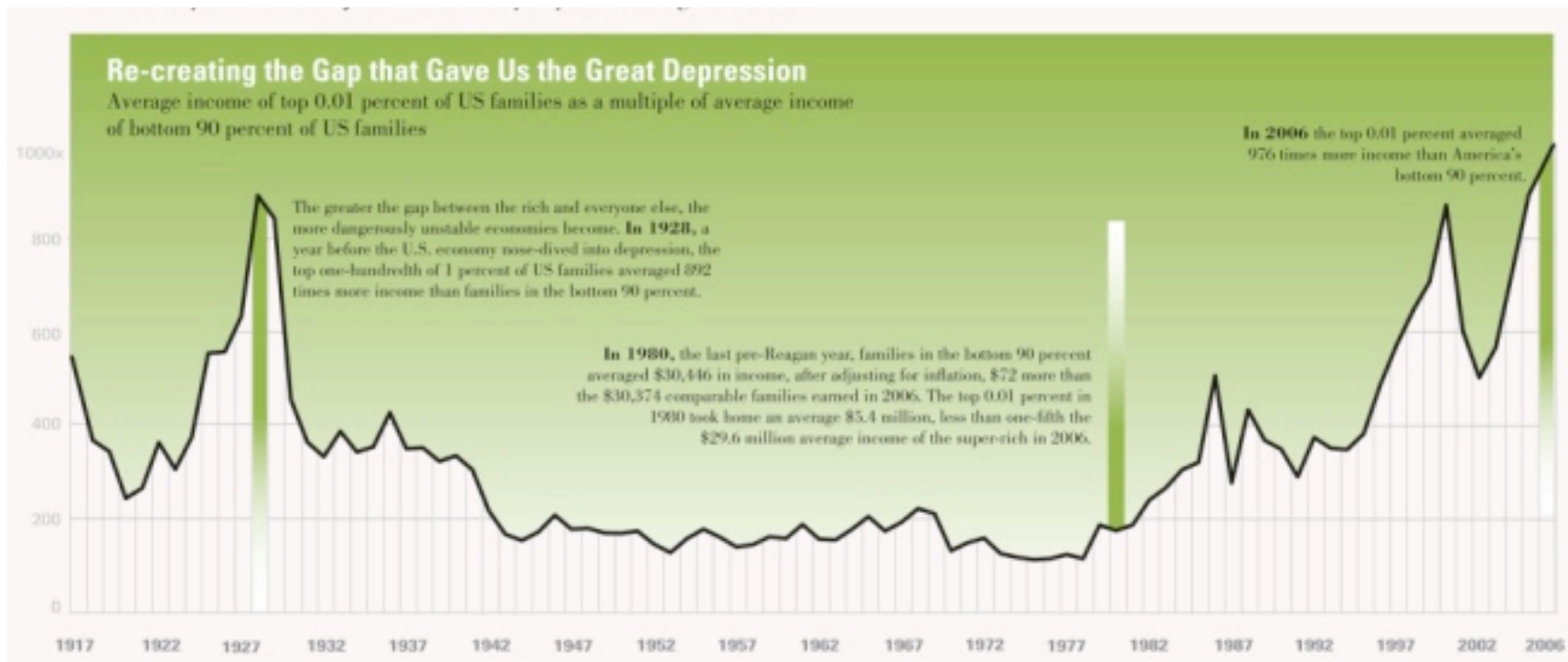


INEQUALITY

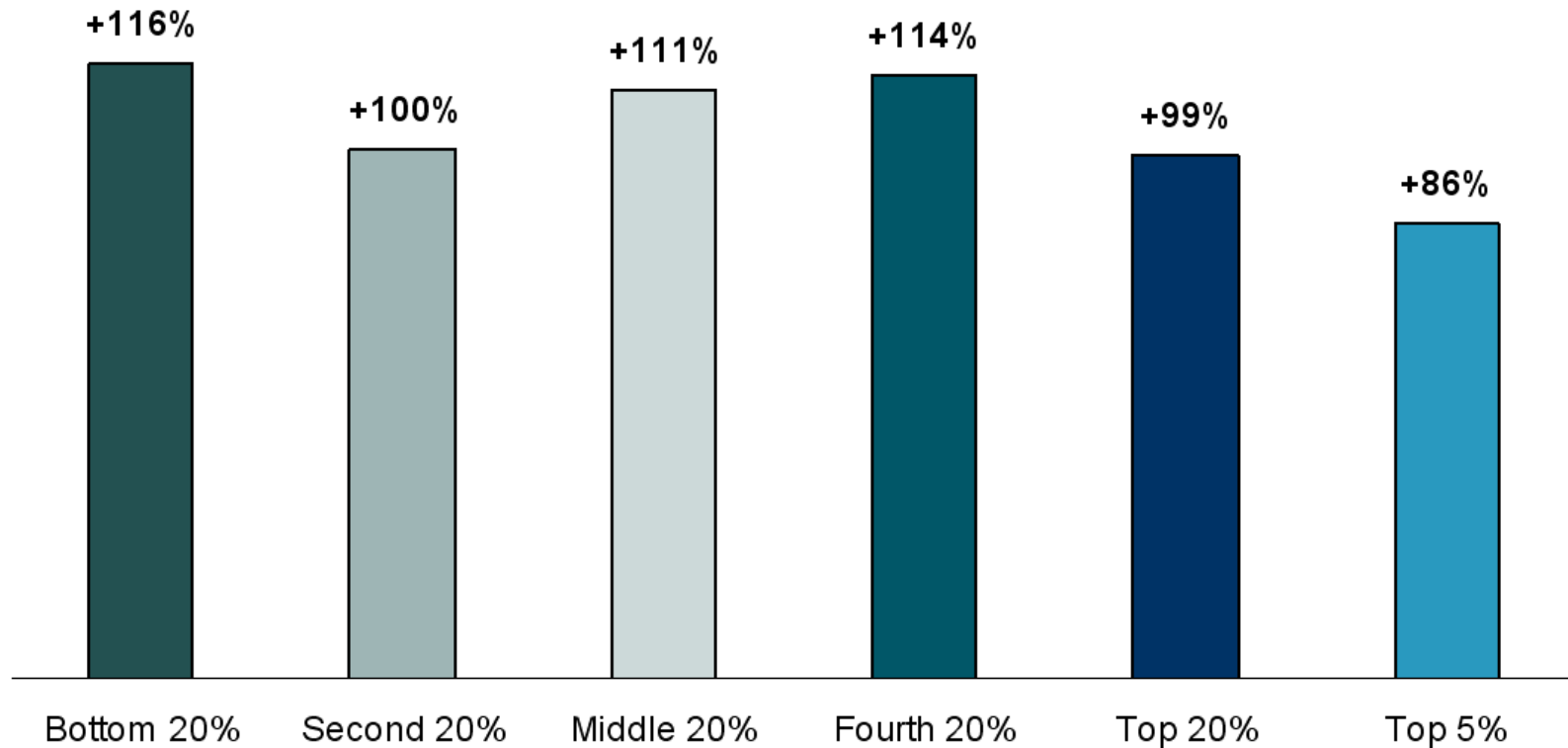


Principles of Microeconomics

Fall 2008

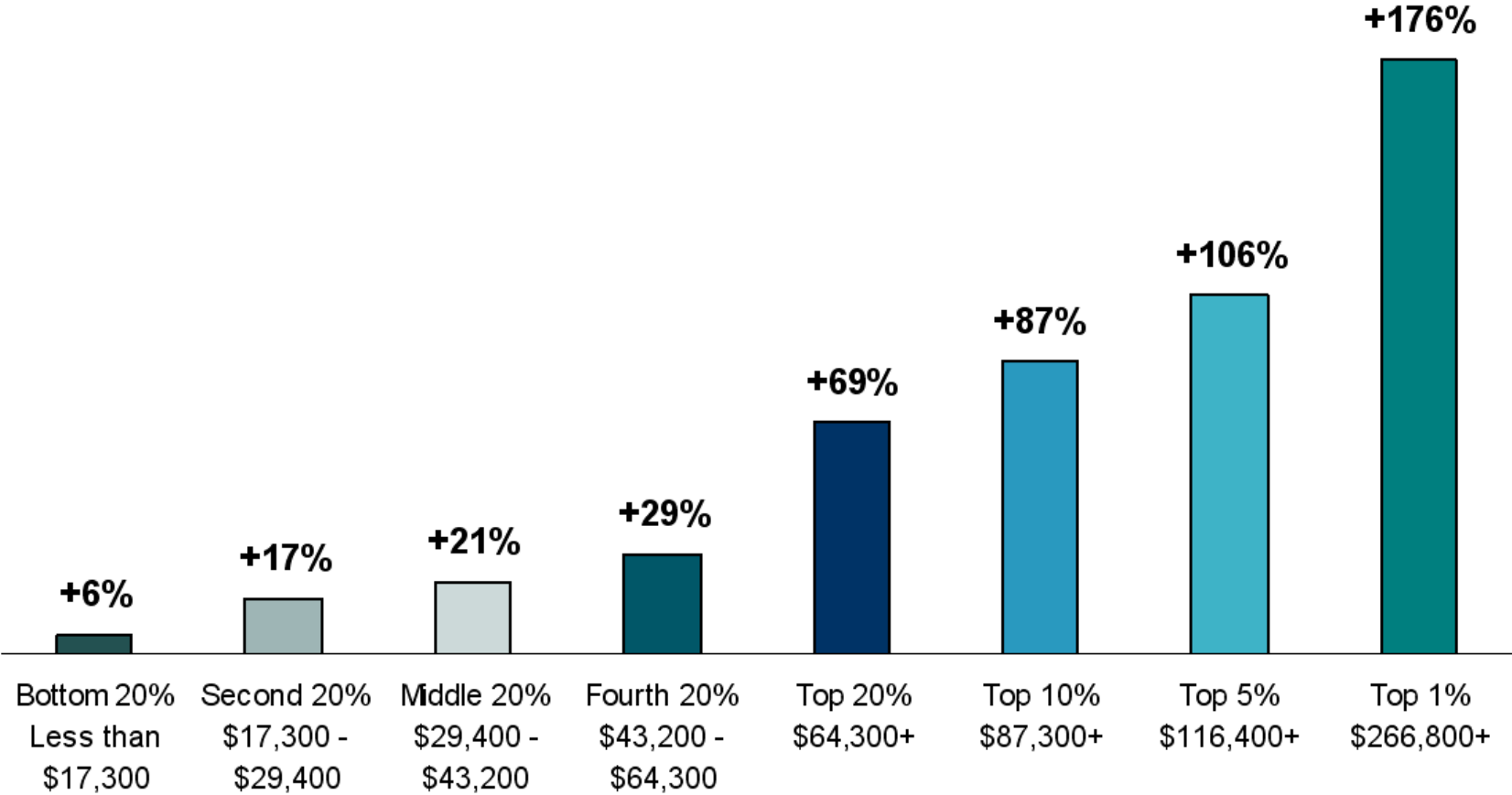
David F. Ruccio

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

Change in After-Tax Income by Income Group, 1979-2004



Source: Congressional Budget Office, *Historical Effective Federal Tax Rates: 1979 to 2004* (December 2006), Table 1C

The CBO data show that between 1979 and 2003:

- o The average after-tax income of the top one percent of the population more than doubled, rising from \$305,800 to \$701,500, for a total increase of \$395,700, or 129 percent. (CBO adjusted these figures for inflation and expressed them in 2003 dollars.)
- o By contrast, the average after-tax income of the middle fifth of the population rose a relatively modest 15 percent, or \$5,900, reaching \$44,800 in 2003.
- o The average after-tax income of the poorest fifth of the population rose just 4 percent, or \$600, over the past 24 years.
