

The messy boundary between pass-through and corporate taxation¹

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Abstract

Businesses may be subject to either individual income taxes or entity-level taxes. Policy choices surrounding the boundary between these taxes can and do vary between countries and over time. I discuss the need for and implications of the existence of this boundary for behavior, economic measurement, and policy.

Firms can take on many different forms and sizes, ranging from large multinational corporations to small sole proprietorships. I will not try to define the meaning of what a firm is, but instead this article will focus on the boundary between two different forms of taxation: individual income tax and entity-level tax. The former taxes the owners of a firm as individuals, while the latter taxes the firm as a separate entity. I will discuss the issues that arise at this boundary and their implications.

There are different approaches to taxing businesses that are used in practice and, stressing the obvious, there has to be an important boundary between them. This boundary is both fuzzy and the decision of where to draw it is somewhat arbitrary. Generally speaking, there are two conceptually different approaches to taxing income derived from economic activity. One approach starts with individuals and attempts to measure their individual income. Some categories are easy to define and include, such as employee wages or interest income on savings in personal bank accounts. Wages, for example, arise in the context of an employment relationship, and their effective taxation relies on cooperation from the employer. These types of income do not pose major conceptual difficulties and also do not pose major practical difficulties in modern tax systems when employers and financial institutions can be required to report information and withhold taxes.

Taxing the compensation for labor of an owner of a firm is harder, because there is no natural third-party present and there is no arm's length transaction between the firm and its owner. One way to account for the owner's income is to include the net income of the business as personal income. One can of course then start tinkering with what is labor and what is capital income. This is of relevance if they are taxed at different rates. This adds a layer of complexity to the process, but still maintains the broad personal income approach to thinking about taxation.

This approach of treating the income of a business as if it were the income of an individual is a natural way of thinking about micro-firms. In fact, this is how self-employed individuals are typically treated. It can also be (and sometimes is) extended to larger firms, where the profits of a legal entity owned by a single individual can be included as personal income, and the profits of a legal entity owned by multiple individuals can be divided among them and included on individual tax returns.

The alternative approach is to tax entities rather than individuals, by imposing a tax that does not depend on the characteristics of the owners and instead is based on an entity-specific base. The most natural choice for this base is profits, with many adjustments in practice. However, alternatives such as cash-flows, revenue, or output-based measures can also be considered. The

corporate tax is the most familiar example of this approach.

In practice, both approaches of taxing individuals and entities are used simultaneously in the same countries. Very small firms typically fall under the individual income tax. It is common for large firms to be taxed under the corporate tax. There needs to be a boundary between the two approaches when both are used.

Throughout most of this discussion, my focus will be on firms that have a relatively small number of owners, for whom the line between what should be considered as business-level income and what should be considered as individual income is not necessarily clear, and to some extent, subject to the discretion of the owner.

I will proceed as follows: I will first show that individual-level taxation of business income (referred to as “pass-through” taxation, following the US terminology) is common, important, but varies across countries. I will discuss tax and non-tax considerations in the choice of organizational form, as well as the evidence on sensitivity of organizational form to tax incentives. I will examine how the endogeneity of organizational form interacts with some of the important economic measurement issues: inequality and factor shares. I will present some evidence on how the choice of organizational form interacts with behavior. I will conclude by discussing the interaction with progressivity and the existence of the boundary.

1 Relevance of pass-through taxation

As [Smith et al. \(2019\)](#) document, so-called pass-through entities — firms whose profits “pass-through” to the owners and are taxed as individual income — have been playing an increasingly large role at the top of the US income distribution. [Clarke and Kopczuk \(2017\)](#) document trends in the number and size of different types of organizational structures: C-corporations that are subject to the corporate tax, and S-corporation and partnerships (including LLCs) that are subject to the pass-through treatment. [Figure 1](#) shows the evolution of the number of different entities in the U.S. First, as recognized in the literature ([Gordon and Slemrod, 2000](#)), their number increased immediately following the Tax Reform Act of 1986 that changed the relationship between corporate and individual tax rates. This led to a wave of conversions from C- to S-corporate structure of existing firms in order to take advantage of the favorable lower personal income tax rates under the S- regime. Second, in the early years that followed, new firms were predominantly created as S-corporations. Third, starting in the 1990s, there was a shift toward Limited Liability Companies

