

# REPORT

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## THE GERMAN MINIMUM WAGE: EXPERIENCES AND PERSPECTIVES AFTER ONE YEAR

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### AT A GLANCE

Since 1 January 2015 a statutory minimum wage of € 8.50 per hour applies in Germany. In 2014 between 4.8 and 5.4 million employees still earned a lower hourly wage. Even if it cannot yet be stated exactly how many employees benefitted from the introduction of the minimum wage, above-average wage increases in the classical low-wage sectors indicate significant effects of the introduction of the minimum wage. Even collective bargaining policies benefitted from the introduction of a minimum wage and contributed to the further increase of the lowest wage groups.

The negative effects on the labour market that were predicted by many economists did not materialise. On the contrary, employment in Germany has seen a continuous increase. Merely the so-called 'mini jobs' (a special form of marginal part-time employment) show a strong decline, but many of these were transformed into regular jobs requiring social insurance.

Against the background of these positive experiences, discussions are currently being held on the future adjustment of the minimum wage that is to come into effect at the beginning of 2017. Following the German Minimum Wage Act the Minimum Wage Commission – composed by employers and trade union representatives – has to give a recommendation by taking into account the recent developments of collectively agreed wages. According to the wage index of the Federal Statistical Office, collectively agreed wages increased by a total of about 5.5% in 2014 and 2015. Thus, the minimum wage would have to be increased to about € 9. Furthermore, it should be examined whether this level of the minimum wage actually guarantees "appropriate minimum protection for employees", as required by the Minimum Wage Act.

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## 1 INTRODUCTION

Since 1 January 2015 Germany for the first time introduced a general statutory minimum wage of € 8.50 per hour. This signaled the provisional end to a 10-year political debate in which trade unions, employer associations and political parties struggled to agree on whether and how a statutory minimum wage should be introduced. From the perspective of trade unions the introduction of a statutory minimum wage constitutes a “historical social reform” (Reiner Hoffmann), from the perspective of many employer associations it damages the autonomy of collective bargaining. Many economists predicted the loss of a couple of hundred thousand up to one million jobs (Schulten/Weinkopf 2015).

After one year since the introduction of the minimum wage it is now about time to take stock. In the present report we start by establishing what the theoretical scope of the minimum wage was at the time when it was introduced. We then verify what effects the introduction of the minimum wage had on the development of income and employment thus far. In this process we also look at the interrelation between a statutory minimum wage and the determination of (minimum) wages through collective agreements. Finally, we then discuss the possible adjustment of the statutory minimum wage that – in terms of the German Minimum Wage Act – is to be decided upon at the middle of 2016.

## 2 THE SCOPE OF THE MINIMUM WAGE AT THE TIME OF ITS INTRODUCTION

Since the mid-1990s the share of low-wage earners increased continuously in Germany and has remained at a high level for the past years (Kalina/Weinkopf 2015). This perpetuated low-wage employment was one of the main reasons for the introduction of a statutory minimum wage. In

certain sectors and regions the overall wage level was so low that a significant share of the employees was to benefit from the introduction of the statutory minimum wage.

The development of the low-wage sector in Germany has already been described in various studies (Brenke/Müller 2013; Falck et al. 2013; Brenke 2014; Amlinger et al. 2014; Kalina/Weinkopf 2015). The data used in these studies was particularly based on the socio-economic panel (SOEP) which is a representative annual survey of households in Germany (see box 1). As the SOEP contains only information on monthly wages there are different methodological approaches to calculate hourly wages. In the following the evaluation of the latest SOEP data is based on two different methods of calculation, the one on the basis of the actual working hours per week and the other taking into consideration overtime that was compensated through free time. The data thus obtained can be considered as the upper and lower limits between which the actual share of persons affected by the introduction of the minimum wage is positioned.<sup>1</sup>

According to this method the SOEP allows us to identify between about 4.8 and 5.4 million employees in 2014 who earned below € 8.50 per hour (Table 1). This corresponds to a share of between 14.8 and 16.6% of all dependent employees who worked for a gross hourly wage of below € 8.50. Thus, the share of persons potentially affected since the announcement of the Minimum Wage Act already decreased significantly: in 2013 about 5.2 to 5.8 million employees still earned less than the minimum wage, i.e. a share of 16.2 to 18.0%.

<sup>1</sup> All information relates to persons and not to jobs. For persons who follow a second job besides their actual job, e.g. in the form of a mini job, only the main job is taken into consideration.

**Employees with gross hourly wages below € 8.50**

Gross hourly wage on the basis of...	2013		2014	
	absolute	in %	absolute	in %
actual number of working hours per week	5.752.000	18,0	5.405.000	16,6
agreed number of working hours per week if overtime is compensated through free time	5.196.000	16,2	4.838.000	14,8

Basis for calculation: gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons. No interns or persons in partial

Source: SOEP v31; calculations by WSI.

**Box 1: SOEP Methodology**

The socio-economic panel (SOEP)<sup>2</sup> is a representative survey of the population conducted since 1984 on behalf of the German Institute for Economic Research (Deutsches Institut für Wirtschaftsforschung – DIW) (see Wagner et al. 2008). The present study only included dependent employees, excluding apprentices. Since the statutory minimum wage does not apply to people under the age of 18 years, to persons benefitting from job creation measures or doing voluntarily work and to persons working in workshops for disabled persons, these persons were also excluded from the calculations. Internships of up to three months in the line of job orientation and compulsory internships within the framework of training or studies are also not subject to the minimum wage act. Since the SOEP does not allow for such an exact differentiation between the different kinds and durations of internships, these were generally excluded from the studies. Thus, data on just below 14 000 employees was collected.

The gross hourly wages are not obtained directly in the SOEP, but can be calculated for the dependent employees from the information on monthly income earned and the working hours per week. However, there are different methods available that have a large influence on the amount of gross hourly wages and thus how big the possible circle of persons receiving the minimum wage is in the end. Usually the gross monthly income without special payments<sup>3</sup> is divided by the average working hours, including

possible overtime. Brenke/Müller (2013), however, suggest that rather than using the hours actually worked, the contractually agreed working hours should be used if the person surveyed states that his/her overtime was compensated through free time. In these cases overtime is not part of remuneration and should thus not be taken into consideration when calculating the hourly income. If, however, overtime is paid for or is not compensated in any form, the actual hours worked will be used.

Both approaches have their advantages and their disadvantages. The first method tends to underestimate the gross hourly wage, because it also takes into consideration overtime when calculating working hours that may be compensated with free time within the framework of working time accounts. The second method tends to overestimate the gross hourly wage, since in the cases where overtime is compensated partly through free time and partly through payments, it is not clear to what extent such payments form part of the gross monthly earnings. Especially low-income earners more frequently opt for having their overtime paid out, which then leads to an over-estimation of the gross hourly wage (Kalina/Weinkopf 2014).

2 Socio-Economic Panel (SOEP), data for the years 1984-2014, version 31, SOEP, 2015, doi: 10.5684/soep.v31

3 In the SOEP special payments are only obtained for the year preceding the survey. Even if the Minimum Wage Act contains no exact definition of the term minimum wage (Schulten 2014 et. al.), there are already decisions by labour courts that holiday allowances and Christmas bonuses may not be considered as part of the minimum wage. For this reason only the basic wage was used for the calculations.

