Low wage work in five European countries and the USA: the role of national institutions

Gerhard BOSCH
Institut für Soziologie
Universidad de Duisburg-Essen
gerhard.bosch@uni-due.de

Jerôme GAUTIÉ
Centre d´Economie de la Sorbonne
Université Paris 1 Panthéon-Sorbonne
Jerome.Gautie@univ-paris1.fr

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ABSTRACT
This paper is devoted to the analysis of the differences in the share of low wage work in six countries. The main differences are related with the set of institutions that influence the regulation of labour markets. It is emphasized the role of collective bargaining, minimum wages, product market regulations and welfare systems.

Key words: low wage, pay setting, collective bargaining, labour institutions, minimum wage.

Bajos salarios en cinco países europeos y los EE.UU.: el papel de las instituciones nacionales

RESUMEN
Este artículo analiza las razones de las diferencias de la importancia relativa del trabajo de bajo salario entre seis países. Se estudia como estas diferencias se deben fundamentalmente a las instituciones que regulan las relaciones laborales. Las instituciones que tienen una mayor influencia son la negociación colectiva, el salario mínimo, las regulaciones de los mercados de productos y el sistema de protección social

Palabras clave: Bajos salarios, regulación salarial, instituciones laborales, negociación colectiva, salario mínimo

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Introduction

This article presents some of the key findings on the impact of pay setting institutions on the extent of low wage work of studies in the United States and five European countries, namely Denmark, Germany, France, the Netherlands and United Kingdom, initiated and funded by the Russell Sage Foundation. National researchers used available data to draw the broader contours of low-wage work in each country. To measure the extent of low-wage work it was defined as earning a gross hourly wage of less than two-thirds of each country's median gross hourly wage. The comparison of the national institutional structures in these countries was supplemented by case studies on specific jobs in five industries in all countries – call centres, food processing, retail outlets, hospitals, and hotels. These case studies were exploring the effects of variations in institutional structures on jobs which were typically low paid in the United States. structures on jobs which were typically low paid in the United**.** The result of this research was published in six country monographs and one comparative volume[1].

In the mid-2000s, according to the coordinated analysis of separate national data-sets in each of the six countries, the United States had the highest share of low-wage employment, with about 25 percent of workers earning less than two-thirds of the national median hourly wage. Germany, contrary to widespread expectations, was the European country in the mid-2000s with the next-highest share of low-wage work (22.7 percent), followed closely by the United Kingdom (21.7 percent). The Netherlands (17.6 percent) fell about midway between these three low-wage-intensive economies, on the one hand, and France (11.1 percent) and Denmark (8.5 percent), on the other hand, both of which had substantially smaller low-wage shares[2]. As important as the incidence of low wage work is the development over the last decades. Since the 1970s, the low-wage employment share has been falling steadily in France. Over the same period, low-wage shares were relatively constant in Denmark (at a low level) and the United States (at a high level, with some cyclical variation). In the remaining three countries, however, low-wage employment was much higher in the mid-2000s than it had been at the end of the 1970s. The Netherlands and the United Kingdom both saw large increases in the low-wage share over the 1980s and 1990s, with no further increases in the 2000s. In Germany,

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[1] The US volume is: Appelbaum/ Bernhardt/ Murnane 2003. The five national European volumes are: Bosch/Weinkopf (2008) on Germany; Caroli/ Gautié (2008) on France; Lloyd/ Mason/Mayhew (2008) on the United Kingdom; Salverda/ van Klaveren/van der Meer (2008) on the Netherlands; and Westergaard-Nielsen (2008) on Denmark. The comparative research is published in Gautié/Schmitt 2009. The present paper relies heavily on Bosch, Mayhew and Gautié (2009).

[2] Those figures include apprentices in France, the Netehrlands and the United-Kingdom (but not in Denmark and Germany).

before reunification, the low-wage share was flat or falling, but from the mid-1990s, the German low-wage share also increased steadily (Mason/Salverda 2010).

One of the main challenges of the research presented here is to explain these substantial and enduring international differences in the prevalence of low-wage work as well as it different development over the last decades. Such different developments cannot be explained with timeless and universal explanations like the hypothesis of skill-biased technological developments for two reasons. First there is no indication that this bias is substantially lower in countries with a lower incidence in low wage work. Secondly low wage work is not necessarily unskilled work. In Germany for example about 80% of low wage worker are skilled. Also country-specific, long-run, economic structural factors seem to have played little role in explaining international differences in low-wage work. National shares of low-wage work do not appear to be correlated with a country's GDP per capita, GDP growth rate, hourly labor productivity, productivity growth rate, or a range of long-term demographic factors, including female employment rates. Nor do between-country differences in the labor share of total value-added appear to play a decisive role in explaining the incidence of low-wage work. The incidence of low pay, however, is strongly related to the distribution of income *within* the labor share of value-added in each country, a phenomenon on which we hope our findings here shed some light (Mason and Salverda 2009).

The analysis of the overall incidence of low pay in the six countries and the results of the case studies in five industries suggest that "pay-setting institutions" play a central role in explaining international differences in low-wage work. By pay-setting institutions, we mean the formal and sometimes informal mechanisms used to determine the wages (and benefits) received by workers in different industries and occupations within each country. More specifically, we mean collective-bargaining arrangements, minimum wages, and other labor and product market regulations that have an impact on wage determination.

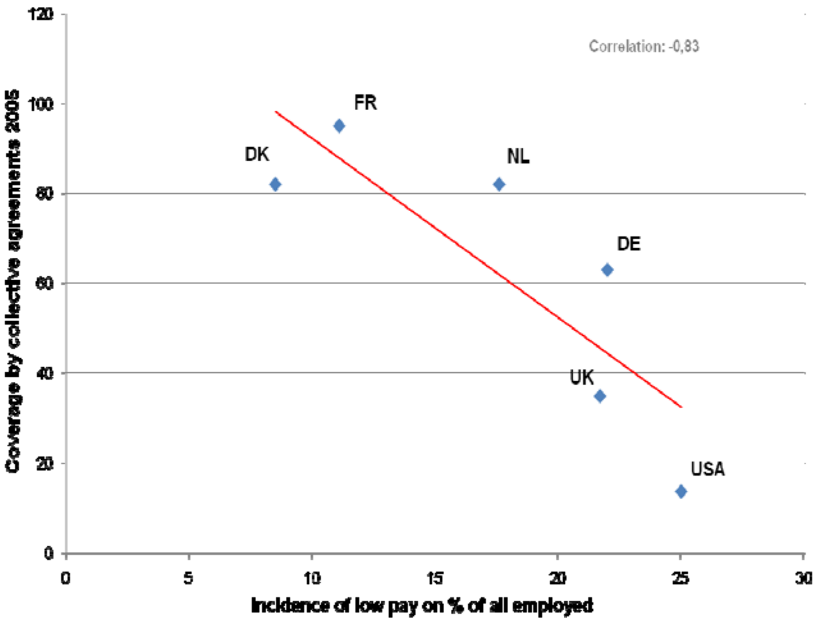
These institutions with their mutual linkages may form inclusive or exclusive pay setting systems. In exclusive systems, the pay and other terms and conditions of employees with strong bargaining power have little or no effect on employees with weaker bargaining power within a company, within an industry or across industries. Inclusive systems extend the benefits of such bargaining power to workers who have relatively little bargaining power in their own right. The more inclusive the set of institutions, the better protected are those at the low end of the workforce. Inclusiveness does not depend just on the formal institutions but also on the extent to which the various players are committed to reducing inequality.

