

INEQUALITY

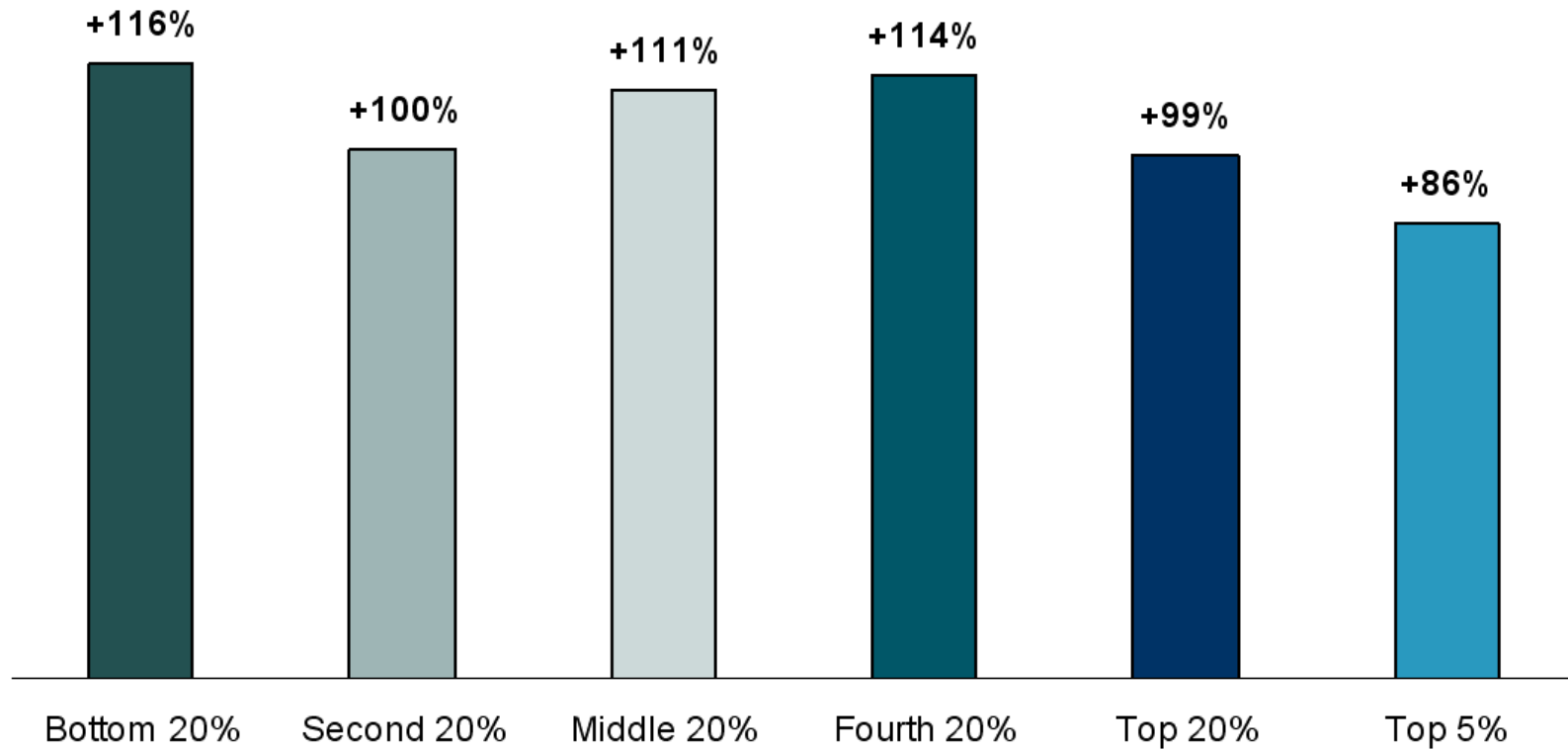


Principles of Microeconomics

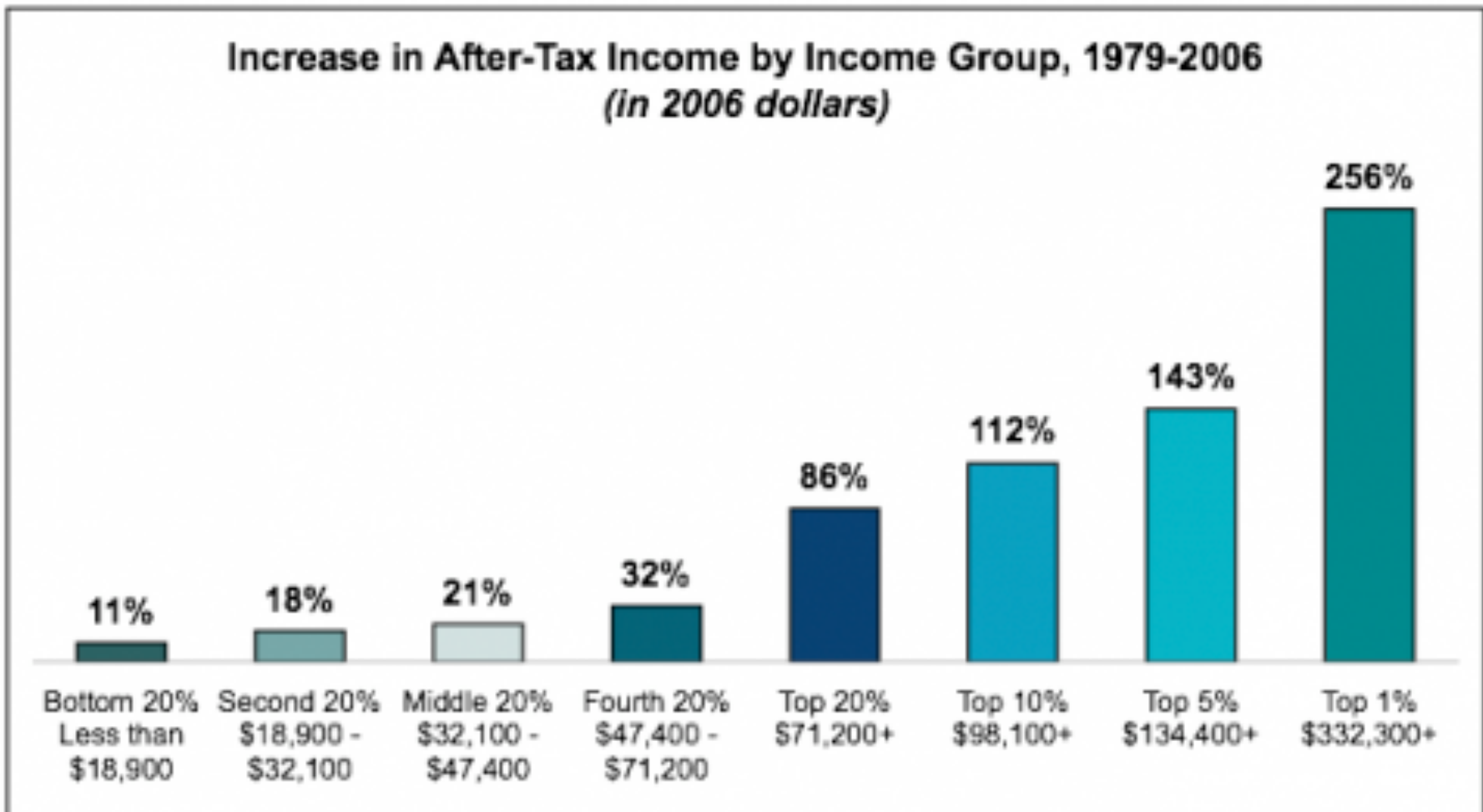
Fall 2010

David F. Ruccio

Change in Real Family Income by Quintile and Top 5% , 1947-1979



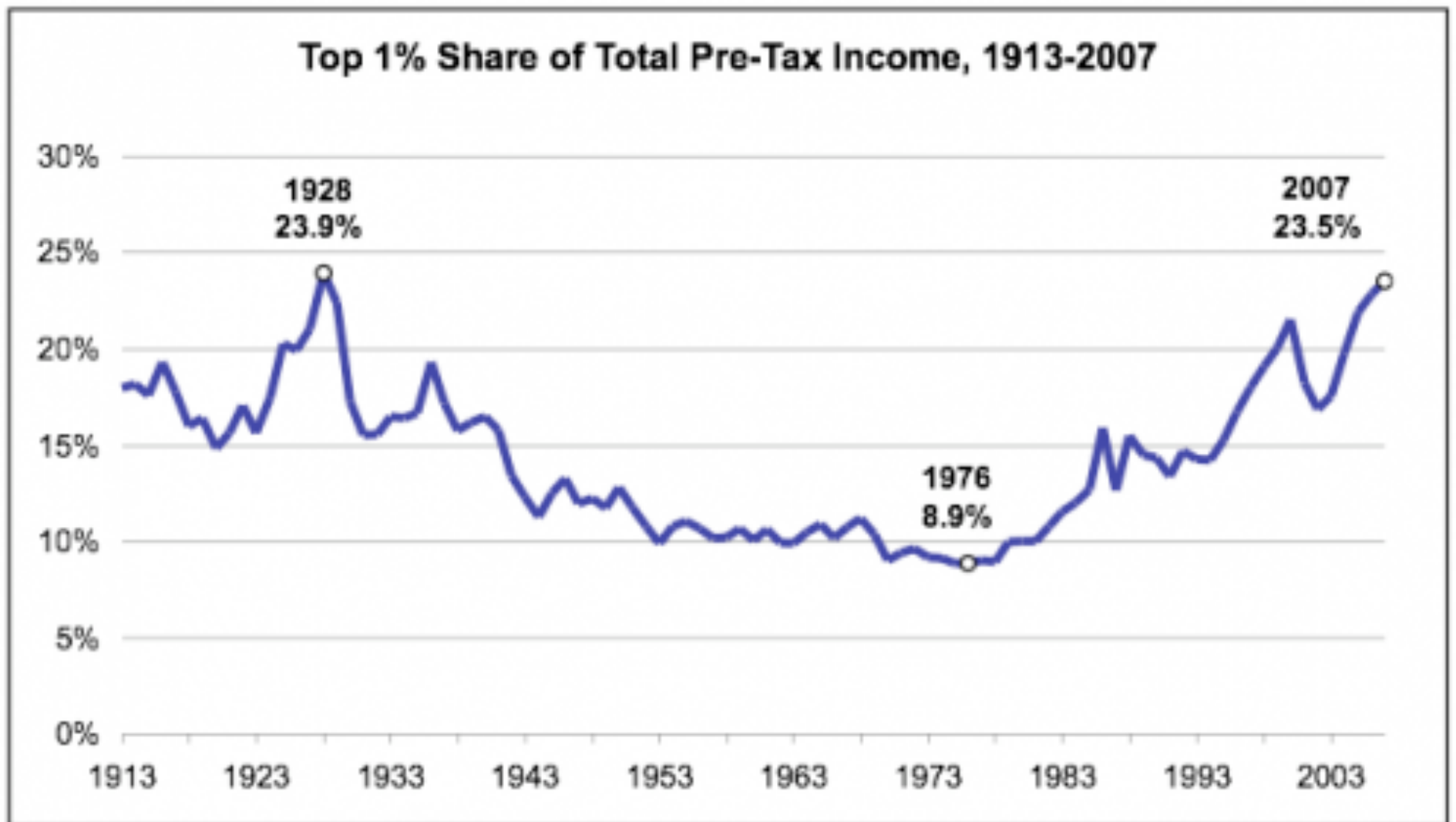
Source: analysis of U.S. Census Bureau data in Economic Policy Institute, *The State of Working America 1994-95* (M.E. Sharpe: 1994), 37



Source: Congressional Budget Office, “Average Household After-Tax Income,” Data on the Distribution of Federal Taxes and Household Income, April, 2009.

