

Inequality

The IFS Deaton Review

Discussion of top incomes and tax policy

Owen Zidar

An IFS initiative funded by the Nuffield Foundation

Discussion of top incomes and tax policy

Owen Zidar (Princeton University; NBER)¹

Introduction

In this commentary, I begin with six observations about top incomes and taxation. Then, I provide some commentary on the chapter 'Top income inequality and tax policy' by Delestre et al. (2022), and I conclude with a brief discussion on the revenue potential of top capital gains taxation.

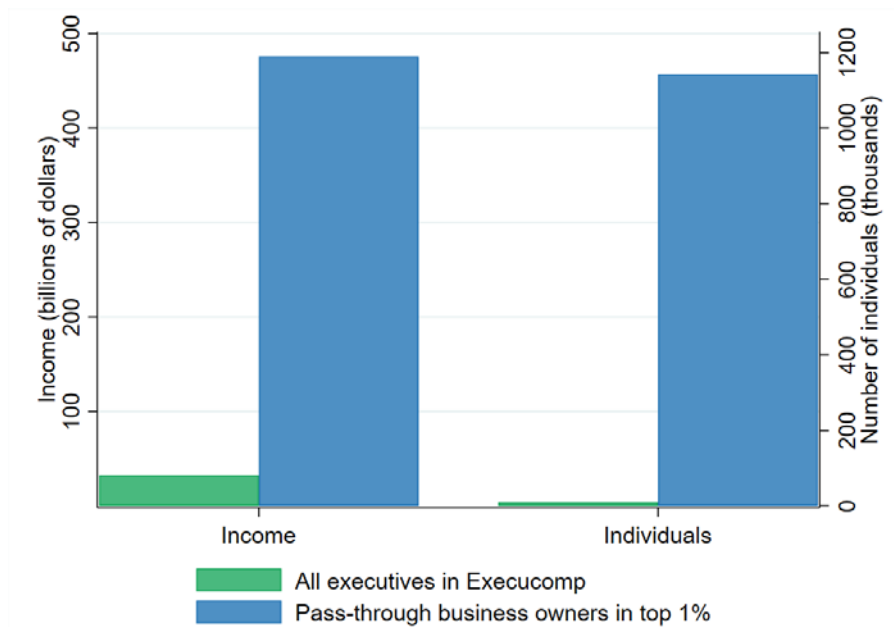
Six observations on top incomes and taxation

(1) Striking world of business owners prevail at the top of the income distribution

In his classic study of American society, de Tocqueville (1838) said, 'What strikes me most in the United States is not the extraordinary greatness of some industrial enterprises, it is the innumerable multitude of small enterprises.'

A multitude of business owners continue to play a leading role today. Smith et al. (2019) document that the vast majority of individuals at the top of the US income distribution own private businesses. Most are active owner-managers, typically in mid-sized firms in skill-intensive industries. In both number and collective income, these private business owners far exceed public company executives, who receive much focus in inequality commentary (see Figure 1).

Figure 1. Pass-through business owners account for a much larger share of people and income in the top 1% than public company executives



Source: Data from Smith et al. (2019).

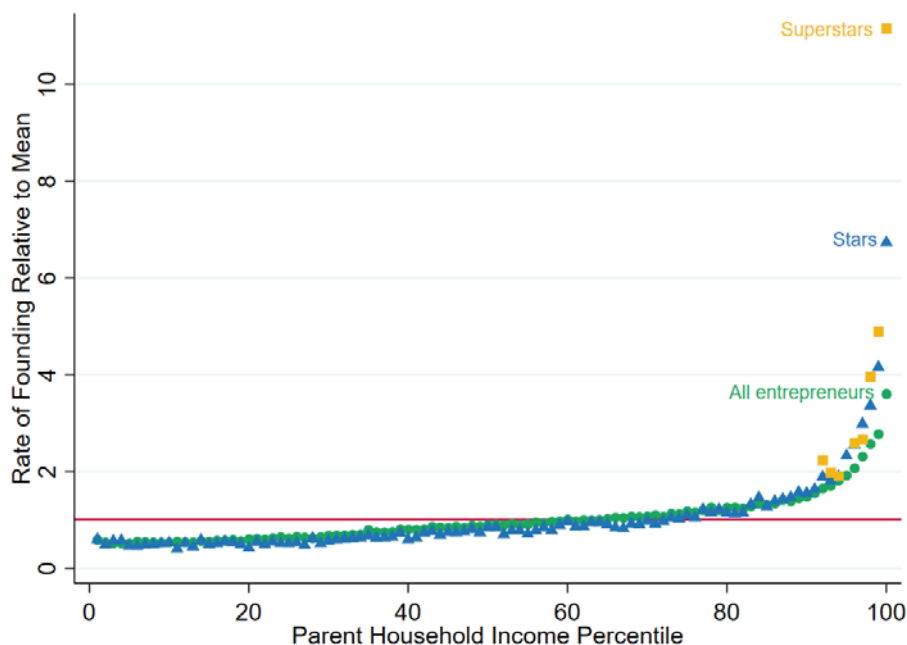
¹ I thank Angus Deaton and Eric Zwick for helpful comments and Coly Elhai for excellent research assistance. I also thank the NSF for support under Grant Number 1752431.