This article looks, in turn, at the "inclusiveness" of collective bargaining arrangements (section 2) and national minimum wages (section 3), product-market deregulations as opportunities for "exit options" from the generally more inclusive national pay-setting systems (section 4); at issues related to pay setting at the firm level through "social wages" (section 5) and finally at the trade-off between wage equality and employment (section 6).

2. The impact of collective bargaining on pay

The well known, close relationship between the incidence of low pay and coverage[3] by collective agreements (OECD 1997 Chapter 3) can be observed in the six countries covered in this study (see Figure 1). Not only do the three countries with the lowest incidences of low pay (Denmark, France and the Netherlands) have greater coverage than the countries (USA, UK and Germany) with higher incidence, coverage in the former group has increased or remained stable since 1980, whilst it has decreased in the latter (see Table 1). Historically, the UK and Germany had high levels of coverage (in the UK until the early 1980s and in Germany until the mid 1990s) which, after substantial transformations of institutions and of employer and state strategies, subsequently declined.

Figure 1: Incidence of low pay and coverage by collective agreements 2005



Source: Low pay incidence: Mason/Salverda 2009. Coverage: Visser 2008: 27

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[3] The coverage rate refers to the share of workers who benefit from a collective agreement.

Table 1. Collective Bargaining Coverage* 1980, 1990, 2007

	1980	1990	2007	Change 1980 - 2007
USA	26	18	14	- 12
UK	70	54	35	- 35
DE	78	72	63	- 15
FR	85	92	95	+ 10
NL	76*	82	82	+ 6
DK	69*	69*	82	+ 13

Source: with * from OECD 1997: 71, other data from Visser 2008

* Figures in this table are from the most reliable comparative data source available. National statistical sources may produce slightly different numbers. In France, the figure is only for workers covered by a branch collective agreement. If workers covered by a firm collective agreement, or benefiting from special status (mainly in public owned firms in utilities and transportation) are added, the coverage rate amounts to almost 98% in 2004.

The extent of collective bargaining coverage (see Tables 2 and 3) depends on different institutional settings in different countries. We can distinguish four types of institutional linkages:

(1) *Low inclusiveness because of low trade union density.* In the two liberal market economies (the US and the UK) coverage is mainly influenced by trade union density. Employers associations at the industry and higher levels are weak and are mainly lobbying organizations rather than actors in the collective bargaining process. Shrinking trade union density, in the absence of other mechanisms to cover non-unionized workers (such as strong employer organizations or extension of agreements by the state) has led to a decline in coverage in these two countries. Although in these two countries unions fail to extend the benefits of collective bargaining to non-union workers, unions do succeed in improving the wages and work conditions of their members (Schmitt et al 2007)

(2) *High inclusiveness because of high trade union density*. As in the US and UK, in Denmark union coverage is mainly determined by trade union density, but density is high across the whole economy. More than 70% of the workforce is union members and density has remained fairly stable over recent decades. Because of strong union power, most firms who are not party to an agreement also pay the negotiated rates. As a result, collective bargaining coverage is even higher than union density. However, the state is not completely absent. High density in Denmark can partly be explained by the so-called Ghent-system in which the unions run unemployment insurance funds, financed mainly by the state. This, together with the fact that job protection is low (see below), creates strong incentives to join a

union and to stay in it when you leave your job. Only workers with high individual bargaining power or young workers who are still in education and are not yet looking for permanent employment do not join a union.

(3) *High inclusiveness because of extended collective agreements and strong employer organizations.* In France and the Netherlands trade union density has been falling but without the same negative impact on coverage as in the UK and USA. In fact, collective bargaining coverage has actually increased even as density has fallen, due primarily to increased employer organization and strong support by the state. In France, as in the Netherlands, non-discriminatory agreements are legally required, so that negotiated agreements are extended to both unionized and non-union-workers in any given company. In addition, the state declares most agreements to be generally binding throughout the relevant sector, giving collective agreements significant leverage [4]. In a small country, such as the Netherlands, coordination between employers is easier than in bigger countries, whilst central agreements on wage moderation, which are attractive for employers, can only be implemented with high employer coverage or legal extension mechanisms.

(4) *Low inclusiveness in spite of high employer density*[5] *and high coverage.* As in France and the Netherlands, high employer density is the major institution for achieving medium to high coverage in Germany. However, in contrast to France and the Netherlands, employer density is shrinking. Collective bargaining is still important but the linkages between the well organized industries and regions and the less organized industries and regions have been broken. In contrast to past practice, employers' organizations are now generally refusing to agree to the extension of agreements. As a result, there is no mechanism to extend coverage to industries with weak unions. Collective agreements on minimum pay levels are declared generally binding in only a few industries (see below), so that decreasing employer density has directly reduced bargaining coverage.

These four types of collective bargaining circumstances differ not only in their institutional linkages, but also with respect to their institutional stability.

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[4] Furthermore, in France, in spite of very low density, unions have considerable bargaining power since they are, at least in the public services, able to mobilize workers for industrial action.

[5] Employer density can be defined as the share of employers who are members of an employers' organization.

Figure 2. Excluded employees in Germany

	Within an establishment	Within an industry	Across industries
Excluded Employees	Agency workers Posted workers Mini-jobbers Outsourced jobs	Many employees in SMEs which left the employers' association	Disappearance of pattern agreements Low coverage in new service industries

Table 2. Collective bargaining coverage, employers' organizations and union density 2007

	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100
France	**U**							**E**		**Cov**
Netherlands			**U**					**E**	**Cov**	
Denmark						**E**		**U**	**Cov**	
Germany			**U**				**E Cov**			
UK			**U**	**Cov, E**						
USA	**E**	**U, Cov**								

Cov = Bargaining coverage (non-standardised).
E = Employers' density: share in % of employers member of an Employer organization (private sector).
U = Union density: share in % of employees who are union members.
*2000

Source: Visser 2008, European Commission 2006

Table 3. Union # and employers density* and extension of agreements

	Trade Union density 1980	Trade Union density 1990	Trade Union density 2007	Change 1980 – 2007	Employer density 1994-1996*	Employer density 2000	Change 1994/6 – 2000	Extension of agreements by the state
USA	22	16	12	- 10	0	0	-	No
UK	51	39	29	- 22	54	40	- 14	No
DE	35	31	20	- 15	72	63	- 9	Few and

								decreas-ing
FR	18	10	8	- 10	74	74	-	Very high and stable
NL	35	26	26	- 9	79	85	+ 6	Very high and stable
DK	76	71	68	- 7	39	52	+ 13	No

Net union density (Trade union membership minus inactive members (retired, students etc.)
*Measured by employees covered by employer peak organizations
Source: trade union density: OECD 1997:71 and Visser 2008; employer density: data for 1996/7, Traxler 2004; for 2000, European Commission 2004

A precondition for high coverage as well as for inclusiveness within industries seems to be multi-employer bargaining at the industry or sectoral level. This gives employers organizations an active role in collective bargaining, which they do not have if decentralized bargaining is dominant, as it is in the UK or the US. Multi-employer bargaining makes co-ordination of collective agreements between different industries easier. It also gives collective bargaining more stability because, to an extent, it takes wages out of competition within any given industry. It encourages the social partners to include new types of workers, new companies and new industries in collective bargaining and to avoid fragmentation of bargaining if product markets are deregulated (see below). In addition, it aggregates the interests of employees and employers, which can give the social partners a better opportunity to negotiate other issues than only wages at the industry or national level and gives them a strong voice in negotiations with the government. An example of this is the strong involvement of the social partners in vocational training in Germany and Denmark (Bosch and Charest 2010).