Besides the SOEP there are also some data from the establishment panel of the Institute for Employment Research (Institut für Arbeitsmarkt- und Berufsforschung – IAB) which for the year 2014 has indicated that only 4,4% of all employees earned less than € 8,50 per hour (Bellmann et al. 2015).<sup>4</sup> The IAB identified numerous reasons for this large discrepancy with most other studies: on the one hand, according to the IAB 7% of the companies adapted their wages during the course of the year 2014 in anticipation of the introduction of the minimum wage. With regard to the SOEP it cannot be established exactly whether at the time of the survey such an adaptation of wages had already taken place.<sup>5</sup> Furthermore, in the survey by the IAB establishment panel employees who are excluded from the statutory minimum wage by way of exemptions, are not included. The SOEP, however, does not allow for the various exemption clauses to be sufficiently reflected. In the present considerations special payments, which are not included by the IAB, are not taken into consideration. And finally, the SOEP captures the hourly wages of marginal part-time employees to a higher degree, since

the IAB establishment panel, for example, does not capture companies in which no employees work that are subject to social insurance (Bellman et al. 2015).

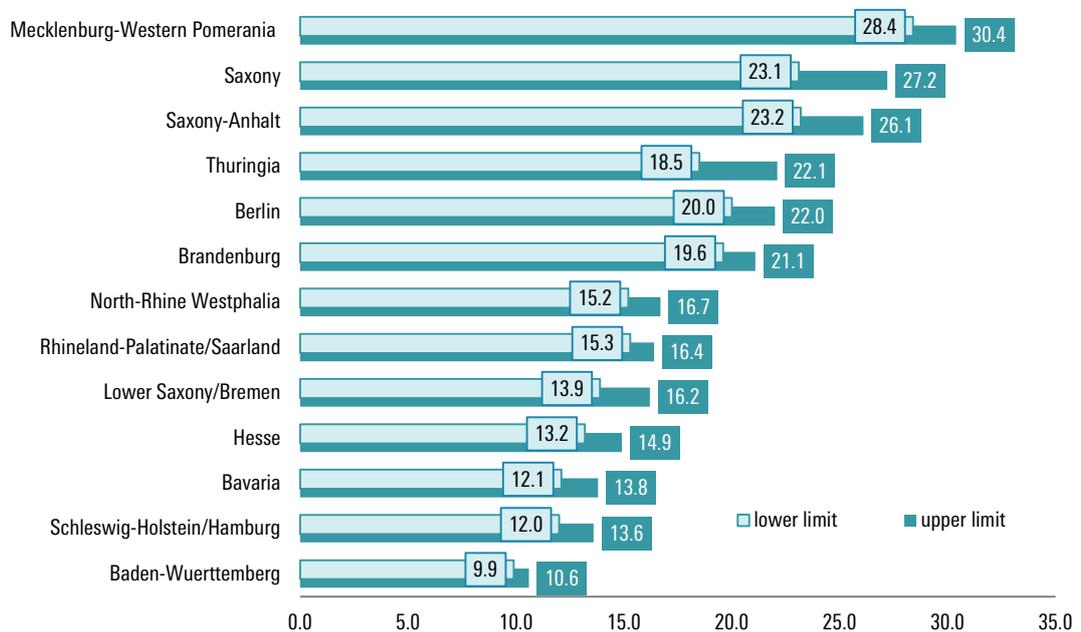
Another reason for the discrepancy may lie in the different structures of the two surveys. While the IAB establishment panel as a survey among employers does not take into consideration or only insufficiently takes into consideration the possible overtime worked by employees, the household survey of the SOEP asks employees directly as to their actual working hours. Thus, the overall data of the SOEP is likely to be more accurate. The IAB data, however, lead to a clear underestimation of the number of employees who benefit from the introduction of the minimum wage.

### Income under € 8.50 before the introduction of the minimum wage

The known fact that in 2014 the number of employees earning less than € 8.50 in the new federal states was far higher than in the old federal

Figure 1

#### Employees with hourly wages below € 8.50 in German federal states (2014) – in %



Basis for calculation: gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons. No interns or persons in partial retirement.

Upper limit: calculation of the gross hourly wage on the basis of actual hours worked.

Lower limit: on the basis of the agreed weekly working hours if overtime is compensated through free time.

Source: SOEP v31; calculations by WSI.

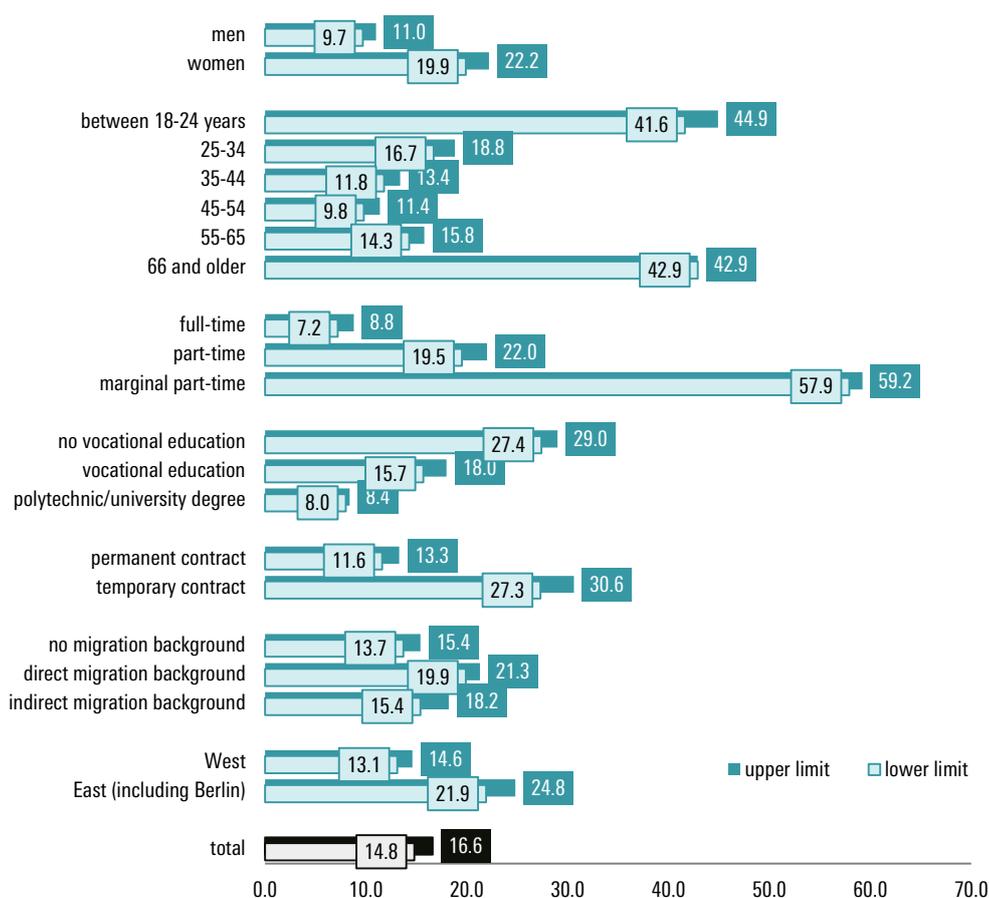


4 Furthermore, the minimum wage was already anticipated in new employments in 2014. At 4.5% an hourly wage of € 8.50 was the most frequently mentioned entry wage (IAB 2016).

5 In total, the period of the survey by the SOEP covered nine months from January to October 2014 (see Glemser et al. 2015).

states was confirmed yet again: whereas in East Germany more than one fifth to one quarter of all employees still received a lower hourly wage, this applied to only 13.1 to 14.6% in West Germany (Fig. 2).

## Different groups of employees with hourly wages below € 8.50 (2014) – in %



Basis for calculation: gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons. No interns or persons in partial retirement.