What is true in the United States is also true in the United Kingdom: business owners feature prominently at the top of the income distribution. The UK statistics in Delestre et al. (2022) tell a very similar story, and the sources of income are also quite similar.

(2) Many missing millionaires

A second feature of top incomes is the striking disparities in opportunity across groups and regions. For example, in ongoing work, Chetty et al. (2022) document that most entrepreneurs in the US tend to be white men and come from high-income families. Figure 2 illustrates these disparities by parental income. Children of parents who are in the top 1% of the income distribution are ten times more likely to start superstar firms (i.e., firms that rank in the top 1% in terms of sales and employment of all firms started in the same year) than the children of those with poorer parents. These patterns, as well as the presence of family firms and other forms of inherited wealth, highlight the considerable role parental resources play in helping business owners reach the top of the income distribution.

Figure 2. Entrepreneurship rates are lower for children of low-income families



Source: Chetty et al. (2022).

These findings suggest that there are many missing entrepreneurs – especially star entrepreneurs – in the US. In particular, we find that the US would have five times as many star entrepreneurs if the bottom 80% in terms of family income started firms at the same rate as the top 20%.² In earlier work looking at the lifecycle of inventors, Bell et al. (2019) found similar patterns and an important role for childhood exposure to innovation. Similar patterns may also hold in the UK.

More generally, recent work on intergenerational mobility (Chetty et al., 2020), regional disparities in opportunity (Chetty et al., 2014; Chetty and Hendren, 2018) and the importance of – and inequality in – early childhood parental investments³ all point to clear and substantial needs to increase opportunity for the children of the non-rich. Initiatives to reduce child poverty, broaden access to pre-school and improve school quality could help increase opportunity. These improvements are not only important for fairness, but also for economic growth. Quantitatively, the calibrations of Hsieh et al. (2019) suggest that around 30% of US growth from 1960 to 2010 can be explained by improvements in the allocation of talent.

² Following Hsieh et al. (2019), Chetty et al. (2021) also consider alternative explanations in their ongoing quantitative work. For example, past family experience in running a business may provide not only liquidity, but also useful human capital.

³ See a summary by Professor James J. Heckman at <https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/>.

(3) Measurement matters: understanding fiscal income and distribution of national income

The literature on top incomes and inequality has made considerable progress over the past 20 years. Two aspects of the development of this literature are worth highlighting. First, different papers measure different things. Second, much of the recent work on wealth and the distribution of national income is deeply inter-related and builds upon common foundations, which are subject to continued refinement.

In their landmark contribution, Piketty and Saez (2003) used tax data to illustrate the level and trend of income concentration in the US. They used income data from tax returns ('fiscal income') to show the evolution of top income shares and the roles of labour and capital income. For example, for recent years in which detailed micro data are available, this approach takes a data file of all tax filers in a given year and then computes the share of income received by the top 1% group. An advantage of this type of direct approach is that it requires few assumptions because tax data make income concentration directly observable. But, a disadvantage is that considerable portions of economic activity and capital income (e.g., retained earnings) are not directly observable in individual income tax data (Piketty, Saez and Zucman, 2018).

A second strand of the inequality literature tries to address this missing income issue by making several imputation assumptions to account for all national income. Piketty et al. (2018) develop this approach and provide distributional national income statistics in an important recent paper. Several others (e.g., Garbiniti, Goupille-Lebret and Piketty, 2018) implement this approach to develop distributional national income statistics for other countries.

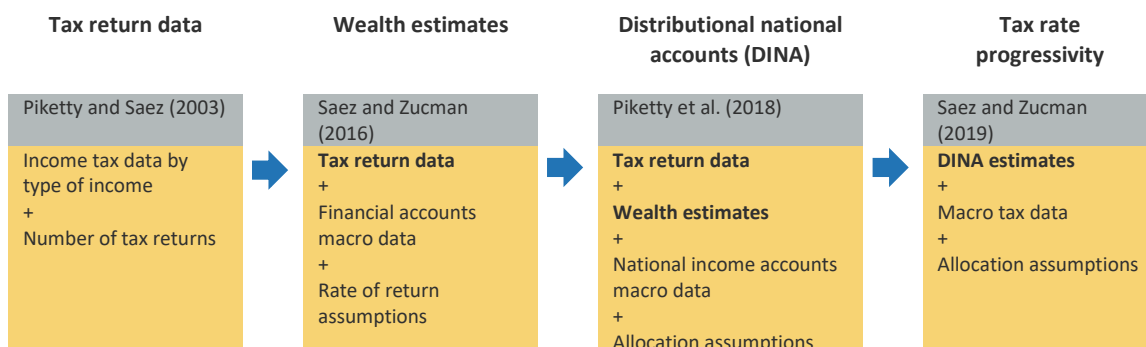
Calculating distributional national income statistics requires measurements of the distribution of wealth; wealth statistics are used to allocate different macro aggregates such as retained earnings or pensions to individuals. In the US, for example, the income measures used by Piketty et al. (2018) build directly on the wealth statistics developed in Saez and Zucman (2016).