- o The top one percent of the population received 12.2 percent of national after-tax income in 2003, 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 15.5 percent in 2003. The bottom fifth received 6.8 percent of such income in 1979, but just 5.0 percent in 2003.

Average After-Tax Income by Income Group (in 2003 dollars)

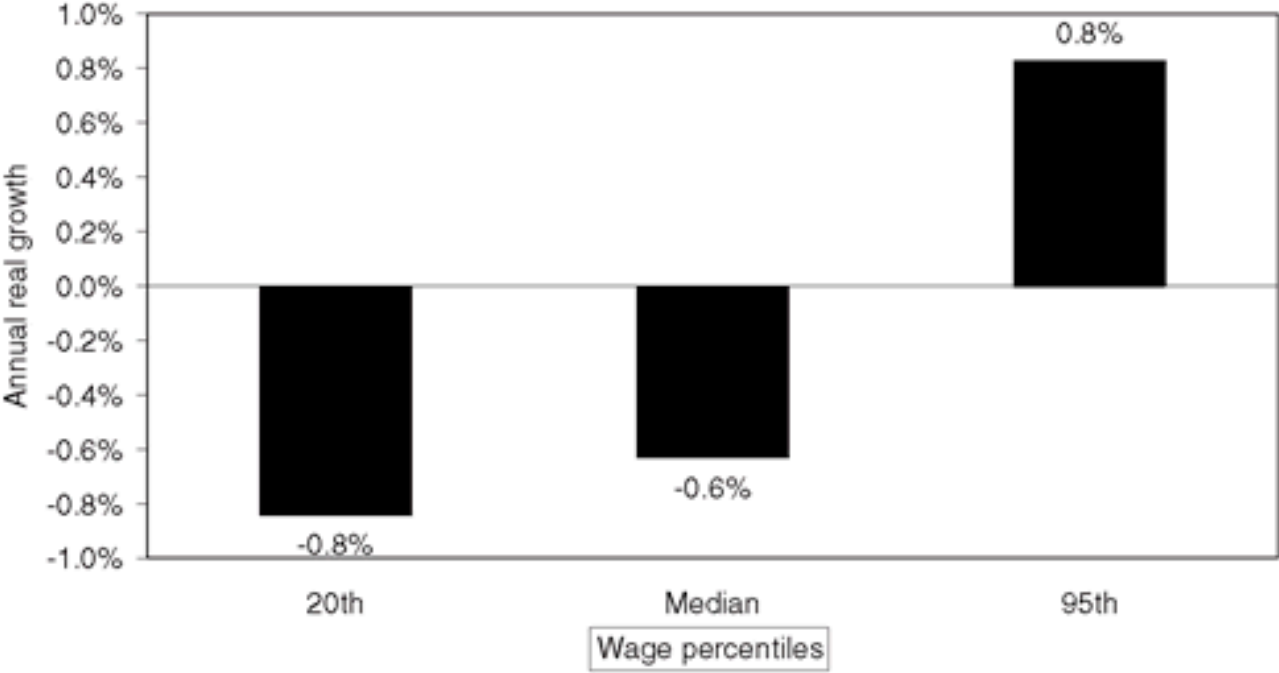
Income Category	1979	2003	% Change 1979-2003	\$ Change 1979-2003
Lowest fifth	\$13,500	\$14,100	4.4%	\$600
Second fifth	\$27,300	\$30,800	12.8%	\$3,500
Middle fifth	\$38,900	\$44,800	15.2%	\$5,900
Fourth fifth	\$50,900	\$63,600	25.0%	\$12,700
Top fifth	\$89,700	\$138,500	54.4%	\$48,800
Top 1 Percent	\$305,800	\$701,500	129.4%	\$395,700

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



Sources: *Historical Statistics of the United States, Colonial Times to 1970*; National Bureau of Economic Research; U.S. Bureau of Labor Statistics
 Note: Real wage is the nominal wage divided by the consumer price index.

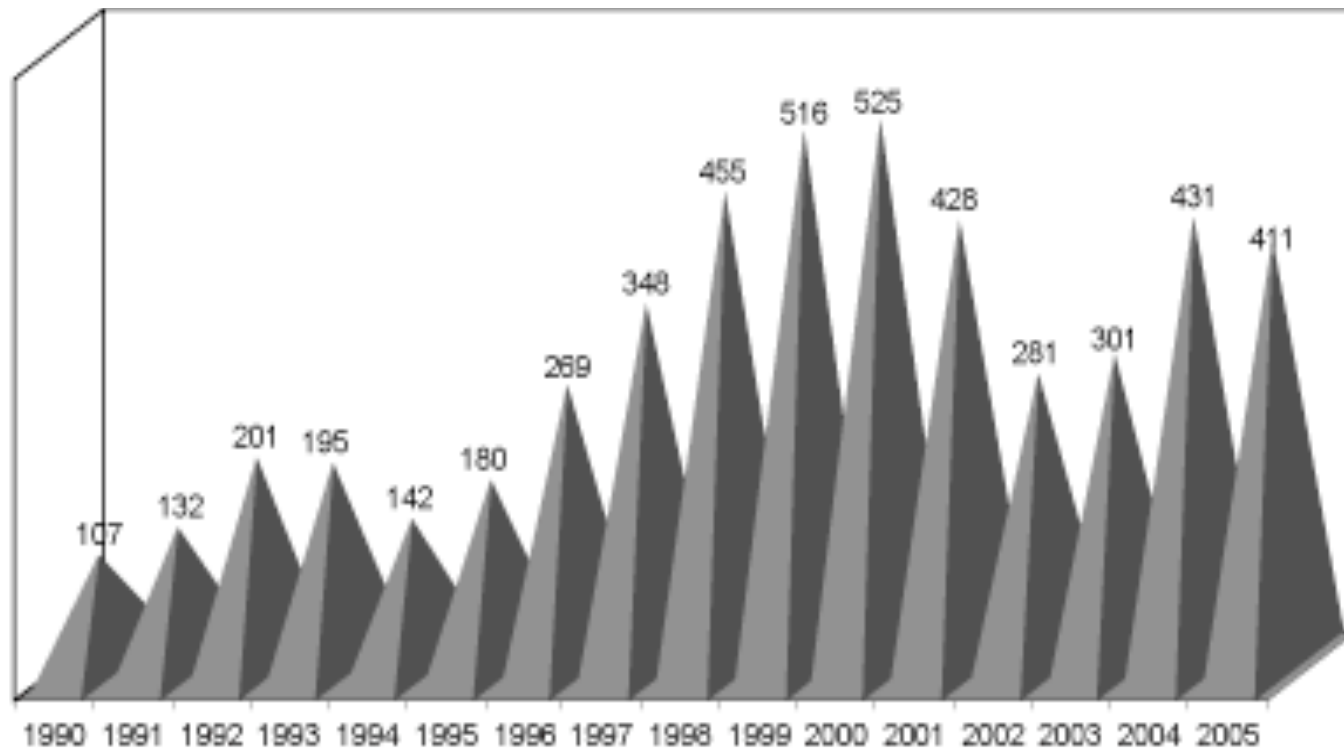
Real Hourly Wage Changes, by percentile, 2003-2005



Sources: Author's analysis of CPS data.

