Striking it Richer:

The Evolution of Top Incomes in the United States

(Updated with 2022 estimates)

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What's new for recent years?

COVID 2019-2022: Modest growth and increased inequality

From 2019 (the year before the COVID crisis hit) to 2022 (the year the economy recovered from the crisis), real average incomes per family have grown modestly by 4.2%.[1] This modest growth was unequal as bottom 99% real incomes grew by only 1.0% from 2019 to 2022 while the top 1% grew by 16.1%. Hence, top 1% families captured 81% of total real income growth per family from 2019 to 2022 (Table 1). By 2022, the top 1% income share stays very elevated 23.6% although down from the all-time peak of 2021 (Figure 2).

Income concentration at the top smashed a record in 2021 due to very large capital gains realizations driven by asset price increases and perhaps fears of an increase in capital gains tax rates after 2021 (which never came to pass). But income concentration excluding capital gains, which is much less volatile, increased substantially during COVID and has stayed very elevated into 2022 with the top 10% families capturing almost half (49.6%) of total income (Figure 1). This shows that the COVID crisis has, if anything, accelerated the path of surging top incomes in the United States since 1980.

[•] 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 https://eml.berkeley.edu/~saez/TabFig2022.xlsx.

[1] This growth rate differs from macro-economic growth in national Income per adult for a number of reasons. We use market income reported on tax returns, which is a narrower concept of income than National Income. We define income per family instead of per adult. We deflate incomes using the Consumer Price Index instead of the National Income deflator. Over the long-run and in particular since the 1970s, fiscal income per family has grown more slowly than National Income per adult. In Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. "Distributional National Accounts: Methods and Estimates for the United States", Quarterly Journal of Economics, 2018), we have created new distributional statistics consistent with National Accounts. These distributional national accounts statistics are now updated regularly in the project: Blanchet, Thomas, Emmanuel Saez, and Gabriel Zucman. "Real-time Inequality", NBER Working Paper No. 30229, July 2022, and posted online at https://realtimeinequality.org/ These new statistics reconcile in a coherent framework inequality analysis with economic growth analysis, and build upon the individual income tax statistics discussed here.

Earlier Years:

2017-2018: Modest income growth for all groups, no visible effects of the tax cut on pre-tax incomes

In 2018, real average incomes per family have grown by 2.5% relative to 2017 (after a large increase of 4.5% from 2016 to 2017). Bottom 90% incomes grew by 2.7% from 2017 to 2018. Top 10% incomes grew by 2.3% from 2017 to 2018. Therefore, growth was evenly distributed across income groups. By 2018, real incomes of the bottom 99% have now recovered about three quarters of the losses experienced during the Great Recession from 2007 to 2009. Top 1% families captured 45% of total real income growth per family from 2009-2018 (Table 1) but the recovery from the Great Recession now looks somewhat less lopsided than in previous years.

In spite of the new tax cut (Tax Jobs and Cuts Act of 2017), there was great stability in top income shares. It does not look like top earners were able to postpone income from 2017 into 2018, perhaps because the tax cut was passed so late in the year. The sharp drop in the corporate tax rate (from 35% down to 21%) might also have induced some pass-through businesses (partnerships and S-corporations) to incorporate. In this case, business profits are no longer reported on individual tax returns when earned and hence disappear from the individual income statistics we analyse here.[2]

Therefore, income inequality remains extremely high. For example, the top 10% income share is 50.5% in 2018, extremely close to its highest point of 50.6% in 2017 (Figure 1). The 50.6% top 10% income share in 2017 is virtually as high as the absolute peak of 50.6% reached in 2012.[3] The top 1% income share increased from 20.7% in 2016 to 22.0% in 2017 and remained stable at 22.0% in 2018 (Figure 2).