The country monographs clearly show that the scope of multi-employer bargaining and its coordination is absolutely central to explaining the differences between the countries. In Denmark, the country with the lowest share of low-wage workers, unions pursued a solidaristic wage policy as in other Scandinavian countries. The Danes have successfully reduced wage differentials between industries and between different groups of workers (by gender, skill and region) within industries, which was possible only because of the strength of the national umbrella union federation[6]. Furthermore in 2005 the social partners also agreed to introduce a high minimum wage for all industries – see below.[7] This policy can be explained in part by the high trade union density. Unions have high shares of members from low wage industries and push for more wage equality (EC 2008: 86).

Such strong intervention in the overall earnings distribution is not a feature in the other countries with multi-employer negotiations where unions are dominated by workers with strong bargaining power. In France, the Netherlands and Germany, pay differentials between industries have remained high. In these three countries, unions have not pursued, or did not have the power to pursue, a solidaristic wage policy. In all three countries, unions in the typical labor intensive low wage industries have been too weak to negotiate wages much above a low floor. In many French industries the national minimum wage is higher than the collectively agreed rate. In Germany, the collectively agreed rates in a number of industries are below the low wage threshold. Multi-employer bargaining, however, has helped to reduce wage differences within industries and between regions. But, in recent years, the metal industries agreement no longer serves as the pattern agreement for the whole economy, diminishing the impact of bargaining on wage differentials.[8]

In the decentralized bargaining systems of the UK and the US there are virtually no higher level or pattern agreements left. Until the 1980s significant parts of the UK economy, including much of private manufacturing and even some private services, had multi-employer agreements. These agreements set minimum terms and conditions for the sector or industry concerned. Though they were not legally binding, in effect they did set floors. During the course of the 1980s such agreements disappeared and bargaining is now confined to the company or even estab-

[6] As a consequence, unions in the highly productive industries, such as manufacturing, have not pressed for wage increases fully corresponding to the growth of their productivity. Instead, the gains from productivity growth were relatively equally distributed across the economy. Therefore, in Denmark workers receive decent pay in industries that are typically low wage in most other countries.

[7] Overall collective bargaining in Denmark is a powerful instrument for preventative intervention in the national earnings distribution, which eases the redistributive burden imposed on the welfare state. This preventative intervention also supports the citizen status even of low-wage earners. They are tax payers, whilst all workers and not just the low wage ones are recipients of universal welfare transfers like child allowances.

[8] In Germany and the Netherlands, the major coordination mechanism between industries (and regions in Germany) was provided by pattern agreements. The pace was set mainly by the metal industries agreement and most other industries followed. The amount of low wage work in Germany increased when the metal industries agreement became significantly less important in setting such a pattern because more and more employers' organizations refused to follow it and an increasing proportion of employees were not covered by an agreement at all.

lishment level. Thus, a dramatic fall in union density was accompanied by a major change in the industrial relations architecture. Today, therefore, coverage in the United Kingdom is only slightly higher than union density. The same is true in the United States, where the steady drop in union density since the mid-1970s is entirely a function of the decline in private-sector union membership. Collective bargaining takes place mainly at the company level and only employees at the relevant company are covered. Coverage is not extended by the state or by membership of an employers' organization. Thus, falling trade union membership not only reduced coverage but also the indirect spill-over influence of collective bargaining on the economy as a whole[9]. Fewer and fewer companies are afraid of union organization campaigns and are therefore more willing than they used to be to pay lower rates.

Germany was regarded for many years as a flagship of coordinated market economies with low earnings dispersion. It still has much higher coverage by collective agreements than the USA and UK but nearly as many low wage earners. This specific combination of high coverage and low inclusion needs some explanation. The options for companies to avoid coverage by collective agreements have been substantially increased by the use of new partially or unregulated forms of work (mini-jobs, agency work, posted workers) or by outsourcing them to non-covered SMEs in the same or other industries. Most restrictions on the use of agency work were abolished by the Hartz laws in 2004. After this deregulation in 2004 the amount of temporary agency work grew dramatically - from about 300,000 in 2003 to 850, 000 in June 2008. The law, however, still requires equal pay for agency workers, but firms can sidestep this requirement through the use of collective agreements. Employers have exploited this loophole by reaching agreements with the "Christian Trade Unions", which generally do not have members in the affected firms and are supporting employers, fixing wage rates at between €5 and €7. Another striking illustration of the "protection gap" is provided by the case of "mini-jobs" positions where the top earnings are limited to €400 per month. "Mini-jobbers" do not pay social contributions or income tax, and are not covered by social insurance; instead employers pay a flat rate tax. Mini-jobbers are legally (or via collective agreements) entitled to equal treatment in terms of hourly wages, working-time, holidays, sick pay and other employment rights (and notably protection against dismissal), but in practice these requirements are generally not met. The number of mini-jobbers has increased dramatically in recent years and, by the

[9] Until the 1980s many US manufacturing companies followed the agreements of the Big Three in the car industry. Today there is no pattern agreement left even within the car industry - the Big Three have become relatively smaller and are under extremely high competitive pressures from other companies that are not covered by an agreement (Levy and Temin 2007).

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mid-2000s, mini-jobs comprised about 15% of total employment and an even larger proportion in some low wage sectors (25% in retail, 36% in hotels and restaurants).

3. Regulating Low Wages: The Role of Minimum Wages

3.1. Different institutional arrangements and different policies

The minimum wage takes different forms in the six countries studied[10]. In France and the Netherlands, collective agreements fix minimum wage levels at the industry level, which are then usually extended by the government to uncovered workers throughout the industry. These agreements not only set a minimum pay floor but also establish a complete pay scale with different rates for different types of jobs and employee characteristics (mainly skills and seniority) and, in many cases, additional industry specific premiums and bonuses as well as some fringe benefits. In Germany, in a small number of industries such as construction, cleaning and postal services, the government declares the minimum wage set in the industry collective agreement as binding within the industry but generally does not extend other terms of the agreement.[11] In Denmark, the social partners agree on a national minimum wage floor, which is enforced by unions and employers. Finally, the United Kingdom, the United States, France, and the Netherlands have a legislated national minimum wage rates (NMW in the following), often called "statutory" or "legal" minimum wages.[12] In France and the Netherlands, if the minimum pay rate set by the industry collective agreement is lower than the NMW, the latter must apply.[13]

Three characteristics of a NMW play key roles in shaping the wage distribution: its coverage, its level, and its implementation. One may define the legal (or "formal") "inclusiveness" of a NMW by the extent of its legal coverage. This coverage does not differ much across the four countries in this study with a NMW (see Table 4), since almost all industries and firms are covered. But there are also some special rates for young workers that constitute legal "exit options" (i.e. legal ways to avoid and/or circumvent stricter regulations). In the Netherlands, these youth rates are very low and, in that sense, the NMW in that country is less "inclusive" than it is in

[10] At the time of writing, Germany is having a serious debate about the introduction of a national minimum wage (Bosch and Kalina, 2010).

