

Stefan Bach

**From Bottom to Top:
The Entire Distribution of Market Income in Germany,
1992 – 2001**

Bundesarbeitsgemeinschaft Wirtschaft und Finanzen
BÜNDNIS 90 / DIE GRÜNEN

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Background and Motivation

Rising income inequality

Noticed for several OECD countries

- “The great U-turn” (Harrison & Bluestone, 1988)

Especially at the top of the income distribution

- Little evidence for Germany

Aim of our study

More evidence on the German income distribution

Integrated micro data base

- Income tax return data 1992, 1995, 1998, 2001
- Household survey data (corresponding years)
- Sophisticated statistical matching strategy

Analyzing market (primary) incomes

- in particular top incomes

Overview

Data sources and integration methodology

Macroeconomic background 1992-2001

Evolution of income inequality 1992-2001

- Overall features

- Evolution and composition of top incomes

Main reasons for increasing inequality

Conclusion

Publications

Bach, Corneo & Steiner: From Bottom to Top:
“The Entire Distribution of Market Income in Germany, 1992-2001”.
DIW Berlin Discussion Paper No. 683. March, 2007.

<http://www.diw.de/documents/publikationen/73/55866/dp683.pdf>

CEPR Policy Insights 4, 2007.

<http://www.cepr.org/pubs/PolicyInsights/PolicyInsight4.pdf>

Summary in German:

“Zunehmende Ungleichheit der Markteinkommen: Reale Zuwächse
nur für Reiche.” Wochenbericht des DIW Berlin Nr. 13/2007.

<http://www.diw.de/documents/publikationen/73/55868/07-13-1.pdf>

Böckler impuls 8/2007

http://www.boeckler.de/pdf/impuls_2007_08_1.pdf

Data sources

Income tax returns (ITR) data

Covers all assessed taxpayers

- i.e. single persons or married couples

Stratified samples (10%) from the 4 waves

- 1992, 1995, 1998, 2001
- contain *all* persons in the top 1%

German Socio-Economic Panel Study (SOEP)

Representative sample of private households, yearly basis

- 12,000 households representing the resident population
 - 38.8 million private households 2001

Detailed income information

- individual and household, previous year, annual basis
- high-income sample as of 2001

Structure of the integrated ITR-SOEP data base compared to the national accounts, 1992-2001

	unit	1992	1995	1998	2001
Income taxpayers (assessment)	1 000	29 479	29 676	28 673	29 104
Single assessment (singles)	1 000	13 961	14 299	13 789	14 595
Joint assessment (married couples) ¹⁾	1 000	15 518	15 377	14 884	14 509
Potential tax units total ²⁾	1 000	44 000	44 506	45 338	46 014
Estimated non-filers	1 000	14 521	14 830	16 665	16 910
Taxpayers as percentage of potential tax units	%	67.0	66.7	63.2	63.3
Population of age >=20	1 000	63 806	64 088	64 425	65 025
Gross market income ³⁾ (integrated data base, less capital gains)	mill. Euro	1 073 158	1 159 620	1 224 326	1 303 268
Gross domestic product ⁴⁾	mill. Euro	1 646 620	1 848 450	1 965 380	2 113 160
Primary income of private households ⁴⁾	mill. Euro	1 270 240	1 402 200	1 466 590	1 599 320
Gross market income as percentage of primary income private households	%	84.5	82.7	83.5	81.5
Wage income (integrated data base) ⁵⁾	mill. Euro	903 337	987 550	1 020 171	1 082 478
Compensation of employees (national accounts) ⁵⁾	mill. Euro	917 170	997 020	1 032 250	1 120 610
Wage income from integrated data base as percentage of wages from national accounts	%	98.5	99.1	98.8	96.6
Income from business activities and capital income (integrated data base, less capital gains)	mill. Euro	169 820	172 070	204 155	220 790
Entrepreneurial and received property income of private households (national accounts) ⁶⁾	mill. Euro	336 810	388 030	427 630	472 880
Entrepreneurial income	mill. Euro	124 990	143 280	142 120	132 970
Received property income ⁶⁾	mill. Euro	211 820	244 750	285 510	339 910
Business and capital income from integrated data base as percentage of entrepreneurial and property income from national accounts	%	50.4	44.3	47.7	46.7
<p>1) Married couples living together are assessed as one tax payer.- 2) Derived from population census statistics: Entire population of 20 years and older, less young adults eligible for child benefit; married couples counted as one tax unit.- 3) Income from business activity, wage income, capital income, exclusive public and private pensions.- 4) At current prices, national accounts.- 5) Including employers' social security contributions and imputed social security contributions for civil servants.- 6) Including non-profit institutions serving households (NPISHs), less financial intermediation services indirectly measured (FISIM).</p> <p>Source: Income tax statistics 1992-2001; ITR-SOEP data base; national accounts.</p>					

Data integration strategy

Editing SOEP data at the taxpayer level: potential tax units

Constrained matching

Within predefined cells: gross income groups and marital status

Conditionally on a number of common variables

- gross income, main income source, occupational status, marital status, age group, family type, number of children, other tax-relevant information

Using LP optimization routines

Network simplex algorithm (transport problem)

- performed by ilog CPLEX and implemented in AMPL or JAVA

SOEP data: donor (supplier), ITR data: host (demander)

Distance measure: absolute deviation between normalized common variables

Resulting integrated data base

Bottom parts of income distribution: SOEP aggregates > ITR

- Nonfilers left behind

Top parts of income distribution: ITR aggregates > SOEP

- Underrepresentation of SOEP

Data matching methodology

Statistical matching

Nearest neighbor matching

Conditional **I**ndependence **A**ssumption

Constrained matching approach

Each observation (record) contained in the SOEP is matched to a certain number of records in the ITR

Correlation structure between the common matching variables and other variables is maintained

Analogy to the LP transportation problem

Records of data set A (B) as supply (demand) nodes

Survey weights w_{ij} of A and B as volumes supplied (demanded) by each A (B) record

Distance measure d_{ij} , as the costs of shipped goods between A and B

Minimize the weighted costs over all data records (n_A, n_B)

- restriction: for each record the weighted number of cases matched from A to B equals the sum of weights in the respective data set

$$\min \sum_{i=1}^{n_A} \sum_{j=1}^{n_B} d_{ij} w_{ij}$$
$$s.t. \sum_{j=1}^{n_B} w_{ij} = w_i, \forall i, \sum_{i=1}^{n_A} w_{ij} = w_j, \forall j, w_{ij} \geq 0, \forall i, j$$

Distance measure: e.g. absolute deviation, Euclidian, or Mahalanobis distance

- absolute deviation after normalizing all variables

Gross market income

Components

Wage income

- including employers' social security contributions

Business income

Capital income

Excluding

- capital gains
- public pensions and other wage replacement benefits from public insurance systems

Analyzed at the individual level

Information from income tax returns

Except for „nonfilers“ identified from SOEP

Except non response in income from capital investment (savers allowance)

