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**Article**

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# Long Hours for Low Pay

by Karl Brenke

There has been no robust growth of the low-pay sector in Germany since 2006. Over the past few years, a constant 22 percent of all employees have fallen into this category. The job structure within the low-pay sector has not changed in the last decade. In the economy as a whole, however, there has been less and less demand for low-skilled work, which is increasingly becoming concentrated in the low-pay sector.

The low-pay sector include many people in part-time and, in particular, marginal employment. Only half of them are in full-time employment. As a result of low hourly rates, they accept long working hours so as to be able to earn a reasonable living. Those in full-time employment in the low-pay sector work an average of almost 45 hours a week, and a quarter of them 50 hours or more. However, this does not go very far towards compensating for the disparity between their pay and average monthly earnings. Working hours comparable to those of low-wage earners are otherwise only seen at the top end of the pay scale, in other words, among high earners in full-time employment. The majority of part-time workers, particularly those with mini-jobs would like to work more and earn more; a hidden underemployment is evident here.

Working in the low-pay sector does not automatically or normally go hand in hand with social welfare benefits; only one in eight of low earners are Hartz IV benefit recipients. The proportion of people in full-time employment in the low-pay sector is particularly small; they only claim state benefits if they have to provide for a larger family. And only a minority of low-wage earners in part-time work or with mini-jobs receive social welfare benefits. There are normally other people living in their household who are in employment, or there is another source of income such as a pension or private support payments.

The present paper is based mainly on data from the German Socio-Economic Panel Study (SOEP).<sup>1</sup> This includes all employees apart from trainees, interns, or those participating in employment initiatives.<sup>2</sup> According to the standard OECD definition, these employees are classified as working in the low-pay sector if their gross hourly earnings are no higher than two-thirds of the median wage.<sup>3</sup> The minimum wage threshold in 2010 was 9.25 euros per hour gross.

In the following study, low wages will be considered from a different perspective than usual. The prime concern is not with socio-structural characteristics of employees or regional aspects,<sup>4</sup> nor are personal employment trajectories of relevance here.<sup>5</sup> Rather, the focus will be on remuneration and working hours, taking into consideration the household context of low-wage workers. The question as to what extent low pay goes hand in hand with social welfare benefits will also be addressed.

**1** G. G. Wagner, J. Göbel, P. Krause, R. Pischner, and I. Sieber, „Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland—Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Anwender),“ *ASTa Wirtschafts- und Sozialstatistisches Archiv*, no. 2 (2008).

**2** Employment initiatives and work opportunity schemes (one-euro jobs).

**3** Data on the hourly rate are not directly collected in the surveys of the German Socio-Economic Panel Study. However, it is possible to calculate this on the basis of the gross monthly pay and the number of hours normally worked per week: gross monthly pay divided by weekly hours multiplied by a factor of 4.2.

**4** For a more recent study on this subject, see T. Kalina and V. Weinkopf, „Niedrigbeschäftigung 2010: Fast jeder Vierte/r arbeitet für Niedriglohn,“ *IAQ-Report* no. 1 (2012).

**5** H. Schäfer and D. Schmidt, *Der Niedriglohnsektor in Deutschland: Entwicklung, Struktur und individuelle Erwerbsverläufe* Berlin (2011). Report written by the Cologne Institute for Economic Research (Institut der Deutschen Wirtschaft Köln) on behalf of the New Social Market Economy Initiative (Initiative Neue Soziale Marktwirtschaft).

## Low-Pay Sector No Longer Growing Disproportionately

The proportion of all employees working in the low-pay sector reached its peak in 2006, while it dropped slightly the following year and has remained constant at 22 percent since then (see Figure 1). Because—apart from cyclical fluctuations—there has been an overall increase in employment over the past few years, the number of employees in the low-pay sector has grown slightly in absolute terms, however. In 2010, this figure was 7.3 million. For several years now, the low-pay sector has therefore been developing at the same pace as total employment; the days of disproportionate growth of this sector seem to be over.

What is lower than the proportion of workers is the proportion of the total number of hours worked that can be attributed to the low-pay sector (19 percent). This means that those in this sector work fewer hours on average. In 2010, they worked 31.6 hours a week, while the corresponding figure was 38 hours on average outside the low-pay sector. This is solely due to the differences in the contractual working hours: part-time jobs, especially marginal employment (such as mini-jobs which pay less than 400 euros with no social security contributions), are overrepresented in the low-pay sector; on the other hand, full-time work is relatively uncommon (see Table 1). Nevertheless, as the dominant form of working hour arrangement in Germany, full-time jobs also

account for a significant proportion of employment contracts in the low-pay sector—just under half. They numbered 3.5 million in 2010. In terms of the contractual working hours, the structure of the low-pay sector barely changed at all in the last decade.

