
Wealth Concentration: The Unique and Dominant Role of Tax Policy

An IPS Inequality Briefing Paper

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Introduction

Only the most extreme defenders of America's billionaire class contend that wealth concentration is not at least partly a result of tax policy. Logically, reduced tax payments from those at the top compared to the rest of us would cause more wealth to accumulate in the hands of the very rich.

Other factors certainly have played a role. Low- and middle-class incomes have stagnated relative to those in the upper class. Law professor [Tim Wu](#) has shown a direct connection between lax anti-trust enforcement and wealth inequality. A rising stock market also is a factor.

But how does the influence of tax policy on wealth concentration interact with the influence of other factors? Has tax policy, over the last century, been the dominant factor in the country's move from an extremely unequal society to a more egalitarian one and back again? Or are other factors equally or more important?

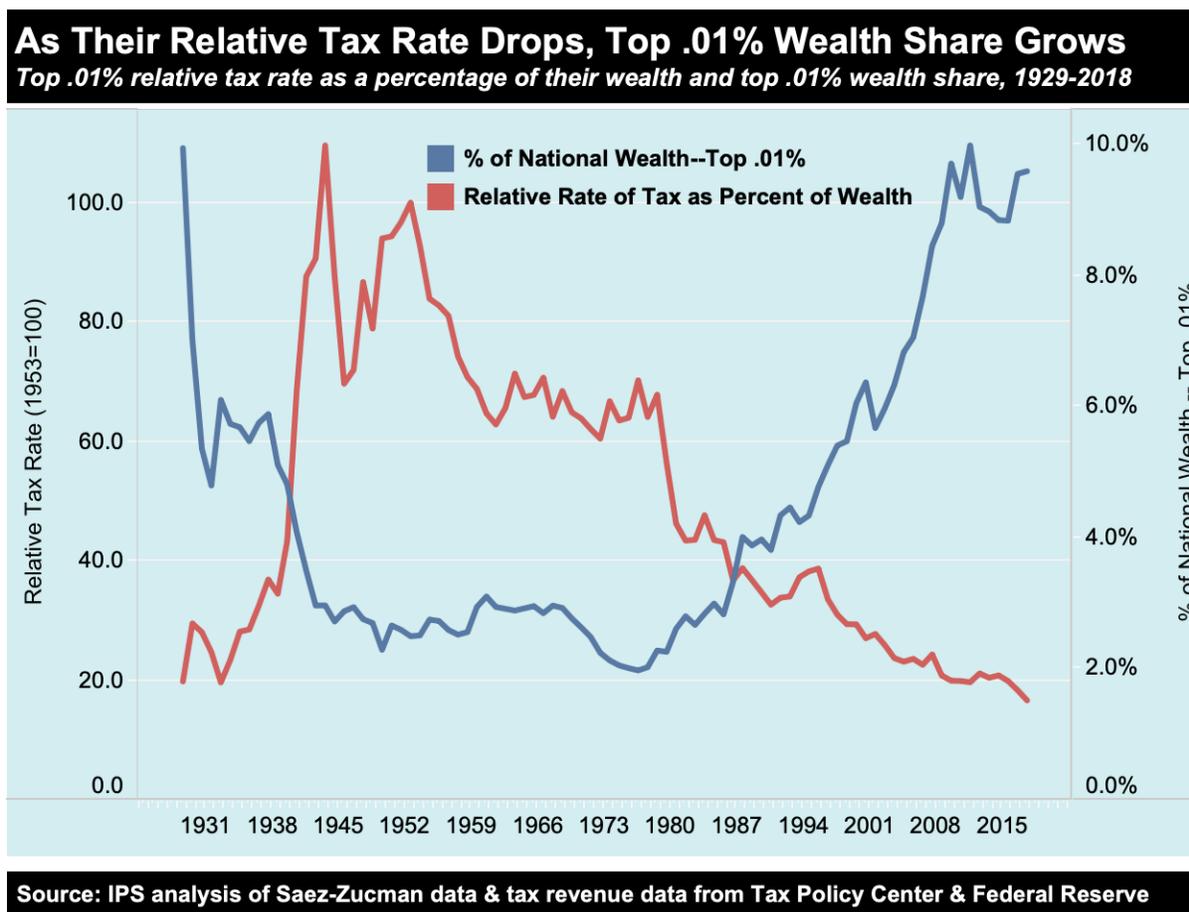
There are no clear answers, at least from our analysis. But we believe our analysis of the relationship between tax payments of the top .01 percent as a percentage of wealth, and the share of American household wealth held by the top .01 percent, indicates that tax policy plays a unique and dominant role in the concentration of wealth. No other factor is as visibly and as directly connected to the concentration of wealth as tax policy.

