

## THE GERMAN MIDDLE CLASS FROM A LABOUR MARKET PERSPECTIVE\*

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In international comparison, Germany can be characterised as an inclusive Bismarckian welfare state with a broadly based middle class. Since the mid-1990s, however, the economic basis of middle-class prosperity and security has been crumbling. The article investigates the development of the German middle class from a labour market perspective. The explosion of the low-wage sector, as well as an increasingly unequal distribution of working time among households, is weakening the economic basis of the middle class. These developments came along with an erosion of the previously inclusive wage system, which was caused by the deregulation of the labour market and the weakening of unions' bargaining power.

Nei confronti internazionali la Germania viene definita come uno stato sociale inclusivo di stampo bismarckiano, caratterizzato da un'ampia classe media. Tuttavia, a partire dalla metà degli anni Novanta, le fondamenta economiche della prosperità e della stabilità della classe media sono andate sgretolandosi. Il presente contributo analizza lo sviluppo della classe media tedesca partendo dal mercato del lavoro. L'esplosione dei settori a bassi salari e una distribuzione sempre più ineguale delle ore di lavoro tra le famiglie hanno indebolito le basi economiche della classe media. Questi sviluppi si sono sovrapposti alla progressiva erosione del sistema salariale inclusivo, causata dalla deregolamentazione del mercato del lavoro e dall'indebolimento del potere contrattuale dei sindacati.

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### 1. INTRODUCTION

In comparative research on the welfare state, the German social model is often regarded as based on the prototype of the conservative Bismarckian welfare state, in which differences in labour market status are perpetuated by income-related benefits (Esping-Andersen, 1990). This status-perpetuating effect certainly cannot be dismissed out of hand; nevertheless, this categorisation underestimates the levelling effect of the German welfare state in the post-war period, for two reasons. First, virtually all employees were (and still are) members of the major social insurance schemes. Among them, only tenured civil servants (*Beamte*) have their own special system. The universal nature of these

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insurance schemes means that the vast majority of the population up to the upper-middle strata are protected against the main contingencies of life. Second, earnings differentials were reduced by industry-level collective agreements covering virtually all workers in the relevant industry and geographical area. In combination with an inclusive wage-setting system, these social insurance schemes perpetuate only slight differences in status. By virtue of these complementarities – and to depart somewhat from Andersen’s typology – the German social model in the post-war period can be described as an *inclusive Bismarckian welfare state* (Bosch, 2015). As such, it provided the economic underpinning for a broadly based middle class that enjoyed a high level of stability over the various phases of the life course, including old age.

Since the mid-1990s, however, income inequality has increased more sharply in Germany than in many other European countries. However, the question of whether this has led to the erosion of the incomes policy that provided a firm foundation for the middle classes is hotly debated (ISG, 2011; Arndt, 2012). In fact, it does not necessarily follow that increasing inequality in individual incomes inevitably leads to inequalities in the household disposable income, which is a decisive factor in determining class affiliation. Household members can compensate for losses of income by increased economic activity, for example, and the welfare state can also make good such losses.

In what follows, we will first outline the growing inequality of income in the primary and secondary distribution between 1992 and 2013 and investigate whether and to what extent this has altered the earnings position of the middle-income groups and their various sub-groups (Section 2). This will be followed by an analysis of household composition in the various income groups, their annual working time and hourly wages (Section 3). In Section 4 we sum up the results and draw conclusions.

## 2. EVOLUTION OF THE MIDDLE HOUSEHOLD INCOME GROUPS BETWEEN 1995 AND 2013

The size and evolution of the middle-income groups are very strongly influenced by how the middle is defined statistically. As the lower limit, we adopt the internationally acknowledged poverty threshold of 60% of median income and as the upper limit, double that median income. Such a broad definition, which puts more than two thirds of all households in the middle-income groups, brings with it the risk that major shifts within this large group will be overlooked; these shifts may be of similar or even greater significance than those between the three income groups. For this reason, we divide the middle-income group into three sub-groups, defining the lower and upper income groups as follows:

