

Gerhard Bosch

## The middle class under pressure: the case of Germany

Labour market chances and transitions in time of austerity  
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**Prof. Dr. Gerhard Bosch**

Universität Duisburg Essen

Institut Arbeit und Qualifikation

Forsthausweg 2, LE, 47057 Duisburg

**Telefon:** +49 (0)203 / 379-1827; **Fax:** +49 (0)203 / 379-1809

Email: gerhard.bosch@uni-due.de; www.iaq.uni-due.de

## After WW II German Society

***“levelled out middle class society”***

***(nivellierte Mittelstandsgesellschaft)***

**(Schelsky 1953: 218)**

# 1. Economic foundation of the German middle class both in primary and secondary distribution

## *Primary distribution: inclusive wage system*

- High coverage by collective agreements
- Standard employment relationship – dominant norm
- low income differentiation

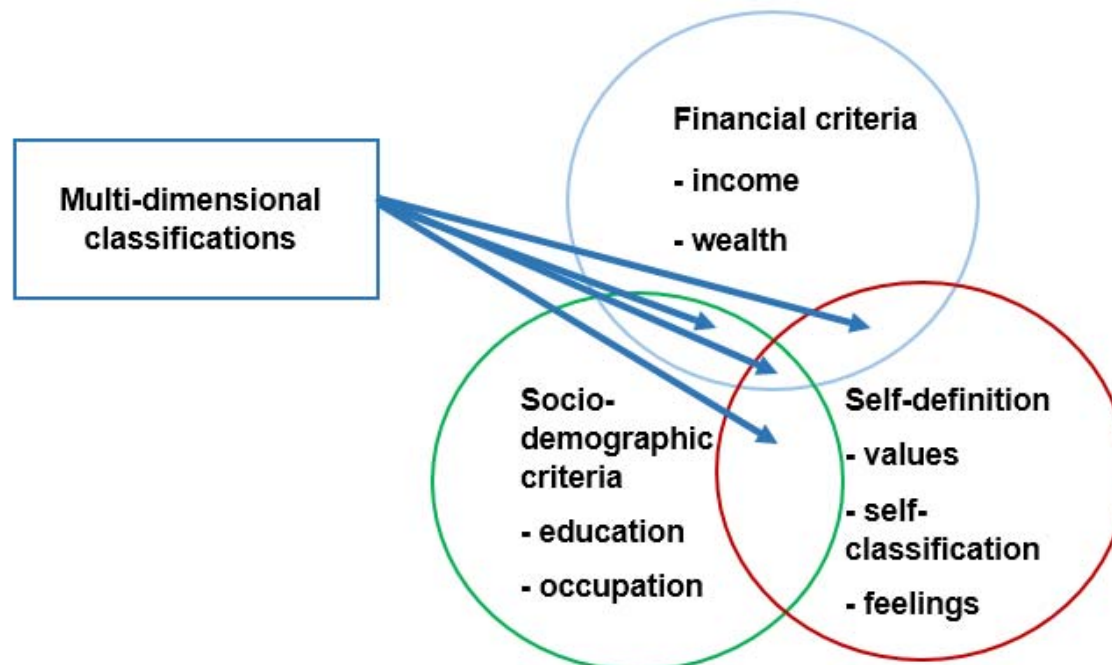
## *Secondary distribution: conservative Bismarkian welfare state*

- Most employees were covered by social insurances
- income related social benefits – status maintenance
- Low unemployment – means tested assistance systems marginal role
- derived entitlements for spouse and children

*Inclusive Bismarkian welfare state* designed around the needs of the middle class

## 2.1 Social classes are multidimensional

- Here analysis of income dimension
- Middle income class 60 -200% of median
- Differentiation of lower, middle and upper middle income classes



## 2.2 Since early 90's –increasing inequality of primary distribution in last 2 decades

Size of middle income classes 2011/reduction since 1995

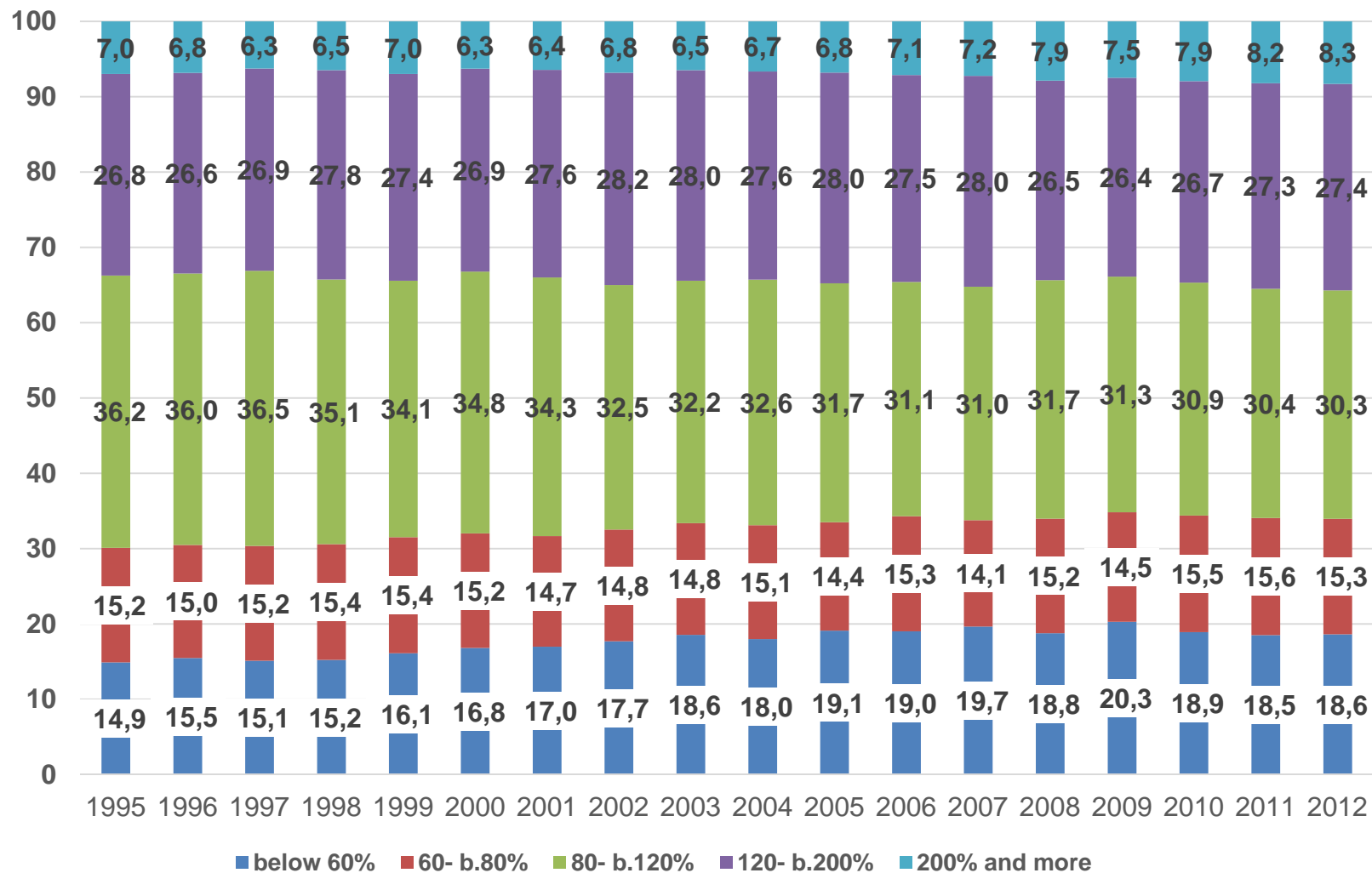
- *Hourly wages:* 72,8%/- 5,3 pct.points
- *Monthly wages:* 63,0% /- 9,0 pct.points
- *Equivalised household income before taxes and transfers* 48,0% / - 8,6 pct.points

Upper middle income class stable – middle middle income class is shrinking most

*Hours paid, number of earners and wages of different earners in households increasingly important to explain inequality*

*Homogamy no impact in DE*

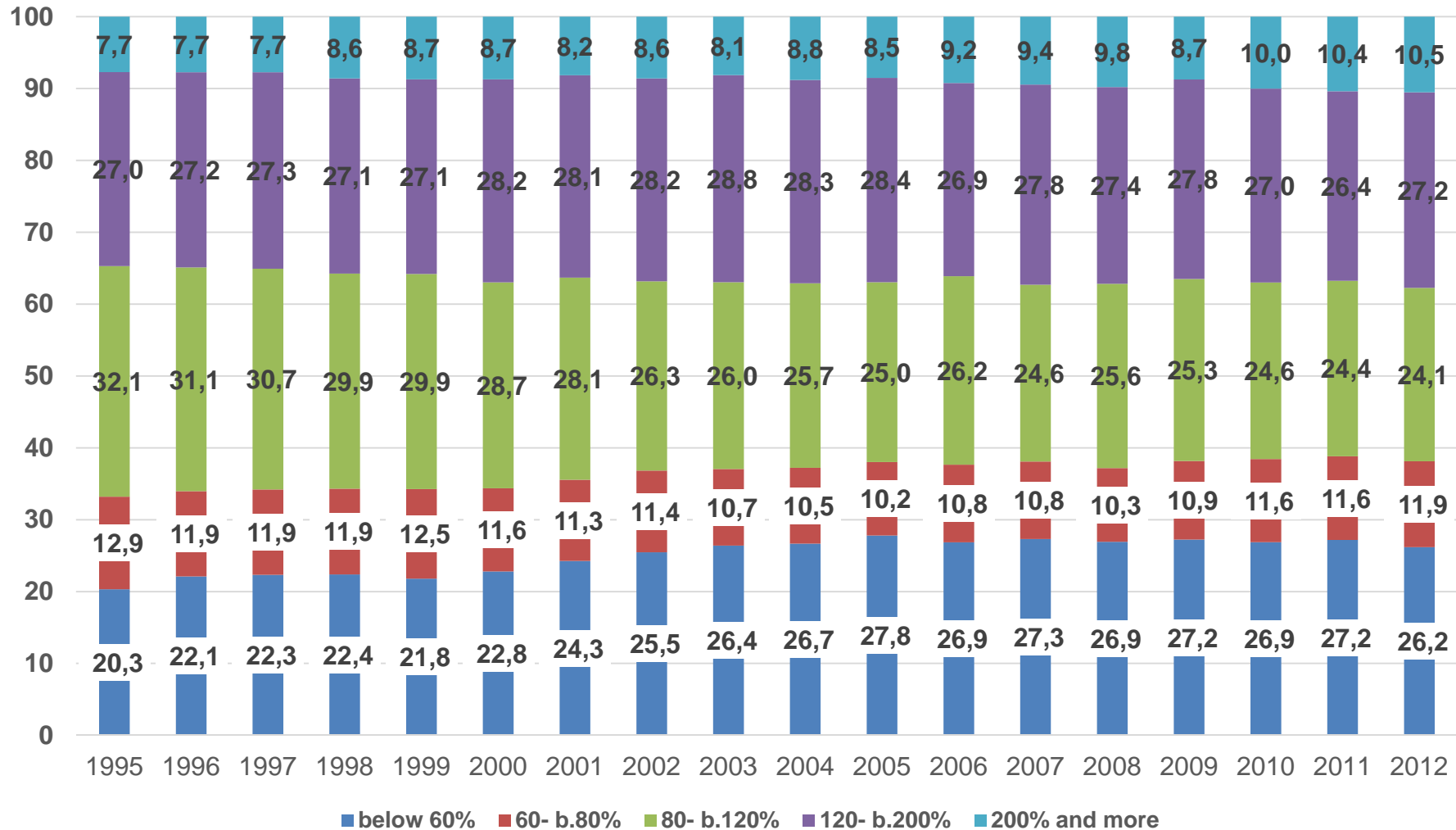
## 2.3 Distribution of hourly gross wages by income groups 1995- 2012 in %