Key Findings

1. The rate of taxation of the top .01 percent in America, as a percentage of its wealth, decreased by over 83% between 1953 and 2018.
2. Between 1953 and 1979, the rate of taxation of the top .01 percent, as a percentage of its wealth, was at the level required to maintain the wealth share of the top .01 percent at its 1953 level.
3. Between 1953 and 1979, factors such as the minimum wage, antitrust enforcement, and labor organization rates all were far more conducive to a more equal sharing of income and wealth than they are currently; yet, it required a rate of taxation on the top .01 percent four times the current rate simply to keep the wealth share of the top .01 percent in check.
4. Between 1980 and 2018, the rate of taxation of the top .01 percent, as a percentage of its wealth, was over 4 percentage points less than the rate needed to prevent the wealth share of the top .01 percent from concentrating beyond its 1980 level.
5. Absent dramatic changes in federal tax policy, further concentration of the nation's wealth in the top .01 percent, a group whose average wealth is approaching \$1 billion per household, is unavoidable.

Our Methodology and Analysis

Using the methodology we developed in [The Case for a U.S. Wealth Tax](#), which we've included here as Appendix I, we estimated the change in tax payments as a percentage of wealth for the top .01 percent throughout the period 1929 to 2018.



View an interactive version of this chart at <https://inequality.org/tax-policy-wealth-concentration-chart/>

We did not attempt to determine the percentage of wealth paid in tax by the top .01 percent for any period. Instead, we estimated the change in the tax payments, as a percentage of wealth, compared to 1953, which we chose as the base year. We did so because 1953 made for an obvious reference point, as it is the year when taxes paid by the top .01 percent, as a percentage of wealth, stopped trending upward, as they had for 24 years with one exception,¹ and started a 55-year downward trend. 1953 also was a temporary low point in the wealth share of the top .01 percent. Ultimately, however, the wealth share of the top .01 percent bottomed out in the 1970s at a slightly lower level.

There is a benefit to estimating relative changes in tax paid as a percentage of wealth from year-to-year, without attempting to determine an actual percentage of wealth paid in tax by any

subgroup of the population in any one year. The available data is broken into subgroups of the population by income and by wealth, but specific data on tax paid generally is not available for a given wealth subgroup. The income share of the top .01 percent by income has been estimated by Emmanuel Saez, Gabriel Zucman and others, as has the wealth share of the top .01 percent by wealth. Although the two overlap considerably, the composition of the top .01 percent by income is not identical to the composition of the top .01 percent by wealth. For example, young, very highly paid athletes may be in the top .01 percent by income, but likely would not make the top .01 percent by wealth due to their lack of an opportunity to convert their incomes into accumulated wealth.

Consequently, the tax payments of the top .01 percent by income would not necessarily be a reliable estimate of the tax payments of the top .01 percent by wealth. But the overlap in membership of the two groups is such that the relative changes of the income share and the tax rate, by income, of the top .01 percent by income should be a reasonable estimate of the relative changes applicable to the top .01 percent by wealth. For example, if the income share of the top .01 percent by income increased by 10% over a given period, 10% would be a reasonable estimate of the increase in the income share of the top .01 percent by wealth. Similarly, if the tax rate, by income, of the top .01 percent by income decreased by 20% over that period, 20% would be a reasonable estimate of the decrease in the tax rate, by income, of the top .01 percent by wealth.

Although our methodology is helpful in identifying multi-year trends, the calculations for any one calendar year do not necessarily paint an accurate picture of the rate of taxation as a percentage of wealth for that year. Tax revenue for a given year is not necessarily collected in the year the incidence of taxation occurs. For example, income tax revenues often are realized in the year following a taxpayer's receipt of income. Estate taxes typically are paid nine months after a person dies. This mismatching of tax payments and taxable events, however, becomes insignificant over the long term.

We considered the impact of non-tax factors in our analysis, including: (1) stock market performance; (2) recessions; (3) antitrust policy and enforcement; (4) the minimum wage; (5) rate of GDP growth; (6) changes in the relationship between aggregate household wealth and GDP; (7) the relationship between productivity and wages, as analyzed by the Economic Policy Institute; (8) the sharing of corporate profits between capital and labor; (9) union membership; and (10) trends in executive compensation. Our consideration of those factors was largely qualitative in nature, to add context to our comparison of the wealth share of the topmost groups to the tax payments of those groups as a percentage of wealth.