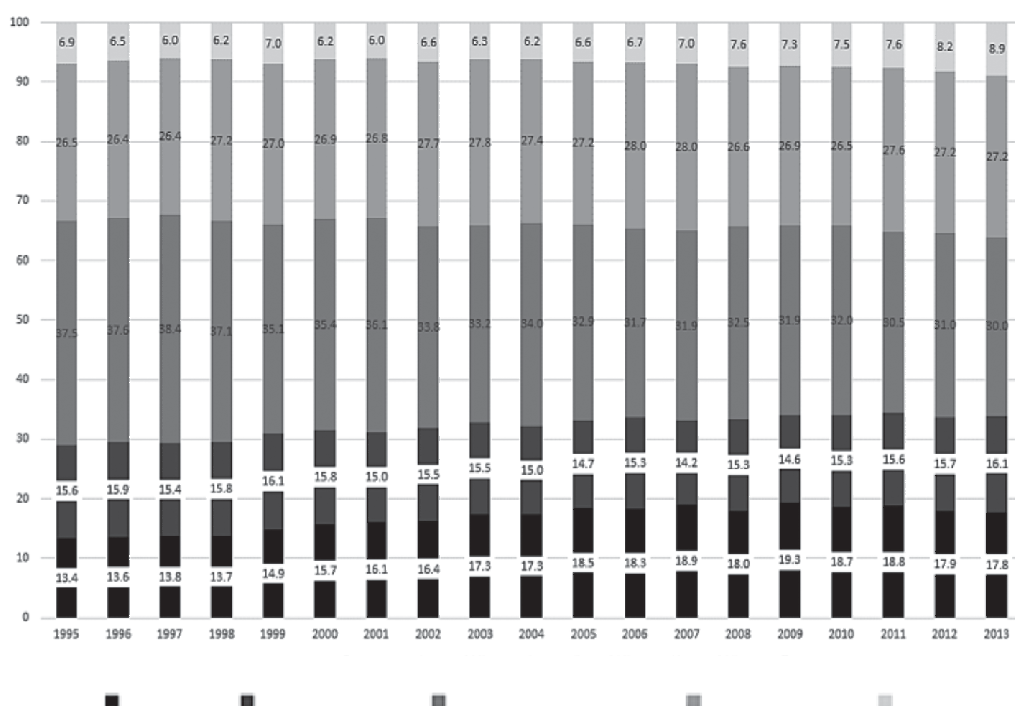
- (i) less than 60% of the median (lower-income group);
- (ii) 60 to 80% of the median (lower middle);
- (iii) 80 to 120% of the median (intermediate middle);
- (iv) 120 to 200% of the median (upper middle);
- (v) 200% of the median and above (upper-income group).

In the following analysis we differentiate between the primary distribution – that is, the distribution of income generated directly by the market process – and the secondary distribution, which relates to disposable income after taxation and transfer payments. The equivalence-weighted data on income at household level include all market income from employment and self-employment, as well as income from assets, maintenance payments and private pension plans.

The analysis of the secondary as well as the primary distribution will enable us to ascertain whether, and to what extent, the State (including the social insurance funds) compensates for possible increasing inequalities in primary incomes in the middle-income groups via the revenue side (taxes, social insurance contributions) or the expenditure side (transfers) and whether redistribution is stronger or weaker than two decades ago<sup>1</sup>.

Figure 1 shows the evolution of the distribution of hourly pay between 1995 and 2013. The figures are evidence of clear increases in the shares of the upper and lower-income groups. The share of the lowest-income group increased between 1995 and 2013 from 13.4% to 17.8%, while the share of the upper-income groups rose from 6.9% to 8.9%. Since the shares of the upper and lower middle-income groups remained virtually unchanged, the losses were suffered almost exclusively by the intermediate middle-income group, whose share fell from 37.5% to 30.0%.

Figure 1. Distribution of hourly gross wages by income brackets, 1995-2013, in percentage (employees)

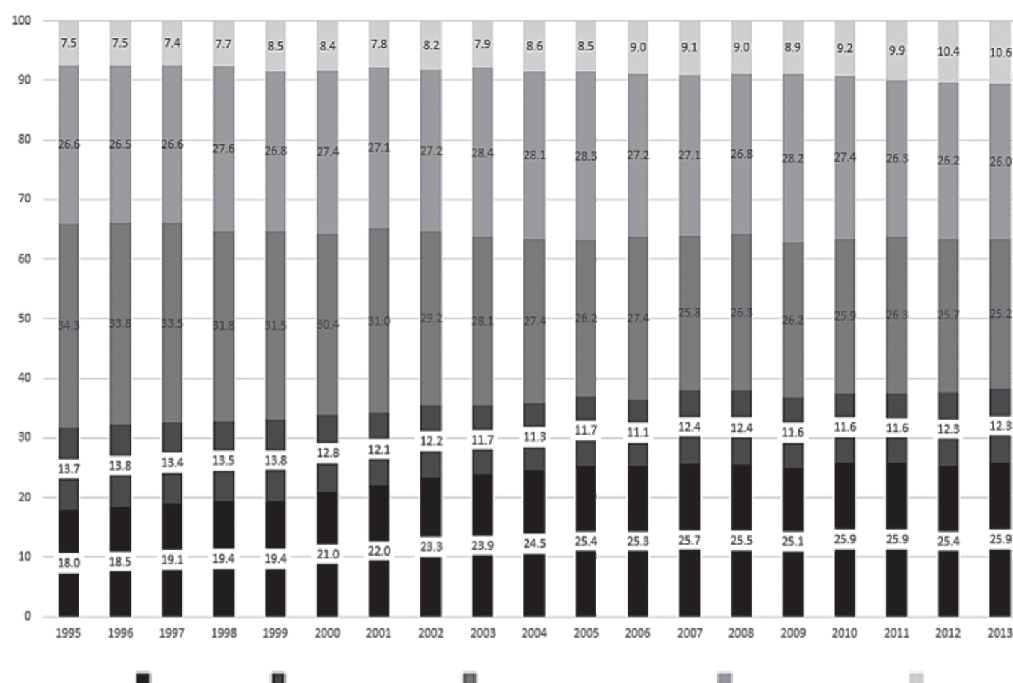


Source: SOEP v30, own calculation.

