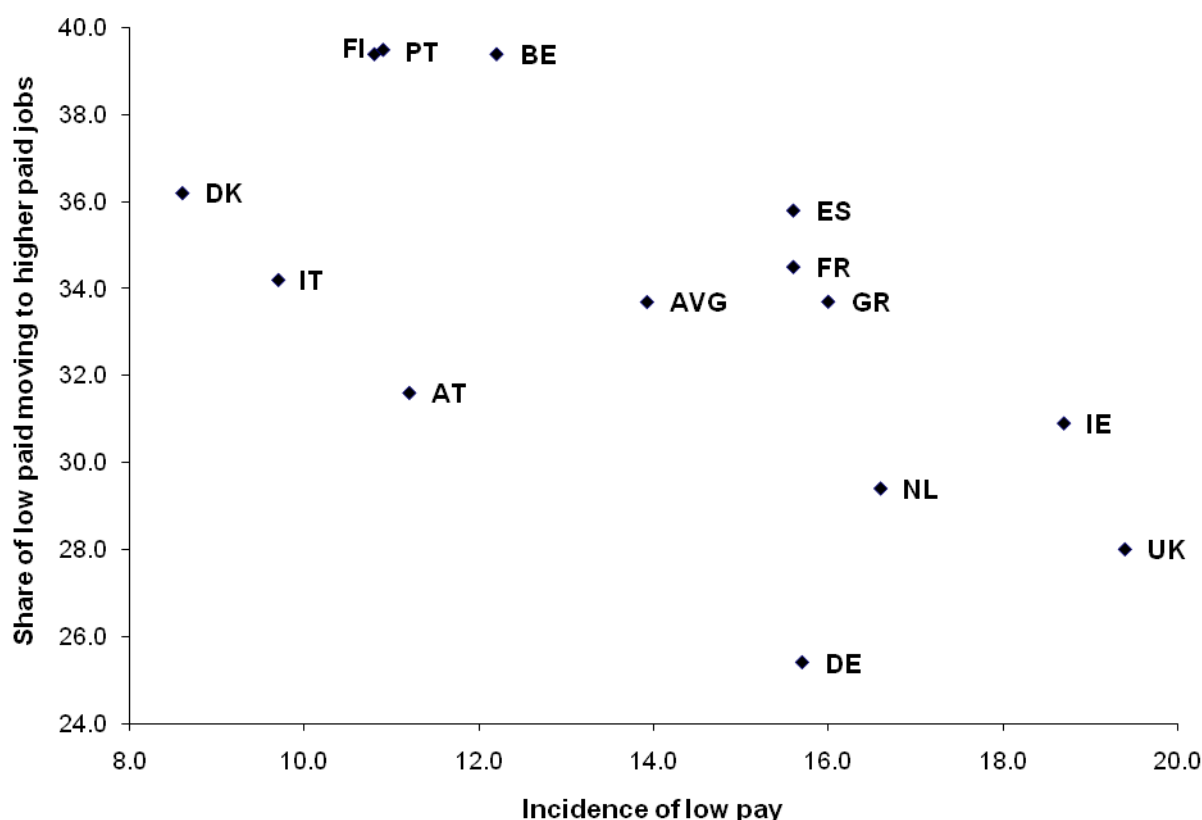
Note: No pay also unfortunately includes people working less than 15 hours and apprentices. Low pay refers to two-thirds of the median gross hourly pay; medium pay between two-thirds and four-thirds of the median; high pay is over four-thirds of the median.

Source: Adapted from EC (2004, Table 53). Data derive from ECHP, version December 2003.

