

# Striking it Richer: The Evolution of Top Incomes in the United States (Updated with 2012 preliminary estimates)

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## What's new for recent years?

### 2009-2012: Uneven recovery from the Great Recession

From 2009 to 2012, average real income per family grew modestly by 6.0% (Table 1). Most of the gains happened in the last year when average incomes grew by 4.6% from 2011 to 2012.

However, the gains were very uneven. Top 1% incomes grew by 31.4% while bottom 99% incomes grew only by 0.4% from 2009 to 2012. Hence, the top 1% captured 95% of the income gains in the first three years of the recovery. From 2009 to 2010, top 1% grew fast and then stagnated from 2010 to 2011. Bottom 99% stagnated both from 2009 to 2010 and from 2010 to 2011. In 2012, top 1% incomes increased sharply by 19.6% while bottom 99% incomes grew only by 1.0%. In sum, top 1% incomes are close to full recovery while bottom 99% incomes have hardly started to recover.

Note that 2012 statistics are based on preliminary projections and will be updated in January 2014 when more complete statistics become available. Note also that part of the surge of top 1% incomes in 2012 could be due to income retiming to take advantage of the lower top tax rates in 2012 relative to 2013 and after.<sup>1</sup> Retiming should be most prevalent for realized capital gains as individuals have great flexibility in the timing of capital gains realizations. However, series for income excluding realized capital gains also show a very sharp increase (Figure 1), suggesting that retiming likely explains only part of the surge in top 1% incomes in 2012. Retiming of income should produce a dip in top reported incomes in 2013. Hence, statistics for 2013 will

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· University of California, Department of Economics, 530 Evans Hall #3880, Berkeley, CA 94720. This is an updated version of "Striking It Richer: The Evolution of Top Incomes in the United States", Pathways Magazine, Stanford Center for the Study of Poverty and Inequality, Winter 2008, 6-7. Much of the discussion in this note is based on previous work joint with Thomas Piketty. All the series described here are available in excel format at <http://elsa.berkeley.edu/~saez/TabFig2012prel.xls>.

<sup>1</sup> Top ordinary income marginal tax rates increased from 35 to 39.6% and top income tax rates on realized capital gains and dividends increased from 15 to 20% in 2013. In addition, the Affordable Care Act surtax at marginal rate of 3.8% on top capital incomes and 0.9% on top labor incomes was added in 2013 (the surtax is only 0.9% on labor income due to the pre-existing Medicare tax of 2.9% on labor income). The Pease limitation on itemized deductions also increases marginal tax rates by about 1 percentage point in 2013. These higher marginal tax rates affect approximately the top 1%. Hence, among top earners, retiming income from 2013 to 2012 saves about 6.5 percentage points of marginal tax for labor income and about 10 percentage points for capital income. In words, for top 1% earners, shifting an extra \$100 of labor income from 2013 to 2012 saves about \$6.5 in taxes and shifting an extra \$100 of capital income from 2013 to 2012 saves about \$10 in taxes.

show how important retiming was in the surge in top incomes from 2011 to 2012.

Overall, these results suggest that the Great Recession has only depressed top income shares temporarily and will not undo any of the dramatic increase in top income shares that has taken place since the 1970s. Indeed, the top decile income share in 2012 is equal to 50.4%, the highest ever since 1917 when the series start (Figure 1).

Looking further ahead, based on the US historical record, falls in income concentration due to economic downturns are temporary unless drastic regulation and tax policy changes are implemented and prevent income concentration from bouncing back. Such policy changes took place after the Great Depression during the New Deal and permanently reduced income concentration until the 1970s (Figures 2, 3). In contrast, recent downturns, such as the 2001 recession, lead to only very temporary drops in income concentration (Figures 2, 3).

The policy changes that took place coming out of the Great Recession (financial regulation and top tax rate increase in 2013) are not negligible but they are modest relative to the policy changes that took place coming out of the Great Depression. Therefore, it seems unlikely that US income concentration will fall much in the coming years.

#### Great Recession 2007-2009

During the Great Recession, from 2007 to 2009, average real income per family declined dramatically by 17.4% (Table 1),<sup>2</sup> the largest two-year drop since the Great Depression. Average real income for the top percentile fell even faster (36.3 percent decline, Table 1), which lead to a decrease in the top percentile income share from 23.5 to 18.1 percent (Figure 2). Average real income for the bottom 99% also fell sharply by 11.6%, also by far the largest two-year decline since the Great Depression. This drop of 11.6% more than erases the 6.8% income gain from 2002 to 2007 for the bottom 99%.