## Decline in Low-Skilled Work and Further Shift Towards Low-Pay Sector

The structure of requirements regarding qualifications has not changed in the low-pay sector, either. Throughout the whole of the last decade, just under half of low-wage workers were in an occupation for which no vocational training was necessary, and just as many had a job requiring an apprenticeship (see Table 2).<sup>6</sup> The rest carry out highly skilled work.<sup>7</sup> Those in part-time and marginal employment tend to have low-skilled jobs. Low paid full-time workers, on the other hand, are predominantly seen in occupations requiring an apprenticeship. The job structure of these employees has not changed in the last decade, either.

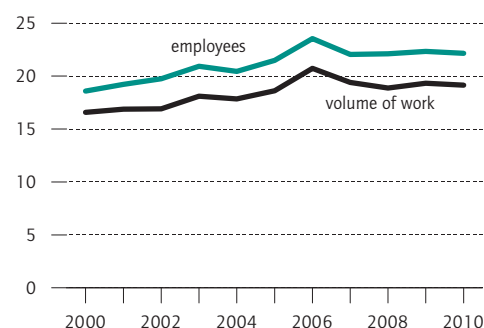
<sup>6</sup> Low-wage workers whose occupation requires an apprenticeship diploma include, for instance, sales assistants, practice nurses, domestic workers, bakers, butchers, those in the hospitality industry, florists, hairdressers, office workers, or carers.

<sup>7</sup> Low-paid employees in highly skilled occupations are to be found, for example, among teachers and in the social professions.

Figure 1

### Proportions of Employees in the Low-Pay Sector and Volume of Work<sup>1</sup>

In percent



<sup>1</sup> Excluding trainees and people in employment initiatives.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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The proportion of employment in the low-pay sector has been stagnating since 2007.

Table 1

### Structure of Employment<sup>1</sup> Within and Outside the Low-Pay Sector in 2010

In percent

	Low-pay sector	Other pay sectors	For information: proportion of all employees in the low-pay sector
Full-time employees	48	77	15
Parttime employees <sup>2</sup>	22	18	26
Occupying a mini-job or other marginal employment	30	6	60
Total	100	100	22

<sup>1</sup> Excluding trainees and people in employment initiatives.

<sup>2</sup> Excluding those in mini-jobs or other marginal employment.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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There is a relatively high number of part-time workers and people in mini-jobs who are employed in the low-pay sector.

On the other hand, we have seen a completely different trend outside the low-pay sector. Here, there has been a sharp decrease in low-skilled work. In line with this, there has been an increasing shift of low-skilled work towards the low-pay sector. Whereas just over a third of all jobs in Germany requiring no formal qualifications were still in this sector in 2000, ten years later it was almost a half (see Figure 2). Nevertheless, the proportion of low paid workers among those pursuing a highly skilled occupation is not only marginal—it corresponds to about a sixth.

The fact that low-skilled work is increasingly losing importance and a growing proportion of this is low paid may be because a relatively high demand for low-skilled jobs puts pressure on the pay level. Although unemployment has fallen in the past few years, including for those without vocational training, the unemployment rate among these individuals is still well above the average (see Figure 3). Evidently, the number of people who can only work in occupations not requiring a very high level of specialist knowledge is not decreasing much faster than the supply of unskilled work.

## Longer Than Average Working Hours in the Low-Pay Sector

It is clear that in the low-pay sector, both full-time/part-time employees and those in marginal employment work much longer hours than other employees with comparable working hour arrangements (see Table 3). However, low-wage workers are only normally able to compensate to a limited extent the difference in hourly rates compared to average earners by working longer hours. This also applies with respect to net wages, although there is a smaller disparity between low-wage workers and other employees than with gross pay—due to their relatively low level of deductions.

What is particularly striking are the long weekly working hours of many full-time employees in the low-wage sector. Half of them clocked up at least 42 hours a week in 2010; the average was as high as almost 45 hours. Nevertheless, a quarter of them claim to normally even work 50 hours a week or more.<sup>8</sup> Full-time employees in the low-pay sector earn on average a gross monthly salary of 1,350 euros. Despite low hourly rates, some even manage to take home a monthly gross pay of around 2,000 euros (see Figure 4). Consequently, a significant proportion of low paid full-time employees thus have an income above the level of social welfare benefit recipients—but they

<sup>8</sup> This is higher than what is normally permitted by law—see Section 7, para. 8 of the German Working Hours Act (Arbeitszeitgesetz).