This interdependence is worth noting because the wealth statistics themselves require an elaborate combination of data and assumptions (see Figure 3). Many of these assumptions are reasonable but some are both quantitatively important and more controversial. Different approaches can deliver materially different conclusions about the degree and nature of both wealth and income inequality.

While there is little doubt that wealth inequality has been increasing in recent decades, there is room for reasonable and scientific discussion about the degree and nature of this rise, especially in terms of the role of fixed income assets (Kopczuk, 2015; Bricker et al., 2016) and capital income at the top (Smith et al., 2019; Smith, Zidar and Zwick, 2022).

Finally, while the full data are not yet available, the rise of the stock market and housing prices during the COVID-19 pandemic has also likely increased wealth inequality (Blanchet, Saez and Zucman, 2022).

Figure 3. Links between wealth, income and tax distribution estimates



(4) Top income is clearly rising, but the sources of the rise are debatable

In recent decades, top incomes and shares have been going up in terms of both fiscal income, which computes statistics using directly observed tax data, and distributional national income, which computes statistics by combining directly observed tax data with allocation assumptions and aggregate statistics.

In fiscal income data, a few key patterns emerge from recent work. While the increase in individual income inequality in the last two decades does indeed come from taxable capital income rather than taxable wage income, it is specifically driven by increases in pass-through income from private businesses (Smith et al., 2019). The vast majority of individuals in the top 1%, and especially in the top 0.1%, own private businesses. Most of them are active owner-managers, typically in mid-sized firms in skill-intensive and unconcentrated industries. These basic facts alone indicate that the working rich are central to rising top incomes.⁴

In distributional national income, top income shares have clearly risen in recent decades, but the sources of that rise differ across methodologies. Figure 4, taken from Smith et al. (2020), compares recent trends in top incomes when accounting for heterogeneity in returns relative to the baseline equal return approach of Piketty et al. (2018). Both approaches show clear increases in top income shares in distributional national income between 1980 and 2014: the top 1% share of national income increased by 9 percentage points according to the equal returns approach, and 8 percentage points according to the Smith–Zidar–Zwick (SZZ) approach. However, the SZZ approach, which accounts for return heterogeneity and the disguised wages of private business owners, shows that much more of the rise of top incomes in the US is due to labour income rather than capital income. Smith et al. (2022) estimate that 5.6 percentage points of the increase in the top 1% share came from increases in *labour* income, compared to the 4.0 percentage points estimated under equal returns. Thus, using the SZZ approach reveals that most of the rise of top income in distributional national accounts came from labour income, not capital income as implied by the equal return approach of Piketty et al. (2018). A similar pattern emerges for top 0.1% shares. These results indicate that there is an active debate about the extent to which 'capital is back', unless capital is broadly defined to include human capital as well.