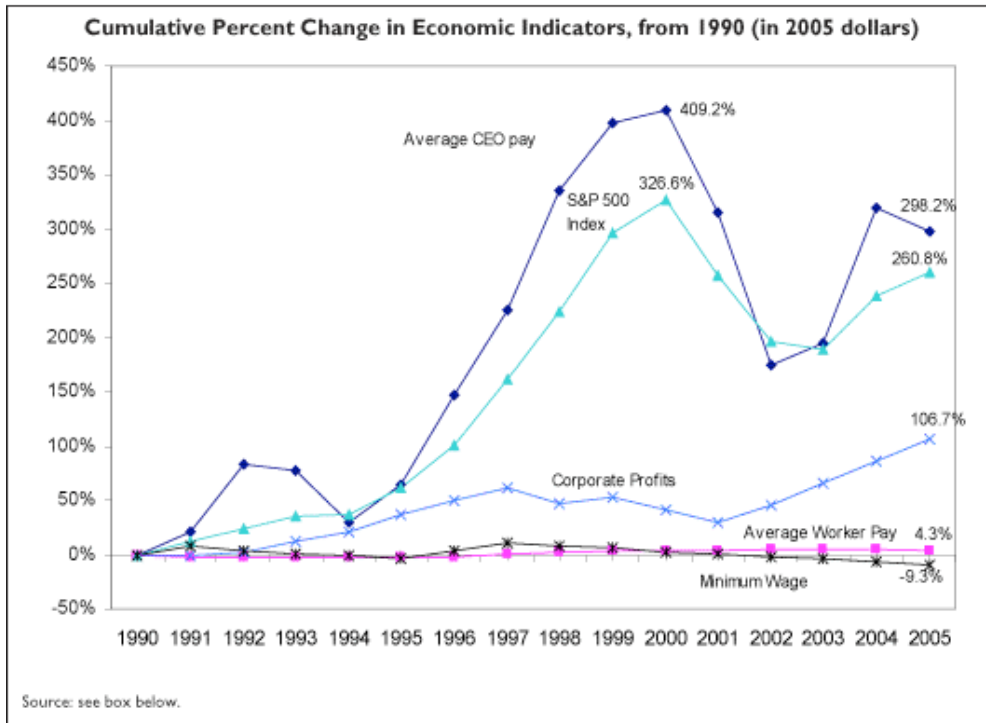
Source: Lee Price, "Why People Are So Dissatisfied with Today's Economy," EPI Issue Brief #219, 28 January 2006

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

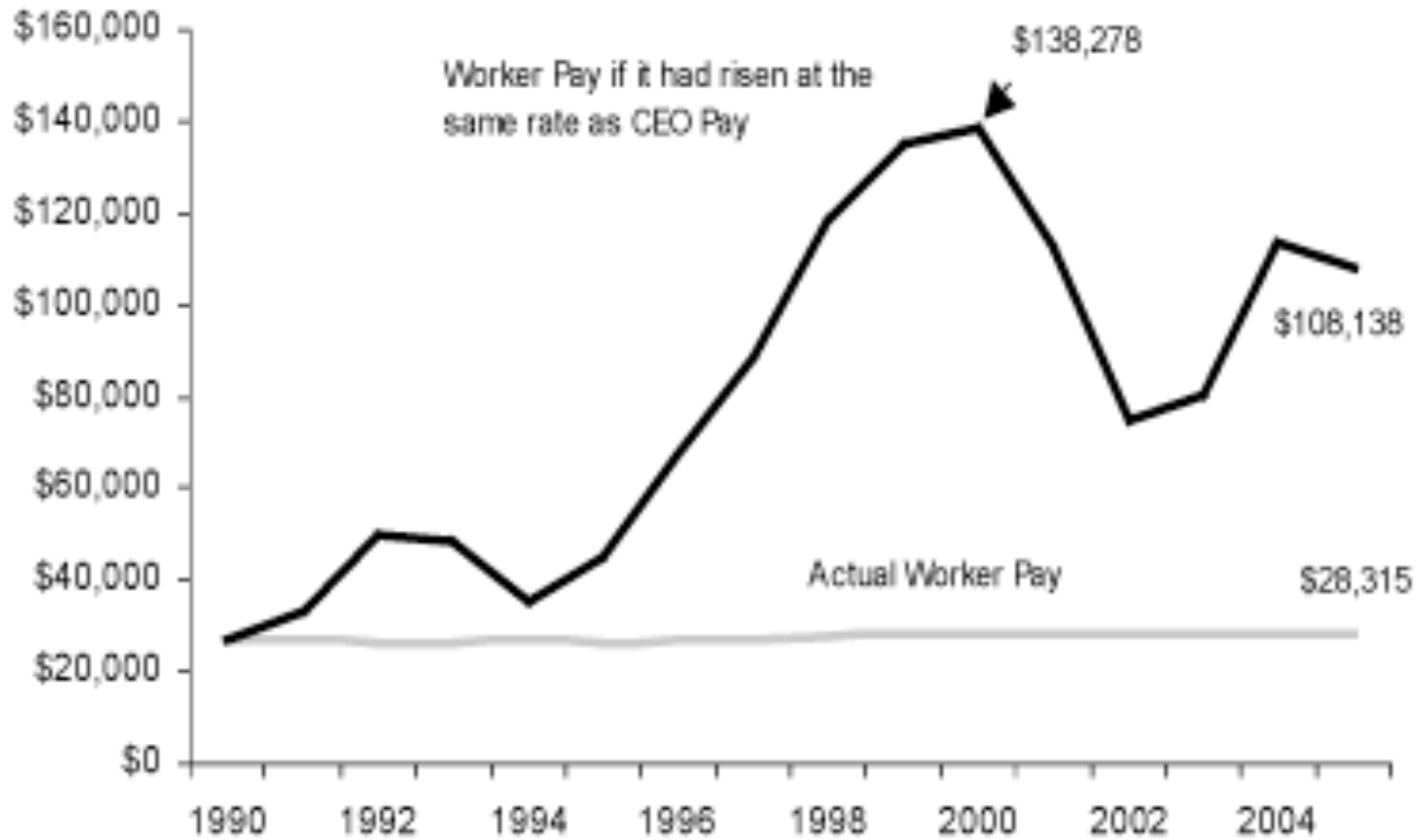
Cumulative Percent Change in Economic Indicators, 1990-2005 (in 2005 dollars)



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

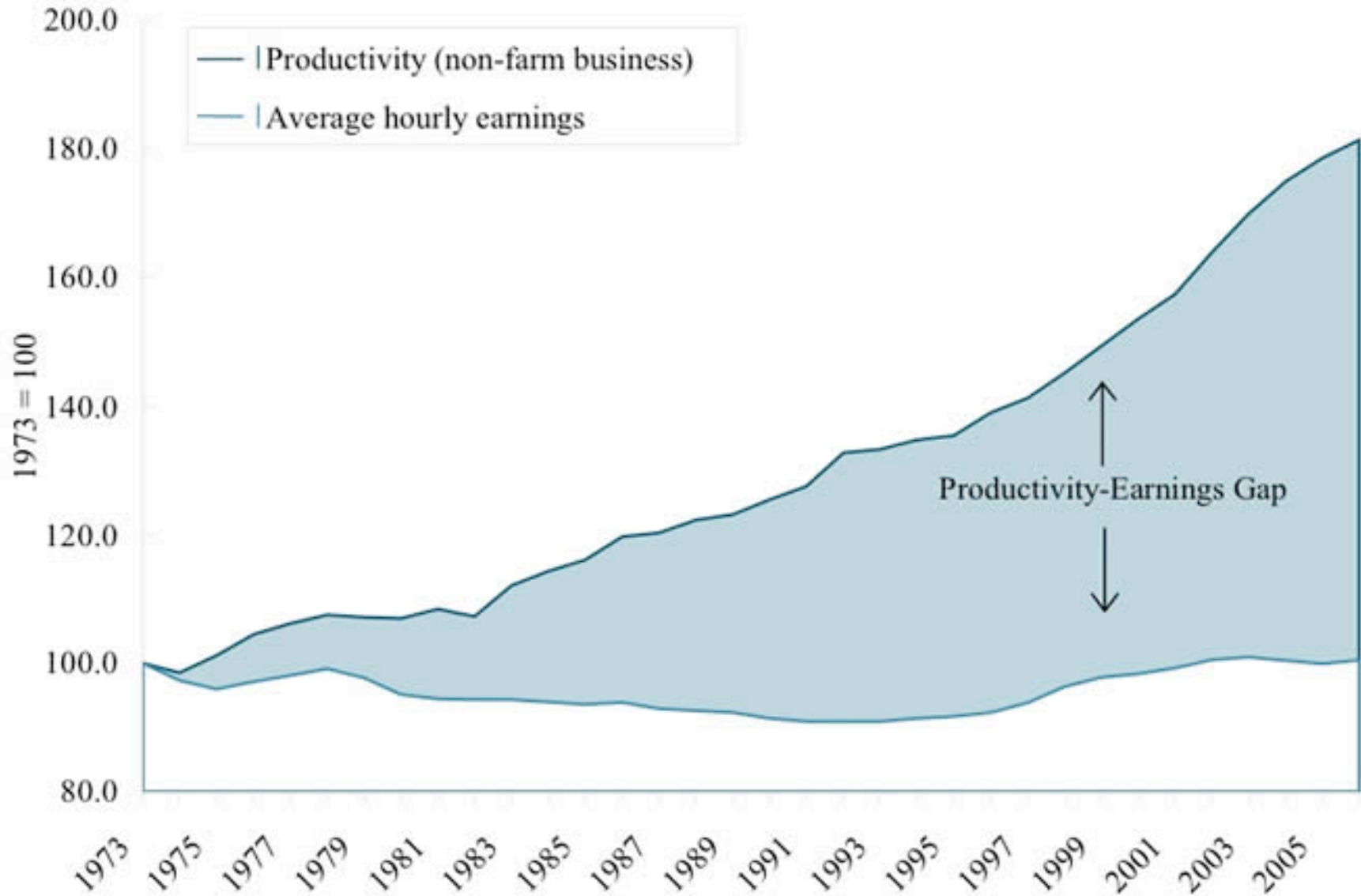
Sources: Total executive compensation: *Business Week* annual compensation survey, various issues, 1991-2005. Includes: salary, bonus, restricted stock, payouts on other long-term incentives, and the value of options exercised. S&P 500 Index: *Economic Report of the President*, 2005 Table B-96; 1997, 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