Table 2

### Structure of Employees' According to Qualifications Required for Their Occupation

Proportions in percent

	All employees			Full-time employees		
	Low-pay sector	Other pay sectors	Total	Low-pay sector	Other pay sectors	Total
<b>2000</b>						
No vocational training	48	19	25	35	17	20
Apprenticeship and/or vocational college	47	60	58	59	61	61
University of applied science or other university	5	21	18	6	21	19
<b>2005</b>						
No vocational training	48	17	23	34	15	18
Apprenticeship and/or vocational college	47	61	58	59	62	61
University of applied science or other university	5	22	19	7	24	21
<b>2010</b>						
No vocational training	48	14	21	32	11	14
Apprenticeship and/or vocational college	47	60	57	60	60	60
University of applied science or other university	5	26	22	8	28	25

<sup>1</sup> Excluding trainees and people in employment initiatives.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

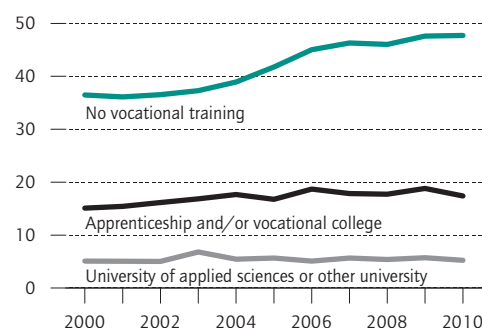
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Low-skilled work is continuing to decline in Germany—but not in the low-pay sector.

Figure 2

### Employees' in the Low-Pay Sector According to Qualifications Required for the Relevant Occupation

Proportion of all employees in percent



<sup>1</sup> Excluding trainees and people in employment initiatives.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

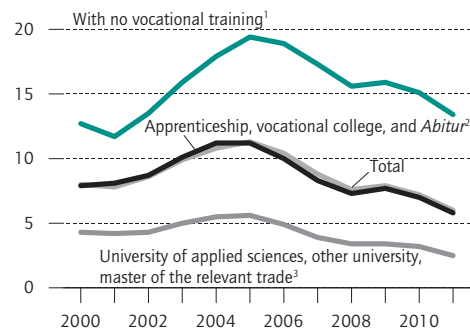
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There is an increasingly higher concentration of unskilled jobs in the low-pay sector.

Figure 3

**Unemployment Rate by Qualification**

In percent



1 ISCED 0 to 2.

2 ISCED 3 to 4.

3 ISCED 5 to 6.

Source: Eurostat.

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Unemployment among those with minimal qualifications is falling, too, but it is still high.

have to put in a lot of hours every week. This applies in particular to drivers, warehouse workers, and those employed in the hospitality industry. Otherwise, there is a relatively large number of employees working long hours every week among the high-income earners. Therefore, as far as full-time employees are concerned, low-wage workers and high earners work particularly long hours. There are, however, also quite a few full-time workers in the low-pay sector with very low monthly earnings. A quarter did not even earn a gross salary of 1,200 euros; the net pay of the quartile with the lowest remuneration is a maximum of 850 euros.

Particularly among full-time employees, overtime is widespread. It is only unusual for one-fifth of them—this also applies to employees outside the low-pay sector (see Table 4). Full-time employees in the low-pay sector who work overtime still put in more hours than others, however. Moreover, there are a significant number of employees here whose working hours are not stipulated by contract. These people work particularly long hours.

Those in marginal employment receive better net hourly rates than other workers in the low-pay sector.<sup>9</sup> These are normally people with special employment contracts (such as mini-jobs in particular) and they are not liab-

<sup>9</sup> Although the majority of those in marginal employment belong to the low-pay sector, there are also people who work shorter hours and have a higher income. A small group has a strong impact on the average hourly rates of those in marginal employment outside the low-pay sector.

Table 3

**Weekly Working Hours and Pay of Employees<sup>1</sup> Within and Outside the Low-Pay Sector in 2010**

In euros

	Full-time employees		Part-time employees <sup>2</sup>		Occupying a mini-jobs or other marginal employment	
	Low-pay sector	Other pay sectors	Low-pay sector	Other pay sectors	Low-pay sector	Other pay sectors
<b>Weekly working hours</b>						
Mean value	44.9	42.8	28.0	25.8	13.0	9.6
Lower quartile	40.0	40.0	22.0	20.0	8.0	6.0
Median	42.0	41.0	30.0	25.0	12.0	8.5
Upper quartile	50.0	45.0	32.5	30.0	16.0	12.0
<b>Gross hourly rate</b>						
Mean value	7.18	18.44	6.82	16.16	5.95	20.12
Lower quartile	6.35	12.96	6.06	11.90	4.76	9.58
Median	7.62	16.29	7.14	14.58	6.12	11.90
Upper quartile	8.57	20.90	8.06	18.06	7.62	19.05
<b>Net hourly rate</b>						
Mean value	5.30	11.95	5.19	10.48	5.64	10.88
Lower quartile	4.67	8.50	4.29	7.88	4.29	8.57
Median	5.56	10.64	5.24	9.52	5.95	9.52
Upper quartile	6.24	13.27	6.19	11.94	7.14	11.43
<b>Gross monthly pay</b>						
Mean value	1,49	3,263	793	1,723	305	774
Lower quartile	1,182	2,300	600	1,186	170	600
Median	1,350	2,900	800	1,566	325	800
Upper quartile	1,559	3,750	984	2,111	400	984
<b>Net monthly pay</b>						
Mean value	992	2,115	595	1,115	284	402
Lower quartile	850	1,500	450	783	170	240
Median	1,000	1,890	600	1,000	300	360
Upper quartile	1,150	2,400	720	1,400	400	400