Source: SOEP v29, own calculation

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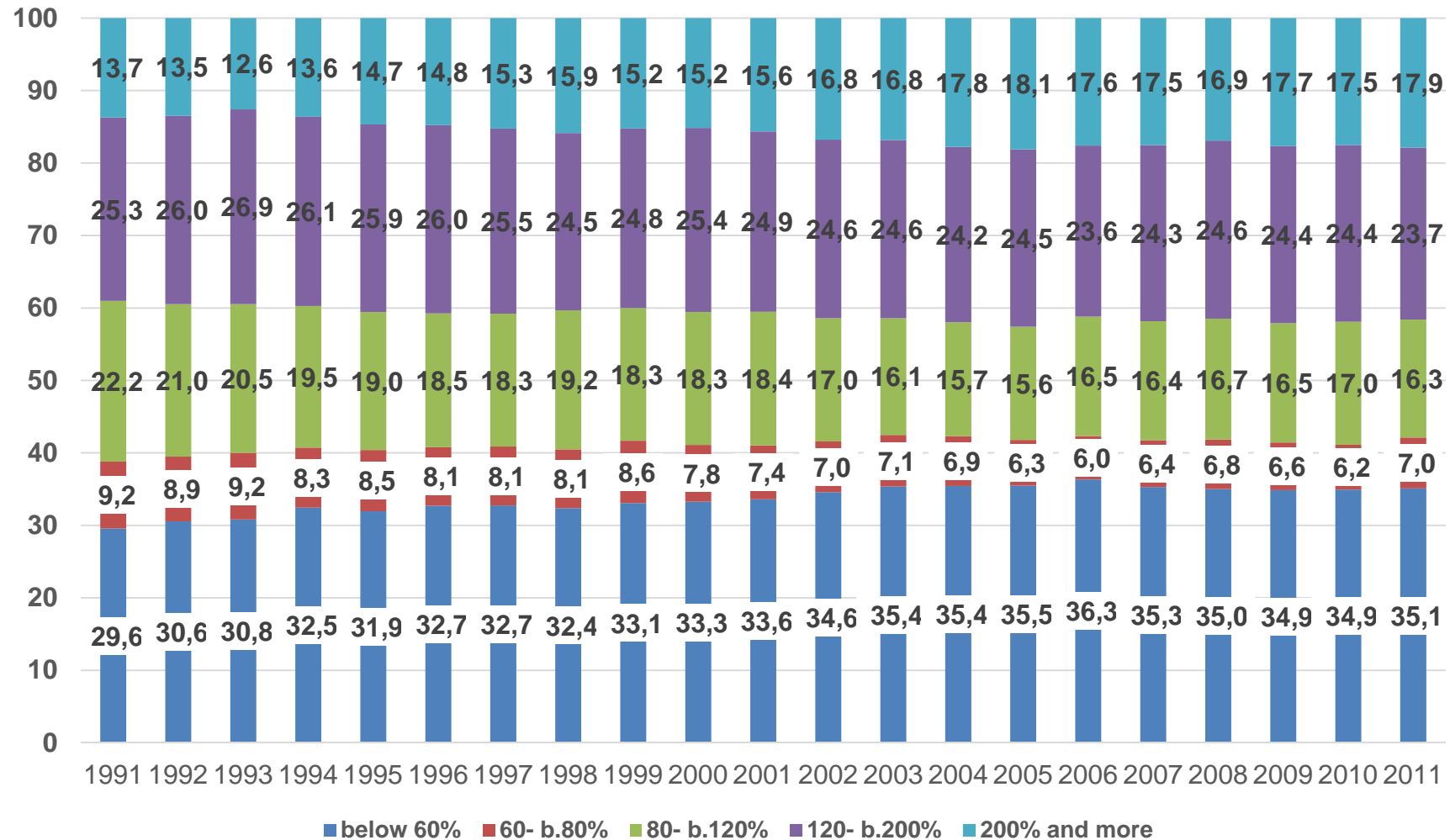
## 2.4 Distribution of monthly gross wages by income groups 1995- 2012 in %



Source: SOEP v29, own calculation

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## 2.5 Distribution of equivalised household income before taxes and transfers 1991 – 2011 in %



Source: SOEP v29, own calculations



## **2.6 Secondary distribution of equivalised household income after taxes, contributions to social insurances and transfers**

### **Share of middle income classes**

**- 2011 78,1%**

**- reduction since 1995 = - 4,5 pct. points**

### **Main winners compared to primary distribution at household level 2011**

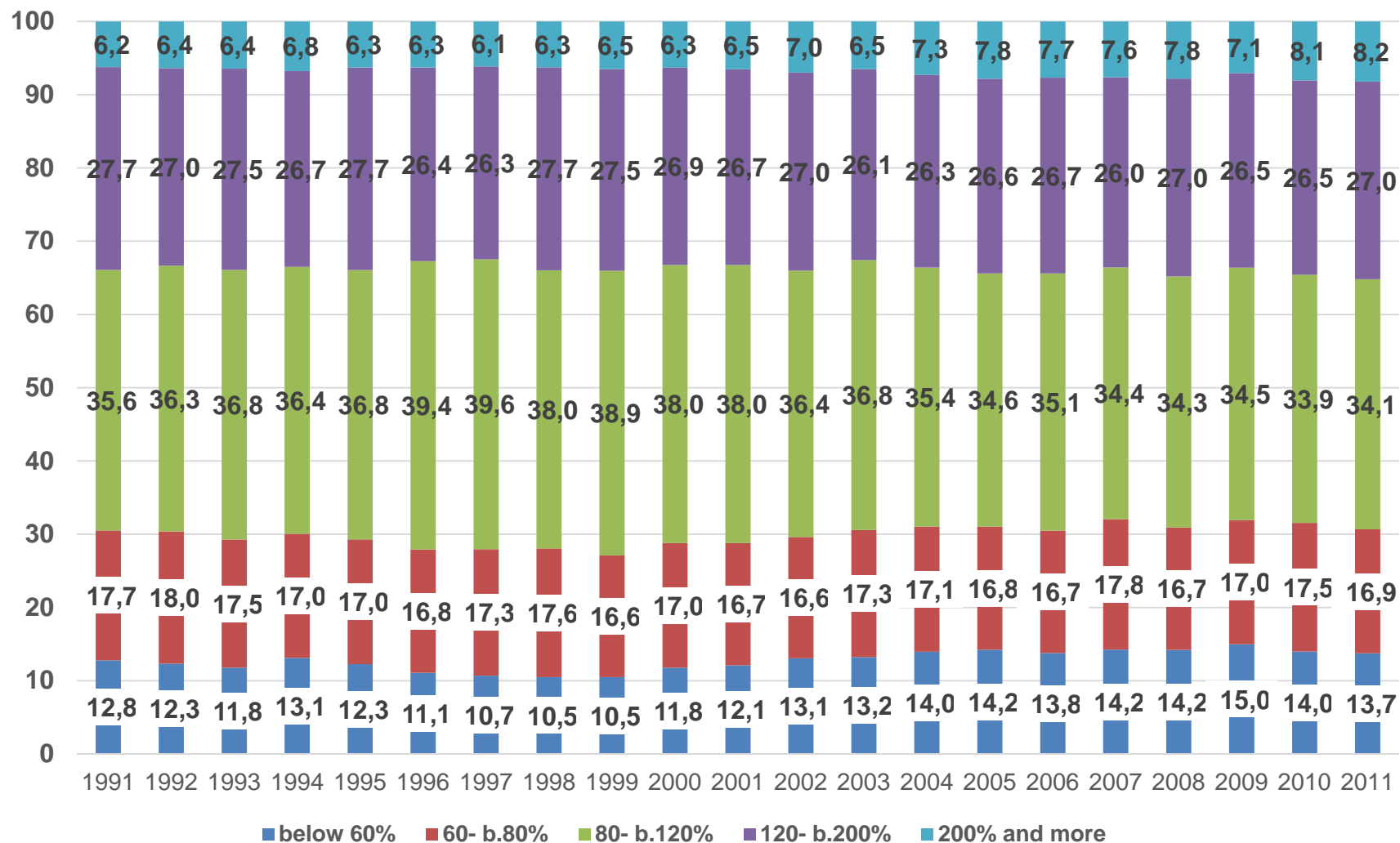
**- middle income class + 17.8 pct.points**

**- lower middle class + 9,0 pct.points**

**Stronger redistribution than 1995 – compared to primary distribution share of middle income class increased 1995 by 26 and 2011 by 30,1 pct.points**

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## 2.7 Disposable equivalised household income after taxes, contributions to social insurances and transfers by class 1994 - 2012 %

