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Striking it Richer: The Evolution of Top Incomes in the United States (Updated with 2009 and 2010 estimates)

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What's new for recent 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),[1] 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 sharp fall in top incomes is explained primarily by the collapse of realized capital gains due to the stock-market crash. Aggregate realized capital gains fell from \$895 billion in 2007 to \$236 billion in 2009. Indeed, including realized capital gains, the top decile income share dropped from 49.7% in 2007 to 46.5% in 2009 while excluding realized capital gains, the top decile income share remained virtually constant from 45.7% in 2007 to 45.5% in 2009 (Figure 1).

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 90% incomes much harder than the 2001 recession

[•] University of California, Department of Economics, 549 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/TabFig2010.xls

[1] This decline is much larger than the real official GDP decline of 3.8% 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 0.6% 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).

(Table 1), and in part because upper incomes excluding realized capital gains have resisted relatively well during the Great Recession. The top 1% absorbed 49% of income losses from 2007 to 2009 while they absorbed a bigger 57% share of the income losses from 2000 to 2002.

2010: Recovering from the Great Recession

In 2010, average real income per family grew by 2.3% (Table 1) but the gains were very uneven. Top 1% incomes grew by 11.6% while bottom 99% incomes grew only by 0.2%. Hence, the top 1% captured 93% of the income gains in the first year of recovery. Such an uneven recovery can help explain the recent public demonstrations against inequality. It is likely that this uneven recovery has continued in 2011 as the stock market has continued to recover. National Accounts statistics show that corporate profits and dividends distributed have grown strongly in 2011 while wage and salary accruals have only grown only modestly. Unemployment and non-employment have remained high in 2011.

This suggests that the Great Recession will only depress 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, excluding realized capital gains, the top decile share in 2010 is equal to 46.3%, higher than in 2007 (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).

Getting income distribution data faster

Timely distributional statistics are central to enlighten the public policy debate. This is particularly true at this time of great public interest in inequality. Distributional statistics used to estimate our series are produced by the Statistics of Income Division of the Internal Revenue Service (http://www.irs.gov/taxstats/). Those statistics are extremely high quality and final, but come with an almost 2-year lag.

The Statistics of Income, in partnership with academic researchers, is developing methods to produce preliminary distributional statistics significantly earlier. The goal is to use tax return data processed in real time by the IRS to project distributions for the complete year. Preliminary investigations show that it is possible to obtain reliable statistics about one year in advance of the final statistics.

Text of “Striking it Richer” updated with 2010 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 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 income share of the top decile from 1917 to 2010 in the United States. In 2010, the top decile includes all families with market income above $108,000. 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 2007 is equal to 49.7 percent, a level higher than any other year since 1917 and even surpasses 1928, the peak of stock market bubble in the “roaring” 1920s. In 2010, the top decile share is equal to 47.9 percent.

Figure 2 decomposes the top decile into the top percentile (families with income above $352,000 in 2010) and the next 4 percent (families with income between $150,000 and $352,000 in 2010), and the bottom half of the top decile (families with income between $108,000 and $150,000 in 2010). 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 2010, for example, average real incomes per family grew by only 13.8% over this 17 year period (implying an annual growth rate of .76%). However, if one excludes the top 1 percent, average real incomes of the bottom 99% grew only by 6.4% from 1993 to 2010 (implying an annual growth rate of .37%). Top 1 percent incomes grew by 58% from 1993 to 2010 (implying a 2.7% annual growth rate). This implies that top 1 percent incomes captured slightly more than half of the overall economic growth of real incomes per family over the period 1993-2010.

The 1993–2010 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 2009-2010, the first year 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 2010, average real income per family grew by 2.3% (Table 1) but the gains were very uneven. Top 1% incomes grew by 11.6% while bottom 99% incomes grew only by 0.2%. Hence, the top 1% captured 93% of the income gains in the first year of recovery.[2] Such an uneven recovery can possibly explain the recent public demonstrations against inequality.

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.[3] 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.

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.[4]

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.

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[2] The exact percentage 93% is sensitive to measurement error, especially the growth in the total number of families from 2009 to 2010, 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.

[3] 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.

[4] 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.

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.

