Comment on "Progressive Wealth Taxation" by Saez and Zucman prepared for the Fall 2019 issue of Brookings Papers on Economic Activity

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November 2019

Emmanuel Saez and Gabriel Zucman offer a discussion of rationale for, implementation and implications of introducing wealth taxation in the United States. In my comments, I will primarily focus on three topics: economic arguments for having this form of taxation, practical issues in implementing it, and a few aspects of underlying data and assumptions that authors rely on in evaluating the impact of this proposal.

A general wealth tax does not exist in the United States. However, the U.S. has a highly progressive estate tax and it taxes capital income through a mix of (1) personal income taxes on dividends, interest, capital gains, royalties and business incomes, and (2) corporate taxation. Bases of all these taxes overlap with the base for wealth taxation, although they are not economically or administratively identical. Thus, the right question in my mind is whether a wealth tax is desirable given existence of these other instruments. In my view, as elaborated below, the case for wealth taxation over capital income taxation in general is quite weak and rests on either desirability of one-time, ideally unexpected, taxation or on the presence of externalities from wealth concentration (that ideally should be treated using instruments tailored to specific problems). From the administrative point of view, even then the challenging and ambitious solutions that could make wealth tax feasible apply equally well to (otherwise preferred) capital income taxation.

The case that authors make is not helped by optimistic empirical assumptions that do not highlight uncertainty, which is likely to run mostly in one direction; that may be a plus for public presentation of the plan, but not for an economist. I discuss these issues at the end of the comment.

Economics of a wealth tax

An individual with this year's stock of wealth W earning the return of r could be next year (assuming away any consumption) subject to a tax that is imposed on either (1+r)W or rW — a wealth or a

^{*}Support from the Research Council of Norway grant 217139/H20 is gratefully acknowledged.

¹They also may have different legal implications, with some questions about constitutionality of wealth taxation, that I am not qualified to comment on.

capital income tax. It is immediate to see that absent any other considerations, a tax of t on wealth is revenue-equivalent to a tax of $\tau = (1+r)t/r$ imposed on capital income rW. This links the two bases and provides a straightforward comparison of the burden that a wealth tax would impose on capital income. If you consider a safe rate of return of, say, 3%, a 3% wealth tax is a 103% tax on the corresponding capital income and a 6% tax rate is a 206% tax. Obviously, even though wealth tax rates appear nominally small, they are in fact very heavy taxes on the corresponding streams of income.

Are wealth and capital income taxes economically identical, assuming that rates are adjusted to be revenue equivalent? A simple way to think about it is by decomposing rate of return into three components:

r= $normal\ rate\ of\ return\ +\ risk\ +\ rents$

where "rents" stand for any extraordinary returns that are not competed away (eg., due to market power, private information, government protection or, from the tax point of view, any misrepresentation of ordinary income as capital income). A uniform capital income tax collects revenue at a high rate, (1+r)/r times higher than the wealth tax, from all these components. A wealth tax would collect equivalent revenue from primarily taxing the principal and effectively imposing the same (low) rate on components of the rate of return. Hence, the wealth tax shifts burden from risk and rents toward the normal rate of return (because taxing principal is similar to taxing safe rate of return). Is this desirable?

Paradoxically, given the rhetoric surrounding the wealth tax, shifting taxation from capital income to wealth relieves rents. Rents are the classic argument for having capital income taxation in the first place. Taxing extraordinary returns is less likely to be distortionary, it has good distributional properties, and it goes precisely after the types of inefficiencies that might give rise to undesirable accumulation. This is the component that wealth tax treats very lightly. If you are worried about monopolies, insider information, or misrepresenting labor as capital, and taxation is your preferred solution to address it, then you should want to tax rents at 20% or more (capital income tax) rather than 2% (wealth tax).