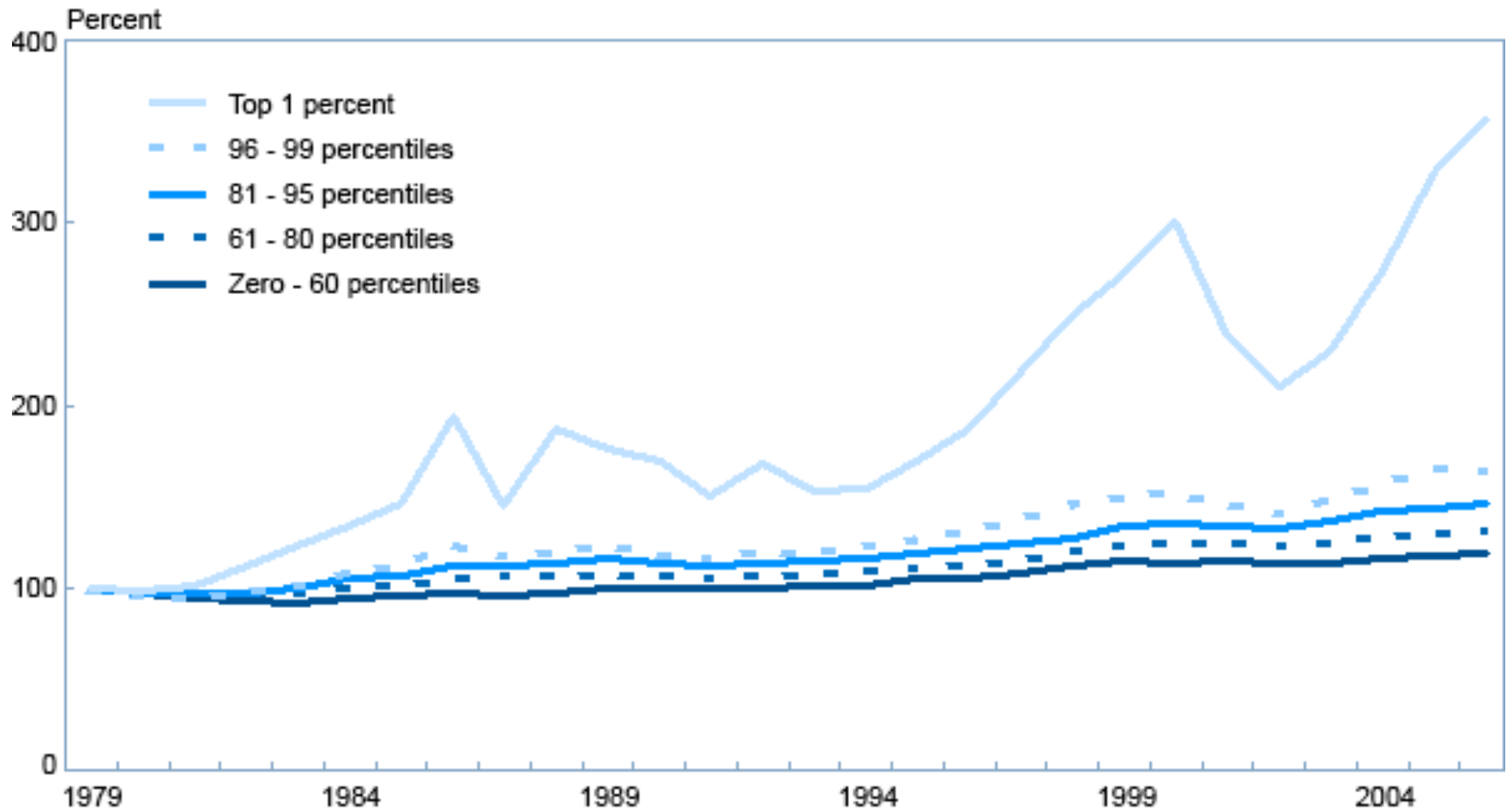
The CBO data show that between 1979 and 2006:

- o The average after-tax income of the top one percent of the population more than doubled, rising from \$337,100 to \$1,200,300, for a total increase of \$863,200, or 256 percent. (CBO adjusted these figures for inflation and expressed them in 2006 dollars.)
- o By contrast, the average after-tax income of the middle fifth of the population rose a relatively modest 21 percent, or \$9,200, reaching \$52,100 in 2006.
- o The average after-tax income of the poorest fifth of the population rose just 11 percent, or \$1600, over that period.
- o The top one percent of the population received 16.3 percent of national after-tax income in 2006, up from its already-large 7.5 percent share in 1979.
- o In contrast, the shares of national income received by various groups of low- and middle-income people all fell. The middle fifth of the population received 16.5 percent of the national after-tax income in 1979, but only 14.3 percent in 2006. The bottom fifth received 6.8 percent of such income in 1979, but just 4.7 percent in 2006.



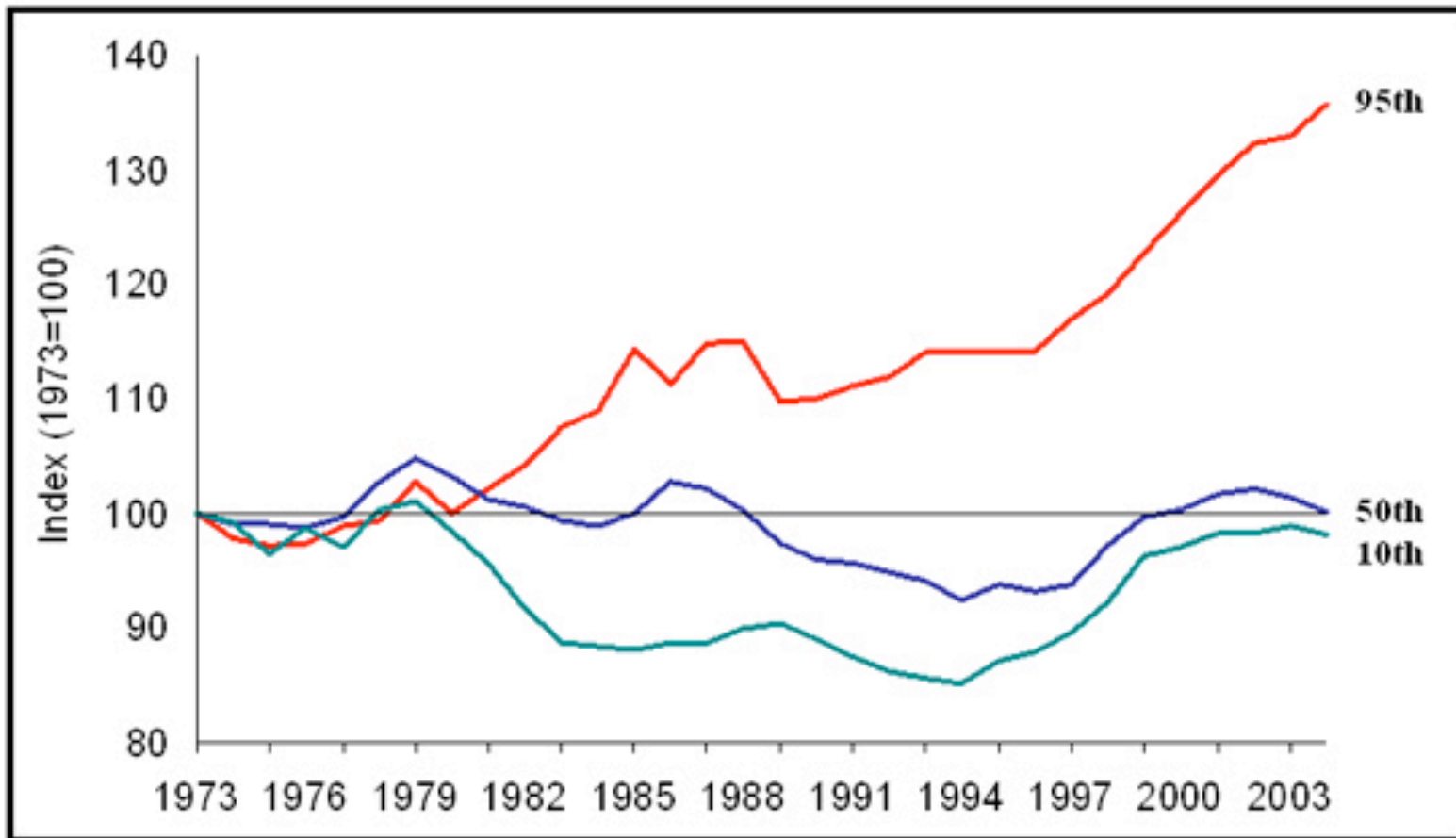
Source: Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913-1998," *Quarterly Journal of Economics*, 118 (1), 2003. Updated to 2007 at <http://emlab.berkeley.edu/users/saez>.

