HOW TO

NOTES

How to Tax Wealth

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How to Tax Wealth

Shafik Hebous, Alexander Klemm, Geerten Michielse, and Carolina Osorio-Buitron
March 2024

Tackling income and wealth inequality is at the top of the policy agenda in many countries. This note discusses three approaches of wealth taxation, based on (1) returns with a capital income tax, (2) stocks with a wealth tax, and (3) transfers of wealth through an inheritance (or estate) tax. Taxing actual returns is generally less distortive and more equitable than a wealth tax. Hence, rather than introducing wealth taxes, reform priorities should focus on strengthening the design of capital income taxes (notably capital gains) and closing existing loopholes, while harnessing technological advances in tax administration—including cross-border information sharing—to foster tax compliance. The inheritance tax is important to address the buildup of dynastic wealth.

Introduction

1. **High income and wealth inequality is one of the major challenges of our time.**[1] The issue of tax avoidance and evasion at the very top of the wealth distribution is salient in the public eye, especially with prominent leaks such as the Swiss Leaks in 2015 and the Panama Papers in 2016. Inequality and taxing wealth have recently featured prominently in the work of international organizations, including in IMF analyses and flagship publications.[2]

2. **Tax policy is a key fiscal policy tool to address inequality**. Whereas spending policies can be used to address poverty and inequality at the lower regions of the income distribution, tax policy can cover the entire income distribution and reach the top through progressive taxation of high incomes and wealth. While inequality stemming from market rigidities and uncompetitive or criminal behavior can be addressed by targeted responses, such as labor market reform, anti-trust legislation, and stronger law enforcement, tax policy can address inequality from any source. It thus also allows addressing inequality resulting from developments that have important benefits. For example, international trade and technological progress often increase inequality—at least temporarily and in some locations. Reducing inequality by preventing progress and trade would be a very costly policy. Well-designed tax policy allows mitigating any resulting effect on inequality from such otherwise beneficial developments while minimizing negative growth effects.

3. **There are many ways in which taxes can be used to collect more from wealthy individuals**. One option that is increasingly being discussed is taxing the stock of net wealth directly. This can be done regularly through a wealth tax, occasionally through a one-off capital levy, or when wealth is transferred through gift, inheritance, and bequest taxes. Another option is to tax the flow of income from wealth, that is the capital income, part of which comes in the form of capital gains. All these approaches have their pros and cons. In the public debate, the distinction between these different tax types is not always made. And some proposals are

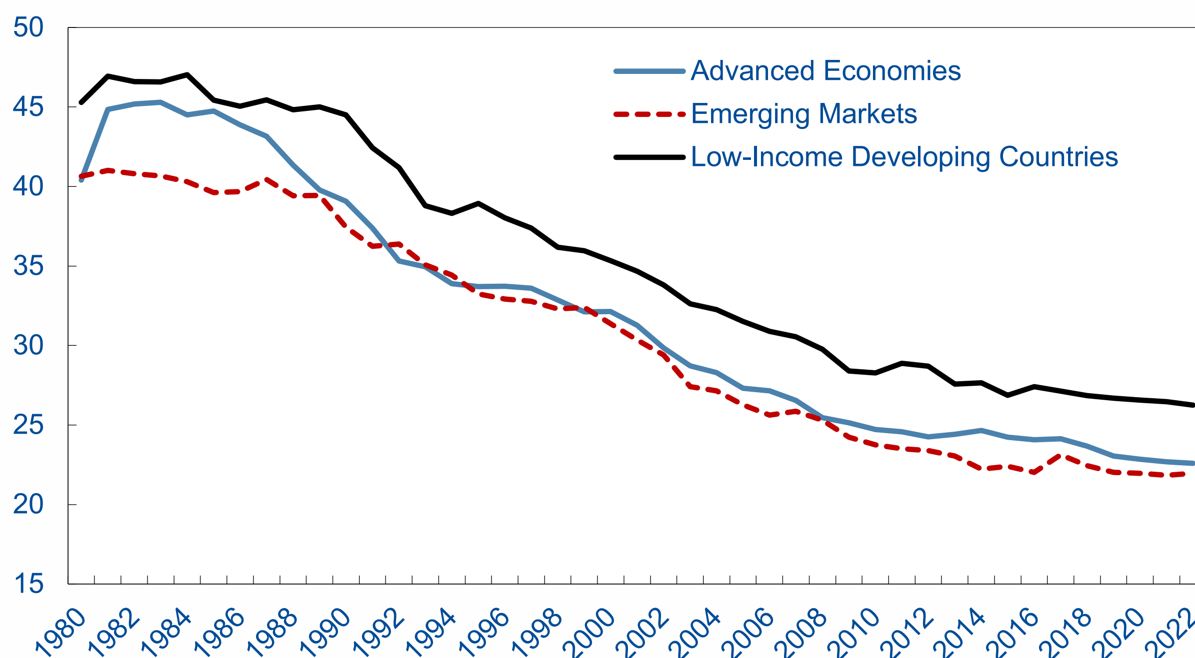
[1] Various major works, such as Piketty (2014, 2020) and Atkinson (2015), have covered the topic of inequality in detail, sparking a debate about its causes, its effects, and, importantly, its potential remedies.

[2] IMF publications include various flagship reports focusing on inequality (World Economic Outlooks [IMF 2007, 2017a, Fiscal Monitors [IMF 2017b, 2021]), books (Clements and others. 2015; Cerra and others 2022), and many papers, including two Staff Discussion Notes (Dabla-Norris and others 2015; Jaumotte and Osorio-Buitron 2015).

based on a combination of wealth and income; for example, a 2022 US bill on a billionaire minimum income tax[3] suggested a minimum tax rate on income (notably including unrealized capital gains) for anyone owning more than $100 million in wealth.

4. **Over the past decades, tax rates on wealth have generally declined across the world**. One important component is the decline in average corporate income tax rates, across country groups of all income levels (Figure 1). For OECD economies, where more detailed data are available, not only corporate-level, but also individual-level capital income taxes declined, both on dividends and interest (Figure 2). While tax rates on capital gains have increased slightly, they are usually restricted to realized capital gains so that they remain undertaxed as discussed later. The use of wealth taxes also declined. In 1990, 12 OECD members had wealth taxes (OECD 2018), nowadays only 3 levy an explicit broad-based wealth tax (Switzerland, Spain, and Norway).[4]

Figure 1. Average Corporate Income Tax Rates (in Percent)

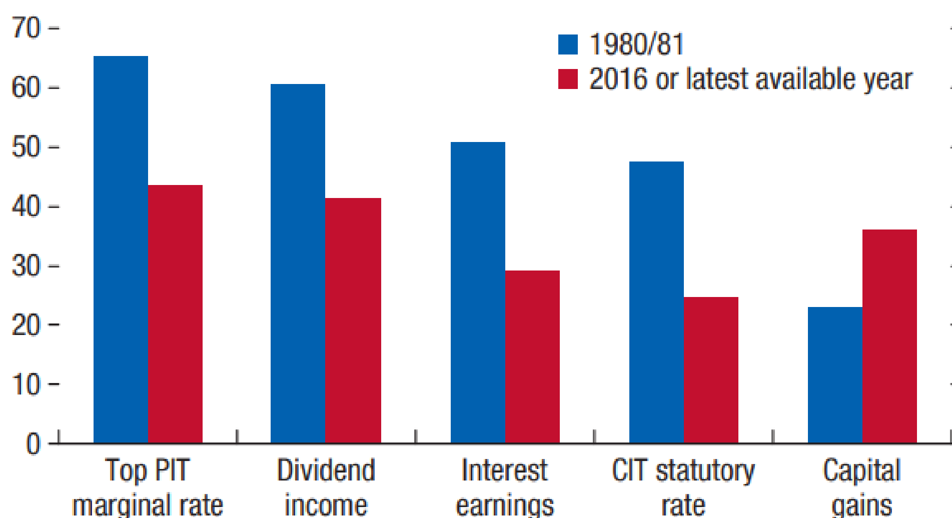


Source: FAD Tax Rates database.

[3] https://www.congress.gov/bill/117th-congress/house-bill/8558.

[4] As will be discussed later the Netherlands also effectively taxes wealth.

Figure 2. Top Income Tax Rates (OECD Averages in Percent)



Source: Fiscal Monitor, April 2021.

5. **In addition to declining headline rates, wealthy taxpayers can often significantly reduce average tax rates by exploiting loopholes and preferential treatments of certain capital income.** Eisinger, Ernsthausen, and Kiel (2021), for instance, report that the wealthiest 25 individuals in the United States faced an effective average tax rate of only 3.25 percent while Yagan (2023) reports a rate of 9.4 percent for the top 400 families. In the United Kingdom, Advani, Hughson, and Summers (2023) find that about ¼ of those with annual remuneration of at least £3 million paid a tax of about 12 percent, which is 35 percentage points below the headline rate for employment.

6. **One general difficulty, across all approaches to taxing wealth, is that the wealthiest individuals are often very sensitive to taxation.** Ways to reduce tax bills include (1) shifting capital income within a country across different income or wealth categories if taxation is nonneutral across assets or legal forms of the business and (2) shifting capital income across borders to exploit differences in taxation across countries. Such responses include both (legal) tax avoidance exploiting tax nonneutralities in the system and (illegal) tax evasion, typically by hiding wealth, for example using offshore bank accounts and complex structures. Wealthy people can also respond in real terms by investing or saving less, or through real cross-border migration. The strong response to taxation at the top implies that simply increasing the statutory income tax rates may not be effective in raising revenues unless there are also improvements to enforcement and tax design. Technological advances and cross-border automatic exchange of information (AEOI) are now allowing enforcement mechanisms that did not exist before, opening new possibilities for wealth taxation.

7. **This note aims to serve as a guide to policymakers who consider reforms to wealth taxation**. In a changing landscape—marked by high inequality and advancing technological tax enforcement tools—the paper covers both conceptual and design issues, as well as how such taxes look and work in practice and how administrative aspects affect the choice of policy.[5] The paper is structured as follows: The next section starts with a conceptual discussion of why wealth should be taxed—abstracting from the question of how to tax it. The following section covers the sensitivity of wealth to taxation, with particular attention to wealthy individuals. The

[5] There is a recent—as yet unsettled—debate on how much inequality rose in the United States. Auten and Splinter (forthcoming) question the previous findings (Piketty, Saez, and Zucman 2018) of a large increase in inequality, which in turn led to the publication of a rebuttal (Piketty, Saez and Zucman 2023).

subsequent three sections then consider in turn (1) taxes on capital income, (2) taxes on wealth stocks, and (3) taxes on inheritances and gifts. The final section concludes and develops policy options.

Should Wealth Be Taxed?

8. **This section addresses the question of whether wealth should be taxed at all.** How it should be taxed—such as through a wealth tax or a tax on its returns, that is, on capital income—is considered later in the paper. A long-standing debate in public economics is whether all income—including saved income—should be taxed or only consumed income.

9. **Taxing all income can be justified by noting that it reflects ability to pay and material wellbeing**. A measure of comprehensive income, the Schanz–Haig–Simons[6] income, is defined as the sum of consumption and change in net worth. It is thus the sum of all labor income and capital income, including all capital gains, even if unrealized. In practice, all tax systems deviate from such an idealized definition, but it serves as a useful benchmark to see how comprehensively income is taxed.

10. **Taxing consumption only can be justified by pointing to efficiency and lifetime income**. The efficiency advantage is that exempting savings, so that they grow at an untaxed rate of return, avoids distorting savings decisions. It is also horizontally more equitable, because, in net present value terms, people with the same lifetime incomes will face the same tax, while a tax on all incomes will overtax those who earn relatively early and need to rely on savings later in life. For formal models showing the inefficiency of taxing capital income, see Atkinson and Stiglitz (1976), Judd (1985), and Chamley (1986).

11. **Taxing only consumption does not necessarily mean using a value-added tax (VAT) or sales tax.** It can equivalently be achieved by taxing only labor income, leaving capital income untaxed (or by taxing all income and granting a deduction for savings). To see this equivalence, consider a wage earner who saves part of their income. The part saved grows at a tax-free interest rate and is then consumed at some point in the future. In net present value terms, it makes no difference if tax is paid once at the beginning through a labor tax or once at the end when consumption takes place, as in either case, interest accrues tax free during the saving period.

12. **The theoretical result regarding the efficiency of exempting capital income has been challenged by recent theoretical advances.** An updated interpretation of the Chamley–Judd models (Straub and Werning 2020) suggests that the optimality of zero-rating the capital income tax applies only under special circumstances. For example, if the intertemporal elasticity of substitution is smaller than one, the Judd (1985) model yields an optimal positive tax. Banks and Diamond (2010) provide a thorough discussion of theoretical arguments in favor of capital income taxation, including uncertainty about future incomes or borrowing constraints.

13. **Another important aspect is that returns on investment often exceed the required rate of return, or normal return, and include economic rents**. The resulting excess returns are not required for an efficient savings decision and can therefore be taxed, even if an undistorted savings decision is the policy goal. Indeed, wealthier people with better access to financial advice are likely to enjoy structurally higher returns, which are more likely to include rents.

14. **Moreover, wealth is not necessarily the result of saved labor income for future consumption.** A large share of wealth stems from endowments, past rents, income that might have avoided or evaded taxation, or even from criminal activity. Moreover, not all income is consumed over a lifetime, and in case of very high incomes, a large share is likely never consumed. Hence, a tax collected on consumption only will effectively

[6] This is named after three key contributions (Schanz 1896; Haig 1921; Simons 1938).

