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Gabriel Zucman: Winner of the 2023 Clark Medal

Emmanuel Saez

The 2023 John Bates Clark Medal of the American Economic Association was awarded to Gabriel Zucman, Associate Professor of Economics at the University of California, Berkeley, for his fundamental contributions to the study of inequality and taxation. Through meticulous empirical work and creative methodological approaches, Gabriel has revealed key trends about the concentration of global wealth, the size and distribution of tax evasion, and the tax-saving strategies of multinational companies. These findings have had a profound impact on the academic literature and on global policy debates. Methodologically, his work has contributed to reviving a centuries-long empirical tradition in the social sciences—pioneered long-ago by the likes of Gregory King and William Petty, and then in the twentieth century by Richard Stone and Simon Kuznets—that attempts to shed light on core economic and political issues through the creation of new measurement systems, which are sophisticated without being wedded to a unique theoretical perspective. In reviving this tradition, Gabriel has shifted the way contemporary economic research is done by showing that measurement can have a large impact in our field and on the world, inspiring many younger scholars to follow in his footsteps.

Gabriel Zucman was born in Paris. After his undergraduate studies—first in the "classe préparatoire B/L" of lycée Henri IV, then at École normale supérieure de Cachan—he chose to specialize in economics. In 2006, at barely 19, he founded a broad-audience review aimed at popularizing economic research, an early sign of

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Gabriel Zucman

his entrepreneurial spirit. The review, which Gabriel served as director until 2013, invites scholars in economics and related disciplines to write articles summarizing their research and explaining how their work can illuminate the public debate of policy issues. The inaugural issue focused on taxation [1],[1] and the review still publishes in French, English, and Spanish today.[2]

Gabriel completed his master's degree at the Paris School of Economics in 2008. His dissertation, under the supervision of Thomas Piketty, investigated whether the wealthy fled the French wealth tax [2]. When he finished this work, the first signs of a devastating financial crisis were emerging. Academic economics seemed increasingly disconnected from the big issues of the time and, unsure about pursuing a PhD, he went to work at a financial firm. He started his position on the very day of the Lehman Brothers bankruptcy—September 15, 2008—tasked with explaining the global economic outlook to the firm's traders and clients in graphics-filled memos. This task was of course impossible (the severity and specificity of the crisis had caught most observers off guard) but it had the unexpected benefit of revealing to him the existence of a wealth of data that one could use to try to make sense of the world, including its dark corners that economists often do not like to talk about. He became fascinated by statistics on international capital

[1] We refer to Zucman's papers mentioned in this essay by number, as enumerated in Table 1.
[2] For the English-language text of *Regards croisés sur l'économie*, see https://www.cairn-int.info/journal-regards-croises-sur-l-economie.htm.

Table 1
Cited Work by Gabriel Zucman

1. Quelle fiscalité pour quels objectifs? *Regards croisés sur l'économie* 2007/1 (n° 1), initial issue.
2. "Do High-Earners Flee the Wealth Tax? An Estimation Over the 1995–2006 Period." 2008. Paris School of Economics master thesis (in French).
3. "The Missing Wealth of Nations: Are Europe and the U.S. net Debtors or net Creditors?" 2013. *Quarterly Journal of Economics* 128 (3): 1321–1364.
4. "The End of Bank Secrecy? An Evaluation of the G20 Tax Haven Crackdown" (with Niels Johannesen). 2014. *American Economic Journal: Economic Policy* 6 (1): 65–91.
5. "Capital is Back: Wealth-Income Ratios in Rich Countries 1700–2010" (with Thomas Piketty). 2014. *Quarterly Journal of Economics* 129 (3): 1255–1310.
6. *La Richesse Cachée des Nations : Enquête sur les Paradis Fiscaux*. 2013. Le Seuil: Paris.
7. *The Hidden Wealth of Nations: The Scourge of Tax Havens*. 2015. University of Chicago Press: Chicago.
8. "Who owns the wealth in tax havens? Macro evidence and implications for global inequality." (with Annette Alstadsæter and Niels Johannesen). 2018. *Journal of Public Economics* 162: 89–100.
9. "Tax Evasion and Inequality." (with Annette Alstadsæter and Niels Johannesen). 2019. *American Economic Review* 109 (6): 2073–2103.
10. Tax Evasion at the Top of the Income Distribution: Theory and Evidence (with John Guyton, Patrick Langetieg, Daniel Reck and Max Risch). 2021. NBER working paper No. 28542.
11. "Taxing Across Borders: Tracking Personal Wealth and Corporate Profits" 2014. *Journal of Economic Perspectives* 28 (4): 121–148.
12. "The Missing Profits of Nations" (with Thomas Tørsløv and Ludvig Wier). 2023. *Review of Economic Studies* 90 (3): 1499–1534.
13. "The Exorbitant Tax Privilege" (with Thomas Wright). 2018. NBER working paper No. 24983.
14. "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data" (with Emmanuel Saez). 2016. *Quarterly Journal of Economics* 131 (2): 519–578.
15. "Twenty Years and Counting: Thoughts about Measuring the Top Tail" (with Thomas Piketty and Emmanuel Saez). 2022. *Journal of Economic Inequality* 20: 255–64.
16. "The Rise of Income and Wealth Inequality in America: Evidence from Distributional Macroeconomic Accounts" (with Emmanuel Saez). 2020. *Journal of Economic Perspectives* 34 (4): 3–26.
17. "Trends in US Income and Wealth Inequality: Revising After the Revisionists" (with Emmanuel Saez). 2020. NBER working paper No. 27921.
18. *The World Inequality Report 2022*. (with Lucas Chancel, Thomas Piketty, and Emmanuel Saez). 2022. Harvard University Press: Cambridge.
19. "Distributional National Accounts: Methods and Estimates for the United States" (with Thomas Piketty and Emmanuel Saez). 2018. *Quarterly Journal of Economics* 133 (2): 553–609.
20. "Simplified Distributional National Accounts" (with Thomas Piketty and Gabriel Zucman). 2019. *American Economic Association, Papers and Proceedings* 109: 289–295.
21. *Global Tax Evasion Report* (with Annette Alstadsæter, Sarah Godar, and Panayiotis Nicolaides). 2023. EU Tax Observatory report.
22. *The Triumph of Injustice*. (with Emmanuel Saez). 2019. WW Norton: New York.
23. "Revenue Effects of the Global Minimum Tax Under Pillar Two" (with Mona Baraké, Paul-Emmanuel Chouc, and Therese Neef). 2022. *Intertax* 50 (10): 689–710.
24. "Progressive Wealth Taxation" (with Emmanuel Saez). 2019. *Brookings Papers on Economic Activity*, 437–511.