What about risk? The classic Domar-Musgrave insight is that a symmetric (with full deductibility of losses) capital income tax on zero-expected value risk component would not change the expected value but would reduce variance, hence encouraging rather than discouraging risk-taking. Imposing a tax on the expected return has naturally the opposite effect, and thus the net effect is theoretically ambiguous. Implementing full deductibility of losses is challenging in practice though. From this point of view, a wealth tax has an appealing property: while it heavily taxes expected return, it effectively implements full deductibility. If this effect dominates, it could perhaps encourage risk taking. On the other hand, many countries have experimented with implementing partial or full allowances for the normal rate of return for corporate taxation that mitigates taxation of expected return, therefore also encouraging risk-taking, and shifts burden of capital income taxation primarily toward rents — something that is not achievable under wealth taxation.

This basic decomposition suggests that the way to think about the choice between well-implemented

capital income and wealth taxation is in terms of trading off taxation of rents vs taxation of normal rate of return. While theoretical arguments for no taxation of capital income in the Chamley-Judd tradition have been recently challenged (Straub and Werning, 2019), the case for heavily taxing rents is likely much stronger than the case for taxing normal return.

According to standard theory, there is one natural rationale for wealth taxes. While the Chamley-Judd result is usually presented as solely indicating that capital income tax rates should be zero in the long run, it is usually forgotten that these model involve very high taxation in the short run. Indeed, that framework requires that you restrict the ability to tax capital in the short run: a one time immediate unexpected capital (or wealth) tax is non-distortionary – swiftly confiscating pre-existing wealth is a lump-sum tax. This is the point that I glossed over before by treating tax on principal as the tax on the normal rate of return: it is so when taxpayers have time to adjust, but a one-time, swift and unexpected tax on principal is qualitatively different because it is non-distortionary. I have some sympathy to this argument, though "unexpected" and "swift" are difficult to execute and "one-time" is hard to commit to. Applying it seriously would require a legitimate reason. Wars (e.g., some European countries taxed wealth accumulated during WWII) or ill-gotten gains (Colombia after drug war) sometimes provided such a reason. Does it apply to the U.S. in 2019? That is not really an economic question. If you consider past accumulation as an injustice that needs to be fixed, that's a logically coherent, but in my view political and subjective argument, I have nothing to say about it as an economist, de gustibus non est disputandum.²

The need for a one-time confiscation of wealth is not an argument that the paper makes explicitly though, even if the rhetoric of past "injustice" appeals to it. If, instead, one interprets it as a call for permanent policy, then the direct comparison to capital income taxation discussed so far strongly suggests that it dominates wealth taxation.

Are there other ways to economically justify a wealth tax? As a permanent policy, a somewhat nonstandard (for an economist) argument in favor of wealth taxation is to target externalities from wealth concentration. On the face of it, this is a plausible argument and I argued elsewhere (Kopczuk, 2013) that this is a reasonable direction for understanding rationale for estate taxation – in that context, equality of opportunities for the next generation looms large and it is tied to transfers received from parents. But what is the incremental externality-based case for wealth taxation beyond taxing intergenerational transfers (which we already, albeit imperfectly, do)? First, recall the basic targeting prescription for dealing with externalities: if feasible, you should tax (or target via regulation, property rights, enforcement) the source of externality directly rather than its proxies. Is wealth the cause of or a proxy for problems that supporters of wealth taxation bring up? For most arguments that I can think of, it is just a proxy and alternative feasible direct instruments exist. Monopoly power should be dealt with by anti-trust. Political power by suitable reforms of political system. Dynastic wealth by estate taxation. Misdirected charity by reforming charitable deduction and rules applying to foundations and charities. A wealth tax does not target any of

²There is an alternative argument that builds on the incentive for confiscating existing wealth. Such an incentive gives rise to potential time inconsistency of policy and relying on capital taxation may weaken that incentive (Farhi et al., 2012). This is a variant of an old argument that redistribution is necessary to preserve social peace.

these particularly well and, by familiar logic, it has other undesirable consequences – it encourages earlier spending, including on politics and charity; it discourages saving and investment; it endangers control of businesses by founders while shifting it toward more short-term focused outside investors; it encourages private rather than public ownership as a way to game valuation. In fact, the paper does not really make the case that externalities from wealth taxation exist — it just occasionally asserts it without providing much evidence.