The fall in top decile income share from 2007 to 2009 is actually less than during the 2001 recession from 2000 to 2002, in part because the Great recession has hit bottom 99% incomes much harder than the 2001 recession (Table 1), and in part because upper incomes excluding realized capital gains have resisted relatively well during the Great Recession.

### **New Filing Season Distributional Statistics**

<sup>2</sup> This decline is much larger than the real official GDP decline of 3.1% from 2007-2009 for several reasons. First, our income measure includes realized capital gains while realized capital gains are not included in GDP. Our average real income measure excluding capital gains decreased by 10.8% (instead of 17.4%). Second, the total number of US families increased by 2.5% from 2007 to 2009 mechanically reducing income growth per family relative to aggregate income growth. Third, nominal GDP decreased by 0.6% while the total market nominal income aggregate we use (when excluding realized capital gains) decreased by 5.5%. This discrepancy is due to several factors: (a) nominal GDP decreased only by 0.4% while nominal National Income (conceptually closer to our measure) decreased by 2%. In net, income items included in National Income but excluded from our income measure grew over the 2007-2009 period. The main items are supplements to wages and salaries (mostly employer provided benefits), rental income of persons (which imputes rents for homeowners), and undistributed profits of corporations (see National Income by Type of Income, Table 1.12, <http://www.bea.gov/national/nipaweb/SelectTable.asp>).

Timely distributional statistics are central to enlighten the public policy debate. Distributional statistics used to estimate our series are produced by the Statistics of Income Division of the Internal Revenue Service (<http://www.irs.gov/uac/Tax-Stats-2>). Those statistics are extremely high quality and final, but come with an almost 2-year lag (statistics for year 2011 incomes have just been published in the summer of year 2013).

In 2012, the Statistics of Income division has started publishing filing season statistics by size of income at <http://www.irs.gov/uac/Filing-Season-Statistics>. These statistics can be used to project the distribution of incomes for the full-year. It is possible to project reliable full-year statistics by the middle of the following year when most of the returns filed before the regular April 15 deadline have been processed by IRS.<sup>3</sup> We have used filing season statistics for 2012 incomes to produce preliminary 2012 estimates. The projection assumes that, in each income bracket, the fraction of tax returns processed by July 2013 for 2012 returns is the same as the fraction of tax returns processed by July 2012 for 2011 returns. Because 2012 statistics are based on a projection, they are preliminary and will be updated in January 2014 when more complete statistics for year 2012 become available.

### **Text of “Striking it Richer” updated with 2012 estimates**

The recent dramatic rise in income inequality in the United States is well documented. But we know less about which groups are winners and which are losers, or how this may have changed over time. Is most of the income growth being captured by an extremely small income elite? Or is a broader upper middle class profiting? And are capitalists or salaried managers and professionals the main winners? I explore these questions with a uniquely long-term historical view that allows me to place current developments in deeper context than is typically the case.

Efforts at analyzing long-term trends are often hampered by a lack of good data. In the United States, and most other countries, household income surveys virtually did not exist prior to 1960. The only data source consistently available on a long-run basis is tax data. The U.S. government has published detailed statistics on income reported for tax purposes since 1913, when the modern federal income tax started. These statistics report the number of taxpayers and their total income and tax liability for a large number of income brackets. Combining these data with population census data and aggregate income sources, one can estimate the share of total personal income accruing to various upper-income groups, such as the top 10 percent or top 1 percent.

We define income as the sum of all income components reported on tax returns (wages and salaries, pensions received, profits from businesses, capital income such as dividends, interest, or rents, and realized capital gains) before individual income taxes. We exclude government transfers such as Social Security retirement benefits or unemployment compensation

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<sup>3</sup> Taxpayers who request a 6-month filing extension generally do not file until October 15. Their tax returns are therefore not processed by IRS until the month of November. A substantial fraction of very high income returns use the filing extension. Hence, estimates based on filing season statistics are not exactly equal to final statistics.

benefits from our income definition. Non-taxable fringe benefits such as employer provided health insurance is also excluded from our income definition. Therefore, our income measure is defined as cash market income before individual income taxes.