Macroeconomic background, 1992-2001

Key drivers

- Reunification, transition in east Germany
- Strong increase of international economic integration
- Skill-biased technological change

Slow economic growth

- Real GDP by an y/y average of 1.7%
- Real GDP per employed person by an y/y average of 1.3%
- Modest increase in employment, rising unemployment

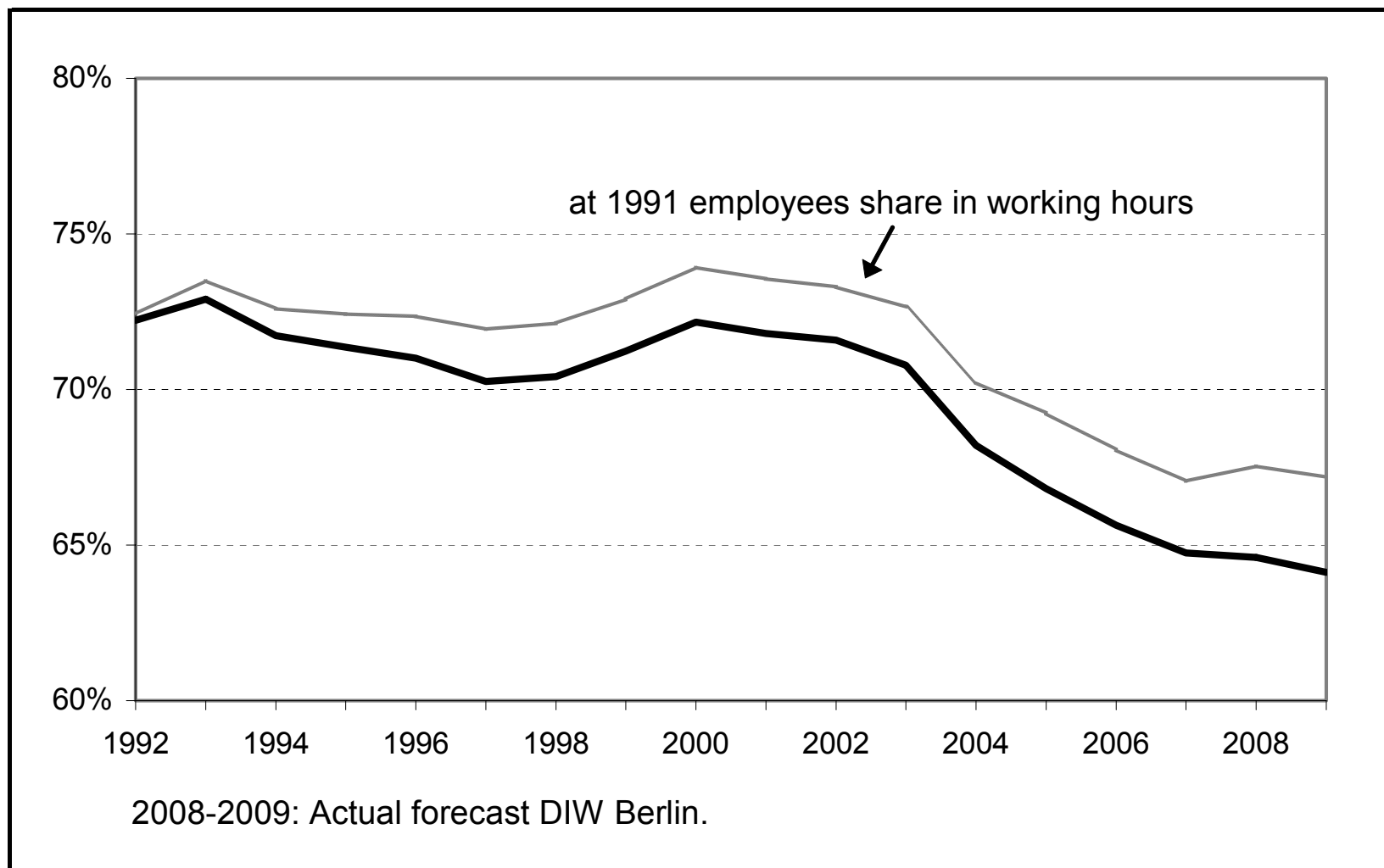
East Germany: Catching up and falling behind

- Productivity and average wages: 75% of the west German level
- Unemployment rate: double the west German level

National income: Small increase

- Meager real 0.4% y/y average
- Labor's share in national income remained stable (72%)

Labor's share in national income, 1992-2009



Evolution of Income Inequality 1992-2001

Structure by income fractiles

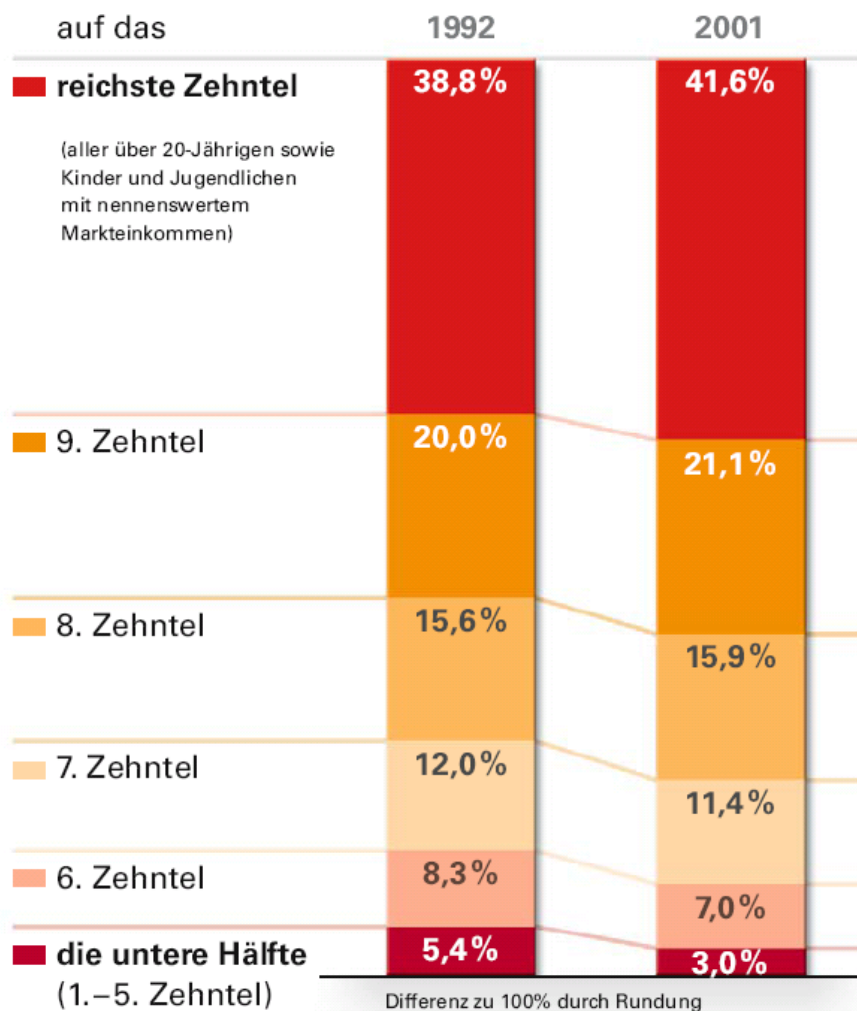
	Gross market income ¹⁾ , capital gains excluded				1992 = 100		
	1992	1995	1998	2001	1995	1998	2001
Structure in % by income fractiles							
1 st decile	- 0.87	- 1.19	- 0.99	- 0.99	136.2	114.2	114.0
2 nd decile	0.05	0.04	0.03	0.03	71.8	60.8	56.0
3 rd decile	0.22	0.17	0.13	0.13	76.5	61.5	60.1
4 th decile	1.42	1.04	0.80	0.76	73.3	56.4	53.6
5 th decile	4.59	4.02	3.46	3.09	87.6	75.4	67.4
6 th decile	8.28	8.12	7.58	7.02	98.1	91.5	84.8
7 th decile	11.96	12.26	11.75	11.35	102.5	98.2	94.9
8 th decile	15.59	15.99	15.88	15.89	102.6	101.8	101.9
9 th decile	19.98	20.54	20.84	21.10	102.8	104.3	105.6
10 th decile	38.78	39.00	40.53	41.62	100.6	104.5	107.3
Total	100.00	100.00	100.00	100.00	100.0	100.0	100.0
Top 1%	11.20	10.64	11.60	11.98	95.0	103.5	106.9
Top 0.1%	4.18	3.85	4.38	4.56	92.2	104.9	109.2
Top 0.01%	1.62	1.55	1.83	1.90	95.6	112.6	117.3
Top 0.001%	0.55	0.59	0.72	0.75	107.3	130.5	135.4
Top 0.0001%	0.16	0.20	0.24	0.24	125.4	152.3	153.0

