Taxing S Corporations as C Corporations

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Abstract

We calculate tax rates for S corporations and compare to hypothetical scenarios where they are taxed as C corporations. Using tax records from 2018 to 2021 to analyze S corporations with positive net income, we find that these firms would face a higher tax rate on average as C corporations, although a small share would face a lower tax rate. This result holds across the income distribution of firms and at nearly all firm asset levels. We find that the tax advantage of being an S corporation would shrink, but remain positive, if the Section 199A deduction for qualifying business income were repealed. We examine the sensitivity of our results to assumptions on the share of profits distributed to owners and the degree to which retained earnings are eventually taxed at the shareholder level. Averaging across firms, we find that firms face lower tax rates as S corporations even if undistributed profits fully escape taxation in the C corporation counterfactual. Weighting by net income, we find that firms would pay lower tax as C corporations only if they distribute little of their profits *and* retained earnings are lightly taxed at the shareholder level.

In the United States, as in many other countries, a business's organizational form determines its tax treatment. Two broad classes of businesses cover most business entities and business income. C corporations, including but not limited to virtually all publicly traded companies, are those that pay corporate tax under subchapter C of the internal revenue code. Pass-through businesses, in contrast, do not pay corporate tax; instead, their income "passes through" to their owners, who are taxed at the owner level.

For a given business, whether the C corporation or pass-through organizational form is preferred depends on both tax and non-tax factors. The very largest businesses prefer the C corporation form because it allows their stocks to be publicly traded, facilitating easier access to capital. However, other businesses may be more attentive to taxes when choosing their organizational form.

C corporations pay corporate tax on all income, and their owners pay tax on dividends distributed, to the extent the owners are taxable entities. Thus, there is an element of choice to corporate taxation: by retaining earnings instead of distributing them, a C corporation can delay some of the tax its owners pay on its income. Pass-through businesses, such as S corporations, do not have this option. For tax purposes, their income is deemed to flow through to their owners each year regardless of actual distributions. However, pass-through businesses generally do not pay tax at the entity level. Thus, whether a business can minimize tax via the C corporation or pass-through form will depend in part on its propensity to distribute income.

In this paper, we calculate average tax rates (ATRs) for S corporations and compare them to hypothetical ATRs if the businesses were instead taxed as C corporations. We define the ATR for an S corporation to be the ratio of (a) the incremental tax liability that its owners face because of the income (and credits) allocated to them by the S corporation to (b) the total income of the S

corporation, including ordinary business income as well as other types of income such as capital gains. We compute these tax rates for a representative sample of S corporations with positive net income[2] from 2018 through 2021 by linking each firm to their owners' underlying tax returns and computing tax liability with and without the S corporation income and credits. We do so both under current law, as well as under a counterfactual where we eliminate the Section 199A deduction; Section 199A provides a 20% deduction for qualifying business income (including S corporation income, subject to certain restrictions), which reduces the effective tax rate on such income.

Next, we compute the ATR for these firms if they were taxed as C corporations. The ATR includes both the effect of the 21% entity-level tax on net income (less credits), as well as the shareholder-level taxes on dividends and capital gains. We proceed under a baseline assumption that sets the payout rate for a given firm (that is, the amount of net-of-tax income paid as a dividend) equal to the payout rate that we observe for that firm in the data. We assume that retained earnings trigger capital gains tax at the shareholder level, but at a substantial discount, reflecting the tax advantages of deferral and basis step-up at death.

We find that the S corporations we study would face a higher tax rate on average as C corporations. Weighted evenly across firms, the average ATR for S corporations is 15.2%, and would be 25.3% if taxed as a C corporation. Weighted by dollars of net income, the average ATR for S corporations is 23.1% under current law and would be 30.1% if taxed as a C corporation. However, this ordering reverses for a minority of firms: 8% of firms (representing 17% of income)

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[2] We restrict attention to S corporations with positive net income to simplify and focus the analysis. Firms with losses would generally prefer the tax treatment of the pass-through form, which allows losses to be netted immediately against their owners' other income (subject to some restrictions), over the C corporation form, which requires the losses to carry forward to future years, only to be used against income within the business (Lim et al., 2018; Goodman et al., 2023).

would face a lower ATR as a C corporation than as an S corporation. We find that the average ATR gap would shrink, but remain positive, if the Section 199A deduction were eliminated; the firm-weighted S corporation ATR would increase to 18.7% and the dollar-weighted S corporation ATR would increase to 27.0%. This general ordering holds across the income distribution of firms and at nearly all firm asset levels.