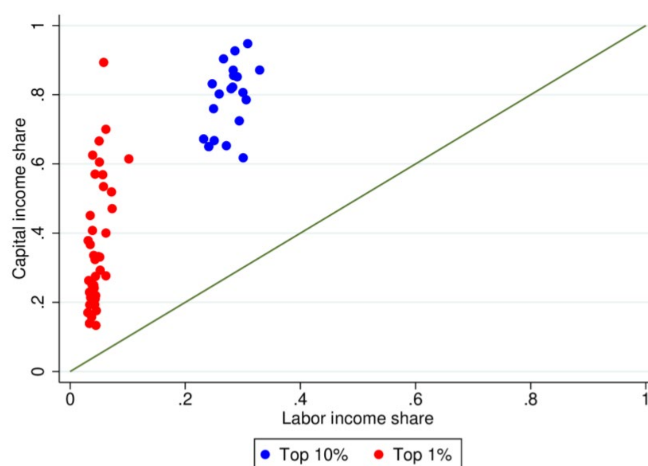
exempt a large part of income (unless bequests are treated as consumption). Unconsumed income is not purely accidental, some of it—and in the case of wealthy individuals, likely a significant proportion—is kept on purpose for the security and power it affords.

15. **When capital is globally mobile, source-based taxes, such as corporate income tax, are sometimes argued to be borne by labor rather than owners of capital, which would call for light taxation, but there are counterarguments.** Under perfect capital mobility, the incidence of capital income taxes falls on labor, as capital shifts to jurisdictions without such taxes, until post-tax rates of return are equalized. In that case, taxing labor directly reduces distortions. In practice, capital mobility is imperfect given differences in production and market locations. Certainly, location-specific rents—such as those related to natural resources—can be taxed without the burden being shifted to labor. Moreover, international minimum taxes limit potential savings from shifting capital.[7] Finally, even if source-based taxes are driven down, residence-based taxation remains an option, as capital owners are less mobile than their capital.

16. **A major practical and conceptual issue from nontaxation (or even differential taxation) of capital income arises for mixed income**. Mixed income includes both a return to capital and reward for labor effort, such as the profits earned by owner-managed firms. Such income cannot be easily split into capital and labor income. Complex regulations are then needed to prevent such owners from minimizing their wages and taking most income as profits when the latter are taxed at a much lower or zero rate.

17. **Last but not least, even if taxing capital income leads to some loss of efficiency, the beneficial effect on equity can make it worthwhile, depending on the weights attached to both goals**. With capital income being much more unequally distributed than labor income (Figure 3), forgoing its taxation would make it much harder to redistribute incomes. Moreover, the labor share of total income has been decreasing, especially in advanced economies (Figure 4), and rising adoption of artificial intelligence is expected to strengthen this development. Hence, relying on labor income as the main tax base would lead to declining ratios of tax to GDP or rising labor tax rates.

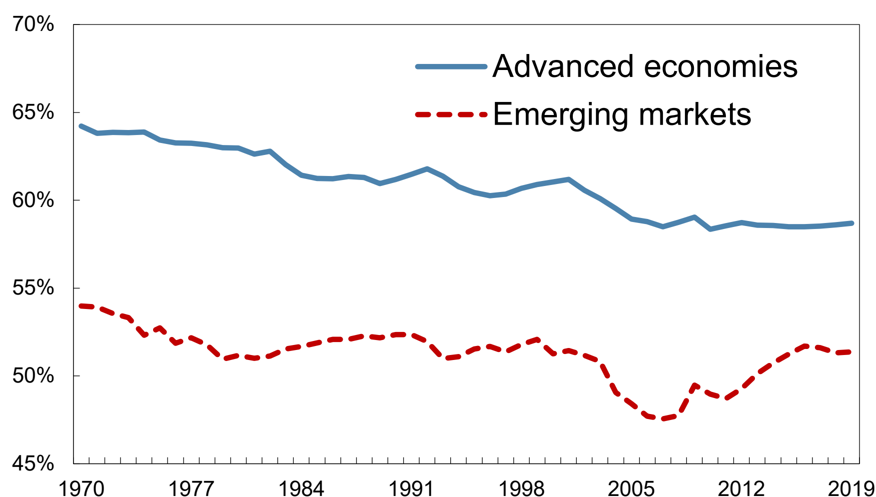
Figure 3. Capital and Labor Income Shares for Top Incomes, 2018 or Latest



Source: LIS and IMF staff calculations.

[7] See IMF (2023) for a recent overview and analysis of international corporate tax reform efforts.

Figure 4. The Labor Share of Income in GDP from 1970 to 2019 (in Percent)



Source: Penn World Tables 10.01.

18. **To sum up these arguments, while it is possible to think of situations in which capital income taxes would have no role to play, these are unlikely to apply**. Apart from rather technical questions about the assumed intertemporal elasticity of substitution, which are important in stylized models, we are not in an economy in which all agents are born without wealth, earn income only through labor, save only for life-cycle purposes, and earn only a normal rate of return on their savings. Hence, there are good reasons to argue for capital income taxes.

19. **Moreover, to allow efficient saving over the life cycle, instead of a broad capital income tax exemption, more limited tools can be considered**. Specifically, many countries allow the accumulation of savings in pension funds, with either contributions being made out of gross income or future pensions being untaxed. Financial returns are also exempt, thus achieving consumption taxation for these instruments. By limiting the maximum contributions, often both in total and per year, the instruments can be restricted to allowing limited saving for future consumption needs, while covering only a small share of wealth for the most prosperous individuals.

Tax Sensitivity of Wealth

20. **Taxing wealth—directly or through the income generated by the wealth stock—triggers behavioral responses.** Such responses include reducing investment, shifting investment toward tax-favored assets, moving assets (or even the residence of their owners) to different tax jurisdictions, and outright tax evasion by under-declaring. The extent of a behavioral response can be summarized by an elasticity that is exactly defined depending on the margin being studied, but generally as the percentage change in real or reported wealth resulting from a 1-percentage point increase in the tax rate.

21. **Estimates of elasticities that capture real effects of capital taxes are often negative, suggesting that higher capital taxes result in a lower accumulation of capital.** For example, Wen and Yilmaz (2020) and Dwenger (2014) study Canadian and German data, respectively, and find that a 1-percent increase in the user cost of capital lowers investment by around 1 percent.[8] Using Danish data, Jakobsen and others (2020)

[8] The tax rate on business income is a key component of the user cost of capital (Creedy and Gemmell 2017). There is a wide range of estimates in this literature (see Gechert and others [2022]).

find that a higher wealth tax lowers the capital stock, estimating that the long-term real-response elasticity of taxable wealth with respect to the after-tax rate of return is −0.77 for the moderately wealthy and −1.15 for the very wealthy.[9]

22. **Tax evasion is another margin of response to the taxation of wealth or its return**. Alstadsæter, Johannesen, and Zucman (2019) find that in Scandinavia, 25 percent of income taxes owed by the wealthiest 0.01 percent of people is evaded using offshore structures. Leenders and others (2023) find a smaller magnitude at 10 percent for the Netherlands. Guyton and others (2021) estimate that 20 percent of true income is underreported by the top 1 percent in the United States, compared to 7 percent at the bottom of the distribution. Looking at wealth taxes in Colombia, Londoño-Vélez and Ávila-Mahecha (forthcoming) find that lowering the net-of-wealth-tax rate (that is, '1 minus the wealth tax rate') by 1 percent lowers reported wealth by 2 percent, with evidence pointing to evasion schemes by undervaluing assets or using offshore entities. All these findings suggest not only costly revenue losses but also a hampering of the progressivity of the system.

23. **Globally, the stock of untaxed offshore hidden wealth is estimated at 9–10 percent of GDP, or around 6–7 percent of total household financial assets** (Zucman 2013). Estimates after the 2016 introduction of the AEOI come out at 3.2 percent of GDP in 2022 (EU Tax Observatory 2023). Back-of-envelope calculations suggest that the corresponding annual offshore hidden income is estimated to be $550 billion, corresponding to $150 billion in evaded income tax per year, prior to AEOI automatic exchange of information.[10] The proportion of wealth held offshore likely varies significantly by residence country. Alstadsæter, Johannesen, and Zucman (2018) find that it is lowest in Scandinavian countries and highest for Gulf countries and some Latin American countries.

24. **Recent advances in cross-border AEOI and tax administration technology have reduced offshore tax evasion, although some evasion schemes are still possible**. Casi, Spengel, and Stage (2020), for example, report that offshore deposits in low-tax jurisdictions dropped as a result of information sharing, and Menkhoff and Miethe (2019) report a reduction of bank deposits by 11–38 percent and of portfolio investment by 21–29 percent in low-tax jurisdictions. However, there remain post-AEOI loopholes; for example, citizenship-by-investment programs enable circumventing information reporting (Langenmayr and Zyska 2023). Moreover, there is scope to better reap the benefits from information sharing especially for developing countries, which are still not effectively receiving or using the information for tax enforcement. Capacity constraints in data analytics and knowledge management are an additional hurdle to overcome. Digitalization of tax administration and units specialized in high-net-worth individuals are correlated with the use of information received from abroad in compliance risk analysis (IMF 2022).[11] Moreover, AEOI does not include real estate, but work is under way to include crypto assets.

25. **Physical mobility across borders (that is, the residency choice of people) is another behavioral response to taxation, reflecting both avoidance and real effects.** For example, Kleven, Landais, and Saez (2013) find that the elasticity is about one for foreign football players in Europe. A similar unitary elasticity is found in Akcigit, Baslandze, and Stantcheva (2016) for the 'superstar inventors' and an even larger elasticity for inventors in multinational companies.[12] While those studies are based on differences in income tax rates,

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[9] These elasticities mean that a reduction of the wealth tax rate by 1 percentage point raises the wealth stock at the end of life by 30 percent for moderately wealthy and by 65 percent for very wealthy people.

[10] This calculation assumes that total hidden wealth is equal to 9.3 percent of GDP (Alstadsæter, Johannesen, and Zucman 2018), hidden wealth earns a rate of return of 7 percent (five-year average return on US Federal Funds and MSCI World, with 75 percent of offshore funds invested in securities markets [Zucman 2013]), and would be taxed at 28 percent (which is the average capital income tax rate, weighted by global GDP). This estimate only reflects income taxation and (therefore) excludes inheritance, transaction, and wealth taxes.

[11] Often, the implementation of exchange of information has been associated with voluntary disclosure programs, which can also be effective under some conditions (Johannesen and others 2020; de Mooij and Beer 2023) but also have risks if not well designed (Benedek and others 2022).

[12] For an overview, see Kleven and others (2020).

Agrawal, Foremny, and Martínez-Toledano (2020) look at wealth taxation differences across Spanish regions and find that wealthy individuals within Spain are highly mobile in response to the wealth tax.

26. **Any measure to increase tax payments by those at the top of the distribution—be they through any new taxes on capital income or wealth or more modestly through enforcement of the existing taxes—will need to address these difficulties**. This means strong anti-avoidance legislation and enforcement, as well as measures such as exit taxes to prevent tax avoidance by moving across borders, are needed.

Capital Income Taxes

27. **This section considers one of the possible forms of wealth taxation, which is to tax wealth through the income it generates, that is, capital income taxes**. The following section considers taxes on wealth stocks and compares both approaches. When considering capital income taxes, it is important to analyze taxes collected at all levels. At the individual level, personal income tax is due on capital income, such as dividends, interest, and capital gains. At the corporate level, corporate income tax is remitted but cannot be borne by corporations, which are merely legal entities. The corporate income tax is thus a way to collect capital income tax from a potentially large group of stockholders (including nonresidents). When considering flows from corporations, such as dividends and interest, the corporate-level tax needs to be accounted for, as discussed further in the relevant subsections.

28. **If capital income is to be taxed, the question becomes by how much.** There are two main approaches. One is to tax capital income together with labor income through a comprehensive (and usually progressive) income tax. The alternative is to apply a progressive schedule for labor income and a separate, usually lower and flat, rate on capital income. The latter approach is known as a dual income tax. The argument supporting such dual income tax approach is that it compromises between the arguments in favor and against capital income taxation considered earlier, by applying a reduced rate to capital income.[13]

29. **Another important argument for taxing capital at a lower rate than labor is the enforcement, and this argument is weakening as a result of technological and legal developments**. A flat capital income tax can be collected through final withholding, whereas under a progressive rate schedule, each income flow needs to be associated with the identity of the taxpayer. Moreover, as noted, the tax sensitivity for capital income taxes is high, putting downward pressure on rates. The advantage of administrative simplicity of final withholding taxes declines as technology and information for enforcing a comprehensive income tax improve. For example, digital third-party (such as financial institutions) reporting with the recipient's taxpayer identification number allows aggregating flows by individual and detecting underreporting by individuals. This is true even in the case of international tax evasion, thanks to recent agreements such as the AEOI on financial assets held by nonresidents.

30. **Capital income can come in various forms, the taxation of which traditionally differs widely**. Hence, even concepts such as dual income taxes with flat rates are in practice often more complex, as rates differ across types of capital income. The following subsections consider the main types of capital income and issues that arise in their taxation.

[13] Other reasons include that low capital income taxes address—though very imperfectly—distortions from inflation (wages are essentially taxed as cash flow while typically returns to capital are not indexed to inflation when taxed). Also, when some assets (for example, unrealized capital gains, houses) are tax favored, a flat rate on capital income mitigates distortion to the ownership pattern whereby investors in high-income brackets specialize in specific assets that are more likely to be tax favored. Finally, lower capital taxation also has a gender angle, in that the inequality in asset ownership between men and women is even greater than that in labor income, so that lower capital income taxes disproportionally benefit men (Coelho and others 2022).

Profits

31. **Individuals can earn profits directly by running a small business (as opposed to owning one run by a separate manager).** As mentioned earlier, in owner-run businesses, there is a difficulty in distinguishing between wages (returns to labor) and profits (return to investment), which is tax relevant if the tax schedules differ for both types of income. In a typical dual income tax system, an owner would face an incentive to first pay out everything in wages to make use of personal allowances and low introductory tax rates. Once the labor tax rate reaches the flat capital income rate, any further income would be paid out as profit to avoid facing higher tax rates.[14] Countries with different tax rates therefore need specific rules to limit such tax planning, as otherwise there is a strong incentive for people to incorporate to have access to such tax-planning opportunities. One approach is to define a minimum wage up to which all income must be paid out as wages, with the residual treated as profit. Another approach is to fix the profit as some return on the invested capital and treat the residual as wage income. Both create administrative and compliance costs.