Upper limit: calculation of the gross hourly wage on the basis of actual hours worked.

Lower limit: on the basis of the agreed weekly working hours if overtime is compensated through free time.

Source: SOEP v31; calculations by WSI.

WSI

The German federal states<sup>6</sup> with the highest shares of gross hourly wages below € 8.50 were thus mainly the new federal states in East Germany (Fig. 1). In Mecklenburg-Western Pomerania alone between 28.4 and 30.4% of all employees still earned less than the minimum wage in 2014. Also in Saxony and Saxony-Anhalt up to a quarter of all employees could have been affected by the introduction of the minimum wage. In the old federal states the scope of low wages is much smaller. At the peak, with up to 16% of employees, were North-Rhine Westphalia, Rhineland-Palatinate and Saarland, as well as Lower Saxony with Bremen. The lowest share with values between 9.9 and 10.6 % was in Baden-Württemberg.

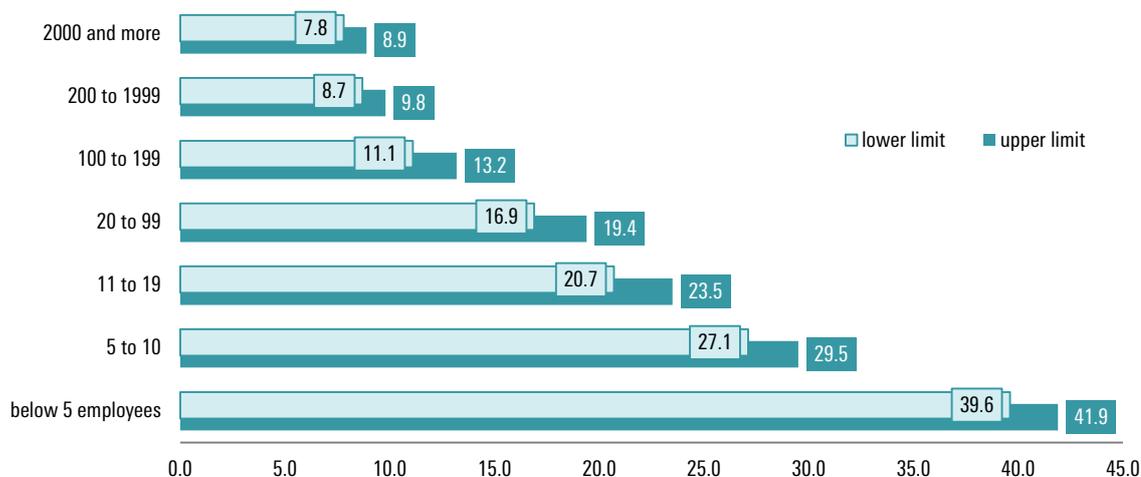
The risk of earning less than the minimum wage is very different for different groups of persons in the different sectors (Fig. 2). The number of affected persons was double as high for women (19.9 to 22.2%) than for men (9.7 to 11.0%). Young per-

sons under 25 years and older employees over 65 years also show a higher proportion of low hourly wages. Of the employees who have not concluded vocational training 27.4 to 29 % are paid less than € 8.50 per hour. Persons with a direct migratory background also often work at hourly wages below € 8.50. In this group about one fifth is thought to have benefitted from the introduction of the minimum wage.

Besides the above, significant differences exist when one considers the different employment conditions. Whereas a mere 7.2 to 8.8% of full-time employees earn less than € 8.50 per hour, part-time or temporary employees are at a higher risk of earning less. However, marginally employed persons constitute the group most affected by the introduction of the minimum wage: almost 60% of mini-jobbers earned a gross hourly wage of less than the statutory minimum wage in 2014.

<sup>6</sup> Because of low case numbers some federal states were bundled.

### Employees with hourly wages below € 8.50, by company size (2014) – in %



Basis for calculation: gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons. No interns or persons in partial retirement.

Upper limit: calculation of the gross hourly wage on the basis of actual hours worked.

Lower limit: on the basis of the agreed weekly working hours if overtime is compensated through free time.

Source: SOEP v31; calculations by WSI.

WSI

Clear differences can be seen between companies of different sizes (Fig. 3). Micro-enterprises with less than five employees are affected to a significantly higher degree: between 40 and 42% of the employees earned less than € 8.50 in 2014. The larger the companies are, the lower is their share of low-income earners. In large companies with 2000 or more employees only about 7 to 9% of the employees are affected.

In 2014 sectors with an above-average share of employees earning below € 8.50 included hotels and restaurants, agriculture and forestry, retail trade, the food industry and other service sectors (Fig. 4). The high share of low-income earners in hotels and restaurants goes hand in hand with a high share of marginal employment in this sector. Within the production industry, on the contrary, the introduction of the minimum wage played a far less important role.

In some sectors the collective bargaining parties found an interim solution with a stepwise adaptation to the minimum wage (see Chapter 4). The respective exemptions in the relevant (partial) sectors could not be taken into consideration in the present report, even if these may have led to the scope and the wage increases in these sectors having been smaller. In the hotel and restaurant sector that was most affected by the introduction of the minimum wage, however, negotiations between the respective trade union for hotels and restaurants (Nahrung-Genuss-Gaststätten – NGG) and the respective employers' association (Deutscher Hotel- und Gaststättenverband – DEHOGA) on a collectively agreed minimum wage failed. According to the current figures of the SOEP this means that the wages of more than half the employ-

ees in the hotel and restaurant sector could have been subject to wage increases. In the East German hotel and restaurant sector 65%, i.e. almost two thirds of all employees, were affected.

### Distribution of low-income earning groups

If one considers the structure of hourly wage levels in the low-income sector, it becomes clear that the gross hourly wages differ significantly even below € 8.50.

Table 2 shows the share of employees with low gross hourly wages at different levels. Only the actual working hours were taken into consideration so that the individual values only reflect the upper limit of the low-income employees. Even in 2014 about 7% of the dependent employees received a gross hourly wage of less than € 6.50. 11.5% of the employees still received below € 7.50. In contrast, a somewhat higher density can be seen in employees earning just above the minimum wage: about 8% of all employees fall in the range of hourly wages between € 8.50 and under € 10, which corresponds with about 2.7 million employees who earn only slightly more than the minimum wage. Before the introduction of the minimum wage, thus, a quarter of all employees still earned hourly wages of below € 10. To what extent the introduction of the minimum wage will lead to so-called ripple effects cannot yet be established at this point in time. However, the majority of these employees are expected to be affected, at least indirectly, by the anticipated increase of the minimum wage in 2017.

### Dependent employees with a gross hourly wage of up to below...

(Basis of calculation: actual hours worked)

	Germany, overall		West		East	
	in total (millions)	in %	in total (millions)	in %	in total (millions)	in %
€ 6.50	2,415	7.4	1,749	6.7	0,666	10.5
€ 7.50	3,753	11.5	2,670	10.2	1,083	17.1
€ 8.50	5,406	16.6	3,831	14.6	1,574	24.8
€ 10.00	8,110	24.9	5,725	21.9	2,385	37.6
€ 12.00	11,748	36.1	8,597	32.8	3,152	49.7

Basis for calculation: gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons.  
No interns or persons in partial retirement.

