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Dear Senator Warren:

We write regarding the Ultra-Millionaire Tax Act of 2021 that imposes a progressive annual wealth tax on American households with net worth (sum of all assets net of debts) above \$50 million. The tax would be 2% on the net worth above \$50 million with an additional 1% tax on net worth above \$1 billion (the 1% extra tax on billionaires becomes a 4% extra tax if and when a Medicare for All program is enacted). Tax payments would start in 2023 based on wealth as of end of 2022. We estimate that **about 100,000 American families (less than 1 out of 1000 families) would be liable for the wealth tax in 2023 and that the tax would raise around \$3.0 trillion over the ten-year budget window 2023-2032, of which \$0.4 trillion would come from the billionaire 1% surtax.** The wealth tax would raise approximately 1.0% of GDP per year (\$250 billion relative to a \$24.3 trillion GDP in 2023). If the billionaire surtax increases to 4%, total revenue over the 10-year window raises to \$3.9 trillion (up from \$3.0 trillion).

The revenue estimate has increased relative to our earlier [estimates](#) during the campaign in January 2019 for two reasons. First, wealth at the top, particularly among billionaires, has grown in the two years since then. Second, the new proposed tax starts in 2023 (while the earlier wealth tax was scored starting in 2019) and wealth is expected to continue growing in the next two years.

Details on the estimation

Data sources:

The best survey data on the wealth of American households is the Survey of Consumer Finances (SCF) from the Federal Reserve Board. The latest year available for is 2019. Because the SCF excludes by design the Forbes 400 from its sampling, it does not provide an accurate measure of the wealth of billionaires. Therefore, to better capture billionaires' wealth, we supplement the SCF with the Forbes real time billionaire list that provides the most up to date estimates for the wealth of US billionaires.

Importantly, none of these sources provides perfect estimates. Reassuringly, using the Distributional National Account data created by Piketty, Saez, and Zucman, which

estimates wealth by capitalizing investment income from income tax returns, generates fairly close (and even slightly higher) revenue estimates.¹ An important virtue of the progressive wealth tax is that it will generate much more accurate data to estimate and track the wealth of the wealthiest Americans.

Methodology:

1) We combine the 2019 Survey of Consumer Finances and the Forbes real-time billionaire list as follows. We first age the 2019 SCF to the end of 2020. Because the SCF does not sample the Forbes 400 billionaires, we remove billionaires in the SCF and replace them with the Forbes real-time billionaires (as of January 24, 2021). We then age the combined dataset of the end of 2022 by inflating the number of households and wealth uniformly to match the aggregate projections for population and GDP growth from the Congressional Budget Office (.6% population growth per year and 3.7% nominal GDP growth per year).

2) Tax avoidance/evasion: recent research shows that the extent of wealth tax evasion/avoidance depends crucially on loopholes and enforcement.² The proposed wealth tax has a comprehensive base with no loopholes and strong enforcement through audits and information reporting. Therefore, the avoidance/evasion response is likely to be small. We assume that households subject to the wealth tax are able to reduce their tax liability by 15% through a combination of tax evasion and tax avoidance. This is a large response in light of existing estimates.³

3) Revenue estimates are reported in the attached table.

a) In 2022, there would be around 100,000 households liable to the wealth tax. In both cases, this would be about .05% of the 185 million US families in 2022. The tax base above

¹ Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States", *Quarterly Journal of Economics* 133(2), 2018, 553-609. Data online at <http://gabriel-zucman.eu/usdina/>

² See Saez, Emmanuel and Gabriel Zucman "Progressive Wealth Taxation." *Brookings Papers on Economic Activity*, Fall 2019, 437-511 for a detailed review of the literature.