flows, in which one can see hundreds of billions of dollars flowing in and out of such places as the Cayman Islands and Luxembourg. He decided to go back to academia, pursue a PhD in economics, and explore the story behind these numbers.

His dissertation, completed in 2013, does not fit the mold of typical contemporary PhD theses in economics. It includes path-breaking work on the measurement of the wealth hidden in tax havens [3], the evaluation of policies implemented to curb this form of tax evasion [4], and (jointly with his PhD advisor Thomas Piketty) the construction of a centuries-long series of macroeconomic capital income and wealth for many countries [5] that would form the backbone of Piketty's (2014) best-seller *Capital in the 21st Century*. Perhaps most unusual for a young academic economist, Gabriel synthesized his thesis work on tax havens into a book published in France in 2013 [6], which was translated into 17 languages and remains his most cited solo work to date [7]. It is the first data-driven, scientific (and yet eminently accessible) treatment of the issue and it inspired the creation of a new field of studies on offshore wealth. The book illustrates some of the most distinct qualities of Gabriel's work: his ability to approach a complex topic with new eyes, to figure out what is important and missing in our understanding, and to illuminate what was previously unseen in a rigorous and yet engaging manner.

After his PhD, Gabriel was hired as Assistant Professor of Economics at the London School of Economics, before moving to the University of California Berkeley in 2015, where he obtained tenure in 2019. Since 2023, he also holds a position of Professor of Economics at the Paris School of Economics.

The American Economic Association is not the first to recognize Gabriel's accomplishments. He has received numerous prizes, including the Excellence Award in Global Economic Affairs from the Kiel Institute in 2017, the Best Young French Economist Prize awarded by Le Monde and le Cercle des Economistes in 2018, the Bernacer Prize and a Sloan Research Fellowship in 2019, and a Carnegie Fellowship in 2021.

Gabriel's Clark Medal citation says in part: "Through his entrepreneurial and creative pursuit of new data and methods for economic measurement, Gabriel Zucman has uncovered a range of fundamentally important facts quantifying the importance of tax evasion and measuring the rise of top income and wealth inequality." Two of his core topics of interest—tax evasion among the rich and measurement of top income and wealth—are inextricably linked. To measure top income and wealth properly, knowing how much is dissimulated by the rich and by the businesses they own is crucial. In this paper, we first provide some background on top-end inequality and tax evasion, and then discuss the pathbreaking contributions of Gabriel in each of these areas. Because being accessible has been central to Gabriel's approach, we will illustrate his accomplishments showing simple graphs drawn from his work that summarize his findings eloquently. Finally, we will discuss the policy impact that Gabriel's work has already had.

Background

Perhaps the most common critique of capitalist economies is that while they foster economic growth, they also generate excessive inequality. The study of top levels of income and wealth is closely tied to tax statistics, because they are the best source of information to capture the rich—despite the long-held suspicion that the rich may not report all their income and wealth to the tax authority.[3] Over a century ago, Vilfredo Pareto (1896) discovered by looking at tabulations of income and wealth tax data for Swiss cantons that top tails of income and wealth distributions follow a power law, now named Pareto distributions. Fifty years later, Simon Kuznets (1953) estimated top income shares by dividing the income accruing to a top income group (for example, the top percentile) by total income economy wide estimated from the national accounts that he also helped to invent. These top income share statistics are more concrete than the abstract Pareto parameter of a power law—and hence have a greater impact in both the academic and policy debates. Kuznets documented the large decrease in US income concentration from 1913 to 1948, which formed the basis of his famous "Kuznets curve" theory that inequality would first rise and then fall with economic development. Lampman (1962), using estate tax data reweighted to represent the full population, documented a similar decline in US wealth concentration.