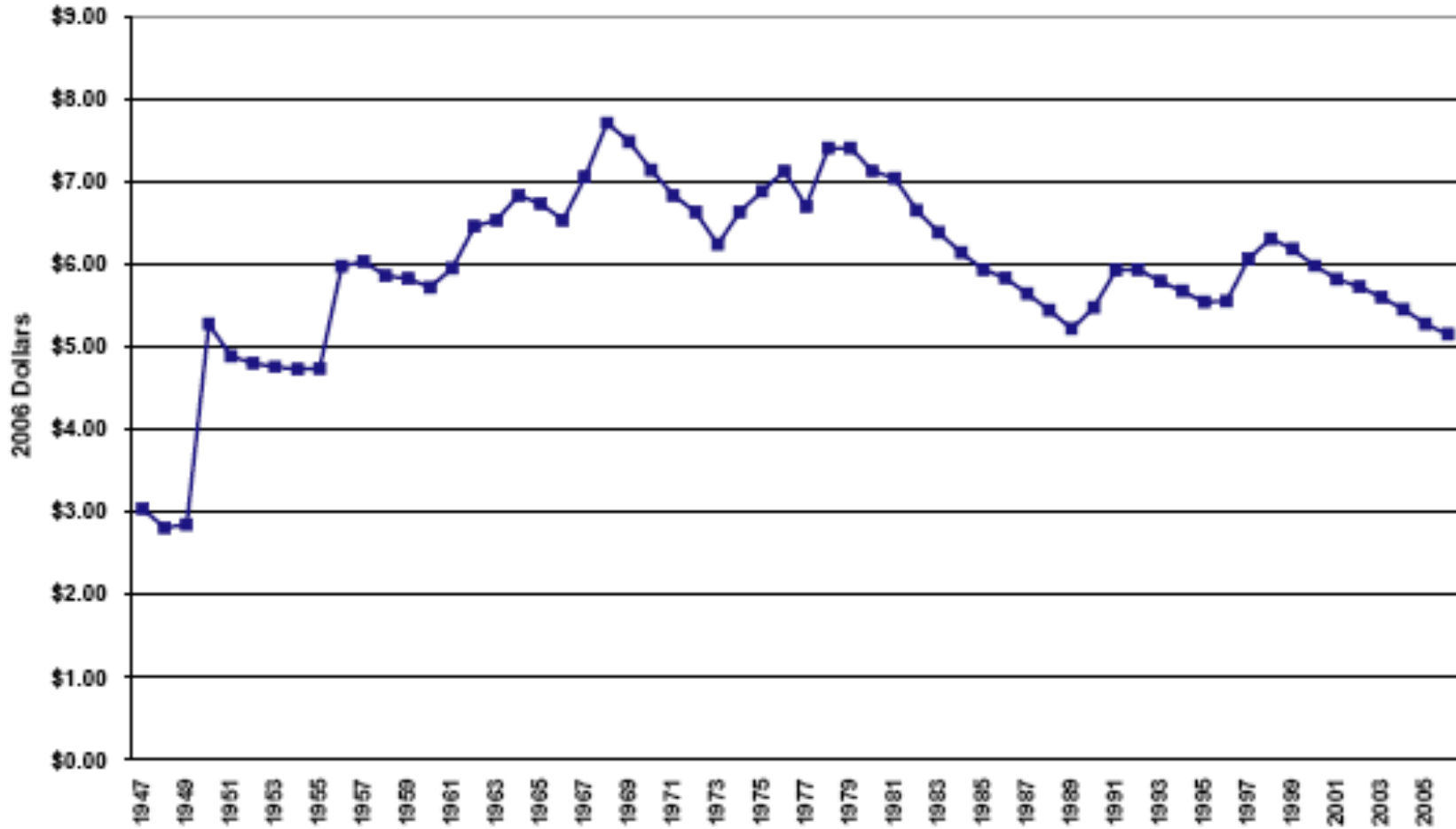
Productivity and Wage Growth



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

Value of Minimum Wage, 1947-2006

[in 2006 dollars]



*through May 2006

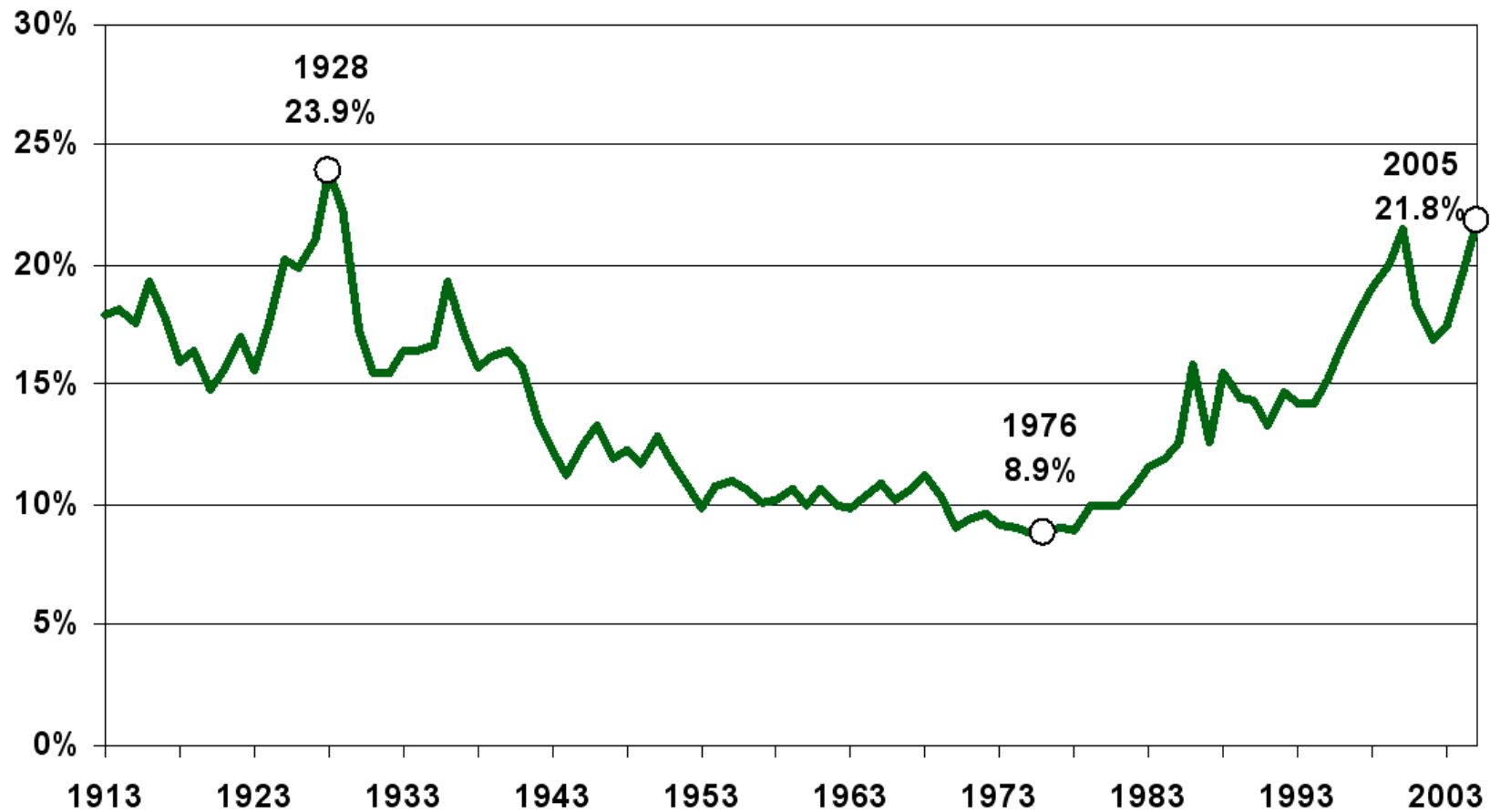
A full-time worker (working 2,080 hours a year) earning \$5.15 an hour would earn \$10,712 a year. . .