Source: SOEP v31; calculations by WSI

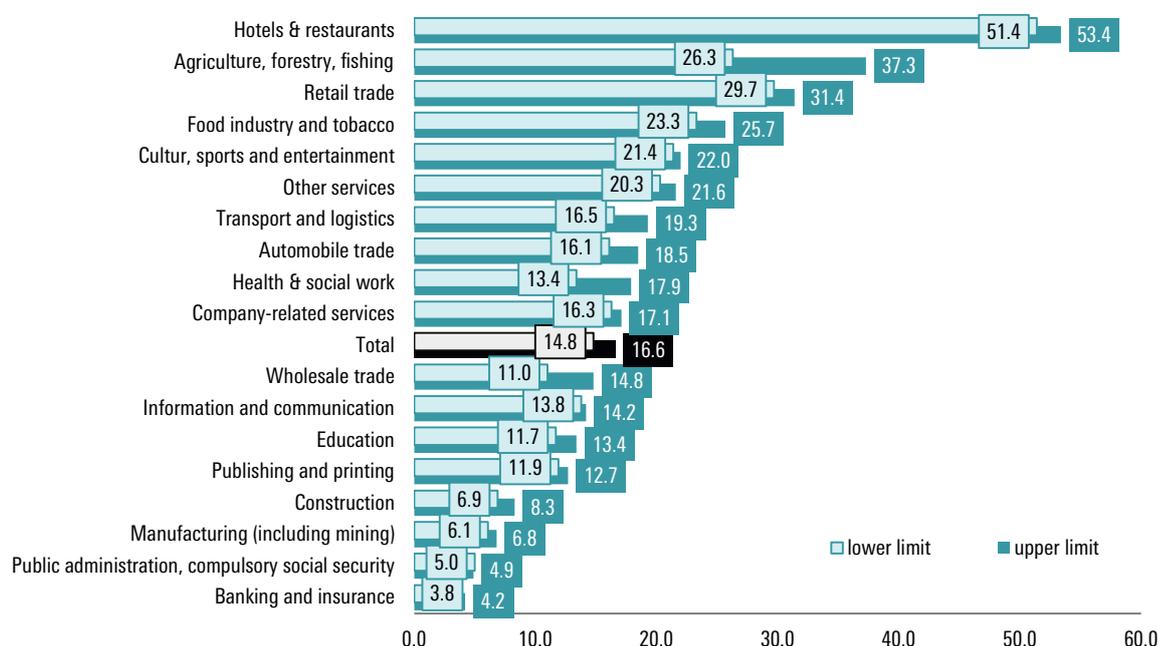
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To what extent the overall wage structure in Germany was changed by the introduction of the minimum wage of € 8.50 per hour. In West Germany only the distribution of gross hourly wages of marginally employed persons is located far to the left and thus in the area of below € 8.50. While in East Germany the wage distribution for all three groups is located far more to the left. Thus, in the new federal states not only the earnings of mini-jobbers are below € 8.50, but also a

The vertical line indicates the statutory minimum wage of € 8.50 per hour. In West Germany only the distribution of gross hourly wages of marginally employed persons is located far to the left and thus in the area of below € 8.50. While in East Germany the wage distribution for all three groups is located far more to the left. Thus, in the new federal states not only the earnings of mini-jobbers are below € 8.50, but also a

Figure 4

### Employees with hourly wages below € 8.50 in different sectors (2014) – in %



Basis for calculation: gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons. No interns or persons in partial retirement.

Upper limit: calculation of the gross hourly wage on the basis of actual hours worked.

Lower limit: on the basis of the agreed weekly working hours if overtime is compensated through free time.

Source: SOEP v31; calculations by WSI.

WSI

7 For reasons of increased clarity, only the gross hourly income on the basis of actual hours worked is displayed, without consideration of overtime compensated through free time.

8 This can be explained by the fact that more than half the persons achieved less than the average wage and thus the median is below the average. The curves are cut off at Euro 40 for reasons of clearer presentation.

significant share of the part-time employees. Even full-time employees in the East are concentrated in the area of gross hourly wages of just above € 8.50.

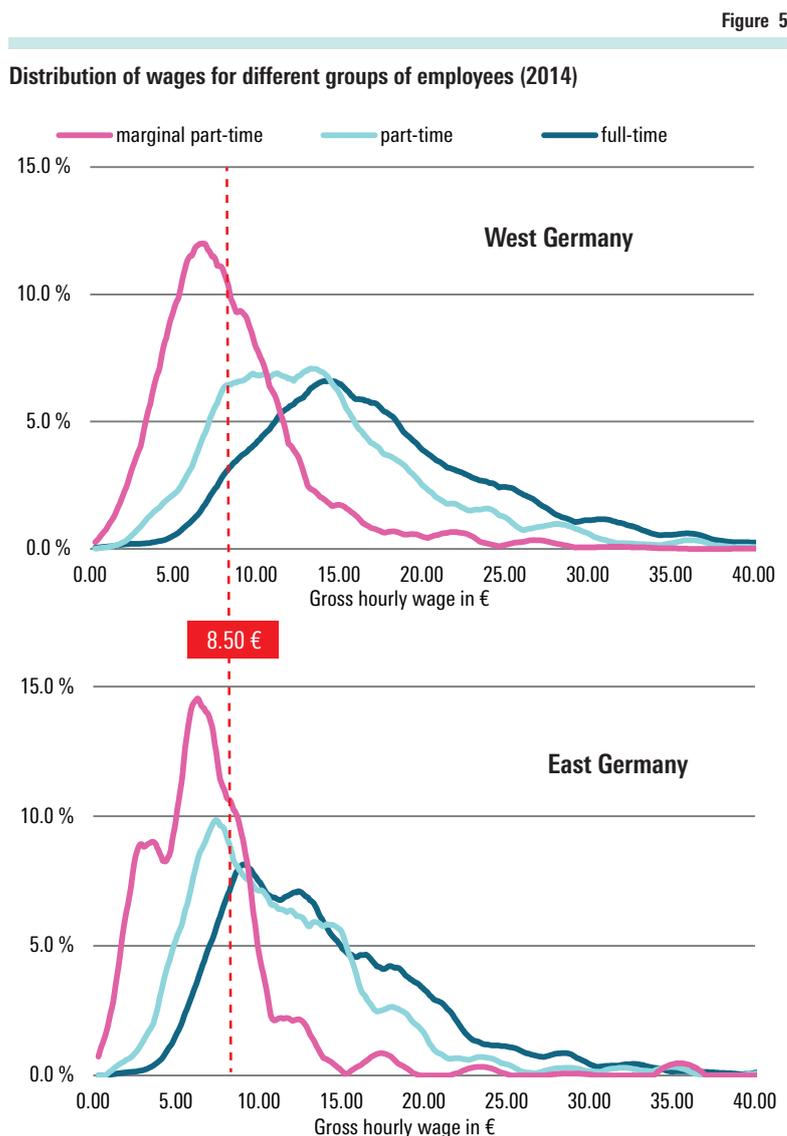
In West Germany the statutory minimum wage thus seems to have a significant effect on the wage distribution in particular among the marginally employed persons and, to a lesser extent, among part-time or full-time employees. In contrast, the expected shift in wage distribution in East Germany is probably much higher and affects part-time employees to a much larger extent.

### 3 DEVELOPMENT OF EARNINGS AFTER THE INTRODUCTION OF THE MINIMUM WAGE

At the present moment it cannot yet be established to what extent the overall wage distribution in Germany has changed through the introduction of the minimum wage. The data needed for this purposes will become available at the earliest during the course of 2016. However, the quarterly income survey (VVE) by the Federal Statistical Office gives a first indication of the effects of the minimum wage on the gross hourly wages.

The VVE is a quarterly representative survey in about 40 500 companies of all sectors of the economy, excl. agriculture, fishery and forestry (Statistisches Bundesamt 2015). The statistics contain the average gross hourly earnings of full-time and part-time employees; for marginally employed persons only information on their gross monthly earnings is captured. The following results thus initially only reflect full-time and part-time employees.

