

OPA for Wealth Tax

07 March, 2019

1 - Policy choices

The wealth tax applies to net worth (sum of all assets net of debts) above \$50 million dollars, and follows the following structure:

Bracket (millions of \$)	Marginal Tax Rate (%)
10	0
25	0
50	2
100	2
250	2
500	2
1000	3

Household net worth above \$50 million would be taxed at 2%. Any wealth over \$1 billion would be taxed an additional 1% (a billionaire surtax).

2 - Compute tax avoidance elasticity

To calculate the tax revenue from this wealth tax, the extent of wealth tax evasion/avoidance is estimated based on recent research. Recent research shows that the extent of wealth tax evasion/avoidance depends crucially on loopholes and enforcement. The tax-avoidance elasticity is computed as the average elasticity from four studies. The table lists the four studies and the avoidance/evasion response to a 1% wealth tax.

Authors	Year	paper	Publisher	Avoidance/evasion response
Seim, David	2017	"Behavioral Responses to an Annual Wealth Tax: Evidence from Sweden"	American Economic Journal: Economic Policy, 9(4), 395-421	0.5
Jakobsen, Kristian, Katrine Jakobsen, Henrik Kleven and Gabriel Zucman.	2018	"Wealth Accumulation and Wealth Taxation: Theory and Evidence from Denmark"	NBER working paper No. 24371	0.5
Londono-Velez, Juliana and Javier Avila.	2018	"Can Wealth Taxation Work in Developing Countries? Quasi-Experimental Evidence from Colombia"	UC Berkeley working paper	2-3
Brülhart, Marius, Jonathan Gruber, Matthias Krapf, and Kurt Schmidheiny.	2016	"Taxing Wealth: Evidence from Switzerland"	NBER working paper No. 22376, 2016	23-34

Seim (2017) and Jakobsen et al. (2018) obtain small avoidance/evasion responses in the case of Sweden and Denmark, two countries with systematic third party reporting of wealth: a 1% wealth tax reduces reported wealth by less than 1%. Londono-Velez and Avila (2018) show medium avoidance/evasion responses in the case of Colombia where enforcement is not as strong: a 1% wealth tax reduces reported wealth by about 2-3%. The study for Switzerland, Brülhart et al. (2016) is an outlier that finds very large responses to wealth taxation in Switzerland: a 1% wealth tax lowers reported wealth by 23-34%. This extremely large estimate is extrapolated from very small variations in wealth tax rates over time and across Swiss cantons and hence is not as compellingly identified as the other estimates based on large variations in the wealth tax rate. Switzerland has no systematic third party reporting of assets which can also make tax evasion responses larger than in Scandinavia.

The final 16% tax avoidance/evasion response to a 2% wealth tax was computed as an average across these four studies $(2\% \cdot (0.5 + 0.5 + 2.5 + 28.5) / 4)$

3 - Data Sources

Three data sources were used in this analysis:

- Survey of Consumer Finances (SCF) from the Federal Reserve Board. Latest year available: 2016.
- Distributional National Accounts (DINA): estimates wealth by capitalizing investment income from income tax returns. Latest year available: 2019.
- Forbes 400: provides the best estimate of billionaires in the US. Last year available: 2018.

3.1 Data cleaning

From each data set three variables were extracted: **networth** that contain information on wealth, **weights** represents the number of households that each observation represents and **data** which tracks the data of origin.

The following transformations were applied to the data:

- Each observation in DINA is aggregated into groups of 5 observations to anonymize the data.
- SCF was aged by inflating the number of households and wealth uniformly to match the aggregate projections for population and total household wealth from the Federal Reserve Board. After that, SCF wealth was scaled to match the total of DINA minus the wealth of Forbes (to prevent double counting of wealth).
- After combining (appending) all three data sources, the population weights of SCF and DINA were combined by taking the average.

The total household net worth projection is \$94 trillion for 2019 (the SCF records a total household net worth of \$87 trillion in 2016).

3.2 Generating Percentiles and micro-percentiles

In this section, the microdata generated before (**wealth.dta**) is aggregated into percentiles and fractions of a percentile. The final analytic file contains: percentile or fraction of percentile (**gperc**), number of households in that group (**nb**), lowest level of wealth in that group (**thres**) and average level of wealth in that group (**avg**)

4 - Number of affected households and their total tax base

To compute the relevant universe the evasion parameter of 16% is applied to both the threshold and the average wealth of each percentile (and fraction of a percentile)

In 2019, there would be around 63000 households liable to the wealth tax (78000 before accounting for avoidance). This would be less than 0.05% of the 130 million US households in 2019.

4.1 - 2% tax to all wealth above \$50 millions

The 62589 households with assests above \$50 million dollars would have a total taxable wealth (above the \$50m each) of \$8.9 trillion, i.e. approximately 10% of the \$94 trillion population-wide total household net worth.