[11] These agreements may set different rates for different groups of workers, for example, in construction, for unskilled and skilled workers.

[12] In recent years, the United States has also seen a rise in state-level minimum wages at levels that are higher than the federal minimum wage, but still low relative to the minimum wage rates in the other five countries.

[13] In France in 2005, in more than 50% of the industry collective agreements, the minimum pay rate was below the NMW and therefore not implemented (see Gautié, 2010).

Table 4: Comparative table of minimum wage legislation

	DK	D	F	NL	UK	US
Existence of a legal NMW	No, but a national wage floor set by a collective agreement between unions and employers	No, but legal minimum wage in some industries (eg construction.) . Collective agreements at industry levels set wage floors in industries with strong unions	Yes. Introduced in 1950 and reformed in 1970 (introduction of the current "SMIC"). Indexed to consumer prices and must be raised annually - at least half the increase in the hourly wage rate of all blue collars. Most industry agreements on wages are declared as generally binding	Yes. Introduced in 1968 for adults only (24+, later 23+); linked to average growth rate of collectively negotiated wages but indexation has often been suspended by special legal measures. Since 1992 it can be suspended by government if the ratio of welfare recipients to employment rises above a threshold	Yes. Introduced in 1999. Low Pay Commission (which includes employer and union representatives) makes annual recommendations to government regarding uprating. No automatic indexation. However, between 2000-2006, the NMW was uprated above increases in the average earnings index.	Yes. Introduced in 1938; no automatic indexation to prices or wages. About 30 States have State minimum wages above the federal NMW.

				level Most industry agreements on wages are declared as generally binding		
Coverage	Some firms do not implement the national wage floor, especially in LW sectors	Increasing number of firms withdrawing from industry collective agreements	All sectors (except public services) covered by SMIC. Special rate for 16-17 years olds - can be paid respectively 80% or 90% of NMW, if with less than 6 months tenure. Apprentices and some trainees not covered.	All sectors covered by NMW; special rates for youth introduced in 1974 starting at 30% of adult minimum for age. 15; up to 1993 not applicable to jobs of less than about 13 hours per week	All sectors covered. Separate, lower "development rates" for 16-17 year olds and 18-19 year olds. Enforcement quite strict although some agencies employing migrant labor find ways of evading NMW legislation.	Applies to all firms with more than $500,000 annual business activity, and to all employees with very few exceptions. During the first 90 calendar days of their employment, youths under the age of 20 must be paid no less than $4.25 per hour (the current federal minimum wage is $5.85 per hour at the end of 2007) State-level minimum wages above federal

						level
% of employees at NMW (2005) *	-	-	16.3%	2.2%	1.8%	1.3%
NMW as a % of LW threshold (beginning-mid-2000s)	88% (wage floor agreed by social partners)	-	95%	84% (adult minimum wage)	79%	54%
Gross (adult) NMW as a % of gross average wage (2006)**	-	-	47%	43% (46% for aged 23 or more, full time employees)	35%	33%
Net NMW, at PPP, USD, (2006) ***	-	-	7.68	7.05	7.66	7.66
Labor cost at NMW as % of average labor cost (2006) ***	-	-	39%	43%	34%	33%

France, the UK and the US. However, the gap between formal regulations and reality may be important. The industry case studies carried out in the comparative research (see Gautié and Scmitt, 2009) shed some light on the “effective” (as opposed to “formal”) inclusiveness of the NMW. Among the occupations covered, housekeepers in hotels provide the most striking example (see Vanselow and alii., 2009). Practices that are more or less illegal are common in all five European countries: undeclared work and target quotas of rooms per day to be cleaned that are not feasible in normal hours (i.e. when the monthly wage is divided by the actual number of hours worked, the real hourly rate can be significantly below the legal NMW). Unpaid overtime (which is the most common way of circumventing the legal hourly minimum wage) is also a feature in other sectors in some countries (such as retail in France). Overall, there may be a non negligible number of workers earning less than the NMW, especially in countries where its level is high or enforcement is low.

In the mid 2000s, the level of the NMW differed substantially, both in absolute and relative terms, between France, the Netherlands, the UK and the US. At the beginning of 2007 the monthly purchasing power[14] of an American full time (adult) minimum wage earner was notably lower than the purchasing power of his or her European counterpart (about 32% lower than in France, 37% lower than in the Netherlands, and about 40% lower than in the UK – see Regnard, 2007). In 2006, the gross wage of a full time minimum wage earner was just under half of that of the average wage of a full time worker in France and the Netherlands (47% and 46% respectively[15]), and only about one third in the UK and the US (35% and 34% respectively) – Immervoll (2007). These contrasts are the consequence of very different policies during the past 15 years or more. The NMW was frozen in nominal terms in the United States between 1996 and 2007 and increased only a small amount in the Netherlands during the same period. As a consequence, the value of the NMW decreased in the two countries both in real and relative terms.[16] By contrast, the increase in the NMW has been substantial in France and the UK (since its introduction in 1999). In France, the NMW (the so-called “SMIC”) is legally indexed to consumer prices and (partially) to the growth of the hourly wages of blue-collar workers. Thus, even without any specific government intervention, the pur-

[14] Based on the monthly value of NMWs converted into dollars at the purchasing power parity rate. Table 7 provides an estimate of the purchasing power of the hourly net NMW.

[15] In the Netherlands, 46% refers to employees who were 23 years old or more, working full time.

[16] Another consequence of the long-term stagnation of the real value of the federal minimum wage has been the rise of state-level minimum wages (see Dube, Leister and Reich, 2007) and more locally oriented "living-wage campaigns" (see Pollin and Luce, 1998).

chasing power of minimum wage earners is preserved and even increases through time[17].