1 Excluding trainees and people in employment initiatives.

2 Excluding those in mini-jobs or other marginal employment.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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Employees in the low-pay sector work longer than average hours.

le for tax and social security payments. Because of this privilege, earning 5.60 euros per hour, those with mini-jobs are paid even a higher net hourly rate on average than other employees in the low-pay sector (between 5.20 and 5.30 euros per hour). Moreover, the difference in liability for deductions also levels out the disparity in net hourly rates between part-time employees subject to social security payments and full-time workers to a considerable extent.

Nevertheless, hourly rates of part-time and marginal employees in the low-pay sector, too, are normally only meager and working hours often relatively long—even without overtime. Those in marginal employment are

particularly frequently remunerated with a piecework rate—and not only low-wage workers. In the low-pay sector, relatively long hours have to be worked for a fixed amount of pay, however.

### Only a Minority of Low-Wage Earners Claim Hartz IV or Housing Benefit

The argument that employees must be taking home enough to make ends meet is often heard as justification for the general introduction of a minimum wage. This should at least apply to those in full-time employment.<sup>10</sup> This argument does make immediate sense since, if income is insufficient, this becomes the responsibility of the state.

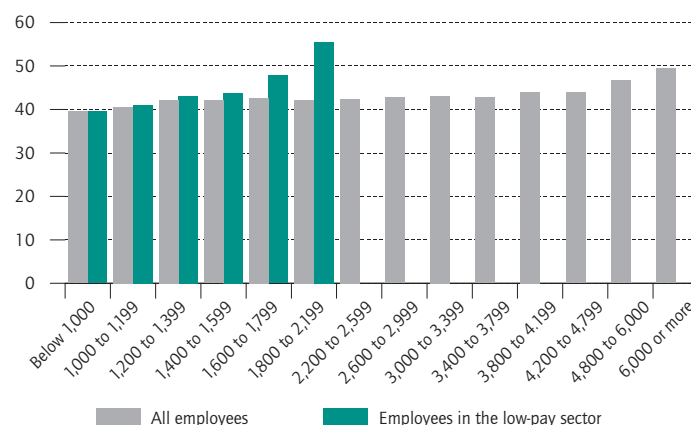
Correspondingly, minimum wage advocates regard the fact that so many employed people claim unemployment benefit II (reformed benefit combining long-term unem-

<sup>10</sup> See, for example, the policy statement by the German Social Democrats (Sozialdemokratische Partei Deutschlands) passed at the SPD Party Conference in Hamburg, October 28, 2007, p.54.

Figure 4

### Average Weekly Working Hours of Full-Time Employees<sup>1</sup> According to Their Gross Monthly Pay

In hours



<sup>1</sup> Excluding trainees and people in employment initiatives.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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Long working hours are found primarily in the low-pay sector and among high earners.

Table 4

### Employees<sup>1</sup> Working or Not Working Overtime and Their Weekly Working Hours in 2010

In hours

	Full-time employees		Part-time employees <sup>2</sup>		Occupying a mini-job or other marginal employment		Total	
	Low-pay sector	Other pay sectors	Low-pay sector	Other pay sectors	Low-pay sector	Other pay sectors	Low-pay sector	Other pay sectors
<b>Structure of employees in percent</b>								
No fixed working hours	11	5	8	5	28	31	15	7
Fixed working hours and regular overtime	69	75	69	68	24	24	56	71
Fixed working hours and no overtime	20	19	23	27	48	45	29	22
Total	100	100	100	100	100	100	100	100
<b>Mean values</b>								
No fixed working hours	49.0	47.2	25.9	21.6	12.7	9.2	27.0	34.1
Fixed working hours and regular overtime	45.8	43.6	29.7	27.3	15.2	13.1	37.5	40.2
Fixed working hours and no overtime	39.2	38.9	24.0	22.7	11.7	8.0	22.8	31.8
Total	44.9	42.9	28.1	25.7	12.8	9.6	31.6	38.0
<b>Medians</b>								
No fixed working hours	50.0	50.0	25.0	22.0	12.0	8.0	24.0	40.0
Fixed working hours and regular overtime	44.0	42.0	30.0	27.0	14.0	11.0	40.0	41.0
Fixed working hours and no overtime	40.0	40.0	24.0	21.0	12.0	8.0	20.0	38.0
Total	42.0	41.0	30.0	25.0	12.0	8.0	35.0	40.0

<sup>1</sup> Excluding trainees and people in employment initiatives.

<sup>2</sup> Excluding those in mini-jobs or other marginal employment.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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Overtime is generally widespread in Germany—those employed in the low-pay sector work particularly long overtime hours.