4.2 - 1% additional tax to all wealth above \$1 billion

The 963 households with assests above \$1 billion dollars would have a total taxable wealth (above the \$1b each) of \$2.2 trillion, i.e. approximately 2% of the \$94 trillion population-wide total household net worth.

5 - Total tax revenue in one year

Starting with the \$8.9 trillion tax base of wealth above \$50 million (\$11.4 with no avoidance), a two percent tax would raise \$178 billion in 2019. The billionaire surtax is estimated to apply to a base of \$2.2 trillion (\$2.8 with no avoidance) from about 1000 billionaire families (1300 with no avoidance). Thus the billionaire surtax would raise \$22 billion in 2019. The combination of the 2% tax above \$50 million and the billionaire surtax would raise $178 + 22 = 200$ billion in 2019.

5.1 - Visualization

The figure below illustrates the distribution of wealth tax across the population:

Renderer: SVG | Canvas

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Click here/ADD URL WHEN ALLOWED to explore different policy proposal and to see how the assumptions of the analysis affect the results.

There are two ways to edit the code behind this document:

- 1 - Download/Clone this repository into your computer. You will need to install R and RStudio.
- 2 - Go to this link and reproduce all the result in a computing enviroment (supported by project binder). You will **not** need to install anything in your computer.

6 - Ten year projections

To project tax revenues over a 10-year horizon, we assume that nominal taxable wealth would grow at the same pace as the economy, at 5.5% per year as in standard projections of the Congressional Budget Office or the Joint Committee on Taxation. This growth is decomposed into 2.5% price, 1% population growth, and 2% of real growth per capita. This implies that tax revenue over the 10 years 2019-2028 is 13 times the revenue raised in 2019¹. This uniform growth assumption is conservative as the wealth of the rich has

¹With $r=5.5\%$, we have $[1+(1+r)+..+(1+r)^9]=[(1+r)^{10}-1]/r=12.9$, approximately 13.

grown substantially faster than average in recent decades. The estimates by Saez and Zucman² show that, from 1980 to 2016, real wealth of the top 0.1% has grown at 5.3% per year on average, which is 2.8 points above the average real wealth growth of 2.5% per year. Average real wealth of the Forbes 400 has grown even faster at 7% per year, 4.5 points above the average. The historical gap in growth rates of top wealth vs. average wealth is larger than the proposed wealth tax. Therefore, even with the wealth tax, it is most likely that top wealth would continue to grow at least as fast as the average.

This 10-year projection implies that revenue raised by the progressive wealth tax would be $13 * 212 = \$2730$ billion, rounded to \$2.73 trillion. Out of these \$2.73 trillion, the billionaire surtax would raise $22 * 13 = \$279$, rounded to \$0.3 trillion.

It is important to emphasize that our computations assume that the wealth tax base is comprehensive with no major asset classes exempt from wealth taxation. Introducing exemptions for specific asset classes would reduce the revenue estimates both mechanically and dynamically as wealthy individuals would shift their wealth into tax exempt assets. Because your proposal does not include any large exemptions, we do not believe our revenue estimate needs to be adjusted.

7 - Wealth inequality

One of the key motivations for introducing a progressive wealth tax is to curb the growing concentration of wealth. The top 0.1% wealth share has increased dramatically from about 7% in the late 1970s to around 20% in recent years. Conversely, the wealth share of the bottom 90% of families has declined from about 35% in the late 1970s to about 25% today. This fall has been primarily the consequence of increased debt for the bottom 90% (through mortgage refinance, consumer credit, and student loans). As a result, the top 0.1% today owns almost as much wealth as the bottom 90% of US families, which includes the vast majority of US families.

8 - Tax burden on the wealthiest 0.1%

The estimates of Piketty, Saez, and Zucman (2018) show that the total burden (including all taxes both at the federal, state, and local levels) of the wealthiest 0.1% families is projected to be 3.2% of their wealth in 2019 (they have on average \$116 million in wealth, and pay total taxes of \$3.68 million). The proposed progressive wealth tax would add an extra \$1.27 million (or 1.1% of wealth) to their tax burden for a total tax burden (relative to wealth) of 4.3%.

In contrast, the bottom 99% families have a total tax burden of 7.2% relative to their wealth. Their tax burden relative to wealth is much higher than for the top 0.1% because the bottom 99% relies primarily on labor income, which bears tax but is not part of net worth. In contrast, the majority of the income of the top 0.1% wealthiest comes from returns to their wealth.

Note: Our analysis complies with the highest levels of transparency and reproducibility for open policy analysis proposed by the Berkeley Initiative for Transparency in Social Sciences. We invite contributors and critics of this analysis to follow similar standards.

²Saez, Emmanuel and Gabriel Zucman, "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data", Quarterly Journal of Economics 131(2), 2016, 519-578, updated series available at <http://gabriel-zucman.eu/usdina/>