32. **For such small owner-run businesses, profits are usually taxed once**. For the smallest such firms, the issue of dividends does not arise because there is no separate business, only profits from a sole tradership. For more complex arrangements in which somebody sets up a firm as a separate legal entity, there are usually pass-through rules, such that the income is nevertheless taxed only once at the level of the owners.

33. **For businesses where ownership and management are not in the same hands, the issue of separating mixed income does not arise, because managers will require a market wage, and owners have an incentive to maximize profits**. However, in this case, another issue arises, namely whether to tax the profit at the corporate level, and if so, how to integrate it with any additional personal income tax for recipients of dividends, interest, or capital gains. The great majority of countries tax such profits initially at the corporate level, because it offers various administrative and economic advantages:

- Dividends and interest are flows that could also be taxed in the hands of recipients (see the next section), but reinvested earnings would not create a taxable flow at the personal level (and could only be taxed through a capital gains tax on unrealized gains). Taxing corporate profits thus ensures that all returns to capital are covered.
- The owners may not be tax residents, so taxing profits at the corporate level allows collecting tax in the country where profits are earned.
- It is often easier to collect tax from a large corporation rather than from a potentially very large number of owners, especially in the case of a public corporation. Notably in developing countries, corporate income taxes make up a significant share of total tax revenues.
- Other arguments for taxing corporate profits include that corporations have legal person status, limited liability, and often receive public benefits in terms of subsidies, infrastructure, education of their prospective workforce, and so on. The weakness of this argument is that none of these benefits are in any way quantitatively related to the corporate income tax liability. Moreover, as corporations cannot bear the incidence of taxes, even if the argument for additional taxation were accepted, it would not follow that it would have to be collected at the corporate level.

34. **Taxing corporate profits at source, however, also has the disadvantage that it is subject to tax competition and profit shifting**. Discussing these phenomena goes well beyond the scope of this paper,[15] but a relevant development that affects the potential for taxation is the recent global agreement on minimum taxes, which is expected to reduce downward pressure on rates (IMF 2023).

[14] Social security also plays into this tradeoff, typically causing owners to switch even earlier to declaring profits rather than wages. But it depends on how valuable such contributions are considered in terms of entitlements they provide, and on the precise rules determining social security contributions in such small firms.

[15] See, for example, De Mooij, Klemm and Perry (2021).

Interest

35. **Interest is generally treated as a deductible expense, while interest receipts are taxable.** As a result, interest is taxed only once and only in the hands of the final recipient. In a domestic context, this does not create major difficulties (apart from different treatment of dividends, discussed in the following subsection). Withholding taxes can be applied on interest to ensure compliance. In the case of a flat rate system, those taxes can be final, whereas in the case of progressive rate structures, they should be creditable and refundable, and suitably high to incentivize compliance.

36. **In the case of international debt, the issue becomes more complex.** An interest flow lowers tax payments in the country of the debtor and raises them in the country of the creditor. To keep some of the tax revenue in the source country, most of them impose a withholding tax on international interest payments. Double taxation treaties often limit the maximum permissible rate, and countries therefore need to carefully consider the implications when negotiating such treaties.[16]

37. **Another issue arises for related-party debt.** As debt issuance and repayment are determined by the same group or owner, there is an incentive to reduce global taxes by highly leveraging affiliates in high-tax countries, while the debt is held in low-tax jurisdictions.[17] To prevent excessive profit shifting through debt, countries can use transfer pricing rules to prevent excessive interest rates. Moreover, they can impose thin capitalization rules that limit interest deductibility if the debt-equity ratio exceeds a certain amount or, more simply, if interest payments exceed some limit, that can be defined in percent profits. The EU's Anti-Tax Avoidance Directive, for example, limits interest deductibility to 30 percent of profits (EBITDA). Under the G20-OECD Base Erosion and Profit Shifting (BEPS) initiative, Action 4 (not a minimum standard) deals with limitation on interest deductions. To keep it as simple as possible, modern interest limitation rules do not generally distinguish between related-party and arms-length debt.

Dividends

38. **Unlike interest, dividends are not a deductible expense.** As a result, they are taxed twice: first as profits at the corporate level, and then again as dividends at the personal level. The taxation of dividends at the corporate level combined with interest deductibility creates a bias favoring debt financing to equity (see, for example, De Mooij [2011]). This debt bias can be mitigated—or in some cases completely undone—if dividends are then taxed less than interest at the personal level. There are various ways to reduce the double taxation of dividends. One is to give a credit for the corporation tax paid, as is done in an imputation system. With rising globalization, these have fallen out of favor, as cross-border crediting is usually not offered, both for practical and revenue reasons. Another approach is to simply apply a lower tax rate on dividends than other capital income. As long as the combined dividend and corporate income tax rate is similar to the tax on interest income, debt bias is mitigated, at least domestically. Internationally, the issue is more complex, because it depends on the interaction of corporate income tax, any withholding taxes in the source country, and any dividend and interest taxes in the recipient country. In most cases though, any lower taxation of dividends is insufficient to make up for the higher taxation at the corporate level, so that debt is effectively taxed less than equity.

39. **The higher taxation of dividends compared to interest raises the question of how this affects incentives of firms to invest.** There is consensus that firms that require new equity—such as new or rapidly expanding firms—are negatively affected, because investors will require a high rate of return to compensate for the high taxation. There is an unresolved debate whether mature firms—with access to debt and retained earnings—are also affected by high dividend taxes (see, for example, Zodrow [1991]). The "new" or "trapped equity" view suggests that this is not the case: as new equity is the most expensive source of funding, firms use retained earnings (or debt) until the point where the marginal return on investment equals the marginal cost of retained earnings, paying out any residual as dividends, which is therefore not affected by the tax level.

[16] On when tax treaties can be beneficial for developing countries, see Leduc and Michielse (2021).

[17] For a discussion of the location of debt within the multinational group (as well as risk), see Schatan (2021).

Empirical evidence on the validity of the new view has been mixed,[18] so that policymakers cannot be fully assured that dividend taxation has no effect on mature firms—in any case, overtaxation will affect new and rapidly expanding firms that require new equity funding.

Capital Gains

40. **Capital gains—the difference between the current and original purchase values of an asset—are more difficult to tax than other capital income.** While interest and dividends comprise observable flows, capital gains either have no observable flow if they are not realized or require that the (possibly old) original cost be netted off from the directly observable *gross* proceeds. Therefore, countries usually exempt unrealized gains from capital gains taxes except under specific circumstances, such as financial assets held in the banking books of financial institutions. Some countries do not even tax realized capital gains, especially at the personal level,[19] if an asset is held for more than a specific period (ranging from several months to several years, depending on the country).[20]

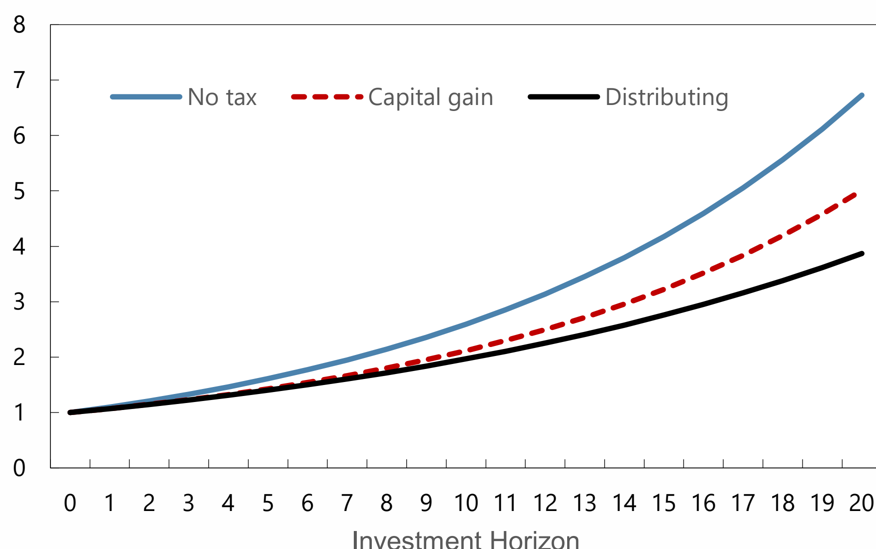
41. **The restriction of taxation to realized capital gains means that when assets are held for more than one year, capital gains are taxed less than other capital income, because they compound untaxed**. To see this think of an asset that pays out an annual return, which is taxed (for example, a bond paying interest), so that value of the investment grows by the net rate of return. Compare this to another asset with the same gross rate of return, but which appreciates in value rather than distributing a return (for example, gold or the stock of a corporation that does not pay dividends). The latter asset will grow at the gross rather than net of tax rate of return and will be taxed only when it is sold and the capital gain realized. The effect is negligible for short horizons but rises with the investment horizon and the gross rate of return. Figure 5 illustrates this for an asset earning a gross return of 10 percent and facing a tax rate of 30 percent. Indeed, differences are small for short horizons (none for a one-year investment). If, however, the asset is held for 20 years, without any taxes it would have increased 6.7 times in value. Taxing the capital gain on realization reduces this to a fivefold increase. However, a distributing asset that faces tax each year (and where all net distributions are reinvested at the same remaining maturity) would increase only 3.9 times.

[18] For example, recent empirical evidence in Moon (2022) supports the traditional view, while Yagan (2015) finds evidence for the new view.

[19] At the corporate level, realized capital gains are usually taxed as part of corporate profits.

[20] And in some countries, for example the United States, transfers through inheritance are not treated as realization. Moreover, in such cases, the basis for future capital gains is stepped up to the current value at the time of inheritance, so that effectively much of the capital gain is never taxed. (Estate tax may apply, but the threshold is very high; see the section on wealth transfer taxes).

Figure 5. Growth of an Appreciating and Equivalent Distributing Asset



Source: Authors' calculations.
Note: Assumes a gross rate of return of 10 percent and a tax rate of 30 percent. Distributed earnings are reinvested in the same asset.

42. **The tax preference for capital gains has various drawbacks**:

- Tax avoidance is encouraged, as there is an incentive to turn income into capital gains to benefit from lower taxation. For example, investment funds can reinvest rather than distribute earnings, and bonds can be designed to increase in value rather than pay interest.
- Tax legislation and administration increase in complexity as there is a need to address loopholes. For example, zero-coupon bonds are often taxed on their implied interest.
- Horizontal equity is diminished, because similarly profitable investments are taxed differently depending on the form in which they generate income.
- Vertical equity is diminished, because the share of income earned as capital gains rises with wealth and income. In the United States, the top 0.001 percent of taxpayers earned 60 percent of their income as capital gains (IRS 2022). In the United Kingdom, among the top 0.01 by income, almost 60 percent receive at least 90 percent of their remuneration in capital gains (Advani and Summers 2020).
- There is a lock-in effect as investors prefer to hold on to an asset even if the expected future returns are lower than those of alternative investments, as long as the tax saving from not realizing a capital gain outweighs the difference in returns.[21] This leads to inefficient capital allocation.[22] Some countries tax capital gains at lower rates (especially for long-term gains) to reduce this effect but thereby exacerbate the relative undertaxation of capital gains.
- In an international context, tax avoidance and evasion occur even on realized capital gains. For example, instead of trading a security directly, investors can trade a depository receipt in an offshore market that does not tax capital gains. Similarly, rather than directly selling a real asset, stocks or entire companies (registered in a different, conduit, country) that derive their values from that underling asset can be traded. The revenue loss can be significant in the case of high-value assets such as natural resources. To overcome this,

[21] Empirical evidence confirms a lock-in effect (Jin 2006; Dai and others 2008; Dowd, McClelland, and Muthitacharoen 2015).

[22] Auerbach (1991) proposed a tax that avoids a lock-in effect, even though it is collected on realization. Its drawback is that it is based on the number of years an asset is held and a statutory rate of return, so it does not achieve ex-post taxation of capital gains. It has not been implemented.

countries are increasingly using rules against indirect transfers of interests which are technically and administratively challenging (IMF and others 2020).

43. **The effect of inflation on capital gains, especially over long periods, is highly visible**. Some countries (for example, India and previously the United Kingdom and Ireland) allow an adjustment to address this. However, this only exacerbates the tax preference for capital gains, because all other returns are also affected by inflation (interest and dividend flows are also higher) and do not benefit from such adjustment. And even in the absence of inflation adjustment, inflation increases the tax preference for capital gains (Beer, Griffiths, and Klemm 2023).

44. **While recognizing obstacles to taxing capital gains on accrual, they are not unsurmountable**.[23]

- *Valuation challenges*: The absence of a transaction value creates difficulties in determining a capital gain. This is particularly the case for privately held stocks, and extremely challenging for assets with volatile and hard-to-measure value such as works of art and collectibles. For many other assets, however, the difficulty is minor. For publicly traded securities, prices are readily available to allow the determination of accrued gains. Similarly, for real property, regularly updated valuations may already exist, in countries that employ market value-based property taxes.

- *Liquidity challenges*: The absence of a flow also creates problems for liquidity-constrained owners of assets. This can create hardships for indivisible high-value assets, such as residential real estate. There is no difficulty for financial securities held in liquid markets, where it is always possible to sell part of the holding to cover any tax liability. Moreover, there are many investors who are not liquidity constrained and still benefit from the current tax saving. As noted, very wealthy investors receive a large share of their income as capital gains. Some of them borrow to finance their consumption so as to avoid triggering a tax liability, and those could also borrow to pay their taxes.[24] For example, Elon Musk pledged $58 billion of shares as collateral for personal loans (Eisinger, Ernsthausen, and Kiel 2021).