To corroborate our conclusions regarding the trend in taxation of the top .01 percent, we estimated the difference between the rate of growth of aggregate American household wealth and the rate of growth of the wealth of the top .01 percent. As explained below, this is a straightforward computation. It provides an alternative means of measuring the adequacy of taxation of the top .01 percent as a percentage of wealth to prevent the concentration of wealth.

Finally, we note that our methodology is intended to provide only an estimate, perhaps a rough estimate, of the overall trend in taxation of America's wealthiest households and its relationship to the concentration of wealth. It should not be relied upon as a precise measure of tax payments by America's top .01 percent.

Our Data

With the exception of statistics for federal and state level tax revenues, we relied entirely on the data sets developed by Emmanuel Saez and Gabriel Zucman,² which they have generously made available for public use. Without those data sets, the analysis in this briefing paper would not have been possible.

Why Tax as a Percentage of Wealth?

Thomas Piketty eloquently and succinctly explained in *Capital in the Twenty-First Century* that the essence of wealth concentration is the simple equation, $r > g$, where r is the return on wealth for a topmost segment of the population, and g is the rate of growth in the economy, which historically has approximated the rate of growth of national wealth. In recent decades, however, the two rates have diverged, with national wealth growing at a rate considerably higher than the rate of economic growth. For purposes of this paper, we'll use g to refer to the rate of growth of national wealth.

The relevance of taxation to wealth concentration, then, is its impact on r . That impact is a function only of tax payments as a percentage of wealth. Specifically, $r = R - t$, where R is the pretax return on wealth and t is the rate of tax as a percentage of wealth. As can be seen from the equation, r and t bear a direct inverse relationship. Keep in mind that R must take into account consumption. So, for example, if a household starting the year at \$100 million in wealth sees its investment portfolio increase by \$6 million while it spends \$2 million, R would be 4%, or .04.

If we assume that the pre-tax return on wealth, R , is greater than g , then $r > g$ can be restated as follows:

$$r > g \Rightarrow$$

$$R - t > g \Rightarrow$$

$$t < R - g$$

In other words, underlying America's wealth concentration over the past four decades is a rate of tax on wealth applicable to the wealthiest members of society that has been less than $R - g$. For example, if the rate of national wealth growth over those years were 3% and the pre-tax return on wealth for the nation's wealthiest members were 6%, we know that t would have been less

than 6% - 3%, or 3%. Of course, the size of the differential between t and $R-g$ would determine the rate of wealth concentration.

The relationship between r and g dictates the rate of concentration of the wealth share of a topmost group. Specifically, the wealth share of the top .01 percent at the end of a period will be equal to its wealth share at the beginning of the period multiplied by $1+r / 1+g$ for that period. Put another way, if w is the wealth share of the top .01 percent, then

$$w_{\text{end}}/w_{\text{start}} = 1+r/1+g \text{ or, stated another way, } w_{\text{end}} = w_{\text{start}} * 1+r/1+g$$

For example, if the share of the top 1 percent of the country's wealth at the beginning of a period were 30%, and the after-tax return on their wealth during the period was 6% while the country's total wealth grew at 3%, the wealth share of the top 1 percent at the end of the period would be $30\% * 1.06/1.03$, or 30.87%.

Finally, over a period of n years, if the annual rates of growth of wealth of the top .01 percent and the entire population are r and g , respectively, then

$$w_{n+1}/w_1 = [1+r/1+g]^n$$

Because the Saez-Zucman data includes national wealth figures and the wealth share of the top .01 percent, we can compute g and w_{n+1}/w_1 for a given period, which allows us to compute r and, therefore, $R-t$ for that period.

A comparison of the relative rate of tax on wealth between 1929 and 2018, and comparing it to the wealth share of the top .01 percent over the same period, indicates the level of taxation needed to avoid a sustained period during which $t < R-g$ and the ever-worsening concentration of wealth that occurs when that is the case.

1929 to 1953; The Inverse Relationship Between Taxation and Wealth Concentration as Inequality Trends Lower

The period between 1929 and 1953 included both the Great Depression and World War II. Consequently, only very general conclusions can be drawn from the data for that period.

That said, the relationship between the rate of tax as a percentage of wealth and the share of wealth held by the top .01 percent during that period is evident. In 1929, the top .01 percent held 9.9% of the nation's wealth while paying tax as a percentage of wealth just under 20% of what it would pay in 1953. As that relative rate of tax as a percentage of wealth increased from 20% to 100% of the 1953 rate, the wealth share of the top .01 percent plummeted from 9.9% to 2.5%, nearly a 75% decline.