We examine the sensitivity of our results to assumptions on the share of profits distributed to owners and the degree to which retained earnings are eventually taxed at the shareholder level. Averaging across firms, we find that firms face lower tax rates as S corporations even if they never pay any dividends and retained earnings fully escape taxation. Weighting by net income, we find that firms would pay lower tax as C corporations only if they distribute little of their profits *and* retained earnings are lightly taxed at the shareholder level.

We contribute to a literature that estimates effective tax rates by entity type. We are closest to Pomerleau (2022), which computes several measures of the effective tax rate for pass-throughs and C corporations. Others (such as Goolsbee, 1998; Mackie-Mason and Gordon, 2012; and Prisinzano and Pearce, 2018) have estimated how the choice of entity type responds to measures of the tax wedge between types. Faced with data limitations, these studies generally make assumptions regarding the individual income tax rate facing pass-through income. By linking firms to their owners, we are able to compute this tax rate directly, separately for each firm.[3]

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[3] There is an additional literature that estimates the effective marginal tax rate on investment by different entities – i.e., the extent to which taxes increase the required rate of return for a marginal investment taking into account cost recovery deductions and other investment subsidies. Recent examples include Foertsch (2022) and Burnham and Carloni (2022). Our empirical exercise, by contrast, measures the average tax burden facing the firm's profits; the average burden is likely a more important factor that firms consider when choosing their entity type.

I.   Methodology

A. The average tax rate as an S corporation

We define the S corporation's effective tax rate as the ratio of (a) the aggregate increase in tax liability to its owners in the current year due to ownership of the S corporation to (b) the income earned by the S corporation in the current year. [4] Let y_i denote the vector of tax-relevant items of owner i that may be affected by their ownership of the S corporation and let x_i denote other tax-relevant items of the owner that are *not* affected by their ownership. The elements of y_i are ordinary income, long-term capital gains, short-term capital gains, qualified dividends, general business credits (GBCs), passive income, and qualified business income (i.e., income eligible for the Section 199A deduction). The elements of x_i include things like itemized deductions, dependents, and filing status.[5] The vector y_i has a potential outcome under the observed state of the world (denoted $y_i(1)$) and a counterfactual where owner i does not receive any income or GBCs from S corporation j (denoted $y_{ij}(0)$), while the vector x_i has the same potential outcome under both scenarios.[6]

Let $T(x)$ denote the tax function. Then, owner i's tax liability with respect to firm j's income, denoted T_{ij}^S, is:

$$T_{ij}^S \equiv T(y_i(1), x_i) - T\big(y_{ij}(0), x_i\big).$$

The S corporation's average tax rate (ATR), τ_j^s, is then given by the following expression, where I_j is firm j's total income (that is, the sum of ordinary income, long-term capital gains, short-term capital gains, and qualified dividends):

$$\tau_j^s = \frac{\sum_i T_{ij}^s}{I_j}. \tag{1}$$

B. The average tax rate as a C corporation

If instead the business were taxed as a C corporation, then there are potentially two layers of tax. The profits of the corporation are taxed at $\tau_j^{c,entity}$ (regardless of ordinary or capital gains character), and the after-tax profits face a second layer of tax at the shareholder level. The entity-level tax rate $\tau_j^{c,entity}$ is 0.21, unless the firm has GBCs.[7] We define the ATR as follows:

$$\tau_j^c = \tau_j^{c,entity} + \left(1 - \tau_j^{c,entity}\right)\left(\alpha_j \tau_j^{div}(\alpha_j) + (1 - \alpha_j)\beta \tau_j^{CG}\right). \tag{2}$$

In this equation, α_j, which can vary from zero to one, represents the share of j's post-tax profits distributed as dividends in the current year. For our baseline analyses, we calculate α_j separately for each firm using the observed distributions reported on Form 1120-S, Schedule K-1 Box 16. In alternative analyses, we let α_j vary as a free parameter. The term $\tau_j^{div}(\alpha_j)$ is the weighted-average dividend tax rate faced by j's shareholders – i.e., $\sum_{i \in S(j)} s_{ij} \tau_{ij}^{div}(\alpha_j)$, where s_{ij} is the share of firm j that is owned by i, $S(j)$ is the set of owners of firm j, and τ_{ij}^{div} is the average tax rate that owner i pays on qualified dividends from firm j.[8] The term τ_j^{CG} is the weighted-average long-term capital

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[7] More formally, we compute $\tau_j^{c,entity}$ as the ratio of current-year corporate tax liability (taking GBCs and the GBC limitation into account) to income earned by the corporation. We abstract from the corporate alternative minimum tax.