³ Seim, David. 2017. "Behavioral Responses to an Annual Wealth Tax: Evidence from Sweden", *American Economic Journal: Economic Policy*, 9(4), 395-421 and 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, obtain small avoidance/evasion responses in the case of Sweden and Denmark in two countries with systematic third party reporting of wealth: a 1% wealth tax reduces reported wealth by less than 1%. Londono-Velez, Juliana and Javier Avila. "Can Wealth Taxation Work in Developing Countries? Quasi-Experimental Evidence from Colombia", UC Berkeley working paper, 2018 show medium size 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, Brühlhart, Marius, Jonathan Gruber, Matthias Krapf, and Kurt Schmidheiny. "Taxing Wealth: Evidence from Switzerland," NBER working paper No. 22376, 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. Our 15% tax avoidance/evasion response to a 2% wealth tax is based on the average across these four studies ($2\% \cdot (.5 + .5 + 2.5 + 28.5) / 4 = 16\%$).

\$50 million would be \$11.0 trillion. A two percent tax on this base would raise \$219 billion (paid in 2023).

b) In 2022, the billionaire surtax base is estimated at \$3.3 trillion and hence the billionaire surtax of 1% would raise \$33 billion in 2023 from about 1000 billionaire families. The higher billionaire surtax of 4% would raise \$131 billion in 2023.

c) The combination of the 2% tax above \$50 million and the billionaire 1% surtax would raise $\$219 + \$33 = \$252$ billion paid in 2023, approximately 1.0% of the 2023 GDP. With the 4% higher billionaire surtax, revenue in 2023 would be \$351 billion.

d) 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 4% per year as in standard projections of the Congressional Budget Office or the Joint Committee on Taxation. This growth is decomposed into 2% price inflation, .6% population growth, and 1.4% of real growth per capita. This implies that tax revenue over the 10 years 2023-2032 is 12.0 times the revenue raised in 2023.⁴ This uniform growth assumption is conservative as the wealth of the rich has grown substantially faster than average in recent decades. The estimates by Saez and Zucman⁵ 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 of 2% and 3% for billionaires, it is most likely that top wealth would continue to grow at least as fast as the average. However, a 6% tax on billionaires could reduce the growth of billionaire wealth. Therefore, in this scenario, we assume that the billionaire wealth tax base would grow by 3 percentage points less each year than in the 3% tax scenario. As a result, the growth of the billionaire tax base would be only 1% per year (instead of 4% per year) and the 10-year revenue would correspondingly be only 10.17 times the revenue in 2023 (instead of 12 times).

e) Under the 1% billionaire surtax scenario, this 10-year projection implies that revenue raised by the progressive wealth tax with would be $12 * 252 = \$3.03$ trillion. Out of these \$3.03 trillion, the billionaire 1% surtax would raise \$394 billion. Under the 4% billionaire surtax scenario, the 10-year projection implies that revenue raised by the progressive wealth tax with would be \$3.91 trillion. Out of these \$3.91 trillion, the 4% billionaire surtax would raise \$1374 billion.

f) 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-

⁴ With $r=4.0\%$, we have $[1+(1+r)+\dots+(1+r)^9]=[(1+r)^{10}-1]/r=12.01$.

⁵ Saez, 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/>

exempt assets. Because your proposal does not include any large exemptions, we do not believe our revenue estimate needs to be adjusted.