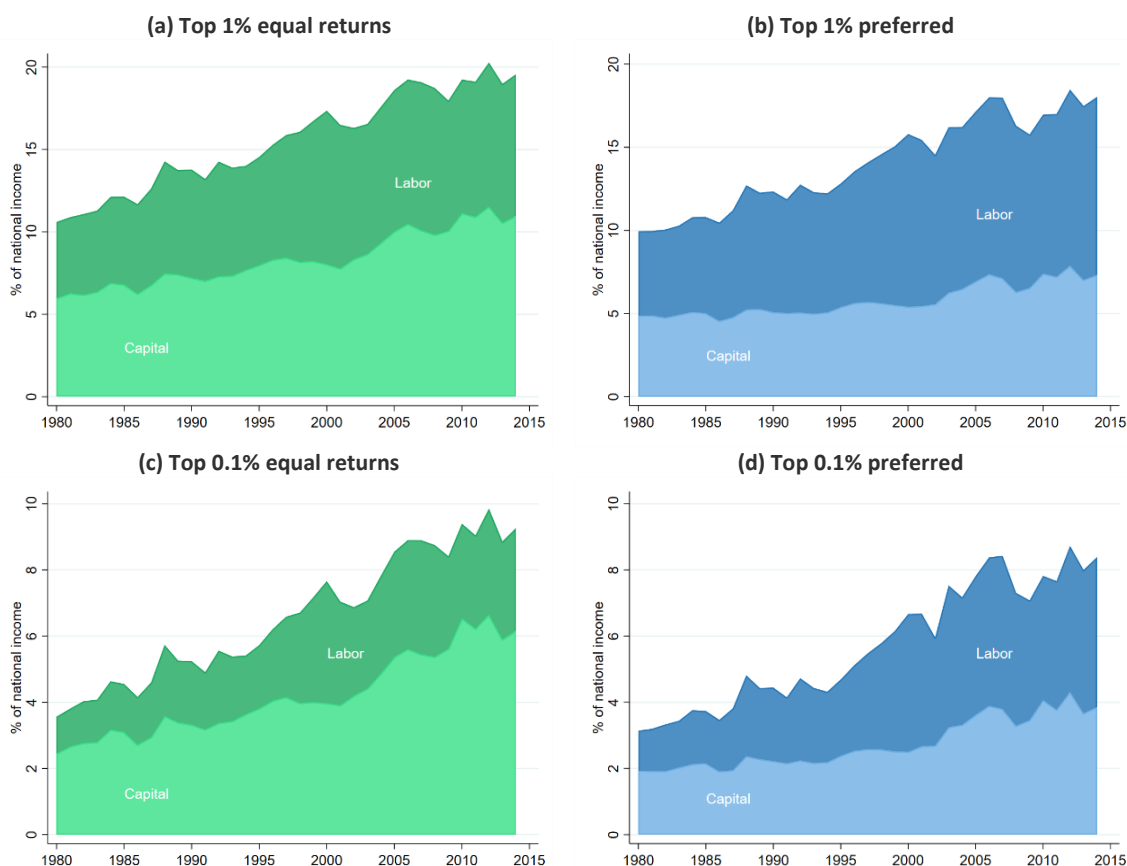
The SZZ series has smaller contributions from capital because this approach accounts for the fact that the rich tend to earn higher returns. Accounting for higher top returns means that a given observed flow of income corresponds with less wealth at the top. For example, \$1 of income could imply \$50 dollars of assets or \$100 dollars of assets if the rate of return were 2% or 1%, respectively. Smith et al. (2022) provide new data and methods that demonstrate that the portfolios and effective rates of return are much higher at the top. For instance, they document that the rich are much more likely to receive interest income from boutique funds (e.g., distressed debt and mezzanine funds) that pay much higher interest rates than the deposit rates that better characterise fixed income returns received by most of the population. This conclusion is supported by data from the Survey of Consumer Finance, novel results from linked payer–payee data that trace interest income to its source using full population tax returns, and a more structured approach that uses the covariance structure of interest income returns, aggregate assets and flows by group for inference in earlier years when population data are not available.

⁴ Measuring the extent of rent-seeking and rent-seeking protections of some of these owner-managers is an important topic for future research.

Overall, this approach yields lower estimates of top fixed income wealth, reducing the allocation of macro fixed income flows (e.g., imputed bank interest) going to top income groups. Similarly, for C-corporation equity wealth, Smith et al. (2020) find slightly less concentration at the top than do Saez and Zucman (2016) and Piketty et al. (2018). As a result, allocating retained earnings in proportion to C-corporation wealth estimates gives less retained earnings income to top groups in the SZZ approach than in the approaches of Saez and Zucman (2016) and Piketty et al. (2018).⁵

Without getting into the details of these specific allocation assumptions, the main takeaway is that our understanding of the distribution of national income is evolving based on better data and the refinement of different assumptions and approaches, and will continue to improve, much like the measurement of GDP. One other point that comes from this work is that future research should focus on the nature of human capital accumulation and its ramifications, as this is key for understanding top income and wealth.

Figure 4. Top capital and labour income in imputed national income under different approaches



Source: Smith et al. (2020).

⁵ Because there is often more income in the national accounts than in fiscal income for a given category, accounting for heterogeneous returns within an asset class can affect the distribution of national income due to the way residual income (in excess of fiscal income) such as imputed bank interest is allocated.

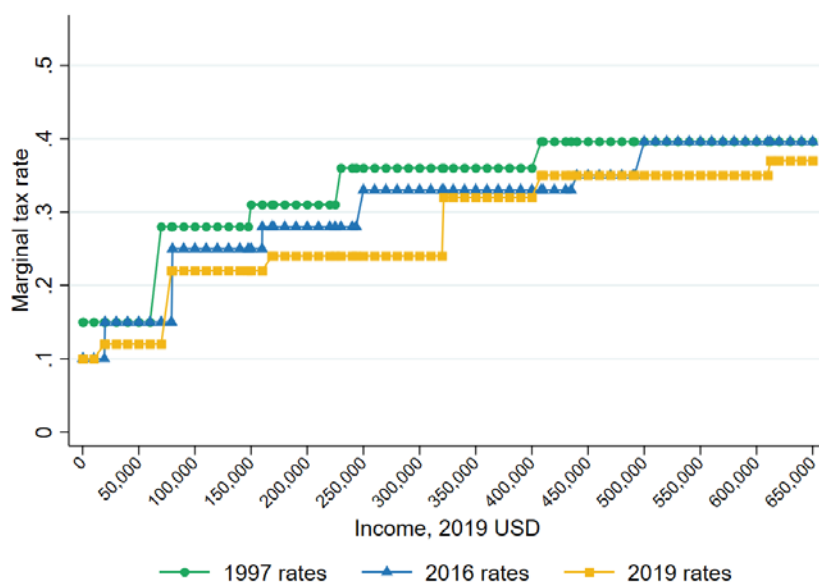
(5) Big tax cuts in recent decades at the top

In the US, top taxation has declined substantially over the past two decades, resulting in large tax savings at the top. Zidar and Zwick (2020) show that trillions could be raised in a highly progressive fashion if the US simply reverted back to the tax code of 1997 (see Figure 5).