Even if no annual average values are available for 2015 yet, significant differences in the wage development of the first three quarters can already be seen in comparison to previous years. During this period, the development of wages was characterized by an above average wage increase among less qualified employees, while in previous years mainly the higher qualified groups could achieve stronger wage increases. The wage development for 2015 in West Germany is much more balanced and in East Germany the strongest gains can be seen among unskilled and semi-skilled employees.



Epanechnikov kernel density estimate of the gross hourly income, bandwidth = 0.7.  
 Basis for calculation: actual hours worked, gross hourly income without special payments. Dependent employees over the age of 18 years excl. apprentices, persons benefiting from job creation measures or persons employed in workshops for disabled persons. No interns or persons in partial retirement.

Source: SOEP v31; calculations by WSI.

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## Gross hourly wages, changes against the same quarter of the previous year – in %



Basis for calculation: gross hourly income without special payments. Full-time and part-time employees without marginally employed persons.

Source: Federal Statistical Office. Quarterly Income Survey; presentation by WSI.

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Upon consideration of the development of wages in the third quarter of 2015 alone, in comparison to the same period of the previous year (Fig. 6), it becomes clear that the wage development in the lower qualified sector has caught up to the general wage development. In Eastern Germany unskilled and semi-skilled employees, but also skilled workers recorded wage increases far above the average.

Overall the gross hourly earnings of full-time and part-time employees increased by 2.0% in the third quarter in comparison to the same quarter the previous year (Fig. 6). The strongest gains of 8.5% were seen among unskilled employees in East Germany, whereas men in the same group saw a wage increase of 8.0%. Overall the earnings in East Germany increased more strongly in the third quarter

of 2015 (3.6%) than in West Germany (1.7%).<sup>9</sup>

Above-average wage increases can also be seen in individual sectors, mainly in the service industry (Table 3). Within the production sector particularly the meat processing sector showed above-average income increases up to the third quarter of 2015. Whereas the overall wage development in the service sector lags behind the production sector, certain selected service sectors have shown gross hourly wages increases that are far above the average. In particular, East German retail trade, hotels and restaurants, guarding and security services and other services (that mostly include other

<sup>9</sup> The same figure shows the wage development of the first two quarters that does not differ significantly from the developments in the third quarter.

**Change in the gross hourly earnings in the 3rd quarter of 2015 in comparison to the same quarter in 2014 (in %) in selected sectors of the economy**

	Total	West	East
<b>Production sector</b>	<b>3.1</b>	<b>2.6</b>	<b>5.1</b>
Abattoirs and meat processing industry, fish processing industry	5.6	4.2	11.1
Construction	3.0	2.1	5.6
<b>Service sector</b>	<b>1.5</b>	<b>1.2</b>	<b>2.9</b>
Retail trade	3.3	2.2	11.0
Transportation and storage	2.1	1.7	4.2
Hotels and restaurants	2.9	2.1	8.6
Guarding and security services as well as detective services	4.2	2.8	10.4
Services to buildings; gardening and landscaping	3.8	2.5	7.2
Other, mainly personal services	1.7	1.0	7.0
<b>Total</b>	<b>2.0</b>	<b>1.7</b>	<b>3.6</b>

Basis for calculation: gross hourly income without special payments. Full-time and part-time employees without marginally employed persons.

Source: Federal Statistical Office. Quarterly Income Survey; calculations by WSI

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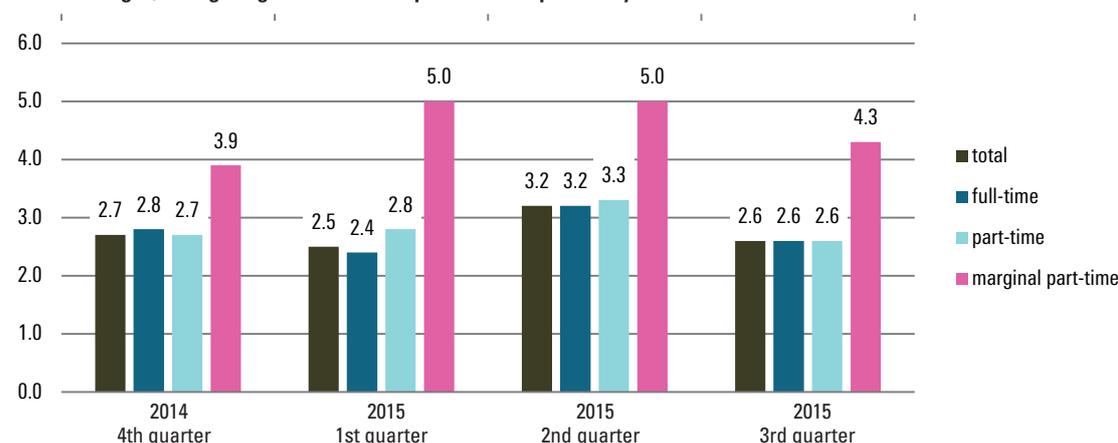
personal services, such as laundry services and hair-cutting) are characterised by very high increases in the hourly wages in 2015. In the hotel and restaurant sector that was most affected by the introduction of the minimum wage, earnings rose by 2.9%, in East Germany even by 8.6%.

For marginally employed persons who were affected to a particularly large extent by the introduction of the minimum wage, no data on the gross hourly earnings is available yet. Since an increase in gross hourly earnings in a marginal employment relationship is often achieved through a reduction of the agreed working hours, information on monthly income is only helpful to a limited extent. However, according to the nominal wage index of the Federal Statistical Office stronger wage dynamics among marginally employed persons can al-

ready be seen for the year 2014 (Fig. 7). In the first three quarters immediately following the introduction of the minimum wage, mini-jobbers achieved, on average, double the income growth as the overall average of all employees.

Figure 7

**Nominal wages, changes against the same quarter of the previous year – in %**

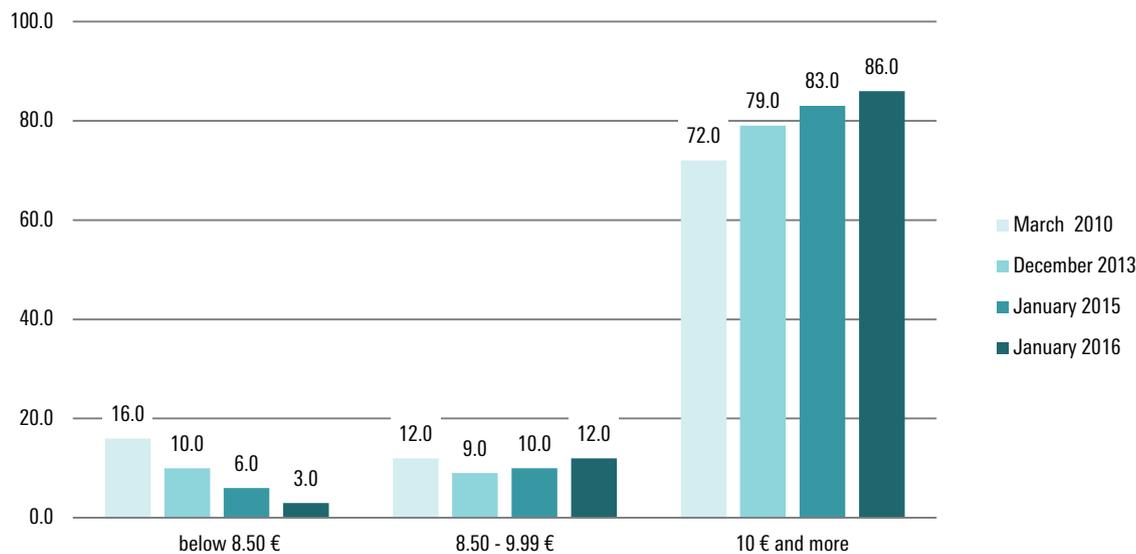


Source: Federal Statistical Office, real wage index and nominal wage index, 3rd quarter 2015. presentation by WSI.