Thirdly, there is considerable inter-country variation in mobility out of low-wage work both in terms of 12-month transitions and the probability of transitions over several years. A striking finding is that those countries with a relatively high incidence of low-wage work are also more likely to experience smaller shares of low-wage workers progressing into higher paid work; this finding suggests countries with higher stocks of low-wage workers also face problems of limited flows out of low-wage work. The causation is likely to run from flow to stock, such that high flows out of low-wage work keep the overall stock of low wage jobs at a low level and vice versa. Figure 10 shows that in the United Kingdom and Ireland, the two countries with the highest shares of low-wage employment in the 13 European countries investigated, the shares of low-wage workers moving into higher paid jobs are well below the country average of 33.7 per cent, at 28.0 per cent and 30.9 per cent, respectively. By contrast, countries in the upper left of Figure

10 combine a much lower incidence of low-wage work with greater success at moving low-wage workers up into high paying jobs; Finland, Portugal and Denmark are high performers in this regard. The same countries also perform best over a longer time period – each scoring a share of 75 per cent of low-wage workers making the transition into higher paying jobs after a period of five years (EC, 2004, Chart 87). Unfortunately, the United Kingdom is also one of the worst performers in Europe over the five-year period, ranked second to the bottom with only 57 per cent of low-wage workers progressing up the wage hierarchy. The worst performer is in fact Germany, where the ECHP data suggest only around 47 per cent of low-wage workers progress upwards after five years. Ireland, while scoring poorly on the 12-month transition score, in fact scores very well on longer-term mobility out of low-wage work, close behind Denmark, Portugal and Finland, with a share of 73 per cent (EC, 2004, Chart 87).

Figure 10: Comparing the incidence of low pay and mobility from low pay to higher pay



Note: Incidence of low pay refers to 2000 ECHP data. Mobility data refer to 12-month transition based on an average for pooled 1994-2001 data.

Source: Own compilation using published data from EC (2004, Tables 51 and 55).

Evidence for Latin America suggests that most 12-month transitions out of low-wage employment are into unemployment and inactivity rather than to higher paying jobs (IDB, 2008);¹⁰ however, differences in definition mean that it is not possible to make comparative conclusions with the European data above. There is inter-country variety in the Latin American region, although the source of material only includes three countries. Duration in low-wage employment is relatively high in Venezuela and low in Argentina. And exits to non-employment are particularly high in Argentina; on average,

¹⁰ The IDB (2008) study estimates average 12-month transitions for the period early 1990s to early 2000s for three countries: Argentina, Mexico and Venezuela.

approximately 35 per cent of low-wage workers in the informal sector moved into non-employment. Also, the problem of getting stuck in a low-wage job is greater for workers in the informal economy than in the formal economy, suggesting that obstacles to obtaining a formal employment contract are an important policy issue.

Finally, detailed analysis of transitions into and out of low-wage work using pooled ECHP data for five European countries highlights two results (Mason and Salverda 2010; see also Salverda and Mayhew, 2009). First, as we saw with the aggregate European data above, women are less likely than men to move from low paying to higher paying jobs, and this is true in all five countries shown in Table 12. The gender gap is highest in France and the United Kingdom and lowest in Denmark. Second, part-timers are far more likely than all workers to move into a status of non-employment, especially in Denmark and France, where such transitions are also high for all workers.

Table 12: Predicted transition rates from low-wage jobs to higher wage jobs and non-employment, 1995-2001

	Denmark	France	Germany	Netherlands	United Kingdom
<i>All workers</i>					
1. Low pay to low pay	0.49	0.49	0.60	0.62	0.58
2. Low pay to higher pay	0.29	0.34	0.25	0.25	0.28
3. Low pay to non-employment	0.23	0.17	0.15	0.14	0.15
<i>Female workers</i>					
1. Low pay to low pay	0.50	0.51	0.62	0.62	0.61
2. Low pay to higher pay	0.27	0.29	0.22	0.22	0.23
3. Low pay to non-employment	0.25	0.21	0.17	0.17	0.17
<i>Part-time workers</i>					
1. Low pay to low pay	0.48	0.49	0.59	0.64	0.63
2. Low pay to higher pay	0.23	0.23	0.23	0.20	0.20
3. Low pay to non-employment	0.30	0.23	0.19	0.16	0.18

Source. Adapted from Mason and Salverda (2010, Table 2.4).