2016-2017: Robust income growth for all groups

In 2017, real average incomes per family have grown substantially by 4.5% relative to 2016 (after a decline of 2.6% from 2015 to 2016).[4] Bottom 99% incomes grew by 2.9% from 2016 to 2017, the best annual growth rate

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[2] Unfortunately, the US tax system does not record ownership of closely held C-corporations. As a result, it is impossible to match corporate profits directly to individual owners to measure incomes fully consistently through the tax reform. This is perhaps the most significant measurement gap for tracking top individual incomes. Various countries, such as Scandinavian countries or Chile have developed the administrative infrastructure to link closely held businesses to owners. The new distributional account statistics recently created by Piketty, Saez, and Zucman (2018) impute corporate profits to individual owners but based on imperfect proxies (as the individual link does not exist).

[3] Top income shares in 2012 were abnormally high due to retiming of income from 2013 to 2012 to avoid the higher top tax rates, which start in 2013 (see below).

[4] This growth rate differs from macro-economic growth in national Income per adult for a number of reasons. We use market income reported on tax returns, which is a narrower concept of income than National Income. We define income per family instead of per adult. We deflate incomes using the Consumer Price Index instead of the National Income deflator. Over the long-run and in particular since the 1970s, fiscal income per family has grown more slowly than National Income per adult. In Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. "Distributional National Accounts: Methods and Estimates for the United States", Quarterly Journal of Economics, 2018), we have created new distributional statistics consistent with National Accounts. The Distributional National Account data are posted online at http://gabriel-zucman.eu/usdina/. This is the only way to reconcile in a coherent framework inequality analysis with economic growth analysis.

since 1999. Top 1% incomes grew even faster by 10.8% from 2016 to 2017. By 2017, real incomes of the bottom 99% have now recovered about three quarters of the losses experienced during the Great Recession from 2007 to 2009. Top 1% families captured 49% of total real income growth per family from 2009-2017 (Table 1) but the recovery from the Great Recession now looks less lopsided than in previous years.

Nevertheless, income inequality remains extremely high. As top incomes have grown faster than middle and bottom incomes, top income shares have continued to increase in 2017 relative to 2016. For example, the top 10% income share increased from 49.5% in 2016 to 50.1% in 2017 (Figure 1). The 50.6% top 10% income share in 2017 is virtually as high as the absolute peak of 50.6% reached in 2012.[5] The top 1% income share increased from 20.7% in 2016 to 22.0% in 2017 (Figure 2).

2013-2015: Robust income growth for all groups

In 2015, real average incomes per family have continued to grow substantially by 3.0% relative to 2014. Bottom 99% incomes grew by 2.9% from 2014 to 2015, the best annual growth rate since 1999. Top 1% incomes grew slightly faster by 3.3% from 2014 to 2015. In 2014 and especially in 2015, the incomes of bottom 99% families have finally started recovering in earnest from the losses of the Great Recession. However, inequality remains very high as top incomes have rebounded strongly in 2014 and 2015 after the 2013 dip due to income retiming caused by the 2013 tax increase at the top (see below).

Hence, the higher top tax rates, which started in 2013, did not prevent broadly shared economic growth from picking up in 2014 and especially 2015. At the same time, they did not have a significant impact on reducing pre-tax income inequality. Their main effect seems to have been a retiming of income from 2013 to 2012 for tax avoidance. This retiming created a spike in top income shares in 2012 followed by a trough in 2013 (Figures 1,2,3). By 2015, top incomes shares are back to their upward trajectory. This suggests that the higher tax rates starting in 2013 will not, by themselves, affect much pre-tax income inequality in the medium-run.

2012-2013: Higher top tax rates temporarily depress top incomes

In 2013, top income shares have fallen relative to 2012. The top 10% income share fell from 50.6% to 48.6%, the top 1% income share fell from 22.8% to 20.0% (Figures 1 and 2). Indeed, top 1% real incomes fell by 14.9% from 2012 to 2013 while bottom 99% average real incomes increased modestly by 0.7%. This modest increase in bottom 99% incomes in 2013 is consistent with Census measures of Household income, which stagnated in 2013.[6] By the end of 2013, the incomes of most American families had hardly recovered from the losses of the Great Recession.