1) Income from business activity, wage income, capital income, exclusive public and private pensions; measured at the individual level.- 2) Deflated by consumer price index.- 3) Difference of ln(mean) and ln(median).- 4) Not including cases with zero or negative income.- 5) GE(0) is the mean logarithmic deviation, GE(1) is the Theil index, and GE(2) is half the square of the coefficient of variation.

Source: ITR-SOEP data base.

Spitzenverdiener legen zu

Von allen Markteinkommen* in Deutschland entfielen...



Jährliche Markteinkommen* der Spitzenverdiener

Einkommensgruppe	Zahl der Personen	durchschnittliches Einkommen	Zunahme seit 1992
oberes Millionstel	65	48.150.000 €	53,2%
oberes Hunderttausendstel	650	15.000.000 €	35,2%
oberes Hundertstel	650.000	240.000 €	6,8%
oberes Zehntel	6.500.000	83.000 €	7,3%

* Einkommen aus Lohn (einschließlich Arbeitgeberanteile an Sozialversicherungsbeiträgen), aus unternehmerischer Tätigkeit sowie aus Vermögen ohne Veräußerungsgewinne; ohne öffentliche Renten, Pensionen und Sozialtransfers; Eurobeträge zu Preisen von 2000

Quelle: Böckler impuls 8/2007. http://www.boeckler.de/pdf/impuls_2007_08_1.pdf

Evolution of Income Inequality 1992-2001

Average income and summary measures of inequality

	Gross market income ¹⁾ , capital gains excluded				1992 = 100		
	1992	1995	1998	2001	1995	1998	2001
Average income at 2000 prices ²⁾							
Mean income (Euro)	20 044	19 767	19 808	20 028	98.6	98.8	99.9
Median income (Euro)	12 915	11 761	10 615	9 790	91.1	82.2	75.8
Relative difference ³⁾ (%)	44.0	51.9	62.4	71.6	118.1	141.9	162.8
Gini coefficient ⁴⁾	0.5813	0.5861	0.5983	0.6064	100.8	102.9	104.3
Generalized entropy measures ^{4) 5)}							
GE(0)	1.3863	1.4603	1.4916	1.4813	105.3	107.6	106.9
GE(1)	0.6961	0.6988	0.7409	0.7603	100.4	106.4	109.2
GE(2)	3.9909	4.9532	6.6778	7.4735	124.1	167.3	187.3
Ratio of percentiles							
90 / 50	3.60	4.01	4.55	5.09	111.4	126.3	141.3
95 / 90	1.27	1.29	1.28	1.28	101.2	100.2	100.4
99 / 90	2.23	2.15	2.23	2.24	96.5	99.8	100.4
99.9 / 90	7.34	6.62	7.01	7.06	90.2	95.6	96.2
99.999 / 90	118.44	111.42	127.92	130.05	94.1	108.0	109.8

1) Income from business activity, wage income, capital income, exclusive public and private pensions; measured at the individual level.- 2) Deflated by consumer price index.- 3) Difference of $\ln(\text{mean})$ and $\ln(\text{median})$.- 4) Not including cases with zero or negative income.- 5) GE(0) is the mean logarithmic deviation, GE(1) is the Theil index, and GE(2) is half the square of the coefficient of variation.

Source: ITR-SOEP data base.

Distribution of gross market income in east and west Germany, 1992-2001

Average income and summary measures of inequality

Gross market income ¹⁾ , capital gains excluded	West Germany (1992: incl. West Berlin; 1995-2001 excl. Berlin)				East Germany (1992: incl. East Berlin; 1995-2001 incl. Berlin)			
	1992	1995	1998	2001	1992	1995	1998	2001
Average income at 2000 prices ²⁾								
Mean income (Euro)	21 317	20 710	20 859	21 151	15 122	14 853	14 709	14 465
Median income (Euro)	13 272	11 810	10 751	10 244	13 057	11 606	10 221	8 270
Relative difference ³⁾ (%)	47.4	56.2	66.3	72.5	14.7	24.7	36.4	55.9
Gini coefficient ⁴⁾	0.5849	0.5883	0.5994	0.6059	0.5075	0.5404	0.5607	0.5807
Generalized entropy measures ^{4) 5)}								
GE(0)	1.4237	1.4657	1.4990	1.4829	1.1671	1.3851	1.4017	1.4152
GE(1)	0.7147	0.7095	0.7518	0.7675	0.4884	0.5626	0.5970	0.6333
GE(2)	4.2311	5.1751	7.1158	7.9358	1.1795	3.7692	1.9668	1.9431
Ratio of percentiles								
90 / 50	3.69	4.19	4.69	5.08	2.53	2.95	3.43	4.43
95 / 90	1.27	1.28	1.27	1.27	1.27	1.23	1.26	1.26
99 / 90	2.27	2.16	2.25	2.26	1.97	1.93	1.99	2.07
99.9 / 90	7.75	6.80	7.33	7.40	4.41	4.83	4.87	4.87
99.999 / 90	127.59	116.08	135.23	139.45	25.22	30.37	33.59	32.74

1) Income from business activity, wage income, capital income, exclusive public and private pensions; measured at the individual level.-

2) Deflated by consumer price index.- 3) Difference of ln(mean) and ln(median).- 4) Not including cases with zero or negative income.-

5) GE(0) is the mean logarithmic deviation, GE(1) is the Theil index, and GE(2) is half the square of the coefficient of variation.