### **Evidence on U.S. top income shares**

Figure 1 presents the pre-tax income share of the top decile since 1917 in the United States. In 2012, the top decile includes all families with market income above \$114,000. The overall pattern of the top decile share over the century is U-shaped. The share of the top decile is around 45 percent from the mid-1920s to 1940. It declines substantially to just above 32.5 percent in four years during World War II and stays fairly stable around 33 percent until the 1970s. Such an abrupt decline, concentrated exactly during the war years, cannot easily be reconciled with slow technological changes and suggests instead that the shock of the war played a key and lasting role in shaping income concentration in the United States. After decades of stability in the post-war period, the top decile share has increased dramatically over the last twenty-five years and has now regained its pre-war level. Indeed, the top decile share in 2012 is equal to 50.4 percent, a level higher than any other year since 1917 and even surpasses 1928, the peak of stock market bubble in the “roaring” 1920s.

Figure 2 decomposes the top decile into the top percentile (families with income above \$394,000 in 2012) and the next 4 percent (families with income between \$161,000 and \$394,000), and the bottom half of the top decile (families with income between \$114,000 and \$161,000). Interestingly, most of the fluctuations of the top decile are due to fluctuations within the top percentile. The drop in the next two groups during World War II is far less dramatic, and they recover from the WWII shock relatively quickly. Finally, their shares do not increase much during the recent decades. In contrast, the top percentile has gone through enormous fluctuations along the course of the twentieth century, from about 18 percent before WWI, to a peak to almost 24 percent in the late 1920s, to only about 9 percent during the 1960s-1970s, and back to almost 23.5 percent by 2007. Those at the very top of the income distribution therefore play a central role in the evolution of U.S. inequality over the course of the twentieth century.

The implications of these fluctuations at the very top can also be seen when we examine trends in *real* income growth per family between the top 1 percent and the bottom 99 percent in recent years as illustrated on Table 1. From 1993 to 2012, for example, average real incomes per family grew by only 17.9% over this 19 year period (implying an annual growth rate of .87%). However, if one excludes the top 1 percent, average real incomes of the bottom 99% grew only by 6.6% from 1993 to 2012 (implying an annual growth rate of .34%). Top 1 percent incomes grew by 86.1% from 1993 to 2012 (implying a 3.3% annual growth rate). This implies that top 1 percent incomes captured just over two-thirds of the overall economic growth of real incomes per family over the period 1993-2012.

The 1993–2012 period encompasses, however, a dramatic shift in how the bottom 99 percent of the income distribution fared. Table 1 next distinguishes between five sub-periods: (1) the 1993–2000 expansion of the

Clinton administrations, (2) the 2000-2002 recession, (3) the 2002-2007 expansion of the Bush administrations, (4) the 2007-2009 Great Recession, (5) and 2009-2011, the first two years of recovery. During both expansions, the incomes of the top 1 percent grew extremely quickly by 98.7% and 61.8% respectively. However, while the bottom 99 percent of incomes grew at a solid pace of 20.3% from 1993 to 2000, these incomes grew only 6.8% percent from 2002 to 2007. As a result, in the economic expansion of 2002-2007, the top 1 percent captured two thirds of income growth. Those results may help explain the disconnect between the economic experiences of the public and the solid macroeconomic growth posted by the U.S. economy from 2002 to 2007. Those results may also help explain why the dramatic growth in top incomes during the Clinton administration did not generate much public outcry while there has been a great level of attention to top incomes in the press and in the public debate since 2005.

During both recessions, the top 1 percent incomes fell sharply, by 30.8% from 2000 to 2002, and by 36.3% from 2007 to 2009. The primary driver of the fall in top incomes during those recessions is the stock market crash which reduces dramatically realized capital gains, and, especially in the 2000-2002 period, the value of executive stock-options. However, bottom 99 percent incomes fell by 11.6% from 2007 to 2009 while they fell only by 6.5 percent from 2000 to 2002. Therefore, the top 1 percent absorbed a larger fraction of losses in the 2000-2002 recession (57%) than in the Great recession (49%). The 11.6 percent fall in bottom 99 percent incomes is the largest fall on record in any two year period since the Great Depression of 1929-1933.