6.2 Vulnerability: Is low pay compensated by other job attributes?

Ideas from neoclassical economics about “compensating differentials” suggest that acceptance of a low wage may be compensated by other more positive features of the job and workplace, such as low health and safety risks, good career opportunities, social working hours and job security, for example. If true, we would expect workers in low-wage jobs to enjoy relatively good conditions of work in a range of other areas, raising their overall package of job quality to a level comparable to better paid workers. However, ideas from labour market segmentation theory suggest that “negative job assets”, as Schettkat (1993, p. 162) calls them, are more likely to be cumulative rather than compensatory (see also Lucifora and Salverda, 2009). Thus low pay, unsocial working hours, health and safety risks and limited skill development are likely to negatively interact in ways that heighten the overall vulnerability measure of low-wage work. Access to “good jobs” means working for an employer who controls some economic “rent” and is more likely to be able to provide opportunities for pay progression, career development and training provision. Conversely, the negative characteristics associated with “bad jobs” also cumulate, such that jobs in low-wage industries are more likely to be insecure, in the informal sector, and so on.

A glance at features of many country wage-setting systems provides some support for ideas of compensating differentials. For example, wage agreements that provide premiums for working unsocial hours (at weekends, public holidays and nights) provide obvious wage compensation for the disutility of having to work outside regular, social hours. Also,

in some countries, access to various welfare benefits provided by the employer may be an important feature of the overall compensation package. The overall evidence to date, however, suggests little support for ideas of compensating differentials and is far more likely to confirm the labour market segmentation argument that negative job assets are in fact cumulative.

Box 3: The poor work conditions of low-wage jobs in the United States

Low-wage jobs in the United States are certainly not compensated by better working conditions than found in higher wage jobs. Across a range of working conditions, a detailed study of the Census Population Survey (Boushey et al., 2007, pp. 9-12) shows that low pay carries a greater risk of poor working conditions than high pay, including:

- Lower rate of health coverage with employer contribution
 - Especially true for low-wage working mothers
 - Only 34% of workers in jobs paid less than \$15 per hour were covered by dental and vision care as part of their employer provided health-care package compared to higher paid workers
 - Only 17% of workers earning less than \$15 per hour had access to long-term disability insurance compared with 48% of higher paid workers
- Lower pension coverage or other retirement plan options
 - Only 14% of workers in the bottom wage quintile have employer-provided pension coverage compared to 48% in the middle quintile and 72% in the top quintile
- Lower rights to paid leave for sickness and vacations
 - Only 39% of jobs in the bottom third of the earnings distribution offer any paid sick days compared to 79% of jobs held by middle- and high-paid workers
 - Only 51% of these low-wage jobs provide paid holidays compared to approximately 90% of middle- and high-paid jobs
- Less worker control over working time schedules and work locations
 - Around 38% of low-wage jobs offer low control compared to 19% of other jobs
- Less opportunity for skill development and training
 - 45% of jobs held by low-wage and low-income workers offer training for skills enhancement compared to 64% and 81% of middle- and high-wage jobs, respectively

A summary of the results is provided below.

Benefit	Low wage	Mid wage	High wage
Employer health coverage (individual worker)	42%	87%	94%
Paid sick leave	39%	74%	90%
Paid vacations	51%	89%	88%
Pension (defined benefits)	16%	39%	48%
Any retirement plan	32%	72%	87%
Job training or education	45%	64%	81%

Source: Boushey et al. (2007, Table 1).

Several features of the employment relationship have been examined (see Box 3). In the United States, one focus of enquiry is the relationship between relative pay and access to good health-care insurance. One study suggests that, at least among married women,

there is evidence they implicitly accept a wage penalty of around 20 per cent in exchange for health insurance (Olson, 2002, cited in Bryson and Forth, 2008). However, most studies argue the contrary. A detailed study of wage data for Los Angeles, for example, rejects the hypothesis that health insurance benefits are a significant compensating factor in explaining intra-industry pay differentials; if anything, the distribution of health insurance widens the observed differentials in compensation (Fairris and Jonasson, 2008). And Pierce's (2001) analysis of enterprise survey data for the United States comprehensively rejects the notion of compensating differentials and shows instead that changes in the distribution of non-wage compensation during the 1980s and 1990s actually reinforced rising wage inequality. A key feature is the decline of health insurance benefits for the lowest paid; Pierce speculates about what might be happening here.