Equity, efficiency, simplicity

If wealth taxation does not offer any special advantages in terms of the base or objectives and it is just a substitute for capital income taxation, then it should be compared on standard equity, efficiency and simplicity grounds to its alternatives. The comparison of equity implications for taxes that apply primarily to the rich may seem trivial, but even in this case I believe there is something to say. First, there is the relative treatment of savers vs spenders — it applies equally to both capital income and wealth taxation, but it is still relevant to note that lavish consumption is a way to reduce tax liability so that any tax of this type is not horizontally equitable in the direction that strikes me as undesirable (punishing thrift). Second, as already discussed, relative taxation of rents vs normal rate of return points in the direction of preferring capital income taxes.

What about efficiency? Is a wealth tax likely to be distortionary? We do not have a lot of evidence on that. Saez and Zucman discuss evidence on tax evasion. I find the studies that are based on bunching around thresholds of wealth tax of interest as a way to demonstrate that response is there, but of limited quantitative usefulness: targeting the extent of tax evasion to be precisely around the tax threshold in a particular year is unlikely to be the only way to respond and it is not a particularly practical way to respond to an annual wealth tax that makes the threshold a moving target. Hence, I suspect that the relatively small elasticities that arise in such contexts are a severe understatement. From that point of view, the study of the Swiss wealth tax (Brülhart et al., 2016) that finds much larger effects is interesting, although I agree with the authors that the mobility response is probably not of major concern in the U.S. and the high responsiveness to the Swiss wealth tax is probably partially driven by mobility. Jakobsen et al. (2019) is the only study so far that directly focuses on longer term effects of wealth taxation and finds persistent and growing behavioral³ response of wealth accumulation for Danish taxpayers affected by the wealth tax.

There is some related evidence from the estate tax context that I surveyed a few years ago (Kopczuk, 2013). A number of older studies found positive responses to estate taxation in the US that would be consistent with sizable wealth tax response⁴ (a more recent paper by Goupille-Lebret

³Rather than simply mechanical; something that's assumed away in the simulations considered in the paper that instead considers the "mechanical" case where the growth rate of pre-tax wealth is unaffected by taxation.

⁴Estimated elasticities with respect to the (net of) estate tax rate are of the order of 0.2. Comparing them to estimates of response to the wealth tax is not straightforward – one is a one time tax with double-digit rates, the other one is annual with much smaller rates that when compounded over time would be of the same order of magnitude as the wealth tax. Poterba (2000) suggested multiplying the estate tax rate by mortality rate to arrive at a measure of annual burden. Using a mortality rate of 1% for illustration, a 1% estate tax change would then be approximately equivalent to a 0.01% wealth tax change and the elasticity of 0.2 equivalent to the elasticity of 20 (in the same

and Infante, 2018, finds quantitatively similar estimates of responsiveness to the French inheritance tax). Saez and Zucman note that taxpayers appear not to be making small inter vivos gifts that are the simplest way to do estate tax planning, however that evidence is based on taxpayers with estates of the order of \$1 million (the level that was taxable in the 1990s). Responses of large gifts to tax reforms are very strong (Joulfaian, 2004) and the existence of estate tax planning industry makes it obvious that avoidance is a real issue, although even in the case of wealthy taxpayers there are indications that the desire to control wealth until death is important (Kopczuk, 2007). How important might transfer be? The standard Pareto assumption that authors rely on implies that 26% of the base is between the threshold and 2*threshold (eg., between \$50m and \$100m): this is how much is at stake through the most obvious and simplest type of tax planning strategy for taxpayers with just one child: making gifts up to the tax threshold limit.⁵

A harder to evaluate, but potentially very important consideration is the ownership distortion. Their "radical scenario" would cut Bezos' wealth by a factor of more than 6, and his 2018 Amazon stake from 16% to 2.4% — that is likely to have a large effect on his ability to control the direction of the firm. If distortions to founder's ability to direct a business are important, then taxes that are based on realization or taxes that delay payment until a later date would be preferred. A capital gains tax on realization, an estate tax, or accruing a notional tax liability to be settled at realization would all fare better in that respect.

Finally, let me turn to simplicity and implementability of the wealth tax.