Bear in mind that even after that decline households lucky enough to be in the top .01 percent remained exorbitantly wealthy. With a wealth share of 2.5%, the average wealth of households in that group was 2500 times the wealth of the average American household. Today, that would represent a fortune of about \$200 million.

1953 to 2018; The Not Entirely Inverse Relationship Between Taxation and Wealth Concentration as Inequality Trends Higher

The data for the period from 1953 to 2018 brings the nature of the inverse relationship between taxation and wealth concentration into sharper focus.

Overall, the changes in the rate of taxation on wealth and the wealth share of the top .01 percent during the 65 years between 1953 and 2018 were a near exact reversal of the changes that occurred during the preceding 24-year period. Specifically, the relative rate of taxation of wealth of the top .01 percent rose from 19.8% to 100% of the 1953 rate between 1929 and 1953, then fell back from 100% to 16.6% of the 1953 rate between 1953 and 2018, while the wealth share of the top .01 percent fell from 9.9% to 2.5% between 1929 and 1953, then rose back from 2.5% to 9.6% between 1953 and 2018.

If the period between 1953 and 2018 is broken into two periods, 1953 to 1979 and 1980 to 2018, however, the data suggests that the rate of taxation on wealth was not the overriding factor influencing wealth concentration until it fell substantially below its 1953 level.

Between 1953 and 1979, the relative rate of tax on the wealth of the top .01 percent fell overall but was relatively stable at above 60% of the 1953 rate for the bulk of the period, standing at 68.8% of the 1953 rate in 1960 and at 67.8% of the 1953 rate in 1979. During that same period, the wealth share of the top .01 percent showed no clear trend. Between 1953 and 1968, the wealth share of the top .01 percent increased, as would be expected, given that the relative rate of wealth taxation during that period declined from 100% to 64.1% of the 1953 rate. But that wealth share increase was minimal, from 2.5% in 1953 to 3.0% in 1968.

Between 1968 and 1979, the rate of taxation on the wealth of the top .01 percent was relatively stable, staying within a few percentage points of 64% of the 1953 rate. During that period, the wealth share of the top .01 percent decreased, from 3.0% in 1968, bottoming out at 2.0% in 1978, and increasing back up to 2.3% in 1979.

However, the relative rate of taxation of the wealth of the top .01 percent fell to 56.4% of the 1953 rate in 1980, then 46.2% of the 1953 rate in 1981, and ultimately declined to 16.6% of the 1953 rate in 2018. Put another way, the tax payments of the top .01 percent, as a percentage of wealth, fell by over 75% between 1979 and 2018. The overall decline from 1953 to 2018 was a decrease of over 83%.

A look at stock market fluctuations alongside changes in the relative rate of wealth taxation of the top .01 percent is illuminating. Because the share of the top .01 percent in the nation's stock market wealth is disproportionate to its share of other wealth, a sharply rising or falling stock market will drive the share of the nation's total wealth held by the top .01 percent higher or lower, all other factors being equal.

The performance of the stock market between 1953 and 1979 clarifies the relationship between the relative rate of wealth taxation and the wealth share of the top .01 percent in the two sub-periods, 1953 to 1968 and 1968 to 1979. Between 1953 and 1968, the stock market rose consistently, with roughly a tripling in market value between 1953 and 1968, while home values, the primary source of wealth for those of lesser wealth, rose at a far slower rate. During that period, the wealth share of the top .01 percent rose from 2.5% to 3.0%. Thus, between 1953 and 1968, the decreasing level of taxation, as a percentage of wealth, on the top .01 percent allowed the wealth share of the top .01 percent to move higher. But that rising wealth share seemed to be driven more by stock market gains flowing disproportionately to the top .01 percent, and perhaps other factors, than by the rate of taxation as a percentage of wealth. If anything, the rate of taxation as a percentage of wealth on the top .01 percent during that period, although down a bit from its 1953 high, seemed to have the effect of keeping in check what otherwise might have been a larger increase in the wealth share for the top .01 percent.

Between 1968 and 1979, the stock market stagnated, with virtually no net movement from the beginning to the end of that period. During that period, the rate of taxation on the wealth share of the top .01 percent was stable, never varying much from its 1968 level of 64.1% of the 1953 rate and standing at 67.8% of the 1953 rate in 1979. Those were about the same levels at which it stood for the final 10 years of the 1953 to 1968 period. The wealth share of the top .01 percent took a significant turn downward, reaching 2.0% in 1975, the lowest point in the 89-year period we reviewed. It remained there until 1978, before increasing to 2.3% in 1979.