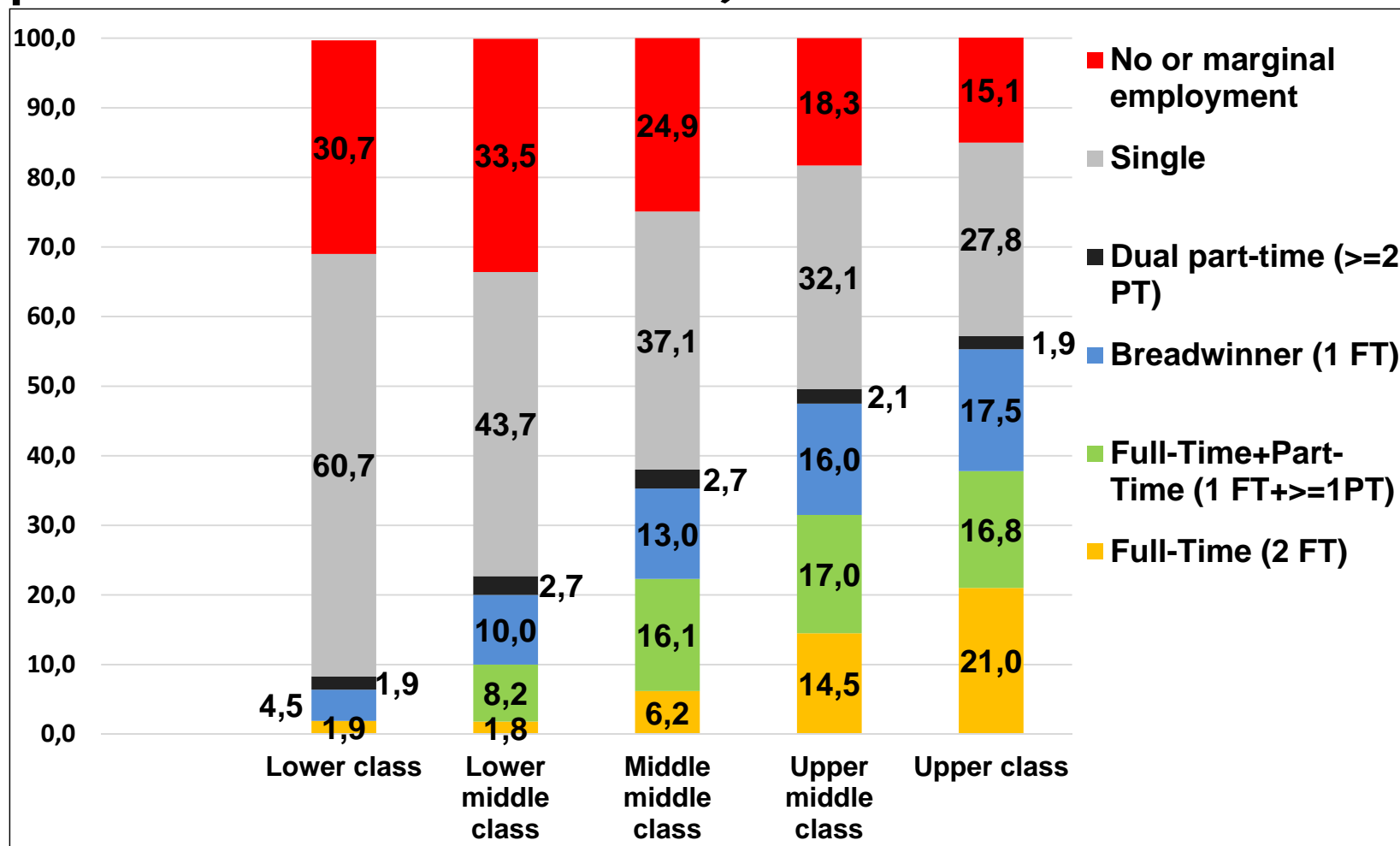


Source: SOEP v29, own calculations

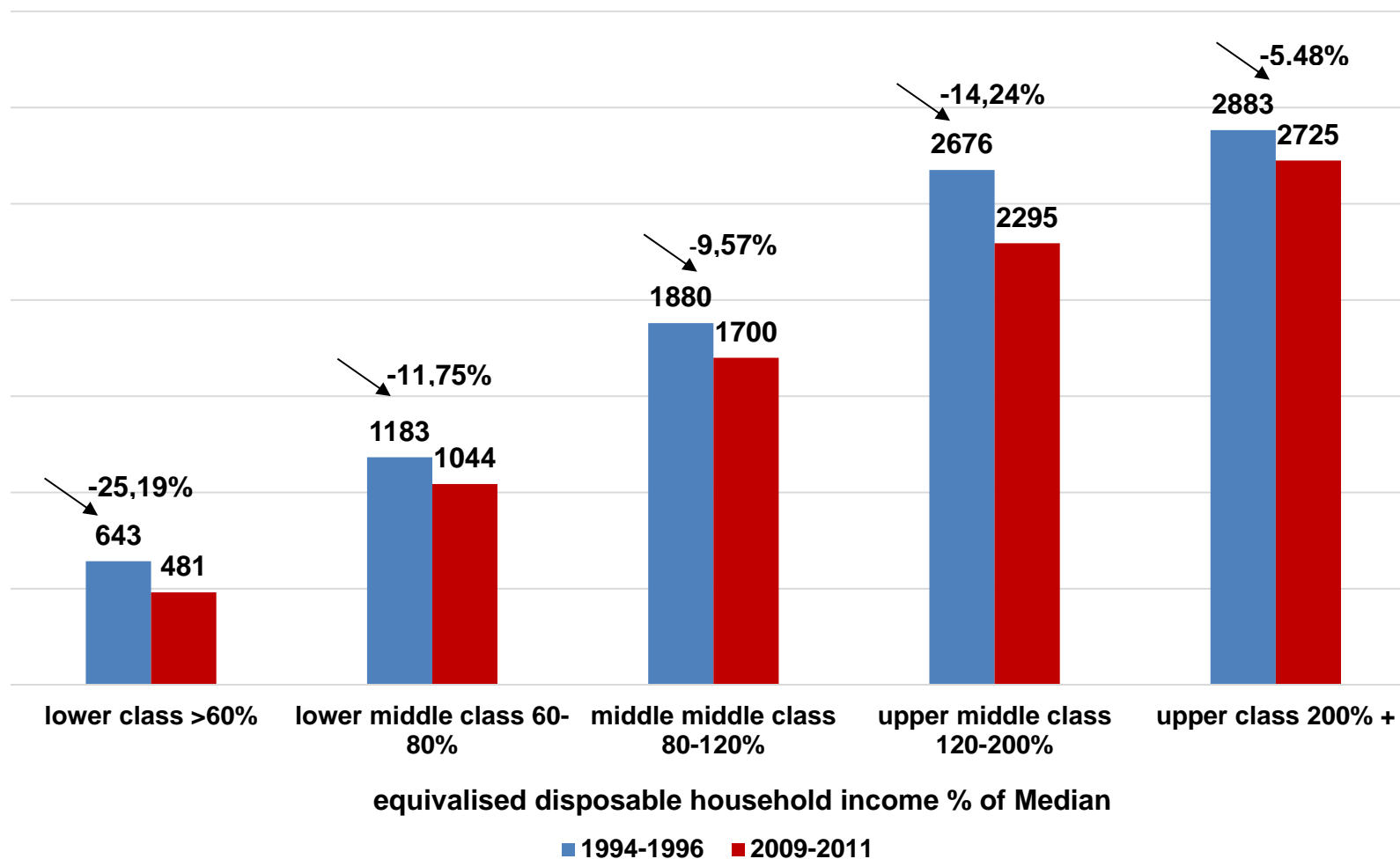
## 3.1 Household structure and working time

- Highest (and increasing shares) shares of single households and households with only marginal employment in the lower and the lower middle income classes
- Longer working hours in upper middle and upper income class – but high variety of working time patterns within income classes
- Lower average wages in lower households with two full-time earners in all income classes
- Reduction of average working hours between 1995 and 2012 in all income classes, most increases in different household types in upper and upper middle income class
- Multi-person household bigger in lower income classes
- Higher share of unskilled in lower classes, but skill level increased
- More young and older persons in lower income classes

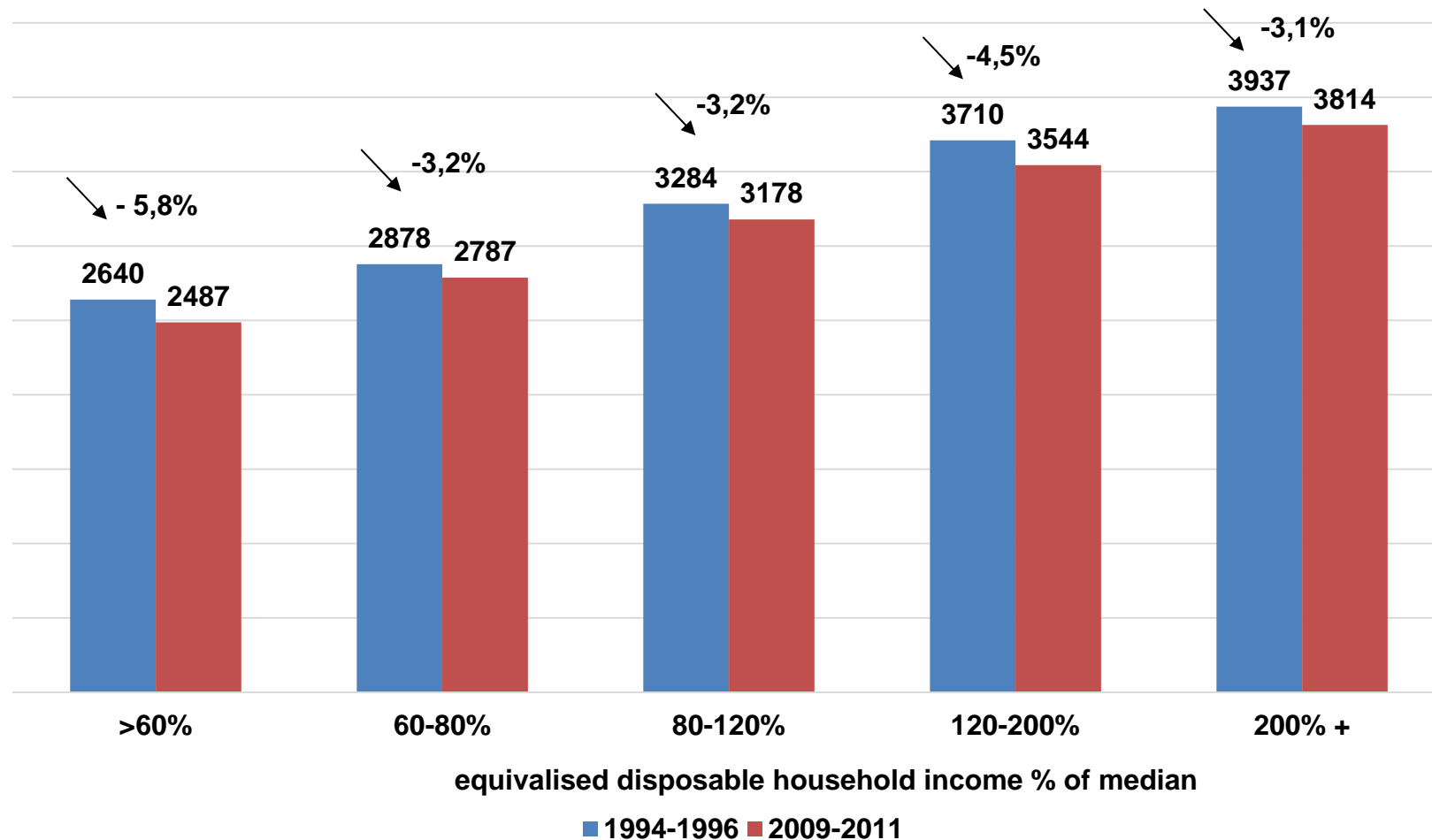
### 3.2 Household types by income class (disposable equivalised household income) 2012 %



### 3.4 Total paid yearly gross working hours (including paid holidays, public holidays, sick leave) by income class 1994-1996 and 2009-2011



### 3.5 Total paid yearly gross working hours (including paid holidays, public holidays, paid leaves) by income class 1994-1996 and 2009-2011 in multi person households



**3.6 Total paid hours per year in multi-person and single households by income classes 2009-2011 (equalized disposable household income) (difference to 1994-1996 in hours) / Bold numbers= increase compared to 1994-1996**

Class	Two full-time earners (>=2FT)	Full-time + Part-time earner (1FT+1PT)	Single breadwinner (1FT)	Two part-time earners (>=2PT)	Marginal (1PT) or no income	Single household	Total (difference to 1994-1996 in hours)
Lower	4957	2990	2363	1651	336	281	481 (-162)
Lower middle	5011	3100	2381	1868	319	694	1044 (-139)
Middle middle	4934	3383	2314	2068	356	1085	1700 (-180)
Upper middle	4941	3595	2407	2153	443	1424	2295 (-381)
Upper	5123	3704	2522	2145	362	1768	2725 (-158)
<b>Total</b>	<b>4981</b>	<b>3450</b>	<b>2382</b>	<b>1997</b>	<b>361</b>	<b>916</b>	<b>1619 (-167)</b>

### 3.7 Average hourly wage by income class (equalized disposable household income) and household structure 2009-2011, in €

Income bracket	Two full-time earners (>=2FT)	Full-time + Part-time earner (1FT+1PT)	Single breadwinner (1FT)	Two part-time earners (>=2PT)	Marginal (1PT) or no income	Single household	Total
>60%	<b>4,16</b>	7,16	7,48	8,09	14,95	7,57	9,89
60-80%	7,18	10,66	11,47	11,57	25,02	9,04	13,31
80-120%	10,60	14,18	17,71	16,31	33,18	12,92	16,75
120-200%	15,57	19,94	26,97	24,37	53,36	20,01	23,96
200%*	25,57	38,78	48,71	45,99	84,47	35,57	39,78
<b>Total</b>	16,02	18,20	22,85	18,06	34,34	15,50	20,32