Implementation

Saez and Zucman note that "wealth taxes are fragile", but that "tax competition and tax evasion is a policy choice". I agree with the first statement wholeheartedly, but with the second only to an extent. Wealth taxes are fragile, because they fundamentally rely on information that is not based on observable arm's length transactions. This is in contrast to the most successful types of taxation. Taxation of labor income relies on transactions between employers and employers. The successful form of consumption taxation – VAT – leverages transactions within supply chain. Arm's length transactions make information reporting (or third party reporting) feasible when parties have incentives to comply, either because they are large or because of financial incentives: employers report wages paid to employees, firms report purchases from their suppliers. The same lessons can and are applied in other contexts that involve arm's length relationships – banks can be required to report information about deposits, brokerages about financial investments. Mechanisms like this

ballpark as Brülhart et al., 2016 estimates). Alternatively, compounding the wealth tax over T years would call for scaling the relevant elasticities by a factor of the order of T while accounting for the revenue impact over the whole T years in order to arrive at comparison to estate taxation.

⁵What cuts against the notion of disincentives due to individual behavioral response is the argument of Guvenen et al. (2019) that a wealth tax introduces a (desirable) bias toward better investors. The mechanism for this effect relies on the presence of credit constraints and their interaction with explosive growth. I have doubts whether prospective billionaires are credit constrained nowadays, but under that assumption calibrated gains from a wealth tax are large. Even then though, it is interesting to note that the ideal wealth tax would be imposed on principal, but not the very high realized returns — the whole point of the tax is to bias the distribution toward those able to earn high returns.

are the backbone of modern tax systems that make parts of them work automatically. It is when they are not feasible that problems arise. Examples abound. Transfer pricing in corporate taxation is a problem, because cross-border transactions are between parties with shared interest, no arm's length relationship there. Property tax assessments are problematic, because they try to infer value without sale. Taxation of small businesses is an issue, when their customers are small or paying in cash. Sales taxes have much narrower revenue potential in practice, because retail-level taxation lacks a counterparty with incentives to report.

Successful tax administrations recognize these considerations. There is room for policy: the extent of third party reporting is a policy choice. But, it does not work when there is no third party and there is usually no third party when what you tax is not an arm's length transaction. Saez and Zucman appeal at times to the insight from Slemrod and Kopczuk (2002) that behavioral elasticities are effectively policy parameters, but ignore two aspects of it. First, there is administrative and compliance cost of reducing responsiveness. This cost may be worth bearing, but it is not without tradeoffs. Second, the nature of this trade-off and how high you can push compliance or how low you can drive behavioral elasticities depends on the nature of the base that you tax. Transfer pricing is not realistically solvable by enforcement. Neither is small business taxation as long as we live in the world of cash.

Because wealth taxation fundamentally relies on taxing a base that cannot be fully covered by information reporting, it is bound to have problems. Saez and Zucman read European experience as highlighting the role of unfairness and liquidity issues in dramatic failure of wealth taxes. While these were issues, they were the consequence of choosing this particular base. Unfairness resulted from exempting or treating favorably types of assets that were hard to measure — primarily private businesses, but also real estate. These are contexts without third parties. Illiquidity naturally arises in the same places because these are not transactions. Countries with otherwise very progressive policy and with extensive and well-functioning third party reporting repealed their wealth taxes (for example, Denmark did so in 1996), because third party reporting does not automatically fix everything if the base is poorly selected.

Saez and Zucman are very optimistic about solving such problems. Why? First, they are right that much of their intended *current* wealth tax base would not be subject to such considerations: publicly traded assets are easy to observe. Second, they note that by making the threshold sufficiently high, the base can be kept relatively clean.