<sup>1</sup> The analysis is based on the German Socio-economic panel (SOEP). The SOEP is a household survey that has been carried out annually in Germany since 1984 on behalf of DIW Berlin by TNS Infratest Sozialforschung. A representative sample of households and all people aged 17 and over living in them are surveyed. The SOEP's basic population is the resident population living in private households within the current boundaries of the Federal Republic of Germany. The SOEP data are rendered representative by means of a differentiated extrapolation procedure (Wagner, Frick, Schupp, 2007).

The changes in individual incomes become even clearer when monthly incomes are examined (FIG. 2). Many employees in the middle of the hourly pay range fall back into the lowest-income group because of short working times, while others actually ascend into the upper-income group because they work long hours. Overall, at 63.5%, the share of the three middle-income groups of employees in 2013, calculated on the basis of monthly wages, was almost 10 percentage points (p.p.) lower than that calculated on the basis of hourly pay (FIG. 1).

Figure 2. Distribution of monthly gross wages by income brackets, 1995-2013, in % (employees)



Source: SOEP v30, own calculation.

In contrast to the wage income shown in FIG. 1 and 2, the equivalence-weighted data on income at household level include all market income from employment and self-employment, as well as income from assets, maintenance payments and private pension plans (FIG. 3). Thus the figures also include transfers, albeit – in contrast to the secondary distribution – only private transfers. According to these figures, the share of households in the middle-income groups in all households fell between 1992 and 2013 by almost 10 p.p., from 56.4% to 48.0%.

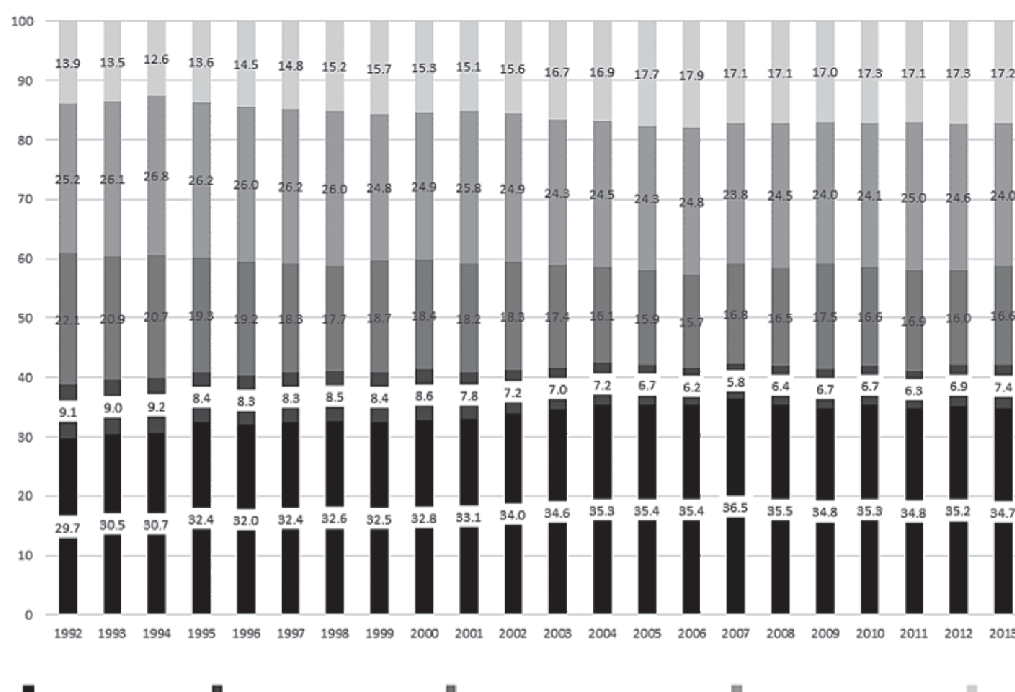
Here too, it was the intermediate middle-income group that suffered the greatest loss of share (–5.5 p.p.). The shares of the upper and lower-income groups in all households are considerably higher than for individual incomes from proper employment, for which



there may be several reasons. The most likely are the growing inequality in income from assets, the high share of high-earning self-employed workers, who are not included in the analyses of individual pay, and increasing differences in the number of earners and hours of paid work in households<sup>2</sup>. The evolution of the number of earners and hours worked at household level will be investigated in greater detail in the next section.

Taken as a whole, the data show a clear trend towards an increasingly unequal distribution for all three indicators of primary income.

Figure 3. Distribution of equivalised household gross income before taxes and transfers in the previous year, 1992-2013, in percentage



Source: SOEP v30, own calculations.

The share of all the middle-income groups in disposable income in 2013, at about 78%, was 30 p.p. higher than their share in market income (FIG. 4)<sup>3</sup>. Compared with the primary distribution, the German welfare state halves the highest-income groups' share in all households, mainly via the progressive income tax system. At the other end of the income distribution, the combined effect of a reduced tax burden and transfer payments

<sup>2</sup> The differences in the distribution of assets and the income distribution of the self-employed have been profitably investigated elsewhere (Grabka, Westermeier, 2014 and Fritsch, Kritikos, Sorgner, 2015).