State Minimum Wages Greater than the Federal Minimum Wages

State	2007 State Minimum Wage	Planned 2008 State Minimum Wage	Planned 2009 State Minimum Wage
Alaska	7.15	7.15	7.15
Arizona	6.75*	Inflation Adjusted	Inflation Adjusted
Arkansas	6.25	6.25	6.25
California	7.50	8.00	8.00
Colorado	6.85*	Inflation Adjusted	Inflation Adjusted
Connecticut	7.65	7.65	7.65
Delaware	6.65	7.15	7.15
District of Columbia	7.00	7.00	7.00
Florida	6.67*	Inflation Adjusted	Inflation Adjusted
Hawaii	7.25	7.25	7.25
Iowa	5.15 (will increase to \$6.20 on 4/1/07)	7.25	7.25
Illinois	6.50 (will increase to \$7.50 on 7/1/07)	7.50 (will increase to \$7.75 on 7/1/08)	7.75 (will increase to \$8.00 on 7/1/09)
Maine	6.75 (will increase to \$7.00 on 10/1/07)	7.00	7.00
Maryland	6.15	6.15	6.15
Massachusetts	7.50	8.00	8.00
Michigan	6.95 (will increase to \$7.15 on 7/1/07)	7.15 (will increase to \$7.40 on 7/1/08)	7.40
Minnesota	6.15	6.15	6.15
Missouri	6.50*	Inflation Adjusted	Inflation Adjusted
Montana	6.15*	Inflation Adjusted	Inflation Adjusted
Nevada	6.15*	Inflation Adjusted	Inflation Adjusted
New Jersey	7.15	7.15	7.15
New York	7.15	7.15	7.15
North Carolina	6.15	6.15	6.15
Ohio	6.85*	Inflation Adjusted	Inflation Adjusted
Oregon	7.80*	Inflation Adjusted	Inflation Adjusted
Pennsylvania	6.25 (will increase to \$7.15 on 7/1/07)	7.15	7.15
Rhode Island	7.40	7.40	7.40
Vermont	7.53*	Inflation Adjusted	Inflation Adjusted
Washington	7.93*	Inflation Adjusted	Inflation Adjusted
Wisconsin	6.50	6.50	6.50

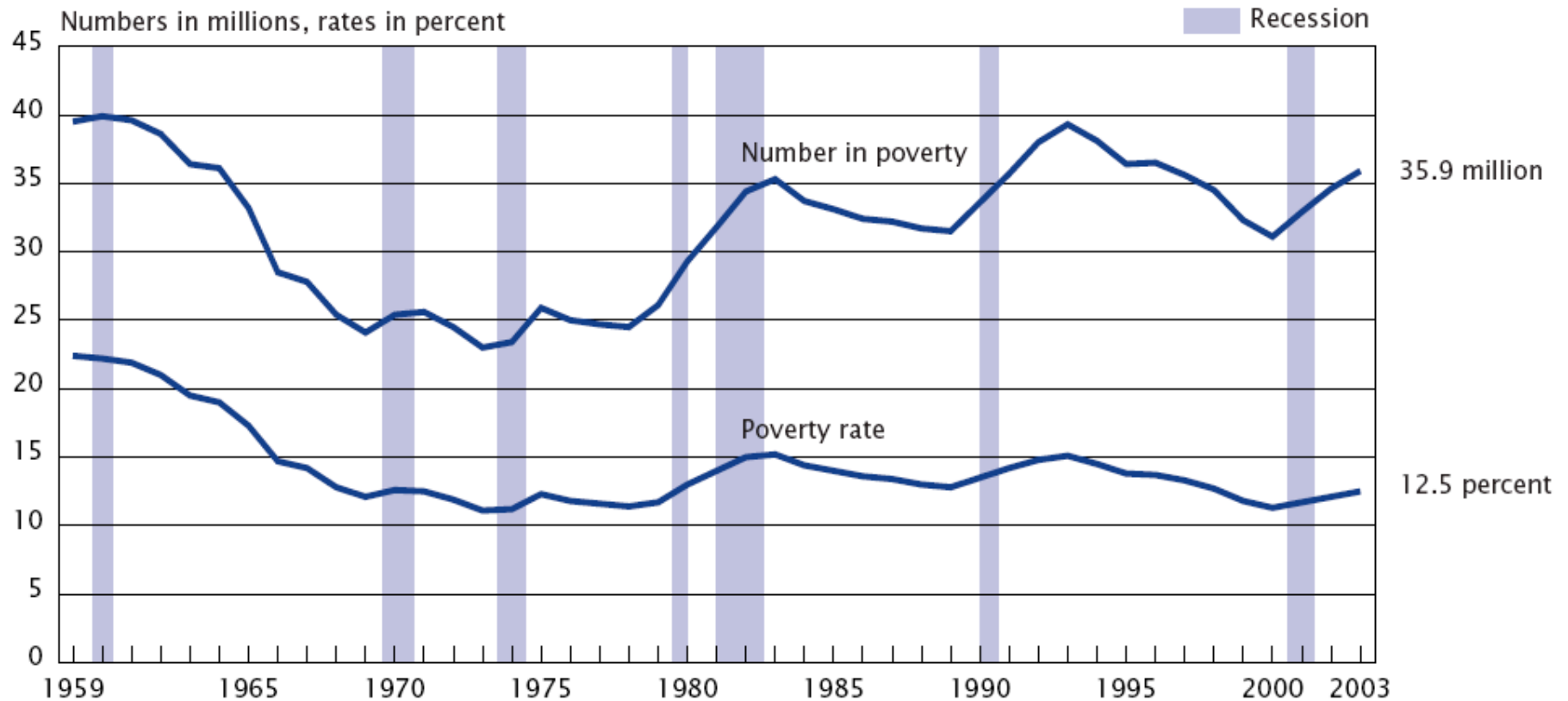
*=State minimum wage adjusted annually for inflation.

Top 1% Share of Total Pre-Tax Income, 1913-2005



Source: Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913-1998," *Quarterly Journal of Economics* 118 (2003). Updated to 2005 at <http://emlab.berkeley.edu/users/saez>

Number in Poverty and Poverty Rate: 1959 to 2003



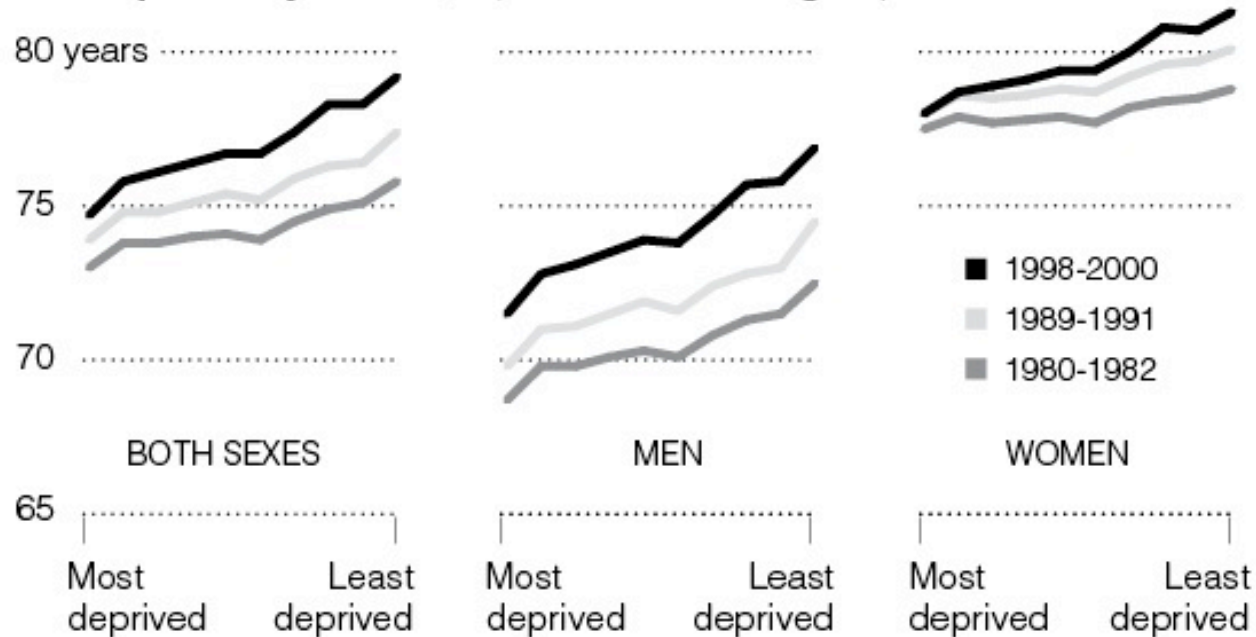
Note: The data points are placed at the midpoints of the respective years.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2004 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

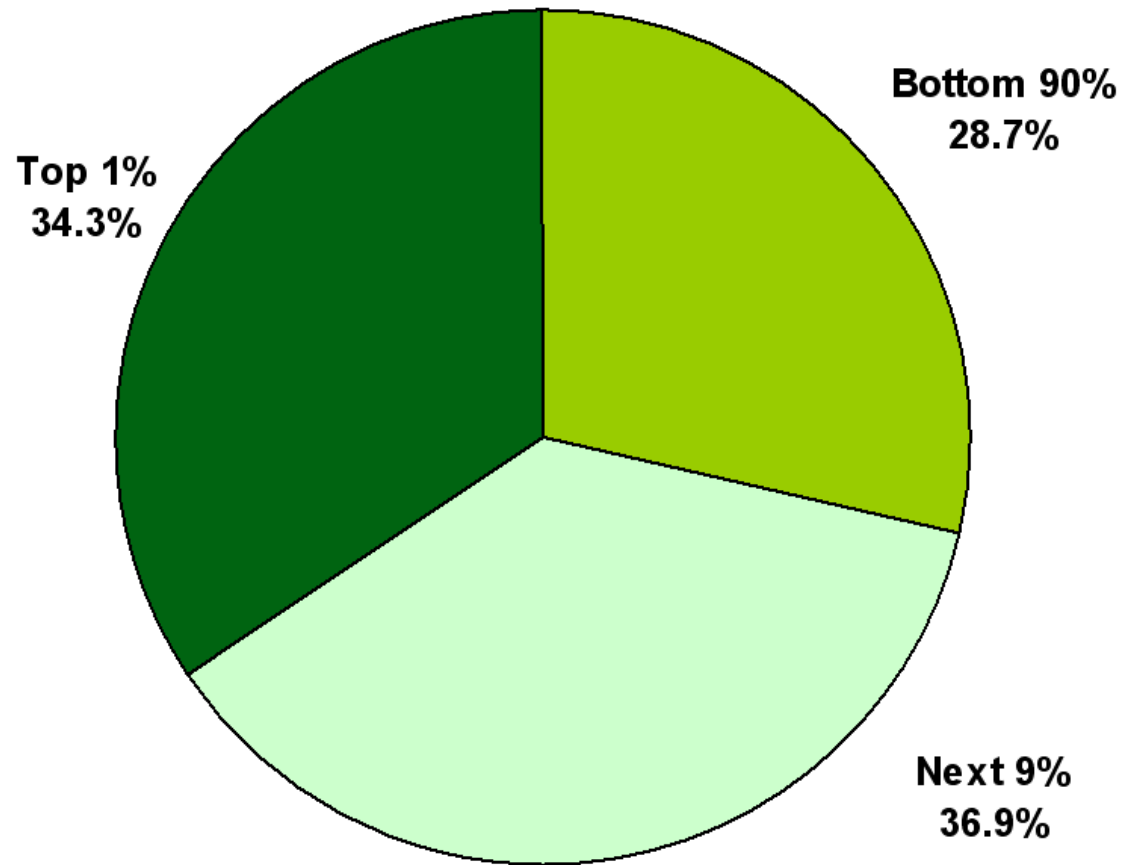


Source: Gopal K. Singh and Mohammad Siahpush, using data from Department of Health and Human Services