- *Treatment of losses*: In years of declining asset prices, widespread capital losses could threaten tax revenues if capital losses are offset against other incomes. This risk can be mitigated by allowing capital losses to be offset only against capital gains rather than all income, as is typically already the case under current realization-based systems. Somewhat related and a prominent recent example is the taxation of capital gains from crypto assets. Despite large gains, there are also massive losses in crypto holdings, which can justify allowing loss offsets only against other crypto gains (Baer and others 2023).[25]

Owner-Occupied Housing

45. **For real property held as investments, taxation is conceptually easy: income includes rents and any capital gains, while costs include maintenance, depreciation, and any cost of finance**. However, when property is owner-occupied, the key difficulty is that no rent is being paid. The owner nevertheless enjoys housing services, which are thus equivalent to an income. A theoretically coherent approach to taxation would be to calculate a taxable imputed rent, while allowing for the same deductions as for an investment property. This would avoid a tax preference of owner occupation compared to renting. For practical reasons, imputed rents are rarely taxable (Switzerland and the Netherlands being exceptions). When imputed rents are

[23] The Netherlands is contemplating taxing unrealized capital gains from financial assets (see the memo by Ministry of Finance). Apart from this technical discussion, taxation on accrual is found to be unpopular—supported by just 25 percent of respondents—in a recent survey-based empirical study (Liscow and Fox 2022). Showing respondents balanced explanatory videos changes their views modestly (+5 percentage points), one-sided videos in favor of accrual taxation have a much larger effect on support (+19 percentage points) than one-sided videos against such taxation (–7 percentage points).

[24] Of course, with accrual taxation, there would be no need to postpone realization for nonbusiness reasons.

[25] Taxing capital gains from crypto assets faces the specific challenge of quasi-anonymity, making it difficult for tax administration to link the gains (or losses) to natural persons.

disregarded as income, but some costs, notably mortgage interest, are nevertheless deductible, this creates an incentive to overconsume housing and for excessive leverage.[26]

Capital Income Taxes in Practice

46. **As noted, tax rates on capital income, both at the corporate and personal levels, have generally declined over the decades** (Figures 1 and 2).

47. **In practice, no country employs a pure version of any of the possible capital income tax systems.** No country taxes income comprehensively, with even those that apply a uniform tax schedule on most types of income, having special treatment for certain assets or income types, such as capital gains (taxed on realization or exempt) and owner-occupied housing (generally exempt). There are also no pure dual systems, as not all capital income is subject to the same low rate.[27]

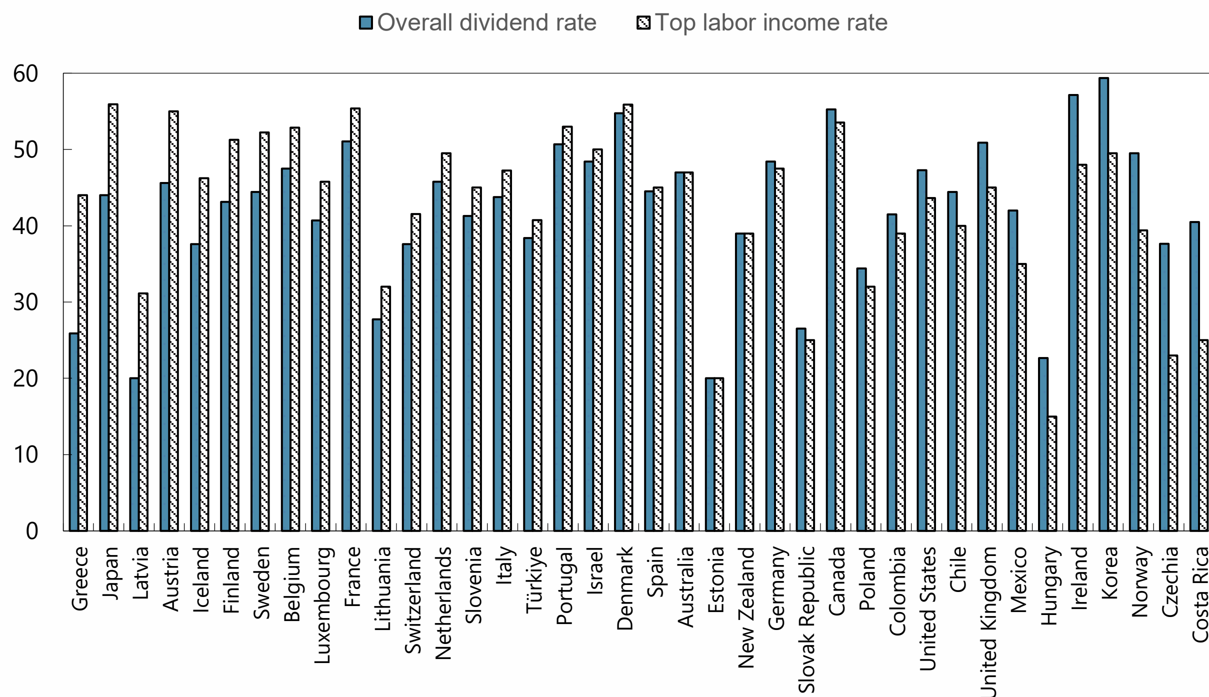
48. **Debt bias is a common feature in most tax systems.** One way to avoid this is by using allowances for corporate equity (ACE), which allow deduction of notional interest on equity, similar to the deductibility of interest that is available for debt finance. Currently very few countries use such system (for example, Malta, and partially Italy and Türkiye), but a few more have done so in the past (see Table 2 in Hebous and Klemm [2020]).

49. **Among OECD members, just over half tax dividends (taking into account both corporate- and personal-level taxes) at a lower rate than labor income, three tax both at the same rate, and the remainder at a greater rate (Figure 6).** The difference can be sizeable in both directions, with Greece offering an 18-percentage-point advantage for dividends, while Costa Rica has 15-percentage-point preference for labor income. Incentives to incorporate thus differ by country.

[26] Housing is also subject to taxes other than on the income (see Box 2).

[27] Denmark, for example, has tax-free allowances also for capital income, Sweden has a different rate for corporate income, and dividends are double-taxed. Norway applies higher taxes on returns to stocks exceeding a normal rate of return.

Figure 6. Overall Dividend Compared to Labor Income Taxation, 2022



Source: OECD.

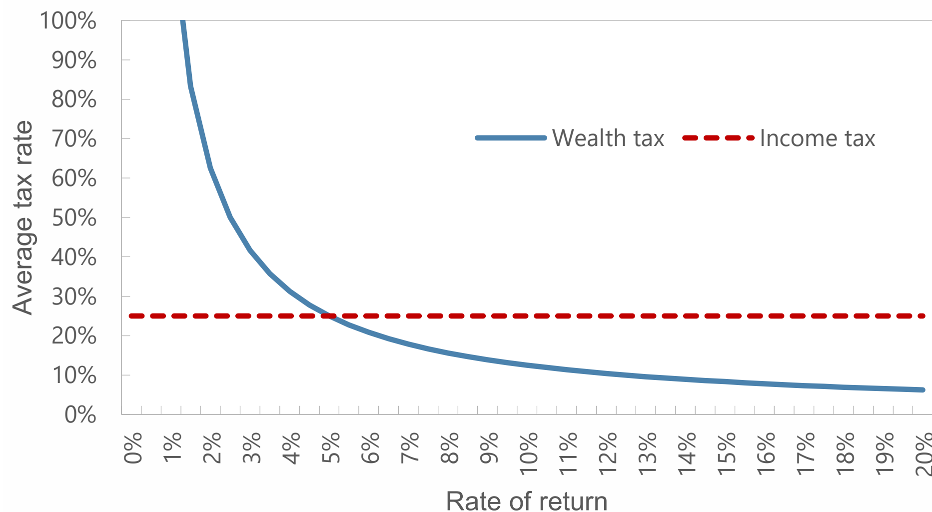
Wealth Taxes

Income versus Wealth Taxes

50. **Moving from capital income to wealth taxes raises the question of how they differ at a fundamental level.** The key difference is that the former is applied on a flow and the latter on a stock: a wealth tax is imposed on the net wealth (assets minus liabilities) of individuals, irrespective of the return. A special case is a one-off wealth tax or capital levy (see Box 1).

51. **Wealth taxes are thus equivalent to taxing a fixed rate of return, that is, an assumed rather than the actual flow of capital income.** This implies that high-yielding investments bear light taxation (in percent of the income), while low-return investments—including loss-making ones—are taxed heavily under a wealth tax. When the wealth tax rate is set such that it is equivalent to taxing the normal return to capital, wealth taxation implies ex post that economic rents are untaxed. Figure 7 provides an illustration of the taxation of an asset through a wealth or a capital income tax, where the hypothetical income tax rate is 25 percent and the wealth tax rate is 1¼ percent. With these tax rates, they are equivalent for assets yielding a return of 5 percent. The figure shows strikingly how effective tax rates on returns decline as the return rises. Even more strikingly they rise for very low returns, tending to infinity as returns approach zero. And while not shown in the chart, they would still be collected on loss-making assets.

Figure 7. Capital Income versus Wealth Taxation



Source: Authors' calculation.
Note: Assumes a capital income tax rate of 25 percent and a wealth tax rate of 1.25 percent.

52. **The focus here is on wealth taxes levied on individuals**. In a few countries (for example, Luxembourg and Switzerland), there are also taxes on corporate assets. Clearly, those are not related to anyone's wealth, as a corporation can be owned by many people with very different wealth levels and an individual can own many corporations. Moreover, if all businesses wealth (for example, in the form of stocks when it is a corporation) is covered under individual wealth taxes, having another tax on the net assets of businesses amounts to double taxation and distorts company structures.

Efficiency of Wealth Taxes

53. **Capital income taxes are generally more efficient than wealth taxes**. As noted, wealth taxes cover only the normal (or some other fixed) return, leaving rent (or some share thereof) untaxed. This is exactly the opposite of what efficient taxation would call for, which would be high taxation of rents, with low or even zero taxation of normal returns. As noted previously, it is the normal return that determines savings and investment decisions, while rents represent profits that exceed a level needed to proceed with financing.

54. **Considering a risky investment, wealth taxes generally lead to higher after-tax risk than capital income taxes**. A risky investment that turns out successful will have its return reduced more by a capital income than a wealth tax. If it turns out unsuccessful, however, its return will be reduced much more by a wealth tax. A capital income tax, thus, smooths out the outcomes making risky investments more attractive to risk-averse investors (Domar and Musgrave 1944). But there are also further complications: a progressive capital income tax will reduce high returns disproportionally, rendering risky investments less attractive. And if risky investments include a risk premium, the expected value of such premium above a fixed return will be covered by a capital income but not by a wealth tax.

55. **There are, however, also theoretical arguments favoring wealth taxation on efficiency grounds.** Guvenen and others (2023) argue that if entrepreneurs differ in their abilities, so that the more productive ones earn on average higher rates of return, then wealth taxation has the advantage of encouraging savings among productive entrepreneurs, thereby shifting the capital stock to them and boosting overall productivity and growth. Of course, this argument hinges on returns being a function of entrepreneurial skills. Empirical evidence suggests that returns differ significantly across investors with persistence over time and are rising with wealth (Fagereng and others 2020). This may reflect differences in entrepreneurial talent, although it could also be the result of financial sophistication and access to information. In a complex economy, investors and entrepreneurs

are not necessarily the same people. A highly productive entrepreneur can multiply the funds invested by others, with those able to afford the best financial advice more likely to invest in the most successful ventures. Moreover, other factors such as abuse of monopolistic positions, rent-seeking lobbying, or even luck could be behind some of the higher returns. Finally, in other models with entrepreneurs with heterogeneous rates of return, the efficiency effect is relatively small and dominated by a positive redistributional benefit of taxing high incomes of entrepreneurs (Boar and Midrigan 2023).

56. **From the angle of macroeconomic management, wealth taxes provide more stable revenues over the cycle and hence much weaker automatic stabilizers than capital income taxes**. In recessions, when capital rates of return plummet and even turn negative for some assets reducing or eliminating tax liability, wealth taxes would still apply, with only a slight reduction resulting from a smaller tax base. Hence, unless concern for a steady revenue stream dominates, capital income taxes are a better choice for governments wishing to strengthen automatic stabilizers.

Equity

57. **Capital income taxes are more equitable than wealth taxes, especially when measured in percent of income.** Horizontally, among two individuals with the same level of wealth, capital income taxes will be higher for the one earning higher returns, while wealth taxes will be the same. Vertically, wealthier individuals are likely to have better access to financial advice and a greater capacity to accept risk, both of which will imply on average greater returns. A capital income tax would automatically cover all these returns, but a wealth tax would need additional progressivity in the rate structure to allow for the rising share of rents and would only get it right ex ante, but not ex post.

58. **Moreover, there could be general equilibrium effects.** To the extent that wealth taxes reduce aggregate capital formation more than capital income taxes—in line with the efficiency arguments discussed earlier, this would in turn reduce wage rates, as capital becomes scarcer and the marginal product of labor consequently lower (similar to the argument by Stiglitz [1978]).

59. **Apart from the theoretical difference of comprehensive capital income or wealth taxes, in practice, the equity effect of either type of tax can be hampered by exemptions**, especially if they include assets commonly held by the wealthiest individuals.

Administrative and Legal Issues

60. **For purely administrative reasons, a wealth tax might appear to be easier to enforce in some cases, because certain capital income, such as unrealized capital gains on hard-to-value or illiquid assets, can be difficult to determine and tax**. An enforceable wealth tax could then be more equitable than an unenforceable capital income tax. It is important, however, to note that for such assets, a wealth tax will face similar valuation difficulties. The only advantage of a wealth tax is then that the volatility of the value of the wealth stock is smaller than that of the capital gain (change in stock), so that measurement issues have a slightly smaller revenue effect in any given year.

61. **Since wealth may create no positive financial return, some taxpayers may lack liquidity for remitting any wealth tax due**. This occurs only when a taxpayer has insufficient other liquid income from which tax payments can be made. When assets are divisible, it creates only a minor inconvenience, requiring partial liquidation. However, when wealth consists of one indivisible asset, requiring a sale can create difficulties for the taxpayer. In the case of highly illiquid assets (for example, a pension entitlement), a sale may not be feasible. Potential solutions are setting a high threshold (the very wealthy should have ways to obtain liquidity; see the following section) or allowing special treatment for certain assets, such as primary residences and pension wealth (which in any case has an upper limit given that contributions are generally restricted). A recent empirical paper using UK data (Loutzenhiser and Mann 2021) found that under a wealth tax with a 1 percent rate and a £500,000 threshold, about 18 percent of wealth taxpayers would face a tax bill exceeding 10 percent of their

income and liquid assets. If pension wealth is excluded, this drops dramatically to 3 percent. They do not assess whether assets are divisible, and hence the share of individuals facing the need to liquidate their only or main asset would be even smaller.