Real After-Tax Average Income as a Percent of 1979 Income, By Income Group



Source: Congressional Budget Office, "Data on the Distribution of Federal Taxes and Household Income" (April 2009)

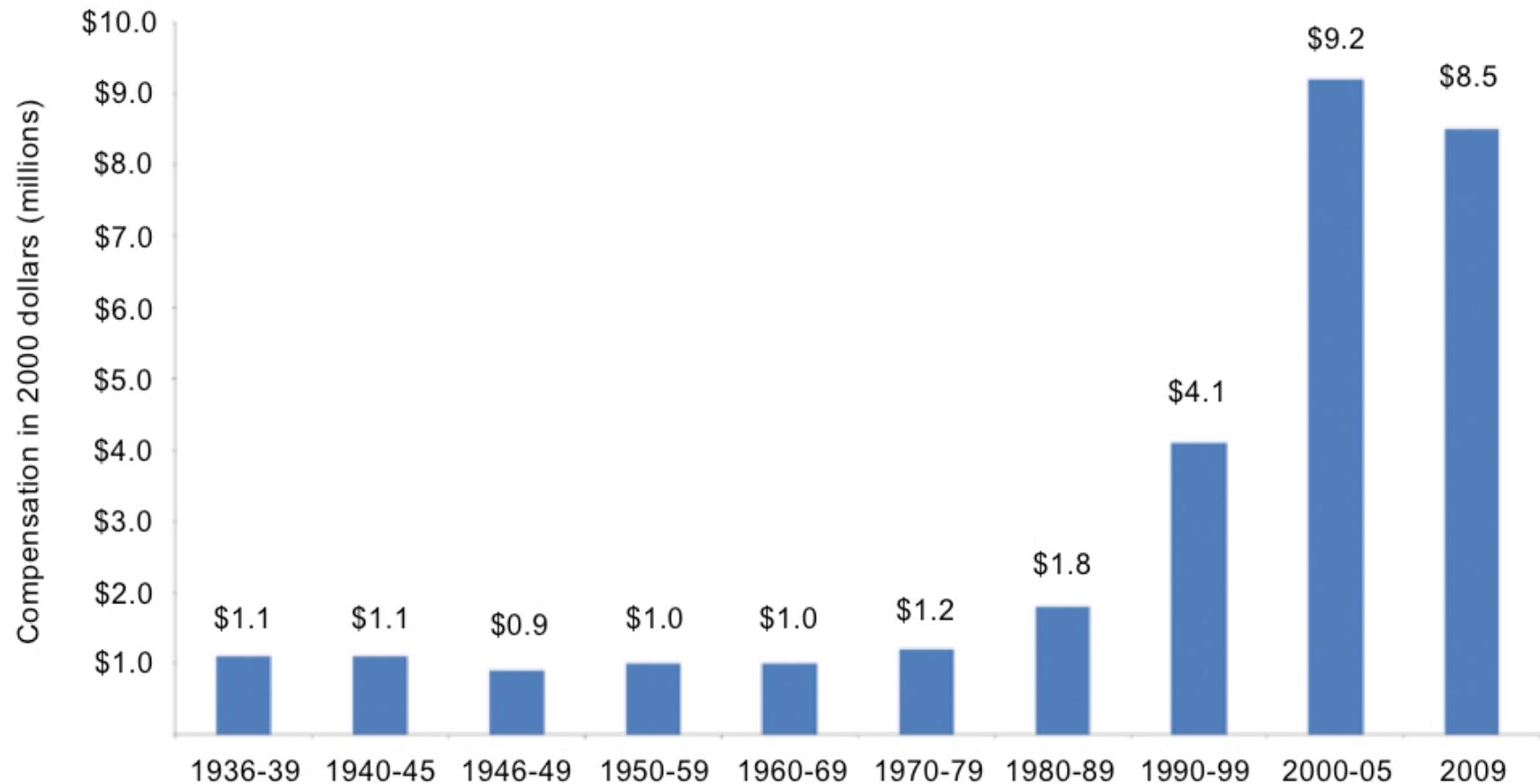
Change in Real Hourly Wages for Men by Wage Percentile, 1973-2004



Source: Jared Bernstein, "The 21st Century Workplace" (27 May 2005)

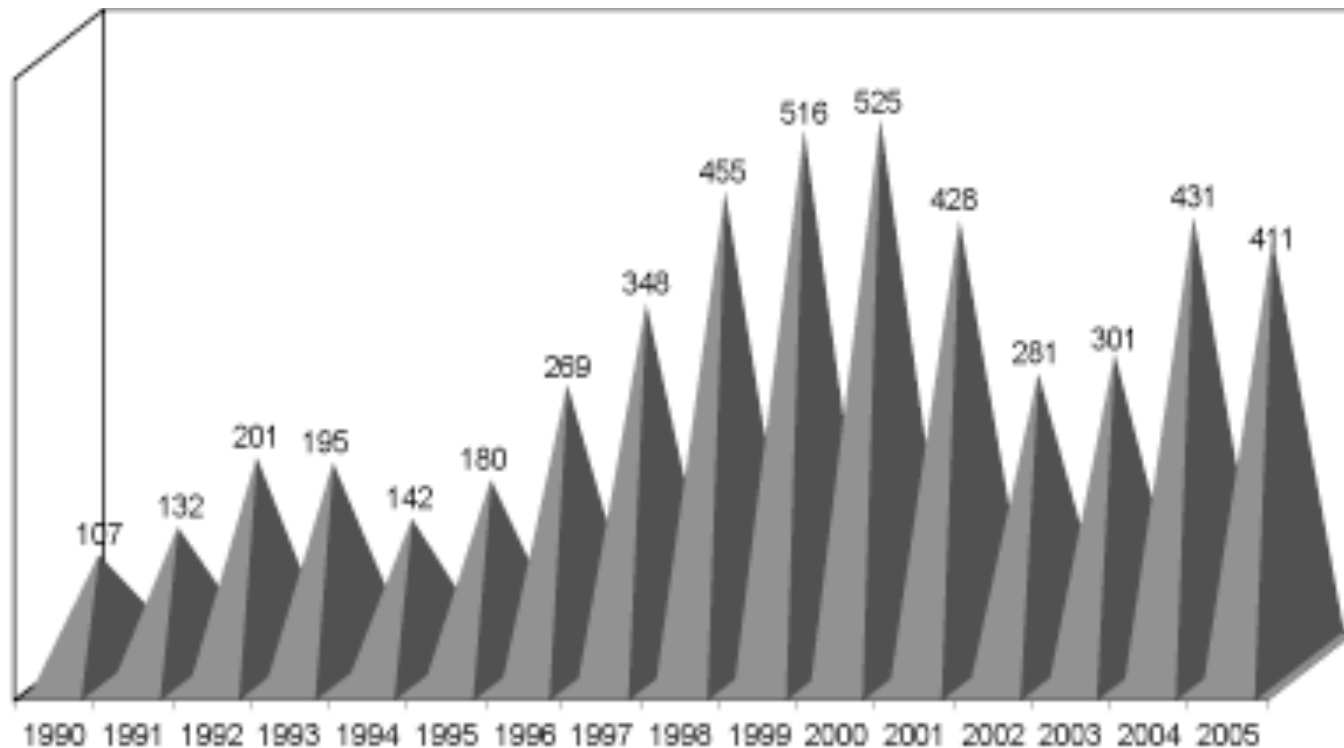
2009 Executive Compensation in Historical Perspective

Median Annual CEO Pay, Top 50 Largest U.S. Firms



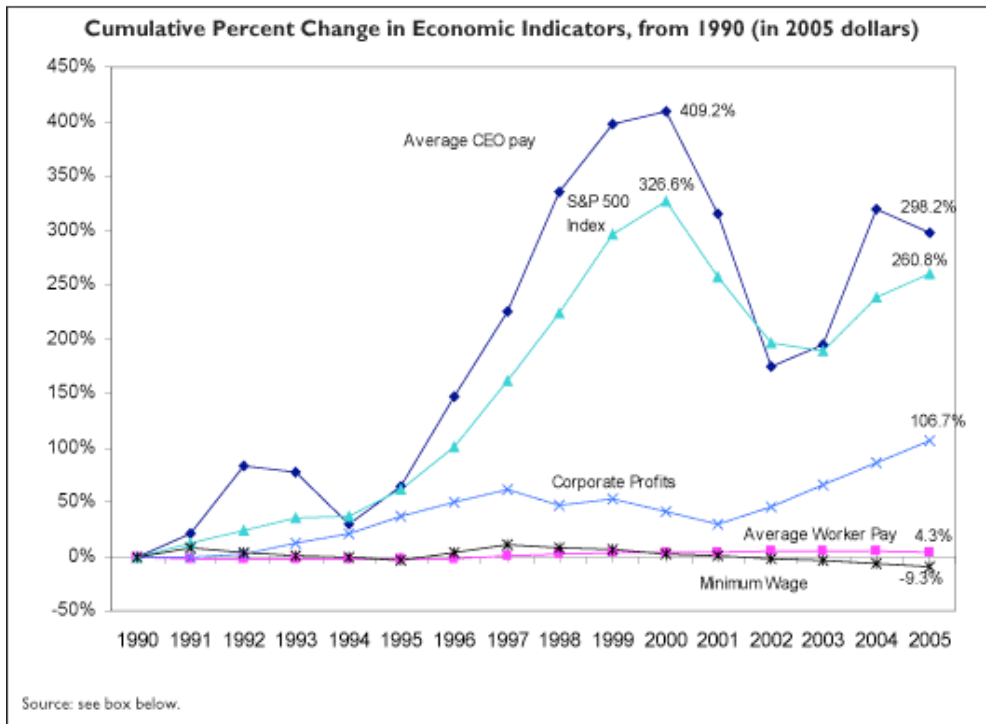
Sources: For data through 2005, Carola Frydman, MIT Sloan School of Management, and Dirk Jenter, Stanford Graduate School of Business.⁴ For 2009 data, IPS calculations.⁵

Average Executive to Average Production Worker Pay Ratio, 1990-2005



Sources: Total executive compensation: *Business Week* annual compensation survey, various issues, 1991-2005. Includes: salary, bonus, restricted stock, payouts on other long-term incentives, and the value of options exercised. Average worker pay: BLS, Employment, Hours, and Earnings from the *Current Employment Statistics Survey*, Table B-2

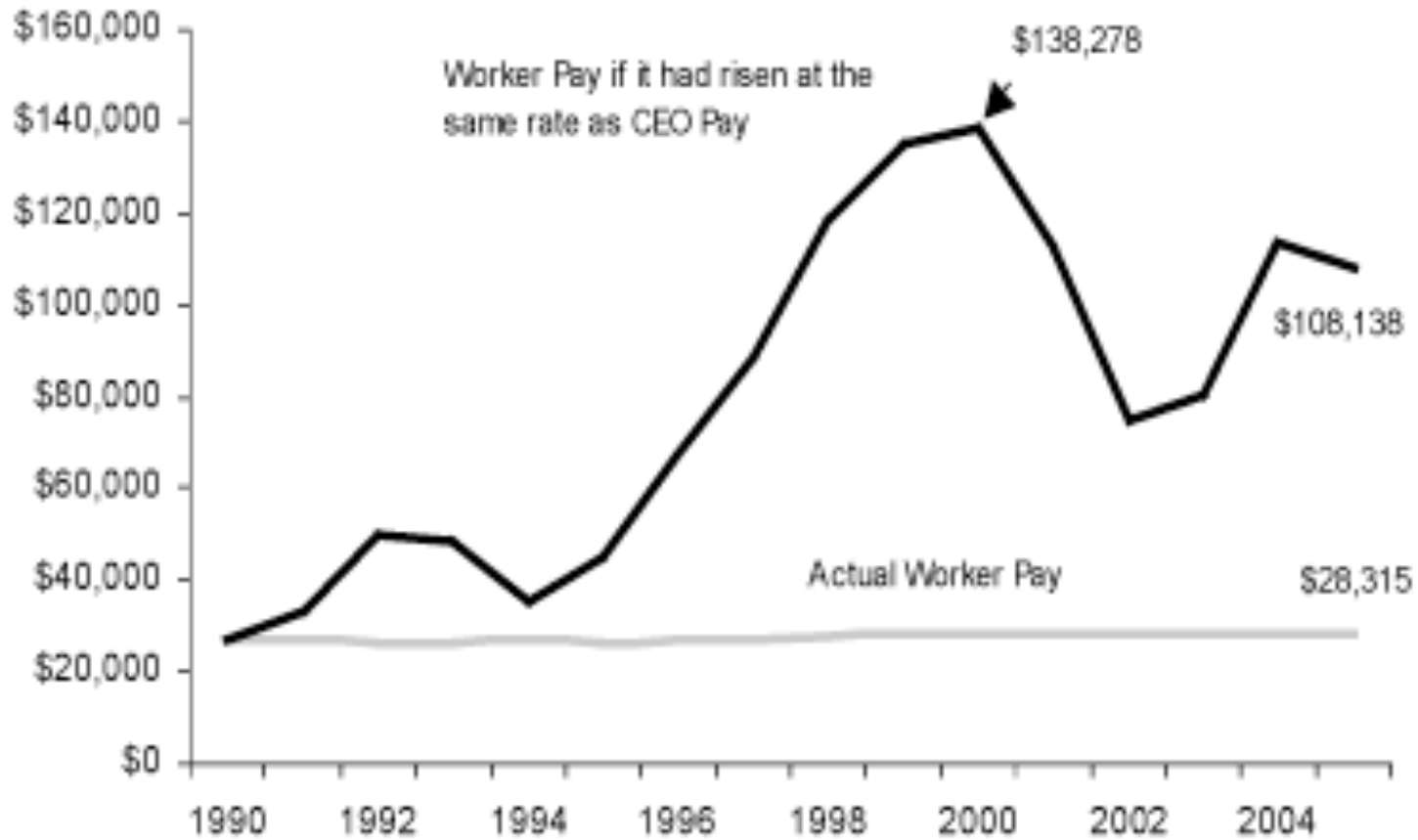
Cumulative Percent Change in Economic Indicators, 1990-2005 (in 2005 dollars)