Source: ITR-SOEP data base.

Comparison to SOEP data alone (sample A-F, less high income sample)

Basically a similar picture 1992-2001

Similar increase in the Gini coefficient, in the share of Top 10% and Top 1%

Under representation of top incomes

Lower level of top incomes

Lower level of the Gini coefficient (1.5%-points)
and esp. of the GE(1) and GE(2) measures

Further increase in income inequality 2001-2004

Evolution of Income Inequality 1992-2004, SOEP data only (sample A-F) Structure by income fractiles

	Gross market income ¹⁾ , capital gains excluded					1992 = 100			
	1992	1995	1998	2001	2004	1995	1998	2001	2004
Structure in % by income fractiles									
1 st decile	- 0.12	- 0.27	- 0.06	- 0.23	- 0.73	229.3	51.0	199.4	620.9
2 nd decile	0.05	0.04	0.03	0.03	0.03	74.7	63.3	60.9	57.2
3 rd decile	0.18	0.13	0.12	0.12	0.11	76.2	65.9	68.3	62.5
4 th decile	1.06	0.81	0.66	0.68	0.63	75.9	61.8	63.6	58.8
5 th decile	4.25	3.48	3.02	2.76	2.50	81.8	70.9	64.8	58.7
6 th decile	8.63	8.22	7.84	7.13	6.36	95.2	90.8	82.6	73.7
7 th decile	12.81	12.83	12.74	12.26	11.73	100.2	99.4	95.7	91.5
8 th decile	16.65	16.99	16.89	16.94	17.32	102.0	101.4	101.7	104.0
9 th decile	21.28	21.58	22.13	22.64	23.40	101.4	103.9	106.4	109.9
10 th decile	35.20	36.20	36.65	37.67	38.66	102.8	104.1	107.0	109.8
Total	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
Top 1%	21.27	22.01	22.21	22.86	23.37	103.5	104.4	107.5	109.9
Top 0.1%	6.58	6.76	6.30	6.79	6.78	102.8	95.8	103.2	103.1
Top 0.01%	1.51	1.32	1.03	1.09	1.08	87.9	68.2	72.2	71.5
Top 0.001%	.	.	.	.	.	.	.	.	.
Top 0.0001%	.	.	.	.	.	.	.	.	.

1) Income from business activity, wage income, capital income, exclusive public and private pensions; measured at the individual level.- 2) Deflated by consumer price index.- 3) Difference of ln(mean) and ln(median).- 4) Not including cases with zero or negative income.- 5) GE(0) is the mean logarithmic deviation, GE(1) is the Theil index, and GE(2) is half the square of the coefficient of variation.

Source: SOEP, sample A-F (high income sample excluded).

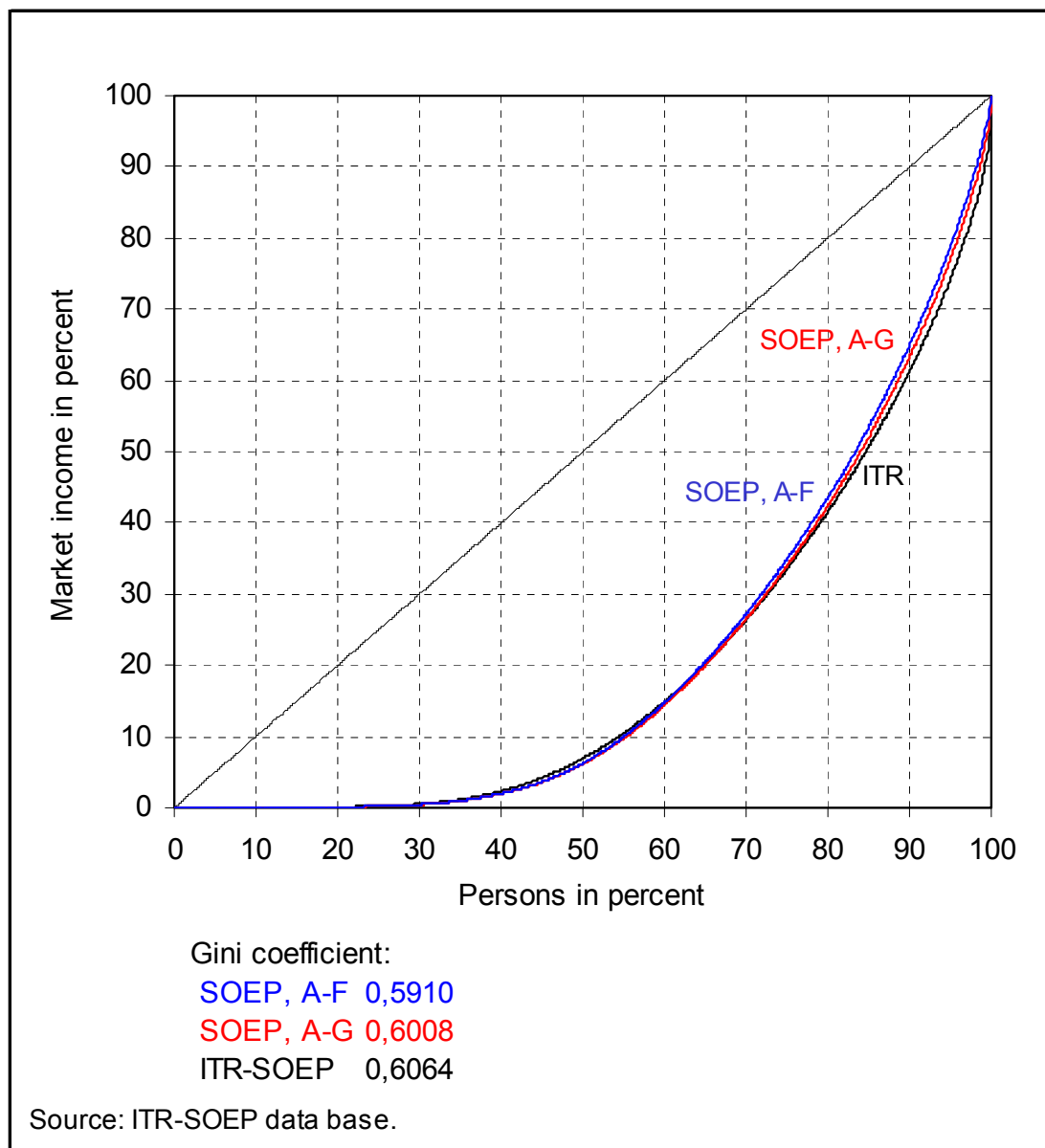
Evolution of Income Inequality 1992-2004, SOEP data only (sample A-F)