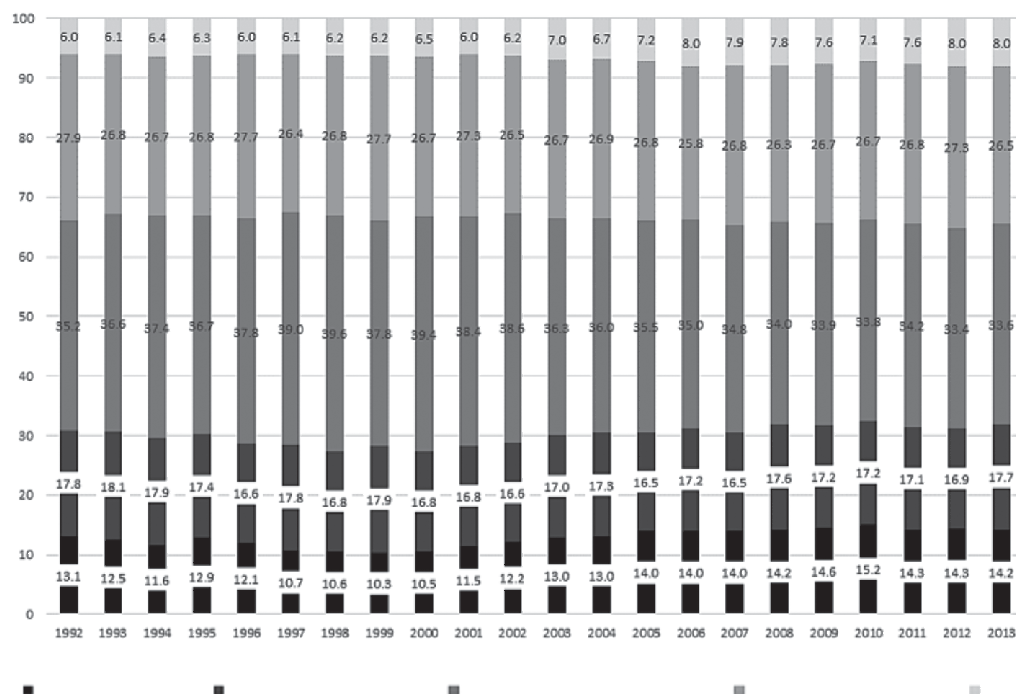
<sup>3</sup> Calculated on the basis of the previous year's incomes.

reduces the share of the lowest-income group by more than 20 p.p., since many households are ‘promoted’ to the lower middle or intermediate middle-income group when classified by disposable income.

Thus, to a large extent, though not fully, the welfare state has been able to compensate for the growing inequality in the primary income distribution. Particularly since the beginning of the new millennium, the shares of the upper and lower-income groups in all households have been growing, admittedly not dramatically but nevertheless by 3.7 p.p. (bottom) and 1.5 p.p. (top), so the upward trend is quite clear, while the share of the middle-income groups declined from 83 % in the year 2000 to 78 % in 2013.

This development has been interpreted in very different ways in the extremely vigorous German debate on the changes in the middle-income groups. According to Goebel *et al.* (2010), incomes are becoming increasingly polarised and the middle-income groups are shrinking. Enste *et al.* (2011), on the other hand, do not detect any clear trend but rather fluctuations in the shares of the various income groups and point to what is, by international standards, the high share of the middle-income groups in disposable income. According to them, the slight increase at the lower margin is above all a consequence of the growth in one-person households: when couples split up, the partner with a low income could be relegated to the lowest-income group.

Figure 4. Equivalised disposable household income after taxes, social insurance contributions and transfers in the previous year by income group, 1992-2013, in percentage



Source: SOEP v30, own calculations.

Our most up-to-date data support the position adopted by Goebel *et al.* (2010). However, what is surprising about the debate, for several reasons, is the one-sided focus on disposable household income after tax and transfers and the consequent neglect of the primary distribution. First, for people of working age, it makes a big difference whether you earn your income yourself or are reliant on transfers. Achieving your income position ‘under your own steam’ imparts self-confidence and a feeling of greater social independence than being dependent on transfers, which can be restricted at any time by political decisions. Second, the growing inequality in primary incomes means that the welfare state is increasingly being required to compensate for growing income deficiencies in the middle and lower-income groups. The increasing demands on the welfare state were offset by the spurts of strong economic growth between 2004 and 2008 and from 2009 to 2015 and the associated growth in employment. However, it is becoming increasingly uncertain whether this will continue to be possible in the event of a sustained economic crisis and with an ageing population. Thirdly and finally, it takes decades for the social costs of an unequal primary distribution to show up fully in the social protection system. This applies in particular to the effects of low pay on future pensions. Thus, growing inequality in primary incomes is a reliable indicator of increasing distribution problems in fiscal and social policy.