The level of the NMW in relative terms (i.e. expressed as a percentage of the average or median wage) determines how hard it "bites". The share of employees receiving the minimum wage is highest in France (see Table 4)[18]. NMW policies may have a direct impact on the global incidence of low wage work by reducing wage inequality, at least at the bottom of the wage distribution. There is indeed strong evidence that the introduction of a NMW (as in the UK) or the increases in its relative level (as in both the UK and France) reduce wage dispersion below the median and below the low wage threshold[19]. Even if the NMW has remained well below the low wage threshold in the United Kingdom, it may nevertheless have contributed to the stabilization of the share of low wage work witnessed since the end of the nineties[20].. The story is different for France, where the low wage threshold was only about 5% higher than the SMIC in the early 2000s, and where the share of low wage work has been declining in the past ten years. In sharp contrast, the small increments in the nominal value of the minimum wage in the Netherlands played an important role in the rise in low wage work there in the 1990s. In the United States, the real and relative decline of the minimum wage may have been a key factor in the increase of inequalities in the bottom half of the wage distribution in the US in the 1980s and 1990s (Di Nardo, Fortin and Lemieux, 1997; Manning, 2003, chap.12). Meanwhile, the absence of a NMW in Germany and the high differentiation of the NMW by age in the Netherlands explain the long tail in the income distribution down to very low rates of pay which are effectively cut-off by the minimum wages in UK and France. Note that collective bargaining and statu-

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[17] Moreover, over the last 30 years – and notably since the end of the 1990s - French governments have increased the SMIC beyond these legal requirements. The hourly "SMIC' increased by 33.4% between 1999 and 2006 (19% in real terms). This resulted partly from the implementation of the law on the reduction of weekly working time (the so-called "35 hours law") when the government chose to maintain the monthly earnings of minimum wage earners. In the UK the NMW rose by 48.6% during the same period.

[18] The figure for France is not directly comparable with the figures for other countries. It covers all those workers whose basic wage (i.e. without taking into account any bonus or premia, such as those for seniority) is the SMIC. But the total hourly compensation of many "SMIC" earners is much higher than the hourly SMIC: in 2006, for instance, 18% of SMIC earners had an effective total hourly compensation 30% higher than the SMIC – see Gautié (2010).

[19] In the United-Kingdom, the NMW has cut the gap between the 50th and the 10th percentile of the wage distribution by 5 percentage points (Metcalf, 2007). In the English care home workers sector the introduction of the NMW caused significant compression at the lower end of the wage distribution (Machin, Manning and Rahman, 2003).

[20] This may be due to the « spill over effects" of the NMW increases: wages above the NMW can be impacted by its increases, for both economic and social reasons.

tory minimum wage can interact. Within Europe as a whole, there is evidence to suggest that strong collective bargaining institutions tend to push up the level of the statutory minimum wage when there is one (EC, 2008).

3.2. The impact of minimum wages on low wage workers

There is an extensive literature on the effect of a NMW on employment (see Card and Krueger, 1995; Manning, 2003; Ragacs, 2004; Neumark and Wascher, 2006; Metcalf, 2007, for the UK case). One of the lessons of the "new minimum wage research" is that there is no simple relationship between minimum wages and employment. Theoretically, the relationship is indeterminate. Minimum wages may increase efficiency by reducing turnover or improving motivation. They may also increase incentives to work. Where there are monopsonistic labour markets, wages will be below the competitive equilibrium. In these circumstances, a minimum wage will compensate for the low bargaining power of labour and, by setting a higher wage, may even increase employment (Stigler, 1946). For a long time monopsony was seen as an exceptional situation. Manning (2003) argues, however, that "one should not get hung up on the prefix 'mono': no employer exists in isolation … and one should think of a model of oligopsony or 'monopsonistic competition'" (p.360). He goes on "There are many frictions in the labour market which give employers the power to set wages like mobility costs or lacks of transparency about labour market opportunities. If the market power of employers is strong then this explains the amazing wage differentials between workers doing equal work like the wage gaps between men and women, small and bigger firms, good or bad employers"[21].

Overall, there seems to be a "range of indeterminacy" (Lester 1964) in which minimum wages can be set without negative employment impacts. Reviews of the empirical research have come to the conclusion that the effect on the employment of adults has been in general negligible in countries where the NMW rate is rather low in relative terms (as in the US or the UK). In the case of young people, there have been negative impacts in some cases (OECD 1998: 47, see also Neumark and Washer, 2006). But the negative impact on employment may be more sizeable in countries, like France, where the level of the NMW is high compared to the median wage – see Abowd, Kramarz, Margolis and Philippon (2001) for comparative evidence on France and the USA.

[21] The idea that monopsony power of employers maybe widespread in advanced economies is also put forward by Erickson and Mitchell (2007). They see "monopsony as a metaphor for the emerging post-union labour market. They argue employee voice needs to be restored to counter the undesirable consequences, such as wage inequality and reduced worker rights, associated with strong macroeconomic performance. Concerning the gender dimension, Bernstein, Hartmann and Schmitt (1999) emphasize how much, in the US, the national minimum wage is a "working woman's issue".

Potential negative employment impacts of minimum wages might be muted by subsidizing wages - notably through social contributions exemptions, as in France, (Caroli and Gautié, 2008; Gautié 2010) or in Germany with the mini-jobs, which are exempt from social security contribution and income tax (see Bosch and Kalina, 2008a: 48 and 52).

Another possible way of muting the employment effects of rising minimum wages are policies designed to improve productivity – policies such as investment in education and training, active labour market measures, support of life-long learning, incentives for innovation and the like.

Denmark, with its high collectively agreed national minimum wage of €12 per hour, is a good example of such a proactive "empowerment" strategy. Extensive training in Denmark helps to raise productivity levels of less-skilled workers to the level required by the minimum wage.[22] Less-skilled workers in Denmark (those with only a lower secondary education) receive more job related training hours than is the case in any of the other five countries in our study (OECD 200a: Table C5 1a)[23]. The highly skilled in Denmark also receive more training than elsewhere, but the gap between the skill levels is still lower in Denmark than in our other countries. Such institutional complementarities may help to explain why the "penniless/jobless" trade-off – depicted by Krugman (1994) - does not necessarily hold in a cross-country comparison. In the mid-2000s the wage distribution was much more compressed in Denmark than it was in the US, but the employment rate (including the employment rate for less-educated workers) was nevertheless higher in Denmark than it was in the United States. In the case of the UK, the evidence concerning the impact of the introduction of the NMW on firm-provided training is more mixed: training decreased in some firms (with a potential negative impact on future wages), while others appeared to react by investing more in their employees.

Aside from the potential negative impact on employment and hours worked, a high minimum wage may involve other costs for LW workers – mainly in terms of work intensification, reduced fringe benefits or "deferred compensation." Research done for the UK Low Pay Commission indicates that some minimum wage recipients have had to work harder to "justify" their higher wages, whilst, in some cases, other monetary rewards, like bonuses, have been reduced (Denvir and Lucas, 2006). A small proportion of affected firms also reduced overtime rates (Low Pay Commission, 2007). In addition some employers reduced fringe benefits in order to compensate for the introduction of NMW and subsequent increases. In France, the

[22] To get a more complete picture one has to take into account initial education and training. Germany, for example, has much higher levels of initial vocational training than all the other countries which partially compensate for this by investing in further training (Bosch and Charest 2010).

[23] In Denmark training and education of adults is mostly financed by enterprises, or the state (Lassen et al 2006)

high level of the SMIC may have contributed to flatter wage profiles, and therefore to a low wage trap[24].