Table 5

**Employees Receiving Unemployment Benefit II**

In 1,000 people

	Full-time <sup>1</sup>	Part-time <sup>1</sup>	Occupying a mini-job or other marginal employment	Trainees	Total
2007	341	181	574	57	1,153
2008	333	201	639	60	1,234
2009	287	210	668	55	1,220
2010	296	224	699	46	1,265
1st half year, 2011	278	232	683	43	1,236

<sup>1</sup> Those employed in jobs subject to social security contributions.  
Source: German Federal Employment Agency (Bundesagentur für Arbeit), calculations by DIW Berlin.

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Only a small proportion of those claiming Hartz IV are in full-time employment.

ployment and welfare benefits = Arbeitslosengeld (unemployment benefit) II/Hartz IV) as an untenable situation.<sup>11</sup> However, what is often ignored in the debate about those claiming top-up benefits under Book II of the German Social Code (Hartz IV unemployment benefit), is that the absolute majority of the approximately 1.2 million top-up benefit claimants are in part-time, particularly marginal, employment. Only 280,000, i.e., a little more than a fifth of all top-up benefit claimants were in full-time employment in the first half of 2011 (see Table 5). This number has fallen over recent years—however, the number in part-time employment has actually increased. The fact that a part-time or mini-job alone is not enough to make ends meet can hardly come as a surprise and can certainly not be used as an argument for the introduction of a minimum wage. In any case, the number of employed people who receive state benefits on top of their salaries is far lower than the number employed in the low-pay sector.

Furthermore, state social welfare benefits are not a new phenomenon for low-income households. The German Social Assistance Act (Bundessozialhilfegesetz), which made it possible for top-up social benefits to be awarded, has been in effect since 1961, and the Housing Benefit Law (Wohngeldgesetz) since 1971, i.e., a long time before the minimum wage even became a topic of discussion in Germany. The introduction of unemployment benefit II at the beginning of 2005 also led to a change

in benefit entitlements. The number of working households receiving housing benefit fell from 480,000 at the end of 2004 to 280,000 in December 2005.<sup>12</sup> In 2007 and 2008, this figure was only slightly over 280,000, and in 2009—the year for which the most recent information is available—it increased to 290,000. This could be put down to the economic crisis at that time and the expansion of short-time working. The fact that some households decided to forego unemployment benefit II and, instead, claimed housing benefit combined with the reformed children's allowance may also have had a role to play here.<sup>13</sup>

It is not individual income that determines social need and support through social welfare benefits but rather the income of the household. Over half of all those employed in the low-pay sector live in households with other members earning additional income (see Figure 5). This applies to almost two-thirds of those in low-wage marginal employment. Most other employed members in low-wage households are in full-time employment.<sup>14</sup> Other employed members of low-earning households occupy part-time positions rather less frequently.

Alongside a person's own earnings or those of other household members, other income can also protect against social need. Among those employed full-time in the low-pay sector, virtually no-one claims housing benefit, pensions or other forms of social assistance such as student loans or grants (BAföG) (see Table 6). This is a more frequent occurrence among low-wage part-time employees, in particular among those in marginal employment—especially when a household has no other source of income. Pensioners, school children, and university or college students make up approximately a third of those employed in low-paid mini-jobs. In general, there are a large number of child benefit claimants in the low-pay sector. Child benefit is, of course, not an indicator of social need—nor does it protect from soci-

<sup>12</sup> Federal Statistical Office (Statistisches Bundesamt), Wohngeld. Haushalte mit Wohngeldempfängern und Wohngeldausgaben (Wiesbaden: 2011). The change from housing benefit to unemployment benefit II was advantageous to many benefit claimants as housing benefit only reimbursed most of the monthly rent bill (excluding heating), whereas unemployment benefit II covers both rent and heating bills.

<sup>13</sup> As of October 1, 2008, the structure of the children's allowance was made much more favorable to recipients. For low-earning households with an income that is higher than the remuneration from a normal parttime job, housing benefit and the children's allowance are often similar to unemployment benefit II. K. Brenke and W. Eichhorst, „Arbeitsmarktpolitik: Falsche Anreize vermeiden, Fehlentwicklungen korrigieren,” Vierteljahreshefte zur Wirtschaftsforschung, no. 79 (1), 61 f. (2010). There are no statistics available on the number of children's allowance recipients.

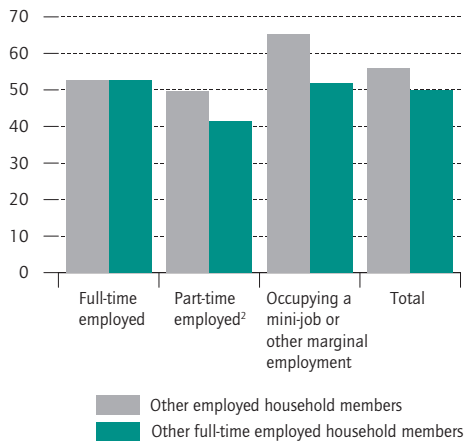
<sup>14</sup> Other people receiving earned income also include those who were excluded from the analysis of the low-pay sector—particularly the self-employed. However, participants in employment initiatives remain excluded.