However, just like a given level of tax avoidance and evasion is not the law of nature, neither is the depth of public markets. One might expect that incentives to stay private would be stronger than nowadays in the presence of a wealth tax. Even with public markets, ownership through trusts, holding companies or intermediaries – hedge funds for example – can be used to make valuation difficult. Saez and Zucman argue that private valuations exist. What they do not note is that they are costly, notoriously speculative (the very recent case of WeWorks and many IPO cases where

⁶For example, note that IRS under an annual wealth tax would have to deal with roughly 100 times as many taxpayers every year as it deals with in estate tax context. In particular, valuations are one of the most challenging parts of the process and are costly both to the IRS and to the taxpayers.

trading price departed from offering price, both under- and over-valuations, are obvious examples). Most fundamentally, they ignore the incentives that go in a different direction when valuation is done for tax reasons and when it is done for investment purposes.

There are intriguing valuation ideas in the paper. For a theoretically-minded economist, the notion of paying in stock and government as a market-maker has a certain element of appeal, but practical aspects of it seem daunting both because of implications of government ownership stake in private companies and because the notion that small stakes in a closely-held company are cheaply marketable and correctly valued seems dubious.

An alternative solutions that they offer, that could be "perfected" based on international experience is formula based, involving book value and multiples of profits, as used in Switzerland. Interestingly, Switzerland is a country with evidence of very high responsiveness (Brülhart et al., 2016). A simple introspection should also make one immediately skeptical of implications of this approach for non-trivial tax rates. Say, one assumes a profit multiple of 15 and a 2% wealth tax rate. This corresponds (for an owner of a closely-held business) to a 30% profit tax rate, on top of any corporate and/or income taxation.

Returning to the theme of comparison of wealth and capital income taxation, any solution that allows for measuring wealth, also automatically allows for measuring wealth *changes* and therefore is of use in addressing deficiencies of the existing system of taxing capital income on realization.

Wealth and progressivity measurement

Although this is not the main focus of the paper, it also provides updates to the Saez and Zucman (2016) and Kopczuk and Saez (2004) estimates of wealth inequality. I commented on these estimates in the past (Kopczuk, 2015), so naturally I welcome this effort. Newer work since (Bricker et al., 2016, 2018; Smith et al., 2019) has revisited the Survey of Consumer Finances wealth estimates and offered revisions of capitalization method. This paper attempts to address some of these criticisms by slightly changing treatment of fixed income assets and adopting modified valuation of private businesses, but ignoring other adjustments to valuing equity suggested by Smith et al. (2019). It also offers a modification of the estate multiplier estimates.

The results are presented in terms of "tax units" – an odd choice if used for illustrating trends in inequality, because it is an economically hard to interpret unit of observation, that is motivated by reliance on tax data. It also requires ad hoc conversion of the SCF and estate tax from much more natural and meaningful households or individuals. These choices matter. As Bricker et al. (2016) document, adjusting the unit of observation shifts the trendline of inequality in about parallel fashion. As the result, given quite arbitrary nature of these adjustments, I prefer the comparison of changes rather than levels. This preference is further strengthened by systematic differences in coverage of different types of assets in different sources (for example, debt is much better observed in estate multiplier than in capitalization approach) that affect the observed level of inequality, but may have smaller impact on changes.

Comparing numbers as reported in this paper, an increase in concentration (top 0.1%) between 1981 and 2012 (last year of estate tax data) in their capitalized series was 13.1pp; in their revised series it was 9.7pp; in the estate tax series it was 8.3pp. Comparing 1989 and 2016 (years when SCF is available), their two capitalization series show an increase of 8.5 and 5.8pp respectively, while the SCF plus Forbes 400 show an increase of 6.1pp, but with a very different time path in between. These are trillion dollar differences that tend to show higher increases using capitalization approach. When Smith et al. (2019) discuss the range of capitalization assumptions for fixed income and equity (that I'll come back to), they find that the range between the original Saez and Zucman (2016) assumption and the most aggressive adjustment that they consider is \$5.8T or 8.6pp as of 2014.

If I can convince the reader of nothing else, I hope I can at least convince that these are highly uncertain numbers that should be presented together with some explicit notion of the magnitude of the measurement error. The headline estimate of an increase in the share of the top 0.1% until 2012 has changed by 3.4pp or \$2.2T between Saez and Zucman (2016) and this paper. The change was driven by modification of two unknowns – the relevant interest rate that should be applied to high net worth individuals on their fixed income assets and conversion factor used to arrive at private business valuations. Both of these are effectively parameters chosen by researchers, one is a unique number for each year, the other one is a single parameter throughout, both relying on very imperfect auxiliary information. All sources of information point to an increase in wealth inequality. Exactly how much is very much uncertain and should not be presented as certain.