CEO Pay	298.2%
S&P Profits	260.8%
Worker Pay	004.3%
Minimum Wage	-009.3%

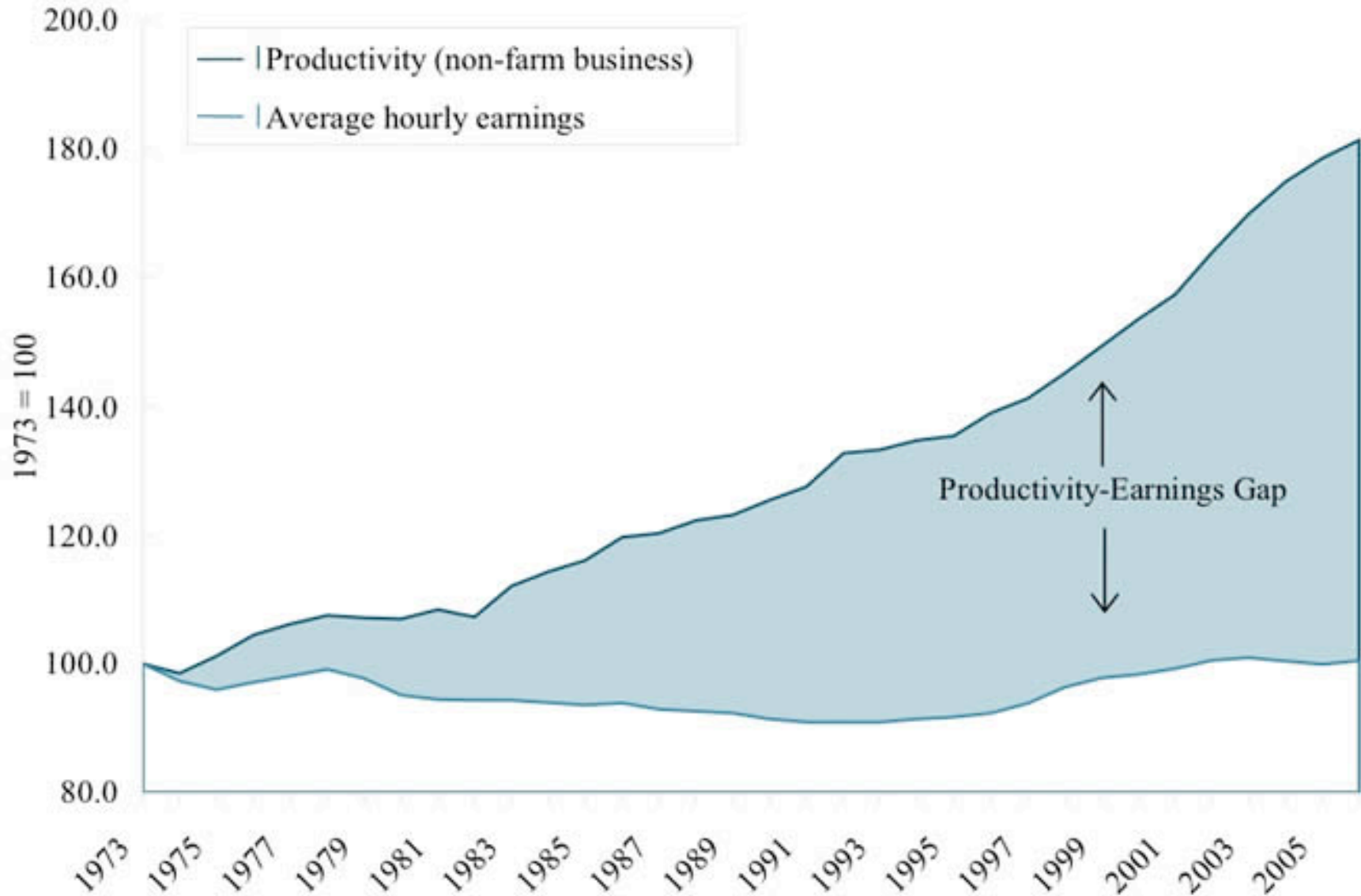
Sources: Total executive compensation: *Business Week* annual compensation survey, various issues, 1991-2005. Includes: salary, bonus, restricted stock, payouts on other long-term incentives, and the value of options exercised. S&P 500 Index: *Economic Report of the President*, 2005 Table B-96; 1997, 2000 Table B-93; average of daily closing index. Corporate Profits: BEA, NIPA, Table 6.16, with inventory valuation and capital consumption adjustments. Average worker pay: BLS, Employment, Hours, and Earnings from the Current Employment Statistics Survey, Table B-2. Minimum wage: Lowest mandated federal minimum wage, nominal; US Dept. of Labor, Employment Standards Administration, Wage and Hour Division. Adjustment for inflation: BLS, Average Annual CPI-U, all urban consumers, all items.

Value of CEO Pay and Average Production Worker Pay, 1990-2005 (in 2005 dollars)



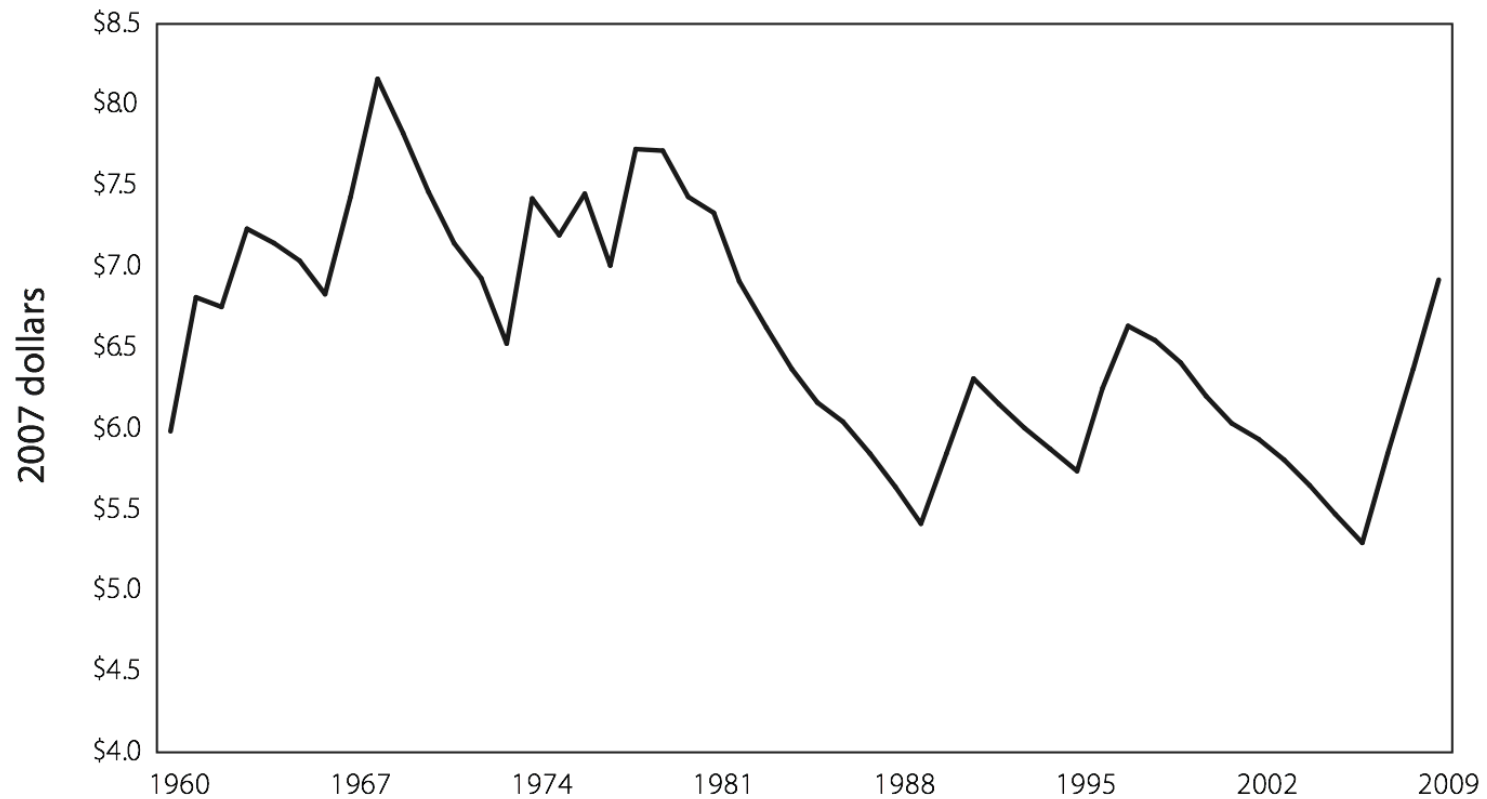
Source: United for a Fair Economy,
http://www.faireconomy.org/research/CEO_Pay_charts.html

Productivity and Wage Growth



Source: Dean Baker, *The Productivity to Paycheck Gap: What the Data Show* (April 2007)