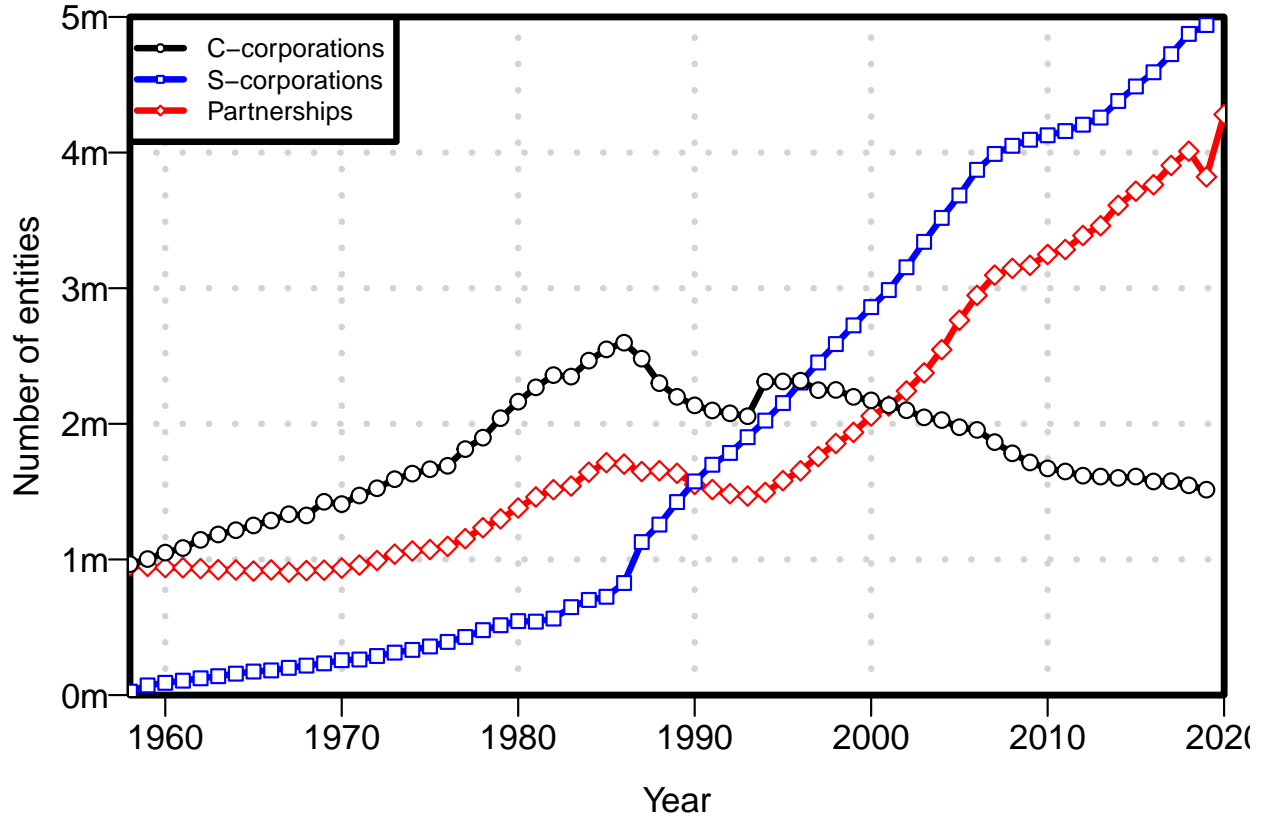


Figure 1: Number of active business entities in the U.S. Figure 2 from [Clarke and Kopczuk \(2017\)](#) updated to 2019

(LLCs) that are the dominant part of the “partnership” category. LLCs build on the flexibility of ownership structure offered by partnerships, add to it limited liability, and combine it with pass-through tax treatment. This full combination became available in the 1990s as the result of states (beginning with Wyoming and Delaware) introducing this option and the IRS approving the pass-through tax treatment ([Hamill, 2005](#)).

Figure 2 shows the corresponding evolution of the shares of business income reported to the IRS accounted by these three different organizational forms.¹ As the organizational form of existing firms shifted, business income also shifted from C-corporate form to pass-through forms. Prior to 1986, pass-through entities accounted for very little profits and, in fact, in some years were in aggregate reporting losses. Afterwards, reported business activity shifted heavily in their directions (with fluctuations around recessions and important tax changes affecting US profits reported by C-corporations).²

¹This is not the complete picture of business activity in the US that also includes RICs, REITs and self-proprietorships.

²It is worth noting changes in the last two years reported on Figure 2, 2018-19, that followed the 2017 Tax Cuts