These estimates are constructed from the bottom up – ownership of different categories of assets is imputed first and then aggregated, so that compositional problems cannot be just brushed off as issues that have no implications for the total: they are determining the total. The fixed income part of the revised series was previously included in the appendix to Saez and Zucman (2016). It is unclear why this was not incorporated in the main series to begin with (I suggested that it should be at the time), because the original series makes a clearly unrealistic assumption about very low rate of return on fixed income assets that is inconsistent with any other source of information about the wealthy, as this work acknowledges.⁷

To illustrate compositional changes, I'll focus on the period between 1998 and 2016, when fixed income adjustments have a bite. Over this period, the original top 0.1% capitalization estimate increased from 14.2% to 19.6%. The part accounted by equities changed from 7.4 to 7.5% (with fluctuations between 6.3% and 8.5%), while almost the whole growth is explained by fixed income assets (an increase from 3.3% to 8.2%). The revised estimates are more modest — an increase

⁷Interest income in tax data does not separate between bonds and banking deposits. The rate of return on the former is larger than on the latter. In low interest rate environment, the interest rate on deposits is close to zero. Then, capitalization of interest income of bond holders (the rich) should be done using a capitalization factor that's much smaller than that implied by the average rate of return. For example, in 2016, the aggregate rate of return on fixed income assets reported by Saez and Zucman is 0.8% and corresponding capitalization factor 127. The SCF-based rate for top 0.1% is 2.5 and the corresponding capitalization factor is 40. The Moody's AAA rate is 3.67% and the capitalization factor of 27. The estimate of fixed income assets can be reduced by 80% by changing this single number.

in the top share from 14.8% to 17.8% (note, the revision reduces the growth over that 18 year horizon by 45%), with an increase in fixed income assets from 3% to 4.5% (note: almost halving by 2016), little change in equities but compensated by adjustments in business assets by 2pp that is due to modifications in the approach to valuation of private businesses adopted from Smith et al. (2019). The behavior of revised fixed income component is closer to realism, although there is still no evidence elsewhere that the rich have rebalanced toward fixed income assets (Bricker et al., 2016, 2018; Smith et al., 2019) and the remaining criticism of Smith et al. (2019) regarding capitalization of equities is unaddressed.

In contrast to minor adjustments to their capitalization estimates, changes to the estate tax multiplier estimates are very large. I argued before (Kopczuk, 2015) that assumptions about mortality differentials are likely responsible for the striking flat pattern in wealth inequality series of Kopczuk and Saez (2004): the key assumption there, that we relied on given existing evidence at that time (the estimates until 2000), was that relative mortality differential between the top of the wealth distribution and the average has remained constant over time (and that it could be approximated by the difference between college educated population and the average). Chetty et al. (2016) showed that these differences in recent years, when looking at income distribution, are larger and that they have trended since 2001. Saez and Zucman implement an approach to incorporate these estimates in 2012 and conclude that it increases wealth of the top group by 50%. They assume that the original assumption in Kopczuk and Saez (2004) was correct in 1980 and phase in the change linearly between then and 2012, which introduces a rapid trend rather level shift (in particular, it implies an increase by 34% or 3pp in 2000, the last year in Kopczuk and Saez, 2004).

This is both welcome and pretty uncertain. This calculation relies on (1) the magnitude of the mortality differential between population of the rich and the average and (2) parametric assumption of the Pareto distribution that allows for modifying the original estimates without revisiting original micro data. The mortality levels and differentials should be based on the population of the wealthy, but the estimates are based on the top 1% of income distribution. These are not the same, perhaps most importantly because people with high wealth that are approaching death may not have a lot of earnings and very little incentive to realize income. The results are sensitive to the Pareto assumption — it is made here to adjust aggregated estimates rather than revisit directly the confidential micro data. They choose to anchor the trend break in 1980, motivated by the comparison between upper and lower half of the distribution rather than any evidence that would apply to the rich. If, hypothetically, mortality differentials for the very rich in 1980 were already understated by half of the final adjustment that would remove 2.1pp growth from the estate multiplier series.