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Figure 8

Wage groups in collective agreements – in %

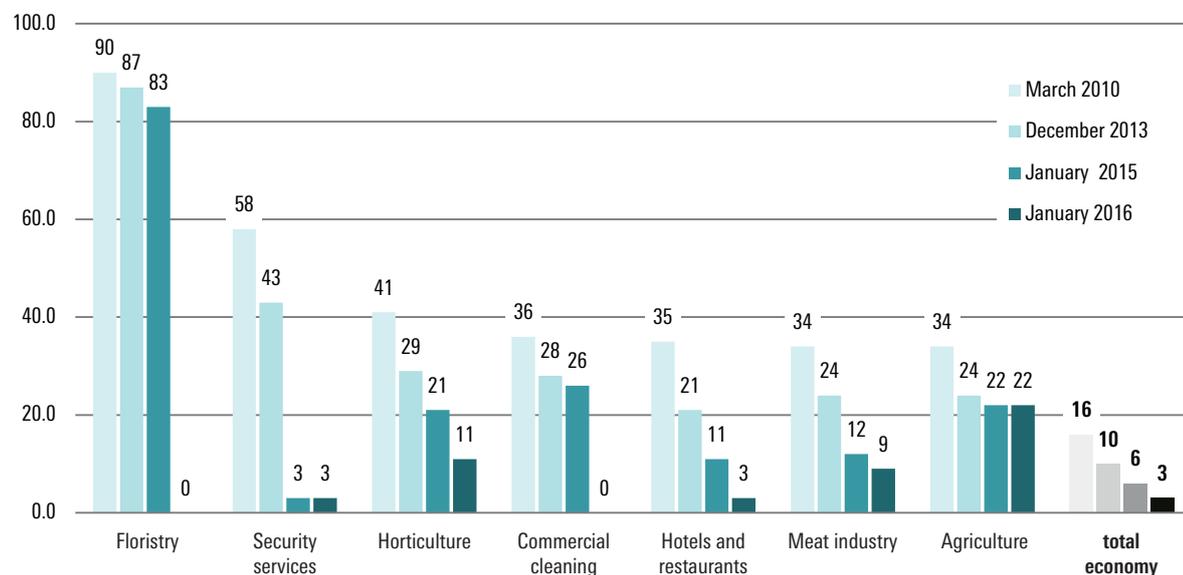


Source: WSI Collective Agreement Archive; as of January 2016.



Figure 9

Wage groups in collective agreements below € 8.50 per hour – in %



Deviations from 100%: rounding differences

Source: WSI Collective Agreement Archive; as of January 2016.



Development of selected sector-specific minimum wages achieved through collective bargaining, in €/hour

Valid from	West	East
<b>Agriculture and forestry, horticulture</b>		
01.01.2016	8.00	7.90
01.01.2017	8.60	8.60
01.11.2017	9.10	9.10
<b>Temporary agency work</b>		
01.04.2015	8.80	8.20
01.06.2016	9.00	8.50
<b>Textile and clothing</b>		
01.01.2016	8.50	8.25
01.11.2016	8.50	8.75
01.01.2017	Statutory minimum wage	Statutory minimum wage, at least 8.75
<b>Laundry services</b>		
01.10.2014	8.50	8.00
01.07.2016	8.75	8.75

Source: WSI Collective Agreement Archive 2016

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## 4 LOW WAGES IN COLLECTIVE AGREEMENTS AND SECTOR-SPECIFIC MINIMUM WAGES

Low income is not only found in companies and sectors not bound by collective bargaining agreements. Depending on the respective sector, even collective agreements sometimes contain rather low wage groups. For 2010 the WSI Low Wage Monitoring established that in collective agreements of about 40 sectors with around 4 700 wage groups a share of 16% contained a collectively agreed basic remuneration of below € 8.50 per hour (Bispinck/WSI Tarifarchiv 2011). By the end of 2013 this share had decreased in small steps to 10%.

Even prior to the actual introduction of a statutory minimum wage, it had already a strong influence on collective bargaining. In various sectors collective agreements on sector-specific minimum wages were concluded before the Minimum Wage Act came into force. The latter allowed sectors for an interim period of two years to stay below the statutory minimum wage of € 8.50 per hour if regulated by a collective agreement. Such agreements were concluded in hairdressing, the meat industry and the area of agriculture, forestry and landscaping.<sup>10</sup> At the beginning of 2015, when the statutory minimum wage came into force, the share of low-income groups below € 8.50 in collective bargaining agreements was at only 6%. Further adaptations to collective bargaining during the course of 2015 led to this share dropping further to 3% at the beginning of 2016 (Fig. 8, Bispinck/WSI Tarifarchiv 2016).

Low-wage groups under € 8.50 continue to exist

in 16 sector-level collective agreements, mostly limited to regional collective bargaining areas. The range of wage groups below € 8.50 varies greatly between the sectors. The share ranges from 1 to 22%. In some sectors the share of low-wage groups has decreased very strongly since 2010. This applies mainly to the guarding industry, hotels and restaurants, the meat industry and landscaping (Fig. 9). In floristry and industrial cleaning wage groups of below € 8.50 were abolished.