For decades afterwards, interest in using tax data to measure inequality waned as income and wealth concentration remained relatively stable and—by earlier historical standards—low, with the focus of distributional work shifting to data from the newly available microsurveys and focusing on the bottom rather than the top of the distribution.

Piketty (2001) and Piketty and Saez (2003) rekindled the study of the top tail using tax data by creating century-long top income shares for France and the United States. While income concentration had remained low in France, the United States experienced a sharp increase in income concentration starting precisely in 1980 after the neoliberal turn of the Reagan presidency. The striking contrast between France and the United States since 1980 showed that inequality trends could not be explained solely by technological progress, as posited by the earlier Kuznets (1953) explanations, or by skill-biased technological progress, as many US wage-inequality studies had proposed (as surveyed in Katz and Autor 1999).

Concerning the issue of US wealth inequality, the high-quality Survey of Consumer Finances showed significant increases in wealth concentration since the 1980s (Wolff 1995), as did the *Forbes* magazine list of the 400 richest Americans. However, estate tax data updating the Lampman (1962) study failed to validate such a surge in wealth concentration (Kopczuk and Saez 2004).

The main weakness of these earlier top income and wealth share studies was their reliance on income and wealth as reported on individual and estate tax

[3] This discussion is based partly on [15], in which one may find a more detailed exposition.

returns. Reported income may not include important components of income such as the undistributed profits of corporations that are particularly important at the top. Furthermore, tax evasion and tax avoidance may reduce reported incomes relative to real incomes and the extent of tax evasion and tax avoidance may also vary over time and across countries, depending on the strength of tax enforcement and the tax avoidance opportunities available. For the US economy, an enormous discrepancy between the booming wealth of the Forbes 400 and the stagnation of the largest estates of decedents suggested that growing tax avoidance/evasion could be an issue (Kopczuk and Saez 2004).

To be sure, an earlier literature on tax evasion and tax avoidance did exist, but it was rarely connected with the analysis of inequality. For the United States, studies of random audits by the Internal Revenue Service showed that adding estimates of evaded income to reported income slightly increases the concentration of income (Johns and Slemrod 2010). But the ability of the IRS to measure evaded income is limited, particularly for sophisticated forms of evasion used by the wealthy such as offshore tax evasion. While ample anecdotal evidence suggested that many rich people stashed wealth in tax havens to evade taxes and that tax havens had developed into a flourishing business model, there was no broadly applicable quantitative evidence about the extent of offshore tax evasion before Zucman's early work in this area [3].

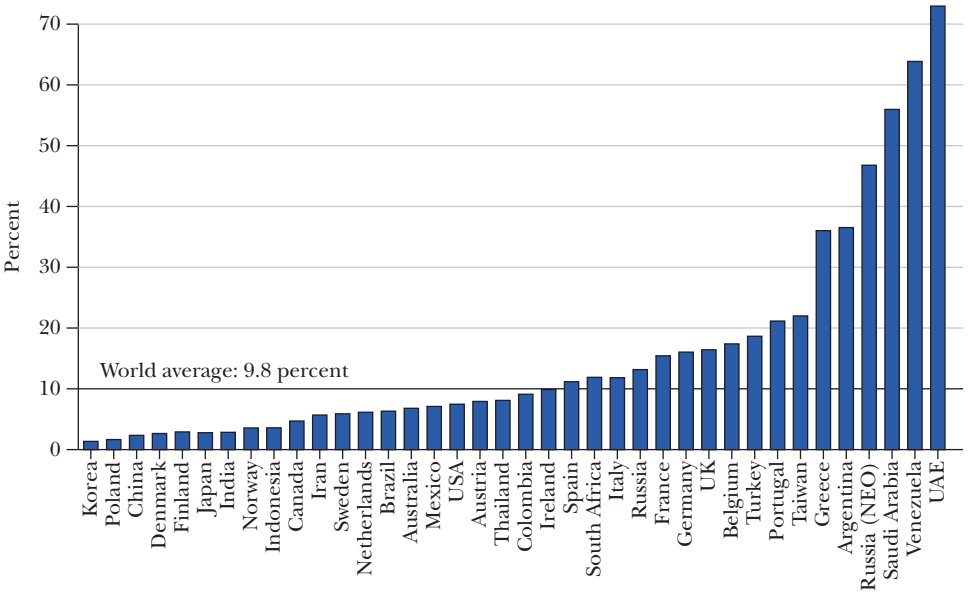
A somewhat larger literature in international business taxation studied the extent to which multinational companies avoid taxes by reporting profits in low-tax jurisdictions—oftentimes the same tax havens that cater to wealthy individuals. Because multinational companies report data on their foreign activities, a body of work suggested that such tax avoidance was significant (for example, Clausing 2009). Yet this literature was nearly impenetrable to the nonexpert because of the complexity of the tax avoidance schemes, the intricacies of the accounting firm data available and their lack of reliability, and perhaps as well an insider love for jargon and details, making it hard if not impossible for everybody else to see the big picture.

Offshore Tax Evasion

In a series of papers and in his book *The Hidden Wealth of Nations* [3, 6, 7, 8, 9, 11], Gabriel developed methods to measure the wealth held in tax havens in a systematic manner, bringing much-needed quantitative assessments to this important issue. Gabriel measured both how much wealth is hidden in tax havens and how ownership of this wealth is distributed across the wealth distribution.