Taken as a whole, the data show a clear trend towards an increasingly unequal primary distribution. The trend over the past 20 years has been relatively continuous and thus cannot be explained by one-off events, such as the Hartz Acts of 2003. In contrast to other countries (Vaughan-Whitehead, 2011), even the financial crisis has not had any detectable influence on the primary income distribution in Germany. Despite a sharp decline in GNP of 4.9% in 2009, employment remained stable, because the drop in orders was cushioned by a redistribution of working time and, above all, by state-subsidised short-time working (Bosch, 2011). The main beneficiaries of this protection were the middle-income groups in the high-earning German export sector.

### 3. EMPLOYMENT PATTERNS, WORKING TIMES AND WAGES BY HOUSEHOLD FROM 1995-1997 TO 2011-2013

The distribution of equivalence-weighted household incomes can be influenced by changes in employment patterns. Thus households can slide down the income distribution if the total number of paid hours worked by household members is reduced and, conversely, rise up the distribution if the number of paid hours worked increases. Increasing the household labour supply by increasing individual working times or increasing the number of earners is a familiar compensation strategy for maintaining living standards in the event of wage reductions. However, such compensation strategies are not always successful if household members are offered only part-time work because of inadequate skills or qualifications or if they are involuntarily unemployed. This is why we talk about employment patterns rather than preferred employment behaviour. In what follows, we describe changes in employment patterns. In order to obtain reliable results despite the inadequate number of cases in several cells, we pooled the data from three years to form two periods for comparison (1995-1997 and 2011-2013)<sup>4</sup>.

<sup>4</sup> Definition of employment patterns: multiple earners:  $\geq 2$  full-time; secondary earner: 1 full-time  $+\geq 1$  part-

Households in Germany have become smaller over the past two decades. The share of the total population living in one-person households has increased by a little under 4 p.p. (TAB. 1). The biggest increase is in multi-person households with low levels of gainful employment, that is, at most one part-time job (up 5 p.p.). The share of households with several earners has evolved in different ways since the 1990s. The share of multiple-earner and single-breadwinner households has declined, while the share of households with secondary earners and two part-time workers has increased. Thus, the increase in women's employment in Germany has not been reflected in an increase in two-earner households with two full-time jobs but rather in an increase in the number of secondary earners working part time<sup>5</sup>.

Table 1. Evolution of household employment patterns from 1995-1997 to 2011-2013, Germany (share in total population)

Employment pattern	All households		Multi-person households with substantial levels of employment	
	1995-1997	2011-2013	1995-1997	2011-2013
Multiple earners	17.6	12.3	28.4	23.2
Secondary earner	19.8	21.8	32.0	41.0
Single breadwinners	21.0	15.0	34.0	28.2
Dual part-time	3.5	4.0	5.6	7.6
Low level of gainful employment	21.5	26.5		
Single	16.6	20.3		
Total	100.0	100.0	100.0	100.0

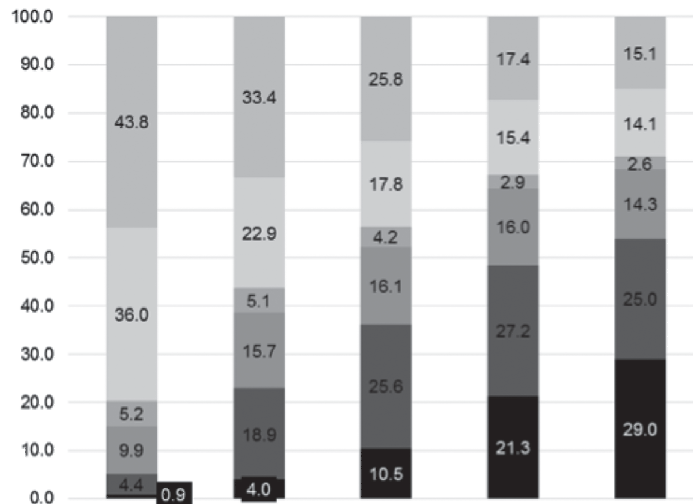
Source: SOEP v30, authors' calculations.

Figure 5 shows the distribution of the population among the various types of household by equivalence-weighted disposable income. In multi-person households with, for example, four people, all four individuals are included in the analysis. The high proportion of single-person households and households in the lower-income groups with no or only marginal levels of gainful employment is clearly evident. As household income rises, so the share of people in multiple-earner households also rises, which is indicative of the close association between the presence of several gainfully employed individuals and membership of the higher-earning households.

time; single breadwinner: 1 full-time; dual part-time:  $\geq 2$  part-time; low level of gainful employment: maximum 1 part-time; single: only one person in household.