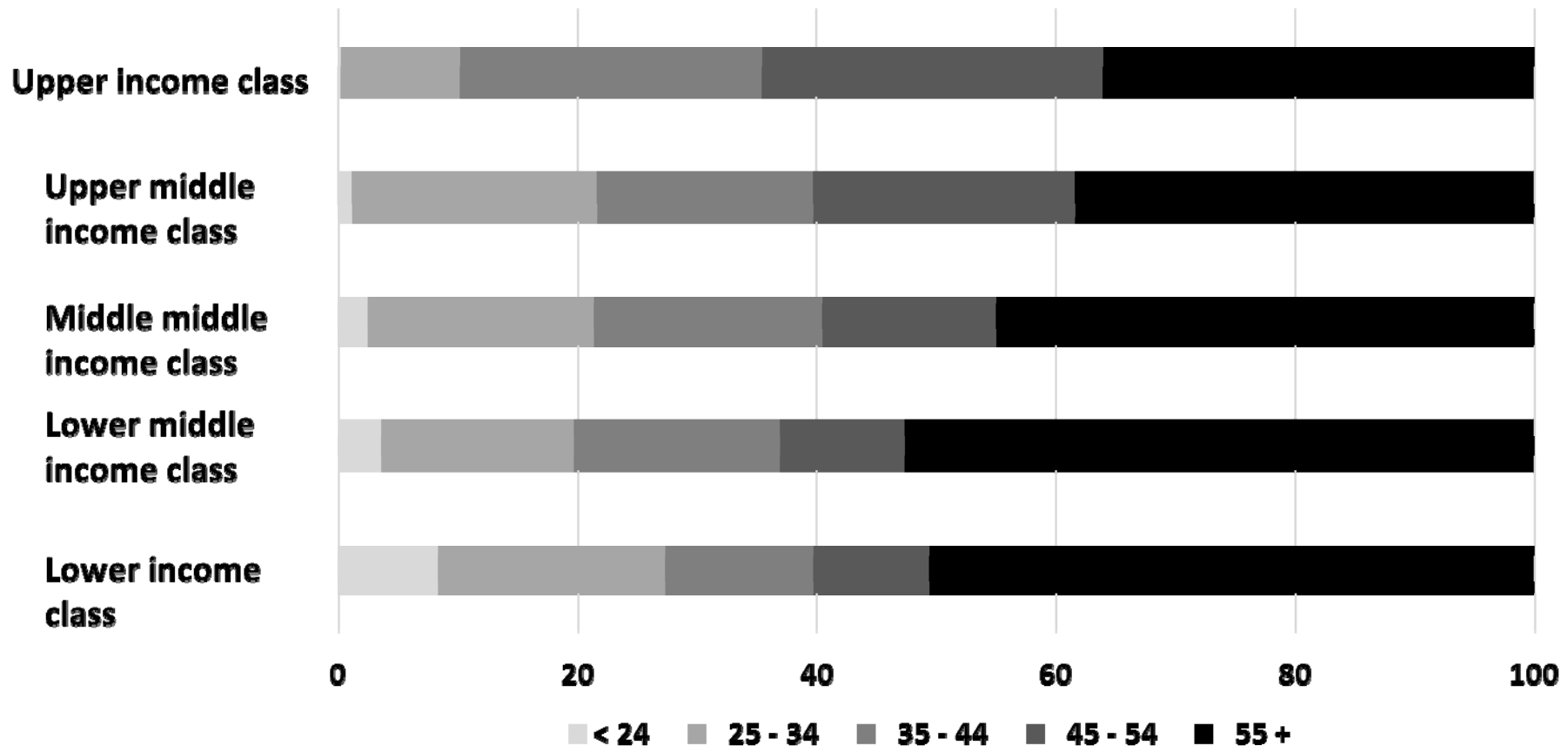
Source: SOEP v29, own calculations



### 3.8 Number of persons in multi-person households by income classes (equalized disposable household income) 2009-2011

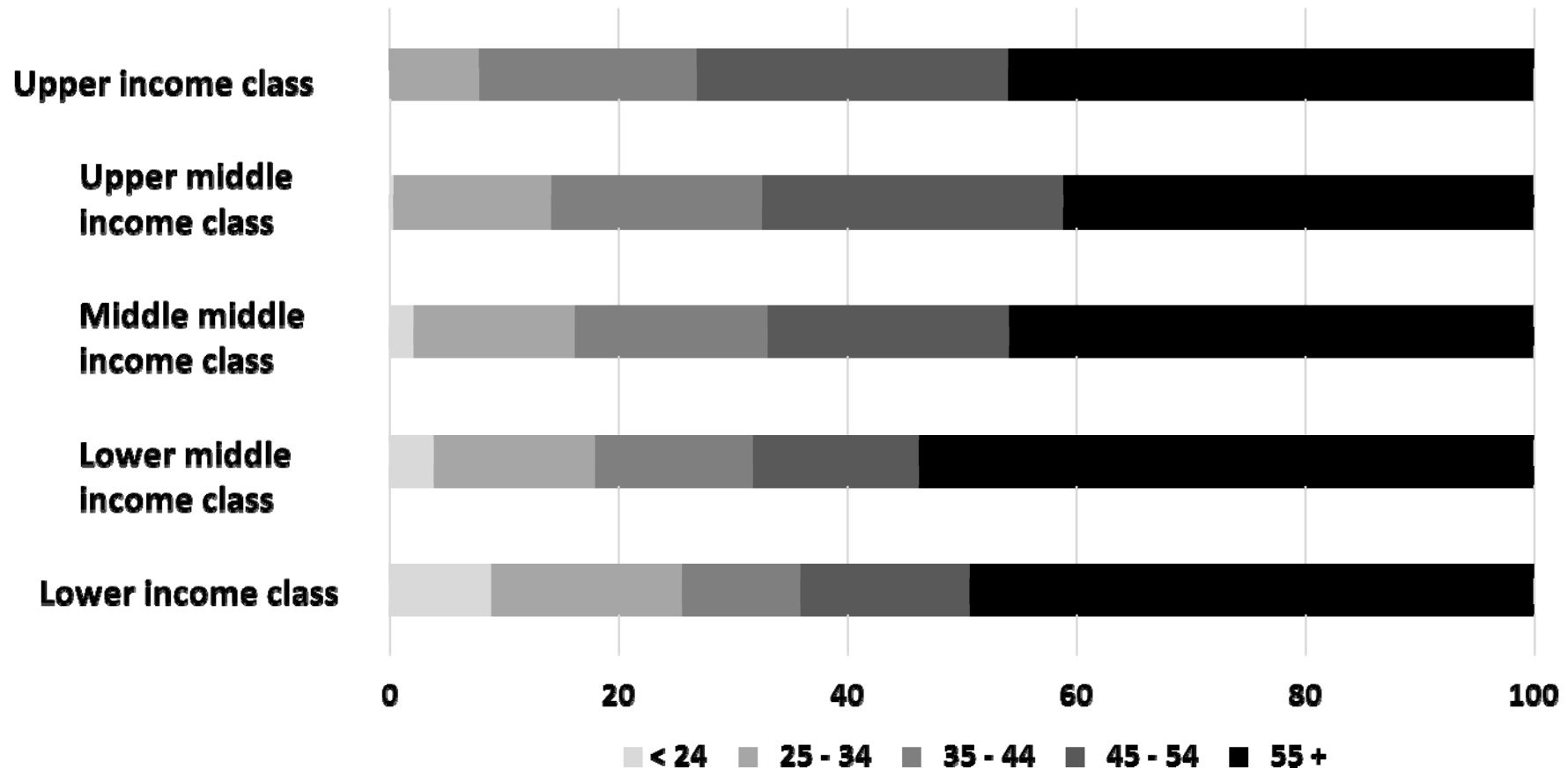
Class	Two full-time earners (>=2FT)	Full-time + Part-time earner (1FT+1PT)	Single breadwinner (1FT)	Two part-time earners (>=2PT)	Total
Lower class	3,5	3,8	3,2	3,2	3,3
Lower middle class	3,6	3,6	3,2	3,2	3,4
Middle middle class	3,2	3,3	2,9	3,0	3,1
Upper middle class	2,6	3,0	2,6	2,7	2,8
Upper class	2,4	2,8	2,4	2,4	2,5
<b>Total</b>	<b>2,8</b>	<b>3,2</b>	<b>2,8</b>	<b>3,0</b>	<b>2,9</b>

## Age of household head 1995-1997 by income class (equivalised post government income of household in the previous year)



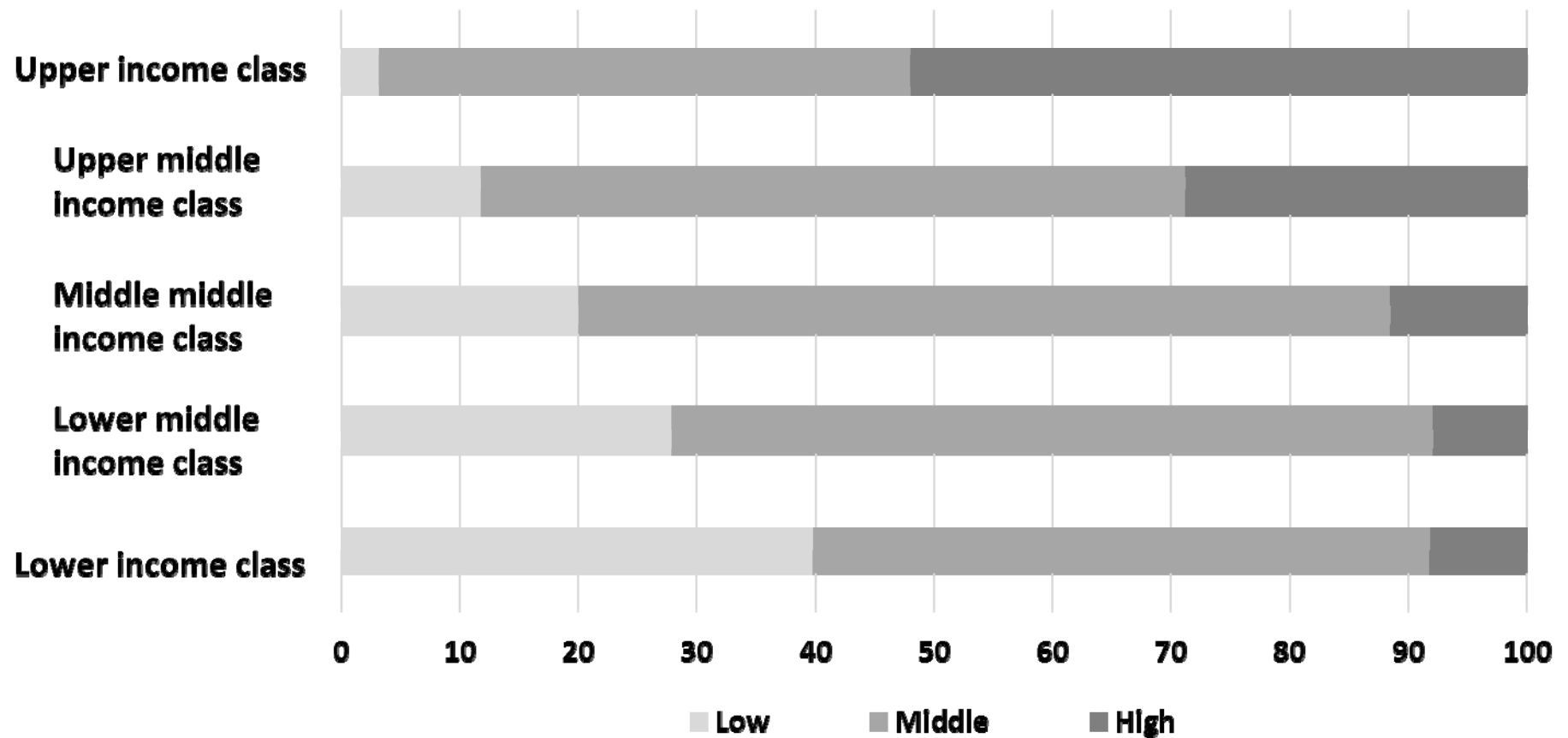
Source: v29 own calculations

## Age of household head 2010-2012 by income class (equivalised post government income of household in the previous year)



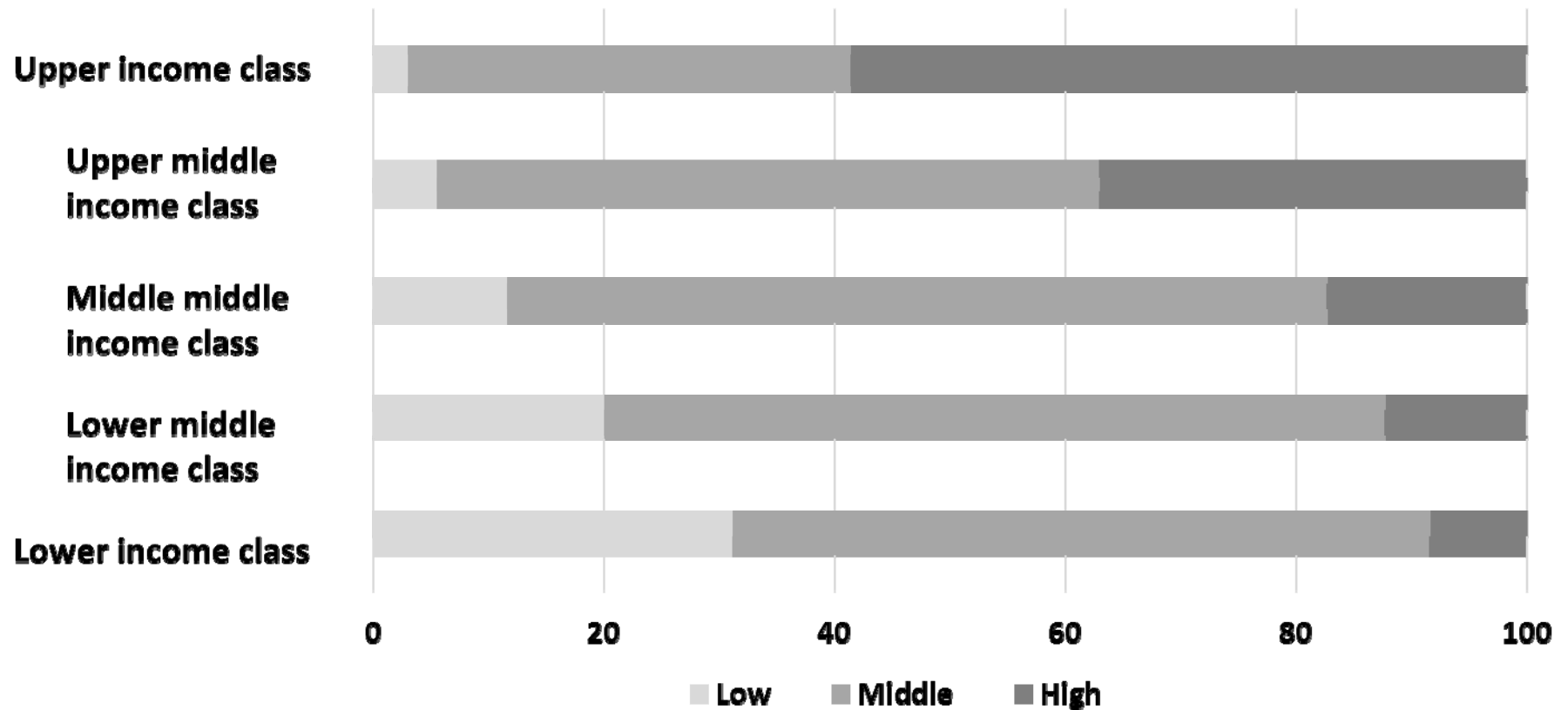
Source: v29 own calculations

## Educational level of the head of the household (1995-1997) by income class (equivalised post government income of household in the previous year)



Source: SOEP v29, own calculations.

## Educational level of the head of the household (2010-2012) by income class (equivalised post government income of household in the previous year)



Source: SOEP v29, own calculations.