It is well-known that there is an anomaly in international statistics on securities (that is, stocks and bonds traded on markets): liabilities exceed assets. According to the statistics, the world as a whole is a net debtor (Lane and Milesi-Ferretti 2007). Gabriel's job market paper [3] notes that this discrepancy can be linked to household wealth assets being held in tax havens. To take a concrete example, if a French person owns US equities in her Swiss account, the US records a liability vis-à-vis the

Figure 1
Offshore Wealth Relative to GDP in 2007, by Country

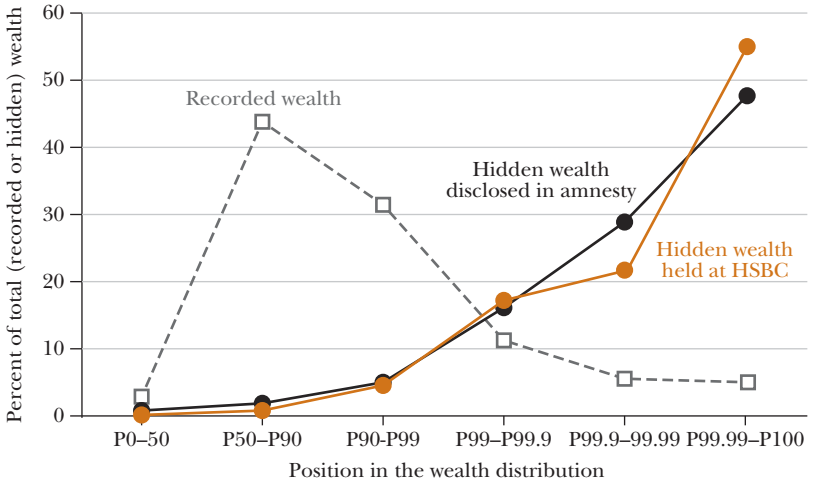


Source: [8], Figure 5.
Note: This figure depicts the amount of household wealth owned offshore by residents of each country as a percentage of GDP of the country, in 2007. The sample includes all the world's countries with more than $200 billion in GDP in 2007. Offshore wealth is estimated by allocating the global offshore wealth estimated by [3], on the basis of the geographical distribution of bilateral cross-border bank deposits in offshore centers.

rest of the world, but France does not record any asset (as the French statistical authorities do not observe these claims), and neither does Switzerland (because these US equities do not belong to Swiss residents and are thus neither assets nor liabilities for Switzerland). Gabriel proposes a methodology to infer the size of global household offshore wealth from the pattern of anomalies seen in global investment data. This allows him to estimate that the equivalent of 8 percent of global household financial wealth—equivalent to about 10 percent of world GDP—is held in tax havens.

In [8], Gabriel exploits newly disclosed data by a number of prominent offshore financial centers—including Switzerland, Luxembourg, the Channel Islands, and Hong Kong—showing the amount of bank deposits that foreigners own in their banks by country of residence of foreigners. Using such data, Gabriel can allocate the global offshore wealth he found in [3] across countries. While on average, offshore wealth hidden in tax havens represents 10 percent of world GDP, he finds a great deal of heterogeneity across countries as he depicted on Figure 1. Scandinavian countries own the equivalent of only a few percent of GDP in offshore wealth,

Figure 2
The Distribution of Recorded versus Hidden Wealth in Scandinavia



Source: [9], Figure 4, Panel B.
Note: The figure shows the distribution of wealth in Scandinavia (Norway, Sweden, and Denmark), excluding offshore wealth (series recorded wealth), and the distribution of wealth held at the banking and financial services firm HSBC and disclosed by amnesty participants. Hidden wealth is dramatically more concentrated at the top than recorded wealth.

but this figure rises to about 15 percent in Continental Europe, and to as much as 60 percent in Russia, Gulf countries, and a number of Latin American countries.

While we can guess that most of the offshore wealth hidden abroad belongs to the wealthy, empirical work to quantify this effect was lacking. In [9], Gabriel made a path-breaking contribution in this direction using new microdata from recent leaks from offshore financial entities—the "Panama Papers" and HSBC "Swiss Leaks"—and from the results of tax amnesties, merged with administrative income and wealth tax records in Norway, Sweden, and Denmark. Offshore wealth from such leaks or reported through tax amnesties is incredibly concentrated at the very top of the distribution. In Figure 2, he depicted the distribution of wealth in Scandinavia (Norway, Sweden, and Denmark), excluding offshore wealth, and the distribution of wealth held at HSBC and disclosed by tax amnesty participants: about half of this offshore wealth belongs to the top 0.01 percent of the wealth distribution, about three-quarters belong to the top 0.1 percent, and over 90 percent belong to the top 1 percent. Since that work, a number of studies have found similar concentration of wealth in other contexts using leaks or amnesties (for an example using data from Colombia, see Londoño-Vélez and Ávila-Mahecha 2021). Therefore, it is plausible to use distributional estimates from Scandinavian countries produced in [9] and apply them to other countries. Using the aggregates by country of offshore wealth held by residents

discussed above, Gabriel was able to evaluate how wealth concentration changes when offshore wealth is included in [8]. Adding offshore wealth has only a modest impact for the United States, where wealth is already very concentrated and aggregate offshore wealth is fairly small: it increases the wealth share of the top 0.01 percent by less than 1 percentage point. However, the effects are much larger in many European countries where wealth is less concentrated and where aggregate offshore wealth is more important; for example, it increases wealth share of the top 0.01 percent in the United Kingdom from 2.7 to 4.4 percent (average in 2000–2009). The effect can be truly dramatic in countries with a lot of wealth hidden offshore: in Russia, the wealth share of the top 0.01 percent more than doubles from 5 to 12.5 percent.