Average income and summary measures of inequality

	Gross market income ¹⁾ , capital gains excluded					1992 = 100			
	1992	1995	1998	2001	2004	1995	1998	2001	2004
Average income at 2000 prices ²⁾									
Mean income (Euro)	18 389	18 563	18 529	19 018	18 378	100.9	100.8	103.4	99.9
Median income (Euro)	11 628	10 440	9 196	8 735	7 356	89.8	79.1	75.1	63.3
Relative difference ³⁾ (%)	45.8	57.5	70.1	77.8	91.6	125.6	152.8	169.8	199.8
Gini coefficient ⁴⁾	0.5659	0.5787	0.5814	0.5910	0.6053	102.3	102.7	104.4	107.0
Generalized entropy measures ^{4) 5)}									
GE(0)	1.4170	1.5126	1.5199	1.5100	1.5878	106.7	107.3	106.6	112.1
GE(1)	0.5915	0.6196	0.6186	0.6365	0.6656	104.8	104.6	107.6	112.5
GE(2)	0.6528	0.6858	0.6394	0.6807	0.7123	105.1	98.0	104.3	109.1
Ratio of percentiles									
90 / 50	3.92	4.49	5.23	5.81	6.87	114.4	133.2	148.2	175.1
95 / 90	1.26	1.30	1.27	1.26	1.27	102.9	100.6	100.1	100.6
99 / 90	1.87	1.86	1.97	1.99	1.94	99.5	105.1	106.5	103.9
99.9 / 90	3.77	4.12	3.00	3.17	3.24	109.1	79.5	84.0	85.8
99.999 / 90

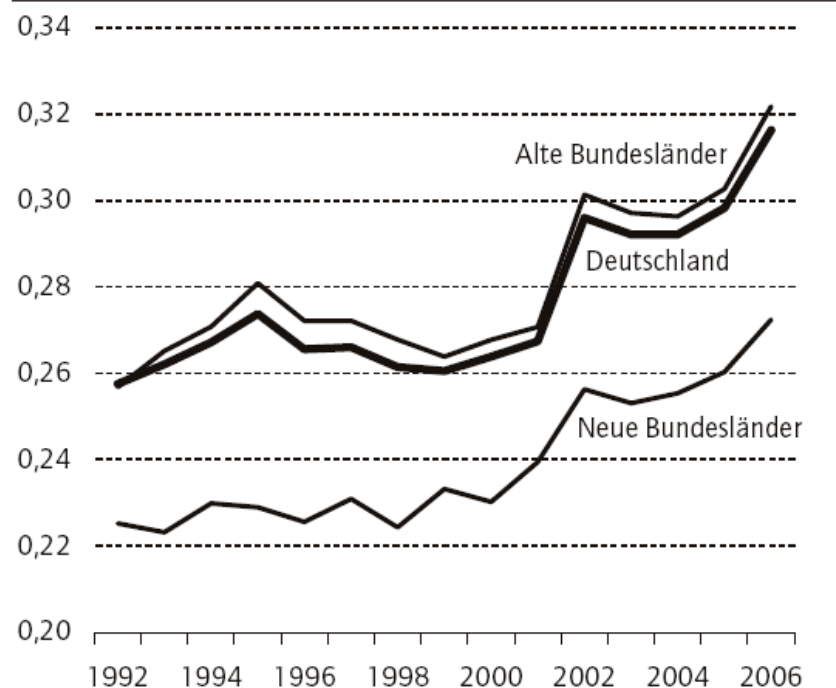
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Source: SOEP, sample A-F (high income sample excluded).

Distribution of gross market income in Germany, 2001



Einkommensungleichheit in Deutschland 1992 bis 2006

Gini-Koeffizient

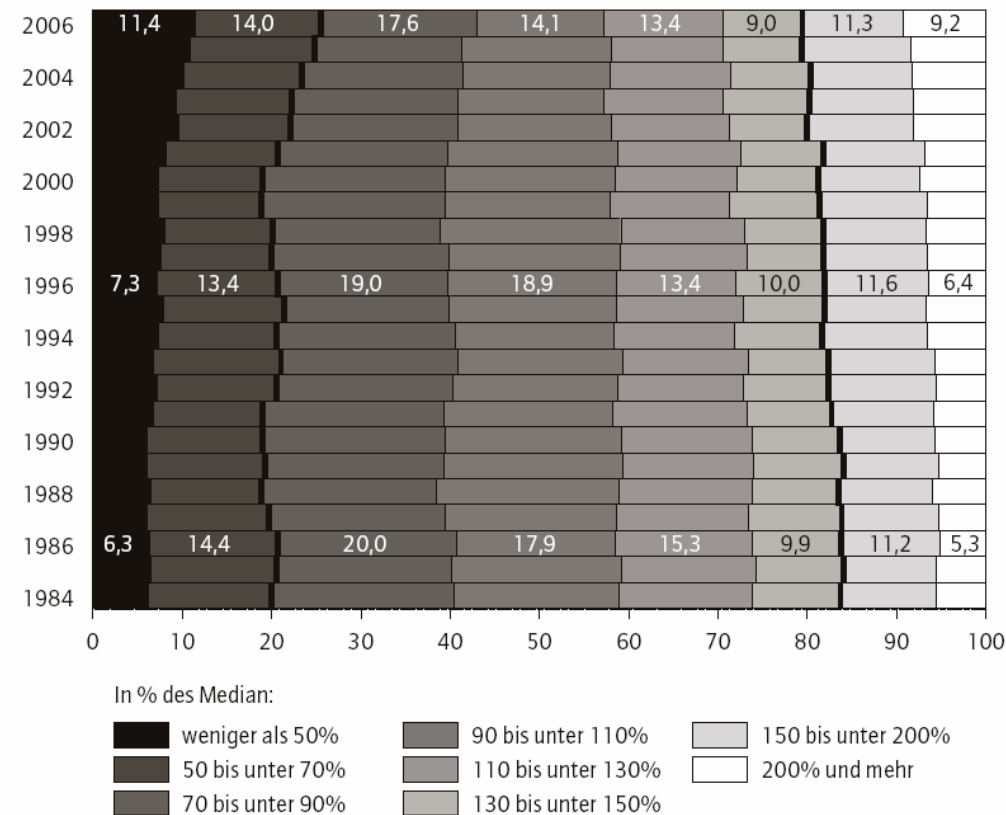


Quelle: SOEP, Personen in Privathaushalten, retrospektiv erfragte bedarfsgewichtete Haushaltsnettoeinkommen des Vorjahres.