## **4.1 The role of taxes, social security contributions and benefits in redistribution**

**Analysis includes only cash benefits, not services and income taxes (other taxes less redistributive)**

- **Benefits from social assurances: equivalence between contributions and benefits – low redistribution**
- **Means-tested benefits flowing mainly to lower classes**
- **Progressive income tax highly redistributive**

**Impact on Gini-Coefficient 2012: Market income led to a Gini-coefficient of 0.50; reduced by the welfare transfers to 0.35; social contributions did not reduce the Gini-coefficient further; progressive tax system brought the Gini-coefficient down to 0.29.**

## 4.2 Private household income and redistribution by taxes and transfers

Equivalent household income	Market income <sup>1</sup>	Private Pensions and transfers <sup>2</sup>	Cash benefits			Gross income	Social contributions	Income tax	Net income
			Benefits from social insurances <sup>3</sup>	Other transfers <sup>4</sup>	Means tested benefits <sup>5</sup>				
<b>Billion €</b>									
1. Decile	19.9	2.7	16.7	5.5	13.0	57.0	7.5	0.1	49.4
2. Decile	43.8	2.6	29.1	6.3	6.6	86.8	17.5	1.2	68.0
3. Decile	63.3	2.6	35.9	5.2	4.0	110.0	25.0	3.4	81.6
4. Decile	87.1	3.1	32.8	5.6	2.2	129.7	32.5	6.5	90.7
5. Decile	103.5	3.3	34.0	4.9	2.1	149.2	37.3	9.7	102.2
6. Decile	142.5	3.0	26.4	5.6	1.9	178.8	47.6	16.0	115.2
7. Decile	170.6	4.3	27.7	5.0	0.7	207.7	54.7	21.9	131.1
8. Decile	203.2	4.6	30.0	4.9	1.2	245.2	62.6	31.1	151.5
9. Decile	269.4	5.2	29.9	3.9	0.5	303.9	73.4	48.1	182.5
10. Decile	447.0	13.2	33.2	4.1	1.0	495.2	76.4	113.2	305.5
<b>Total</b>	<b>1550.3</b>	<b>44.6</b>	<b>295.9</b>	<b>50.9</b>	<b>33.4</b>	<b>1963.4</b>	<b>434.5</b>	<b>251.2</b>	<b>1277.8</b>
<b>Structure in %</b>									
1. Decile	1.3	6.1	5.7	10.8	39.0	2.9	1.7	0.0	3.9
2. Decile	2.8	5.9	9.8	12.3	19.8	4.4	4.0	0.5	5.3
3. Decile	4.1	5.8	12.1	10.2	12.1	5.6	5.8	1.3	6.4
4. Decile	5.6	7.0	11.1	11.0	6.7	6.6	7.5	2.6	7.1
5. Decile	6.7	7.4	11.5	9.7	6.4	7.6	8.6	3.8	8.0
6. Decile	9.2	6.6	8.9	10.9	5.8	9.1	11.0	6.4	9.0
7. Decile	11.0	9.6	9.4	9.7	2.2	10.6	12.6	8.7	10.3
8. Decile	13.1	10.4	10.2	9.6	3.6	12.5	14.4	12.4	11.9
9. Decile	17.4	11.7	10.1	7.6	1.5	15.5	16.9	19.1	14.3
10. Decile	28.8	29.6	11.2	8.1	3.0	25.2	17.6	45.1	23.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Gini</b>	<b>0.50</b>	<b>0.49</b>	<b>0.38</b>	<b>0.37</b>	<b>0.35</b>		<b>0.35</b>		<b>0.29</b>

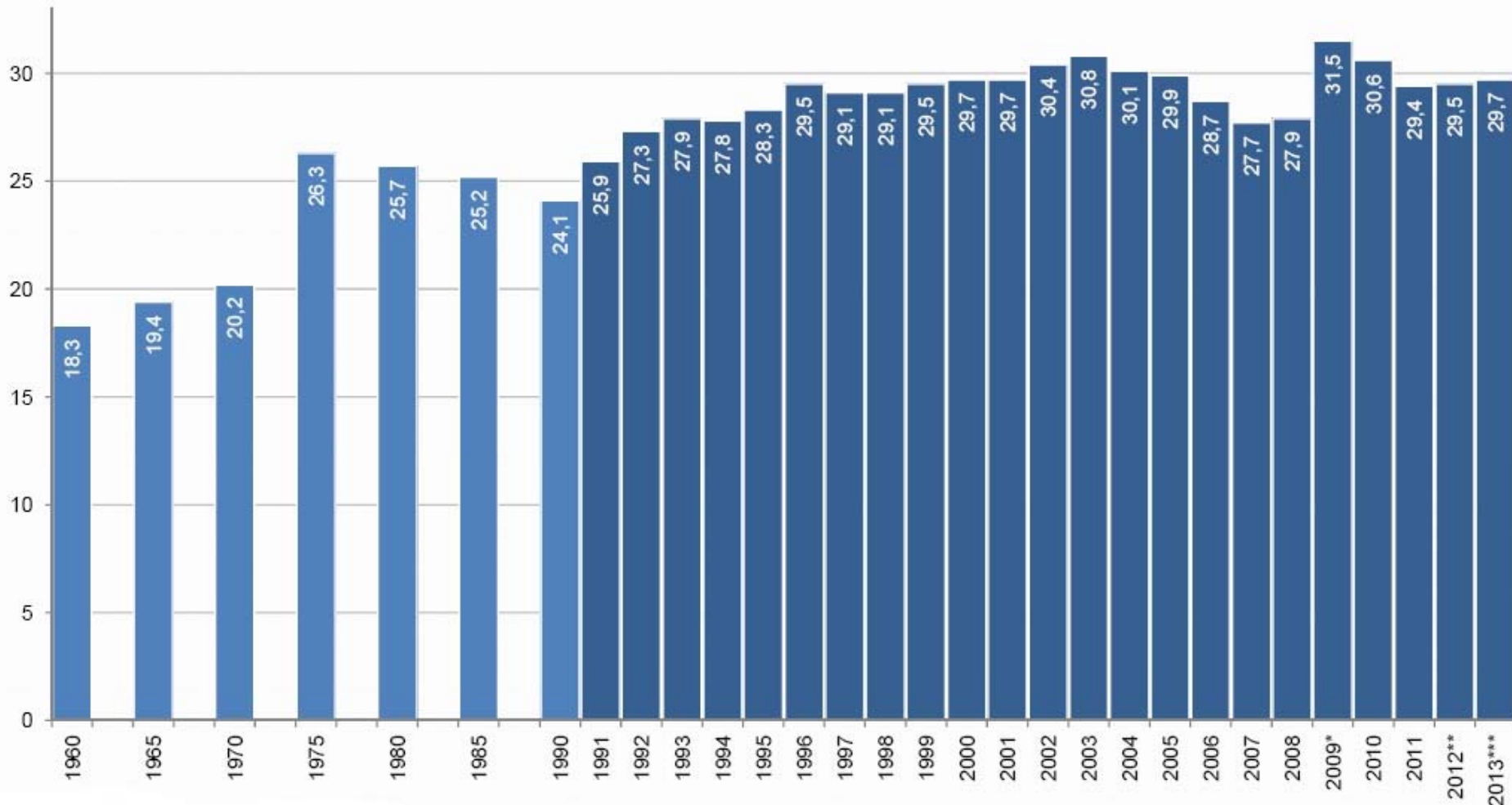
<sup>1</sup> Labour income, asset income including rent value of own houses; <sup>2</sup> Private pensions, company pensions, alimony payments, other private transfers;

<sup>3</sup> Social security pensions, pensions of civil servants, unemployment benefits, care allowance; <sup>4</sup> Child allowance, maternity benefit, grants, tax allowance for housing;

<sup>5</sup> Unemployment allowance, welfare aid, housing subsidy Source: Bach/Grabka/Tomasch 2015: 151 (SOEP 2012)



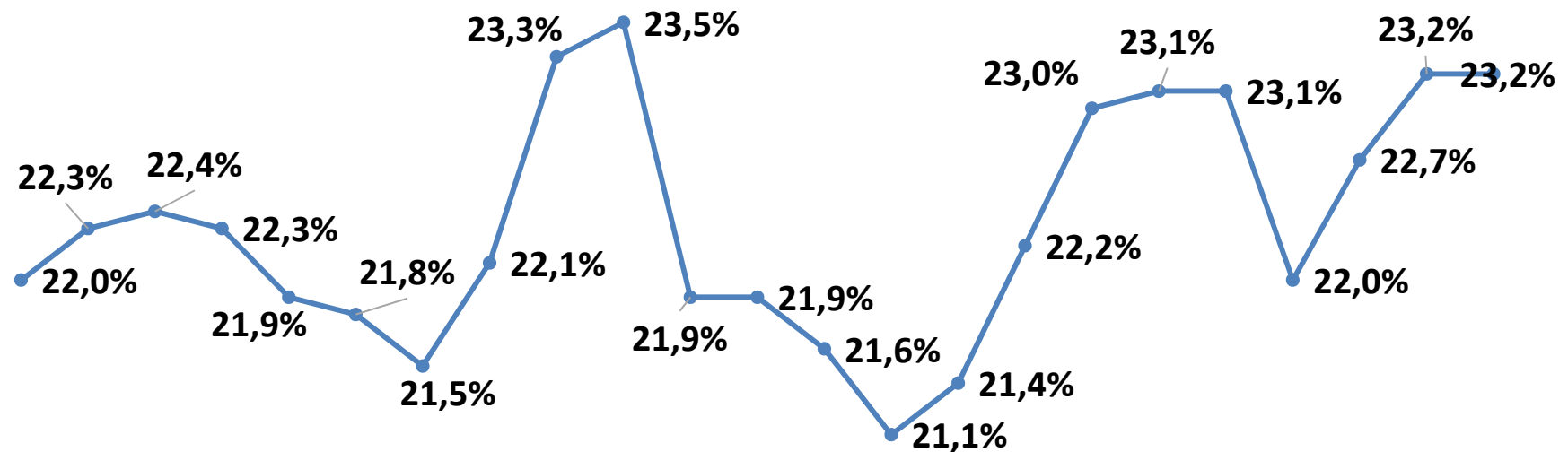
## 4.3 Social benefit ratio 1960 – 2013 in Germany (social expenditures in % of GDP)



Source: Bundesministerium für Arbeit und Soziales



## 4.4 Tax ratio 1991-2013 in Germany (taxes in % of GDP)



1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

## 5.1 Main employment related drivers of improving middle class standards since 1995

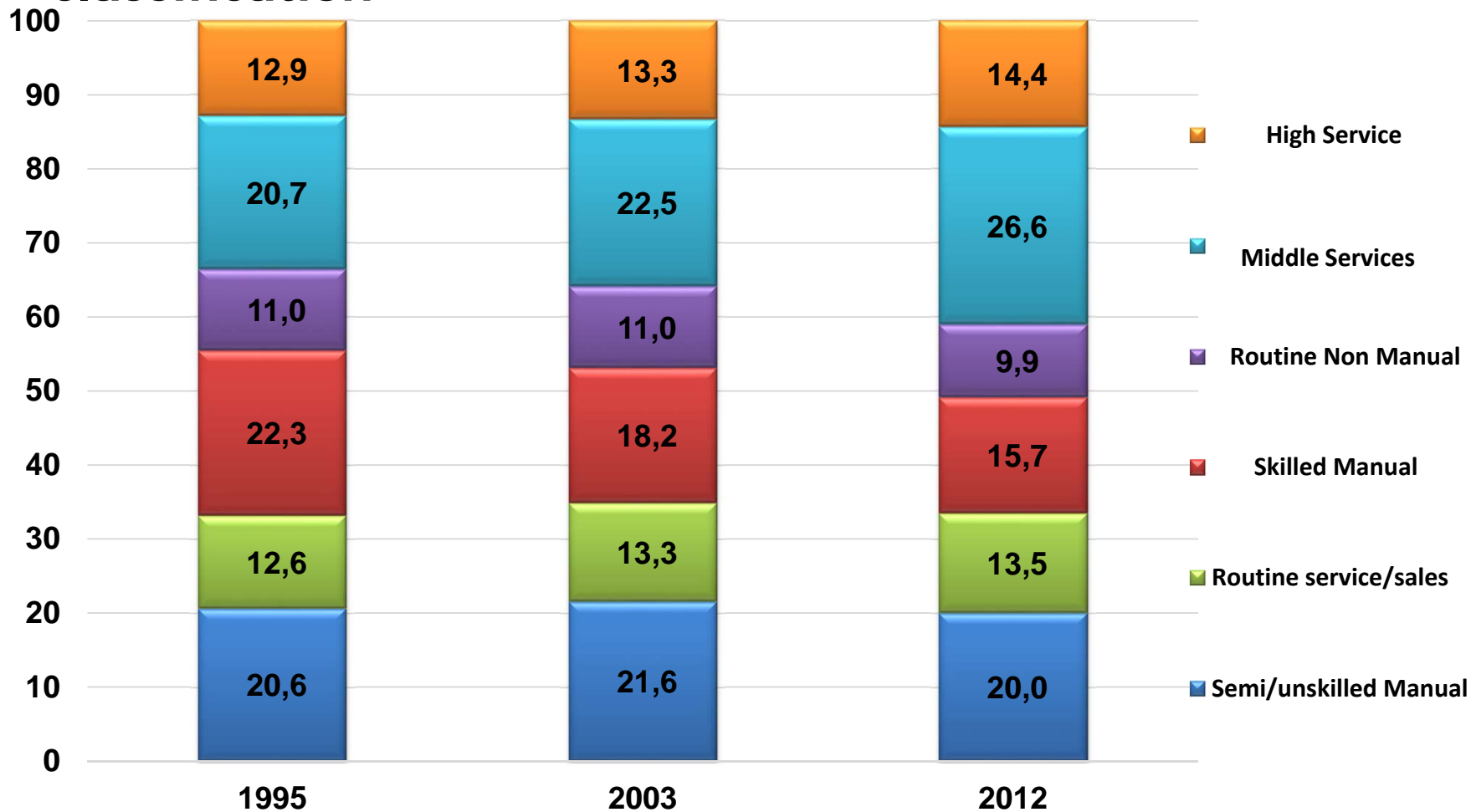
- Extension of welfare state to East-Germany – High West-East-Transfers in social insurances and of tax revenues
- Introduction of care insurance in the late 90's
- New family model: Expansion of child care and all-day schools, paid parental leave, new working time options (from FT to PT and vice versa) – less part-time penalties - longer hrs
- Job miracle in the financial crisis: reduction of working hours not of jobs, recruitment of apprentices even in the crisis
- Introduction of Minimum wage of 8.50 € and facilitation of extending collective
- Strong job growth since 2004
- Growth of skilled service jobs