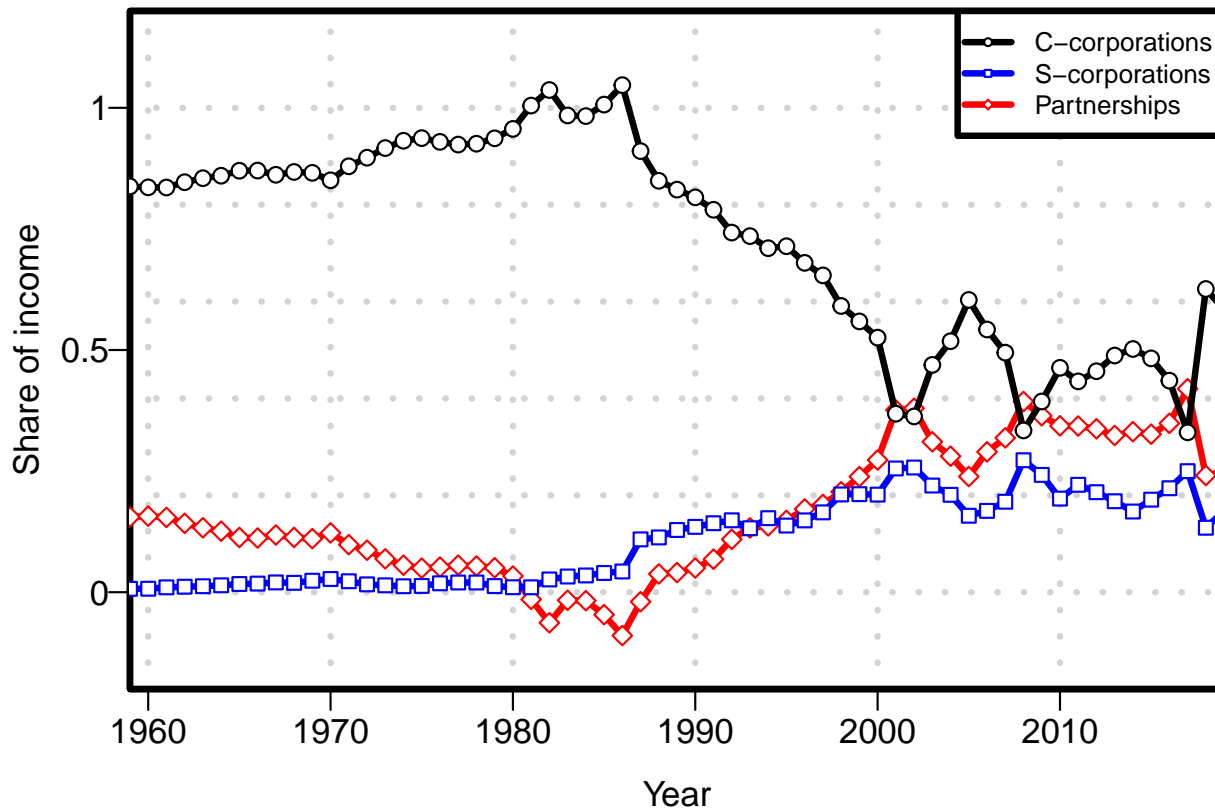


Figure 2: Relative shares of business income accruing to C-, S-corporations, and partnerships. Figure 3 from [Clarke and Kopczuk \(2017\)](#), updated to 2019. Note: The total is defined as the sum of the three categories and excludes other types of business income (RICs and REITs, self-employment)

The relevance of pass-through entities is not limited to the United States, although it varies significantly across countries. Following [Joint Committee on Taxation \(2013\)](#), [Clarke and Kopczuk \(2017\)](#) document that over time the UK, Canada and Australia moved in the opposite direction from the US by increasing the relative reliance on entity level taxation. At the same time, [Joint Committee on Taxation \(2013\)](#) concluded that in 2007 only 34% of business incomes in Germany

and Jobs Act. The TCJA changed many provisions in the tax code, including a large cut in the corporate tax rate and changes to the corporate tax base, as well as a new individual income tax preference (Section 199A) for some owners of pass-through businesses that reduced their marginal tax rate by 20%. This is a fairly recent tax reform that has been followed by the upheaval of the pandemic that makes studying its longer-term effects difficult. The short-term corporate tax revenue effect has been negative, although an increase in repatriations (that contributes to increased C-corporate income in the Figure) offsets it somewhat ([Gale and Haldeman, 2021](#)) and there is evidence of short-term corporate income shifting that increased reported incomes right after the reform ([Dowd, Giosa and Willingham, 2020](#)). [Goodman et al. \(2021\)](#) study the response of pass-through owners to the section 199A itself and don't find evidence of large responses. [Dobridge et al. \(2022\)](#) find some behavioral implications of the corporate tax component, and evidence that the cut partially benefits high-wage employees. The simultaneous existence of the pass-through cut makes the implications of the large corporate tax for the choice of organizational form somewhat ambiguous, but the reform itself likely tilted the preference somewhat toward C-corporate structure. The longer term implications for the organizational form landscape are not yet clear.

and 50% of business incomes in Japan were subject to the corporate tax. Even when the reach of corporate tax is more extensive, business incomes subject to the personal income taxation may still be important. In their analysis of top incomes in the UK, [Delestre et al. \(2022\)](#) stress the importance of active business ownership (partners and managers of closely held companies with up to five shareholders) at the top of the UK distribution.

2 Organizational choice considerations

As noted, firms may have some flexibility in choosing their organizational form and tax treatment, depending on the institutional and tax environment in the country at a particular point in time. There are many factors that may influence decisions. Firms may choose to organize as corporations or partnerships, with different rules that apply to them. In general, these choices may have implications for the flexibility of the contract between partners or shareholders that the firm represents, limited liability considerations, contractual labor market implications, access to credit, flexibility to sell, bankruptcy and dissolution implications, reporting, and transparency requirements.

On the tax side, as already mentioned, the most basic consideration is the relevance of income vs corporate taxation. The basic trade-off would compare the applicable personal income tax rate on one side and corporate tax treatment on the other, while accounting for future dividend and capital gains tax implications. This trade-off may be complicated in various ways. First, the relevant rates may not be the same as statutory rates. For example, some pass-through business in the US became eligible for a 20% deduction following the Tax Cuts and Jobs Act of 2017. Alternatively, corporate and personal tax regimes may have different availability of credits and deductions for R&D or other incentives. Second, capital and labor income are often not subject to the same tax rates so that shifting between these may be relevant. As discussed by [Sørensen \(2010\)](#), this is one of the important issues that affected the design of Nordic tax systems that, as the result, attempted to impute part of business income as labor income of active shareholders. In the US context, this arises for example for S corporations that have to pay their owners “reasonable compensation”. The incentive to re-characterize income as capital rather than labor for businesses subject to personal income tax rates arises naturally, because of social insurance taxes that usually apply to labor compensation and not to capital income. The decision on the corporate tax side would additionally trade off corporate tax implications of higher labor compensation and, downstream, tax implications of

alternative ways of paying out profits. Finally, preferential tax treatment of capital gains offers yet another possibility of disguising labor as capital income. Examples of that are carried interests and stock-based compensation, both of which also tie to the organizational structure of the underlying business.