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[5] Top income shares in 2012 were abnormally high due to retiming of income from 2013 to 2012 to avoid the higher top tax rates, which start in 2013 (see below).

[6] See Table A-2 in the official report "Income and Poverty in the United States: 2013", series P60-249, US Census Bureau Current Population Report at http://www.census.gov/content/dam/Census/library/publications/2014/demo/p60-249.pdf

The fall in top incomes in 2013 is due to the 2013 increase in top tax rates (top tax rates increased by about 6.5 percentage points for labor income and about 9.5 percentage points for capital income).[7] The tax change created strong incentives to retime income to take advantage of the lower top tax rates in 2012 relative to 2013 and after. For high income 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. Realized capital gains are particularly easy to retime, explaining why the drop in top income shares in 2013 is more pronounced for series including capital gains than for series excluding capital gains (Figure 1). This retiming inflates 2012 top income shares and depresses 2013 top income shares.[8]

2009-2012: Uneven recovery from the Great Recession

From 2009 to 2012, average real income per family grew modestly by 6.9% (Table 1). However, the gains were very uneven. Top 1% incomes grew by 34.7% while bottom 99% incomes grew only by 0.8% from 2009 to 2012. Hence, the top 1% captured 91% of the income gains in the first three years of the recovery.

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. 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, absent more drastic policy changes.

Great Recession 2007-2009

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[7] 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 for ordinary income and 0.5 percentage points for realized capital gains and dividends in 2013. These higher marginal tax rates affect approximately the top 1%.

[8] Indeed, previous expected top tax rate increases (such as in 1993 for ordinary income and in 1987 for realized capital gains) also produced significant retiming. See Saez, Emmanuel "Taxing the Rich More: Preliminary Evidence from the 2013 Tax Increase," Tax Policy and the Economy, ed. Robert Moffitt, (Cambridge: MIT Press), Volume 31, 2017, 72-120 for a more detailed analysis of the 2013 tax increase.

During the Great Recession, from 2007 to 2009, average real income per family declined dramatically by 17.4% (Table 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 fall in the top 10% 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

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 (https://www.irs.gov/statistics). Those statistics are extremely high quality and final, but come with an almost 2-year lag (statistics for year 2021 incomes have been published in September 2023).

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. 2022 estimates have been updated using filing season tax return statistics posted by IRS in February 2024.

Original Text of "Striking it Richer" updated with 2022 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 pre-tax income share of the top decile since 1917 in the United States. In 2022, the top decile includes all families with market income above $161,000. 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 and even exceeded its pre-war level.

Figure 2 decomposes the top decile into the top percentile and the next 4 percent, and the bottom half of the top decile. 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 to a record high of 27.6 percent by 2021. 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 2022, for example, average real incomes per family grew by only 35% over this 29 year period. However, if one excludes the top 1 percent, average real incomes of the bottom 99% grew only by 20.3% from 1993 to 2022. Top 1 percent incomes grew by 123% from 1993 to 2022. This implies that top 1 percent incomes captured 50% of the overall economic growth of real incomes per family over the period 1993-2022.

The 1993–2022 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) the 2009-2019 recovery, (6) the COVID crisis 2019-2022. 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 2019, average real income per family grew by 16.4% (Table 1) but the gains were uneven. Top 1% incomes grew by 35.8% while bottom 99% incomes grew only by 12.1%. Hence, the top 1% captured 40% of the income gains during this recovery period.

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.[9] 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.[10]

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.

[9] 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.

[10] 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 shown in a separate paper (Kopczuk, Wojciech, Emmanuel Saez, and Jae Song "Earnings Inequality and Mobility in the United States: Evidence from Social Security Data since 1937", Quarterly Journal of Economics 125(1), 2010, 91-128), 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.