DIW Berlin 2008

Einkommenschichtung in Deutschland¹ 1984 bis 2006

In Prozent, Einkommensposition auf Basis des jahresspezifischen Median



¹ Ab 1992 Deutschland insgesamt.

Quelle: SOEP, Personen in Privathaushalten, retrospektiv erfragte bedarfsgewichtete Haushaltsnettoeinkommen des Vorjahres.

DIW Berlin 2008

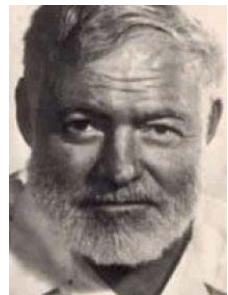
Quelle: Grabka & Frick: Schrumpfende Mittelschicht – Anzeichen einer dauerhaften Polarisierung der verfügbaren Einkommen? Wochenbericht des DIW Berlin, 10/2008. <http://www.diw.de/documents/publikationen/73/79586/08-10-1.pdf>

The rich are different?



F. Scott Fitzgerald:

“The rich are different from you and me.”



Ernest Hemingway:

“Yes, they have more money.”

Top average real market incomes in Germany, 1992-2001

Gross market income ¹⁾ , capital gains excluded	1992	1995	1998	2001	1995	1998	2001
	1 000 Euro at 2000 prices ²⁾				1992 = 100		
Mean income	20.0	19.8	19.8	20.0	98.6	98.8	99.9
Median income	12.9	11.8	10.6	9.8	91.1	82.2	75.8
Average income							
Top 10%	77.7	77.1	80.3	83.4	99.2	103.3	107.3
Top 1%	224.5	210.4	229.7	239.9	93.7	102.3	106.8
Top 0.1%	837.5	761.7	868.1	914.1	90.9	103.7	109.1
Top 0.01%	3 252.0	3 066.6	3 617.8	3 810.9	94.3	111.2	117.2
Top 0.001%	11 082.6	11 721.4	14 280.4	14 981.1	105.8	128.9	135.2
Top 0.0001%	31 437.7	39 051.4	47 230.3	48 151.9	124.2	150.2	153.2
Lowest income							
Top 10%	46.5	47.2	48.3	49.8	101.4	103.8	107.1
Top 1%	103.7	101.6	107.5	111.6	97.9	103.6	107.6
Top 0.1%	341.4	312.3	338.8	351.9	91.5	99.3	103.1
Top 0.01%	1 401.1	1 211.3	1 385.0	1 471.3	86.5	98.9	105.0
Top 0.001%	5 510.0	5 257.7	6 178.6	6 482.0	95.4	112.1	117.6
Top 0.0001%	18 360.4	19 696.6	25 456.4	26 255.5	107.3	138.6	143.0

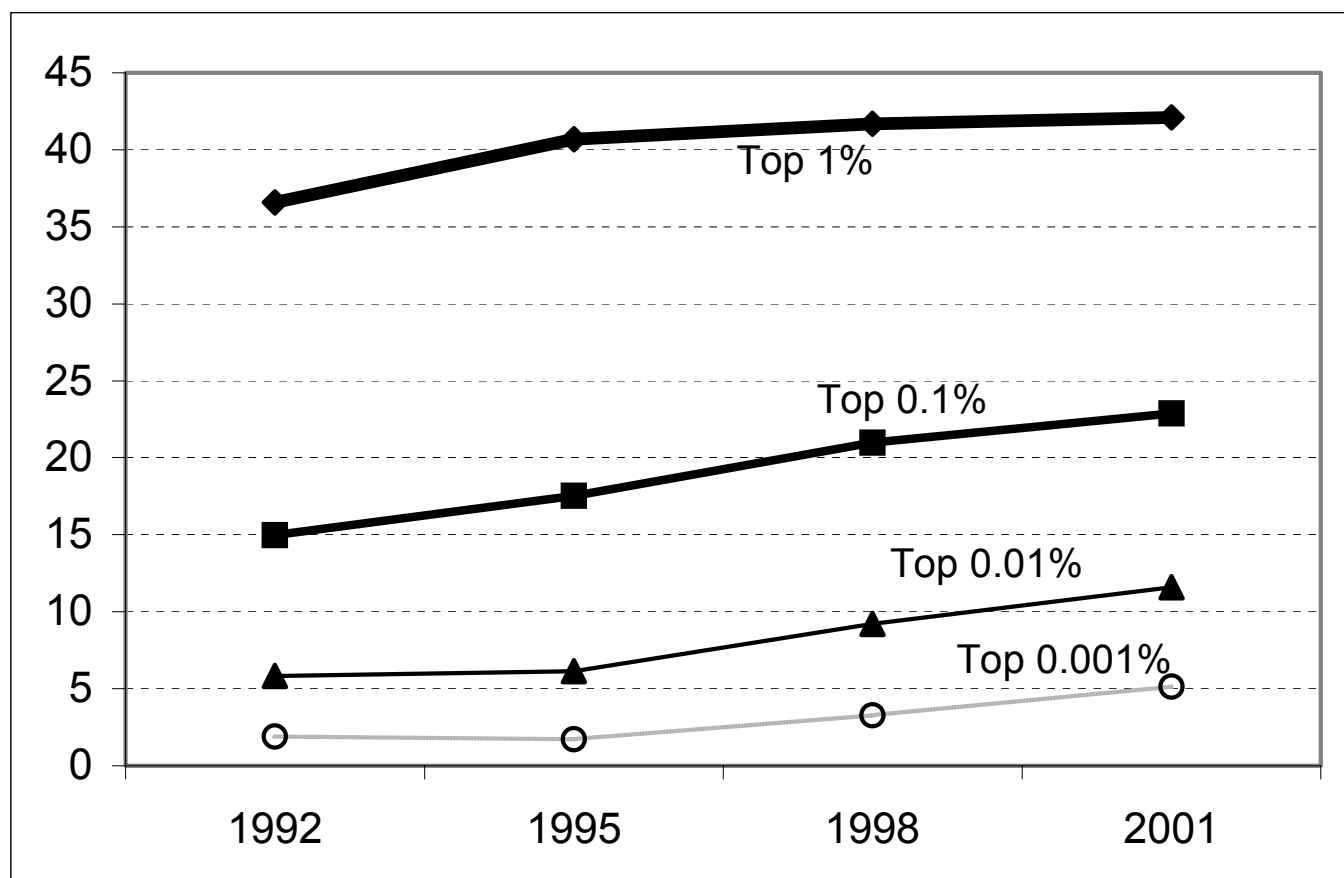
1) Income from business activity, wage income, capital income, exclusive public and private pensions; measured at the individual level.- 2) Deflated by consumer price index.

Source: ITR-SOEP data base.