As with other pieces of evidence, the implicit error bands on these numbers are large. Still, despite heavy uncertainty in these estimates, all of this suggests that the estate tax multiplier estimates of wealth concentration can be reconciled with other methods without appealing to speculative trends in tax evasion as the explanation.

Progressivity. The final piece are progressivity estimates, which are just the 2018 figures from Saez and Zucman (2019a), with methodology further described in Saez and Zucman (2019b). Splinter (2019) also has a separate discussion that focuses on methodological choices and reconciling these results with estimates in Auten and Splinter (2019). This calculation is based on highly unusual incidence assumptions: it relies on what I would call expert-augmented statutory incidence assumptions. Contrary to the literature and the standard practice (including their own earlier work that this analysis builds on, Piketty et al., 2018), it assumes statutory incidence of corporate tax, i.e. that it is borne by shareholders (nothing on wages, nothing on bonds and other assets). The statutory assumption is not consistently applied elsewhere though – sales tax and payroll tax are assigned to consumers and workers, despite statutory incidence of the former being on sellers and the latter split between workers and employees. Income excludes any transfers other than Social Security and tax liability excludes transfers and refundable portion of tax credits. Despite not including transfers and credits in income, sales tax burden is calculated based on consumption. At the bottom of the distribution, this implies that incomes are small, but tax liability large because it is partially based on post-transfer consumption and not offset by any other transfers. As the results, at the very bottom of the distribution the implied "tax rates" would be very large – at the extreme of no income, they would be infinite. This problem is "solved" by dropping people below 50% of minimum wage annual income — 27 million individuals in 2018, over 10% of the population, so that what is labeled as the bottom 10% in Figure 5 is actually closer to being the second decile. It is not really "solved" of course — some transfers are still present higher up in the distribution — but it masks the glaring evidence of problems with this approach to defining tax burden. These choices create the false impression of flat tax liability throughout much of the distribution. Splinter (2019) discusses the more standard approaches used in Auten and Splinter (2019), by CBO and other agencies, that uniformly find that the U.S. tax system is progressive.

What about the top? The statutory incidence assumptions assigns the burden of the corporate tax to the shareholders, so that drops in corporate tax revenue translate one-for-one into the drop of the effective tax rate paid by shareholders. The paper innovates by separating Top 400 and showing data for 2018. It "triangulates" tax liability — tax information for Forbes 400 is not available. Finally, it projects to 2018 based on aggregate corporate revenue that has been affected by the 2017 tax reform, assumptions about the impact of individual income tax changes, and assumptions about the extent to which Forbes 400 is affected by these changes. None of it is certain, but the combined impact is behind the rate at the very top being lower than elsewhere. As with other estimates, it should be taken with a grain of salt.

⁸Not assigning anything to wages implies that the very top is more sensitive to corporate tax changes. Not assigning anything to assets — bonds predominantly — is more subtle, but turns out to matter primarily for the extent of the decline in the burden at the very top that features prominently in Saez and Zucman (2019a) and is in contrast to the findings in Piketty et al. (2018) that show only a mild decline over since the 1950s.

Conclusion

The paper is accompanying political proposals that have been picked up by two of the front-runners in the Democratic primaries. It makes a heartfelt case for a wealth tax that's appealing to many politically. In my view, the economic case for it is overstated though. The data that underlies the revenue and progressivity impacts of the proposal has large margins of errors. The tax is unlikely to fare well on administrative grounds and, in my view, the economic case for it over a mix of capital income and estate taxation is weak. A much more productive effort would be to focus on feasible and necessary fixes of the existing U.S. taxation. My short list of such changes includes the removal of step-up in basis at death; modification of tax treatment of charity (including the ability to transfer unrealized capital gains); moving away from realization and toward accrual taxation, in particular by considering mark-to-market of capital gains where feasible; and reversal of preferences for pass-through businesses introduced in 2017.

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