62. **One implication of wealth taxes is that they can lead to a total tax bill that exceeds all income, and is collected even if income is negative, such as in a year of capital losses.** Some countries have upper caps on total income and wealth taxes as a percent of income. In France, for example, total taxes were limited to 75 percent of income, while in Spain, the limit was 60 percent, though it interacted with a lower limit of at least 20 percent of the wealth tax being payable (OECD 2018). It appears that no country carries forward any wealth tax forgone as a result of a cap, even though this would likely yield additional revenue, given that capital income can be volatile.

A Wealth Tax on the "Superrich"

63. **Some recent proposals consider wealth taxes with exceedingly high thresholds, such that they affect only the "superrich."** The tax issues that arise are largely the same as before, but there are also some differences:

- Some of the practical concerns of wealth taxes are mitigated when they apply only to a small number of superrich taxpayers. The small number reduces administrative costs, while compliance costs and liquidity concerns are less relevant in case of exceedingly high wealth.
- Real entrepreneurial activities and innovation could be less affected by a wealth tax restricted to the very top. First, it would not affect most entrepreneurs or inventors, given the high threshold. Second, one might conjecture a non-linear tax elasticity of entrepreneurial decisions, decreasing at the very top given their already high consumption and security levels. There is, however, no empirical evidence on such conjecture, given the absence of such taxes so far and the very small potential sample. A counterargument is that entrepreneurial risk is highly concentrated at the top (Hall and Woodward 2010), so that any measure that affects risk-adjusted payoffs could discourage investment.
- An argument can be built that to address extreme inequality, it is not sufficient to reduce the growth rate of assets of the wealthiest individuals but to reduce their wealth toward some upper limit over time. Such argument could, for example, be based on concerns that excessive wealth concentration can be intertwined with rent-seeking behavior and influence on rule making (Stiglitz 2012). If society decides to follow such an approach, then it can be achieved much more easily through a wealth tax than through an income tax, which would require tax rates that exceed 100 percent of the capital income. Such wealth-reducing tax is, however, likely hard to implement as there is also evidence that the superrich influence the political process to their favor, including by hindering progressive tax reforms (Page and Seawright 2023).

64. **As there is no common definition of the "superrich," the determination of the cutoff is a key aspect of the debate**. It is a term often loosely used to refer to the top 0.01 percent of the income or the wealth distribution, or another arbitrary fraction at the top. Occasionally, it simply means the billionaires or the top few hundreds of individuals in a country (Scheuer and Slemrod 2020). A slightly different concept is behind the term "superstars" that is meant to highlight differences in ability within a particular group, for example, sport stars, actors, inventors, and scientists more broadly.

65. **The global top 500 wealthy individuals had an estimated combined wealth of $7.7 trillion in 2023**.[28] At an assumed average return of 5–10 percent, this wealth generates annual income of $385–$770 billion. How much of such income is de facto taxed and at what rate is difficult to determine. The EU Tax Observatory (2023) estimates that a wealth tax of 2 percent on the world's top billionaires in 2023 (about 2,800 billionaires, 30 percent of whom are in the United States according to the report) can raise about $250 billion (or 0.2 percent of world GDP). Often the revenue consequences of such proposals are not particularly high, but the

[28] Authors' calculation based on Bloomberg Billionaires Index (https://www.bloomberg.com/billionaires/), as of August 2023.

aim is to address inequality at the top. For example, Saez and Zucman (2019) analyze the proposal by Senator Warren[29] to introduce a wealth tax on the superrich in the United States. They put the revenue estimate at $49 billion from the top 400 families[30] and find that the tax would have a large effect on progressivity within the top 0.1 percent.

Box 1. Capital Levies (One-Off Wealth Taxes)

Ad hoc temporary wealth taxes—also known as capital levies—are sometimes raised in response to major shocks, such as wars or natural disasters. Such levies are theoretically nondistortionary if they are unanticipated and not expected to be levied again. They are sometimes levied at relatively high rates. If unanticipated, they do not affect behavior before they apply, and if perceived to be one-off, they do not affect future behavior. The difficulty is that these two conditions are virtually impossible to meet. Given their importance, they are likely to be debated or information about them might be leaked, so they are unlikely to be unexpected, triggering avoidance and evasion behavior before their imposition. And once used, they will be expected to be repeated—especially if they are considered to have been successful—and at that point behavior will become distorted, possibly very strongly so if the tax was high (Keen 2013).

There are a few historical examples of capital levies. Many of them were not successful, because slow introduction allowed avoidance and evasion.[31] Under exceptional circumstances, they can be successful, with a common example being a levy in Japan after the Second World War. With the international links largely severed, avoidance was difficult, and the situation was very clearly exceptional lending credibility to the measure being of a one-off nature.[32]

More recently, there have been a few instances of capital levies, with lower rates than earlier levies. Ecuador, for instance, introduced a temporary wealth tax in the aftermath of the COVID-19 pandemic. O'Donovan (2021) discusses the temporary levies in Iceland (on wealth) and Ireland (on pension assets) following the global financial crisis. Both had some features of a capital levy, but also differences, notably they were not assessed on a one-time valuation of assets, but rather over a few years on updated values. Both were extended beyond the initial horizon, confirming the difficulty of maintaining exit dates, though both were ultimately allowed to expire. In other cases, initially temporary wealth taxes became permanent: in Spain, the wealth tax was extended on an annual basis, but in 2021, it became permanent; and in Colombia, wealth was taxed between 1935 and 1992. After a 10-year hiatus, the tax was reestablished in 2002 as a "temporary" levy to finance the war against illegal armed groups. This tax also became permanent, although its rate structure and base have since been reformed numerous times, and its revenues have ceased to be earmarked.

Wealth Taxes in Practice

66. **Wealth taxes have become less common among advanced economies.** As noted, among OECD members, those levying an explicit wealth tax declined from 12 in 1990 to only 3, while the Netherlands[33] de facto also levies a wealth tax as part of its personal income tax (as does, outside the OECD, Liechtenstein)

[29] One example of a proposal for a wealth tax on the superrich is by US Senator Elizabeth Warren, in 2019, with the idea to tax net worth above $50 million and $1 billion, with rates of 2 percent and 3 percent, respectively.

[30] In a hypothetical scenario that assumes the tax was in place during 1982–2018.

[31] For an overview see Table 1 in (Klemm and others 2021).

[32] For more details of the Japanese levy, see Eichengreen (1989) who contrasts this to the less successful levies around the First World War. See O'Donovan (2021) for a relatively favorable assessment of other post-Second World War levies in France and West Germany.

[33] Following a high court decision in 2021, this system was reformed such that the assumed return differs across assets and the intention is to move toward taxing actual returns from 2027.

(Table 1). And where employed, the wealth tax is not a significant source of revenue, because of high exemption thresholds and widespread evasion, amid severe enforcement challenges (Kopczuk 2019; Advani and Tarrant 2021). At 1.4 percent of GDP over the 2018–20 period, Switzerland has the highest revenue yield globally, but the country does not levy a capital gains tax (and its wealth concentration is high by international standards [Föllmi and Martínez 2017]). With the existing wealth taxes mostly modest and limited, studying them will not necessarily be indicative about the effect of more comprehensive or higher wealth taxes.

67. **Among emerging and developing economies, wealth taxes are most common in Latin America, where some countries introduced the tax in the aftermath of the COVID-19 pandemic.** As with wealth-taxing advanced economies, the wealth tax does not raise significant revenues in developing countries. It currently generates 0.35 percent of GDP on average, and historically, it has rarely exceeded 0.1 percent of GDP. In many emerging and developing countries, wealth taxes are used to foster tax enforcement because revenue administrations observe assets, notably immovable property, more easily than they can verify income, and it sometimes acts as a minimum tax. Moreover, several other countries require income taxpayers to report assets and liabilities to support income tax enforcement (Londoño-Vélez and Ávila-Mahecha 2021). For example, in Brazil and Indonesia, mandatory reporting of assets and liabilities must be disclosed in the tax return, enabling the authorities to check if changes in taxpayers' net worth are compatible with changes in their reported income; in Thailand, the tax authority has the power to reassess an individual's income tax liability, based on their net worth; and in Bangladesh reported net worth triggers an income tax surcharge or a wealth tax, whichever is higher (Scheuer and Slemrod 2021).

68. **Al-Zakat is a form of a wealth tax paid by Muslims in some countries—generally 2.5 percent of net wealth above a threshold**.[34] In Saudi Arabia for example (where there is no income taxation of individuals), it is mandatory for individuals doing businesses and its revenue enters a general "social budget," whereas in some other countries, it is voluntary and its revenue tends to be earmarked for specific purposes. As it is often voluntary or only applies to part of the population, it is not included in Table 1. Other taxes that apply on some assets, but not comprehensive measures of wealth are discussed in Box 2.

[34] While there is a consensus on the rate of 2.5 percent, the definition of the base varies across countries. For example, in Malaysia, the base of 'Zakat Harta' is mainly 'earnings' (rather than the stock of wealth), although the definition also includes silver, gold, and livestock.

Table 1. Wealth Taxes

Country	Base	Rates (percent)	Revenue (percent of GDP, 2018–20 average)
Algeria	Worldwide net assets of residents	0–1	n.a.
Argentina	Worldwide net assets of residents. Exemptions: dwellings, intangible property, rural land, government securities, certain savings accounts, financial instruments to promote investment.	Domestic assets: 0.5–1.25 Foreign assets: 0.7–2.25	0.34
Bolivia	Worldwide net assets of residents. Credit for property and income tax paid by self-employed professionals. Introduced in December 2020.	1.4–2.4	0.085[a]
Colombia	Net assets above a threshold.	Since 2022: 0.5–1.5 From 2027: 0.5–1	0.08
Liechtenstein	Worldwide net assets. Net wealth is multiplied by a standard return (4%) and added to the income tax base. Exemptions: immovable property abroad, commercial establishments abroad, privately used motor vehicles, certain equipment and tools, art/historic collections made available to the public.	Product of a standard return rate and the income tax rate (of up to 28%)	n.a.
Netherlands	Net assets above €50,000. Main exceptions: pension wealth and owner-occupied housing. Taxation occurs through the income tax by assuming a notional return on the wealth. Substantially owned firms (≥5%) are taxed based on income instead.	0.37–2.17 percent (product of a notional return of 1.03–6.04 depending on the amount of wealth and a tax rate of 36%)	n.a.
Norway	Worldwide net assets above NOK 1,700,000.	2.5	0.56
Spain	Worldwide net assets. Exemptions: certain substantial (≥5%) holdings of unquoted shares.	Varies by municipality (0 in Madrid), typically 0.2–3.5	0.19
Suriname	Net assets with a value exceeding SRD 100,000 if single, or SRD 120,000 if married.	0.3	n.a.
Switzerland	Worldwide net assets above a threshold. Exemptions: foreign real estate and businesses.	0.01–1, varying by canton/municipality	1.4
Uruguay	Net domestic wealth exceeding a threshold, (UYU 5,030,000 in 2021). Exemptions: domestic deposits, government bonds, coastal vessels, some agricultural land, historical monuments.	Residents: 0.1–0.4 Nonresidents: 0.7–1.5	0.9
Venezuela	Net worldwide assets of high-net-worth individuals (> 150 million Tax Units). Exemptions: principal residence, non-luxury household goods. Since 2019.	0.25–1.5	n.a.

Source: IMF staff compilation using PwC, IBFD, and EY tax guides.

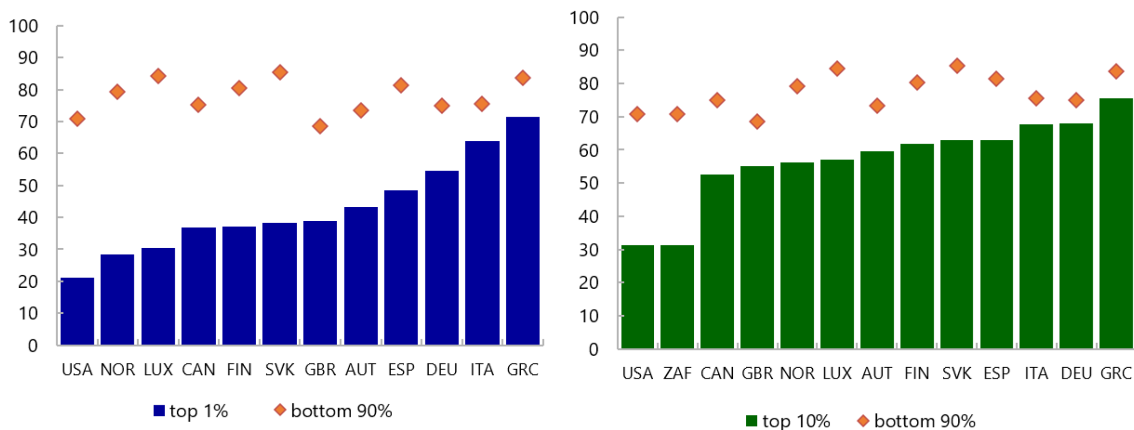
[a] Figure for 2021.

Box 2. Taxes on Specific Types of Wealth

Real property taxes are sometimes described as an example of wealth taxes, but they are fundamentally different. They are nevertheless highly useful taxes, fulfilling other purposes, such as local government finance, given that property values provide a good indication of the use of local public services. Moreover, they are highly efficient and have been shown empirically to be among the most growth-friendly taxes (Johansson and others 2008). They can be designed in progressive fashion, with exemptions that ensure that modest homes face little or no taxation (see Grote and Wen [2024] on how to implement property tax reforms).

- First, they only cover one type of asset. And while property ownership rises with wealth up to a point, very wealthy people will hold a much smaller share of their total assets in real property than a typical middle-class household, where the family home is often the main asset (Figure 8).
- Second, and more important, they do not allow deduction of any debts, including mortgages on the property under taxation. They thus even apply where net wealth is minimal.