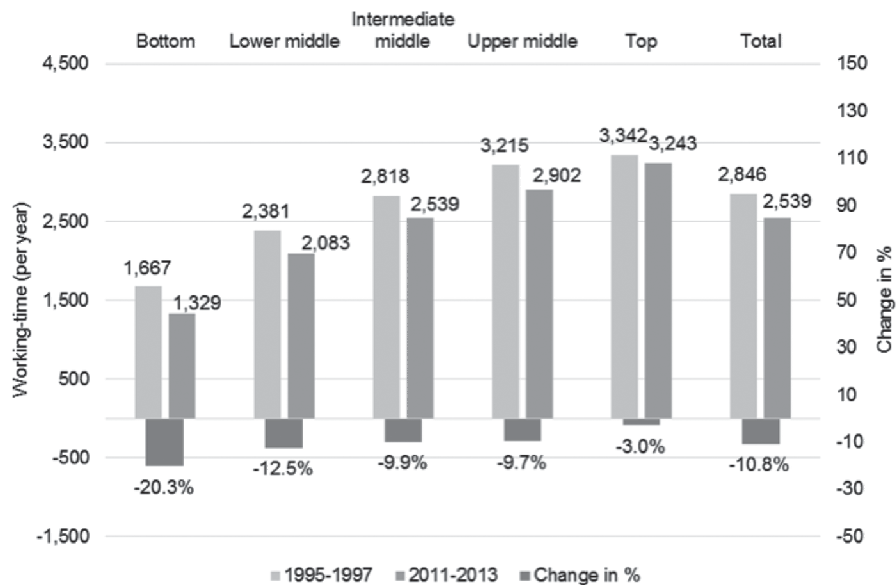
<sup>5</sup> This increase could constitute a compensation strategy for a reduction in the volume of working time by increasing the number of earners. In order to be able to assess this accurately, however, one would have to investigate the evolution of individual households over time in order to ascertain whether a second-earner household, for example, was in the past a two-earner or single-breadwinner household.

Figure 5. Employment patterns by income brackets (net disposable, equivalence-weighted household income in the previous year), 2011-2013 (percentage share in total population)



Source: SOEP v30, authors' calculations.

Figure 6. Gross working times per household by income brackets (net disposable income in the previous year), Germany, 1995-1997 and 2011-2013



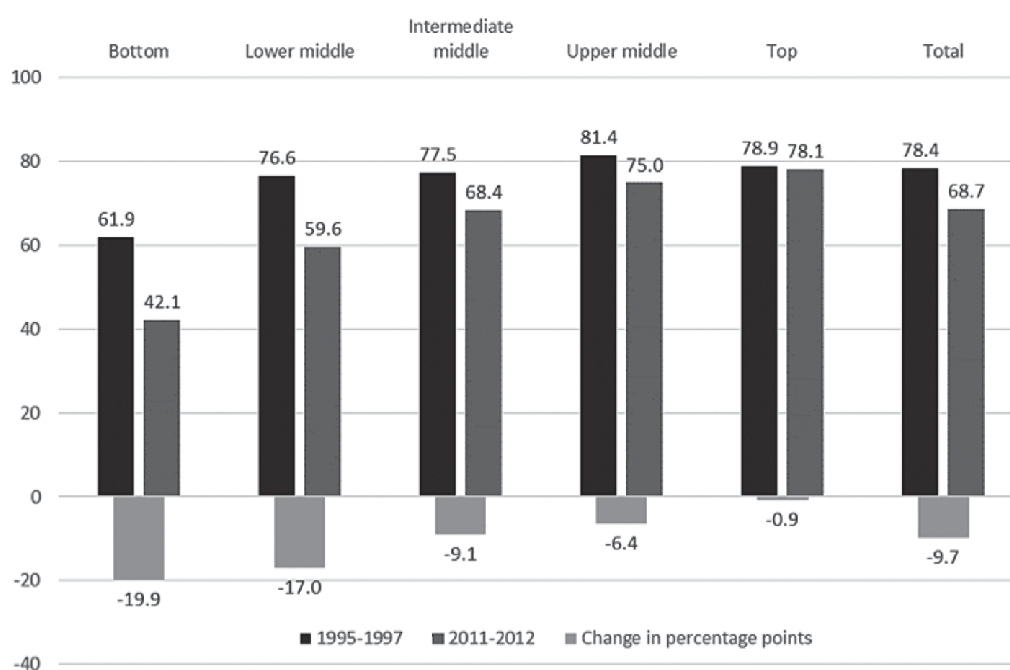
Note: also includes paid holidays, sick-leave days and statutory public holidays; the basis for calculation is the working times of all economically active individuals. The inactive population is not included.

Source: SOEP v30, authors' calculations.

The upper-income groups have not only more earners but also significantly longer working times. Figure 6 shows average gross paid hours worked per household by income group. Gross paid hours include the hours actually worked together with paid holiday, paid sick days and statutory public holidays. The working times of households in the highest-income bracket are on average 2,000 hours per year higher than those of households in the lowest-income group. Since 1995-1997, the number of paid hours worked has declined in all income groups, but the reductions are much greater in the lower-income groups than in the middle and upper-income groups. Thus the increasing differentiation of household working times has contributed to the growing inequality among households in primary income.

The growing differentiation of working times is the result primarily of the reduction in full-time employees in the two lower-income groups. In the lowest-income group the share of full-timers fell by about 20 p.p., while in the lower middle-income group it fell by 17 p.p.; in the highest-income group, the share of full-timers remained virtually unchanged (FIG. 7).