Firms may not have complete flexibility in choosing their tax treatment and other relevant considerations. As already noted, legal changes in the U.S. made it possible to access pass-through treatment for partnerships only in the 1990s. Before that, the choice of pass-through treatment required a less flexible S-corporate structure that imposed restrictions on the number of shareholders, US residency, and one class of stock. Thus, a firm could be subject to a corporate tax; face the S-corporation restriction and be subject to an income tax; or have flexibility of a partnership with personal income taxation but without limited liability. The development of LLCs relaxed these constraints. In other countries, the pass through treatment may be available only to self-employed and simple partnerships, or restricted to firms without limited liability, or based on other criteria. As an example, in Poland the pass-through treatment used to be nominally available only to businesses without limited liability but with a loophole: a mixed partnership with limited and general partners (“spółka komandytowa”) is also eligible (with the further option that a general partner itself can be a limited liability entity).

The economics literature has not yet extensively delved into the complexities at the intersection of tax and other considerations, but there is some evidence of responsiveness of organizational form considerations to tax incentives. As Figure 1 shows, shifts in organizational form around the Tax Reform of Act of 1986 were significant and this and other forms of income shifting around the reform have been analyzed by [Gordon and Slemrod \(2000\)](#) and [Auten, Splinter and Nelson \(2016\)](#) among others. [Goolsbee \(1998\)](#) provides related evidence using pre-World War II data, [MacKie-Mason and Gordon \(1997\)](#) using pre-1986 tax variation, and [Goolsbee \(2004\)](#) and [Luna and Murray \(2010\)](#) analyzed implications of state tax laws. [DeBacker et al. \(2019\)](#) et al provide evidence of incorporations and tax avoidance in response to pass-through tax regime changes in Kansas. [Thoresen and Alstadsæter \(2009\)](#) provide evidence from Norway. [Romanov \(2006\)](#) documents a wave of incorporations in Israel as the response to changes in the top personal income tax rate. [Tazhitdinova \(2020\)](#) analyzes tax sensitivity of the choice between self-employment and incorporation in the UK. [Elschner \(2013\)](#) documents that the choice of corporate vs partnership form for shipping companies in the EU depends on whether partnership are subject to pass through taxation and whether the availability of the special tax regime (“tonnage tax”) extends to pass-through entities. [Edmark](#)

and Gordon (2013) provide evidence on incorporation from Sweden, focusing on heterogeneity of responses across the size distribution. Smart (2021) discusses evidence of response of organizational form in Canada.

Two papers from Norway provide evidence of more subtle types of responses. Alstadsæter and Wangen (2010) show that Norwegian corporations modify their ownership structure in order to qualify for a preferential tax regime. This is due to the tax distinction between “closely” and “widely” held firms, which is defined based on the ownership share of active owners. Alstadsæter, Kopczuk and Telle (2019) show that changes in dividend and capital gains taxation created incentives for indirect ownership structure and provide evidence of conversion to own closely-held firms through a holding company.

3 Inequality

Organizational form decisions can affect the ability to measure income. Generally, individual income tax returns allow for observing business-side income only when taxable to individuals. For pass-through businesses that implies that income is observable as it accrues on an annual basis. For corporate-level income, the situation is more complex. Corporate profits do not automatically correspond to individual-level income. Instead, individuals receive taxable income when dividends are paid or when capital gains are realized. This means that, generally speaking, individual income tax return data will be at best out of sync with the accrual of corporate profits because their timing is not going to correspond to individual-level income payouts or realizations. This is because dividend need not be paid or capital gains need not be realized at the same time when profits are earned. In the context of capital gains, this is further aggravated by the fact that they may in principle correspond not just to past profits, but also to expected future profits that may increase valuation. This further complicates their interpretation. Additionally, in practice, capital gains are often realized in a very lumpy manner. Finally, corporate side income may not show up as individual income at all or show up for a different individual. This could be the case due to tax avoidance and evasion, but also in the case of charitable contributions of appreciated shares, or transfers inter vivo or at death.

These issues in how corporate income translates into individual-level data are important for any individual-level analysis that relies on individual personal tax information, in particular for the measurement of top income inequality and progressivity. One solution is to focus on “fiscal

income” that relies on dividends and capital gains as reported by taxpayers, despite the fact that this may not correspond to economic income that accrues in a given year. While this approach has advantages, it creates difficulties because fiscal income has time-varying relationship to national accounts. The alternative is to reconcile total allocated income with national accounts as [Piketty, Saez and Zucman \(2018\)](#), with [Smith et al. \(2019\)](#) and [Auten and Splinter \(2023\)](#) updating various aspects of their methodology. The organizational form issue is evident in the difficulty of allocating retained earnings that are known in aggregate but are not allocated to individuals in available data. As a result, these papers resort to imputing ownership based on observed capital income and allocating ownership based on that.