Real value of the minimum wage, 1960-2009

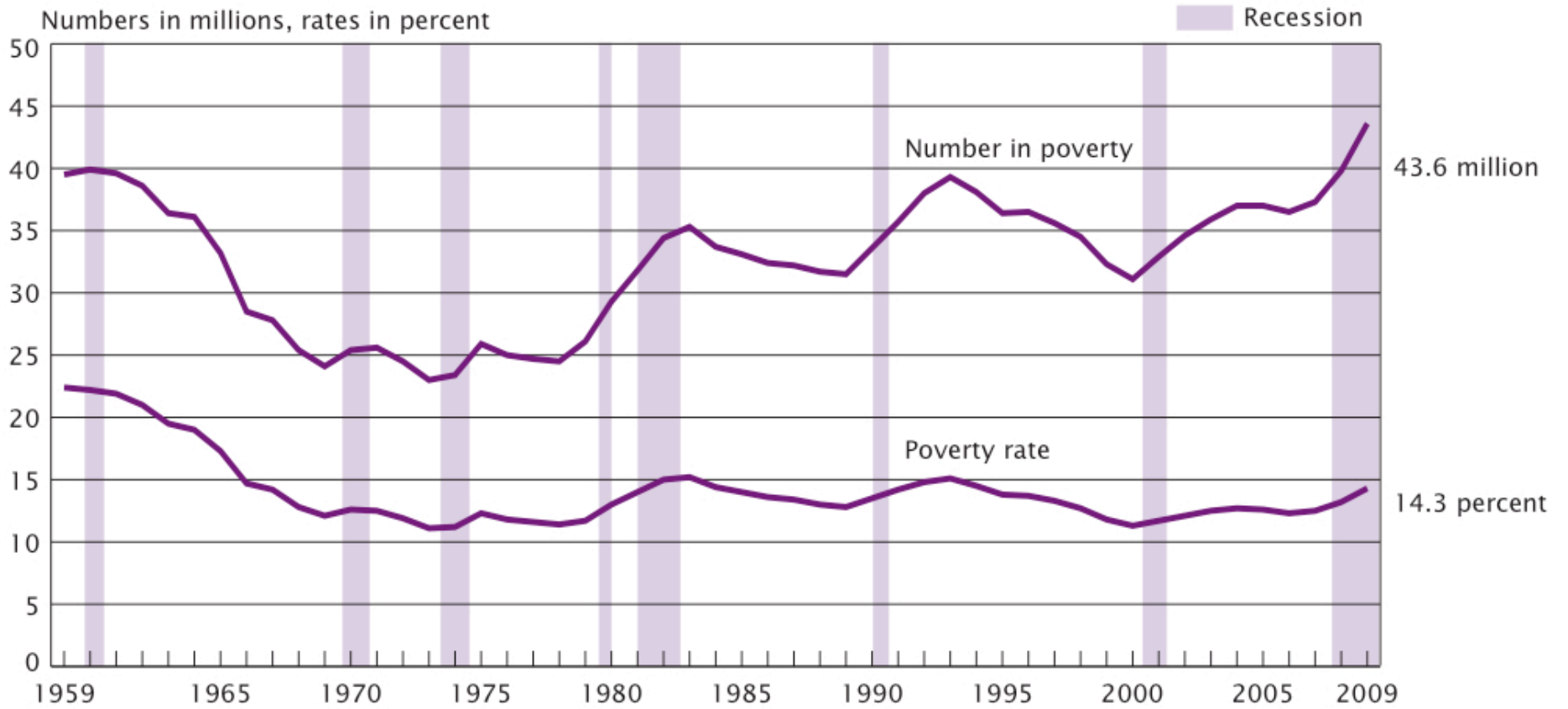


Source: Authors' analysis of Shapiro (1987).

Figure 3AA from: Mishel, Lawrence, Jared Bernstein, and Heidi Shierholz, *The State of Working America* 2008/2009. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press, 2009.



Number in Poverty and Poverty Rate: 1959 to 2009



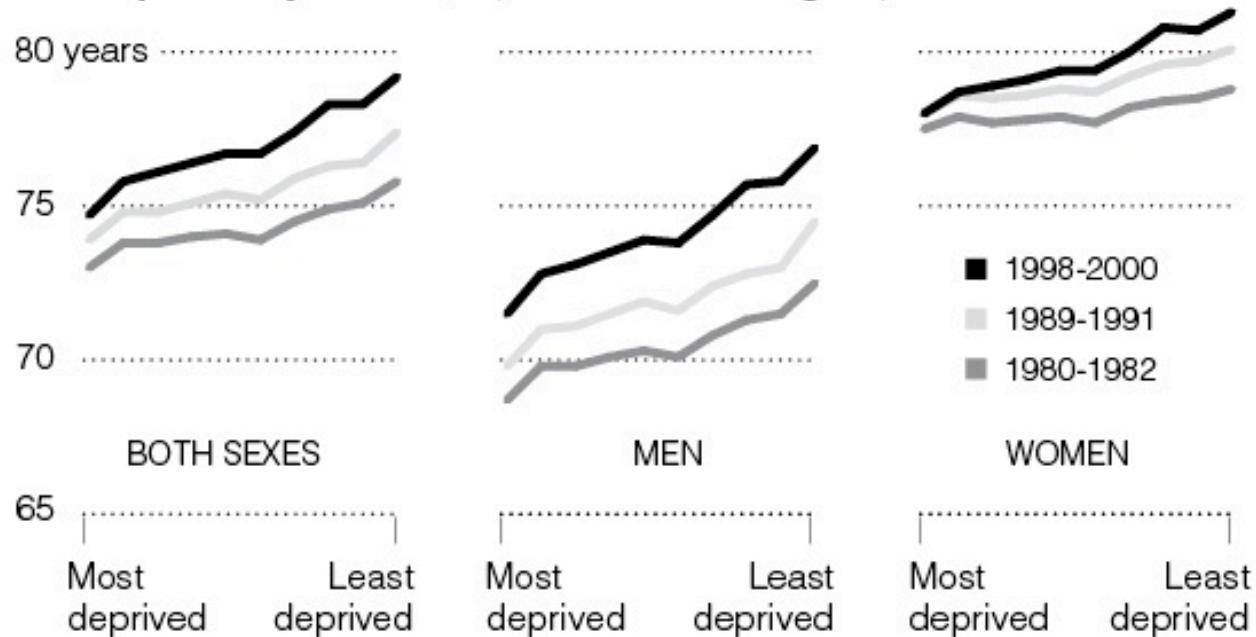
Note: The data points are placed at the midpoints of the respective years.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2010 Annual Social and Economic Supplements.

Growing Disparities

New research has found that differences in life expectancy for richer and poorer Americans have grown in the last two decades.

Life expectancy at birth, by socioeconomic groups

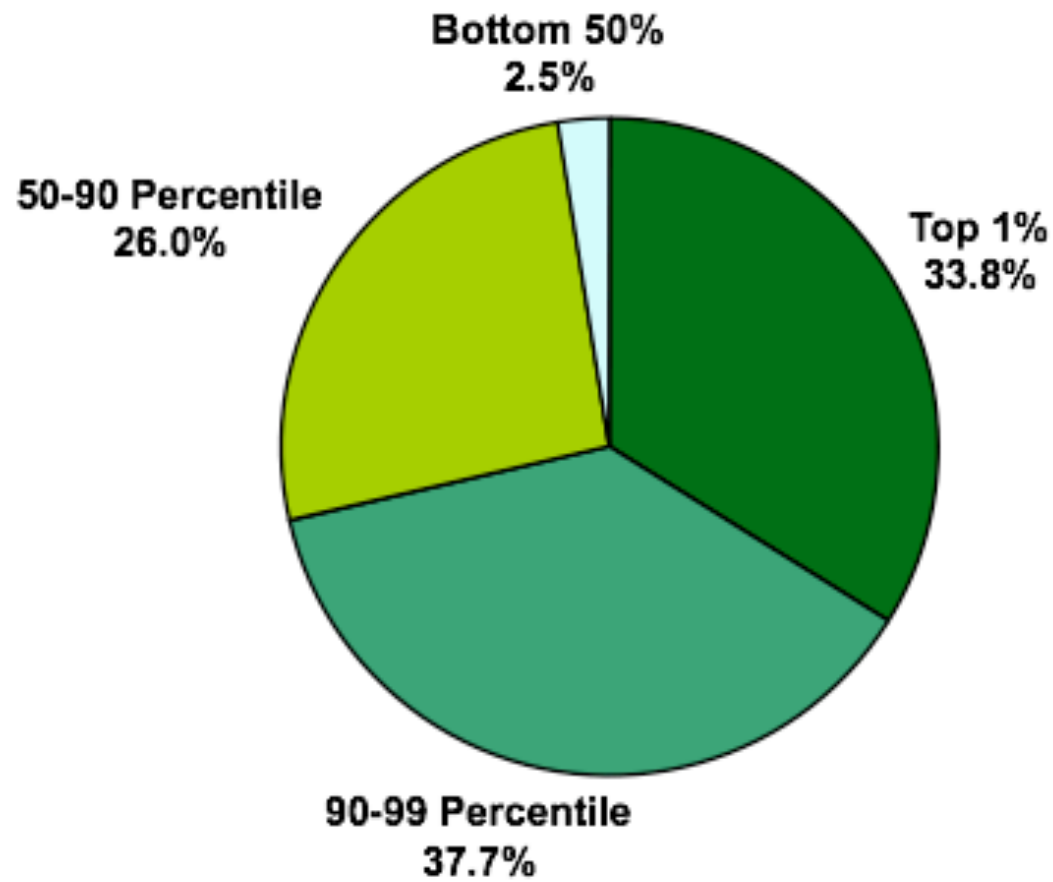


Source: Gopal K. Singh and Mohammad Siahpush, using data from Department of Health and Human Services