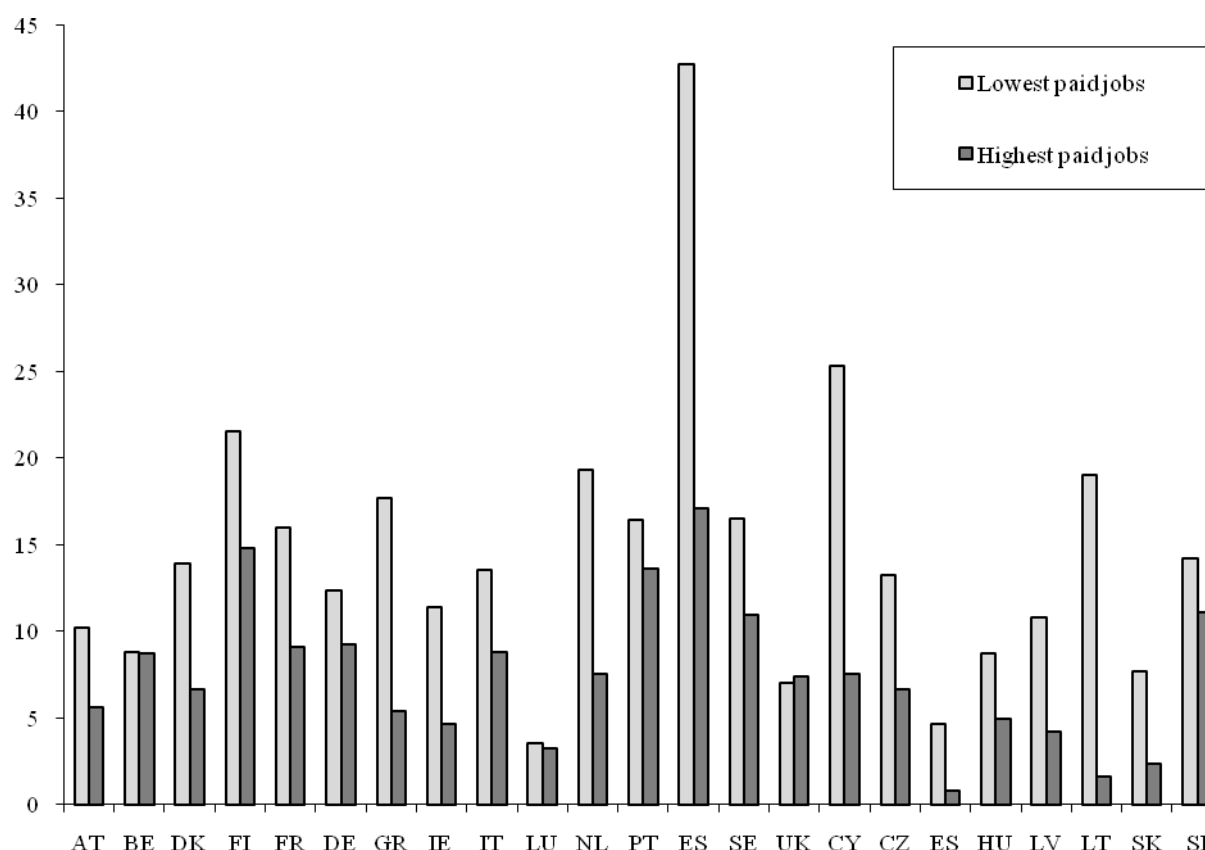
'Fringe benefits have become less equally distributed through time, and compensation inequality rose over the past 10-15 years by a greater amount than did wage inequality. The differences are apparent mainly in the bottom half of the respective distributions, and are large due to declines in health insurance coverage rates. The distributional changes are also consistent with income effects, where low wage workers, facing declining real wages, choose to take a disproportionately large fraction of the compensation decreases in the form of lower fringe benefits' (Pierce 2001, pp. 1520-1521).

In other words, with weak protection through forms of joint regulation of employment conditions (i.e. collective bargaining), low-wage workers in the United States are accepting cuts in their health insurance protection rather than endure further drops in their real earnings.