[Clarke and Kopczuk \(2017\)](#) argue that retained earnings, or profits that a company keeps rather than distributing as dividends, are sufficiently large to have the potential to affect overall historical inequality trends. [Figure 3](#) illustrates in a simple way the potential relevance of these considerations, for years surrounding the Tax Reform Act of 1986. It starts from the [Piketty and Saez \(2003\)](#) fiscal income approach and first allocates retained earnings in the C-corporate sector to the top 1% based on its share of dividends. Second, it considers potential heterogeneity in who retained earnings belong to. While data allowing to link owners to firms does not exist during that period, in its Corporate Source Books the IRS publishes some information by asset classes. I consider two groups of firms — those with assets below and those with assets above (current dollars) \$100 million and focus on separately allocating their retained earnings. Specifically, [figure 3](#) shows the results of allocating either 70% or 100% of retained earnings of “small” firms to the top 1%, with retained earnings of the large firms allocated based on dividends. The idea behind this rudimentary exercise is to explore sensitivity to the notion that smaller firms are likely to have few owners who would be likely to have high income, while large firms may be publicly traded with diverse ownership and more likely to pursue a regular dividend payout policy. The quantitative implications of these exercises are non-trivial and sensitive to the 1986 reform: while dividend allocation retains the sharp increase in 1986, allocating small firms to the top shifts the level of inequality upwards and eliminates much of the trend in the top 1% share in the 1970s and 1980s. The importance of the method of allocating retained earnings declines after 1986, when the large number of smaller firms converted to the S-corporation status that corresponds to their income already being accounted for in fiscal income measures. While this exercise should be thought of as a very rudimentary back-of-the-envelope calculation, it illustrates the potential importance of carefully considering the allocation of retained earnings.

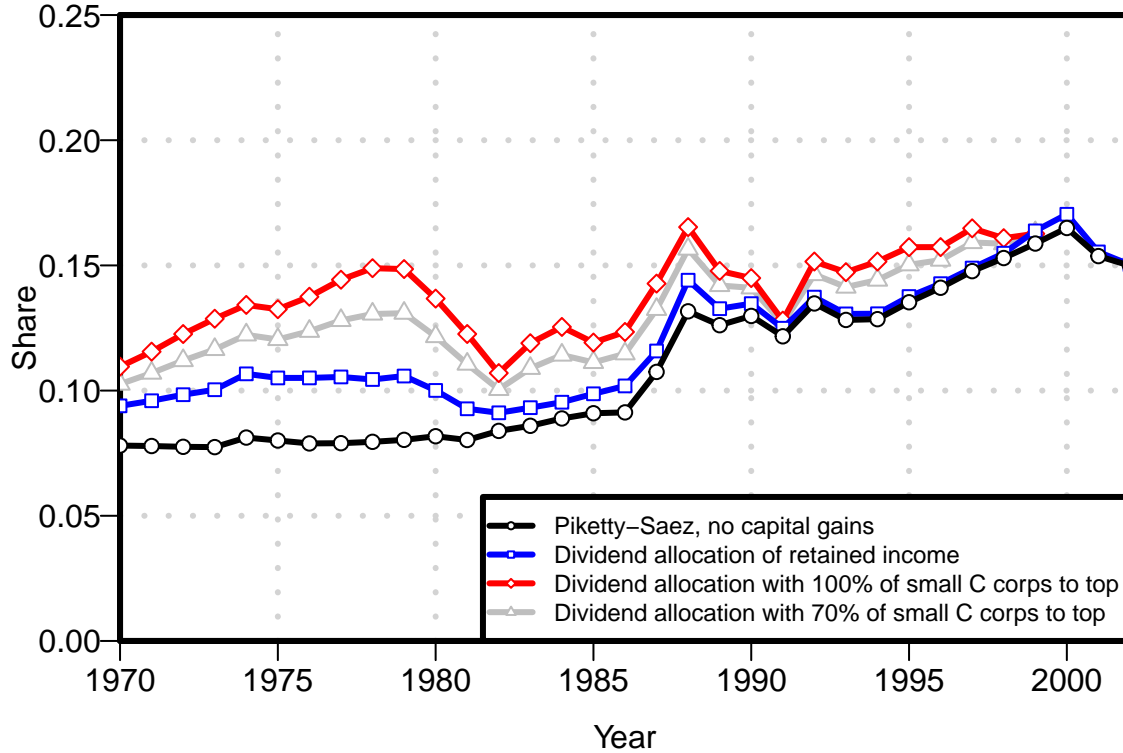


Figure 3: Alternative ways of allocating retained earnings in the US around 1986
 Note: The series start from [Piketty and Saez \(2003\)](#) top 1% share (excluding capital gains) and modify it by allocating retained earnings based on dividends or by treating the retained earnings of small (below \$100 million of assets) and large firms separately, with the allocation of retained earnings of small firms to the top of the distribution and the allocation of large firms in proportion to dividends. The asset-size breakdown is not available at the end of the period and \$100 million is not adjusted for inflation.

More constructively, papers in a few other countries used business ownership registries to provide a clearer picture of inequality that pierces through the corporate veil. The idea is simple. Once the ownership structure is known and both corporate and individual information is known, one can allocate corporate income to individuals as it accrues rather than when it is realized as dividends or capital gains. Conceptually, the objective of this exercise is the same as in the context of allocating aggregate retained earnings — forming a better approximation of the Haig-Simons income concept — but relying on the precision of individual data. [Wolfson et al. \(2016\)](#) used this method in Canada and [Fairfield and Jorratt De Luis \(2016\)](#) in Chile in order to provide a one-year static adjustment to the picture of inequality in these countries. [Alstadsæter et al. \(2023\)](#) used Norwegian data from 2000-2013 and found that the visibility of income on individual tax returns greatly responded to the 2005 tax reform, which caused a sharp reduction in dividend payouts and the corresponding

increase in retained earnings. These effects were very large and implied that while the top 1% share could be measured with a small error before the reform by simply using income tax data, it was understated by a factor of 2 after the reform when not adjusting for retentions. Furthermore, they show that if one instead imputed ownership based on dividend payouts as done in the US literature, post-reform this only attributed about half of the actual retained earnings that should be attributed to the top of the distribution (and substantially less in some years). This is because dividends are correlated with ownership of large firms in a cross-section, but they are mechanically inversely related to retained earnings for a particular firm: a firm that pays large dividends retains less earnings.