From 2009 to 2012, average real income per family grew modestly by 6.0% (Table 1) but the gains were very uneven. Top 1% incomes grew by 31.4% while bottom 99% incomes grew only by 0.4%. Hence, the top 1% captured 95% of the income gains in the first two years of the recovery. From 2009 to 2010, top 1% grew fast and then stagnated from 2010 to 2011. Bottom 99% stagnated both from 2009 to 2010 and from 2010 to 2011. Preliminary statistics for year 2012 show that top 1% incomes increased sharply from 2011 to 2012 while bottom 99% incomes grew only modestly.<sup>4</sup>

The top percentile share declined during WWI, recovered during the 1920s boom, and declined again during the great depression and WWII. This very specific timing, together with the fact that very high incomes account for a disproportionate share of the total decline in inequality, strongly suggests that the shocks incurred by capital owners during 1914 to 1945 (depression and wars) played a key role.<sup>5</sup> Indeed, from 1913 and up to the 1970s, very top incomes were mostly composed of capital income (mostly dividend income) and to a smaller extent business income, the wage income share being very modest. Therefore, the large decline of top incomes observed during the 1914-1960 period is predominantly a capital income phenomenon.

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<sup>4</sup> The exact percentage 95% is sensitive to measurement error, especially the growth in the total number of families from 2009 to 2012, estimated from the Current Population Survey. However, the conclusion that most of the gains from economic growth was captured by the top 1% is not in doubt.

<sup>5</sup> The negative effect of the wars on top incomes can be explained in part by the large tax increases enacted to finance the wars. During both wars, the corporate income tax was drastically increased and this reduced mechanically the distributions to stockholders.

Interestingly, the income composition pattern at the very top has changed considerably over the century. The share of wage and salary income has increased sharply from the 1920s to the present, and especially since the 1970s. Therefore, a significant fraction of the surge in top incomes since 1970 is due to an explosion of top wages and salaries. Indeed, estimates based purely on wages and salaries show that the share of total wages and salaries earned by the top 1 percent wage income earners has jumped from 5.1 percent in 1970 to 12.4 percent in 2007.<sup>6</sup>

Evidence based on the wealth distribution is consistent with those facts. Estimates of wealth concentration, measured by the share of total wealth accruing to top 1 percent wealth holders, constructed by Wojciech Kopczuk and myself from estate tax returns for the 1916-2000 period in the United States show a precipitous decline in the first part of the century with only fairly modest increases in recent decades. The evidence suggests that top incomes earners today are not “rentiers” deriving their incomes from past wealth but rather are “working rich,” highly paid employees or new entrepreneurs who have not yet accumulated fortunes comparable to those accumulated during the Gilded Age. Such a pattern might not last for very long. The drastic cuts of the federal tax on large estates could certainly accelerate the path toward the reconstitution of the great wealth concentration that existed in the U.S. economy before the Great Depression.

The labor market has been creating much more inequality over the last thirty years, with the very top earners capturing a large fraction of macroeconomic productivity gains. A number of factors may help explain this increase in inequality, not only underlying technological changes but also the retreat of institutions developed during the New Deal and World War II - such as progressive tax policies, powerful unions, corporate provision of health and retirement benefits, and changing social norms regarding pay inequality. We need to decide as a society whether this increase in income inequality is efficient and acceptable and, if not, what mix of institutional and tax reforms should be developed to counter it.

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<sup>6</sup> Interestingly, this dramatic increase in top wage incomes has not been mitigated by an increase in mobility at the top of the wage distribution. As Wojciech Kopczuk, myself, and Jae Song have shown in a separate paper, the probability of staying in the top 1 percent wage income group from one year to the next has remained remarkably stable since the 1970s.

**Table 1. Real Income Growth by Groups**

|                                  | Average Income<br>Real Growth | Top 1% Incomes<br>Real Growth | Bottom 99%<br>Incomes Real<br>Growth | Fraction of total<br>growth (or loss)<br>captured by top 1% |
|----------------------------------|-------------------------------|-------------------------------|--------------------------------------|---|
|                                  | (1)                           | (2)                           | (3)                                  | (4)   |
| <b>Full period<br/>1993-2012</b> | <b>17.9%</b>                  | <b>86.1%</b>                  | <b>6.6%</b>                          | <b>68%</b>  |
| Clinton Expansion<br>1993-2000   | 31.5%                         | 98.7%                         | 20.3%                                | 45%   |
| 2001 Recession<br>2000-2002      | -11.7%                        | -30.8%                        | -6.5%                                | 57%   |
| Bush Expansion<br>2002-2007      | 16.1%                         | 61.8%                         | 6.8%                                 | 65%   |
| Great Recession 2007-<br>2009    | -17.4%                        | -36.3%                        | -11.6%                               | 49%   |
| Recovery<br>2009-2012            | 6.0%                          | 31.4%                         | 0.4%                                 | 95%   |

Computations based on family market income including realized capital gains (before individual taxes).