Table 1. Real Income Growth by Groups, 1993-2010

	Average Income Real Growth (1)	Top 1% Incomes Real Growth (2)	Bottom 99% Incomes Real Growth (3)	Fraction of total growth (or loss) captured by top 1% (4)
Full period 1993-2010	**13.8%**	**58.0%**	**6.4%**	**52%**
Clinton Expansion 1993-2000	31.5%	98.7%	20.3%	45%
2001 Recession 2000-2002	-11.7%	-30.8%	-6.5%	57%
Bush Expansion 2002-2007	16.1%	61.8%	6.8%	65%
Great Recession 2007-2009	-17.4%	-36.3%	-11.6%	49%
Recovery 2009-2010	2.3%	11.6%	0.2%	93%

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.
From 2009 to 2010, average real family incomes increased by 2.3% and the top 1% captured 93% of those gains.
Source: Piketty and Saez (2003), series updated to 2010 in March 2012 using IRS tax statistics.

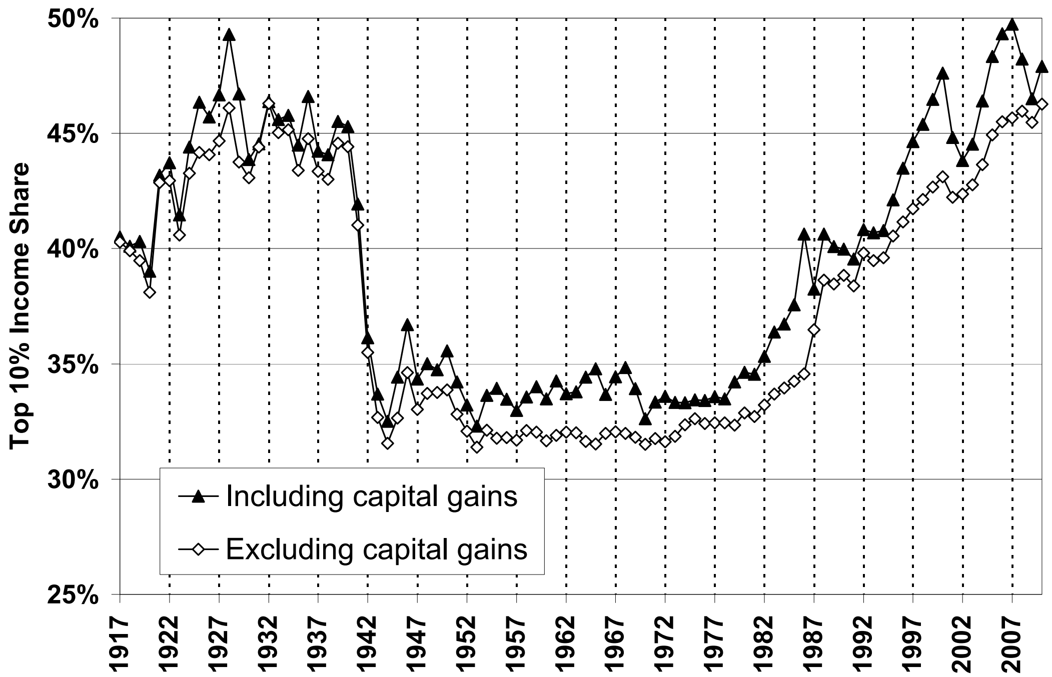

FIGURE 1

The Top Decile Income Share, 1917-2010

Source: Table A1 and Table A3, col. P90-100.
Income is defined as market income (and excludes government transfers).
In 2010, top decile includes all families with annual income above $108,000.