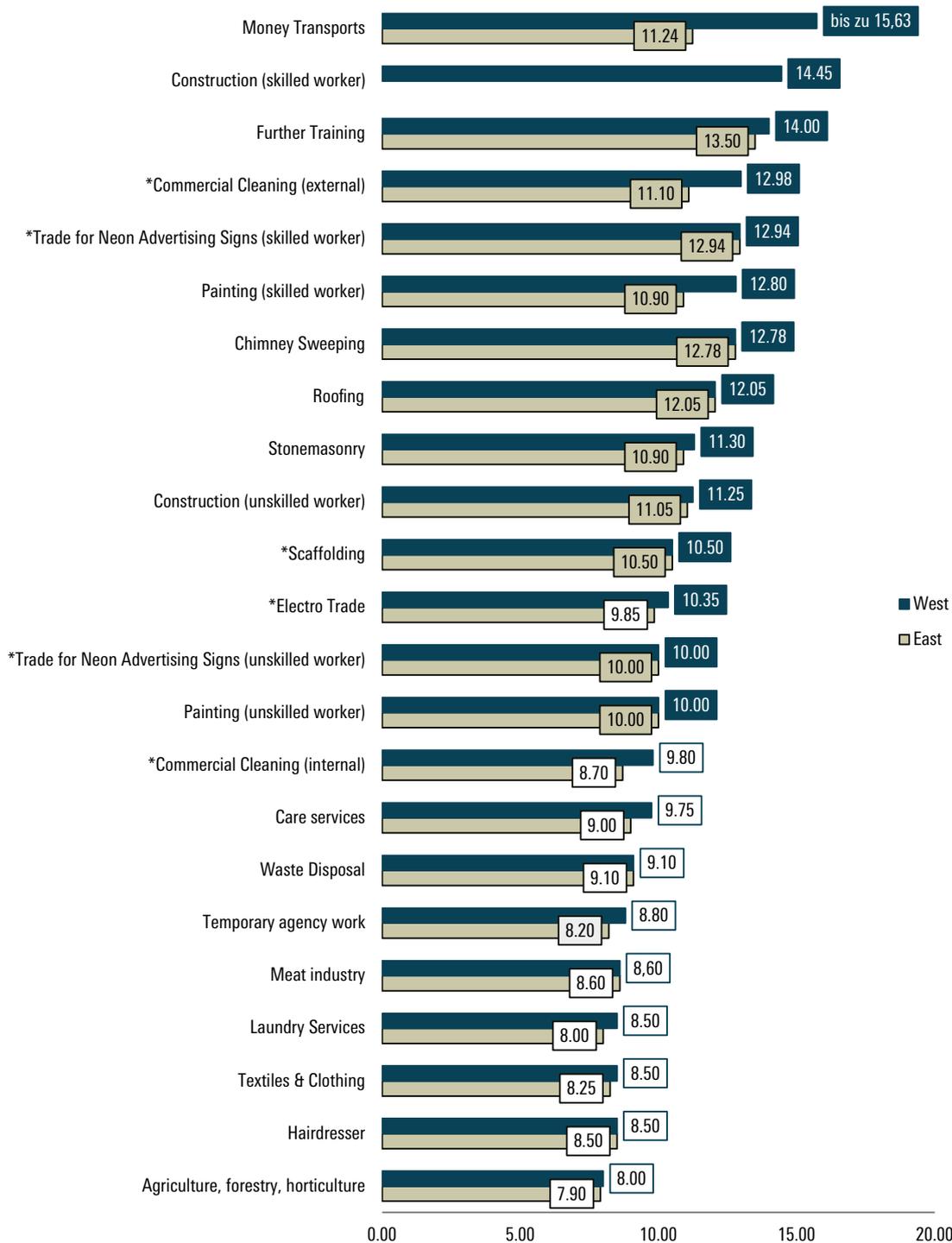
In only four sectors minimum wages are still below € 8.50 and, with the exception of agriculture, forestry and landscaping, these are all located in East Germany. Here the exemption clauses of the Minimum Wage Act are being utilised. In these sectors stepwise measures to further increase the lowest collectively agreed wages to at least € 8.50 or above exist (Table 4). Collectively agreed wage groups of below € 8.50 that were agreed in the sectors without generally binding collective bargaining agreements, are being forced out by the statutory minimum wage. These are mainly contained in older collective bargaining agreements that are still valid but have not been re-negotiated for many years.

At the beginning of 2016 sector-specific minimum wages exist for 19 sectors of the economy (Fig. 10) employing around 4.6 million workers. From January 2015 to January 2016 almost all sector-specific minimum wages were increased. The percentage increase was between just below 1% and above 16%. The sector-specific minimum wages vary according to sector and regional collective bargaining area and range between € 7.90 and 15.73 per hour. The majority of sectors, however, have minimum wages of € 10 and above.

<sup>10</sup> No agreement could be reached in the hotel and restaurant sectors and in the taxi sector.

Figure 10

Universally applicable sectoral minimum wages concluded by collective agreements in €/hour



\* not yet declared universally applicable

Source: WSI Collective Agreement Archive; Effective January 2016.



## 5 EFFECTS OF THE MINIMUM WAGE ON EMPLOYMENT

While in international minimum wage research, the majority of recent studies came to the result that no direct relation exists between minimum wages and employment development (Bosch/Weinkopf 2014), a large number of German economists had expected that the introduction of the minimum wage in Germany would have a clear negative effect on the development of employment. Various studies predicted hundreds of thousands or even up to one million of jobs being lost (for an overview, see Schulten/Weinkopf 2015).

One year after the introduction of the statutory minimum wage economists across the country are largely in agreement that the “predicted job drama did not happen” (Joachim Möller, quoted by Eubel 2016). On the contrary, at the end of 2015 Germany recorded the lowest unemployment figures since the beginning of the 1990s (Bundesagentur für Arbeit 2015). This applies to West as well as East Germany.

According to employment statistics of the Federal Employment Agency (Bundesagentur für Arbeit) there were 713 000 more regular employees with social insurance in October 2015 than in the same month of the previous year (Table 5). This reflects an increase of 2.3%. In East Germany the increase in employment of 1.9% was slightly less than in West Germany (2.4%). The biggest employment growth of 6.6% was recorded in the hotel and restaurant sector, followed by the areas of “other economic services”, temporary agency work, homes and social services as well as transportation and storage. Thus, a number of classical low-income sectors that had to face a particularly strong increase of wages after the introduction of the minimum wage, have seen an above-average increase in employment. On the other hand, the whole of Germany has recorded a slight employment decrease only in the mining and energy supply and waste disposal sectors – sectors that do not form part of the classical low-wage sectors and thus were only slightly affected by the minimum wage.

In East Germany, however, a slight decrease in employment can be seen in some sectors, these including the mining, energy supply and waste disposal sector, the financial sector, the public service sector as well as agriculture, forestry and fishery sector. Only the last mentioned sector shows a high share of low-wage earners. The decrease in employment can, however, hardly be attributed to the minimum wage, because agriculture and forestry still fall under a collective bargaining exemption clause according to which the minimum wage in East Germany is € 7.90 until the end of 2016.

A comparably strong decline of just below 133 000 jobs was recorded for marginally employed

persons. With minus 4.7% in East Germany in comparison to minus 1.3% in West Germany this is a significant decline. The decline for exclusively marginally employed persons of over 200 000 jobs was even more severe, whereas the number of marginally employed persons in secondary employment has increased strongly.

The reduction of mini jobs is often seen as proof that the minimum wage has led to employment losses (Groll 2015, Knabe/Schöb 2015, Peters 2015). Indeed, the share of employees earning less than € 8.50 before the introduction of the minimum wage was by far the highest among the marginally employed persons and thus the introduction of the minimum wage led to the biggest increase of hourly wages in this income group. In fact, the minimum wage again led to the introduction of a maximum work limit for marginal employment that is at 53 hours per month without taking into consideration paid leave, sick leave and public holidays, which makes these jobs far less attractive for employers.

However, the reduced number of mini-jobs cannot simply be construed as a corresponding number of job losses. Within the framework of the newly introduced “Labour market mirror” on the developments after the introduction of the minimum wage, the Institute for Employment Research (IAB) investigated the particularly strong reduction of the only marginally employed persons at the turn of the year 2014/2015 (Berge et al. 2016). According to this study just above half of the decline can be explained by the affected employees having changed to an employment relationship subject to social insurance. About 40% of the former mini-jobbers have not been accounted for, but the IAB assumes that the majority of these are no longer available to the labour market. The share of former mini-jobbers who then reported to be unemployed was very low at 4%.

Overall, the introduction of the minimum wage led to a significant share of formerly marginally remunerated jobs being transformed into regular employment relationships subject to social insurance. This is supported by the above-average growth of employment subject to social insurance in sectors, which traditionally had a particularly high number of mini-jobbers, as for example the hotel and restaurant sector.

In conclusion it can thus be said that so far no indications were found that the introduction of the minimum wage had negative effects on employment relationships in the German labour market. To a limited extent it may even be assumed that the introduction of the statutory minimum wage led to an additional gain in purchasing power that strengthened domestic demand and thus the creation of new employment opportunities (Horn et al. 2015).