Figure 8. Gross Wealth Held in Real Estate by Position in Wealth Distribution (in Percent of Gross Assets)



Source: LWS and IMF staff calculations.

Nevertheless, real property taxes have merits when it comes to ensuring that high incomes and wealth are taxed: they are immobile and easy to enforce (though valuation can be a challenge in developing countries, especially in rural areas). Real property is visible (possibly purposefully for conspicuous consumption). While it is possible to underestimate the value of a property (for example, because someone undertakes unreported quality improvements) and tax might be under-collected, there is little risk that a luxury property would go undetected. And once assessed, it can be enforced, because transactions and valid titles require official documentation. In case of non-payment, real property can be repossessed and sold. In some contexts, for example, a financially successful criminal, a real property tax can be one of the few ways of extracting tax despite all income and non-housing wealth being hidden.

Apart from the real property tax, there are further taxes that cover only some aspects of wealth. All wealth taxes exclude some nonfinancial assets, not least for practical reasons (for example, general household items, infrequently-traded art and valuables). The large number of exemptions is arguably one of the factors behind the low revenues of past wealth taxes and a contributor to their declining use

(Perret 2021). But some wealth taxes are much narrower by construction in that they only cover certain assets rather than attempting to cover broader definitions of wealth (Table 2). The assets covered can include items of conspicuous consumption, such as luxury vehicles or vessels, or certain financial assets. Apart from obviously having a low revenue yield, such narrow taxes also invite tax avoidance and evasion, by simply holding most wealth in untaxed forms or indirectly.

Table 2. Examples of Partial Wealth Taxes

Country	Base	Rates (percent)
Belgium	Worldwide securities (except registered shares) accounts ≥€1 million. Started in 2019, abolished and then reintroduced in 2021.	0.15
Chile	Tax on the market value of luxury assets—including aircraft, vehicles, and boats—introduced in February 2022. Applies to individuals and firms.	2
Italy	1. Immovable property located abroad (domestic property instead subject to property tax). 2. Financial assets (separate taxes for domestic and foreign assets; same rate, some differences in bases).	Foreign property: 0.76 Financial assets: 0.2
Moldova	Immovable residential property or holiday cottages net of mortgages (in addition to the property tax) with an assessed value > MDL 1.5 million, and total area > 120 square meters.	0.8

Sources: IBFD, EY, PwC, and national sources.

Wealth Transfer Taxes

69. **This section considers wealth transfers through inheritance or gifts**. Some assets are also subject to transaction taxes when traded, for example financial transaction taxes or real estate transfer duties. Such taxes are not aligned to returns or wealth levels, as an asset's effective tax rate depends mostly on the frequency of transactions. Hence, they are not further discussed here (on financial transaction taxes, see Matheson [2011]).

Estate, Inheritance, and Gift Taxes

70. **Wealth can also be taxed when it is transferred from one person to another**. Transfer tax on wealth can be levied either on inter vivos transfers (gift tax) or on transfers at death (inheritance tax or estate tax). Most personal income taxes include neither gifts nor bequests as income of the recipient, so to tax them, a separate wealth transfer tax is required.

71. **Transfer taxes on wealth at death come in two basic forms: as an inheritance tax levied on the recipient of the transferred property (recipient based), and as an estate tax levied on the transferor or their estate (transferor based).**[35] Transferor-based taxes are more typical in common law countries. This distinction is not simply an administrative matter on how payment is collected but creates fundamental

[35] The nomenclature is not always clear; the British estate tax, for example, is called "inheritance tax."

differences. Under an inheritance tax, each heir is subject to their own tax schedule, so that an estate that is split among many heirs will overall be taxed less than an estate that passes on to just one heir.

72. **Generally, the tax base for transfer taxes on wealth includes either worldwide net assets of a taxpayer (transferor or heir) who has a sufficient nexus to the jurisdiction or those assets situated in that jurisdiction regardless of the taxpayer's nexus.** Tax rates are typically applied on graduated rates. In the case of inheritance taxes, rates may depend not only on the amount but also on the level of relationship to the transferor, with lower rates and higher exemptions typically applicable to close family members.

Efficiency

73. **Wealth transfer taxes can potentially influence behavior of both transferors and recipients.** Recipients have little if any control over whether and how much they receive, so gifts and inheritances are akin to lump sums. When an inheritance or gift is received,[36] it will thus mostly have an income effect that is likely to reduce labor supply. In dual income tax systems, there is no further effect. In comprehensive income tax systems, the interaction of the capital income on the newly acquired wealth with the personal income tax system can create an additional substitution effect. In that case, such new capital income can push taxpayers into higher tax brackets, thereby further reducing labor supply incentives. Taxing wealth transfers then mitigates such effects and can be expected strengthen labor supply.

74. **Behavioral effects on transferors are more relevant—and have been studied much more—as transferors have control over how much to save for wealth accumulation and to whom they give and—within some legal constraints—to whom they bequeath their wealth.** Some bequests are purely accidental, for example if individuals accumulate wealth to fund consumption in their old age, but then pass away prematurely. In those cases, taxing wealth transfers has no effect on working and saving decisions of transferors, implying that they could be taxed at high rates with no efficiency costs.[37] Bequests can, however, also be purposeful, in which case tax may affect incentives. The motive can be strategic, such in exchange for a service (for example, caretaking), or altruistic, such as in supporting children. In those cases, transferors face two opposing effects from taxation of wealth transfers: (1) they may work and save less knowing that part is taxed before it is passed on to their heirs, a substitution effect, and (2) they may have to work and save more to pass on to the next generation a certain amount of wealth, an income effect. Kopczuk (2013) surveys the inheritance tax literature and concludes that motives likely represent a mix of strategic and altruistic ones, and that a first-order issue is the preference of transferors for control over wealth, which is consistent with both relatively limited giving inter vivos and significant tax avoidance efforts.

75. **While the direction of substitution and income effects on transferors has been much studied theoretically and to some extent empirically, there is no consensus on their size. Kopczuk** (2013) **notes the difficulty of identifying the effect on wealth accumulation of incentives that operate over a very long time.** The fact that even people without children or other apparent heir often accumulate significant wealth suggests that negative effect on working and savings decisions, especially of very rich individuals, may not be large.

76. **Behavioral effects are likely to be stronger for tax planning.** There are potentially large amounts at stake, and transferors may have plenty of time for planning, as discussed in subsequent subsections.

Equity

77. **Empirical evidence shows that the share of inherited wealth in overall wealth is large, though precise figures are hard to come by.** One difficulty is that estimates differ much depending on whether capital

[36] To some extent these effects already apply when a gift or inheritance is expected, but they will be muted by the uncertainty surrounding the amount and timing of such transfers.

[37] Such bequests are likely the result of inefficient annuity/old-age insurance markets, which means that individuals do not find it profitable to simply purchase a lifetime annuity.

income earned on inherited wealth is counted as part of the inherited share or not. Davies and Shorrocks (2000) argue that a share of 35–45 percent is a reasonable estimate, based on balancing different assumptions made in papers yielding much higher or lower estimates. With more detailed and recent data, which are available for a few European countries, Piketty and Zucman (2015) report results for France, Germany, and the United Kingdom, finding that in 2010, the share of inherited wealth ranges from just over 50 percent in Germany to close to 60 percent in the United Kingdom. Moreover, as shown by Acciari and Morelli (2020) using Italian data, inheritances appear to become larger (from 8.4 to 15.1 percent of GDP between 1995 and 2016) and more concentrated over time. According to a UBS (2023) report, new billionaires acquired greater wealth through inheritance than entrepreneurship.

78. **With high shares of wealth being inherited, taxing inheritances can be expected to have a great effect on wealth inequality and help address the buildup of dynastic wealth**. Theoretically the effect of inheritances on the wealth distribution is ambiguous. If inheritances are less unequal than existing wealth among heirs, or if inheritances split wealth among many heirs, inheritances can reduce wealth inequality. Counter-intuitively this can occur even if wealthy heirs inherit more than poorer ones on average, if the poorer ones inherit more in relative terms to their wealth than rich ones. Under such a scenario, a flat inheritance tax could worsen the wealth distribution.[38] To avoid such effect, an inheritance tax can be designed with sufficiently large personal exemptions and progressive rate structures. Moreover, if the revenues of the tax are used for redistribution, poverty-reducing spending, or growth-enhancing tax cuts (for example, on low-wage labor), this can further improve the income distribution.[39] General equilibrium models can also lead to cases in which inheritance taxes increase inequality, for example if their negative effect on saving reduces the capital stock and hence wage rates, thereby harming especially those people who inherit little and earn their income (Stiglitz 1978).

79. **In terms of equity outcomes, an inheritance tax is preferable to an estate tax, because it is directly linked to the wealth inequality after the transfer.** Wealth that dissipates across a large family with many members (or that is shared among many unrelated friends), and that therefore leads to a less unequal wealth distribution, is taxed less under an inheritance tax than wealth that is obtained in a concentrated manner by one or a few heirs.

80. **Another equity argument for taxing bequests applies in consumption tax systems.** As noted earlier, no consumption tax is collected on income that is not spent over a lifetime. Taxing bequests—or in other words treating them as consumption—can then ensure that revenues are collected on all income earned over a lifetime, restoring the equivalence between consumption and lifetime income.

81. **Putting together efficiency and equity considerations, Piketty and Saez** (2013) **derive an optimal inheritance tax formula, similar to such formulae for labor taxes**. Crucially, their model allows lifetime resources to depend not only on labor earnings but also on bequests—because otherwise labor taxation would be a sufficient tool (Atkinson and Stiglitz 1976). The optimal tax rate is then particularly high when bequests are relatively inelastic, bequest concentration is high, and preferences for distribution high. When calibrating their model to the United States and France, they find that optimal tax rates could be 50–60 percent, and even higher for top bequests.

[38] This is not merely a theoretical possibility but has been found in a recent empirical study (Eliner, Erixson, and Waldenström 2018) showing that in Sweden, inheritances reduce wealth inequality measured by top wealth shares and Gini coefficients, and that inheritance taxation weakens this effect. The equity effect would turn positive, if revenues were used for redistribution. The finding may reflect the Swedish institutional context, notably a very low exemption threshold of just $11,000.

[39] The effect may even go beyond the direct one on wealth levels, with wealth transfer taxes also potentially enhancing equality of opportunity. Wealth transfers might give recipients a head start that is not linked to their personal efforts but may still be reflected in their future income even from labor, for example, if it allows obtaining a better education. Berg and Hebous (2021) present empirical evidence suggesting that parental stock of wealth increases children's labor income.

Tax Planning and Anti-Avoidance Measures

82. **As noted, inheritance taxes are prone to avoidance as taxpayers usually have time to plan.** The simplest way to avoid paying inheritance tax is by giving the assets to heirs before death. While the testator then loses their control over the assets and complete giveaway is unlikely, gift taxes that are well integrated with inheritance taxes are crucial backstops to prevent or limit this route of tax avoidance.

83. **A more sophisticated way to avoid inheritance tax is by separating the assets from the owner, while leaving the testator still with the revenues (or nonfinancial benefits, for example, imputed rents) from those assets.** These arrangements can take the legal form of a trust (mainly in a common law legal environment) or a usufruct construction (mainly in civil law jurisdictions).

84. **Some countries allow individuals to set up trusts, into which a person (grantor) transfers assets out of their estate.** Once the trust is established, it becomes the legal owner of the assets. The grantor nominates a trustee (the person representing the trust) and beneficiaries who are entitled to related income (financial income or use of real estate), typically the grantor and, conditionally, their heirs. At the time of death, assets do not pass on to the next generation, but simply stay in the trust, while benefits are now due to the surviving family members. Apart from simply not allowing such a structure, countries can, for example, treat transfers to a trust as a bequest and tax them accordingly or subject trusts to a one-off tax every 30 years (simulating a generational transfer of assets) or an equivalent lower annual tax.

85. **The separation of ownership (usus) and revenue (fructus) in civil law jurisdictions allows giving the asset to heirs while keeping their returns, reducing the disadvantage of an outright gift.** The prime example for this is a home that is transferred to children, while the parents maintain a lifelong right of use. This does not only allow taking advantage of any lower taxation of gifts versus inheritances. Even in a fully integrated gift and inheritance tax system, tax liability is reduced, because the value of an asset stripped of its returns (for some years)—in the example the value of the home with someone still living in it—is lower thereby reducing the tax base. Any accrual toward full ownership value over time does in general not attract tax liability—in the example, the value of the home will reach full value once the parents pass. Taxing such accrual, though, would close the loophole.

86. **If certain assets are given favorable treatment, tax can be avoided by investing in such assets.** For example, a tax preference for business assets creates an incentive to set up a business. Such business might be simply a corporate shell through which private assets are held. At the time of the bequest, the business is passed on triggering a lower tax liability than if its assets had been passed on directly. There are various options to confront this avoidance. First and foremost, such tax preferences can be abolished. If they are kept for political reasons—to avoid triggering sales of family businesses on inheritance—direct specific anti-avoidance legislation could address holding private assets in a legal shell. Alternatively, the lower rates applicable to generational transfers of businesses could be limited to those assets that are substantially—that is, more than 90 percent—used for business purposes.

87. **Finally, there are some minor avoidance options that are of more limited relevance**. For example, transferors can invest more in the earning capacity of their children (education) rather than accumulating wealth to be transferred. Such strategy is naturally limited by the maximum possible cost of education, and it may entail positive externalities.

Inheritance and Estate Taxes in Practice

88. **Wealth transfer taxes are far more common than wealth taxes, but not ubiquitous. In the OECD, about two-thirds of its member states have a tax on wealth transfers, yielding on average about 0.2 percent of GDP (0.5 percent of total tax revenue) in 2020 (OECD Revenue Statistics).** The use of wealth transfer taxes has been declining with nine OECD members having abolished such taxes since the 1970s (OECD 2021).

89. **Details of inheritance and estate taxes differ much across countries.** Inheritance taxes are far more common than estate taxes and are almost always accompanied by gift taxes (Table 3). Details are more complex than what can be shown in an overview table though: while some gift taxes are fully integrated into the inheritance tax, with the same thresholds and rates, and accumulation over time, other gift taxes can be lower or higher than the inheritance tax, creating tax-planning opportunities. Estate taxes are less often accompanied by gift taxes, but some of them include gifts made within a certain period before death in the estate, which at least prevents some short-term tax planning, such as giving away wealth when death is foreseeable.