THE NEW YORK TIMES

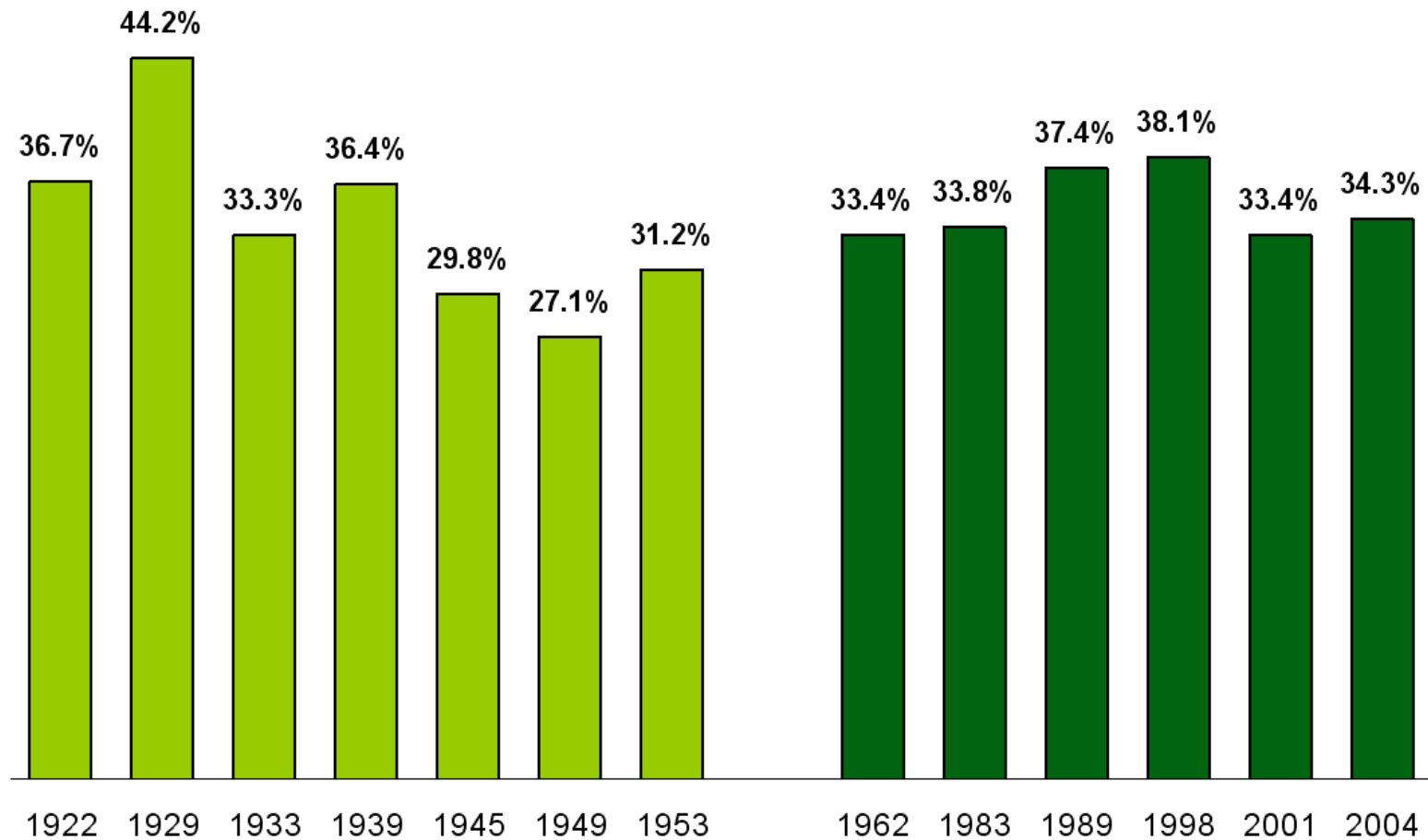
“We have heard a lot about growing income inequality. There has been much less attention paid to growing inequality in life expectancy, which is really quite dramatic.” —Peter Orszag, director of the Congressional Budget Office

Distribution of U.S. Wealth, 2004



Source: Economic Policy Institute, *State of Working America 2006-07*, Table 5.1

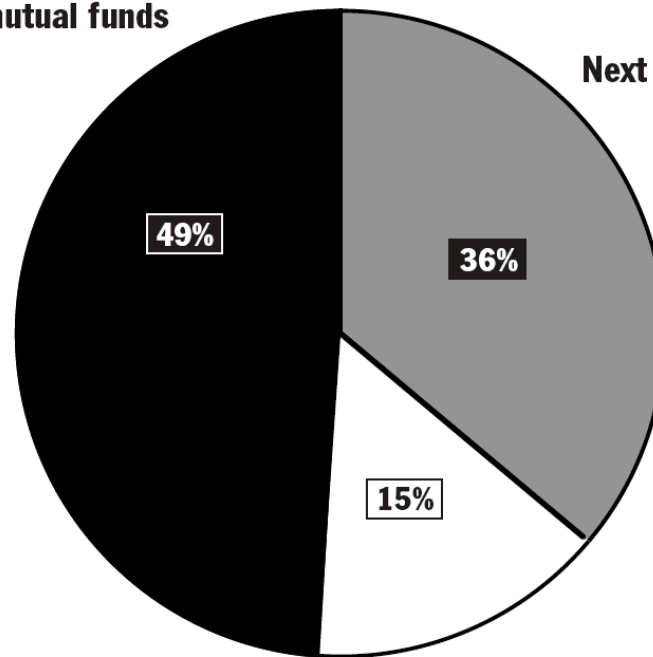
Top 1% Share of Total Household Wealth, 1922 - 2004



Sources: 1922-53: Edward N. Wolff, *Top Heavy* (New Press: 1996); 1962-2004: Economic Policy Institute, *State of Working America 2006-07*, Table 5.3

Ownership of Stocks and Mutual Funds, 1998

**Wealthiest 1% own
49% of all stocks
and mutual funds**

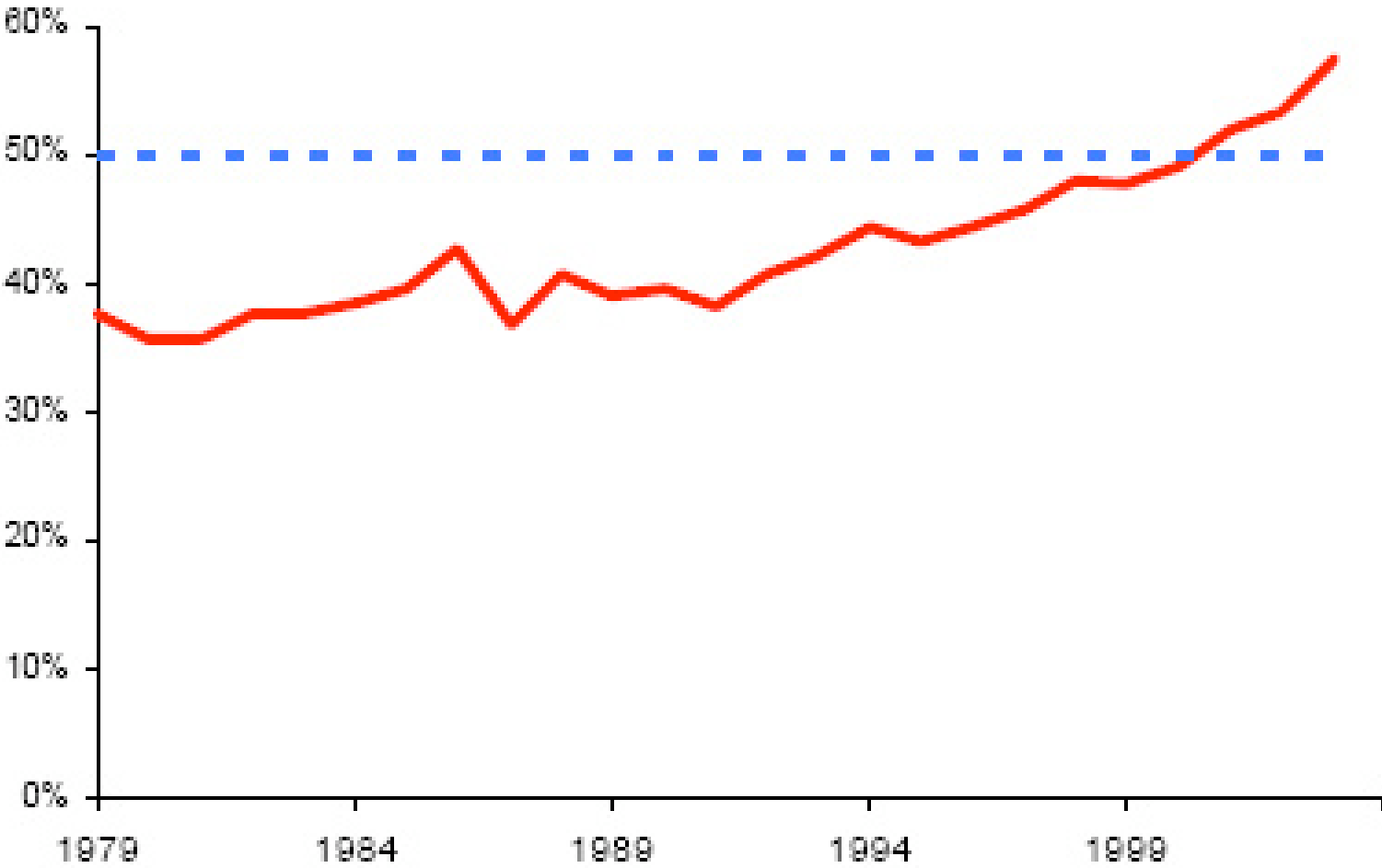


Next 9% own 36%

Bottom 90% own 15%

Sources: Edward N. Wolff, "Recent Trends in Wealth Ownership, 1983-98." Calculations based on the 1998 Survey of Consumer Finances, conducted by the Federal Reserve Bank.