There is another measurement issue that is affected by organizational form. As documented by [Smith et al. \(2019\)](#), a significant portion of pass-through income resembles human capital and, therefore, labor rather than capital income. This adds to the difficulty of measuring labor and capital shares at the aggregate level. [Smith et al. \(2022\)](#) document that adjusting for the role of pass-throughs accounts for one-third of the decline in the share of labor income in corporate sector in the US. These issues have not been fully explored yet, and both firm level and aggregate capital and labor measurement are affected by organizational form and are of relevance for many macroeconomic questions.

4 Difference in behavior depending on organizational form

Retaining earnings is one important channel through which the choice of organizational form matters for behavior and it reflects the choices that taxpayers make in response to corporate tax incentives. While pass-through firms may also retain earnings, tax incentives to do so are no longer there, because the corresponding income has already been taxed on the individual side. In the Norwegian context, [Alstadsæter and Fjærli \(2009\)](#) show response of dividend payouts to tax reforms and findings in [Alstadsæter et al. \(2023\)](#) show that it led to a massive growth in earnings retentions. In the UK, [Miller, Pope and Smith \(2022\)](#) show evidence of intertemporal shifting motivated by tax considerations that they argue has to do with both progressivity that encourages temporal planning and retaining earnings within a firm in order to extract the value in the future through preferentially taxed capital gains.

[Kopczuk and Zwick \(2020\)](#) discuss a range of other responses that may be present. In particular, one largely unexplored in the literature possibility is that owners and other stakeholders of

businesses may be consuming through their firms. There is anecdotal evidence of such responses — company jets and cars, travel expenses, or club memberships, among others. Obviously, there are rules that apply to each of these that are supposed to limit their use, but especially for smaller closely-held firms, these things may be difficult to police.

The evidence on the presence of this type of behavior is scare. A small literature in the 1970s/1980s looked at the corporate perks for executives (Clotfelter, 1979, 1983; Long and Scott, 1982; Woodbury, 1983). Possibly, the importance of these considerations was reduced because of tightening the deduction for business meals and entertainment expenses in 1986, 1993, and the repeal in 2017, that reduced the ability to pursue such an avenue legally. However, given that estimates of tax evasion for sources of income without third party reporting exceed 50% (Internal Revenue Service, 2022) and that such income is dominated by business incomes, it is plausible that these considerations remain large for closely held businesses (and, in fact, prominent political figures have been accused of exactly that).

Although not directly tax evidence, Edgerton (2012) analyzes corporate jet holdings of private corporations and notes that one explanation for large fleets in some private companies are the depreciation and debt tax shield benefits that make it more valuable to own private planes through a company rather than outright. Elsewhere, Alstadsæter, Kopczuk and Telle (2014) provide suggestive evidence that an increase in retention of earnings in Norway corresponded to increased ownership of cars, boats, and planes as well as investments in financial assets — all consistent with closely-held businesses using their businesses as substitutes for spending and investment that would otherwise be pursued using private funds.

5 Conclusions

This short review of some of the issues that arise at the boundary between individual and corporate taxation is not meant to be exhaustive, but rather an appeal for more work on this topic. In my view, this has been a poorly and unsystematically explored area so far. It deserves more attention, because it matters. I argued that it does matter for the measurement of inequality and labor/capital shares. It does matter for how firms are organized, which in turn affects their behavior.

I have not yet touched on the importance for the design of the tax system itself. A number of issues closely tie to the organizational form. First, absent annual accrual taxation, taxable income in any particular year will not correspond to economic income. With progressivity almost always

implemented based on annual incomes, this undermines this objective by relying on a base that further deviates from the ideal. Of course, actual tax systems incorporate taxation of dividends and capital gains, but even when these are not preferentially taxed, they still rely on realization of income. The corporate tax rate is an imperfect mechanism to compensate, because (putting aside complex incidence issues) it effectively treats all owners identically regardless of their position in the income distribution.

A potential way out is corporate integration that can effectively treat corporate taxation as a withholding mechanism, with reconciliation happening when corporate-side income is reported on the individual level. However, corporate integration has been implemented in few places because it tends to run into complex legal and tax treaty issues. Still, as a direction, when corporate tax exists, integration is an appealing solution to having an individual income tax base that's more closely aligned with economic income. An administratively simpler solution that goes in this direction is harmonization of tax rates: setting the top income tax rate, the tax rate that applies to pass-through businesses, and the corporate tax rate at the same level. The complication here is addressing "double-taxation" of corporate income due to the taxation of dividends. Exempting dividends is conceptually simple, but achieving neutrality rests on effective tax corporate tax rates not substantially deviating from statutory ones.

One can ask a broader question of why not shift to taxing all businesses as pass-through entities so that income is measured on accrual for everyone and aligns more closely with vertical equity objectives. Put differently, what is the point of entity taxation? I believe that there are two answers, one historical and one present, and both are rooted in broader administrative and tax design difficulties. Historically and across development levels, countries find it easier to tax businesses, and especially large businesses, than to tax individuals. There is little surprise here. Businesses are easier to observe, there are fewer of them, and they have exposure to other administratively convenient places such as borders, financial institutions and other firms. Hence, extensive business taxation preceded individual income taxes, because it is easier to implement at lower levels of development. An extension of this argument is that one may view individual-level taxation on accrual of business-level income as unimplementable. Although the proposals to mark-to-market go in that direction, they are straightforward to apply only for publicly traded firms and, even then, run into issues of liquidity. Over time, this type of administrative motivation for taxing businesses directly held largely true, but also started showing cracks due to multinational firms relying on within-firm cross-jurisdiction transactions to reduce their tax liability and due to capital mobility

exceeding labor mobility.