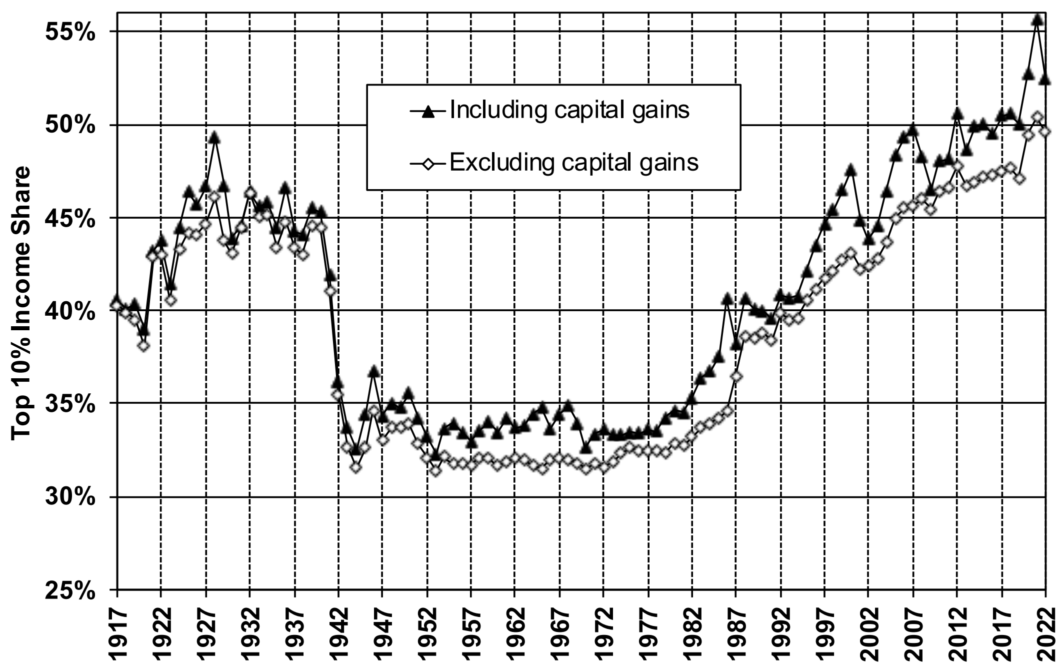

FIGURE 1
The Top Decile Income Share, 1917-2022

Source: Table A1 and Table A3, col. P90-100.
Income is defined as market income (and excludes government transfers).
In 2022, top decile includes all families with annual income above $161,000.