## 5.2 Main employment related drivers of falling middle class standards since 1995

- **Erosion of the inclusive wage system – mainly through deregulation of product markets and new employer strategies**
- **Growth of non-standards employment forms: Deregulation and new employer strategies**
- **Strengthening of old family model with strong financial incentives to work short hours**
- **Reduction of progressive income and corporate taxes: increased financial pressures on the welfare state**
- **Benefits cuts: Abolition of income-related unemployment aid for long term-unemployed, shorter duration of unemployment benefit, reduction of pension levels (effects will show up over the next 40 years)**

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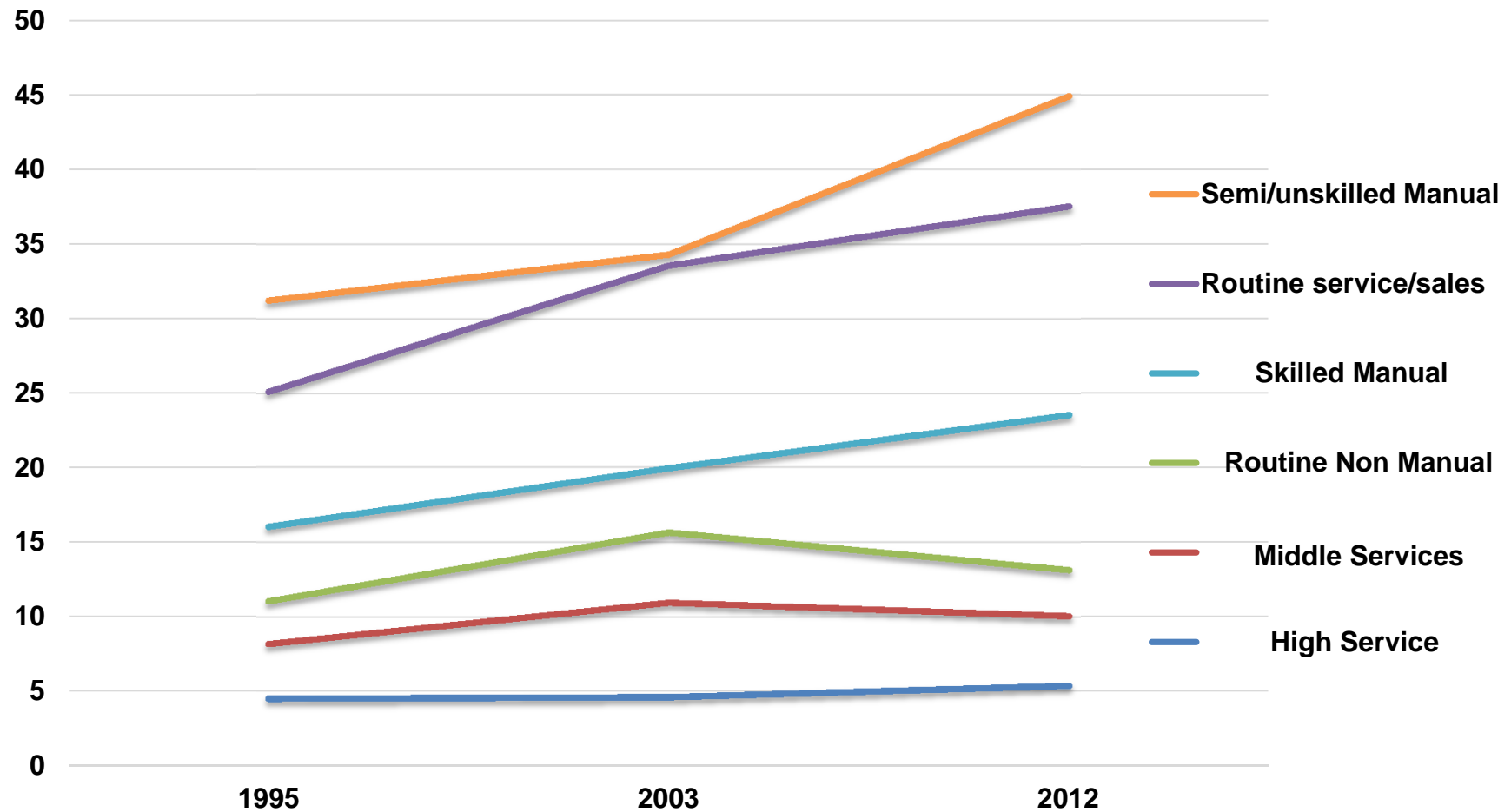
## 5.3 Occupational structure Eriksen/Goldthorpe classification



Source: SOEP v29, own calculations

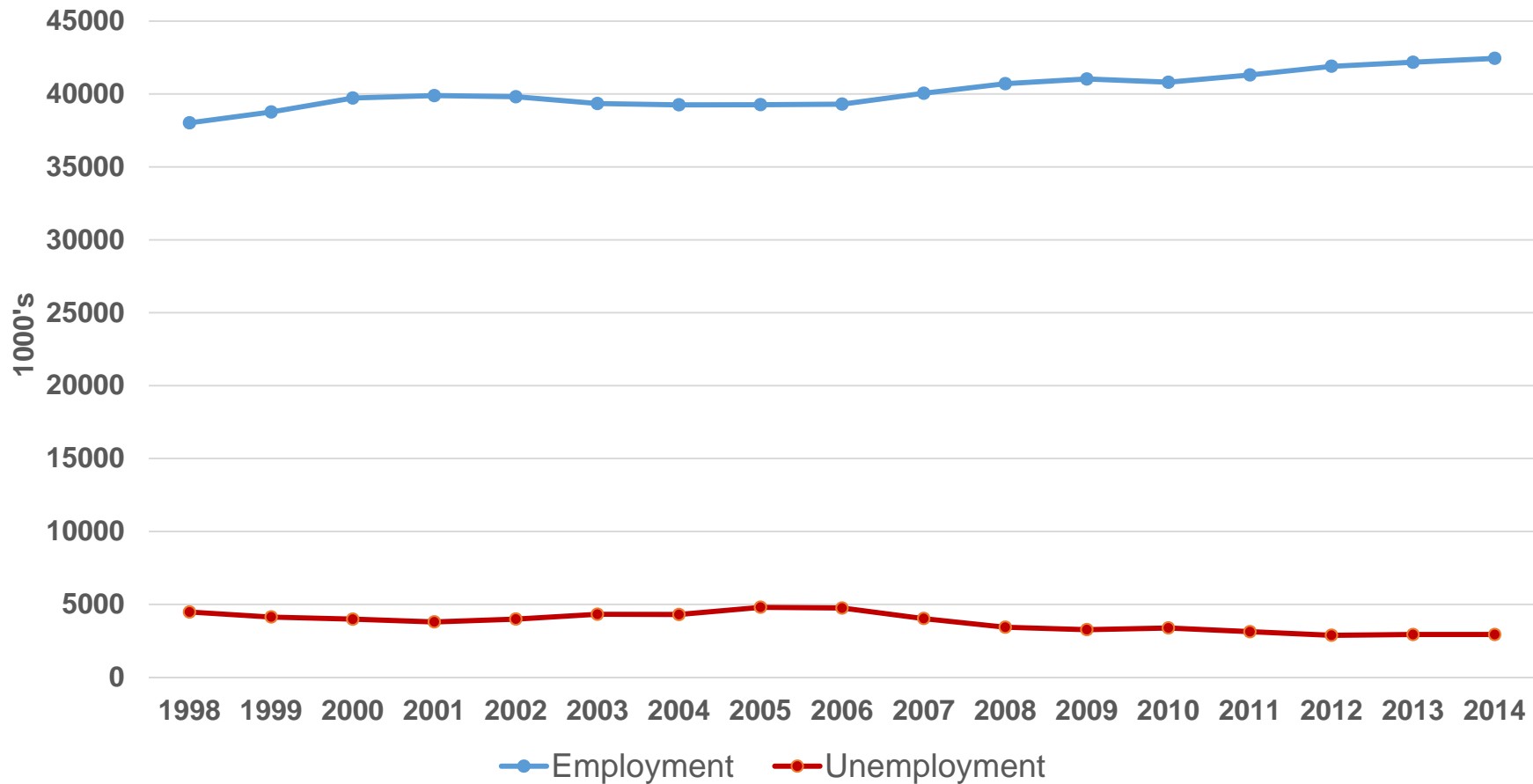
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## 5.4 Low wage incidence by occupational groups (Eriksen/Goldthorpe classification)



Source: SOEP v29, own calculations

## 5.5 Seasonal adjusted employment and unemployment in 1000 in Germany



Source: Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2015): Konjunkturindikatoren für Deutschland. Arbeitsmarkt, own presentation

## 5.6 Employment forms in main job 1991, 1995, 2000, 2005, 2010 and 2013 only core employees in working age (15-65 years) not in education or apprenticeship in 1000

Year	Employer*	Solo-self-employed	Temp-agency Work***	Temporary contract***	Socially insured part-time***	Mini-Job***+	Total
1991	1.575	1.284	n.a.	1.968	4.306	654	34.680
1995	1.737	1.422	n.a.	1.986	4.698	750	33.601
2000	1,721	1.697	n.a.	2.265	5.664	1.749	33.530
2005	1.685	2.110	563 (2006)	2.498	6.652	2.498	33.116
2010	1.728	2.169	743	2.858	7.513	2.734	35.109
2013	1.719	2.091	679	2.524	7.842	2.524	35.631

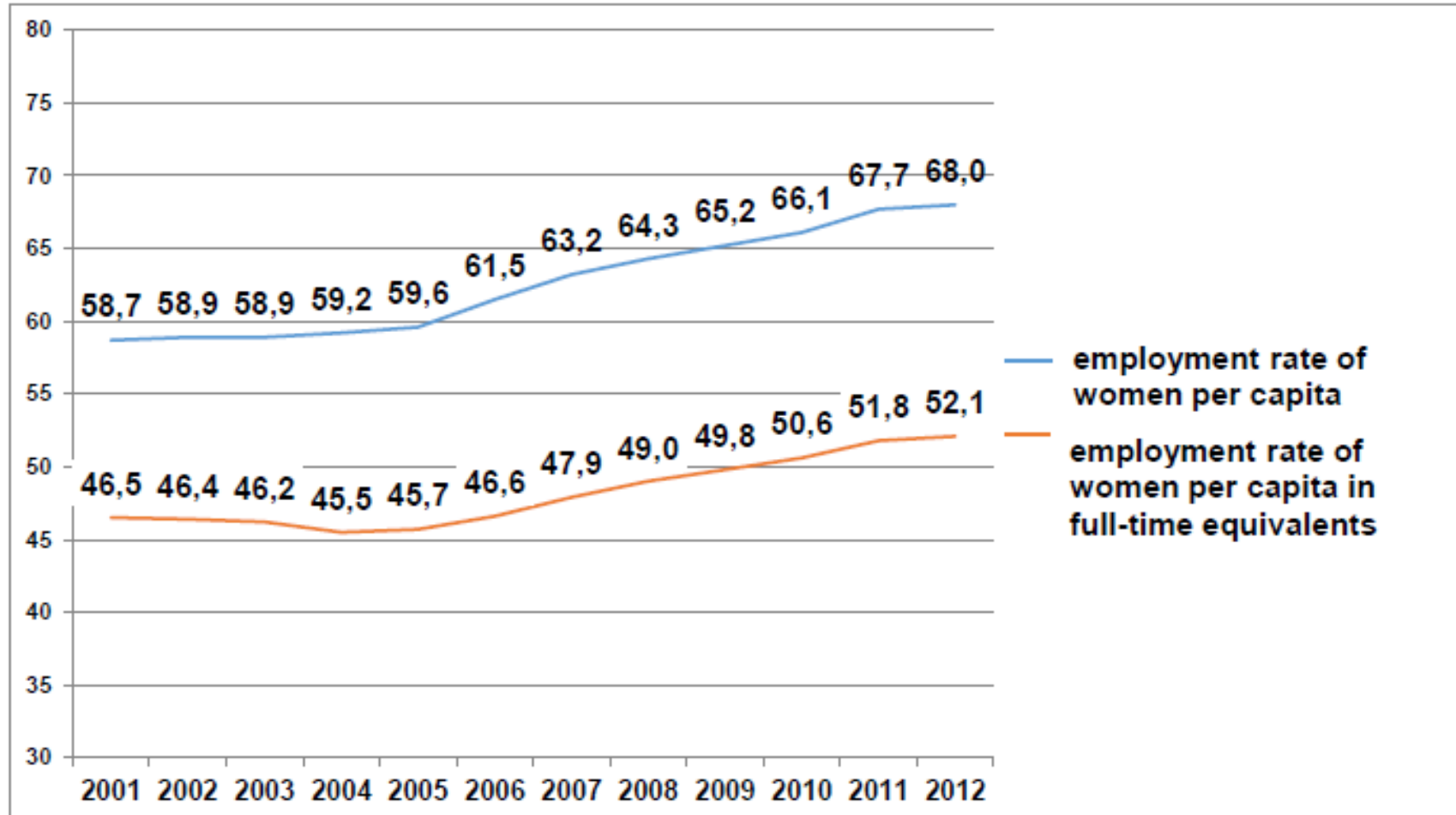
\*self-employed with employees, \*\*\* partly overlapping marginal, + part-time with maximum 450 € earnings per month