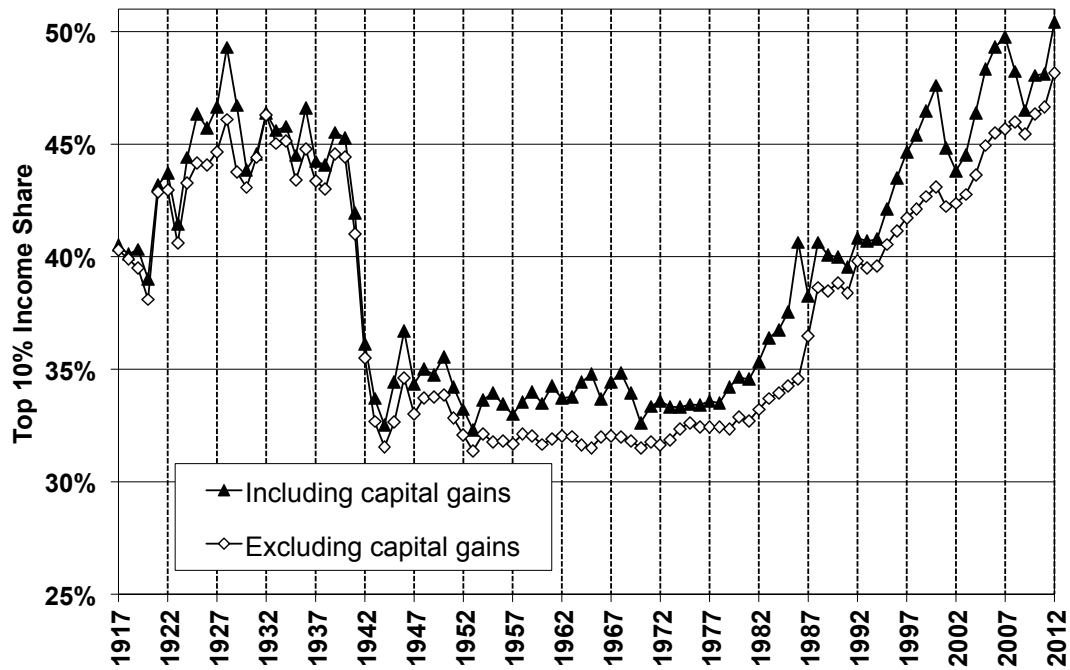
Incomes exclude government transfers (such as unemployment insurance and social security) and non-taxable fringe benefits.

Incomes are deflated using the Consumer Price Index.

Column (4) reports the fraction of total real family income growth (or loss) captured by the top 1%.

For example, from 2002 to 2007, average real family incomes grew by 16.1% but 65% of that growth accrued to the top 1% while only 35% of that growth accrued to the bottom 99% of US families.

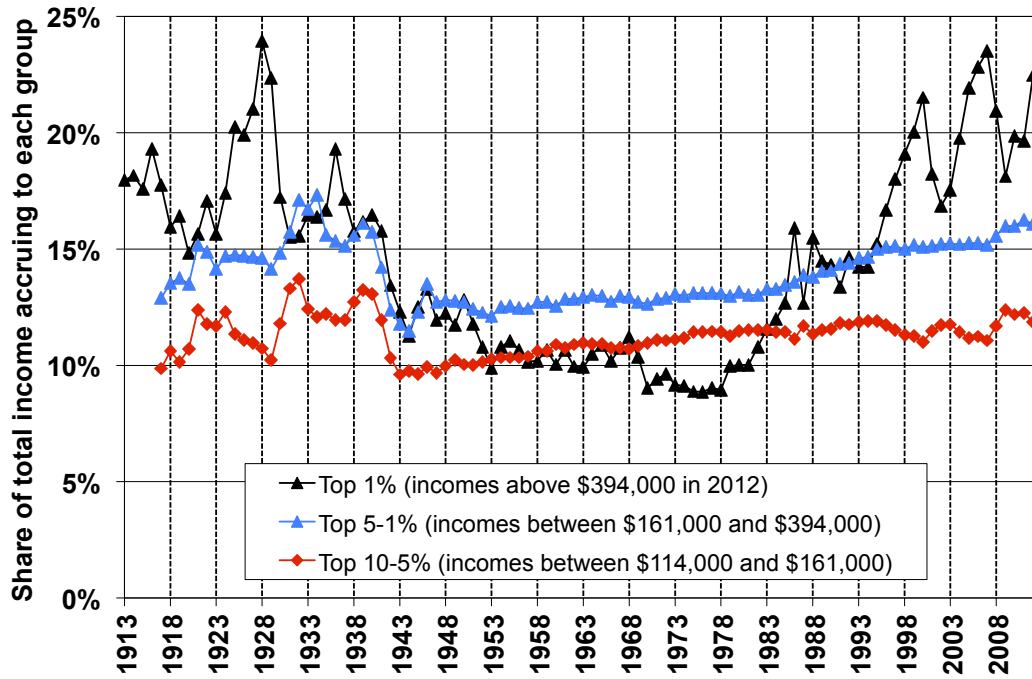
Source: Piketty and Saez (2003), series updated to 2012 in August 2013 using IRS preliminary tax statistics for 2012.