THE NEW YORK TIMES

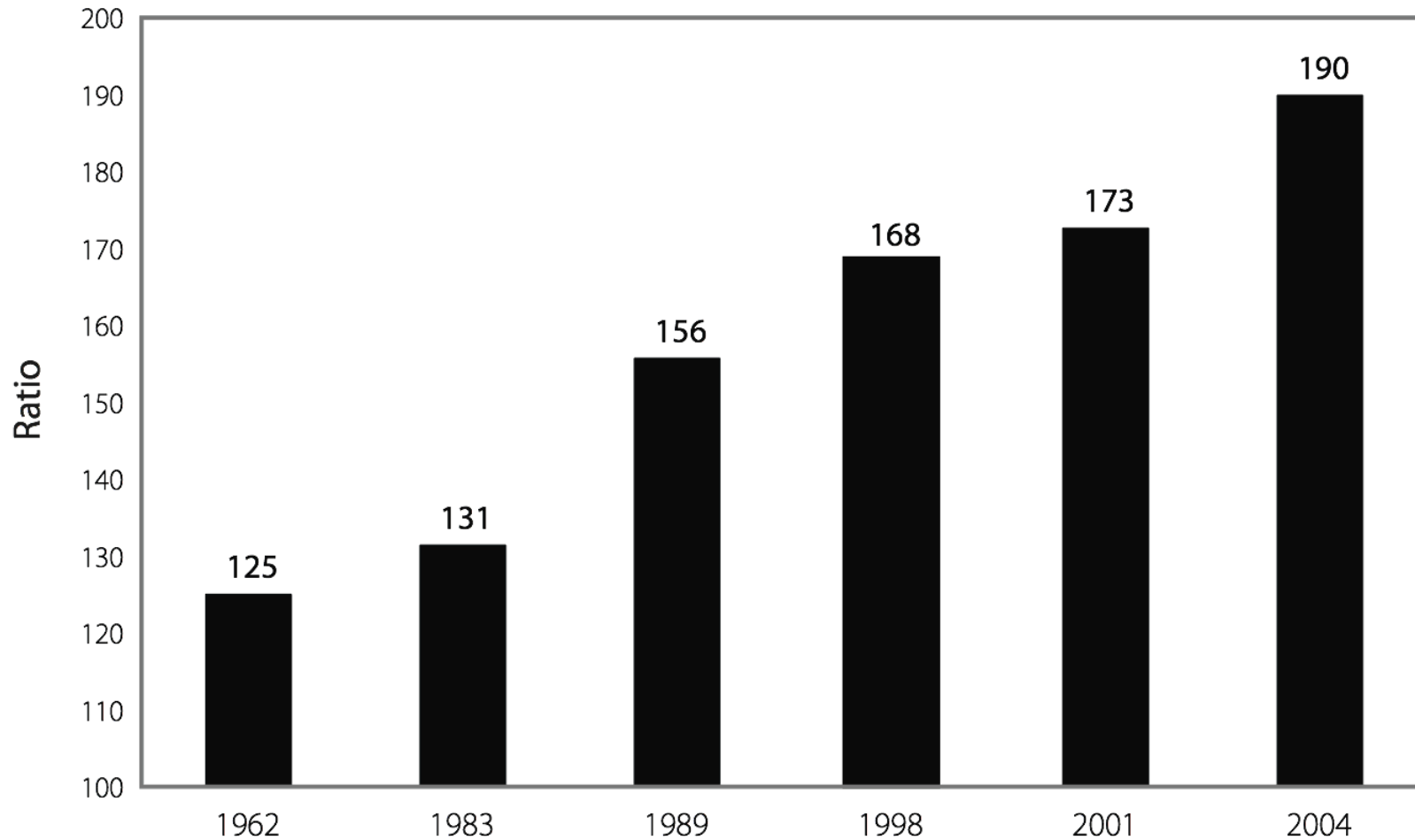
“We have heard a lot about growing income inequality. There has been much less attention paid to growing inequality in life expectancy, which is really quite dramatic.” —Peter Orszag, director of the Congressional Budget Office

Distribution of U.S. Wealth, 2007



Source: Arthur B. Kennickell, "Ponds and Streams: Wealth and Income in the U.S., 1989 to 2007," Federal Reserve Board Working Paper, January 7, 2009, Figure A3a, p. 63.

The ratio of the wealthiest 1% to median wealth in the United States

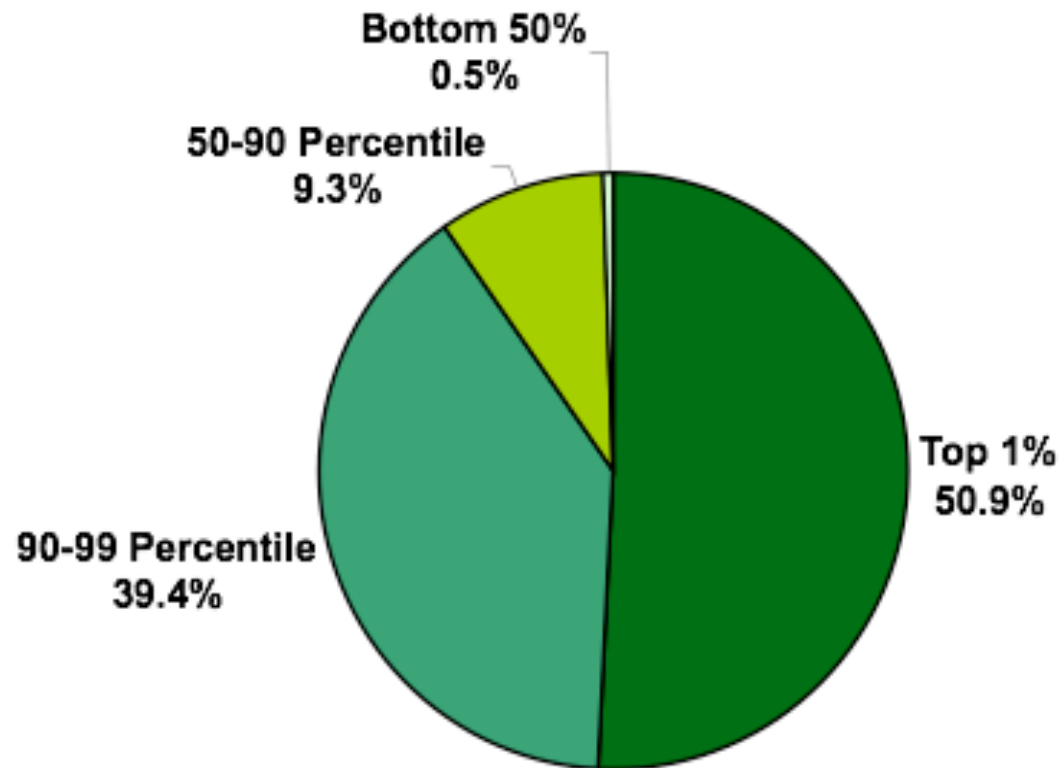


Source: Wolff (2006).

Figure 5C from: Mishel, Lawrence, Jared Bernstein, and Heidi Shierholz, *The State of Working America* 2008/2009. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press, 2009.

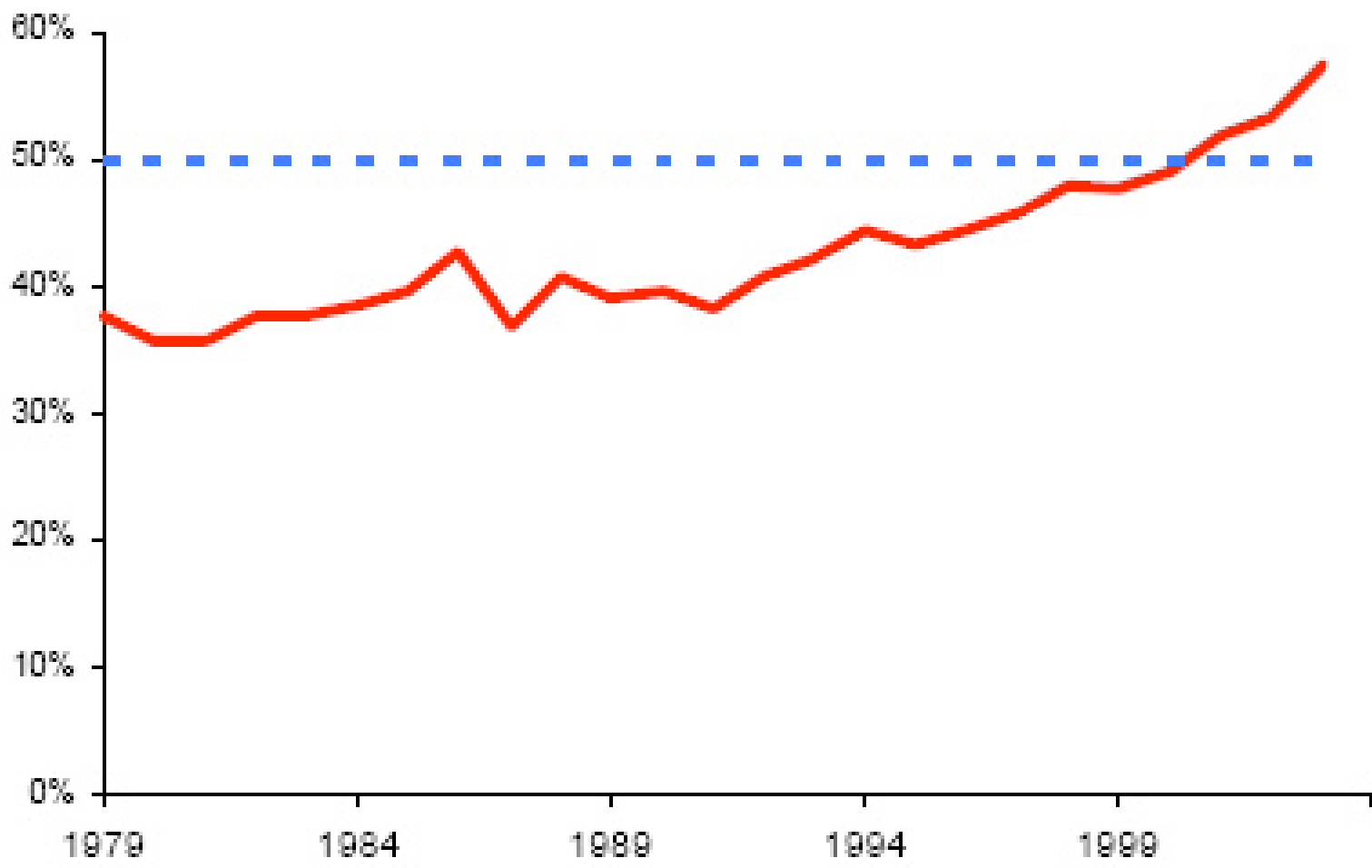


Distribution of U.S. Stock, Bond and Mutual Fund Ownership, 2007



Source: Arthur B. Kennickell, "Ponds and Streams: Wealth and Income in the U.S., 1989 to 2007," Federal Reserve Board Working Paper, January 7, 2009, Figure A3a, p. 63. Does not include assets held in money market mutual funds or tax-deferred retirement accounts.

Share of Capital Income Flowing to Top 1% of Income
Distribution Has Increased Substantially in Recent Years



- o In 2003, the top one percent of the population received 57.5 percent of all capital income. This was larger than in any other year examined by the CBO, with its data going back to 1979.
- o The flipside of this trend is that the share of capital income that is held by the rest of the population has dropped markedly. In 2003, the bottom 80 percent of the population received only 12.6 percent of such capital income, the lowest share on record (with data back to 1979). As recently as 1989, for instance, the bottom 80 percent of the population received 23.5 percent of capital income subject to taxation, a share nearly twice as high.