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

Forbes 10 Richest Americans

[net worth-September 2008]

1-Bill Gates

\$57 billion

2-Warren Buffett

\$50 billion

3-Lawrence Ellison

\$27 billion

4-Jim Walton

\$23.4 billion

5-S. Robson Walton

\$23.3 billion



6-Alice Walton

\$23.2 billion

6-Christy Walton

\$23.2 billion

7-Michael Bloomberg

\$20 billion

9-Charles Koch


\$19 billion

9-David Koch

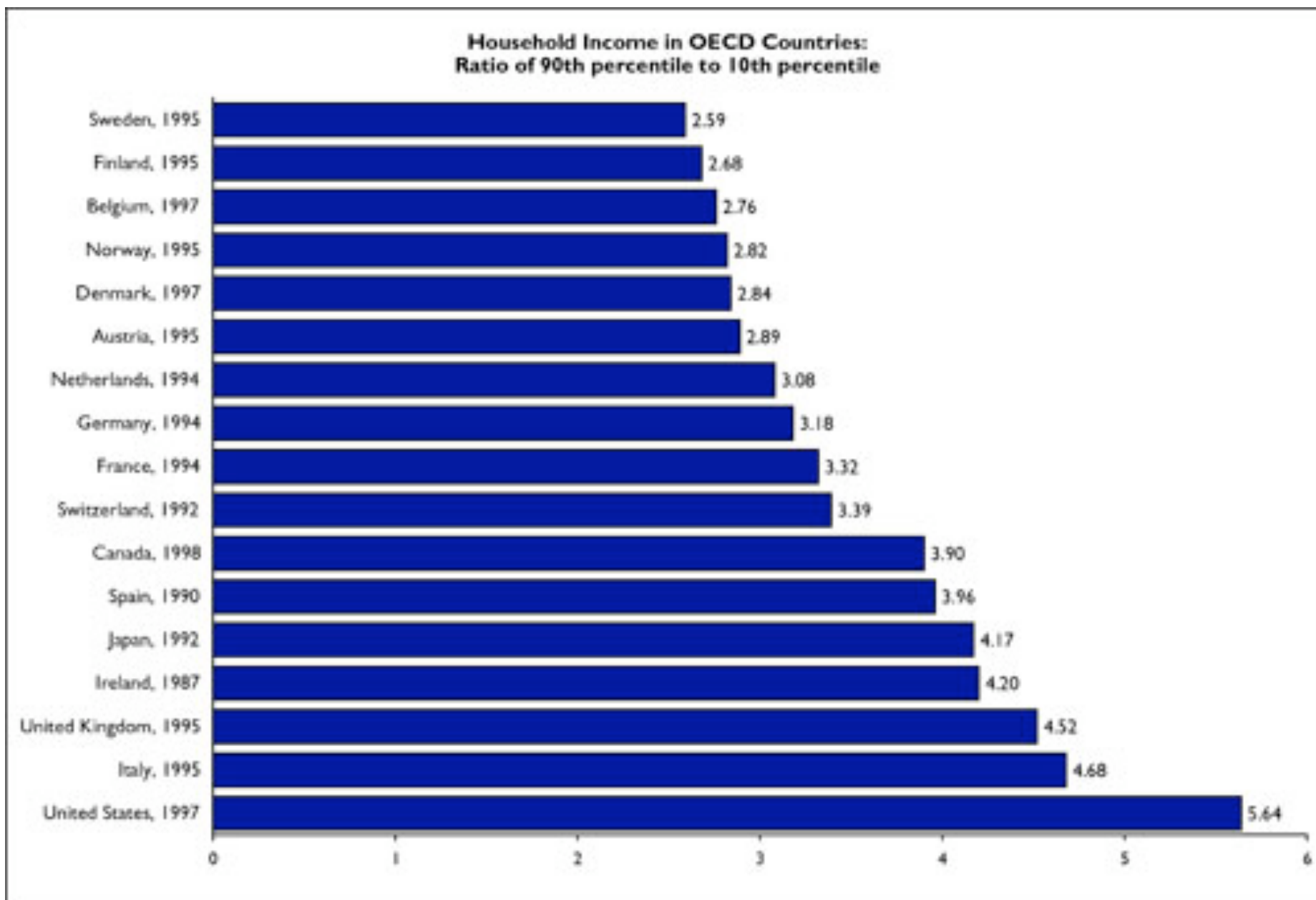
\$19 billion

The World's 10 Richest People

(March 2008)

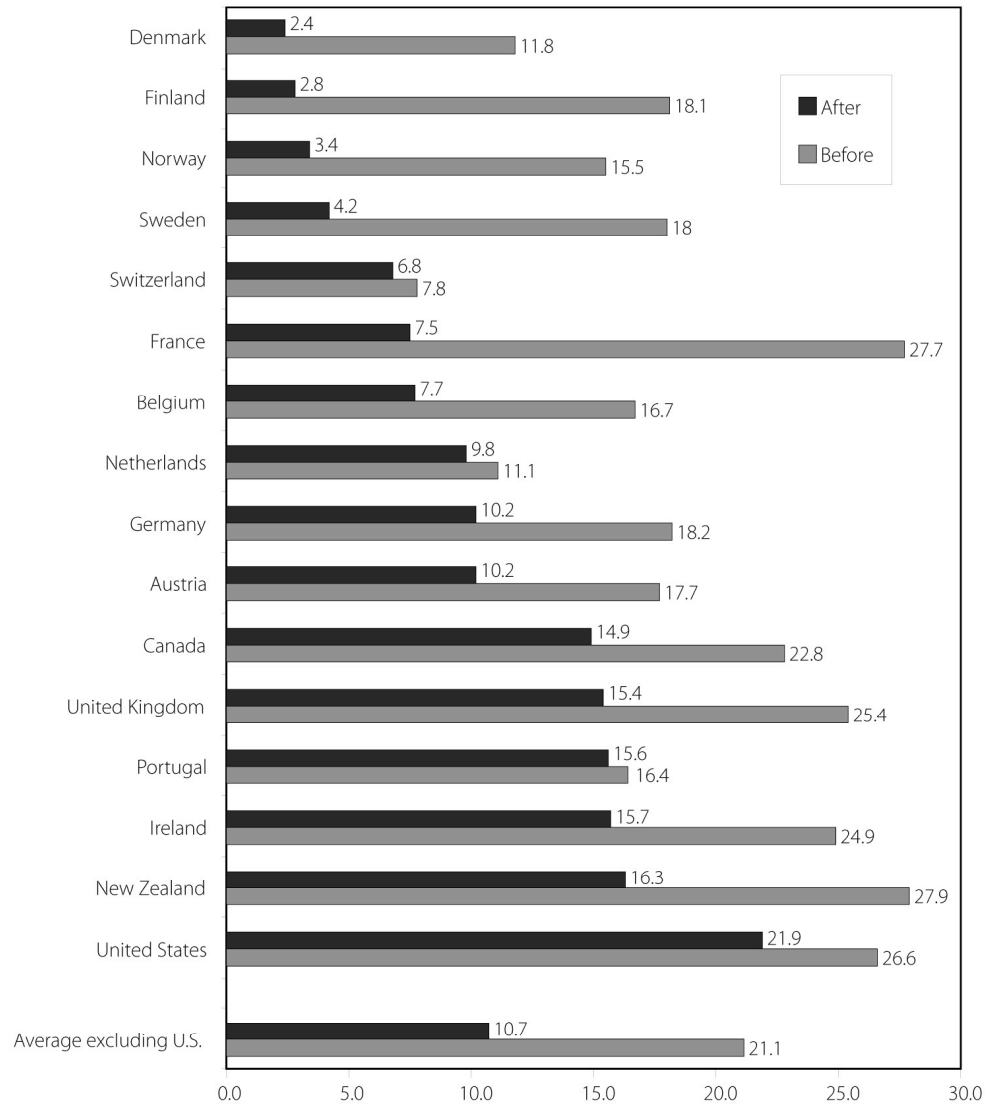


<i>Name</i>	<i>Citizenship</i>	<i>Net Worth (\$billion)</i>	<i>Residence</i>
Warren Buffett	United States	62	United States
Carlos Slim Helú	Mexico	60	Mexico
William Gates III	United States	58	United States
Lakshmi Mittal	India	45	United Kingdom
Mukesh Ambani	India	50	India
Anil Ambani	India	42	India
Ingvar Kamprad	Sweden	31	Switzerland
KP Singh	India	30	India
Oleg Deripaska	Russia	28	Russia
Karl Albrecht	Germany	27	Germany



Source: Economic Policy Institute, *The State of Working America, 2002-03* (2003), Table 7.10.