Nevertheless, from a dynamic perspective a NMW can prevent a “race to the bottom” that might be encouraged by a variety of economic circumstances or institutional changes. The recent experience of Germany, which despite recent debate (Bosch and Kalina 2008b), still has no NMW, provides a dramatic example here. In some sectors, such as meat processing (see Grunert et al., 2009)), a growing number of employers have withdrawn from sectoral collective agreements and have taken advantage of the very high unemployment levels (partly caused by the low growth following the reunification), as well as (more recently), of the entry of Central and East European countries into the EU, to set very low wages (4 euros per hour or even less). As a consequence, local workers are in danger of being undercut by "posted" workers (foreign workers who technically work under the labor law of their country of origin, not of the country where they are actually working) with very low reservation wages (see Grunert et alii., 2009, and Bosch and Weinkopf, 2008). In hotels (Vanselow et al., 2009), in hospitals – for cleaning activities - (Méhaut et alii., 2009), as well as in call centers (Lloyd et alii., 2009), the use of outsourcing to subcontractors is particularly intensive in Germany as compared to the other countries, since the arrangement allows employers to escape the collective bargaining institutions. In one of the case study call center, entry wages were set at 6 euros per hour for qualified workers. Such practices help to explain the significant increase in the number of low wage workers in Germany. Overall, a NMW can appear as an effective counterbalancing factor to the consequences of the decrease in the inclusiveness of collective bargaining.

4. Product market regulation and pay setting

Labor standards often depend not only on employment regulations, but also on the structure of product markets and their regulation. Often public enterprises were monopolies and price-setters, which allowed them to pay high wages and provide good working conditions. In addition, tariffs, conduct regulations, including restriction on prices and requirements to respect agreed wages (such as prevailing wage laws) and market entry regulations often created a supportive environment for collective bargaining and labor market regulation.

Over the last two decades, many product market regulations have been weakened or abolished. This deregulation has sometimes been determined at the national level and sometimes at the supranational level by international agreements,

[24] There is also some evidence that the significant decrease in wage mobility at the bottom of the wage distribution during the seventies was correlated with the large increase of the SMIC during this period (Gautié, 2010).

such as those concluded in the World Trade Organization (WTO). Indeed, it is not too fanciful to describe product market deregulation as organized globalization via (self)-transformation of the national states. Deregulation of product markets has been a major preoccupation of the EU, with the aim of creating a single, competitive European market. The EU member states agreed to deregulate important industries like gas, electricity, water, communications (post and telephone) and transport. In most countries public enterprises had dominated these industries. Because of EU directives, the member states were obliged to open entry to new competitors. In most cases EU member-states also privatized public firms or are planning to do it. In theory the European market for the provision of services has been open for a long time. However, the possibilities were only rarely exploited before the early 1990s. Since then, and particularly since the 2004 entry of new Central and East European member states, competition has become more and more common. The most recent initiative is the so called Services Directive. Since many service markets are highly regulated by licensing and other standards, the European Commission proposed in its first drafts of this directive to apply the principle of origin to all services with some exceptions (lawyers, of course, who drafted the directive, but also the health sector).

There are tensions between product market deregulation and labour standards. In some cases, re-regulation has taken place or provisions to support labor standards have been agreed:

- *Posted Workers Directive*: Since services could be offered in other countries with the working conditions of the home country, this made it possible for foreign competitors to undercut terms and conditions. The Posted Workers Directive of 1996, however, allowed national governments to set minimum standards or to extend collective agreements such that national and foreign competitors offer the same pay and benefits.
- *Services Directive*: Because of substantial opposition in many EU countries, the principle of country of origin for labor standards has been removed from the Directive on Internal Services of 2006, which means that is now left to the states to require that local rates are applied.
- *Privatization*: In some countries regulatory authorities have been established with some power to enforce labor standards. In the German postal industry, new competitors have to be licensed and the regulatory authority can require that they pay prevailing wages.[25]

[25] This, however, has not been enforced. Therefore a minimum wage was agreed upon in 2007. This industry specific minimum wage has been extended by a decree of the Labour Ministry.

The OECD has developed a wide range of indicators monitoring changes in product market regulations[26]. The results show that, over recent years, product markets have been deregulated substantially in the six countries in our study (see Table 5; Conway and Nicoletti 2006: 42). In 2003, the United Kingdom had the least regulated product markets, followed by the US and Denmark, Germany and Netherlands, with France some distance behind (Conway and Nicoletti 2006: 47).[27]

Table 5. Overall indicator of product market regulation, 1998 and 2003 for six countries (6=high, 0= low)

	1998	2003
USA	1.3	1.0
UK	1.1	0.9
DK	1.5	1.0
DE	1.9	1.4
NL	1.8	1.4
FR	2.5	1.7

Source: Conway, Janod and Nicoletti, 2005: 59

The key question is how these changes in product market regulation affected labor standards (Table 6). In short, the impact varied across the countries and has been filtered by the national institutions regulating the labor market. In the United-States, the United-Kingdom, and Germany product market deregulation has been a major factor bringing wages back into competition and in increasing the incidence of low pay. In the case of the United-Kingdom, such forces were aided and abetted by industrial relations legislation (which made it more difficult for unions to organize and for them to pursue industrial action) and by widespread privatization in the 1980s and early 1990s. In the US, deregulation of the trucking industry was a major reason for the break up of employers organizations and the collapse of one of the few multi-employer agreements - the "National Master Freight Agreement" - and substantial wage cuts in this industry (Belzer, 2000: 110). The abolition of

[26] The summary indicator ("economy wide product market indicator") is based on seventeen indicators summarizing information on 156 economy-wide or industry-specific regulatory provisions. These detailed indicators cover three broad regulatory domains: state control over business enterprises; barriers to entrepreneurship; barriers to international trade and investment (Nicoletti, Scarpetta and Boylaud, 1999).

[27] The United States had already started deregulation in energy, transport and communication between 1975 and 1985. The United-Kingdom followed suit between 1985 and 1995. Denmark and Germany deregulated these markets primarily between 1995 and 2003. France started deregulation between 1995 and 2003, but has still not fully implemented the EU directives (Conway and Nicoletti, 2006).

prevailing wage laws in the construction industry in many US states had a similar effect on multi-employer bargaining and pay levels (Philips, 2003).[28] In Denmark, the Netherlands, and France, deregulation of product markets has had less impact on wages and benefits since deregulation did not allow downward pressure on employment practices in affected firms and industries.

Table 6. Product market deregulation and labour standards

1.USA	Fragmentation or disappearance of collective bargaining in deregulated industries. Lower threshold (minimum wage).
2. UK	Disappearance of industry wide bargaining in affected industries. Fragmentation or disappearance of collective bargaining in deregulated industries. Since 1999 lower threshold (legal minimum wage).
3. Germany	Threat to, fragmentation of or disappearance of industry-wide bargaining. No lower threshold. High percentages of low wages in newly privatized industries (postal services etc).
4. France	Low impact because of extension of industry-wide collective agreements and legal minimum wage.
5. Denmark	Low impact because of high trade union density and high coverage by collective agreements, and the national minimum wage set by social partners.
6. Netherlands	Low impact because of extension of industry-wide collective agreements and legal minimum wage.

More or less the same principles apply to the opening up of European markets for services from other countries. Posted-workers are officially employed by a foreign firm which delivers a service to a domestic client firm. The pressure on domestic wages depends heavily on the labor market regulations in the client firm's country (Table 7). The downward pressure is greater in countries such as Germany, where there is neither statutory national minimum wage nor legal extensions of collective agreements. Posted-workers can be found in the German meat processing industry, for instance, where they can be paid as low as 3 to 5 euros an hour (see Grunert et alii., 2009)).