Thus, although the rate of taxation on wealth of the top .01 percent was about one-third less than the 1953 rate during the 1968-1979 period, the wealth share of the top .01 percent nonetheless contracted. In all likelihood, the poor performance of the stock market and other factors contributed more to that contraction. Still, the rate of taxation of the wealth of the top .01 percent was at a level which, with the contribution of other factors, could deconcentrate the nation's wealth.

What is the impact, then, of especially high levels of taxation as a percentage of wealth? The period between 1946 and 1959 sheds some light on this. During that period, the rate of taxation on the wealth of the top .01 percent stayed consistently above 70% of the 1953 rate, rising steadily between 1946 and 1953 and falling steadily between 1953 and 1959. The stock market performed exceptionally well during that period, with the Dow Jones average approximately quadrupling during that period. That performance is roughly comparable to the bull markets of the 1990s and 2010s.

Despite the exceptional performance of the stock market during the 1946 to 1959 period, the wealth share of the top .01 percent actually fell slightly, from 2.9% in 1946 to 2.6% in 1959. That decrease is not statistically significant, but the lack of any increase during that period suggests that a rate of taxation of wealth between 70% and 100% of the 1953 rate would have a deconcentrating effect when the stock market and other factors are at historical norms.

After 1979, the relative rate of taxation of wealth of the top .01 percent took a marked turn downward, currently standing at 16.6% of the 1953 rate, the lowest level during the 89-year period we reviewed. During that same period, the wealth share of the top .01 percent skyrocketed, more than quadrupling from 2.3% in 1979 to 9.6% in 2018. Throughout the period there was no sub-period of sustained decline. While short-term fluctuations in the economy may cause the process to pause for a year or two, the increasing concentration of America's wealth under tax policies that have been in place for the past 40 years seems inevitable.

To be sure, other factors have contributed to the inexorable concentration of the country's wealth since 1980. Antitrust enforcement policy changed dramatically since 1980, allowing corporations to increase market share and market power. The minimum wage failed to keep pace with inflation. As the [Economic Policy Institute has shown](#), the paths of productivity and workers' wages began to diverge in 1980. Historically, workers' wages and productivity had increased at close to the same rate. Subsequent to 1980, however, productivity continued its historically upward trend, but workers' wages stagnated. Those changes undoubtedly drove a larger share of the nation's income and ultimately its wealth to the top .01 percent.

Nonetheless, the data from the pre-1980 period for the top .01 percent demonstrates that even in the absence of other contributing factors, tax policy since 1980 made concentration of wealth in America unavoidable.

During the 1953 to 1979 period, non-tax factors that impact economic equality were historically favorable towards the working and middle classes. The inflation-adjusted minimum wage has never been higher than during the 1956-1979 period. Wage increases kept pace with productivity increases throughout the entire period. The ratio of executive pay to worker pay was a fraction of its current level.

Yet, despite those historically favorable economic conditions, a rate of taxation of the top .01 percent, as a percentage of wealth, at or above 60% of the 1953 rate throughout the 1953-1979 period was needed to keep the wealth share of the top .01 percent in check. The wealth share of the top .01 percent barely moved from the beginning to the end of the period.

Which means that during the 1953-1979 period, $r \approx g$ and, in order for that relationship to hold, $t \approx R-g$ or, put another way, $R-t-g \approx 0$. Indeed, during that period, $R-t-g$ stood at a negative 0.4%. The difference between $R-g$ and t during that period was minimal, with t exceeding $R-g$ by less than half a percentage point. That slight excess of t over $R-g$ caused the wealth share of the top .01 percent to contract slightly between 1953 and 1979, from 2.5% to 2.3%.

Had the rate of taxation on the wealth of the top .01 percent during that period been substantially less than 60% of the 1953 rate, then t would have been less than $R-g$, resulting in $r > g$, and an increase in the wealth share of the top .01 percent.

The relationship between r and g after 1980 is an entirely different story. Between 1980 and 2018, the excess of t over $R-g$ was 4.1 percentage points. The ratio $1+R-t/1+g$ during that period, the annual rate of increase of the wealth share of the top .01 percent, was 1.0388. Each year during that period, on average, the wealth share of the top .01 percent was nearly 3.9% higher than it was the year before.