[8] τ_{ij}^{div} is a function of α_j because the long-term capital gain and qualified dividend tax schedule is progressive. I.e., a larger value of α_j changes the average tax rate when the dividend straddles a bracket boundary. Furthermore, τ_{ij}^{div}

gains rate faced by shareholders, i.e. $\sum_{i \in S(j)} s_{ij} \tau_{ij}^{cg}$, where we compute τ_{ij}^{cg} as the marginal tax rate on the next dollar of long-term capital gains.[9]

The term β, which can vary from zero to one, reflects the extent to which retained earnings are eventually taxed. It is a present-value, reduced-form parameter summarizing many aspects of the corporate tax environment. To the extent that shareholders can minimize capital gains taxes by holding their shares until a low-tax-rate year or by holding until death (such that their heirs step up the basis), β will be lower. We refer to β as the "deferral/avoidance parameter". In our baseline analysis, we assume $\beta = 0.5$, consistent with a substantial benefit from retaining earnings. We then consider how different assumptions on β affect the comparison between the C corporation and S corporation counterfactuals.

II.   Data

We study S corporations included in the Internal Revenue Service (IRS) Statistics of Income samples for 2018 through 2021. These samples are cleaned and edited by the IRS. We limit to S corporations with positive income. To be precise, we require positive ordinary income, positive "total income" (ordinary income, plus capital gains, plus qualified dividends), non-negative qualifying business income (i.e., income potentially qualifying for the Section 199A deduction), and non-negative capital gains income. These restrictions allow us to sidestep most issues related to current-year activities generating carryforwards that would apply against future

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varies by j because we stack the dividend from each firm j last in the computation; if owner i owns multiple firms with different amounts of imputed dividends, τ_{ij}^{div} could differ by j.

[9] Parameter τ_{ij}^{cg} is also a function of α_j; however, we suppress this notation because we only calculate τ_{ij}^{cg} once, using our baseline assumptions for α_j. In alternative analyses, when we let α_j vary as a free parameter, we hold τ_{ij}^{cg} fixed. This is because τ_{ij}^{cg} represents a future tax rate on capital gains, not one dependent on this year's exact circumstances.

income. We estimate that 67% of S corporation tax returns, representing 73% of S corporation assets, meet these restrictions.

To identify the owners of the S corporations, we use data from Schedule K-1 of the S corporation tax return (Form 1120-S). We match this to cleaned and edited samples of individual tax returns (Form 1040). If there is no match, we turn to the unedited near-universe of individual tax returns. If there is no match, we turn to the unedited near-universe of tax returns for estates and trusts (Form 1041); if the trust files Form 1041, Schedule K-1, we look through to the underlying owner. If there is no match to any of these tax returns, we assume that the owner is an employee stock ownership plan (ESOP) if the owner's identification number is an employer identification number, or, rarely, an individual non-filer if the owner's identification number is a social security number. We assume income flowing to ESOPs is entirely untaxed (whether the firm is a C corporation[10] or an S corporation). We impute the income of individual non-filers based on their S corporation income and compute their tax liability as if they filed.[11]

For owners with observable data, we calculate $x_i(1)$ and $x_{ij}(0)$. We then use a simplified tax calculator which takes account of the ordinary and capital gains rate schedules, the GBC limitation, and the net investment income tax (NIIT).[12] For S corporations, we make the tax calculations under current law and alternatively under the assumption that Section 199A—which generally provides a 20 percent deduction on eligible pass-through business income—is repealed.

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[10] That is, in addition to no shareholder-level tax, we assume that there is no *entity-level* tax under the C corporation counterfactual to the extent that the firm is owned by an ESOP. This is an approximation for the deduction available for some dividends paid to ESOPs and other tax benefits associated with ESOPs.