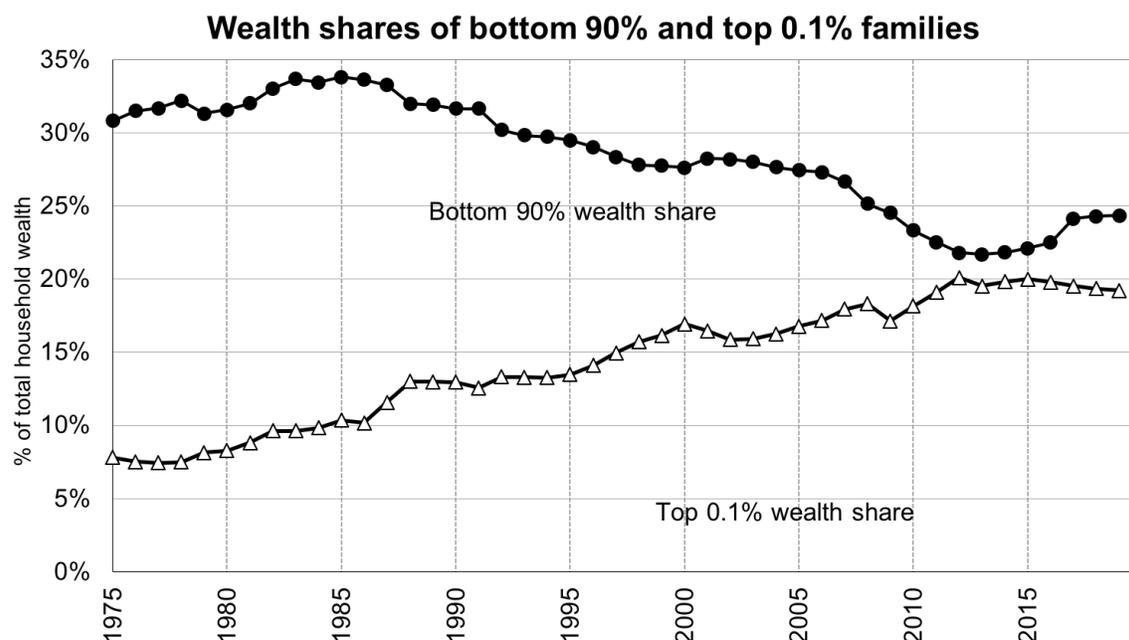
Ultra-Millionaire Tax Revenue Estimates (in 2022 dollars)

	Threshold	Base above exemption in \$billions (in 2022)	Number of taxpayers (in 2022)	Share of US families liable	Tax rate above threshold	Tax revenue in \$billions (for 2022 wealth collected in 2023)	10-year tax revenue in \$billions (collected in 2023-2032)
A. 2% above \$50 million + extra 1% above \$1 billion							
Base rate	\$50 million	10971	100,449	0.054%	2%	219	2633
Surtax on billionaires	\$1 billion	3284	1,005	0.00054%	1%	33	394
Total revenue (summing the two components):						252	3027
B. 2% above \$50 million + extra 4% above \$1 billion							
Base rate	\$50 million	10971	100,449	0.054%	2%	219	2532
Surtax on billionaires	\$1 billion	3284	1,005	0.00054%	4%	131	1374
Total revenue (summing the two components):						351	3906

Notes: The table displays revenue estimates for the extreme wealth tax. The wealth tax is an annual tax on the total worldwide net worth starting in 2023 (based on end of year 2022 wealth). The exemption threshold of \$50 million is the same for married and non-married taxpayers. The wealth tax combines a tax of 2% above \$50 million with an extra tax above \$1 billion. In panel A, the extra tax on billionaires is 1% (so that the total marginal tax rate above \$1 billion is 3%). In panel B, the extra tax on billionaires is 4% (so that the total marginal tax rate above \$1 billion is 6%). Estimates are based on the 2019 Survey of Consumer Finances (aged to 2022) combined with the Forbes billionaires list (as of January 24, 2021 and aged to end of 2022). We assume a 15% tax avoidance/evasion rate which is realistic given the robust proposed enforcement. Computations by E. Saez and G. Zucman (UC Berkeley).