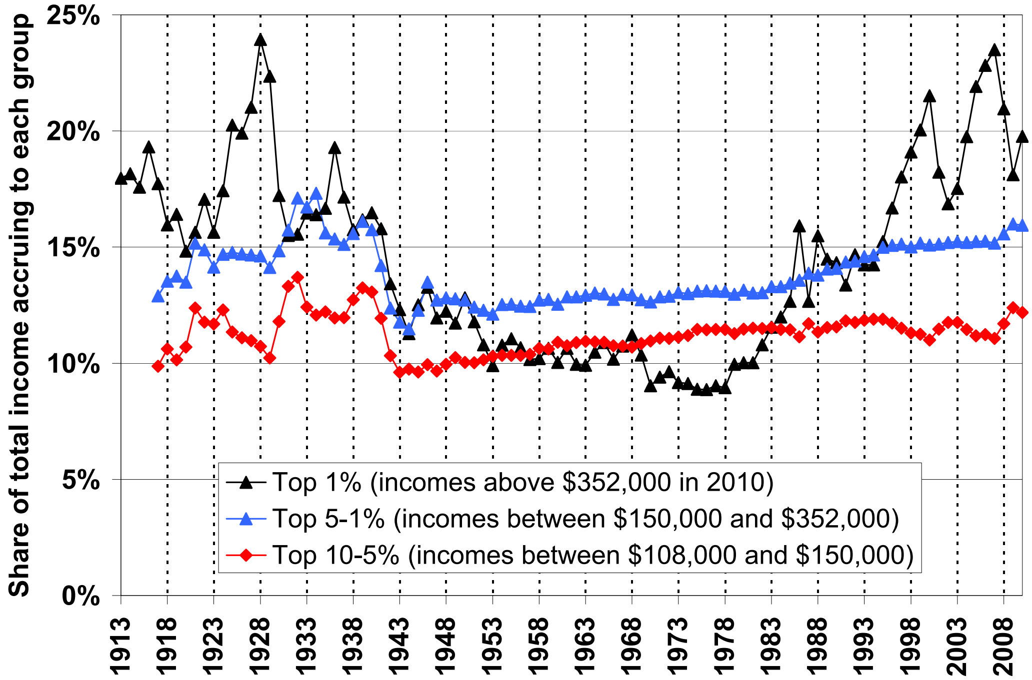

FIGURE 2

Decomposing the Top Decile US Income Share into 3 Groups, 1913-2010

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 $352,000 in 2010)
Top 5-1% denotes the next 4% (families with annual income between $150,000 and $352,000 in 2010)
Top 10-5% denotes the next 5% (bottom half of the top decile, families with annual income between $108,000 and $150,000 in 2010).

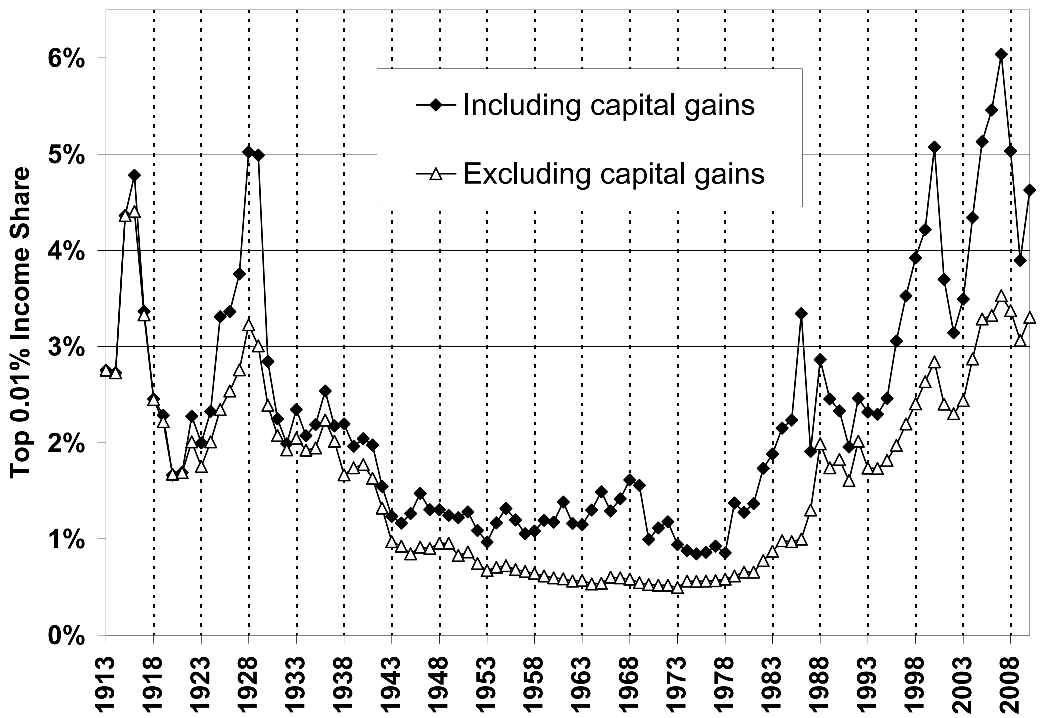

FIGURE 3

The Top 0.01% Income Share, 1913-2010

Source: Table A1 and Table A3, col. P99.99-100.
Income is defined as market income including (or excluding) capital gains.
In 2010, top .01% includes the 15,617 top families with annual income above $7,890,000.