This distributional analysis of offshore wealth has also shown that tax evasion at the top of the distribution is substantially higher than previously thought. The evidence from Scandinavia in [9] implies that the top 0.01 percent wealthiest Scandinavians evade about 25 percent of their taxes, in contrast with conventional audits that find evasion rates below 5 percent across the wealth distribution because they cannot capture offshore wealth. In [10], Gabriel applies those findings to the United States, showing that taking sophisticated tax evasion such as hidden wealth offshore into account, which cannot be detected by IRS random audit studies used to estimate tax evasion by income groups, dramatically shifts the picture of evasion across the income distribution. Instead of a fairly flat pattern of unreported income by income group from the IRS studies, unreported income as a fraction of true income rises from 7 percent in the bottom 50 percent of the income distribution to more than 20 percent in the top 1 percent. As a result, income that *should* be reported on US tax returns is more concentrated than income *actually* reported on tax returns.

Multinational Tax Avoidance

A second strand of Gabriel's research quantifies the tax avoidance of multinationals using tax havens. Multinationals can use a variety of accounting strategies to maximize the share of their profits reported in tax havens, where their profits are taxed lightly if at all. In this way, the firms can minimize the share of their profits reported in higher tax countries, which are typically large and rich countries where the bulk of the real economic activity takes place. It is considered tax avoidance—as opposed to tax evasion discussed above—because these strategies are not outright fraud: they are devised by tax accountants and then vigorously defended when challenged by tax authorities. However, tax evasion and tax avoidance are closely related, because the line between aggressive tax avoidance that wins in courts and tax avoidance that loses and crosses into tax evasion territory is a thin one.

The important topic of tax avoidance by multinationals had been the subject of earlier academic research in the international tax literature, but the complexity of the institutional details made it hard going. In an early contribution, in what probably remains the simplest and most pedagogical contribution to understanding the big picture, Gabriel [11] constructs simple statistics illustrating the enormous rise of

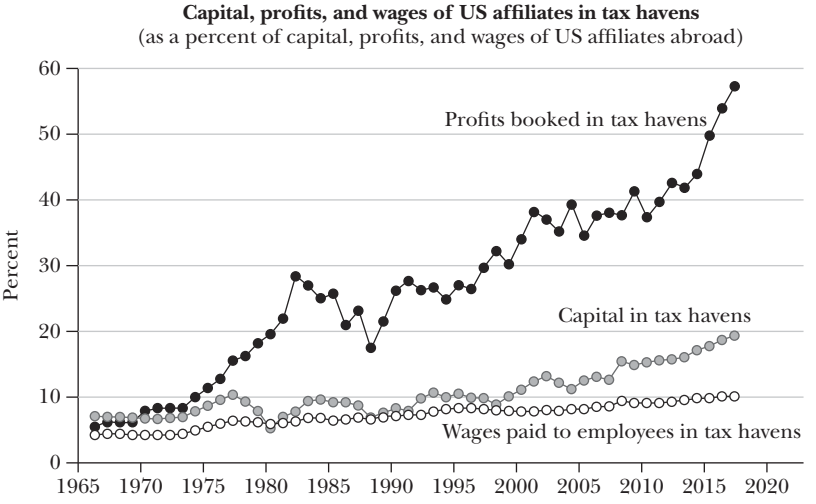
profit-shifting by US multinationals to tax havens: by the 2010s, more than half of the foreign profits reported by US multinationals are reported in tax havens. In [12], Gabriel mobilizes new macroeconomic data about global multinational companies and their foreign operations, known as "foreign affiliates statistics." This step allows him to provide a first global and granular quantification of profit-shifting, with bilateral estimates of the amount of profit shifted out of any country A to any tax haven B. The analysis reveals that globally, 36 percent of the profits of multinationals reported abroad end up reported in tax havens and that US multinationals are particularly aggressive and shift almost twice as much as other multinationals (about 50 percent of their foreign profits, as opposed to about 30 percent for non-US multinationals). The paper provides a new comprehensive international database of profit-shifting available online at MissingProfits.world, and also provides revised versions of official statistics such as GDP and trade balances corrected for such profit-shifting.

Another important contribution of [12] is to show that multinational operations in tax havens appear an order of magnitude more profitable than local firms in the same tax havens, which strongly suggests that profits reported in tax havens do not represent real economic activity taking place in such tax havens, but rather inflated paper profits shifted for tax minimization purposes. Gabriel depicted a simple illustration of this phenomenon in Figure 3, which shows the evolution of the profits booked, tangible capital owned, and wages paid by US multinationals in tax havens since 1965, as a fraction of total foreign profits, capital, and wages of US multinationals (where "foreign" means outside the United States). The profit line shows that more than half of foreign profits of US multinationals are now booked in tax havens. However, only about 20 percent of tangible capital deployed abroad by US multinationals is deployed in tax havens. Moreover, only 10 percent of the foreign wage bill of US multinationals is for workers located in the tax havens. Therefore, real production including research and development, design services, or management, accounting, and legal services do not substantially move to tax havens because such moves would create a substantial wage bill in tax havens inconsistent with the data. Put simply, paper profits move to tax havens, while real economic activity in the form of real tangible capital and workers do so much less. This set of results have had a very large impact on the international tax literature that had focused on models of tax competition where countries use lower tax rates to compete for real economic activity, when the reality of tax competition is that countries compete to become the financial home of paper profits.