The more modern, and perhaps underappreciated, consideration has to do with the structure of ownership of corporate firms. While it is tempting to think of individuals as owners of firms, the actual picture is substantially more complicated. Individuals can be both domestic and foreign. Ownership of financial assets may take place through institutions. Insurance and financial institutions are one category; various forms of government ownership are another; non-profits (for example, university endowments in the US) are yet another; finally, non-taxable or tax-preferred accounts — pension funds and retirement accounts in particular — are yet another major type of ownership. [Rosenthal and Burke \(2020\)](#) point out that just over 20% of ownership of U.S. stocks is through taxable individual accounts, with as much as 40% owned by foreigners and 30% by IRAs, defined contributions and defined benefits accounts. The common theme across all of these is that they are either non-taxable or complicated to tax (foreigners). As the result, the corporate tax is taxing income that either does not directly map into individual income of U.S. taxpayers or that would require fundamental changes to the tax system and institutions to be mapped. Hence, an entity-level corporate income tax becomes a presumptive tax on income that would otherwise largely escape taxation.

Both of these sets of considerations suggest that, absent a wholesale shift away from income taxation, having a line somewhere that defines who is subject to corporate and who is subject to individual tax treatment is unavoidable. Where exactly this line should be is an interesting agenda for the future.

References

- Alstadsæter, Annette, and Erik Fjærli.** 2009. “Neutral Taxation of Shareholder Income? Corporate Responses to an Announced Dividend Tax.” *International Tax and Public Finance*, 16(4): 571–64.
- Alstadsæter, Annette, and Knut Reidar Wangen.** 2010. “Small Corporations’ Income Shifting Through Choice of Ownership Structure — A Norwegian Case.” *Finnish Economic Papers*, 23(2).
- Alstadsæter, Annette, Martin Jacob, Wojciech Kopczuk, and Kjetil Telle.** 2023. “Accounting for Business Income in Measuring Top Income Shares: Integrated Accrual Approach Using Individual and Firm Data from Norway.” NMBU and Columbia University, mimeo.
- Alstadsæter, Annette, Wojciech Kopczuk, and Kjetil Telle.** 2014. “Are Closely-Held Firms Tax Shelters?” *Tax Policy and the Economy*, 28: 1–32.
- Alstadsæter, Annette, Wojciech Kopczuk, and Kjetil Telle.** 2019. “Social networks and tax avoidance: evidence from a well-defined Norwegian tax shelter.” *International Tax and Public Finance*, 26: 1291–1328.
- Auten, Gerald, and David Splinter.** 2023. “Income Inequality in the United States: Using Tax Data to Measure Long-Term Trends.” Treasury and JCT, mimeo.
- Auten, Gerald, David Splinter, and Susan Nelson.** 2016. “Reactions of High-Income Taxpayers to Major Tax Legislation.” *National Tax Journal*, 69(4): 935–964.
- Clarke, Conor, and Wojciech Kopczuk.** 2017. “Business Income and Business Taxation in the United States since the 1950s.” *Tax Policy and the Economy*, 31: 121–59.
- Clotfelter, Charles T.** 1979. “Equity, Efficiency, and the Tax Treatment of In-Kind Compensation.” *National Tax Journal*, 32(1): 51–60.
- Clotfelter, Charles T.** 1983. “Tax-Induced Distortions and the Business-Pleasure Borderline: The Case of Travel and Entertainment.” *American Economic Review*, 73(5): 1053–1065.
- DeBacker, Jason, Bradley T. Heim, Shanthi P. Ramnath, and Justin M. Ross.** 2019. “The impact of state taxes on pass-through businesses: Evidence from the 2012 Kansas income tax reform.” *Journal of Public Economics*, 174: 53–75.