[11] Non-filing is rare: only 1.4% of owners are individuals who have not (yet) filed a Form 1040 for the year in question. Non-filing is more prevalent for owners of firms with less income. Furthermore, non-filing is more prevalent in later years (1.8% of owners in 2021) than earlier years (0.8% in 2018), suggesting that a meaningful share of such apparent non-filers will file a return for the year in question at some point in the future.

[12] In our calculations, we account for NIIT using the available information of Form 1040 Schedule E to assess the likelihood that a given owner's income from a given firm should be considered passive or non-passive. We assume that the owner does not have any other GBCs.

This allows an assessment of how important Section 199A is to the balance of tax rates across the C corporation and pass-through forms. To calculate the Section 199A deduction, we use industry-level estimates (computed elsewhere; see Goodman, et al., 2024) of how binding the 199A "guardrails" are for high-income owners.

Table 1 summarizes our analysis sample, which is representative of 12.3 million firm-year observations. On average, assets are $1.1 million, business income is $233,130, and 46 percent of post-tax business income is distributed to shareholders.[13] The average firm has 1.6 shareholders, and these owners have adjusted gross income (AGI) of $495,000 on average. The sample is similar to S corporations overall in terms of assets, number of shareholders, and shareholder AGI. Unsurprisingly, because we exclude loss firm-year observations, our analysis sample has higher mean business income. It also has a somewhat higher payout rate.

Weighted by income, the average payout rate (α_j) across firms in our sample is 56% (not shown in Table 1). In Figure 1, we plot a histogram of this parameter without censoring above at 1, weighting each firm equally (solid circles) and weighting according to total income (hollow circles). Approximately 42% of firms representing 23% of income make no distributions or pay distributions less than the owners' tax liability attributable to the firm.[14] However, a substantial share of firms pay out the majority of their after-tax income as distributions: 22% of firms

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[13] To measure the payout rate (α_j in Equation (2)), we subtract the owner-level tax liability associated with the S corporation from both the numerator (observed distributions) and denominator (firm income). For example, suppose S corporation j has ordinary income $100, which we calculate leads to tax liability of $20 for its owners, and makes $60 of distributions. We compute α_j as $\frac{60-20}{100-20} = 0.5$. The idea is that $20 of distributions in this example were made to provide liquidity to owners to pay their income tax attributable to that S corporation. Of the $80 in "post-tax" income available to distribute, $40 was additionally distributed. As a C corporation, if the business instead paid $20 of entity-level tax, we assume it would distribute half ($40) of its post-tax income to its owners. When tax liability under the C corporation counterfactual, we do not allow α_j to exceed one, as that would reflect a distribution of more than one year of income. We also do not allow $\alpha_j < 0$.

[14] Of these 42% of firms, approximately 10% (that is, 4% of all firms) make zero distributions. The rest make distributions less than the tax liability that we estimate.

(representing 31% of income) distribute between 50% and 100% of their income while an additional 28% of firms (representing 26% of income) distribute more than 100% of their income. This likely reflects a distribution of multiple years of profits.

III. Results

A. Baseline Results

We present our baseline results in Table 2. Each cell reports the average value of τ_j^S or τ_j^C, respectively; the first column computes this average as an unweighted mean, while the second column computes this average weighting by total income of the firm (y_j). In row 1, we estimate that S corporations with positive income pay an average ATR of 15.2% (firm-weighted) or 23.1% (dollar-weighted) under current law. If Section 199A were repealed, the average ATR would increase by about 3 to 4 percentage points. Even in the absence of Section 199A, the average ATRs are meaningfully lower than under the C corporation counterfactual, where these firms would pay ATRs of 25.3% (firm-weighted) or 30.1% (dollar-weighted).

As captured in Table 2, firms in our sample would face a higher tax rate on average as C corporations. In Figure 2 we show the extent to which this ordering holds across firms. Specifically, each panel plots a histogram of $\tau_j^C - \tau_j^S$; firms to the left of zero pay a higher tax rate as an S corporation, while firms to the right of zero pay a higher tax rate as a C corporation. In Panels A and B, we calculate τ_j^S under current law. A small share of S corporations would face a lower ATR as a C corporation: 8% (firm-weighted) or 17% (dollar-weighted). In Panels C and D, we calculate τ_j^S in the absence of Section 199A. The share of S corporations that would face a lower ATR as a C corporation increases to 21% (firm-weighted) and 34% (dollar-weighted). Furthermore, we find spikes in mass around 11 percentage points (Panel A) and 9 percentage points