Figure 7. Share of full-time employees ( $\geq 35$  hours per week) among dependent employees by income group, 1995-1997 and 2011-2012

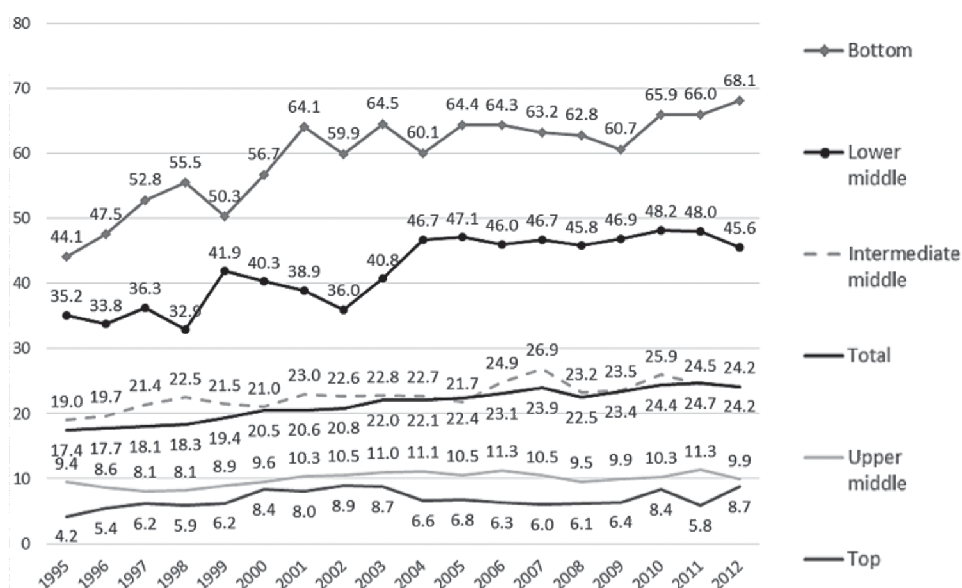


Source: SOEP v30, own calculations.

The third variable besides the number of earners and working time that determines the level of household market income is the hourly rate of pay. The risk to earn an hourly

wage below the low-wage threshold of two thirds of the median hourly wage is at more than 68% (2012) in the lowest-income group, much higher than the average low-pay risk of about 24% (FIG. 8). The risk of low pay grew especially in the bottom and the lower middle-income groups from 44% to 68% and from 35% to 46%, respectively. For the upper middle and the top-income groups the risk of low pay is in most years below 10%. In these income groups low pay can anyway be compensated by the higher income of other household members.

Figure 8. Share of low-wage work (below two thirds of the median hourly wage) by income group, 1995-2012



Source: SOEP v30, authors' calculations.

The differences in hourly pay rates become even more obvious if we further differentiate the analysis by household employment pattern (TAB. 2). Average hourly pay in the upper-income class, at 38.62 € in 2011-2013, was around five times greater than the hourly rate in the bottom-income group. Hourly rates, such as working time, rise with income level, such that the differences in euros between the groups widen and are at their greatest (more than 17 €) between the upper middle and top-income groups. These average figures conceal large differences between employment patterns. By far the highest hourly rate, about 52 €, is found among households with two part-timers in the top income bracket. In each income group, the hourly rates of households with a single breadwinner or with two part-time workers are higher than those of multiple-earner and secondary-earner households. This is evidence of a clear trade-off between pay and working time. As hourly rates of pay rise, so do the working time options, and households are better able to manage them with two part-time earners or a single breadwinner.

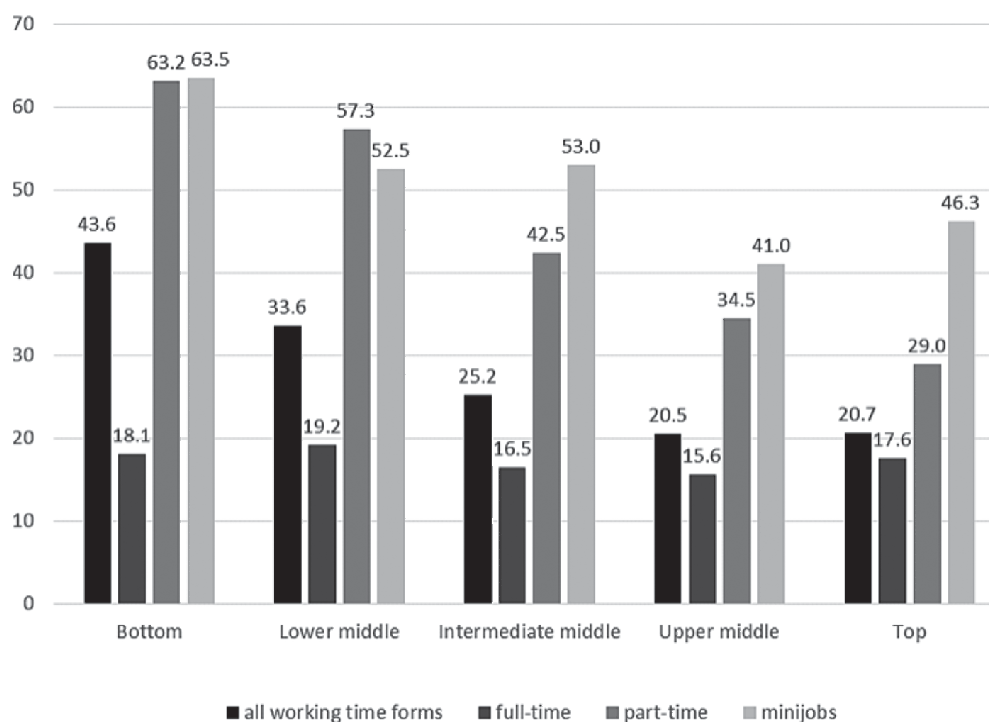
Table 2. Average hourly wage of households by income brackets (equivalised disposable household income) and household employment pattern, Germany, 2011-2013, €