[28]For a fuller discussion of the connection between product market deregulation and the labor market in the United States, see also Peoples (1998).

Table 7. Freedom to provide services and its potential impact on labour standards in the EU

1. USA	Does not apply.
2. UK	Minimum wage has to be paid to posted-workers.
3. Germany	Legally binding minimum wages were introduced following the posted workers directive only in a few industries (construction, cleaning, postal services). In some other industries since 2004, with the entry of the new EU member states, substantial undercutting of local rates – especially in the food industry. Germany a major target country for foreign providers since it does not have a statutory legal minimum wage
4. France	Social dumping based on posted-workers is limited by the legal extension of industry-wide collective agreements and statutory national minimum wage. Probably some problems with enforcement in some industries.
5. Denmark	Social dumping based on posted-workers has been limited so far due to high trade union density and high coverage by collective agreements·
6. Netherlands	Social dumping based on posted-workers is limited by the legal extension of industry-wide collective agreements and statutory national minimum wage.

5. The "Social Wage"

Pay setting in the firm is partly influenced by outside institutions the firm including industry-wide collective bargaining and minimum wages. Firms themselves are also institutions and differ as much as the external institutions influencing pay and working conditions. To varying degrees governments oblige firms to pay, in addition to hourly gross wages, "social wages" (health insurance, paid leave and pensions, for example) and to implement regulations on working conditions including equal treatment or health and safety standards.

Beyond direct compensation workers may receive other benefits – such as paid vacations, paid public holidays, health insurance, paid sick days, pensions and other forms of compensation. In the United States many of these benefits are paid for privately and are entirely at the discretion of employers, though workers there are eligible, for example, for Social Security pension benefits, as a result of their payroll-tax contributions.

All European welfare states require firms to continue to pay their employees when they are sick. The cost of sick pay is often shared between firms and the state. In addition, in all European countries employment is directly linked with mandatory health, old age, unemployment and accident insurance, for which both employees and employers make contributions. In some EU countries, some welfare entitlements are financed by the state (mainly in Denmark) and in some cases, such as the National Health Service in the UK, entitlements are linked with citizenship (or residence) status and not employment. These rights are mandatory and cannot be denied to the low paid, which means that alongside the minimum hourly wage, there is also a minimum social wage, which is often sizable.

In the US a considerable proportion of *average* labor costs (about 37% in 2000) are non-wage costs (EBRI.org 2006), with the latter substantially lower for low-wage workers, who generally have lower levels of non-wage benefits such as health care and paid time off. This overall US share is not far below the 43.3% non-wage costs in Germany or the about 45% rate for France but many social benefits (holiday and sick pay for instance) are not legally regulated. This allows employers to pay low-wage workers social wages below the average. The National Compensation Survey, for example, shows that low-paid and part-time workers are frequently excluded from non-wage benefits. Only 76% of employees in the US receive paid holidays and only 57% receive sick pay. Among employees earning less than $15 per hour, these percentages are even lower, at 67% and 46% respectively. The figures for part-timers are 37% and 22% (US Department of Labor, 2006).

Thus for the low-paid the differences in social wages between the US, on the one hand, and the five European countries, on the other, are significantly larger than the differences for private wages alone. If the low wage threshold used here (i.e. two-thirds of the national median hourly wage) had been computed on the basis of social rather than private wages, the proportion of low wage workers would almost certainly be even higher than 25% in the US, and the gap with the European countries would be wider.

If, as in Europe, the government sets a minimum social wage, all firms are generally obligated to pay it. By contrast, many US employers, operating in highly competitive and price sensitive markets, see little possibility of paying non-wage benefits above the minimum wage since their competitors are not likely to follow suit.

6. No simple trade-offe between employment and wage inequality

It has been often argued that in face of skill-biased demand shifts there is an inescapable trade-off between employment and wages for low-skilled workers. Less inequality in Europe would therefore be linked with lower employment, and higher inequality in the US with higher employment. From the small sample of countries analyzed here one cannot draw definite conclusions about possible trade-offs in other countries. Given this limitation, however, the data on levels and development of employment rates does not support this theory. Contrary to conventional wisdom in Denmark and the Netherlands, countries with strong welfare states and high levels of collective bargaining, employment rates are higher than in the liberal economies of US and in UK, where wage inequality is much higher (See OECD, 2009, Appendix, Table C).

As discussed above (see section 3.2.) one would expect that high minimum wages would price at least the low skilled out of the market. The employment rate of persons (25-64 years) with less than upper secondary education are, however, highest in Denmark (63%) and the Netherlands and in France at the same level as in the US (58%). UK has the highest employment rate of the low skilled (66%) in spite of the introduction of a minimum wage while the decrease of wages below the level of the Bristish minimum wage did not improve employment prospects of the low skilled in Germany who have the lowest employment rate of the six countries with 54% (OECD 2008b: Table D). This confirms the results of a recent analysis of the OECD which found that income inequality is negatively correlated with labour force participation and employment rates (OECD 2006: 165).

These findings based on univariate analysis alone hint that institutional settings in some European countries help escaping the trade-of between employment and pay. They also do not preclude that in other settings (for example in France) such a trade-off may exist. It seems plausible that employment rate outcomes depend heavily on the mix of particular institutions and policies.

As mentioned above, a trade off between wages and employment could be avoided by increasing the productivity of workers by improvements in work organization, and investments in skills and technology. In some of the five industries under research some support for such high road strategies in countries with lower shares of low wage work were found. Front-line jobs in meat processing are more capital-intensive in Denmark and France where higher wages than in the four other countries were paid in this industry (Grunert et. al 2009). In German retail trade most sales persons are skilled and take over jobs which usually are done by supervisors in others countries (Carré et al 2009). Another example are hospitals. Low skilled and poorly paid jobs of “nursing assistants” in the US are transformed into better paid jos in all European countries (Mehaut et al 2009). In Denmark, France and Germany the jobs of call center agents are less fragmented and broader than in the other three countries although this does not always translate into higher pay in Germany. At the other extreme, in spite of high differences in wages work organization and job content was quite similar for hotel cleaners across all six countries without (Vanselow et.al 2009). This may illustrate the existence of the range of indeterminacy” (Lester 1964) in which wages can be set without negative employment impacts (see also above, the discussion in section 3.2).

7. Conclusions: Inclusive versus exclusive pay-setting institutions

In the two liberal market economies in Hall and Soskice's formulation (Hall and Soskice, 2001), the United Kingdom and the United States, the pay-setting regime is less "inclusive". Collective bargaining power is weak and does not extend much beyond union members. The national minimum wage is low relative to the average wage. It compresses wages in the low wage sector but does not reduce the incidence of low pay. As a result, workers do well or badly primarily depending on their individual bargaining power, which almost by definition is slight for those occupying the lower reaches of the labor market A critical difference between the United Kingdom and the United States is with respect to the impact of the state on the "social wage". Low paid workers in the UK can count on better benefits and working conditions than those available to their low-wage counterparts in the US – paid holidays, paid sick days, paid parental leave and health care, for example. Indeed, the lack of a "social wage" -more than any other factor-- separates the American low paid from their counterparts in all of the other countries in this study. Furthermore, EU directives on equal pay have improved the position of fixed term and part-time workers in the European Union and may do the same eventually for temporary agency workers.