In addition, capital taxes have also fallen considerably. Simply returning dividend tax rates to their 1997 levels would increase the top federal tax rate to 39.6% from 20% for the recipients of most taxable dividends. For capital gains, this change would bring maximum long-term capital gains tax rates back to 28%, from 20% today. Unwinding the 2001 and 2017 reductions in estate and gift taxation would entail returning to a 55% top rate and setting a \$1 million effective exemption.

Most of the revenues from reverting back to 1997 come from the top of the income distribution (Zidar and Zwick, 2020). Specifically, the top 10%, 5%, 1% and 0.1% account for 83%, 70%, 46% and 23% of the increase, respectively. The average after-tax income of the top 0.1%, whose average pre-tax income is \$2.1 million, would fall by 14%, or \$220,000. The bottom line is that simply undoing the changes in US tax policy since 1997 would raise considerable revenues primarily from the top of the income distribution. While imagining a return to 1997 policy is illustrative, such a change would be insufficient; more ambitious reforms to top taxation and enforcement are needed.

Figure 5. Marginal tax rates have declined over the past two decades



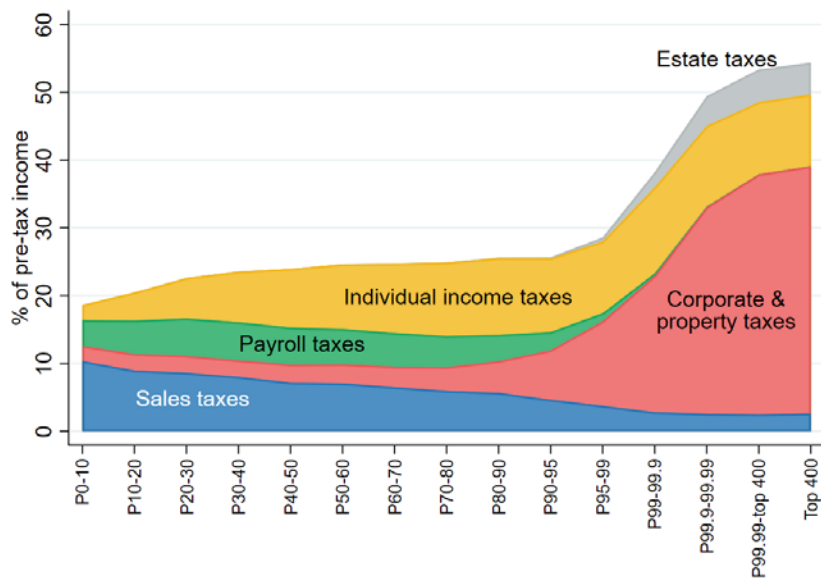
Source: Zidar and Zwick (2020).

More generally, as a share of national income, the US collects much less tax revenue from the top of the income distribution than it has in the past (see Figure 6). Saez and Zucman (2020) describe this trend, characterising the evolution of US tax policy as the 'triumph of injustice'. They point to large declines in capital taxes, especially from the corporate tax, as well as individual income taxes as important reasons why top taxation and progressivity have declined in the US.

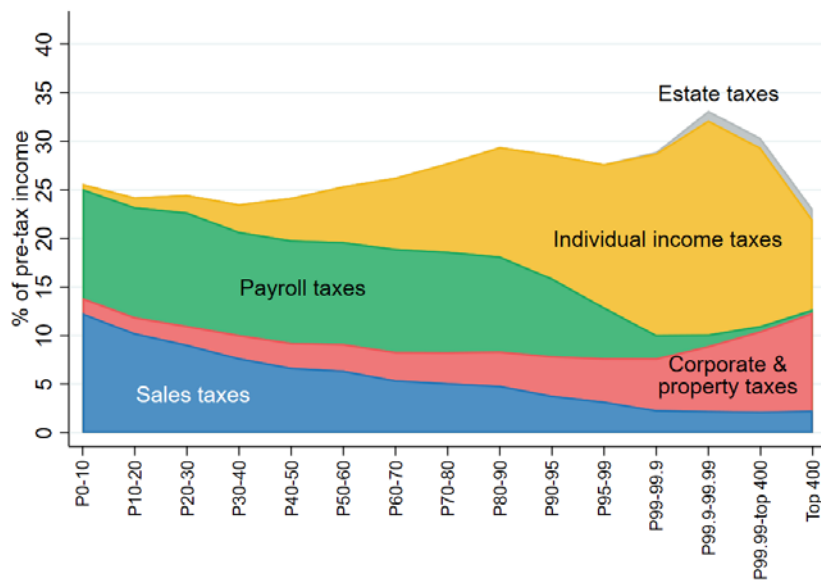
While the exact magnitudes of each of these components depends on allocation assumptions related to those discussed above (see point 3), the general pattern of declining progressivity of the US tax system and relatively low levels of taxation at the top is quite clear. It also points to a potential path forward to increase revenues and tax progressivity.