Wealth inequality

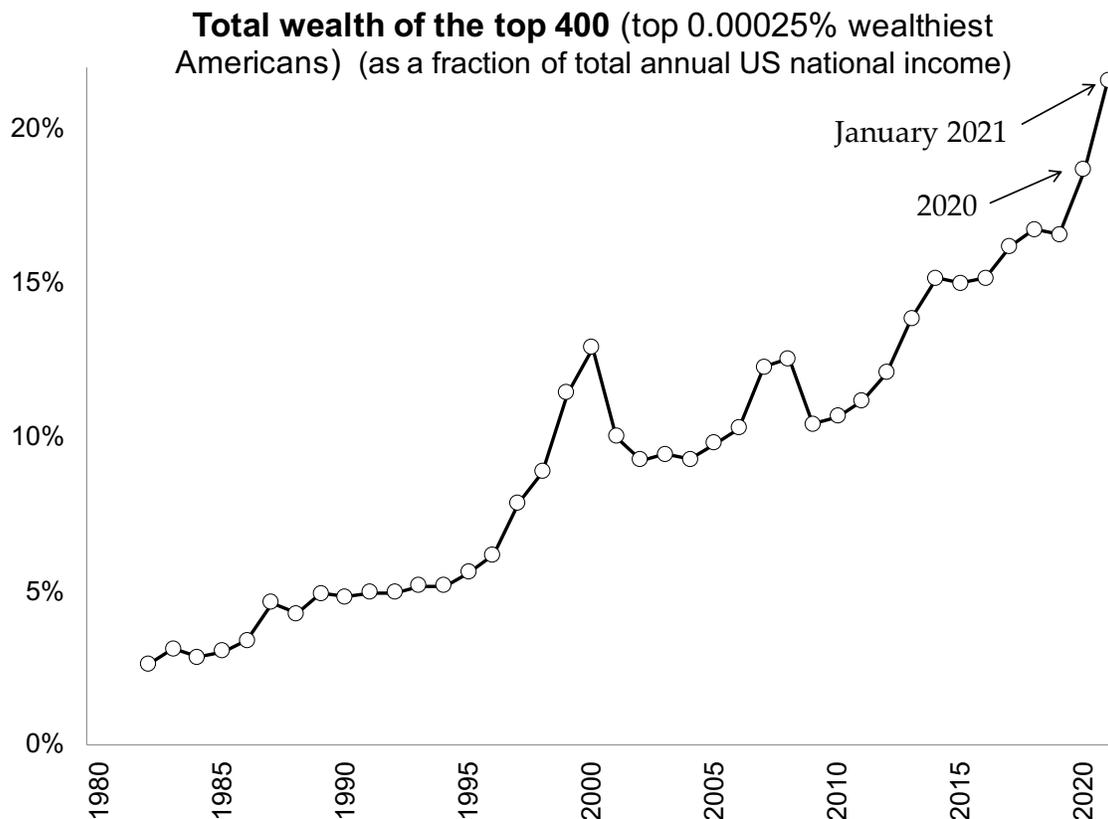
One of the key motivations for introducing a progressive wealth tax is to curb the growing concentration of wealth. The figure below depicts the evolution of the share of wealth going to the top 0.1% of wealth holders vs. the bottom 90% based on the Piketty, Saez, and Zucman (2018) data (updated to 2019). It shows that 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 early 1980s 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.



The figure depicts the share of total household wealth owned by bottom 90% and top 0.1% obtained by capitalizing income tax returns (Piketty, Saez and Zucman 2018, updated to 2019). The unit of analysis is the family.

The rise of wealth concentration has been particularly extreme for billionaires. The Forbes 400 richest Americans data available since 1982 show that billionaires wealth has been growing much faster than the economy. The figure below shows that, in 1982, the wealthiest .00025% (approximately the top 400 Americans today) could buy 2.6% of national income (everything that the US produces within 1 year) with their wealth that year. Based on their wealth today (as of January 24, 2021), they can buy 21.6% of annual national income. Hence, their weight in the economy has grown by a factor 8 over the last 40 years. The figure shows that the wealth of the top 400 has exploded over the last 2 years during the COVID crisis. The Forbes real-time billionaire data show that billionaire wealth

now stands at \$4.2 trillion (as of January 24, 2021) 40 percent higher than before the COVID crisis (it was only \$3.0 trillion in March 2019). Billionaires are the group that has done best during these challenging times. The proposed graduated wealth tax is the most direct way to make them contribute part of their gigantic gains to the benefit of the country.



Tax burden relative to wealth

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%.⁶

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 1% because the bottom

⁶ For the wealthiest 1% families, the total tax burden is projected to be 3.2% of their wealth in 2019 (they have on average \$21.3 million in wealth, and pay total taxes of \$.68 million). The proposed progressive wealth tax would add an extra \$.11 million (or .54% of wealth) to their tax burden for a total tax burden (relative to wealth) of 3.7%.

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 1% wealthiest comes from returns to their wealth.

Sincerely,

Emmanuel Saez and Gabriel Zucman

Handwritten signature of Emmanuel Saez, consisting of the initials 'E. Saez' followed by a stylized flourish.Handwritten signature of Gabriel Zucman, consisting of a stylized 'GZ' monogram above a horizontal line.