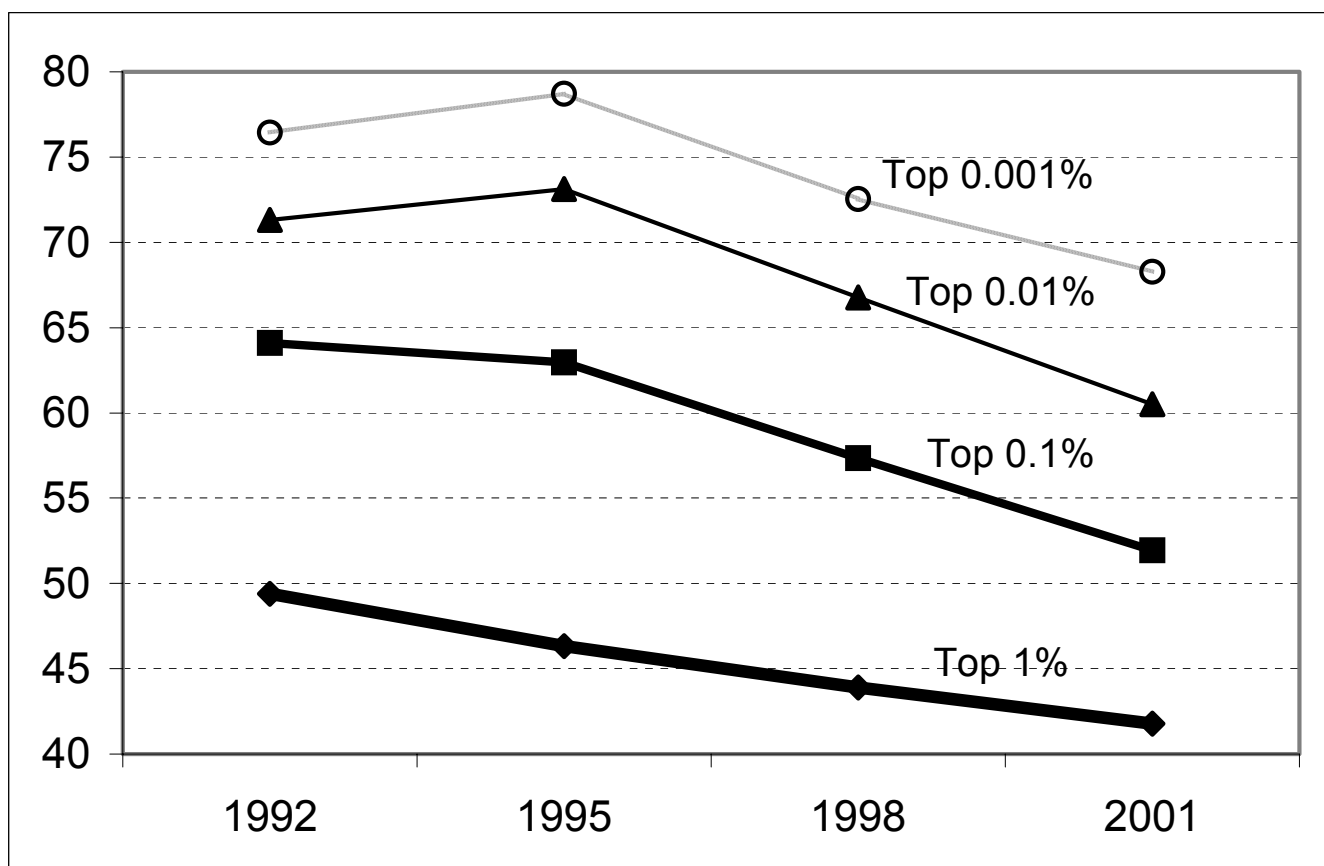
Composition of top market incomes by income component (in %), 1992 and 2001

Gross market income ¹⁾ , capital gains excluded	Gross market income ¹⁾ less capital gains	Income from business activity less capital gains			Wage income ²⁾	Capital income less capital gains		
		Total	business enterprise	profess. services		Total	Interest, dividends	Renting and leasing
		2001						
Mean income	100.0	11.4	7.0	4.4	83.1	5.5	4.2	1.4
Top 10%	100.0	19.7	11.5	8.2	73.3	6.9	5.3	1.6
Top 1%	100.0	41.8	24.3	17.5	42.1	16.1	13.0	3.1
Top 0.1%	100.0	52.0	40.3	11.7	22.9	25.2	22.1	3.0
Top 0.01%	100.0	60.5	57.0	3.5	11.6	27.9	26.1	1.8
Top 0.001%	100.0	68.3	67.3	1.0	5.2	26.6	25.8	0.7
Top 0.0001%	.	.	.	.	.	.	.	.
		1992						
Mean income	100.0	11.3	7.4	3.8	84.2	4.6	3.4	1.2
Top 10%	100.0	21.3	13.3	8.0	72.7	6.0	4.6	1.4
Top 1%	100.0	49.4	31.2	18.2	36.6	14.0	11.2	2.9
Top 0.1%	100.0	64.1	50.1	14.0	15.0	20.9	18.2	2.8
Top 0.01%	100.0	71.3	67.1	4.2	5.8	22.8	21.0	1.9
Top 0.001%	100.0	76.4	75.6	0.8	1.9	21.7	20.8	0.8
Top 0.0001%	.	.	.	.	.	.	.	.
1) Income from business activity, wage income, capital income, exclusive public and private pensions; measured at the individual level.-								
2) Including employers' social security contributions and imputed social security contributions for civil servants.								
Source: ITR-SOEP data base.								