Thus, even if the non-tax conditions impacting wealth concentration had not turned to favor the wealthy subsequent to 1980, the wealth share of the top .01 percent almost certainly would have increased. Yes, it would have increased at a slower pace, but ultimately, we could reach the same level of wealth concentration. It would just take longer. For example, with the ratio of $1+r/1+g$ at 1.0388, the ratio that existed during the 1980 to 2018 period, it will take a little more than 18 years for the top .01 percent to double its share of the nation's wealth. If non-tax factors are less favorable to those in the top .01 percent, such that the ratio $1+r/1+g$ is only 1.023 year-in and year-out, the wealth share of the top .01 percent still will double. It will just take longer, a little over 30 years.

The nature of the tax policy changes made subsequent to 1979 also suggests that even if the non-tax factors influencing wealth concentration prior to 1980 had not changed in the 1980 to 2018 period, the increasing wealth share of the top .01 percent and other topmost groups over the past 40 years was unavoidable. Since 1980, American tax policy has increasingly favored wealth over work.³ Among other things,

- (1) The maximum rate of income tax on dividends was substantially higher than the maximum rate of income tax on wages in 1980 but by 2003 was substantially lower than the maximum rate of income tax on wages and has remained so since that time.
- (2) The exemption from estate tax has increased from \$322,000 for a married couple in 1980 to almost \$23 million in 2018.
- (3) The rate of tax on corporate income in 2018 was less than half the 1980 rate.
- (4) The reach of the social security tax, a tax on wages, has expanded substantially. In 1980, both the employer and employee portions of the tax were limited to the first \$25,900 of wages paid to a worker. In 2018, that limit had increased to the first \$128,400 of wages. To be sure, a substantial part of that increase can be attributed to inflation. But not all of it.

The foregoing changes explain how taxation of the top .01 percent has plummeted as precipitously as it has since 1980.

Conclusion: The Taxation of America's Wealthy Has Fallen Far Too Low to Prevent the Concentration of Wealth

Only the most general of conclusions can be drawn from our comparison of the wealth share of the top .01 percent to their rate of taxation as a percentage of wealth.

That said, our analysis shows that the taxation of the top .01 percent by wealth in the U.S. has reached a rate, as a percentage of their wealth, so anemic that concentration of wealth at the pinnacle of American society is unavoidable. To be sure, other factors influence the wealth share of the top .01 percent. But the cumulative impact of those factors seems to have been limited over time. Between 1953 and 1979, factors such as the minimum wage, antitrust enforcement, and labor organization rates all were far more conducive than they currently are to a more equal sharing of income and wealth. Yet it required a rate of taxation on the top .01 percent four times the current rate simply to keep the wealth share of the top .01 percent in check.

That takes us back to Piketty and $r > g$ or, as we re-framed it, $t < R - g$. To be sure, R and g both vary over time. Non-tax factors may cause the gap between R and g to widen or narrow from year to year, causing $R - g$ to fluctuate. In volatile economic times, $R - g$ even has sunk below zero for short periods. But over longer periods, $R - g$ has throughout history remained a positive number, such that there is a minimum level of taxation of the top .01 percent, as a percentage of wealth, that must be sustained in order to prevent the wealth share of the top .01 percent from increasing.

In order to keep the wealth share of the top .01 percent in check, the tax rate, t , must be approximately equal to $R - g$ over the long term. Without knowing what t actually was during the 1953 – 1979 period, we know that it was almost exactly equal to $R - g$, the difference being only .4 percentage points.

During the 1980 – 2018 period, however, the shortfall between t and $R - g$ exploded to 4.1 percentage points. During that period, the after-tax rate of wealth growth of the top .01 percent was over 10% per year, while national wealth grew at a rate of just over six percent per year. The tax payments of the top .01 percent during that period, as a percentage of their wealth, were a full 4 percentage points less than the level that would have kept their wealth share at its 1980 level.

All of which means that unless the rate at which the top .01 percent is taxed is raised dramatically from its current level, further concentration of wealth in that group, the average wealth of which is approaching \$1 billion per household, will be unavoidable.

We don't know, from our analysis, the level of taxation of the top .01 percent needed to prevent further concentration of the nation's wealth in that group; but, based on our comparison of the current rate at which the top .01 percent is taxed to the level at which they were taxed before 1980, we conclude that a substantial increase from the rate at which the top .01 percent currently is

taxed as a percentage of its wealth -- at least a 4 percentage point increase and ideally a quadrupling of the current rate -- will be required to prevent further concentration of America's wealth.

APPENDIX: ESTIMATING THE REDUCTION IN TOP .01 PERCENT TAX BURDEN AS A PERCENTAGE OF TOP .01 PERCENT WEALTH

Recent studies by Saez and Zucman allow us to estimate the change in the tax burden on members of the Top .01 Percent as a percentage of their wealth. But making these estimates requires that we follow an indirect and somewhat convoluted path.