In Denmark, France, Germany, and the Netherlands, "coordinated market economies", the role of institutions in determining wages is stronger.[29] However, the institutions and their interactions still differ substantially between these countries. All four countries have collective bargaining systems that are more inclusive than in the US or UK. A significantly larger percentage of workers are covered by collective bargaining agreements, this coverage being achieved in a variety of ways. In Denmark, high coverage simply reflects high union density. In France and the Netherlands coverage is extended because of the importance of employers' organizations and the legal extension of collective agreements. A statutory national minimum wage also plays an important role – especially in France, where without the SMIC collective bargaining institutions , would not have been be sufficient to contain the incidence of low-paid work. In the Netherlands and France, the role of the state in the regulation of the low end of the labor market is more central than in Denmark. Germany, one of the prototypes of coordinated economies, still has high union coverage. In recent years, coverage has declined as industry wide agreements have diminished in significance and employer density has declined. Unless the state intervenes to plug gaps in coverage and inclusiveness, the incidence of low pay is likely to increase and indeed this is what has happened in Germany

Product market, employment protection and social security policies can shore up collective as well as individual bargaining power, but the case studies and the

[29] In Hall and Soskice (2001) typology, if the USA and the United-Kingdom have usually been put forward as the reference models for liberal market economies, Germany, Sweden and Japan serve as the reference models for coordinated market economies. According to Hall and Soskice, France does not fit well as a coordinated market economy. Given the striking diversity amongst the group of countries serving as prototypes for the latter, some authors prefer to distinguish "corporatist" (Germany, Sweden) from "state-led" (France) varieties (Bosch Lehndorff and Rubery 2009).

national-level evidence show that these same features of labor markets and social policy can also reduce inclusiveness and increase labor-market dualism if some categories of employee are not covered. Germany provides a striking example of this in its treatment of some of its non-standard workers. These non-standard work arrangements, together with outsourcing of jobs to companies not covered by collective agreements, offer many "exit options" for employers[30].

The fairly stable incidence of low pay in Denmark and France can be explained by the stability of their industrial relations architectures and underlying political coalitions. These two countries managed to keep the share of low-wage workers stable despite structural change and an increase in the number of more vulnerable service jobs. The increase of low pay in the Netherlands was mainly negotiated within an institutional setting that was also fairly stable.[31] Collective bargaining in the United-States, the United-Kingdom and Germany are in transformation. Falling union density in United-States and the United-Kingdom has led to further "exhaustion" of the already weak collective bargaining system. Although coverage of collective bargaining is still much higher than in the United-States or United-Kingdom, Germany is losing ground because of the decline of industry-wide agreements and because of the creation of new "exit options" for employers; the country appears to be drifting towards the liberal model. Because of the absence of increases in the federal minimum wage in recent years, the United-States also provides an example of the deliberate neglect of institutional maintenance (Streek/Thelen 2005). In sharp contrast, the introduction of the National Minimum Wage in the United Kingdom and its gradual increase provide an example of the successful revitalization of instruments for low pay protection which had been removed by the Thatcher government.

In the case of Germany, some "exit options" already existed before the rise in low-wage work in the 1990s, but they were used relatively infrequently. Within a given set of institutions, there always exists a margin of discretion that can be used for good or ill. Especially at the bottom of the labor market, a strong employee voice is necessary at the establishment level for the enforcement of collective agreements, minimum wages and other employment protection regulation. Even where two countries have apparently equally strong wage setting systems at the aggregate level, enforcement might differ substantially. Virtuous circles between institutions inside and outside the firm might mutually support each other and lead firms to follow "high road" product and HRM strategies based on higher pay.

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[30] Referring to Gallie's (2007) typology of "employment regimes", Germany is a good illustration of a "dualist regime", as opposed to both "inclusive" (e.g. Denmark) and "market" (e.g. United-States) regimes.

[31] Using the Streeck and Thelen (2005) typology of change, this can be categorized as "conversion" of a tool to guarantee a wage floor at least partially into a tool for wage moderation (see also Salverda, Van Klaveren and Van der Meer, 2008).

Such virtuous circles function only on the basis of a common understanding of their mission. Thus, for example, equity norms shared by all the actors may emerge, which can be used to settle distributional issues. Social norms may be also particularly important in deterring opportunistic behaviour by employers, and may limit employers' use of "exit options." As such, in some circumstances, they may also constitute an important dimension of institutional "inclusiveness" at a national or industry level[32].

Such mutually shared norms or beliefs of the main actors give specific institutional settings their stability. They have to be reaffirmed regularly to be kept alive and transmitted to new generations of actors. Pay setting institutions not only embody social values but are reflective of historical compromises between different actors which might be subject to change. "Institutions frequently outlive their founding coalitions, and their endurance and robustness often involves a reconfiguration of their coalitional base in light of shifting social, political and market conditions" (Thelen 2004: 33) . The result might be changes of institutions but also different strategies within and outcomes from the same institutional setting. Changes in behaviors within a given set of institutions may be in some cases as important as changes in institutions themselves[33].

Minimum wages, and even more so minimum wage policies that reflect social and political commitments to equality and solidarity, have played contrasting roles among the countries in our study.

The potential negative impact of the relative high minimum wages or high collectively agreed minimum rates in Europe – especially in Denmark -- compared to the US seem to have been successfully counteracted by linkages with institutions providing high levels of productivity such as more intensive training for the less skilled. The impact of such institutional linkages needs to be further studied in order to avoid simplistic conclusions about the effect of minimum wages. Our country studies suggest the absence of obvious causal relationships between wages and

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[32] In the Danish call center industry, for example (see. Lloyd at al., 2009), something approaching a "high road" human resource strategy emerged despite the lack of formal agreements and regulations. In this case, the employer response does not seem to flow primarily from a culture of "social consensus" (as is often argued for the Scandinavian countries), but more from fear of retaliation from unions (even though union density is relatively low in this sector) and from concerns about being stigmatized in the eyes of both workers and consumers. Explicit "name and shame" campaigns such as those in the US hotel and retail industries also illustrate the use of social norms that low-wage workers can use to defend their interests.

[33]Germany offers a striking example. The large changes in the regulation of the German labor market are quite recent: the so-called "Hartz laws" (which included the deregulation of temp agency work, decreases in the generosity of unemployment benefit and other changes) have only been adopted since 2004. During the 1990s and 2000s, however, changes in employer behavior within a relatively stable institutional environment played at least as big a role as the formal reforms that followed.

employment at national level, whilst the link between the two variables seems to differ from country to country because of the diverging institutional architecture.

Whatever mix of institutions determines the extent of inclusiveness in any individual country, collective bargaining at a level above that of the company or organization is a common feature of inclusive systems. In achieving inclusiveness, the government cannot replace the social partners, but it must play a role if the incidence of low pay is to be small, a decent social wage is to be paid, and the consequences of low pay for the current living standards and prospects of its recipients are to be mitigated.

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