Measuring Top Income and Wealth

The last strand of Gabriel's research that I will discuss is the measurement of top income and wealth. In the end, measuring hidden wealth and shifted profits is done to achieve a better understanding of the wealth and income of the rich and the taxes they actually pay, which are issues of fundamental importance in any society.

Figure 3
Paper Profits Moving to Tax Havens, Real Capital and Workers Less So

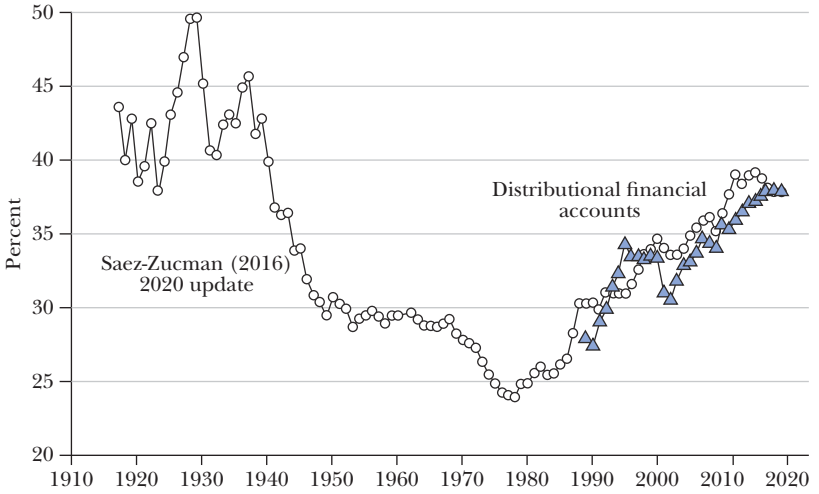


Source: Source: [13], Figure 3, Panel A.
Note: The figure depicts the evolution of the profits booked, tangible capital owned, and wages paid by US multinationals in tax havens since 1965, as a fraction of total foreign (that is, outside the United States) profits, capital, and wages of US multinationals.

Wealth Inequality

While many sources of information are available concerning US income inequality, much less is known about wealth. After all, the United States has no wealth tax (yet) that would provide such information systematically. Lists of the wealthy, such as the Forbes 400, along with data from the Survey of Consumer Finances told us that US wealth concentration had been increasing, while estate tax data told us it had not. Gabriel made progress on this question in [14] by applying another method to estimate wealth: the income capitalization method. We know a lot about capital income generated by wealth, because such income is generally taxable. The capitalization method seeks to infer wealth from capital income. In its simplest form, the method assumes that the rate of return on wealth is uniform within each asset class. Because the concentration of capital income flows such as dividends, capital gains, interest, or business profits have all increased sharply, the capitalization method finds that wealth has also increased sharply in recent decades. Figure 4 (reproduced from [16] appearing in this journal) depicts the wealth share of the top 1 percent in the US economy using the capitalization method since 1913 and compares it to the top 1 percent wealth share from the distributional financial accounts from the Federal Reserve Board based on the Survey of Consumer Finance data since 1989 (with small adjustments to make the Fed series directly comparable in terms of definition of

Figure 4
Top 1 Percent Wealth Share in the United States



Source: [16], Figure 1.
Note: This figure depicts wealth share held by the top 1 percent estimated using the capitalization method from [14] and the distributional financial accounts from the Federal Reserve Board using the same definition of wealth (market value of all financial assets net of all debts, excluding consumer durables and unfunded pensions).

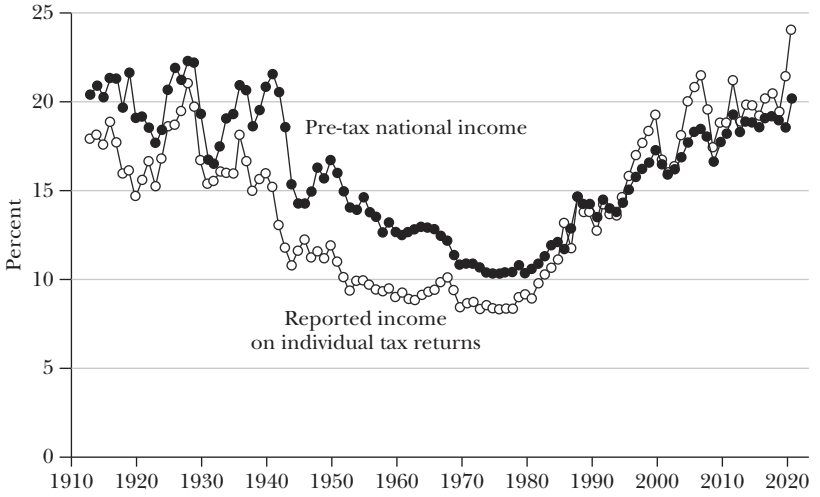
wealth and family unit). Both series show a sharp increase in the wealth share of the top 1 percent wealth share, which increases from about 25 percent around 1980, a low level of wealth concentration by historical and international standards, to almost 40 percent in recent years, a very high level for an advanced economy in a democratic country. For a recent survey of wealth inequality over time and across countries, see [17]. Obviously, the capitalization method requires a lot of assumptions that have been debated in subsequent work leading to revised and better estimates [18]. Most notably, Smith, Zidar, and Zwick (2023) have used more granular internal tax data and alternative assumptions but find in the end remarkably similar results.