## Employees subject to social insurance and marginally employed persons

Changes in comparison to the previous year, October 2015

Employees subject to social insurance	Germany		West		East	
	absolute	in %	absolute	in %	absolute	in %
Hotels and restaurants	62.200	6,6	47.700	6,6	14.500	6,7
Other economic services	75.300	5,7	62.500	6,3	12.700	3,9
Temporary agency work	39.400	4,9	33.100	5,1	6.200	3,8
Homes and social services	93.100	4,5	78.100	4,9	15.000	3,3
Transportation and storage	63.500	4,0	52.800	4,1	10.900	3,5
Real estate activities, scientific and technical services	68.700	3,1	54.000	3,0	14.700	3,9
Information and communication	27.300	2,9	19.900	2,5	7.300	4,8
Health	54.300	2,4	44.900	2,4	9.200	2,1
Other services, private households	22.900	2,1	22.100	2,5	800	0,3
Agriculture, forestry and fishery	4.800	2,0	5.800	3,9	-1.000	-1,1
Trade, vehicle rep.	82.600	1,9	66.800	1,9	15.800	2,2
Education and teaching	21.400	1,8	18.400	2,1	2.900	1,0
Construction	27.100	1,6	27.300	2,0	-200	-0,1
Manufacturing	70.800	1,1	65.300	1,1	5.600	0,6
Public administration, defence, social insurance	6.600	0,4	12.200	0,9	-5.600	-1,4
Financial and insurance services	-100	0,0	700	0,1	-900	-0,8
Mining and quarrying, energy supply, waste disposal	-4.100	-0,8	-3.100	-0,7	-1.000	-0,8
<b>Total</b>	<b>713.000</b>	<b>2,3</b>	<b>608.500</b>	<b>2,4</b>	<b>107.000</b>	<b>1,9</b>
<b>Marginally employed persons</b>						
Only marginally employed persons	-200.800	-4,0	-149.800	-3,4	-48.400	-7,3
Marginal employment as second job	68.300	2,7	63.300	2,8	6.400	2,8
<b>Total</b>	<b>-132.600</b>	<b>-1,8</b>	<b>-86.500</b>	<b>-1,3</b>	<b>-42.000</b>	<b>-4,7</b>

Source: Federal Employment Agency (2016)

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## 6 HOW SHOULD THE STATUTORY MINIMUM WAGE BE ADJUSTED IN FUTURE?

Against the background of the socially and economically very successful implementation of the minimum wage the question about the future adjustment of the minimum wage level is now on the agenda. In terms of the German Minimum Wage Act (Mindestlohngesetz, MiLoG) the adjustment of the minimum wage is to be decided upon by the Minimum Wage Commission that was specifically established for this purpose and that is made up equally of three representatives from trade unions and employers respectively and one independent chairperson. The Minimum Wage Commission has the task to decide on the adjustment of the level of the minimum wage every two years, whereby the first resolution is to be taken on 30 June 2016 to come into effect on 1 January 2017. In this respect the commission is to verify "within the framework of an overall assessment what level of minimum wage is proper to contribute to an appropri-

ate measure of protection for employees, to allow for fair and well-functioning competitive conditions and not to threaten employment." Furthermore, it was determined that the Minimum Wage Commission should take into consideration "the previous developments of collectively agreed wages" (German Minimum Wage Act § 9).

According to information by the Federal Statistical Office the index of collectively agreed wages (without special payments) that is decisive for the Minimum Wage Commission increased by 2.9% in 2014 and by 2.5% in 2015 (Table 6). For the entire period of two years this results in an increase of 5.5%. Should the minimum wage of currently € 8.50 per hour be increased by the same percentages, this would result in an amount of € 8.97.<sup>11</sup> This would mean that € 9 is the guiding value for the next adjustment of the German minimum wage.

<sup>11</sup> The WSI Collective Agreement Archive in its collective bargaining statistics suggests an increase of collectively agreed wages for the years 2014 and 2015 of 3.1% and 2.7%. This results in an overall increase of 5.9% and thus in an increase of the minimum wage to € 9.00.

In view of the stable economic situation and the high employment figures in Germany the question of whether the current minimum wage level guarantees an “appropriate minimum protection of employees” as demanded by the Minimum Wage Act should be discussed. Since no generally accepted definition of the “appropriateness” of a certain minimum wage level exists, we conclude this report by discussing some guiding criteria for the future adjustment of the German minimum wage.

A first guiding criterion could be the level of minimum wages in other European countries. The minimum wages of western European countries outside Germany that have a level of economic development comparable to that of Germany are all above € 9 per hour (Table 7). In France the minimum wage is currently even more than one euro above the German minimum wage level.

Besides the absolute minimum wage amount the relative minimum wage amount in comparison to the overall national wage structure is of importance. This value that is also referred to as the Kaitz index is calculated in relation to the respective national average or median wage. In all European countries the minimum wage is clearly below the low-income threshold of two-thirds of

wage” in terms of relative poverty.<sup>12</sup> In the discussions on minimum wage policies being coordinated across Europe a minimum wage of 60% of the median wage is often considered as a “appropriate minimum wage level”. For Germany this would imply an increase to significantly above € 10 (Schulten 2016).

The sectoral minimum wages agreed upon through collective agreements in various sectors can be considered a second guiding criterion for an appropriate minimum wage level. The majority of sectors now show minimum wages of € 10 and above (see Chapter 4).

Finally, the suitability of the minimum wage level must be assessed by whether the minimum wage can actually guarantee a certain minimum subsistence level. In discussions about the German minimum wage the aim was formulated repeatedly that the wage should allow for a decent life without additional social benefits from the state – at least for single full-time employees. For large German cities it can be said with certainty that a minimum wage of € 8.50 will not be sufficient without social benefits, even for households of singles. Such social benefits would only become redundant if the minimum wage were raised to clearly above € 9. In particularly expensive cities, such as Munich, the local

Table 6

#### Model calculation: adaptation of the minimum wage to average developments of collectively agreed wages in 2014 and 2015

Increase of the index of collectively agreed wages in 2014	2,9%
Increase of the index of collectively agreed wages in 2015	2,5%
Increase of the index of collectively agreed wages in 2014 and 2015	5,5%
<b>Increase of the minimum wage of € 8,50 by 5,5%:</b>	<b>Increase to € 8,97</b>

Source: Federal Statistical Office 2016, calculations by WSI

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Table 7

#### Minimum wages in Western Europe

	Absolute minimum wage per hour, in € January 2016	Relative minimum wage Minimum wage in % of the median wage, 2014
Luxembourg	11.12	56.5
France	9.67	61.1
The Netherlands	9.36	47.7
United Kingdom	9.23	48.0
Ireland	9.15	43.6
Belgium	9.10	50.5
Germany	8.50	47.8

Source: WSI Minimum Wage Database 2016, OECD

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the median wage. In many countries – including Germany – it is even below 50% of the median wage and must thus be considered as a “poor

12 The 50% threshold is taken from international poverty research in terms of which a household with a net equivalence income of below 50% of the median income is considered a poor-income household.

job agency even considers a minimum wage of € 11.50 to be necessary (Farrenkopf 2015).

A similar scenario can also be developed for income in old-age: according to calculations by the Federal Ministry of Labour and Social Affairs – on the basis of a 38.5 hour-week and 45 insurance years – an hourly wage of about € 11.50 would have been required in 2015 to achieve a pension above the basic subsistence level (Öchsner 2015).

The continuing debate on the adjustment of the minimum wage shows that the application of a methodically and technically impeccable process to determine the 'optimum rate' of increase alone is insufficient. The wording of the Minimum Wage Act that the adaptation is to be done "within the framework of overall considerations" already indicates that other factors must be taken into consideration in such a decision. As with the introduction of the statutory minimum wage, prior political and social discussions will play an important role in its adjustment too.

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