Other studies investigate the relationship with job insecurity. In his US-Germany comparison, Schettkat (1993) tests the proposition that wages and job stability act as compensating factors. Again, the compensating differentials thesis is rejected. The data for American manufacturing suggest industries with higher-than-average job turnover (as a proxy for employment instability) also tend to pay lower wages. Comparing the results with German data, the pattern is similar but significantly weaker, which conflicts with the view that the American labour market is closer than Germany to the competitive labour market model (Schettkat, 1993).

There is also evidence of the links between relative pay and temporary employment contractual status. Research commissioned by the European Foundation for Living and Working Conditions (Stehrer et al., 2008) finds that the share of temporary workers is higher among workers in the bottom quintile of the earnings distribution compared to workers in higher paid jobs (Figure 11).

Figure 11: Share of temporary workers in lowest paid and highest paid jobs in Europe



Note: Lowest paid jobs refer to jobs ranked in the bottom quintile of the earnings distribution for each country and highest paid jobs to those ranked in the top 20 per cent for each country.

Source: Own compilation from data reported in Stehrer et al. (2008).

For all 23 European countries in the study, the share of workers on a temporary contract is higher among the bottom 20 per cent of jobs ranked by earnings than among the top 20 per cent of jobs. This is especially true of Denmark, Greece, Ireland, the Netherlands, Spain, Cyprus, Estonia and Latvia, where the lowest paid jobs include more than double the share of temporary workers in highest paid jobs (Figure 11). Other single-country studies confirm these findings of cumulative negative job assets. Kolev's (2005, Table 6) study of Bulgaria finds a significant relationship between working in a low-paid job and having a fixed-term contract, and an especially strong relationship with having no contract at all. And McGovern's study for the United Kingdom finds the share of low-paid workers with a temporary or fixed-term contract to be far higher than among all workers – 46 per cent among full-time low-wage workers compared to 9 per cent for all full-time workers, and 62 per cent among part-time low-wage workers compared to 4 per cent among all part-time workers (2004, Table 1).

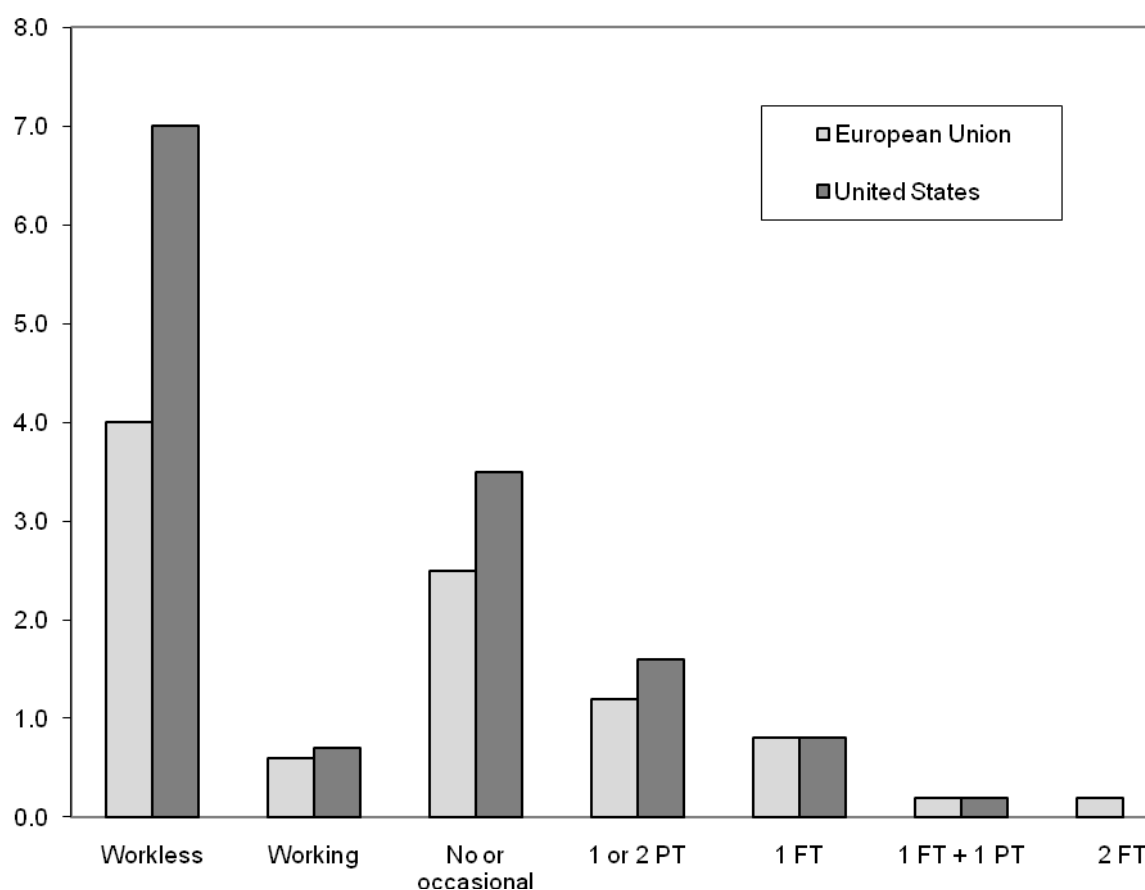
6.3. Poverty: Are low-wage workers poor?