Income Inequality

Gabriel has also contributed to the measurement of income inequality. Piketty and Saez (2003), using individual tax statistics, found that the concentration of reported income increased enormously since the 1970s, as depicted in Figure 5 using updated estimates to 2021—the top 1 percent reported income share more than doubled from 8 percent in the 1970s to over 20 percent in recent years.[4]

[4]The reported data series rank families by reported income excluding capital gains, but add back capital gains when computing the income share. This practice smooths out the lumpiness in capital gains realization, while taking into account this important source of income among the rich.

Figure 5
Top 1 Percent Income Share: Reported Income versus National Income, 1913-2021



Source: WID.world.
Note: This figure compares the share of reported income earned by the top 1 percent tax units in the United States (from Piketty and Saez 2003, updated; series including capital gains in income to compute shares but not to define ranks, to smooth the lumpiness of realized capital gains) to the share of pre-tax national income earned by the top 1 percent equal-split adults from [19].

Reported income concentration reached a record high in 2021, with a top 1 percent share of 24 percent as the strong recovery from the COVID-19 pandemic drove up asset prices and realized capital gains. However, reported income is about two-thirds of all national income earned by US residents. Undistributed corporate profits, fringe benefits of employees such as health insurance, and tax evasion are not included in reported income. Furthermore, the fraction of national income from the national income and product accounts reported in individual income tax data has declined from 70 percent in the late 1970s to about 60 percent in recent years [16]. The gap is even larger in survey data, such as the Current Population Survey, which do not capture top incomes well. Therefore, inequality measures using reported income or survey data are not consistent with macroeconomic measures of economic growth.

In [19], Gabriel and his co-authors pioneer "distributional national accounting," which aims to allocate all national income across percentiles of the US income distribution. National income is conceptually the broadest definition of all economic income received by residents of the country. Starting from individual tax returns, all forms of income that are part of national income, but not included in reported individual income for tax purposes, are imputed and added. Figure 5 depicts the corresponding top 1 percent national income share on a pretax basis. The overall U-shape of income inequality over time remains, but slightly attenuated relative to the reported income series from Piketty and Saez (2003). Since

the 1970s, the top 1 percent still doubled from about 10 percent of the national income to about 20 percent in recent years. The modest effect of missing income on inequality is to be expected, giving that reported income still represents about two-thirds of national income. As explained in [20], it would require extreme, and hence highly unrealistic, equalization of unreported income to offset the visible and truly dramatic increase in reported income concentration depicted on Figure 5.

Distributional national income can be used to measure how macroeconomic growth is distributed across income groups. For the US economy, what stands out is the sharp change that took place since 1980. From the end of World War II to 1980, income growth was pretty much the same across each percentile of the income distribution, except somewhat smaller for the top 1 percent. Economic growth was truly lifting all boats; the macroeconomic growth rates told us how income all along the economic ladder was growing. Since 1980, however, economic growth has been skewed with hardly any income gains in real terms for the bottom 50 percent, solid income growth comparable to or better than the overall rate of growth only for the top 10 percent, and astonishing income growth for the top 1 percent. Distributional national accounts can also be used to consider income after taxes and adding transfers. The expansion of means-tested transfers has helped low-income groups, but the vast majority of this support is in-kind, particularly Medicaid and Medicare health insurance. Disposable cash income for the bottom 50 percent has not kept up with economic growth and has barely increased in real terms since 1980 (as shown in [16], Figure 6, in this journal). In recent years, the data show that the exceptionally generous transfers of 2020 and 2021 related to the COVID-19 pandemic increased the disposable incomes of the bottom 50 percent enormously, but only temporarily, with most of this extra support gone by early 2023 [21].

The distributional national account methodology has been applied to a wide range of countries [17]. It has produced series on wealth and income inequality that are also provided to the public in an accessible format via the World Inequality Database, available online, that Gabriel has helped create as one of the founding co-directors.

Policy Impacts

It is hard to think of another economist whose academic research has had such a large impact on policy debates at such a relatively young age. Gabriel's research is tightly linked with several important policy developments in tax policy.