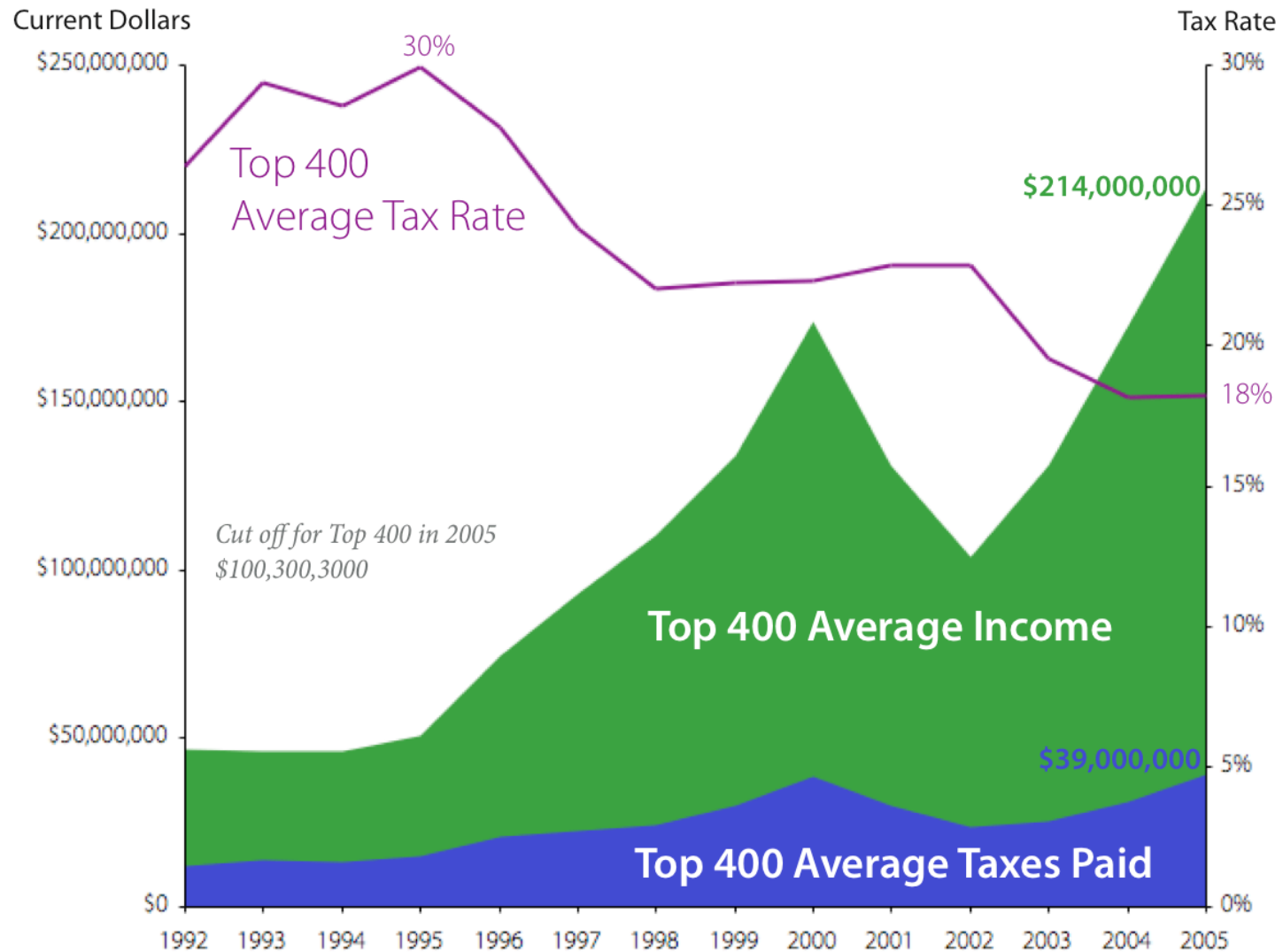
Source: Congressional Budget Office, *Historical Effective Federal Tax Rates: 1979 to 2003*, December 2005



1992-2005 United States

Top 400 Taxpayers: Income and Taxes

based on Adjusted Gross Income reported to IRS



Forbes 10 Richest Americans

[net worth-September 2010]

1-Bill Gates

\$54 billion

2-Warren Buffett

\$45 billion

3-Lawrence Ellison

\$27 billion

4-Christy Walton & family

\$24 billion

5-Charles Koch

\$21.5 billion



6-David Koch

\$21.5 billion

7-Jim Walton

\$20.1 billion

8-Alice Walton

\$20 billion

9-S. Robson Walton

\$19.7 billion

10-Michael Bloomberg

\$18 billion



The World's Billionaires

(March 2010)



<i>Name</i>	<i>Citizenship</i>	<i>Net Worth (\$billion)</i>	<i>Residence</i>
Carlos Slim Helú	Mexico	54	Mexico
William Gates III	United States	53	United States
Warren Buffett	United States	47	United States
Mukesh Ambani	India	29	India
Lakshmi Mittal	India	29	United Kingdom
Lawrence Ellison	United States	28	United States
Bernard Arnault	France	28	France
Eike Batista	Brazil	27	Brazil
Amancio Ortega	Spain	25	Spain
Karl Albrecht	Germany	24	Germany

© AMEX

Household income inequality, 2005

	Gini coefficient 2005	Ratio of 90th-to-10th percentile, 2005
<i>United States*</i>	0.37	4.86
<i>Japan</i>	--	3.12
<i>Germany</i>	0.28	3.13
<i>United Kingdom</i>	0.34	3.51
<i>France</i>	0.28	3.10
<i>Italy</i>	0.33	--
<i>Canada</i>	0.32	3.74
<i>Australia*</i>	0.31	3.12
<i>Austria</i>	0.26	--
<i>Belgium</i>	0.28	--
<i>Denmark</i>	0.24	2.64
<i>Finland</i>	0.26	2.42
<i>Greece</i>	0.33	--
<i>Ireland</i>	0.32	3.57
<i>Netherlands</i>	0.31	2.91
<i>New Zealand</i>	--	3.50
<i>Norway</i>	0.28	2.21
<i>Spain</i>	0.32	3.53
<i>Sweden</i>	0.23	2.33
<i>Switzerland</i>	--	2.61
<i>Average excluding U.S.</i>	0.29	3.03

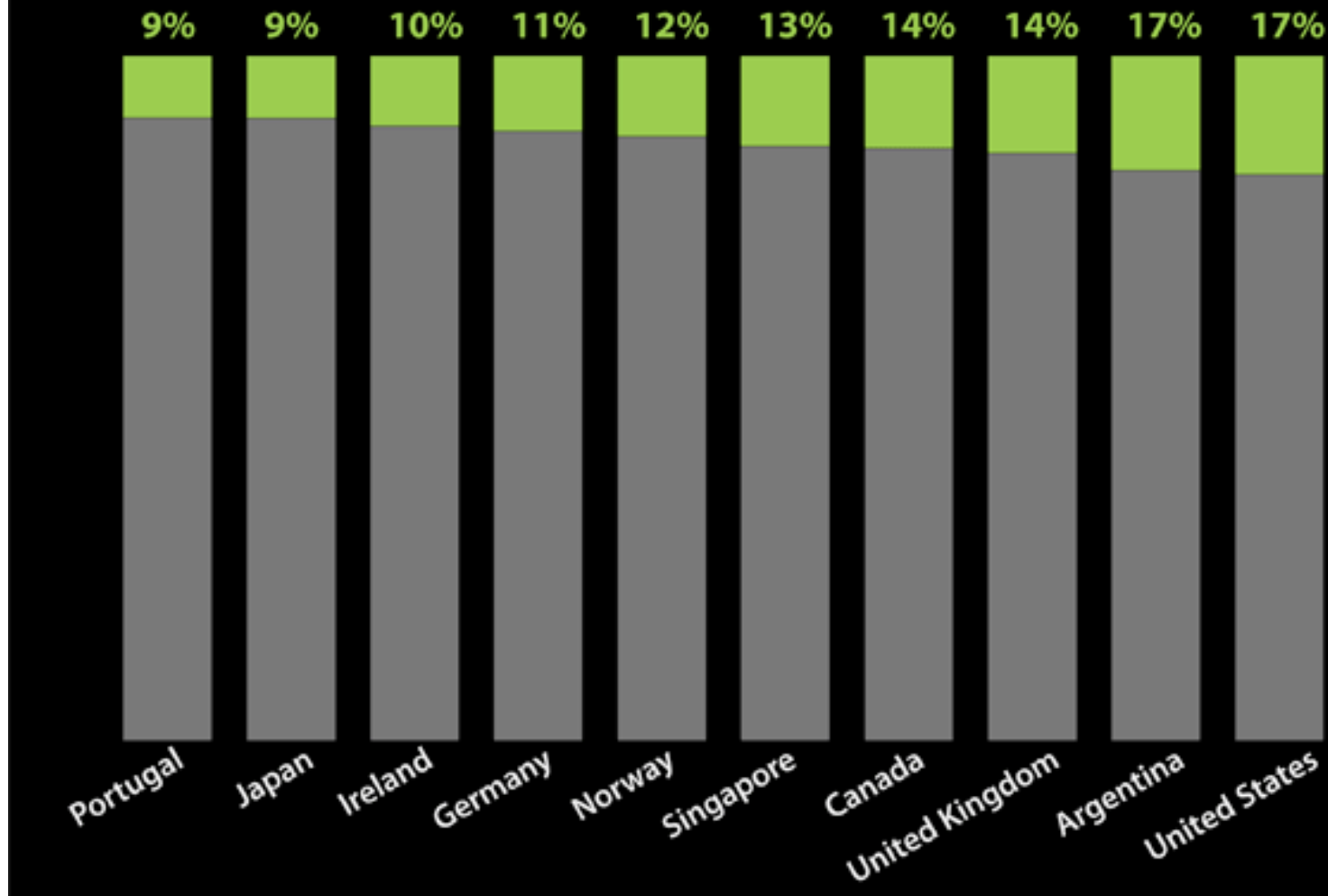
* See Table Notes.

Source: OECD (2005), CIA (2008), and Luxembourg Income Study (2007).

Table 8.15 from: Mishel, Lawrence, Jared Bernstein, and Heidi Shierholz, *The State of Working America* 2008/2009. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press, 2009.