Throughout the analysis, the following abbreviations will be used:

C = Current (2018)

P = Past (1953)

W = Wealth

T = Tax

R = Ratio

r = effective rate of total tax on income

EP = Entire Population

01 = Top .01 percent

From available data, we can estimate the ratio of the rate of total tax, as a percentage of wealth, for the entire population in 1953 to the rate today. Let's call that the "Current to Past Wealth Tax Ratio," or $CPWTR_{EP}$.

We have a fairly clear idea of what has happened to tax receipts as a percentage of wealth during the 1953 to 2018 period. Between 1953 and 2018 federal tax receipts increased from [\\$69.6 billion to \\$3.33 trillion](#). That rates as a 48-fold increase. Similarly, state and local tax receipts increased from [\\$21.1 billion in 1953 to \\$1.80 trillion in 2018](#), an 85-fold increase. During that same period, the country's aggregate wealth increased about 84-fold, [from approximately \\$1.06 trillion to approximately \\$88.66 trillion](#).

Which means that federal, state and local taxes paid by Americans as a percentage of wealth amount to about 67.6 percent of their total in 1953. In 1953, tax receipts stood at about 8.56 percent of total wealth, in contrast to 2018 when tax receipts represented 5.79 percent of total wealth.

We know that if we multiply the $CPWTR_{EP}$ by the ratio of the $CPWTR$ for the Top .01 Percent, $CPWTR_{01}$, to $CPWTR_{EP}$, we arrive at the current to past wealth tax ratio for the Top .01 Percent. That relationship is expressed formulaically as:

$$CPWTR_{EP} * (CPWTR_{01} / CPWTR_{EP}) = CPWTR_{01}$$

We can substitute for $CPWTR_{EP}$ in the first place it appears (but not the second), what we know to be its value: 63.1 percent. That leaves us with the following:

$$67.6\% * (CPWTR_{01} / CPWTR_{EP}) = CPWTR_{01}$$

The data to calculate $CPWTR_{01}$ directly is not available, but we can estimate that ratio indirectly by determining $CPWTR_{01} / CPWTR_{EP}$ from available data.

We know that $CPWTR_{01}$ reflects the current ratio of tax burden to wealth for the Top .01 Percent divided by the ratio in 1953 of tax burden to wealth for the Top .01 Percent:

$$(T_{01}^{2018} / W_{01}^{2018}) / (T_{01}^{1953} / W_{01}^{1953}) \text{ or}$$

$$T_{01}^{2018} * W_{01}^{1953} / W_{01}^{2018} * T_{01}^{1953}$$

$$\text{Similarly, } CPWTR_{EP} = (T_{EP}^{2018} / W_{EP}^{2018}) / (T_{EP}^{1953} / W_{EP}^{1953}), \text{ or } T_{EP}^{2018} * W_{EP}^{1953} / W_{EP}^{2018} * T_{EP}^{1953}$$

Putting all that together then, $CPWTR_{01} / CPWTR_{EP} =$

$$\frac{T_{01}^{2018} * W_{01}^{1953} * W_{EP}^{2018} * T_{EP}^{1953}}{W_{01}^{2018} * T_{01}^{1953} * T_{EP}^{2018} * W_{EP}^{1953}}$$

$$W_{01}^{2018} * T_{01}^{1953} * T_{EP}^{2018} * W_{EP}^{1953}$$

The factors comprising the ratio can be reordered as the product of four ratios:

$$\frac{W_{01}^{1953}}{W_{EP}^{1953}} * \frac{W_{EP}^{2018}}{W_{01}^{2018}} * \frac{T_{01}^{2018}}{T_{EP}^{2018}} * \frac{T_{EP}^{1953}}{T_{01}^{1953}}$$

Focus on the first two factors. The first ratio simply gives us the wealth share of the Top .01 Percent in 1953. The second factor is the inverse of the current wealth share of the Top .01 Percent. The product of those two factors is the ratio of the wealth share of the Top .01 Percent in 1953 to the current wealth share of the Top .01 Percent. That's available from the Saez-Zucman data: 2.5/9.6, or 1/3.84.

So we know the product of the first two factors in the ratio is 1/3.84. This means the equation for the current to past wealth tax ratio for the Top .01 Percent can be reduced to:

$$67.6\% * 1/3.84 * (T_{01}^{2018}/T_{EP}^{2018}) * (T_{EP}^{1953}/T_{01}^{1953})$$

Turning to the final two factors, the third factor represents the current “tax share” of the Top .01 Percent — that is, the share of the country’s tax burden borne by the Top .01 Percent in 2018. The fourth factor is the inverse of the tax share of the Top .01 Percent in 1953. The product of those two factors, then, is the ratio of the current tax share of the Top .01 Percent to the tax share of the Top .01 Percent in 1953.