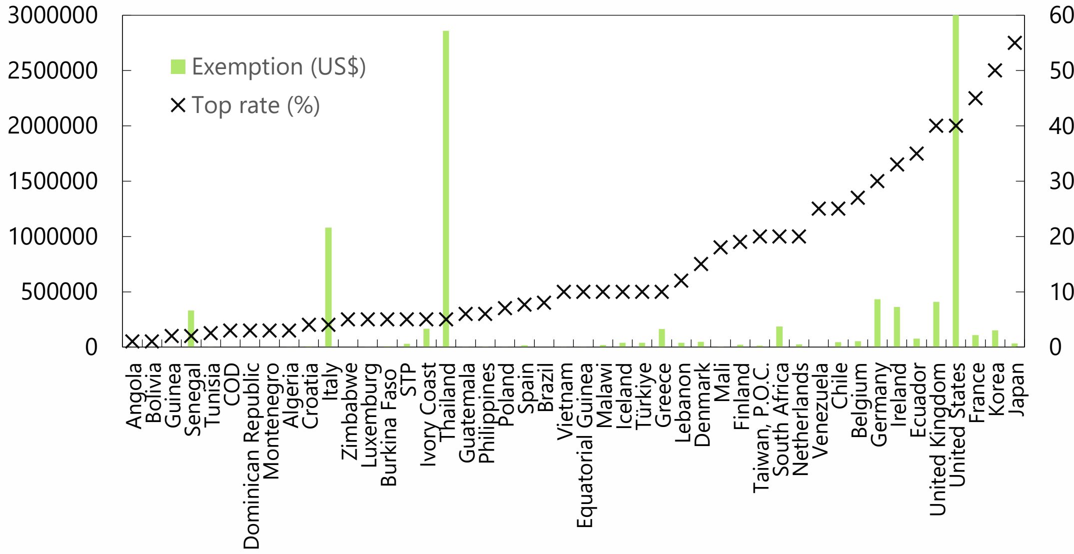
Table 3. Classification of Estate and Inheritance Taxes

	Complemented by Gift Tax	No Gift Tax
Inheritance tax	Algeria, Angola, Belgium, Bolivia, Brazil, Burkina Faso, Chile, Democratic Republic of the Congo, Croatia, Denmark, Ecuador, Equatorial Guinea, Finland, France, French Guiana, Germany, Greece, Ireland, Italy, Japan, Korea, Lebanon, Luxemburg, Mali, Montenegro, Netherlands, Poland, Sao Tome and Principe, Senegal Spain, Tunisia, Türkiye, Venezuela, Vietnam	Guinea
Estate tax	Dominican Republic, Ivory Coast, Philippines, South Africa, Taiwan Province of China, United States	Guatemala, Malawi, United Kingdom, Zimbabwe

Source: IBFD database, August 2023.

90. **Tax bases differ much across countries, for example in terms of assets that are exempt or receive beneficial treatment.** Rate structures are also complex and may not only be progressive in the amount transferred but also differ by degree of family relationship. Therefore, simplifying assumptions need to be made to give at least a cursory overview of tax levels. Focusing on the exemption threshold and top rates applicable for direct children, Figure 9 shows that such rates are at or below 10 percent in more than half of the countries but are much higher in the upper third of the distribution, reaching a maximum of 55 percent in Japan. Exemptions are generally not very high (with a median of around $20,000), but exceed millions of dollars in some countries, with the highest exemption in the United States, where it reaches almost $13 million. Given the differences in tax bases, complex rate structures, and factors outside the tax system, such as demographics, it is not surprising that top rates are hardly correlated with revenues (Figure 10).

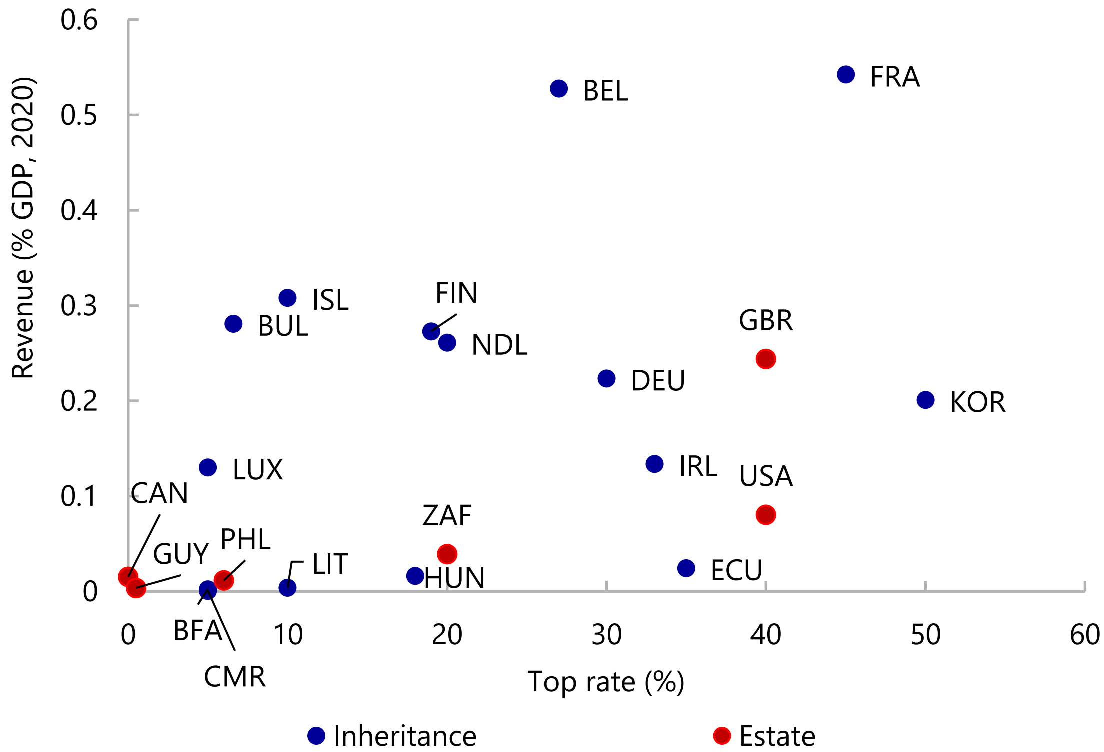
Figure 9. Inheritance and Estate Tax Rates and Allowances



Source: IBFD database, August 2023.

Note: US$ values based on August 2023 exchange rate. The US exemption is $12.9 million and was truncated to improve visibility. COD: Democratic Republic of the Congo; STP: Sao Tome and Principe.

Figure 10. Inheritance and Estate Tax Revenues



Source: OECD Revenue Statistics and IBFD.

Conclusion

91. ***How much* to tax wealth is a distinct question from *how* to tax wealth.** On the question of how much to tax, this note argues that returns to capital generally should be taxed for equity and possibly efficiency reasons, and that in many countries, wealth inequality and better tax enforcement strengthen the case for higher effective taxation than in the past. The note, however, does not propose any specific level of tax, given that this depends on country-specific preferences over revenues and redistribution, and the sensitivity of capital to taxation (including through base erosion).

92. **On the question of how to tax wealth, theory and empirical findings offer guidance.** One main lesson is that policy concerns about wealth inequality do not imply that governments should use net wealth taxes. Improving capital income taxes tends to be both more equitable and more efficient compared to replacing them with net wealth taxes. Countries, hence, should prioritize improving capital income taxation over considering the introduction of wealth taxes.

93. **Capital income taxes can be strengthened in many ways.** In countries where tax rates on capital income are relatively low, tax rate increases can be considered; where administrative capacity is high, a comprehensive approach to taxing labor and capital income is an option. But strengthening capital income taxes goes far beyond rates. A key issue is addressing loopholes, notably the undertaxation of capital gains in many countries. This can include removing any reduced tax rates or exemptions or specific downward adjustment for any capital gains, and ensuring wealth transfers are treated as capital gain realizations. An even bolder reform would involve moving toward taxation on accrual, with safeguards to deal with liquidity constraints or difficulties with valuation.

94. **There can still be a case for using a net wealth tax to complement capital income taxes, especially if applied only to very high wealth levels.** Such additional net wealth tax can address limitations of existing capital gains taxes (such as deferral of realizations) or provide an additional tax to discourage accumulation of capital beyond some level (although its feasibility depends on each country's constitution).

95. **Taxing capital transfers through gifts or inheritance provides another opportunity to address wealth inequality.** The efficiency costs of such taxes are modest, and the key challenge is often related to tax avoidance facilitated by the availability of loopholes—the most obvious being gifts inter vivos, which in many countries are taxed more lightly. Inheritance taxes are better aligned with redistribution than estate taxes since exemptions and rate structures can account for the circumstances of the heirs.

96. **Progress in information sharing during the last decade has enabled better enforcement of capital taxes at the top of the income distribution**. However, countries should continue tackling international tax avoidance and the remaining loopholes irrespective of the chosen tool to better tax the affluent (and even without new or higher taxes). Moreover, they need to keep up with technological advances, such as crypto assets and artificial intelligence, which could introduce new avoidance and evasion opportunities.

References

Acciari, Paolo, and Salvatore Morelli. 2020. "Wealth Transfers and Net Wealth at Death: Evidence from the Italian Inheritance Tax Records." NBER Working Paper No. 27899, Cambridge, MA: National Bureau of Econmic Research.

Advani, Arun, and Andy Summers. 2020. "Capital Gains and UK Inequality: New Evidence from Tax Microdata." CAGE Policy Briefing No. 19, Coventry, United Kingdom: Centre for Competitive Advantage in the Global Economy.

Advani, Arun, and Hannah Tarrant. 2021. "Behavioural Responses to a Wealth Tax." *Fiscal Studies* 42 (3–4): 509–37.

Advani, Arun, Helen Hughson, and Andy Summers. 2023. "How Much Tax Do the Rich Really Pay? Evidence from the UK." *Oxford Review of Economic Policy* 39 (3): 406–37.

Agrawal, David R., Dirk Foremny, and Clara Martínez-Toledano. 2020. "Paraísos Fiscales, Wealth Taxation, and Mobility." *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting:* 1–79. Washington, DC: National Tax Association.

Akcigit, Ufuk, Salomé Baslandze, and Stefanie Stantcheva. 2016. "Taxation and the International Mobility of Inventors." *American Economic Review* 106 (10): 2930–81.

Alstadsæter, Annette, Niels Johannesen, and Gabriel Zucman. 2019. "Tax Evasion and Inequality." *American Economic Review* 109 (6): 2073–103.

Alstadsæter, Annette, Niels Johannesen, and Gabriel Zucman. 2018. "Who Owns the Wealth in Tax Havens? Macro Evidence and Implications for Global Inequality." *Journal of Public Economics* 162 (C): 89–100.

Atkinson, Anthony. 2015. *Inequality—What Can Be Done?* Cambridge, MA: Harvard University Press.

Atkinson, Anthony, and Joseph Stiglitz. 1976. "The Design of Tax Structure: Direct versus Indirect Taxation." *Journal of Public Economics* 6 (1–2): 55–75.

Auerbach, Alan. 1991. "Retrospective Capital Gains Taxation." *American Economic Review* 81 (1): 167–78.

Auten, Gerald, and David Splinter. forthcoming. "Income Inequality in the United States: Using Tax Data to Measure Long-Term Trends." *Journal of Political Economy.*

Baer, Katherine, Ruud de Mooij, Shafik Hebous, and Michael Keen. 2023. "Taxing Cryptocurrencies." *Oxford Review of Economic Policy* 39 (3): 478–97.

Banks, James, and Peter Diamond. 2010. "The Base for Direct Taxation." In *Dimensions of Tax Design*, edited by James Mirrlees, 548–674. Oxford, United Kingdom: Oxford University Press.

Beer, Sebastian, Mark Griffiths, and Alexander Klemm. 2023. "Tax Distortions from Inflation: What Are They? How to Deal with Them?" *Public Sector Economics* 47 (3): 353–86.

Benedek, Dora, Martin Grote, Grace Jackson, Maksym Markevych, Christophe J Waerzeggers, and Lydia E Sofrona. 2022. *Voluntary Disclosure Programs — Design, Principles, and Implementation Considerations.* Technical Notes and Manuals No. 2022/002, Washington, DC: International Monetary Fund.

Berg, Kristoffer and Shafik Hebous. 2021. "Does a Wealth Tax Improve Equality of Opportunity? Evidence from Norway." IMF Working Paper 21/85. Washington, DC: International Monetary Fund.

Boar, Corina, and Virgiliu Midrigan. 2023. "Should We Tax Capital Income or Wealth?" *American Economic Review: Insights* 5 (2): 259–74.

Casi, Elisa, Christoph Spengel, and Barbara M.B. Stage. 2020. "Cross-Border Tax Evasion after the Common Reporting Standard: Game Over?" *Journal of Public Economics* 190: 104240.

Cerra, Valerie, Barry Eichengreen, Asmaa El-Ganainy, and Martin Schindler. 2022. *How to Achieve Inclusive Growth.* Oxford, United Kingdom: Oxford University Press.

Chamley, Christophe. 1986. "Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives." *Econometrica* 54 (3): 607–22.

Clements, Benedict, Ruud De Mooij, Michael Keen, and Sanjeev Gupta. 2015. *Inequality and Fiscal Policy.* Washington, DC: International Monetary Fund.

Coelho, Maria, Aieshwarya Davis, Carolina Osorio Buitron, and Alexander Klemm. 2022. "Gendered Taxes: The Interaction of Tax Policy with Gender Equality." IMF Working Paper 22/26. Washington, DC: International Monetary Fund.

Creedy, John, and Norman Gemmell. 2017. "Taxation and the User Cost of Capital." *Journal of Economic Surveys* 31: 201–25.