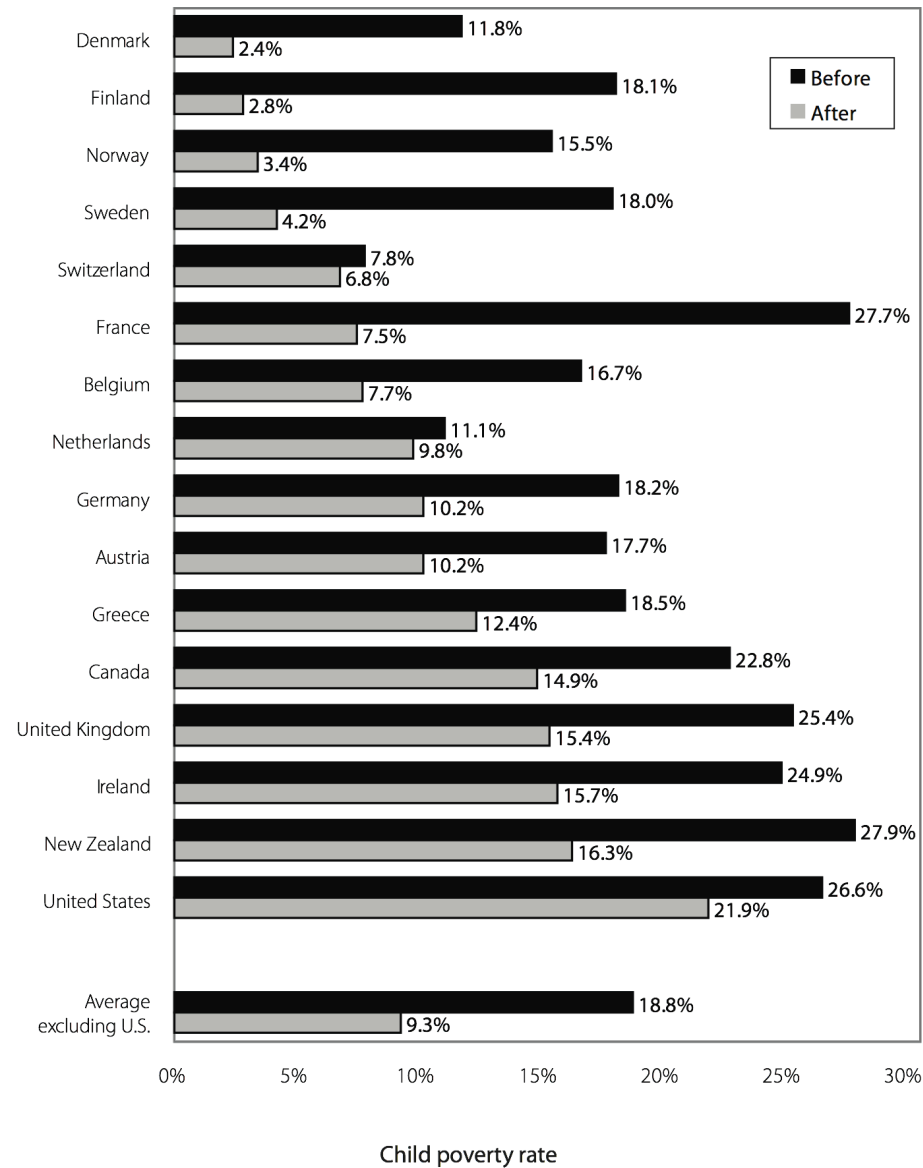


2005 Income share of Top 1%



Sources: Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez. Chart by Catherine Mulbrandon of VisualizingEconomics.com.

Child poverty rates before and after taxes and transfers, 2000



Source: Corak (2005).

Figure 8G from: Mishel, Lawrence, Jared Bernstein, and Heidi Shierholz, *The State of Working America* 2008/2009. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press, 2009.



Poverty rates, 2000

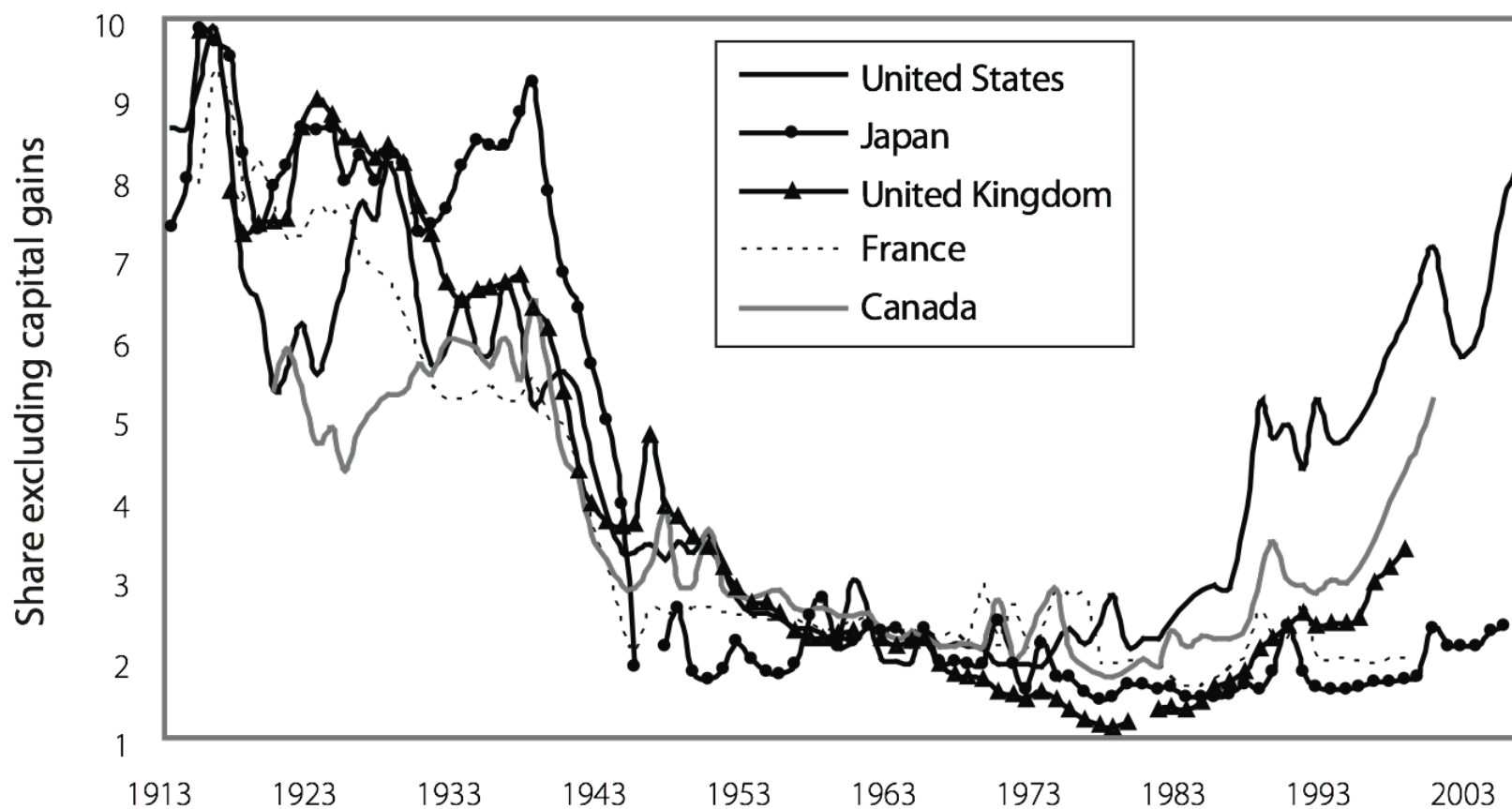
Country	Poverty line (50% of median)		
	Total poverty	Children	Elderly
<i>United States</i>	17.0%	21.9%	24.7%
<i>Germany</i>	8.3	9.0	10.1
<i>France</i>	8.0	7.9	9.8
<i>Italy</i>	12.7	16.6	13.7
<i>United Kingdom</i>	12.4	15.3	20.5
<i>Canada</i>	11.4	14.9	5.9
<i>Australia</i>	14.3%	15.8%	29.4%
<i>Austria</i>	7.7	7.8	13.7
<i>Belgium</i>	8.0	6.7	16.4
<i>Denmark</i>	9.2	8.7	6.6
<i>Finland</i>	5.4	2.8	8.5
<i>Ireland</i>	16.5	17.2	35.8
<i>Netherlands</i>	7.3	9.8	2.4
<i>Norway</i>	6.4	3.4	11.9
<i>Spain</i>	14.3	16.1	23.4
<i>Sweden</i>	6.5	4.2	7.7
<i>Switzerland</i>	7.6	6.7	18.4
<i>Average excluding U.S.</i>	9.8%	10.2%	14.6%

Source: Luxembourg Income Study.

Table 8.16 from: Mishel, Lawrence, Jared Bernstein, and Heidi Shierholz, *The State of Working America* 2008/2009. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press, 2009.



Top 0.1% income share in selected countries



Source: Smeeding and Piketty (2003, 2006), Smeeding and Moriguchi (2007), and Smeeding and Alvaredo (2007).



Figure 8F from: Mishel, Lawrence, Jared Bernstein, and Heidi Shierholz, *The State of Working America* 2008/2009. An Economic Policy Institute Book. Ithaca, N.Y.: ILR Press, an imprint of Cornell University Press, 2009.

Numbers of Poor in Developing World (millions)

	1981	1984	1987	1990	1993	1996	1999	2002	2005
<u>(a) Aggregate for developing world</u>									
Old estimates using 1993 ICP									
\$1.08 (1993)	1488.5	1281.4	1178.5	1247.5	1172.4	1092.9	1119.8	1067.1	931.3
New estimates using 2005 ICP (number in millions below each line at 2005 PPP)									
\$1.00	1515.0	1334.7	1227.2	1286.7	1237.9	1111.9	1145.6	1066.6	876.0
\$1.25	1896.2	1808.2	1720.0	1813.4	1794.9	1656.2	1696.2	1603.1	1376.7
\$1.45	2137.7	2111.5	2051.7	2153.5	2165.0	2048.1	2095.7	1997.9	1751.7
\$2.00	2535.1	2615.4	2639.7	2755.9	2821.4	2802.1	2872.1	2795.7	2561.5
\$2.50	2731.6	2858.7	2944.6	3071.0	3176.7	3231.4	3316.6	3270.6	3084.7
<u>(b) Excluding China</u>									
Old estimates using 1993 ICP									
\$1.08 (1993)	854.9	856.1	868.1	873.1	838.2	881.5	897.1	890.5	858.2
New estimates at 2005 ICP (number in millions below each line at 2005 PPP)									
\$1.00	784.5	786.2	814.9	787.6	793.4	823.2	843.2	821.9	769.9
\$1.25	1061.1	1088.3	1134.3	1130.2	1162.3	1213.4	1249.5	1240.0	1169.0
\$1.45	1244.0	1293.2	1348.9	1365.3	1418.9	1488.1	1541.7	1543.5	1535.2
\$2.00	1563.0	1652.1	1732.7	1795.1	1895.2	2009.9	2101.9	2140.8	2087.9
\$2.50	1759.5	1895.4	2037.6	2110.2	2250.4	2439.2	2546.4	2615.6	2611.0

Source: S. Chen and M. Ravallion, "The Developing World Is Poorer Than We Thought, But No Less Successful in the Fight against Poverty" (World Bank, August 2008)

Food for thought. . .

George A. Akerlof (2003 interview with *Der Spiegel*): "What we have here is a form of looting. . .The rich don't need the money and are a lot less likely to spend it—they will primarily increase their savings. Remember that wealthier families have done extremely well in the US in the past twenty years, whereas poorer ones have done quite badly."

Paul Samuelson: "If we made an income pyramid out of a child's blocks, with each layer portraying \$1,000 of income, the peak would be far higher than the Eiffel Tower, but almost all of us would be within a yard of the ground."

Mr. Spock of "Star Trek" (describing Ardana, where the rulers live in luxury in a cloud city above miners working in misery): "This troubled planet is a place of the most violent contrasts. Those that receive the rewards are totally separate from those who shoulder the burdens. It is not a wise leadership."