Figure 6. Total tax rates by pre-tax national income

(a) 1962



(b) 2018



Source: Saez and Zucman (2019).

(6) Capital gains are key for taxing top income in current tax code

Capital gains are a key source of revenue potential, as well as the subject of active policy debate. Saez, Yagan and Zucman (2021) provide a table (see Table 1) highlighting the importance of capital gains at the very top. As described in more detail below, there is good reason to believe that there is considerably more revenue potential from higher taxes on capital gains than implied by many recent estimates from the tax scoring community (Sarin et al., 2021).

Table 1. Level and composition of unrealised capital gains

Wealth group	Total gains (in \$billions)	Gains as fraction of wealth	Composition of gains			
			% Gains in publicly traded stock	% Gains in private business shares	% Gains in real estate	% Gains in other
A. Survey of Consumer Finances combined with Forbes billionaires 2020 (household level)						
All	33,538	33%	18%	42%	40%	0%
Below \$10m (bottom 99%)	15,857	28%	11%	25%	63%	0%
\$10m to \$20m (next 0.7%)	4,646	34%	24%	47%	29%	0%
\$20m to \$50m (next 0.25%)	4,949	38%	24%	53%	23%	0%
Above \$50m (top 0.05%)	8,086	50%	25%	65%	10%	0%
Above \$100m (top 0.02%)	6,206	54%	26%	64%	10%	0%
B. Estate tax data 2010 (individual level)						
\$5m to \$10m		33%	40%	18%	34%	8%
\$10m to \$20m		34%	41%	23%	31%	6%
Above \$20m		44%	30%	49%	16%	6%

Source: Saez et al. (2021).

Commentary on 'Top income inequality and tax policy'

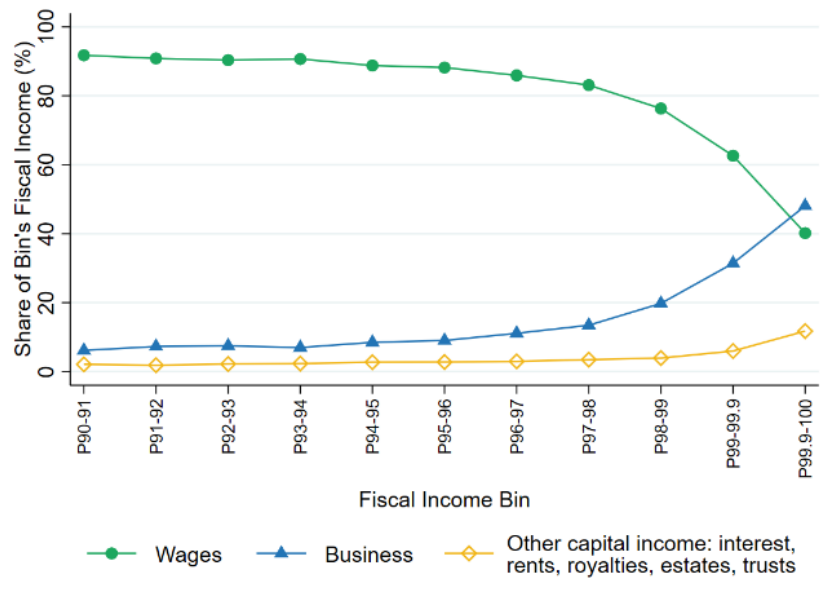
Delestre et al. (2022) provide an excellent overview of top incomes and taxation in the UK. I have four comments on their chapter.

(1) Similar patterns in UK and US

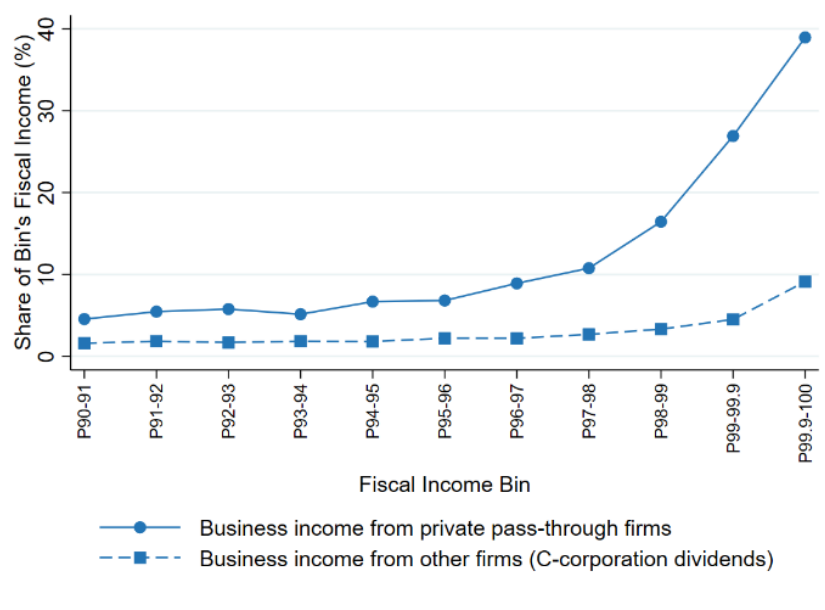
The similarities in the US and UK are quite striking, especially in terms of the prominent role that businesses owners play at the top of the income distribution (see Figure 7). The concentration of capital gains in the UK among the top 1% is also quite similar to the concentration of capital gains in the US.