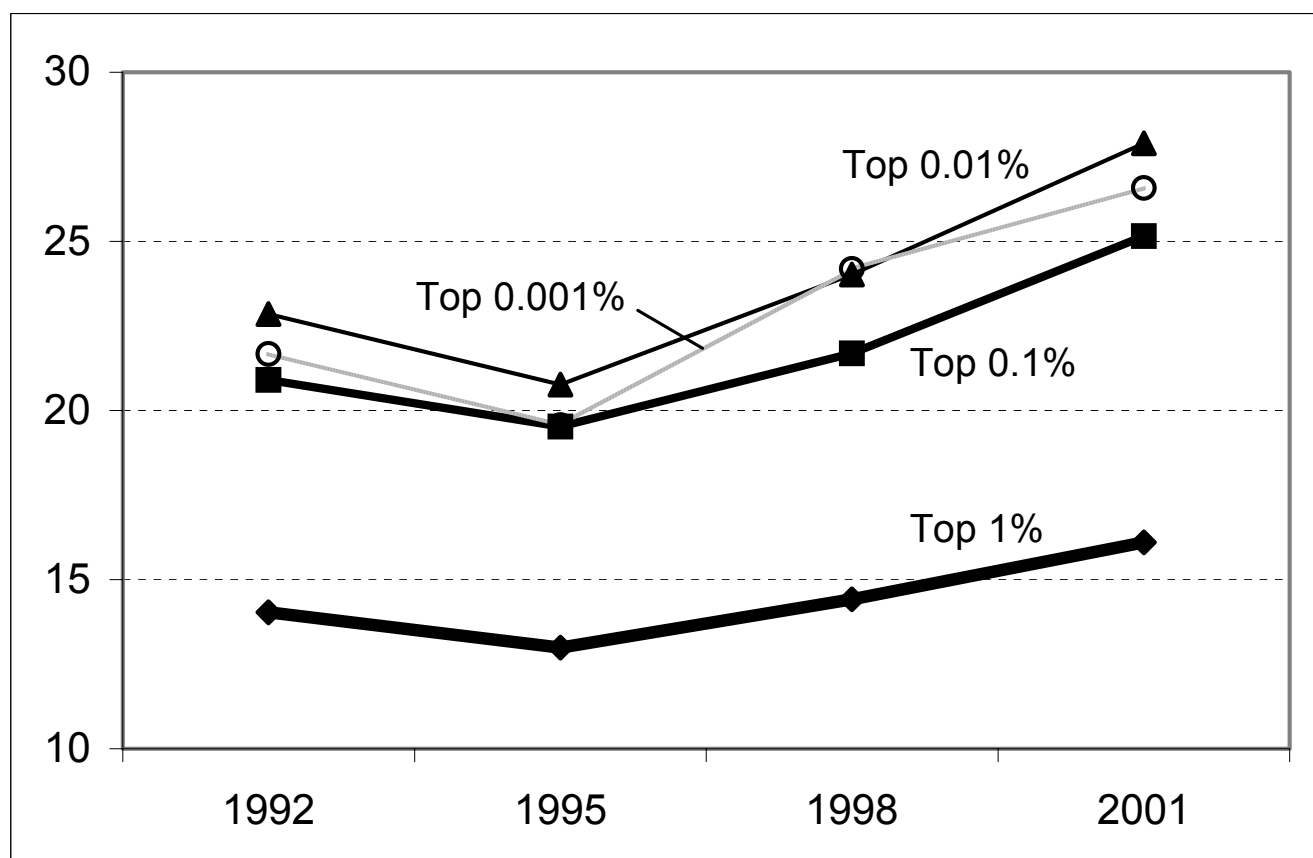
Share of wages in top incomes in Germany, 1992-2001 in % of total market income



Share of business income in top incomes in Germany, 1992-2001 in % of total market income



Share of capital income in top incomes in Germany, 1992-2001 in % of total market income



Individuelles Netto-Vermögen in Deutschland 2002

Verteilungskennwerte	West-	Ost-	Gesamt-
	Deutschland		
In Euro			
Mittelwert	91 486	34 290	80 722
Median	18 326	7 554	15 000
p90	232 360	103 379	207 160
p95	345 804	150 520	312 941
p99	791 926	292 395	736 781
Konzentrationsmaße			
Gini-Koeffizient	0,779	0,801	0,790
p90/p50	12,68	13,69	13,81
In Prozent			
Personen mit negativem Vermögen	5,3	5,8	5,4
Personen mit einem Vermögen von Null ¹	24,3	24,3	24,3

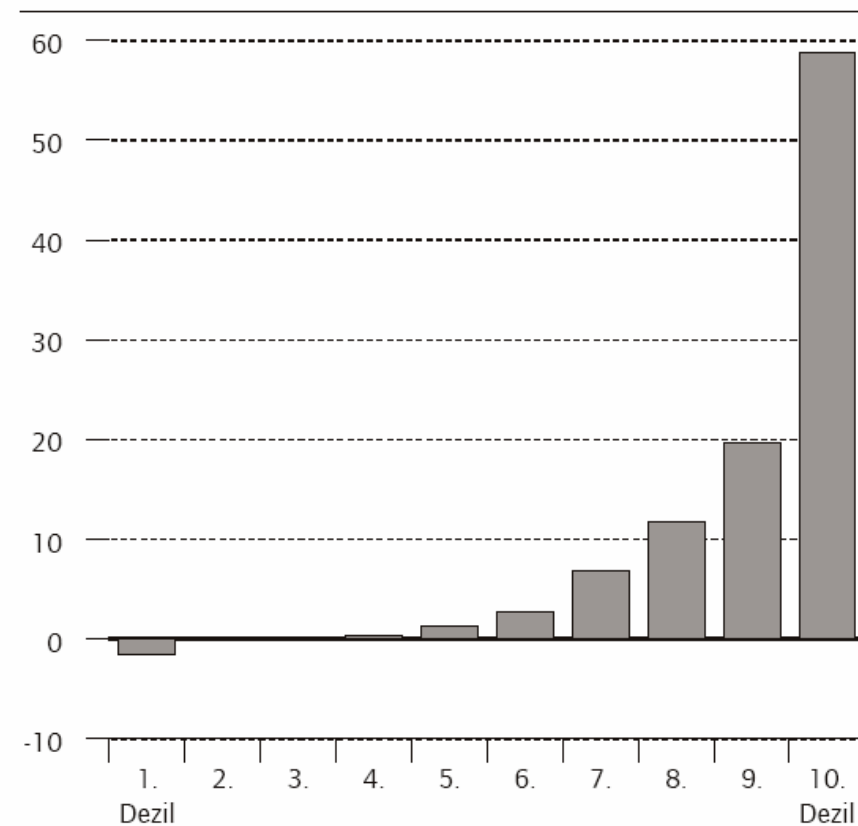
1 Der Anteil der Personen ohne Vermögen ist überschätzt, da für drei Komponenten (Geldvermögen, private Versicherungen und Konsumentenkredite) ein Schwellenwert von 2 500 Euro vorausgesetzt wird.

Quellen: SOEP, individuelle Vermögensinformationen nach multipler Imputation fehlender Werte, inklusive eines 0,1 % Top-Coding; Berechnungen des DIW Berlin.

DIW Berlin 2007

Individuelles Netto-Vermögen nach Dezilen in Deutschland 2002

Anteile in Prozent



Quellen: SOEP; Berechnungen des DIW Berlin.

DIW Berlin 2007

Quelle: Grabka & Frick: Vermögen in Deutschland wesentlich ungleicher verteilt als Einkommen. Wochenbericht des DIW Berlin, 45/2007.
<http://www.diw.de/documents/publikationen/73/74780/07-45-1.pdf>

Explanations for increasing inequality

International economic integration, globalization

Triumphant advance of international capitalism

Deregulation, liberalization

Decline of unionization

Reduction in employee working hours

Skill-biased technological change

“Superstar” theory (Rosen, AER 1981)

Economies of scale associated with globalization and increased communication opportunities

Also applies to CEOs' high pay?

Conclusion

Inequality of market incomes moderately increased
1992-2001

Basically in-line with previous studies based on household surveys

Higher increase in top and very top incomes

Dominance of business and capital income within the very
top fractiles

However: rising share of wage income

Persistent trend after 2001?

Further increase in unemployment 2002-2004

Wage moderation, boom in profit and capital income

Significant drop in labor's share in national income

Thank You for Your Attention!