Source: Destatis, Microzenus

(<https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erwerbstaetigkeit/TabellenArbeitskraefteerhebung/AtypKernerwerbErwErbsformZR.html>)

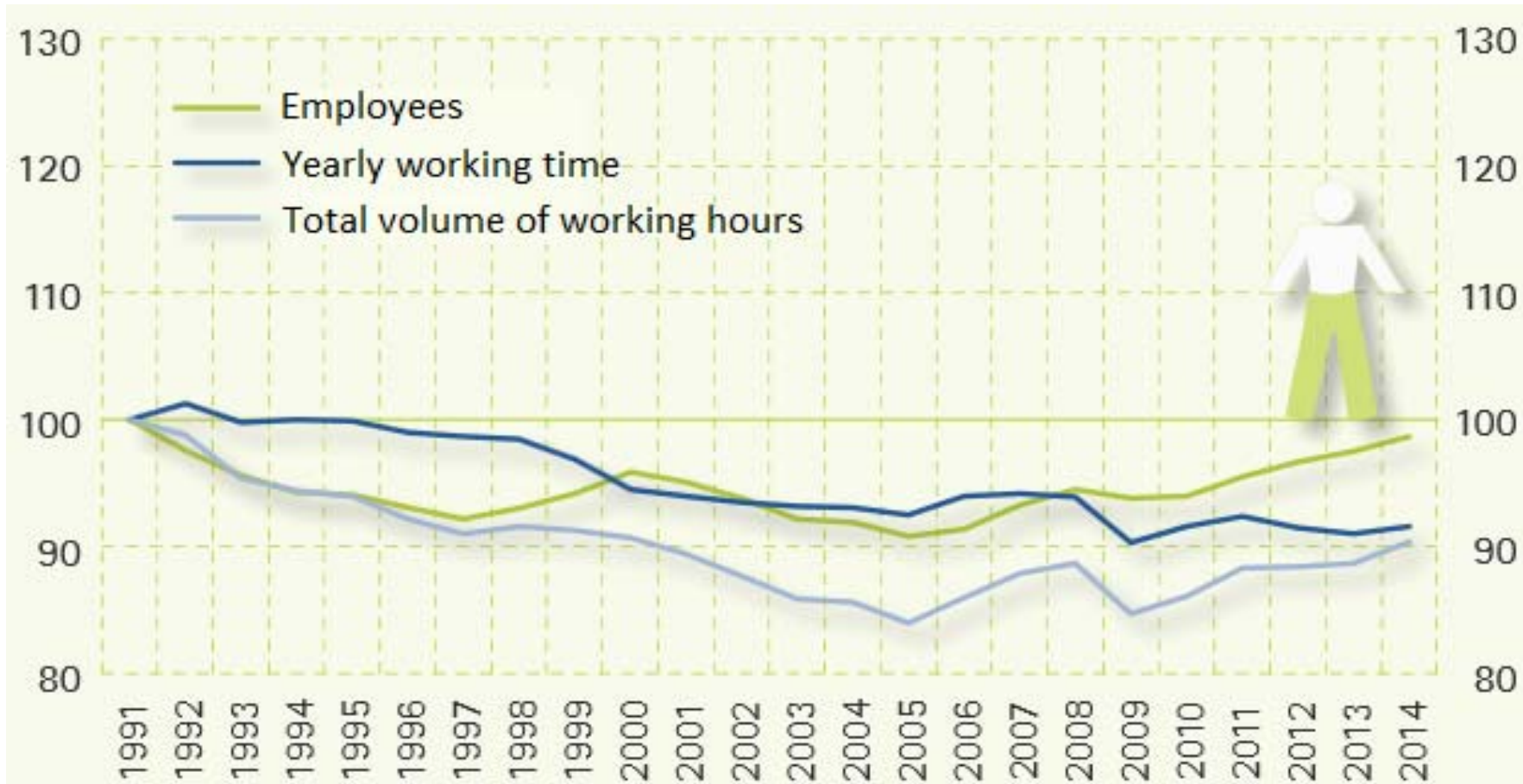
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## 5.7 Employment rate of German women in head count and in FTE 2001-2012 (in %)