Figure 7. Shares of fiscal income by source

(a) Income



(b) Business income



Source: Smith et al. (2019).

(2) Aggregate top tax base

Delestre et al. (2022) provide a nice discussion of the revenue effects of different tax reforms in Table 4. When considering these estimates, it is useful to keep in mind how large the estimated mechanical and behavioural effects are, to try to make sure that the estimates reflect the latest research on the aggregate top tax base and how it is likely to respond to tax changes.

(3) Economic drivers of top labour and capital income and policy implications

In the interest of brevity, Delestre et al. (2022) were not able to focus as much on the economic drivers of top incomes in both labour and capital markets. Some of the recent work by Florian Scheuer and Joel Slemrod (Scheuer and Slemrod, 2020, 2021) – which Delestre et al. (2022) cite – provide useful summaries of taxing superstars and the tax implications of rent-seeking at the top. This focus on the economics of top incomes not only informs the analysis of behavioural responses, but might also suggest other policy solutions. For instance, if one of the drivers of top labour income is technology outracing education, one implied solution would be increased high-skill immigration.

(4) Inequality dynamics

Delestre et al. (2022) do a nice job highlighting the difference between inequality in the cross-section versus over time. This distinction matters when computing statistics such as those in Piketty et al. (2018) that use capital gains to allocate retained earnings. If someone has a large capital gain in a given year, they will appear to be much higher in the wealth and distributional national income statistics than they actually are over a five-year period. Thus, exercises that distribute growth across different percentiles should be interpreted carefully, as different people will be represented in a given top percentile. The same applies over the life cycle. While there are clearly many who persistently remain at the top of the income and wealth distribution, it is important to consider how measures of lifetime resources may differ from cross-sectional statistics and other approaches to distributing economic growth by percentile.

The revenue potential of top capital gains taxation

In terms of practical policy, an important way to raise more tax revenue from the top is the taxation of capital gains. The revenue potential from increasing tax rates and broadening the tax base on capital gains may be substantially larger than previously thought by many in the tax policy community.

The primary object of policy interest when considering revenue potential is the effect on aggregate tax revenue over a ten-year period. However, the mapping from estimates in most prior capital gains studies to this object of interest is much less clear than some believe, and may miss out on considerable revenues.

Consider three types of approaches: individual-level studies, state-level studies and national time series analyses.

At the individual level, one can relate capital gains realisations to tax rate changes using panel data. However, the mapping from micro to macro is quite difficult. First, because capital gains in the US are taxed upon realisation, one has to account for an important selection problem based on the decision whether to realise gains. While there are standard selection corrections that can be applied, there is considerable scope for mis-specification and error, especially at the top of the distribution where gains can be quite sizeable. In addition to selection issues, micro studies also have to be thoughtful in terms of aggregation: the responses should be dollar-weighted as those with substantial gains are much more important in terms of aggregate revenues than typical investors. The third and most important consideration is medium-term dynamics. As I have argued recently in Sarin et al. (2021), much of the literature on capital gains (either due to data limitations or the use of short panels) likely misses a lot of the revenue potential that comes from investor retiming of gains.

A second style of approach is to use state-level studies, which investigate how aggregate realisations at the state level evolve following changes to state capital gains tax. This approach has some clear advantages. First, it focuses on a variable that is much closer to the primary object of interest in revenue

scoring: aggregate capital gains realisations and tax revenues. Second, in doing so, this approach avoids having to implement specific selection corrections, as those decisions are reflected directly in the outcome. Third, there is considerable policy variation at the state level. In recent work, Agersnap and Zidar (2021) use this additional power at the state level to estimate how realisations evolve over a ten-year period following a tax change, which is substantially longer than much of the prior literature.

However, there are also some important limitations to the state-level focus. A key issue is that state-level tax changes tend to be much smaller than the tax changes debated at the federal level, so the use of estimates from these studies requires more extrapolation and concomitant uncertainty.

Finally, at the federal level, some researchers look to compare aggregate realisations across periods with different federal tax rates. But, as discussed in Sarin et al. (2021), there are many other confounding factors that make inference from the time series alone difficult. Some cross-country work might provide a promising way forward, though clearly this approach is also not without limitations.⁶

Overall, my view is that the best predictions about the revenue potential from capital gains are the product of empirical evidence and more model-based approaches that incorporate additional moments such as investor behaviour and asset turnover (e.g., Auerbach, 1989) to discipline predictions.