Income brackets	Multiple earners	Secondary earner	Single breadwinner	Dual part-time	Total
Bottom	4.76	7.11	7.70	7.98	7.55
Lower middle	7.72	10.87	11.94	12.55	11.23
Intermediate middle	10.81	14.46	18.06	17.77	15.29
Upper middle	15.72	20.35	27.48	24.10	21.43
Top	25.97	40.79	51.35	52.07	38.62
Total	16.32	18.80	23.50	19.21	19.88

Source: SOEP v30, authors' calculations.

Thus, high hourly rates of pay enable households to reduce their working time, while low pay has the opposite effect, encouraging households to increase their labour supply.

Figure 9. Preference for longer working times by income group, 2011-2012 (employees)



Note: The comparison is between contractually agreed working times and preferred working times. If the preferred working time is more than 1.5 hours longer than the contractual working time, someone wishes to work more; at  $\pm 1.5$  hours preference and contractual hours are equally matched; finally, if the preferred working time is more than 1.5 hours below the contractual working time, someone wishes to work less (cf. Wanger, 2011).

Source: SOEP v30, own analysis.



However, the opportunities to actually realise working time and employment preferences are very unevenly distributed. The preference for longer working times declines as household income rises. In the lowest-income group, almost 44% of households would like longer working times; in the top group, about 21% express such a preference. The preference for longer working times is particularly strong among part-timers in jobs liable for social security contributions and mini-jobbers earning less than 450 € per month (FIG. 9).

#### 4. CONCLUSIONS

From the end of the Second World War onwards, a middle class emerged in Germany that was, by international standards, broadly based. The economic basis for this middle class was good pay and relatively low income differentiation, which was the result of a high coverage rate by collective agreement. In this *inclusive Bismarckian welfare state*, the various social insurance schemes protected the vast majority of the population from life's contingencies.

Since the mid-1990s, however, the economic basis of middle-class prosperity and security has been crumbling. In the primary distribution, the share of households in the middle-income groups fell between 1992 and 2013 by more than 8 p.p., from 56.4% to 48%. The welfare state was no longer able to compensate fully for this unequal primary distribution. The middle-income groups' share in the secondary distribution – that is, after taxes, social insurance contributions and social transfers – also fell from 83% to 78% between 2000 and 2013. This decline cannot be explained by demographic factors, such as changes in household size, or inadequate qualification levels among low earners, but largely by the increasingly unequal distribution of working time among households and the explosion of the low-wage sector and precarious employment forms in Germany. The decline in coverage by collective agreements and the erosion of the previously inclusive wage system cannot be explained solely by the deregulation of the labour market by the Hartz Acts of 2003. Equally important factors include the trade unions' weaker bargaining power following the rapid increase in unemployment in the wake of the collapse of the eastern German economy, the difficulties of transferring the western Germany collective bargaining system to the less productive eastern German economy, and increased reluctance on the part of employers to adhere to collective agreements. Also important are product market deregulation, and in particular the transfer of previously publicly operated services into the hands of private providers, the large-scale job cuts in the public sector, the repeated cuts in pension levels and, finally, the traditional German family model, which offers strong incentives for women to restrict their labour supply. At the same time, the middle-income groups have been stabilised by the strong employment growth since 2005, the introduction of long-term care insurance and the so-called 'employment miracle' in the financial crisis, in which there were neither mass redundancies nor any increase in youth unemployment. The new minimum wage and the easing of the process of declaring collective agreements generally binding may work in the same direction, which at the time of writing could not be demonstrated with statistics, however.

The middle-income groups have also shrunk further in the past decade, when these last-named stabilising factors had already begun to work. Thus, the continuing decline in coverage by collective agreements, the growth in relatively unprotected employment forms and the above-average reduction in paid working hours in low-income households are

interacting with all the other changes. Consequently, the new minimum wage, an increase in coverage by collective agreements, the re-regulation of atypical employment forms and the elimination of all incentives to take marginal, part-time jobs are the keys to strengthening the middle-income groups in Germany.

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