- Delestre, Isaac, Wojciech Kopczuk, Helen Miller, and Kate Smith.** 2022. “Top Income Inequality and Tax Policy.” In *IFS Deaton Review of Inequalities*, <https://ifs.org.uk/inequality/top-income-inequality-and-tax-policy>.
- Dobridge, Christine, Patrick Kennedy, Paul Landefeld, and Jake Mortenson.** 2022. “The Efficiency-Equity Tradeoff of the Corporate Income Tax: Evidence from the Tax Cuts and Jobs Act.” UC Berkeley and JCT, mimeo.
- Dowd, Tim, Christopher Giosa, and Thomas Willingham.** 2020. “Corporate Behavioral Responses to the TCJA for Tax Years 2017-2018.” *National Tax Journal*, 73(4): 1109–1134.
- Edgerton, Jesse.** 2012. “Agency Problems in Public Firms: Evidence from Corporate Jets in Leveraged Buyouts.” *The Journal of Finance*, 67(6): 2187–2213.
- Edmark, Karin, and Roger H. Gordon.** 2013. “The choice of organizational form by closely-held firms in Sweden: tax versus non-tax determinants.” *Industrial and Corporate Change*, 22(1): 219–243.
- Elschner, Christina.** 2013. “Special tax regimes and the choice of organizational form: Evidence from the European Tonnage Taxes.” *Journal of Public Economics*, 97: 206–216.
- Fairfield, Tasha, and Michel Jorratt De Luis.** 2016. “Top Income Shares, Business Profits, and Effective Tax Rates in Contemporary Chile.” *Review of Income and Wealth*, 62: S120–S144.
- Gale, William G., and Claire Haldeman.** 2021. “The Tax Cuts and Jobs Act: Searching for Supply-Side Effects.” *National Tax Journal*, 74(4): 895–914.
- Goodman, Lucas, Katherine Lim, Bruce Sacerdote, and Andrew Whitten.** 2021. “How Do Business Owners Respond to a Tax Cut? Examining the 199A Deduction for Pass-through Firms.” National Bureau of Economic Research Working Paper 28680.
- Goolsbee, Austan.** 1998. “Taxes, organizational form, and the deadweight loss of the corporate income tax.” *Journal of Public Economics*, 69(1): 143 – 152.
- Goolsbee, Austan.** 2004. “The impact of the corporate income tax: evidence from state organizational form data.” *Journal of Public Economics*, 88(11): 2283 – 2299. Trans-Atlantic Public Economics Seminar.

- Gordon, Roger H., and Joel Slemrod.** 2000. “Are “Real” Responses to Taxes Simply Income Shifting Between Corporate and Personal Tax Bases?” In *Does Atlas Shrug? The Economic Consequences of Taxing the Rich.* , ed. Joel Slemrod. New York:Harvard University Press and Russell Sage Foundation.
- Hamill, Susan Pace.** 2005. “The Story of LLCs: Combining the Best Features of a Flawed Business Tax Structure.” In *Business Tax Stories.* , ed. Steven A. Bank and Kirk J. Stark. New York:Foundation Press.
- Internal Revenue Service.** 2022. “Tax Gap Estimates: 2014-2016 (And Projections for 2017-2019).” Department of the Treasury 5364, www.irs.gov. Rev. 10-2022, Catalog Number 73348Z.
- Joint Committee on Taxation.** 2013. “Foreign Passthrough Entity Use in Five Selected Countries.” Report prepared by the Staff of the Joint Committee on Taxation.
- Kopczuk, Wojciech, and Eric Zwick.** 2020. “Business Incomes at the Top.” *Journal of Economic Perspectives*, 34(4): 27–51.
- Long, James E., and Frank A. Scott.** 1982. “The Income Tax and Nonwage Compensation.” *Review of Economics and Statistics*, 64(2): 211–219.
- Luna, Leann, and Matthew Murray.** 2010. “The effects of state tax structure on business organizational form.” *National Tax Journal*, 63(4): 995–1022.
- MacKie-Mason, Jeffrey K., and Roger H. Gordon.** 1997. “How Much Do Taxes Discourage Incorporation?” *Journal of Finance*, 52(2): 477–505.
- Miller, Helen, Thomas Pope, and Kate Smith.** 2022. “Intertemporal Income Shifting and the Taxation of Business Owner-Managers.” *Review of Economics and Statistics*, 1–45.
- Piketty, Thomas, and Emmanuel Saez.** 2003. “Income Inequality in the United States, 1913-1998.” *Quarterly Journal of Economics*, 118: 1–39.
- Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman.** 2018. “Distributional National Accounts: Methods and Estimates for the United States.” *The Quarterly Journal of Economics*, 133(2): 553–609.
- Romanov, Dmitri.** 2006. “Corporation as a Tax Shelter: Evidence from Recent Israeli Tax Changes.” *Journal of Public Economics*, 90(10-11): 1939–54.

- Rosenthal, Steve, and Theo Burke.** 2020. “Who’s Left to Tax? US Taxation of Corporations and Their Shareholders.” Urban-Brookings Tax Policy Center, mimeo.
- Smart, Michael.** 2021. “Small Business Taxation and Income Inequality: The View from Canada.” *National Tax Journal*, 74(2): 493–512.
- Smith, Matthew, Danny Yagan, Owen Zidar, and Eric Zwick.** 2019. “Capitalists in the Twenty-First Century.” *Quarterly Journal of Economics*, 134(4): 1675–1745.
- Smith, Matthew, Danny Yagan, Owen Zidar, and Eric Zwick.** 2022. “The Rise of Pass-Throughs and the Decline of the Labor Share.” *American Economic Review: Insights*, 4(3): 323–40.
- Sørensen, Peter Birch.** 2010. “Dual income taxes: a Nordic tax system.” In *Tax Reform in Open Economies*. Edward Elgar Publishing.
- Tazhitdinova, Alisa.** 2020. “Are changes of organizational form costly? Income shifting and business entry responses to taxes.” *Journal of Public Economics*, 186: 104187.
- Thoresen, Thor O., and Annette Alstadsæter.** 2009. “Shifts in Organizational Form Under a Dual Income Tax System.” *Finanz Archiv/Public Finance Analysis*, 66(4): 384–418.
- Wolfson, Michael, Michael Veall, Neil Brooks, and Brian B. Murphy.** 2016. “Piercing the Veil – Private Corporations and the Income of the Affluent.” *Canadian Tax Journal/Revue Fiscale Canadienne*, 64(1).
- Woodbury, Stephen A.** 1983. “Substitution between Wage and Nonwage Benefits.” *American Economic Review*, 73(1): 166–182.