<sup>11</sup> See, inter alia, The German Federation of Trade Unions (DGB), Department of Labor Market Policy (Abteilung Arbeitsmarktpolitik) (pub.), „Hartz IV—Bedürftigkeit von Erwerbstätigen,” Arbeitsmarkt aktuell, no. 1 (2012).

Figure 5

### Low-Pay Sector Employees<sup>1</sup> in 2010 Living in Households with Other Employed Members

Share of all employees made up by the respective groups, in percent



<sup>1</sup> Excluding trainees and people in employment initiatives.

<sup>2</sup> Excluding those in mini-jobs and other positions of marginal employment.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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Half of low-wage households have other employed members.

al need, as it is set significantly lower than means-tested benefits for children.

The proportion of those employed in the low-pay sector receiving income from top-up social benefits is, on the whole, not particularly high: Only one in eight receives unemployment benefit II (see Figure 6) and less than one in twenty receives housing benefit. The shares are higher among sole wage earners. Those in part-time employment claim unemployment benefit II most frequently—particularly when a household has no other source of income. This benefit is claimed least frequently by those in full-time employment. Here, unemployment benefit II is essentially only paid out to large households (see Figure 7). Single people in full-time employment claiming Hartz IV are rare exceptions.

Social need among low-wage earners, therefore, particularly arises when their hours are cut, and when there are also no other employed household members and the household has no other sources of income (old age pensions, private maintenance payments). Here, need is frequently a consequence of underemployment. This is further evidenced by the fact that the majority of those

Table 6

### Low-Wage Earners<sup>1</sup> Receiving Other Selected Forms of Income in Addition to Wages

Share in percent

Form of income	Full-time employed	Part-time employed <sup>2</sup>	Occupying a mini-job or other marginal employment	Total
<b>All employees</b>				
<b>Own income</b>				
Old age pension	1	4	13	5
Widow's, widower's, and orphan's pension	1	4	2	2
Student loans / grants	0	0	2	1
Private maintenance payments	1	7	5	4
Advance on maintenance payments	0	3	1	1
Unemployment benefit	0	1	3	1
<b>Household income</b>				
Child benefit	36	53	56	46
Long-term care benefits	1	0	2	1
Housing benefit	3	5	5	4
Welfare	1	0	0	1
Minimum old age pension	0	0	3	1
<b>Sole earners</b>				
<b>Own income</b>				
Old age pension	1	9	20	7
Widow's, widower's, and orphan's pension	2	6	5	4
Student loan / grant	0	0	5	1
Private maintenance payments	2	8	11	6
Advance on maintenance payments	1	6	3	2
Unemployment benefit	0	1	3	1
<b>Household income</b>				
Child benefit	25	46	43	35
Long-term care benefits	1	1	3	1
Housing benefit	2	10	9	6
Welfare	1	0	0	1
Minimum old age pension	0	0	5	1

<sup>1</sup> Excluding apprentices and those in employment initiatives.

<sup>2</sup> Excluding those in mini-jobs or other marginal employment.

Source: Socio-Economic Panel Study (v27); calculations by DIW Berlin.

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Low-wage earners with mini-jobs in particular are likely to have further sources of income.

se in marginal and part-time employment would like to work longer hours even if the hourly rate remained the same (see Figure 8).<sup>15</sup> However, a different picture emerges if we look at full-time employees in the low-pay sector. Here, only a small proportion—one fifth—would work longer hours; whereas a somewhat larger share would prefer shorter working hours.

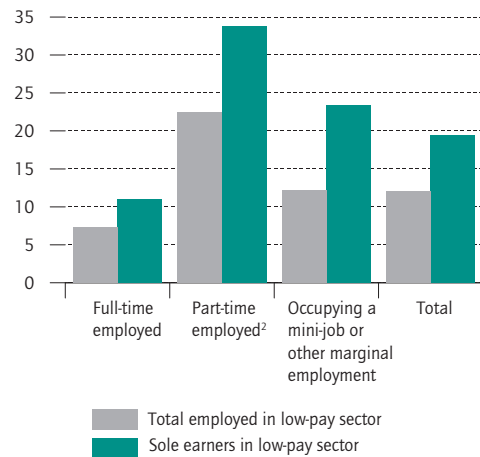
<sup>15</sup> In SOEP surveys, employees are asked how many hours per week they would prefer to work, assuming commensurate changes in income. Those individuals whose preferred working hours did not deviate from their contractually agreed working hours by more than two percent are classified in the data analysis as wanting no change in working hours. The remaining employees are treated as wanting to work longer or shorter working hours.