Reflecting the strong policy concern for the welfare of low-wage workers, there is a great deal of research that investigates the linkages between low-wage work and household poverty. The relationship between low pay and poverty is not straightforward for a number of good reasons. Most importantly, low pay is a measure of an individual's gross earnings status, whereas poverty is typically a measure of the net disposable income of a household, adjusted for size and composition. As a result, the relationship between low pay and poverty is generally somewhat looser than might be anticipated. Many low-wage workers share a household with higher paid earners, or have entitlements to particular state income

transfers (benefits or tax credits), or earn other sources of income, for example through self-employment or second jobs. Conversely, many poor households are poor primarily because nobody earns a wage. Moreover, it is also possible that someone with a job that pays relatively well in fact lives in a poor household; this is likely where the household is dependent on their earnings and has a number of dependants.

Much of the risk of living in poverty is contingent upon the employment patterns among household members. OECD analysis for the United States and the European Union reveals considerable variation in long-term poverty risks by both the number of workers in a household and the combination of full-time and part-time working (Figure 12). Risk of long-term poverty is clearly highest for households where nobody works or where household members only enjoy occasional work. Among households with one or two members in part-time employment, the relative risk is 1.2 for the European Union and 1.6 for the United States and remains relatively high even among households with one full-timer.

Figure 12: Relative long-term poverty risk by household working status, 1994-2001



Source: OECD data based on the ECHP; for the United States, the Panel Study of Income Dynamics.¹¹

¹¹ Accessed from the website <http://ic.pressflex.com/249.pressflex.net/images/2546.photo.jpg> (March 2010).

Few studies investigate explicitly the linkages between low-wage work and household poverty. For Europe, Marlier and Ponthieux (2000) provide a relatively comprehensive analysis. This finds that across Europe, the share of all employees who live in a poor household is lower than the share of employees who are low paid – 9 per cent and 15 per cent, respectively, for 13 European countries. Drawing on the same study, Figure 13 shows the high risk faced by low-wage workers of living in a poor household compared to all employees. It also reveals considerable country variation. Poverty among low-wage workers is highest in Greece, Italy and Germany, with shares of 24 per cent and higher. This compares to shares of less than 15 per cent in Denmark and Ireland. The relative disadvantage of low-wage workers, or in other words the risk of poverty compared to all employees, is actually highest in Portugal and then Denmark, where the risk is more than threefold.

Figure 13: The share of low-wage employees ^a and all employees living in a poor household ^b



Notes: a. Low wages defined as 60 per cent of the national monthly median wage. b. Poor household refers to a country-based definition of equivalized income for an adult that accounts for the size and composition of the household and considers all household income (including from benefits); poverty is defined as below a threshold of 60 per cent of the national median.

Source: Marlier and Ponthieux (2000, Table 8).