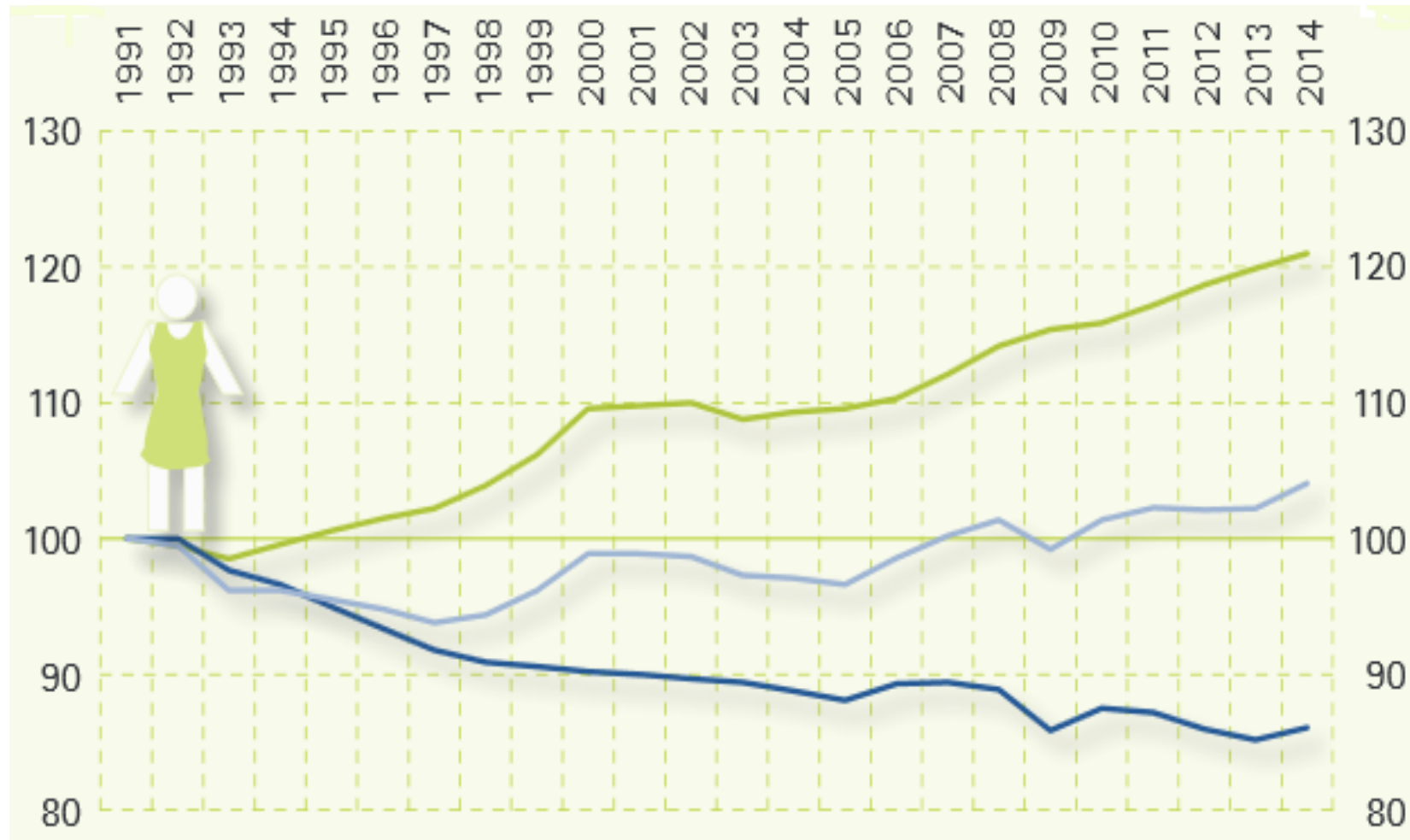


## 5.8 Employees, working time and total volume of working hours (Yearly averages for men)



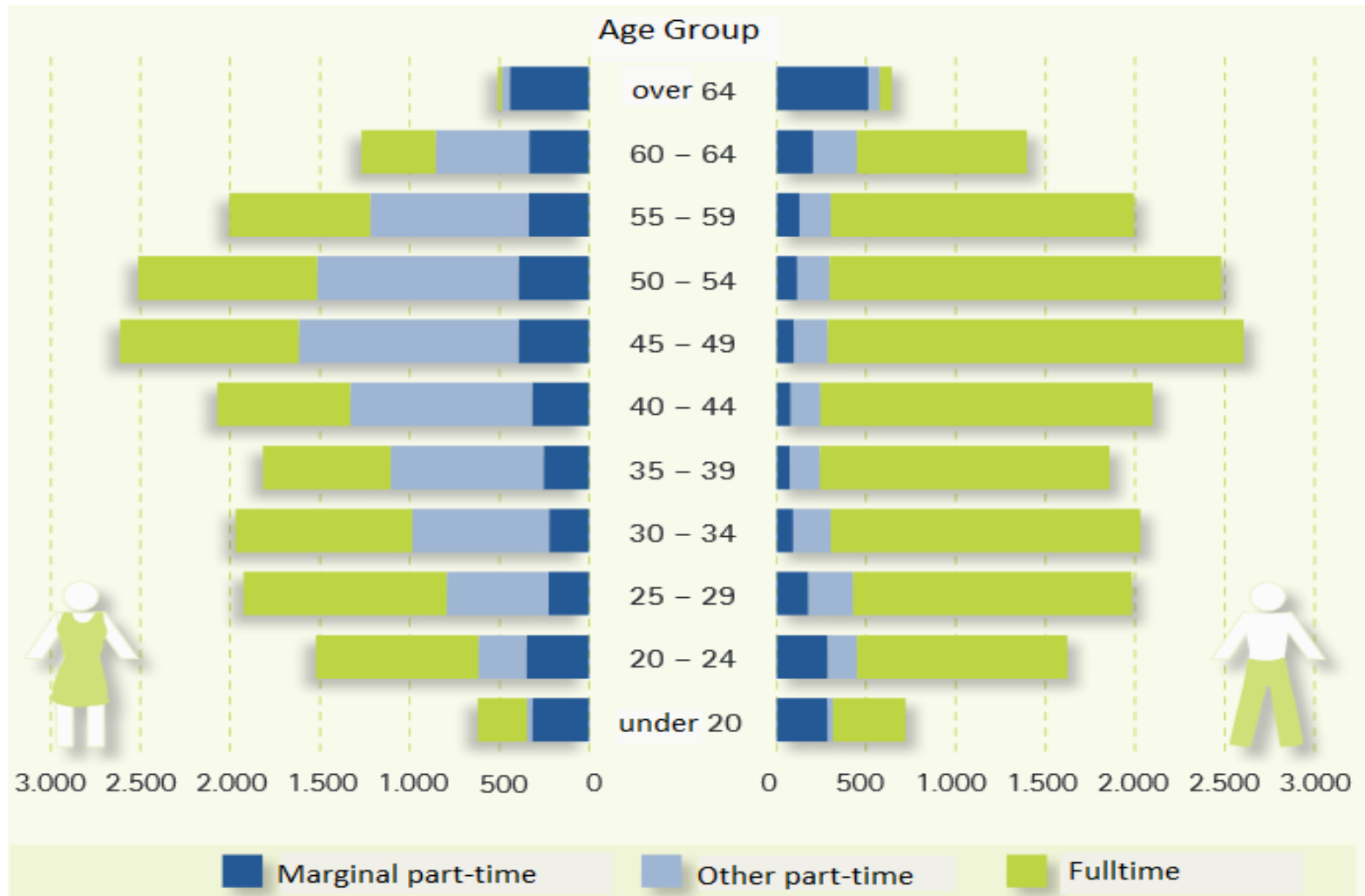
Source: IAB-Kurzbericht 4/2015, p. 2

## 5.9 Employees, working time and total volume of working hours (Yearly averages for women)



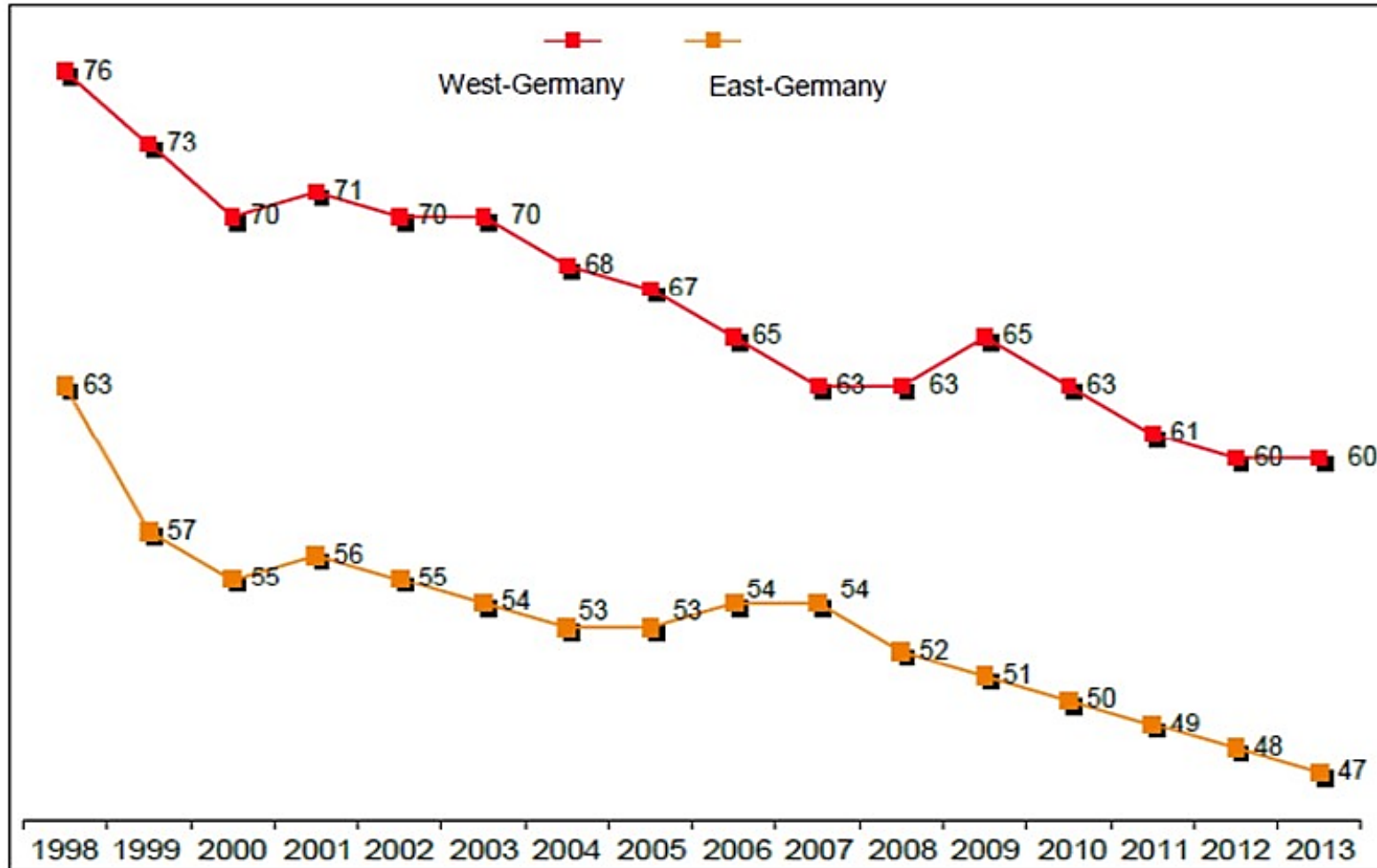
Source: IAB-Kurzbericht 4/2015, p. 2

## 5.10 Employment forms by age and gender in 1000's



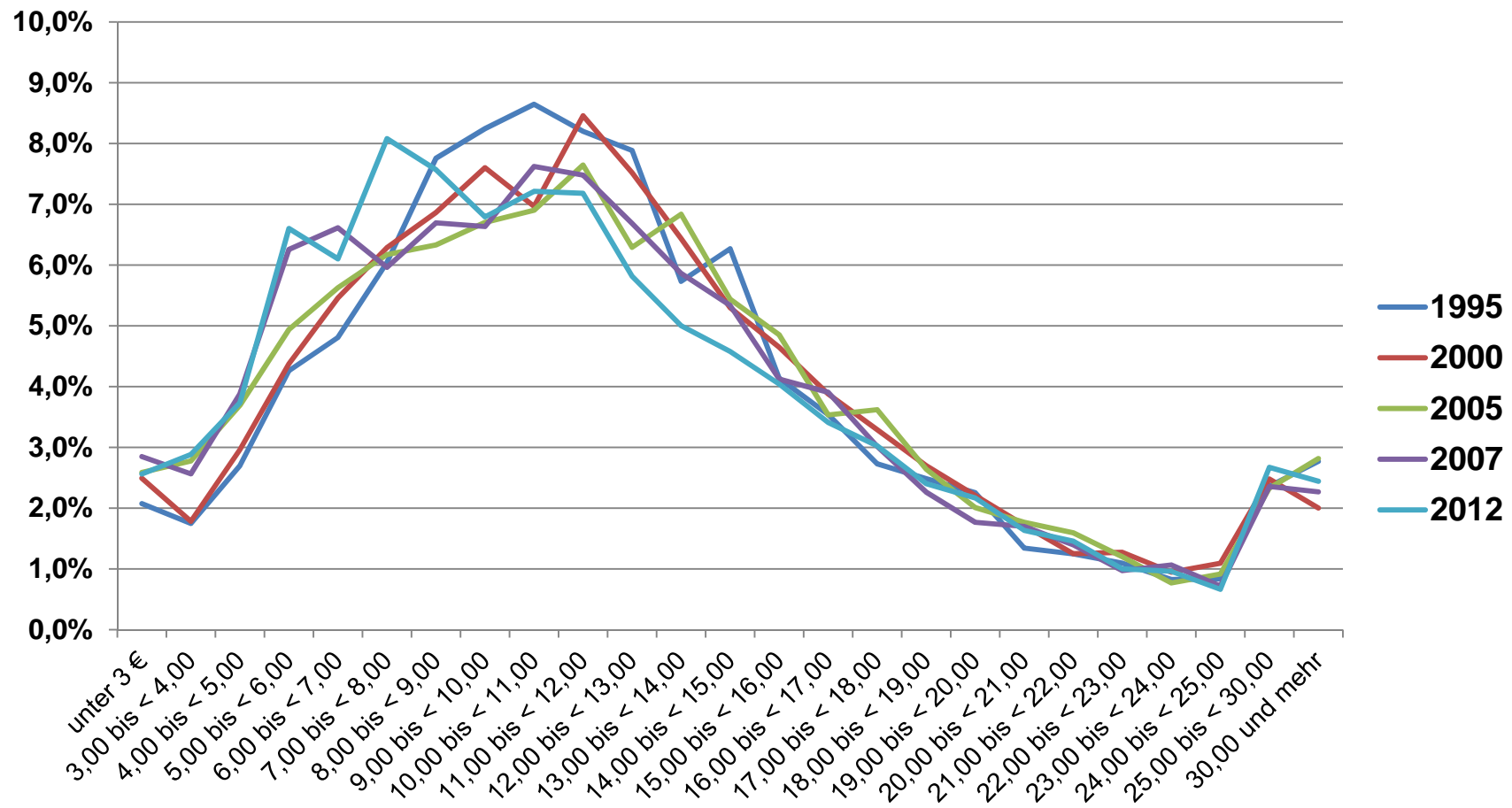
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## 5.11 Coverage by collective agreements in % of employees



Source: WSI – Tarifarchiv (IAB Betriebspanel)

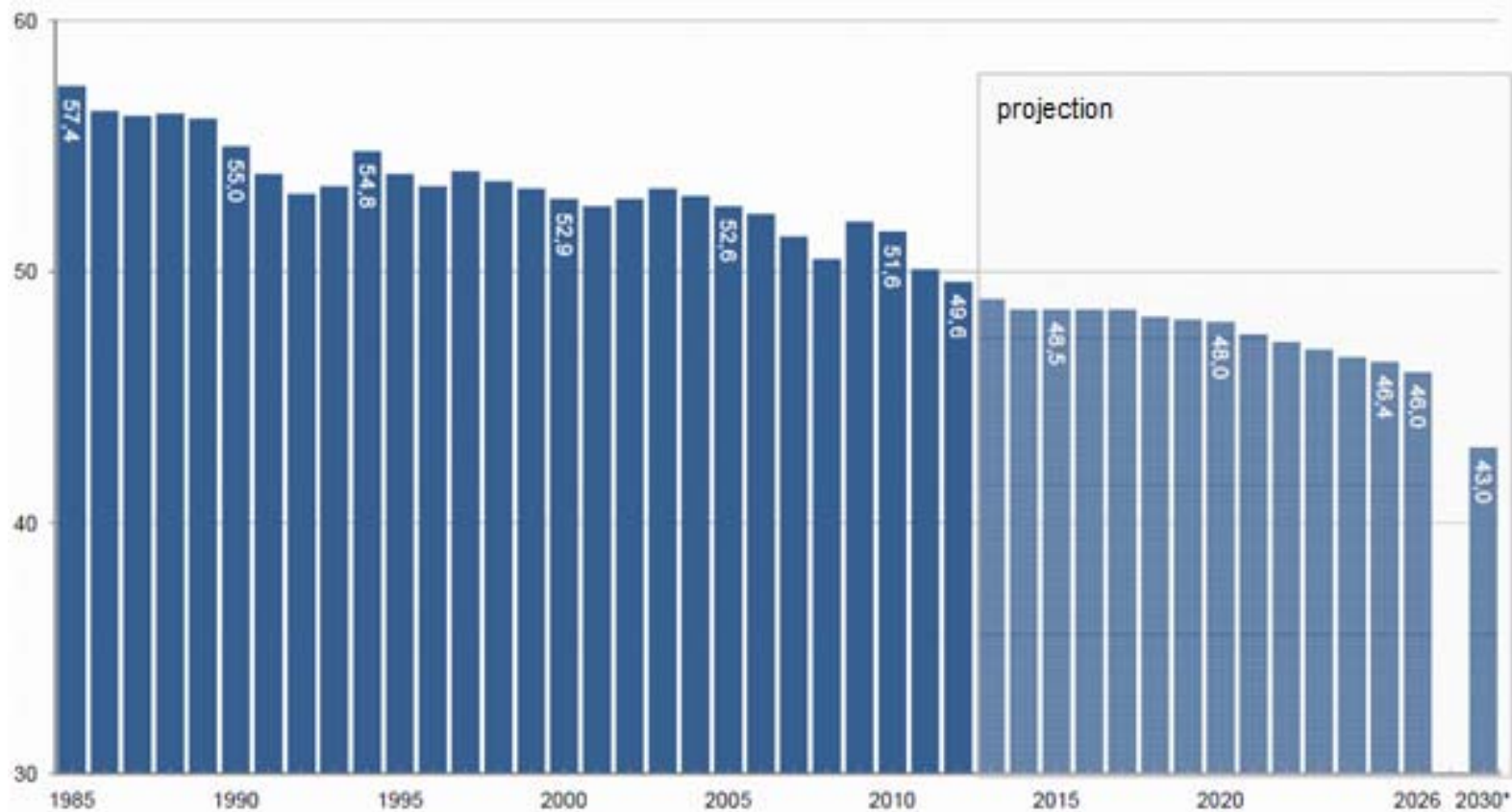
## 5.12 Increase of low wages: Distribution of hourly pay, Germany, adjusted for inflation (base = 1995)



Source: SOEP 2012, own calculations

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## Evolution of net standard pension level before tax 1985 – 2026 and 2030 Level of the net standard pension before tax (45 contribution years) as % of average annual earnings



\* Lower limit of level safeguarding clause

Source: Data to 2008: Deutsche Rentenversicherung (2011): Rentenversicherung in Zeitreihen  
Data from 2009: Bundesregierung: Rentenversicherungsbericht 2012, Berlin

## 6.1 Conclusions

### *Middle income classes are shrinking with all measures*

- Pressures mainly from more unequal primary income distribution - reasons:
  - Erosion of the inclusive wage system
  - Increasing inequality in paid working hours between individuals and households
- In spite of higher social benefit ratio and job growth some but not full compensation of increasing inequality by welfare state
- Pressures on welfare state will increase in economic crisis and in the long run through lower pension levels



## 6.2 Conclusions

### *Main policy challenges:*

- Reduction of inequality in the primary distribution
- Increasing coverage by collective agreements
- More equal distribution of working hours across classes
- abolition of incentives to work short hours linked with traditional family model,
- more second earners through new family model
- reduction of share of low skilled to reduce increasing hours divided between skill levels

*Welfare state should contribute to improve primary distribution through social investments, a new family model and minimum standards for pensions*