The current assessment of many in the scorekeeping community that raising capital gains tax rates to top income tax rates would raise little revenue is not well supported by the evidence and may need to be rethought in light of: aggregation; medium-run retiming and implied behaviour in turnover models; base broadening reforms; recent changes in the composition of gains that make a smaller portion of gains easy to retime; and other considerations mentioned in Sarin et al. (2021). Given the magnitudes at stake – the differences in revenue estimates could exceed hundreds of billions of dollars over a ten-year period – scorekeeping procedures employed in evaluating capital gains should be made more transparent and should be the subject of external professional debate and review.

⁶ Agersnap and Zidar (2021) compare the evolution of capital gains realizations US and UK in their Figure 1.

References

- Agersnap, O, and Zidar, O. (2021), 'The Tax Elasticity of Capital Gains and Revenue-Maximizing Rates', *American Economic Review: Insights*, 3, 399–416.
- Auerbach, A. (1989), 'Capital Gains Taxation and Tax Reform', *National Tax Journal*, 42, 391–401.
- Bell, A., Chetty, R., Jaravel, X., Petkova, N., and Van Reenen, J. (2019), 'Who Becomes an Inventor in America? The Importance of Exposure to Innovation', *Quarterly Journal of Economics*, 134, 647–713.
- Blanchet, T., Saez, E., and Zucman, G. (2022), 'Real-time Inequality', Working paper.
- Bricker, J., Henriques, A., Krimmel, J., and Sabelhaus, J. (2016), 'Measuring Income and Wealth at the Top Using Administrative and Survey Data', *Brookings Papers on Economic Activity*, 2016(1), 261–331.
- Chetty, R., and Hendren, N. (2018), 'The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects', *Quarterly Journal of Economics*, 133, 1107–62.
- Chetty, R., Hendren, N., Jones, M. R., and Porter, S. R. (2020), 'Race and Economic Opportunity in the United States: An Intergenerational Perspective', *Quarterly Journal of Economics*, 135, 711–83.
- Chetty, R., Hendren, N., Kline, P., and Saez, E. (2014), 'Where is the land of opportunity? The geography of intergenerational mobility in the United States', *Quarterly Journal of Economics*, 129, 1553–623.
- Chetty, R., Van Reenen, J., Zidar, O., and Zwick, E. (2022), 'America's Missing Entrepreneurs', Working paper.
- Delestre, I., Kopczuk, W., Miller, H., and Smith, K. (2022), 'Top Income Inequality and Tax Policy', IFS Deaton Review of Inequalities.
- Garbinti, B., Goupille-Lebret, J., and Piketty, T. (2018), 'Income Inequality in France, 1900–2014: Evidence from Distributional National Accounts (DINA)', *Journal of Public Economics*, 162, 63–77.
- Hsieh, C. T., Hurst, E., Jones, C. I., and Klenow, P. J. (2019), 'The Allocation of Talent and US Economic Growth', *Econometrica*, 87, 1439–74.
- Kopczuk, W. (2015), 'What Do We Know about the Evolution of Top Wealth Shares in the United States?', *Journal of Economic Perspectives*, 29(1), 47–66.
- Piketty, T., and Saez, E. (2003), 'Income Inequality in the United States, 1913–1998', *Quarterly Journal of Economics*, 118, 1–41.
- Piketty, T., Saez, E., and Zucman, G. (2018), 'Distributional National Accounts: Methods and Estimates for the United States', *Quarterly Journal of Economics*, 133, 553–609.
- Saez, E., Yagan, D., and Zucman, G. (2021), 'Capital Gains Withholding', Working paper.
- Saez, E., and Zucman, G. (2016), 'Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data', *Quarterly Journal of Economics*, 131, 519–78.
- Saez, E., and Zucman, G. (2019), *The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay*, New York: WW Norton & Co.
- Sarin, N., Summers, L., Zidar, O., and Zwick, E. (2021), 'Rethinking How We Score Capital Gains Tax Reform', NBER Working Paper 28362, available at <https://ssrn.com/abstract=3772601>.
- Scheuer, F., and Slemrod, J. (2020), 'Taxation and the Superrich', *Annual Review of Economics*, 12, 189–211.
- Scheuer, F., and Slemrod, J. (2021), 'Taxing Our Wealth', *Journal of Economic Perspectives*, 35 (1), 207–30.

Smith, M., Yagan, D., Zidar, O., and Zwick, E. (2019), 'Capitalists in the Twenty-first Century', *Quarterly Journal of Economics*, 134, 1675–745.

Smith, M., Zidar, O., and Zwick, E. (2020), 'Top Wealth in America: New Estimates and Implications for Taxing the Rich', Working paper.

Smith, M., Zidar, O., and Zwick, E. (2022), 'Top Wealth in America: New Estimates under Heterogeneous Returns', Working paper.

Zidar, O., and Zwick, E. (2020), 'A Modest Tax Reform Proposal to Roll Back Federal Tax Policy to 1997', in *Vision 2020: Evidence for a Stronger Economy*, Washington DC: Washington Center for Equitable Growth.