Other country results include the following:

- In Denmark, around 35 per cent of low-wage workers lived in a poor household (defined as less than 60 per cent of the median household income) (Westergaard-Nielsen, 2008, p. 80)
- In Ireland, 13 per cent of low-wage full-time workers lived in a poor household in 1994 (below 60 per cent of average equivalent income) (Nolan, 1998, p. 135)
- In the United Kingdom, 14 per cent of low-wage workers lived in poor households in 2000-01 (Millar and Gardiner, 2004)

The policy implications from these findings are first that efforts to address low pay will only impact on a minority of households defined as having incomes below the poverty

threshold. Thus, the statutory national minimum wage is only a partial instrument in addressing poverty among the low paid. Other policies, especially tax and in-work benefit policies, offer complementary measures for addressing poverty among low-wage employees, although with caution regarding the risks of creating poverty traps.

7. Summary and conclusion

This report presents an overview of key issues that frame our understanding of low-wage work, focusing on the definitions, patterns, causes and consequences in international perspective. Some of the key points to emerge from the review are the following:

- The current, most widely used, definition of low-wage work is work that pays a wage less than a threshold of two-thirds of the median wage for all employees in the economy
- Data from different regions of the world reveal wide variation among countries in the incidence of low-wage work and no indication of convergence
- Low-wage jobs tend to be concentrated in particular sectors and occupations and are characterized by an over-representation of women, young people and the less educated
- 1990s employment policy was strongly influenced by the notion that low pay trades off with job growth, but this has since been largely discredited
- Labour markets are not perfectly competitive, but are instead shaped by institutions. As such, four key institutions have clear effects on the level and nature of low-wage work:
 - *Minimum wage legislation*: e.g. in Europe, there is a strong negative relationship between the level of the minimum wage and the incidence of low pay
 - *Collective bargaining*: the form and strength of collective bargaining, union bargaining power and type of union wage-bargaining strategy together play an important role in shaping a country's incidence of low pay
 - *Welfare institutions*: access to social welfare payments in principle shapes a person's incentives and disincentives to accept low-wage jobs – however the research evidence is mixed
 - *Skill formation systems*: country-wide systems for vocational training and firm investment in skill development programmes reduce the incidence of low-wage work in an economy
- Low-wage work is strongly gendered, with a near universal pattern of women's over-representation. This is a complex issue for analysis and requires interrogation of inter-related themes, including the undervaluation of many areas of "women's work", the limited entitlements of women to a reservation wage (e.g. unemployment benefits), gendered wage-setting institutions and the gendered structure of workplaces
- Patterns of mobility out of low-wage work are enormously varied across countries, with high flows out of low-wage work associated with an overall lower stock of low-wage employment

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- Low-wage work is generally not compensated by other more positive job attributes; country studies suggest low-wage workers are more likely than other better-paid workers to have lower pension coverage, lower rights to sickness and vacation leave, and less control over working time and work locations, for example
 - The link between low pay and poverty is not straightforward, but a low-wage worker in Europe does face a significantly higher risk of poverty than the average worker

The report was designed to identify the key issues, in international perspective, that frame our current understanding of low-wage work. However, for reasons of time, expertise and data resources, it suffers from particular limitations. First, it barely addresses the complex issues in less developed countries, including the different labour market dynamics associated with the informal economy and the agricultural and family-organized sectors of the economy, the more severe problems of macroeconomic instability, and, in some countries, the relative uncertainty over how to develop a sustainable model of political governance with an effective role for social partners. Second, it somewhat underplays the role of the firm in shaping the character of low-wage work and therefore misses important discussions about the degree to which firms enjoy a range of discretion, even in highly competitive markets, with which to improve their business strategy and overall job quality. Third, it lacks a more wide-ranging appreciation of the political economy of labour's overall share of the wealth created in the contemporary global economy. In particular, many of the interesting explanations for the persistent share of low-wage work in advanced capitalist countries are absent from the report (skill-biased technologies, trade and offshoring, the power of lead firms in global value chains, a shift to a polarized service economy, etc.). A conscious decision was taken to focus on the role of country-based institutions in order to provide a basis for policy action and to underscore the potential for varying country paths in trends and patterns of low-wage work.

Further research on low-wage work depends critically on good data. Improved earnings data in some of the wealthier regions of the world have aided analysis greatly in recent years, with online data now easily accessible from OECD and Eurostat data sources, for example. Similar investments are needed in other regions of the world to support our understanding of low-wage employment in distinctive labour market and socio-economic contexts.

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