The problem of offshore tax evasion that Gabriel carefully documented is well on its way to being substantially reduced through systematic information reporting across countries, as advocated by Gabriel [6, 7] and, to be sure, many others. Following the impetus of the US Foreign Account Tax Compliance Act (FATCA) passed in 2010 under the Obama administration, more than 100 countries, including most tax havens, have now agreed to the Common Reporting Standard whereby their financial institutions will report income and wealth of their foreign clients to

the tax authorities of the home country of the clients. Gabriel, through the EU Tax Observatory he created thanks to funding from the European Commission, is monitoring these developments [21]. As data are generated, academic work will follow, a lot which will be done by young scholars inspired or directly supervised by Gabriel (see [21] for a recent overview of the early efforts). These developments would have felt utopian before 2010. They show that impediments to taxing the rich more fairly are not the inevitable result of a globalization, but rather the consequence of policy choices—and that these choices can be changed.

The problem of profit-shifting of US multinationals, also long seen as an intractable by-product of globalization, is being tackled through the proposed global 15 percent minimum tax on multinationals profits to which over 130 countries agreed to in October 2021. The Biden administration and US Treasury Secretary Janet Yellen played a leading role in spearheading this agreement, although ironically the United States has not yet enacted the global minimum tax itself. However, many countries, including the European Union member states, are moving forward. While the global minimum tax is modest in terms of the tax rate (15 percent) and generous in terms of exemptions, it shows global tax harmonization is not a pipe dream. Such a minimum tax had been advocated by Gabriel [22] and others. Before 2020 however, such a global agreement would have also been considered utopian, because the received wisdom was that globalization meant tax competition between countries to offer lower tax rates to multinationals. Future years will tell whether the global minimum tax can limit or reverse this trend. In [23], Gabriel has built a useful tool to provide revenue estimates for the currently proposed global minimum tax, as well as for alternative and more ambitious scenarios with higher tax rates and less generous exemptions.

The problem of growing wealth inequality in the United States and abroad has attracted many policy proposals, perhaps most famously a wealth tax on the ultra-rich proposed in the 2020 US Democratic presidential primaries by Elizabeth Warren and Bernie Sanders. Gabriel helped to shape and to estimate their budgetary effects [24]. While a US wealth tax is unlikely to happen anytime soon, the idea of taxing the huge wealth gains of the ultra-rich has become mainstream. For example, the Biden administration included such a proposal "the new billionaire minimum income tax" in its 2022 budget (White House 2022). A number of countries in the world are considering adding or reinitiating progressive wealth taxes as part of making their tax systems more progressive. Time will tell whether the revival of the idea of progressive wealth taxation will translate into legislation and whether these new wealth taxes can be well enforced and are indeed successful in improving the progressivity of our tax systems. Gabriel and the EU Tax Observatory will be watching.

Conclusion

Because Gabriel's work has been so innovative and relevant—indeed, it is at the center of many of the most hotly contested tax policy debates of the day—it has not come without pushback. Some have described it as painting an exaggerated

view of inequality and tax injustice. In reality—and I have witnessed the process first-hand—the data have radicalized Gabriel, rather than the other way around. The same is true for Thomas Piketty and for me: it is the increasing visibility of rising inequality and of its costs that has led us to consider more ambitious policy solutions.

But another form of radicalism is more specific to Gabriel. Piketty and I started our research careers with theoretical work that was well-anchored in the dominant neoclassical framework, such as optimal tax theory and political economy models, which gave us a lot of buy-in from the profession. In his formative years, Gabriel was more influenced by another intellectual tradition: that of the great British empirical social scientists of the last centuries—from Gregory King in the seventeenth and early eighteenth century, to Charles Booth in the late nineteenth and early twentieth century, to Richard Stone in the mid-twentieth century, and more recently Anthony Atkinson, who wanted to use economic statistics to understand (and reform) society—a tradition that flourished well before neoclassical economics. For the questions in which Gabriel was interested, he saw little need to encumber himself with the weight of the neoclassical apparatus. His methodological approach, reconnecting with that British tradition and applying it to the issues of the day (such as the arithmetic of international tax evasion and the rise of extreme wealth concentration) was radical and risky for a modern academic, but also fruitful: risky, because it drew the ire of economists who felt defensive towards this new empirical work that bypassed mainstream theorizing (or worse, showed that this theorizing could obscure reality rather than illuminate it); and fruitful, because it allowed Gabriel to see core problems with fresh eyes—and hence make genuine progress.

My colleague David Card, a former Clark Medalist, showed long ago that minimum wages do not always reduce employment (Card and Krueger 1994) and got pilloried for it by those who apparently could only reason in terms of the standard supply-and-demand competitive labor market where such a result is impossible. David Card was personally hurt by the experience enough that he vowed to never again work on minimum wages. Gabriel has followed a different strategy. He listened to his critics, and kept engaging with lengthy exchanges and incorporating valuable points [17]. His data series of offshore wealth, profit shifting, US inequality, and global wealth are all regularly updated,[5] incorporating new source data, refined methodologies, and lessons from the growing body of work on these issues—a truly unique approach in a profession focused on publishing papers rather than generating and updating data, and a testament to the seriousness of his approach. This path-breaking and meticulous work has shifted the way economic research is done by showing that bringing careful measurement to important but complex issues can have a large impact. It has already inspired many younger scholars to follow on his footsteps and will undoubtedly inspire many more.

[5]Gabriel's offshore wealth data series is at https://atlas-offshore.world. His data on profit-shifting is at https://missingprofits.world. His data on US inequality is at https://gabriel-zucman.eu/usdina and https://realtimeinequality.org. Finally, his data on global wealth is at https://wid.world.

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