Figure 6

### Unemployment Benefit II Recipients of All Employed<sup>1</sup> in the Low-Pay Sector 2010

Share in percent



<sup>1</sup> Excluding trainees and people in employment initiatives.

<sup>2</sup> Excluding those in mini-jobs and other positions of marginal employment.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

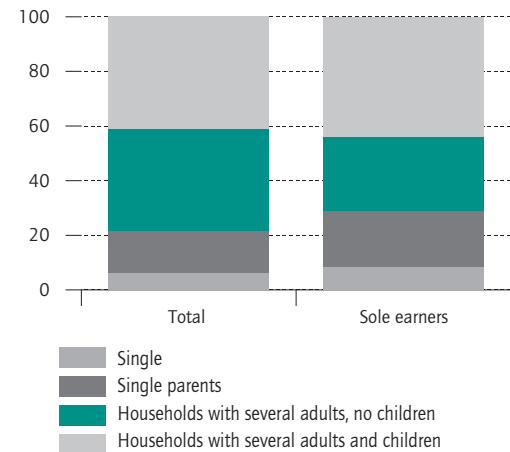
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Only a minority of low-wage earners claim Hartz IV.

Figure 7

### Full-Time Employed in the Low-Pay Sector<sup>1</sup> Receiving Hartz IV, by Household Composition

Structure in percent



<sup>1</sup> Excluding trainees and people in employment initiatives.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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Barely any single full-time low-wage employees receive Hartz IV.

## For and Against the Minimum Wage

The arguments put forward in favor of the minimum wage are predominantly of an ethical and socio-political nature. The demand that the minimum wage must be high enough to ensure that at least those in full-time employment are able to make ends meet has, certainly from a socio-political perspective, come to nothing. As the present analysis has shown, full-time employment almost always protects single people from social need. Low-wage earners in full-time employment are only awarded top-up social benefits if they live in larger households and they are few and far between. In fact, it is surprising that such people exist at all as they would have to be very low-wage earners to be able to completely replace income from gainful employment with Hartz IV benefits. Clearly, non-monetary motives have a role to play here. Personality traits such as pride could be a factor as could the threat of sanctions from employment agencies.

In a large number of low-wage cases, the household has a further source of income, mostly from full-time employment. This is particularly common among those in mini-jobs and other positions of marginal employment. For the most part, this also protects individuals

from social need. Furthermore, there are some low-wage earners who also claim old age pensions, child support, or student loans and grants. In total, only one in eight employees in the low-pay sector receives Hartz IV—this equates to slightly more than 800,000 people.

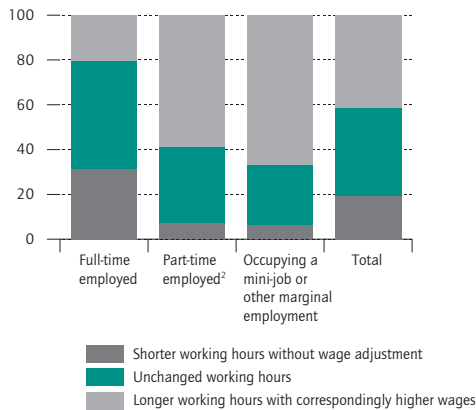
However, it is questionable as to whether social welfare benefits are really the most appropriate benchmark to evaluate the fairness of wage levels. In any case, it should not be overlooked that many low-wage earners only bring home a monthly salary that is more or less adequate, but nonetheless meager, because they have worked long hours in order to be able to do so. A significant number of those in full-time low-wage positions work as many as 50 hours or more per week. This is certainly a socio-political problem. Even those with reduced hours in the low-pay sector are working a relatively high number of hours per week. Frequently, no hourly wage is paid but rather a piecework rate, i.e., a certain output is stipulated which, in the low-pay sector, is set particularly high and, therefore, results in long working hours.

Ethical and socio-political considerations may offer arguments in favor of a minimum wage. However, we must not lose sight of the economic aspects as—alongside regulative arguments—the primary argument proposed

Figure 8

### Preferred Working Hours of Low-Pay Sector Employees<sup>1</sup> in 2010

Structure in percent



<sup>1</sup> Excluding apprentices and people in employment initiatives, and also employees with no agreed fixed working hours.

<sup>2</sup> Excluding those in mini-jobs and other positions of marginal employment.

Source: German Socio-Economic Panel Study (v27), calculations by DIW Berlin.

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Many low-wage workers in part-time or mini-jobs would prefer to work longer hours.

in opposition to the introduction of a minimum wage is that it would destroy jobs. There are numerous studies that attribute minimum wages to detrimental effects on employment. Other studies, however, conclude that this is not the case.<sup>16</sup> The fact that there are already a large number of analyses on the effects of the minimum wage and more are being carried out supports the suspicion that the research community still has some way to go before it reaches its goal of actually determining the effects.