**FIGURE 1**  
The Top Decile Income Share, 1917-2012

Source: Table A1 and Table A3, col. P90-100.  
 Income is defined as market income (and excludes government transfers).  
 In 2012, top decile includes all families with annual income above \$114,000.  
 2012 data based on preliminary statistics





**FIGURE 2**

Decomposing the Top Decile US Income Share into 3 Groups, 1913-2012

Source: Table A3, cols. P90-95, P95-99, P99-100.

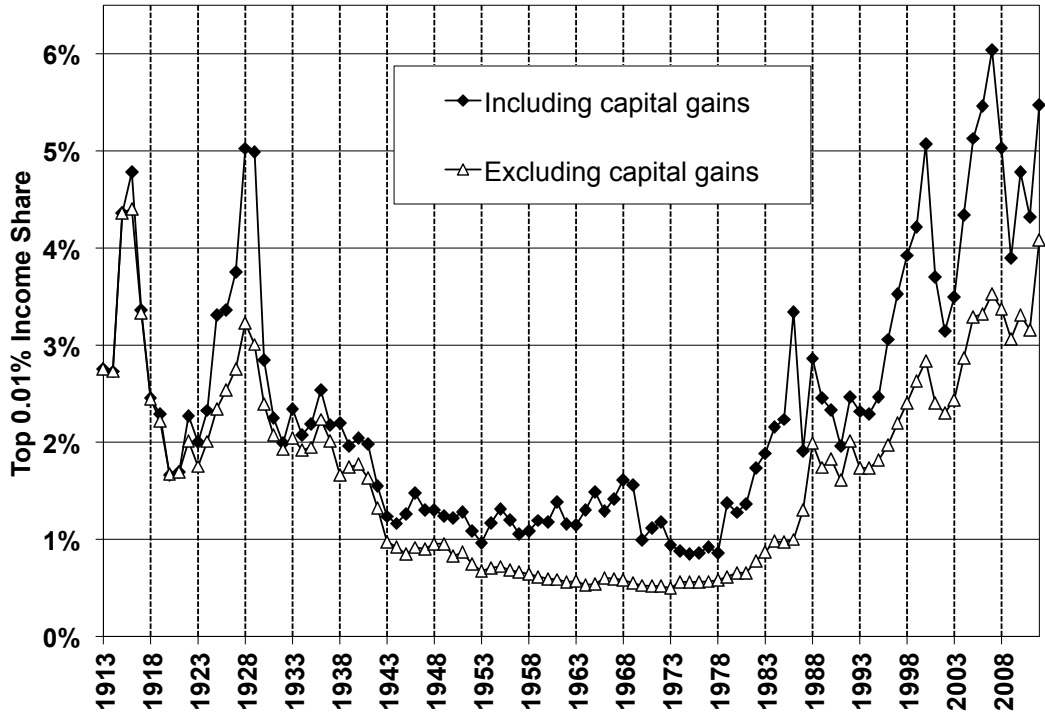
Income is defined as market income including capital gains.

Top 1% denotes the top percentile (families with annual income above \$394,000 in 2012)

Top 5-1% denotes the next 4% (families with annual income between \$161,000 and \$394,000 in 2012)

Top 10-5% denotes the next 5% (bottom half of the top decile, families with annual income between \$114,000 and \$161,000 in 2012).

2012 data based on preliminary statistics



**FIGURE 3**  
The Top 0.01% Income Share, 1913-2012

Source: Table A1 and Table A3, col. P99.99-100.

Income is defined as market income including (or excluding) capital gains.

In 2012, top .01% includes the 16,068 top families with annual income above \$10,250,000.

2012 data based on preliminary statistics