The data provided to us by Saez and Zucman allow us to estimate this ratio.

The current tax share of the Top .01 Percent is the ratio of the product of current tax rate (on income) of the Top .01 Percent (r_{01}^{2018}) and the current income share of the Top .01 Percent (IS_{01}^{2018}) to the product of the current tax rate of the entire population (r_{EP}^{2018}) and the current income share of the entire population, which we know to be 100 percent, or 1.0. That ratio is expressed formulaically as follows:

$$(r_{01}^{2018} * IS_{01}^{2018}) / (r_{EP}^{2018} * 1.0) = \text{Tax Share}_{01}^{2018}$$

The tax share of the Top .01 Percent in 1953 is the ratio of the product of the 1953 tax rate of Top .01 Percent (r_{01}^{1953}) and the 1953 income share of the Top .01 Percent, IS_{01}^{1953} to the product of the 1953 tax rate of the entire population (r_{EP}^{1953}) and the 1953 income share of the entire population, which we also know to be 100 percent, or 1.0. That ratio is expressed formulaically as follows:

$$(r_{01}^{1953} * IS_{01}^{1953}) / (r_{EP}^{1953} * 1.0) = \text{Tax Share}_{01}^{1953}$$

The ratio of the current tax share of the Top .01 Percent to the tax share of the Top .01 Percent in 1953 thus is expressed formulaically as:

$$(r_{01}^{2018}/r_{01}^{1953}) * (IS_{01}^{2018}/IS_{01}^{1953}) * (r_{EP}^{1953}/r_{EP}^{2018})$$

The [Saez and Zucman](#) analysis provides the tax rates in the formula. According to Saez and Zucman, the total tax rate of the Top .01 Percent (by reported income) currently is 29.4 percent of income,⁴ a rate we can assume extended to America’s Top .01 Percent by wealth. The total tax rate of the Top .01 Percent in 1953, according to Saez and Zucman, was about 64.3 percent of income.⁵ The total tax rate paid by the entire population currently is 27.7 percent of income.⁶ The total tax rate paid by the entire population in 1953 was 26.2 percent.⁷

According to [Saez and Zucman](#), the income share of the Top .01% by income was 2.1% in 1953 and 4.6% in 2018. The ratio of the Top .01 Percent income share in 2018 to the Top .01 Percent income share in 1953 therefore is 4.6/2.1, or 2.19.

The ratio of the current tax share of the Top .01 Percent to the tax share of the Top .01 Percent in 1953 thus reduces to:

$$(29.4\%/64.3\%) * 2.19 * (26.2\%/27.7\%) = .947$$

We now can estimate the Current to Past Wealth Tax Ratio of the Top .01 Percent as follows:

$$CPWTR_{01} = 67.6\% * 1/3.84 * .947 = 16.6\%$$

We estimate, as a result, that the rate of tax paid by members of the Top .01 Percent as a percentage of their wealth is 16.6 percent of what it was in 1953. Put another way, the Top .01 Percent has enjoyed a cut of over 83 percent in the rate at which its wealth is taxed.

The analysis here rests on some imprecise assumptions. For example, the change in the income share of the Top .01 Percent by wealth may not match exactly the change in the income share of the Top .01 Percent by income.

But given the enormity of the reduction in the taxation of Top .01 Percent wealth, the imprecision does not meaningfully detract from the conclusion reached.

¹ Taxes paid by the top .01 percent were highest, as a percentage of wealth, in 1944. However, that appears to be a statistical anomaly, likely related to World War II.

² See [SZ2019AppendixFigures](#); [SZ2019MainFigures](#); and [SZ2019AppendixTables](#)

³ See [Trump Tax Plan Taunts the Dignity of Labor \(Lord, Bob and Pizzigati, Sam; Dallas Morning News 2017\)](#)

⁴ See <https://eml.berkeley.edu/~saez/SZ2019AppendixTables.xlsx> Table B1

⁵ See <https://eml.berkeley.edu/~saez/SZ2019AppendixTables.xlsx> Table B1

⁶ See <https://eml.berkeley.edu/~saez/SZ2019AppendixTables.xlsx> Table A3

⁷ See <https://eml.berkeley.edu/~saez/SZ2019AppendixTables.xlsx> Table A3