The problem with all these different studies is that they only ever give a partial view of reality. They do not include all relevant correlations and are unable to do this—because the required data, the knowledge about the reactions of market participants, and the understanding of economic cycles do not exist. It is, for example, possible to ascertain that the minimum wage has not led to a loss in jobs in the fast-food industry.<sup>17</sup> However, it could be that, in spite of a rise in prices caused by wage increases,

the customer remained undeterred from buying burgers but, on the other hand, perhaps went to the movies or traveled in a cab less frequently, leading to a loss of jobs in the cinema and taxi industries.

Some studies, particularly those focusing on the costs for companies of the minimum wage or the impact of the minimum wage on prices,<sup>18</sup> generally ignore the macroeconomic impact on demand. To stay with the fast food example, if fast food chain staff experience an increase in wages, this could release additional income for more visits to the movies. It is precisely those with lower income who usually spend the majority of their earnings on consumption. Higher costs resulting from the introduction of a minimum wage may also lead to companies, by way of compensation, increasing their investments, rationalizing more, and focusing on innovation. All of this can not be calculated or modeled.

It also remains unclear what the impact of a minimum wage would be on wage structures. It can also be assumed that, after the introduction of a minimum wage, those who are earning slightly more than that minimum will call for wage increases in order to re-establish the wage gap. However, there is evidence that this is only occurring to a limited extent and the wage gap between unskilled and qualified employment is shrinking.<sup>19</sup> This can have a negative impact on the motivation of some employees which, in turn, could also have implications for educational behavior. Potential consequences for competition are also unpredictable because, in sectors in Germany which have already introduced a minimum wage, employers, too, almost always have a vested interest with a view to protecting themselves from unwelcome competition. For example, the minimum wage introduced in the construction industry in the mid-90s also served to keep East German construction companies away from the West German building sites<sup>20</sup> precisely at a time when the construction industry in the new East German states was in decline.

<sup>18</sup> See K.-U. Müller and V. Steiner, „Mindestlöhne kosten Arbeitsplätze: Jobverluste vor allem bei Geringverdienern,“ Wochenbericht des DIW Berlin, no. 30 (2008); R. Bachmann, T.K. Bauer, J. Kluve, S. Schaffner, and C.M. Schmidt, „Mindestlöhne in Deutschland. Beschäftigungswirkungen und fiskalische Effekte,“ RWI Materialien, no. 43 (2008).

<sup>19</sup> H. Apel, R. Bachmann, P. vom Berge, M. König, H. Kröger, A. Paloyo, S. Schaffner, M. Umkehrer, and S. Wolter, „Mindestlöhne im Bauhauptgewerbe—Folgen für die Beschäftigung blieben aus,“ IAB-Kurzbericht, no. 4 (2012) and P. Rattenhuber, „Building the Minimum Wage. Germany's First Sectoral Minimum Wage and its Impact on Wages in the Construction Industry,“ Discussion Papers of DIW Berlin, no. 1111 (2011).

<sup>20</sup> Had the East German companies which were, at that time, normally less productive, operated in western Germany, they would have had to pay their employees the prevailing wages there which were significantly higher than in the new East German states.

<sup>16</sup> D. Neumark and W. Wascher, Minimum Wages (Cambridge, MA: 2008).

<sup>17</sup> D. Card and A.B. Krueger, „Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania,“ Working Paper Series, no. 4509, (National Bureau of Economic Research, Cambridge, MA: 1993).

It is also evident that the introduction of a minimum wage would particularly impact small companies; according to SOEP data from 2010, 45 percent of low-wage earners worked for companies with fewer than 20 employees; this was only the case for 19 percent of other employees. Larger companies in a sector could actually receive competitive advantages through the introduction of a minimum wage.

### Conclusions

If a minimum wage were to be introduced in all sectors in Germany and regulated by law, this would be a field experiment, the positive outcomes of which could not be guaranteed. To prevent negative effects on employment, the whole process must certainly be handled with caution in order to avoid massive and abrupt changes in wage structures, i.e., the minimum wage should not be set overly high. We must always take into consideration that the demand for unskilled work is in decline but, at the same time, the labor market has an abundance of people with limited vocational qualifications. It would be extremely misguided to reduce their job opportunities by introducing an excessive minimum wage.

If Germany is to introduce a minimum wage across the board, a whole range of practical issues also need to be clarified. Specifically, how should the privileged status of the mini-job—which runs counter to the system from a taxation point of view—be handled? The basis for fixing the minimum wage is always gross income. This is a sound approach as it excludes personal and family characteristics that influence wage deductions. However, when it comes to mini-jobs, the gross = net principle applies, which means that those with mini-jobs in the low-pay sector receive, on average, a higher net hourly wage than others employed in that same sector. Secondly, how to determine a minimum wage for employees who are not paid according to hourly but rather piecework rates would also need to be examined. Thirdly, what about unpaid overtime? This could also be used to circumvent minimum wage laws.

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