Child poverty rates before and after taxes and transfers, 2000



Source: Corak (2005).

Figure 8G, taken from the Economic Policy Institute's *State of Working America 2006/2007*, available at www.epi.org

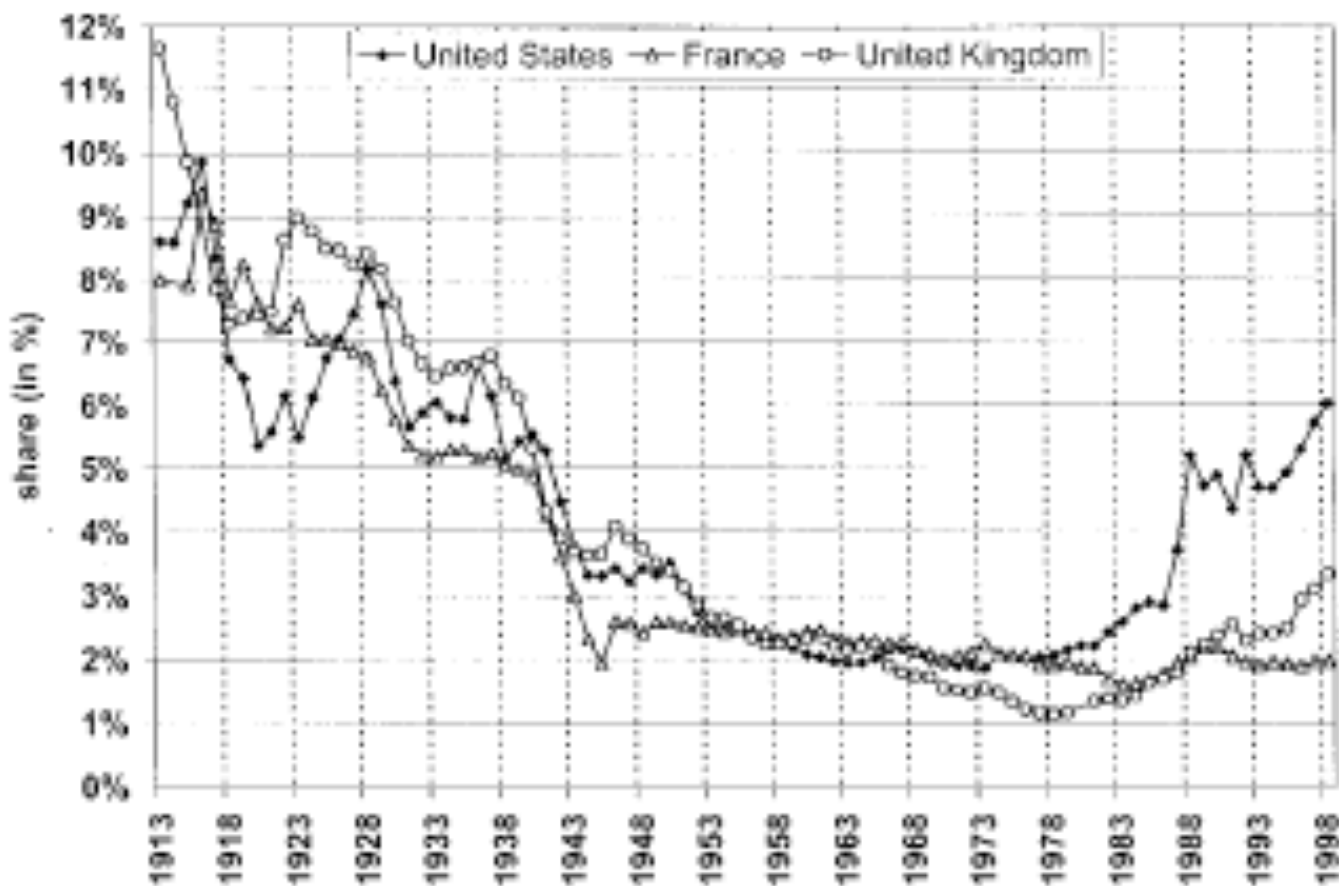
Poverty rates in OECD countries, 2000

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

Source: Luxembourg Income Study (2006b) data.

Table 8.17, taken from the Economic Policy Institute's *State of Working America 2006/2007*, available at www.epi.org

Top 0.1 Percent Income Shares in the United States, France, and the United Kingdom, 1913-1998



Source: T. Piketty and E. Saez, "Income Inequality in the United States, 1913-1998," *Quarterly Journal of Economics* (February 2003): 36

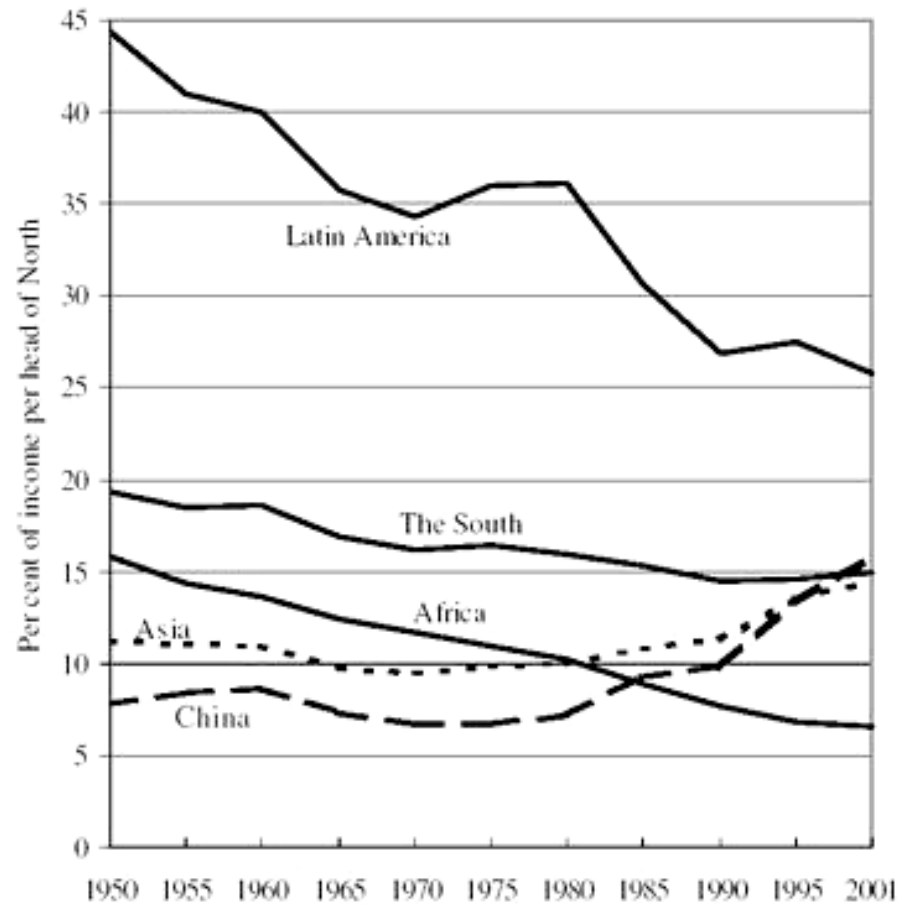
Numbers of people living below \$1 and \$2 per day

	\$1.08 per day (million)							
	1981	1984	1987	1990	1993	1996	1999	2001
East Asia	795.6	562.2	425.6	472.2	415.4	286.7	281.7	271.3
Of which China	633.7	425.0	308.4	374.8	334.2	211.6	222.8	211.6
Eastern Europe and Central Asia	3.1	2.4	1.7	2.3	17.4	19.8	29.8	17.6
Latin America and Caribbean	35.6	46.0	45.1	49.3	52.0	52.2	53.6	49.8
Middle East and North Africa	9.1	7.6	6.9	5.5	4.0	5.5	7.7	7.1
South Asia	474.8	460.3	473.3	462.3	476.2	461.3	428.5	431.1
Of which India	382.4	373.5	369.8	357.4	380.0	399.5	352.4	358.6
Sub-Saharan Africa	163.6	198.3	218.6	226.8	242.3	271.4	294.0	315.8
Total	1481.8	1276.8	1171.2	1218.5	1207.5	1096.9	1095.1	1092.7
	\$2.15 per day (million)							
	1981	1984	1987	1990	1993	1996	1999	2001
East Asia	1169.8	1108.6	1028.3	1116.3	1079.3	922.2	899.6	864.3
Of which China	875.8	813.8	730.8	824.6	802.9	649.6	627.5	593.6
Eastern Europe and Central Asia	20.2	18.3	14.7	22.9	81.1	97.4	112.3	93.5
Latin America and Caribbean	98.9	118.9	115.4	124.6	136.1	117.2	127.4	128.2
Middle East and North Africa	51.9	49.8	52.5	50.9	51.8	60.9	70.4	69.8
South Asia	821.1	858.6	911.4	957.5	1004.8	1029.1	1039.0	1063.7
Of which India	630.0	661.4	697.1	731.4	769.5	805.7	804.4	826.0
Sub-Saharan Africa	287.9	326.0	355.2	381.6	410.4	446.8	489.1	516.0
Total	2450.0	2480.1	2477.5	2653.8	2763.5	2673.7	2737.9	2735.6



Source: Shaohua Chen and Martin Ravallion, "How Have the World's Poorest Fared Since the Early 1980s?" (World Bank)

Income per Head as Percentage of North



Source: A. Maddison, *The World Economy: Historical Statistics* (2003)

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."