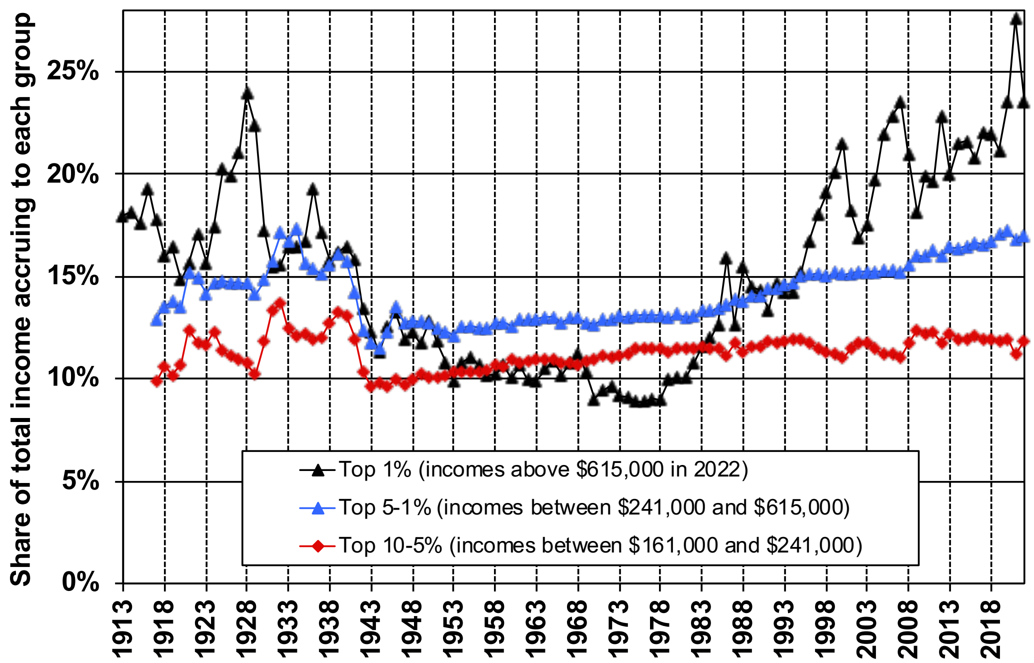

FIGURE 2

Decomposing the Top Decile US Income Share into 3 Groups

Source: Table A3, cols. P90-95, P95-99, P99-100.
Income is defined as market income including capital gains.

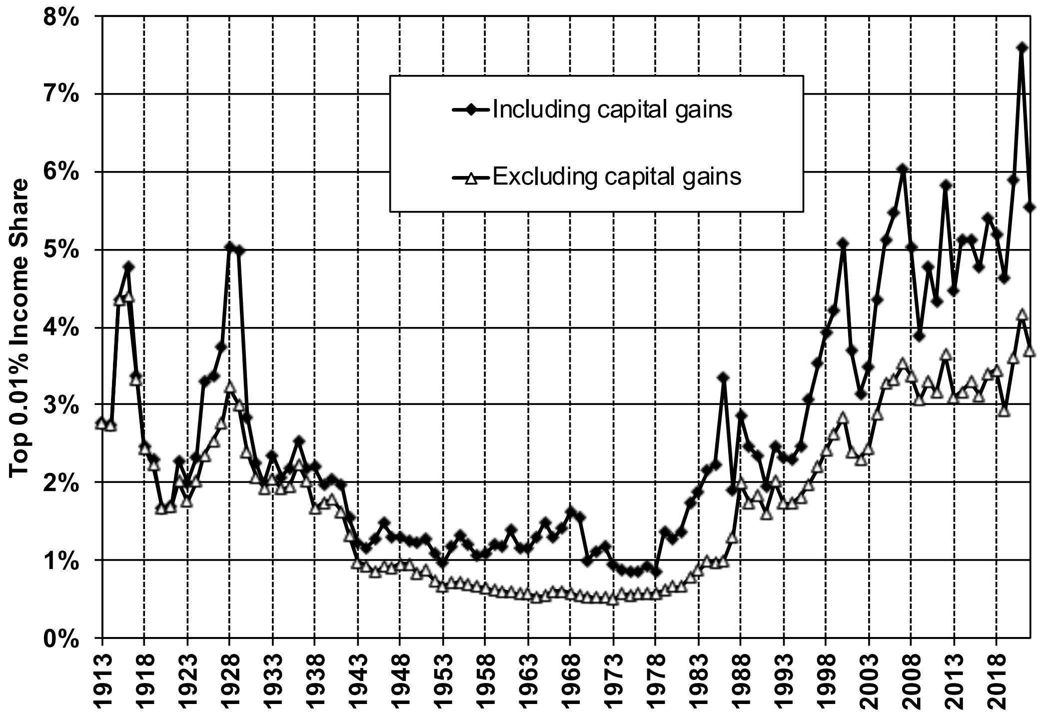

FIGURE 3
The Top 0.01% Income Share, 1913-2021

Source: Table A1 and Table A3, col. P99.99-100.
Income is defined as market income including (or excluding) capital gains.

Table 1. Real Income Growth by Groups

	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 1993-2022	**35.0%**	**123.3%**	**20.3%**	**50%**
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 2009-2019	16.4%	35.8%	12.1%	40%
COVID 2019-2022	4.2%	16.1%	1.0%	81%

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.