Dabla-Norris, Era, Kalpana Kochhar, Nujin Suphaphiphat, Franto Ricka, and Evridiki Tsounta. 2015. *Causes and Consequences of Income Inequality: A Global Perspective.* Staff Discussion Notes No. 2015/013, IMF. Washington, DC: International Monetary Fund.

Dai, Zhonglan, Edward Maydew, Douglas A. Shackelford, and Harold H. Zhang. 2008. "Capital Gains Taxes and Asset Prices: Capitalization or Lock-In?" *Journal of Finance* 63 (2): 709–42.

Davies, James, and Anthony Shorrocks. 2000. "The Distribution of Wealth." *Handbook of Income Distribution* 1: 605–75.

De Mooij, Ruud. 2011. *Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions.* IMF Staff Discussion Note 11/11, Washington, DC: International Monetary Fund.

De Mooij, Ruud A., and Sebastian Beer. 2023. "Coming Clean on Your Taxes ." IMF Working Paper No. 2023/006, Washington, DC: International Monetary Fund.

De Mooij, Ruud, Alexander Klemm, and Victoria Perry. 2021. *Corporate Income Taxes under Pressure.* Washington, DC: International Monetary Fund.

Domar, Evsey D., and Richard A. Musgrave. 1944. "Proportional Income Taxation and Risk-Taking." *Quarterly Journal of Economics* 58 (3): 388–422.

Dowd, Tim, Robert McClelland, and Athiphat Muthitacharoen. 2015. "New Evidence on the Tax Elasticity of Capital Gains." *National Tax Journal* 68 (3): 511–44.

Dwenger, Nadja. 2014. "User Cost Elasticity of Capital Revisited." *Economica* 81 (321): 161–86.

Eichengreen, Barry. 1989. "The Capital Levy in Theory and Practice." NBER Working Paper 3096, Cambridge, MA: National Bureau of Econmic Research.

Eisinger, Jesse, Jeff Ernsthausen, and Paul Kiel. 2021. “The Secret IRS Files: Trove of Never-Before-Seen Records Reveal How the Wealthiest Avoid Income Tax.” *ProPublica*, June 8.

Eliner, Mikael, Oscar Erixson, and Daniel Waldenström. 2018. “Inheritance and Wealth Inequality: Evidence from Population Registers.” *Journal of Public Economics* 165: 17–30.

EU Tax Observatory. 2023. “Global Tax Evasion.” Report 2024. Paris, France.

Fagereng, Andreas, Luigi Guiso, Davide Malacrino, and Luigi Pistaferri. 2020. “Heterogeneity and Persistence in Returns to Wealth.” *Econometrica* 88 (1): 115–70.

Föllmi, Reto, and Isabel Martínez. 2017. “Volatile Top Income Shares in Switzerland? Reassessing the Evolution between 1981 and 2010.” *The Review of Economics and Statistics* 99 (5): 793–809.

Gechert, Sebastian, Tomas Havranek, Zuzana Irsova, and Dominika Kolcunova. 2022. “Measuring Capital-Labor Substitution: The Importance of Method Choices and Publication Bias.” *Review of Economic Dynamics* 45: 55–82.

Grote, Martin, and Jean-Francois Wen. 2024. “How to Design and Implement Property Tax Reforms.” How-To-Note, Washington, DC: International Monetary Fund.

Guvenen, Fatih, Gueorgui Kambourov, Burhan Kuruscu, Sergio Ocampo, and Daphne Chen. 2023. “Use It or Lose It: Efficiency and Redistributional Effects of Wealth Taxation.” *Quarterly Journal of Economics* 138 (2): 835–94.

Guyton, John, Patrick Langetieg, Daniel Reck, Max Risch, and Gabriel Zucman. 2021. *Tax Evasion at the Top of the Income Distribution: Theory and Evidence.* NBER Working Paper w28542, Cambridge, MA: National Bureau of Econmic Research.

Haig, Robert M. 1921. “The Concept of Income-Economic and Legal Aspects.” In *The Federal Income Tax* edited by Robert Haig, 1–28. New York, NY: Columbia University Press.

Hall, Robert E., and Susan E. Woodward. 2010. “The Burden of the Nondiversifiable Risk of Entrepreneurship.” *American Economic Review* 100 (3): 1163–94.

Hebous, Shafik, and Alexander Klemm. 2020. “A Destination-Based Allowance for Corporate Equity.” *International Tax and Public Finance* 27 (3): 753–77.

IMF. 2007. “Globalization and Inequality.” World Economic Outlook. Washington, DC: International Monetary Fund.

IMF. 2017a. “Understanding the Downward Trend in Labor Income Shares.” World Economic Outlook: Gaining Momentum. Washington, DC: International Monetary Fund.

IMF. 2017b. “Tackling Inequality.” Fiscal Monitor. Washington, DC: International Monetary Fund.

IMF. 2021. “A Fair Shot.” Fiscal Monitor, Washington, DC: International Monetary Fund.

IMF. 2022. “Coordinating Taxation Across Borders.” Fiscal Monitor, Washington, DC: International Monetary Fund.

IMF. 2023. “International Corporate Tax Reform.” IMF Policy Paper 2023/1. Washington, DC: International Monetary Fund.

IMF, OECD, UN, and WBG. 2020. *The Taxation of Offshore Indirect Transfers—A Toolkit.* Platform for Collaboration on Tax.

IRS. 2022. “Statistics of Income—2020 Individual Income Tax Returns.” Publication 1304 (Rev. 11-2022), Washington, DC.

Jakobsen, Katrine, Kristian Jakobsen, Henrik Kleven, and Gabriel Zucman. 2020. “Wealth Taxation and Wealth Accumulation: Theory and Evidence From Denmark.” *Quarterly Journal of Economics* 135 (1): 329–88.

Jaumotte, Florence, and Carolina Osorio-Buitron. 2015. *Inequality and Labor Market Institutions.* Staff Discussion Notes No. 2015/014, Washington, DC: IMF.

Jin, Li. 2006. “Capital Gains Tax Overhang and Price Pressure.” *Journal of Finance* 61 (3): 1399–431.

Johannesen, Niels, Patrick Langetieg, Daniel Reck, Max Risch, and Joel Slemrod. 2020. “Taxing Hidden Wealth: The Consequences of US Enforcement Initiatives on Evasive Foreign Accounts.” *American Economic Journal: Economic Policy* 12 (3): 312–46.

Johansson, Asa, Christopher Heady, Jens Arnold, Bert Brys, and Laura Vartia. 2008. *Taxation and Economic Growth.* OECD Economics Department Working Papers No. 620, Paris, France: OECD.

Judd, Kenneth. 1985. “Redistributive Taxation in a Simple Perfect Foresight Model.” *Journal of Public Economics* 28 (1): 59–83.

Keen, Michael. 2013. “Once and For All—Why Capital Levies Are Not the Answer.” *IMF Blog*. https://www.imf.org/en/Blogs/Articles/2013/11/06/once-and-for-all-why-capital-levies-are-not-the-answer.

Klemm, Alexander, Shafik Hebous, Geerten Michielse, and Narine Nersesyan. 2021. *COVID-19 Recovery Contributions.* Special Series on COVID-19, Washington, DC: International Monetary Fund.

Kleven, Henrik, Camille Landais, Mathilde Muñoz, and Stefanie Stantcheva. 2020. “. Taxation and Migration: Evidence and Policy Implications.” *Journal of Economic Perspectives* 34 (2): 119–42.

Kleven, Henrik Jacobsen, Camille Landais, and Emmanuel Saez. 2013. “Taxation and International Migration of Superstars: Evidence from the European Football Market.” *American Economic Review* 103 (5): 1892–924.

Kopczuk, Wojciech. 2019. “Comment on ‘Progressive Wealth Taxation’.” *Brookings Papers on Economic Activity* Fall 2019: 512-526.

Kopczuk, Wojciech. 2013. “Taxation of Intergenerational Transfers and Wealth.” *Handbook of Public Economics* 5: 329–90.

Langenmayr, Dominika, and Lennard Zyska. 2023. “Escaping the Exchange of Information: Tax Evasion via Citizenship-by-Investment.” *Journal of Public Economics* 221: 104865.

Leduc, Sebastien, and Geerten Michielse. 2021. “Are Tax Treaties Worth it for Developing Economies?” In *Corporate Income Taxes Under Pressure*, edited by Ruud De Mooij, Alexander Klemm, and Victoria Perry, 123–73. Washington, DC: International Monetary Fund.

Leenders, Wouter, Arjan Lejour, Simon Rabaté, and Maarten van ’t Riet. 2023. “Offshore Tax Evasion and Wealth Inequality: Evidence from a Tax Amnesty in the Netherlands.” *Journal of Public Economics* 217: (104785).

Liscow, Zachary, and Edward Fox. 2022. “The Psychology of Taxing Capital Income: Evidence from a Survey Experiment on the Realization Rule.” *Journal of Public Economics* 213: 104714.

Londoño-Vélez, Juliana, and Javier Ávila-Mahecha. forthcoming. “Behavioral Response to Wealth Taxation: Evidence from Colombia.” *Review of Economic Studies.*

Londoño-Vélez, Juliana, and Javier Ávila-Mahecha. 2021. “Enforcing Wealth Taxes in the Developing World: Quasi-Experimental Evidence from Colombia.” *American Economic Review* 3 (2): 131–48.

Loutzenhiser, Glen, and Elizabeth Mann. 2021. “Liquidity Issues: Solutions for the Asset Rich, Cash Poor.” *Fiscal Studies* 42 (3–4): 651–75.

Matheson, Thornton. 2011. *Taxing Financial Transactions: Issues and Evidence.* IMF Working Paper 2011/54, Washington, DC: International Monetary Fund.

Menkhoff, Lukas, and Jakob Miethe. 2019. “Tax Evasion in New Disguise? Examining Tax Havens’ International Bank Deposits.” *Journal of Public Economics* 176: 53–78.

Moon, Terry S. 2022. “Capital Gains Taxes and Real Corporate Investment: Evidence from Korea.” *American Economic Review* 112 (8): 2669–700.

O’Donovan, Nick. 2021. “One-off Wealth Taxes: Theory and Evidence.” *Fiscal Studies* 42: 565–97.

OECD. 2021. *Inheritance Taxation in OECD Countries.* OECD Tax Policy Studies 28, Paris: OECD Publishing.

OECD. 2018. *The Role and Design of NetWealth Taxes in the OECD.* OECD Tax Policy Studies 26, Paris: OECD Publishing.

Page, Benjamin, and Jason Seawright. 2023. “The Wealthy as a Barrier to Tax Reform.” *Oxford Review of Economic Policy* 39 (3): 643–65.

Perret, Sarah. 2021. “Why Were Most Wealth Taxes Abandoned and Is this Time Different?” *Fiscal Studies* 42 (3–4): 539–63.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century.* Cambridge, MA: Harvard University Press.

Piketty, Thomas. 2020. *Capital and Ideology.* Cambridge, MA: Harvard University Press.

Piketty, Thomas, and Emmanuel Saez. 2013. “A Theory of Inheritance Taxation.” *Econometrica* 81 (5): 1851–86.

Piketty, Thomas, Emmanual Saez, and Gabriel Zucman. 2023. *Comment on Auten and Splinter (2023).* Technical Note 2023/09, World Inequality Lab.

Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. 2018. “Distributional National Accounts: Methods and Estimates for the United States.” *Quarterly Journal of Economics* 133 (2): 553–609.

Piketty, Thomas, and Gabriel Zucman. 2015. “Wealth and Inheritance in the Long Run.” *Handbook of Income Distribution* 2B: 1303–68.

Saez, Emmanuel, and Gabriel Zucman. 2019. “Progressive Wealth Taxation .” *Brookings Papers on Economic Activity* Fall 2019: 437–511.

Schanz, Georg von. 1896. “Der Einkommensbegriff und die Einkommensteuergesetze.” *FinanzArchiv* 13: 1–87.

Schatan, Roberto. 2021. “Difficulties in Determining and Enforcing Source-Based Taxes.” In *Corporate Income Taxes under Pressure*, edited by Ruud De Mooij, Alexander Klemm, and Victoria Perry, 57–85. Washington, DC: International Monetary Fund.

Scheuer, Florian, and Joel Slemrod. 2020. “Taxation and the Superrich.” *Annual Review of Economics* 12: 189–211.

Scheuer, Florian, and Joel Slemrod. 2021. “Taxing our Wealth.” *Journal of Economic Perspectives* 35 (1): 207–30.

Simons, Henry. 1938. *Personal Income Taxation: the Definition of Income as a Problem of Fiscal Policy.* Chicago: University of Chicago Press.

Stiglitz, Joseph. 1978. “Notes on Estate Taxes, Redistribution, and the Concept of Balanced Growth Path Incidence.” *Journal of Political Economy* 86 (2, Part 2): 137–150.

Stiglitz, Joseph. 2012. *The Price of Inequality: How Today’s Divided Society Endangers Our Future.* New York: W. W. Norton .

Straub, Ludwig, and Ivan Werning. 2020. “Positive Long-Run Capital Taxation.” *American Economic Review* 110 (1): 86-119.

UBS. 2023. *Changing of the Guard-The Coming Era of Wealth Succession and the Drive for Greater Purpose.* Billionaire Ambitions Report, Zurich: UBS.

Wen, Jean-François, and Fatih Yılmaz. 2020. “Tax Elasticity Estimates for Capital Stocks.” *FinanzArchiv: Public Finance Analysis* 76 (3): 215–39.

Yagan, Danny. 2015. “Capital Tax Reform and the Real Economy: The Effects of the 2003 Dividend Tax Cut.” *American Economic Review* 105 (12): 3531–563.

Yagan, Danny. 2023. “What is the Average Federal Individual Income Tax Rate on the Wealthiest Americans?” *Oxford Review of Economic Policy* 39 (3): 438–50.

Zodrow, George R. 1991. “On the” Traditional” and “New” Views of Dividend Taxation.” *National Tax Journal* 44 (4): 497–509.

Zucman, Gabriel. 2013. “The Missing Wealth of Nations: Are Europe and U.S. Net Debtors or Net Creditors?” *Quarterly Journal of Economics* 128 (3): 1321–64.