(Panel C), corresponding to the set of firms whose owners are in the 12% ordinary income tax bracket – e.g., joint filers in 2018 with ordinary taxable income between $19,050 and $77,400. For these firms, the S corporation ATR is 12% without Section 199A and 9.6% under current law, while the C corporation ATR is often exactly 21%, as these firms typically do not have GBCs, and their owners face a zero marginal tax rate on long-term capital gains and qualified dividends. Given that these firms tend to have relatively low income, these spikes do not appear nearly as visibly in the dollar-weighted panels.

B. Heterogeneity by firm characteristics

In Figure 3 Panel A we present (firm-weighted) average ATRs in twenty bins of firm size as measured by assets, where the bins are constructed so that each bin has approximately the same amount of aggregate assets. In Panel B, we present an analogous plot measuring firm size by total income. In each panel, we plot the average ATR under the C corporation counterfactual (solid line, solid circle), current law S corporation estimate (dashed line, hollow circle), and S corporation counterfactual with no Section 199A (dashed line, solid square). The ATR under both S corporation scenarios is hump shaped. The increase reflects the progressivity in the tax rate on ordinary income, while the decrease reflects the fact that larger firms tend to have a greater share of their income in the form of capital gains and qualified dividends. Similarly, the ATR in the C corporation counterfactual is generally slightly increasing, reflecting the modest progressivity in the tax rate on long-term capital gains and qualified dividends. The tax code's progressivity causes an upward-sloping relationship in portions of each series because larger firms (whether measured by assets or income) tend to have higher-income shareholders—directly because of the inclusion of more business income and indirectly through selection effects—who face higher tax rates on their income.

The average ATR under the C corporation counterfactual exceeds the current law S corporation estimate at all income and asset levels. In the absence of Section 199A, the average ATR for firms between $10 million and $100 million, and for total income between $1 million and $10 million, is quite similar whether taxed as an S corporation or as a C corporation, while S corporation status is more clearly favored at other size ranges. In addition, Figure 4 presents heterogeneity by number of shareholders. We find that average ATRs are lower in both S corporation scenarios, relative to the C corporation counterfactual, regardless of the number of shareholders.

Figure 5 presents heterogeneity in ATRs according to the average AGI of firms' owners. For this figure, we drop firms where any owners are ESOPs, or whose owners' average AGI is negative. We find that ATRs are mostly increasing in owner income, though more steeply under S corporation scenarios than the C corporation counterfactual. C corporation ATRs are above current law S corporation ATRs at all owner income levels. In the absence of Section 199A, firm-weighted ATRs are higher under the S corporation counterfactual than the C corporation counterfactual at the highest income ranges (approximately $600,000 and above). However, when weighting by total income, C corporation ATRs remain higher than S corporation ATRs at all levels of owner income. This likely reflects the fact that dollar-weighting tends to put more weight on firms with a higher share of tax-preferred income.

Table 3 presents heterogeneity by industry. In Panel A, we split by six supersectors, each representing a set of two-digit NAICS codes. The ATR as an S corporation is lower than under the C corporation counterfactual for all supersectors, even in the absence of Section 199A. Under current law, the tax-rate gap is smallest in the education/health supersector. In Panel B, we split by whether we model the six-digit NAICS code as being a specified service trade or business

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(SSTB) for the purpose of Section 199A; the income from such businesses is ineligible for the 20% deduction for high-income owners.[15] The ATR as an S corporation – with or without Section 199A – is lower than the ATR under the C corporation counterfactual for both SSTBs and non-SSTBs. Under current law, the tax-rate gap is smaller for SSTBs, as expected given the limitations under Section 199A facing SSTBs.

C. Sensitivity to payout parameters

Thus far we have assumed that payout rates remain unchanged, relative to current law, in the C corporation counterfactual. However, payouts generally have no tax consequences for pass-through businesses, while payouts would generally be subject to dividend taxes in the C corporation counterfactual. Therefore, we might expect payout rates to change. In Figure 6, we plot average ATRs as we vary α, the rate at which net-of-tax profits are paid out. In Panels A and B, we treat α as a free parameter – that is, we exogenously assign a fixed value of α to all firms, compute average ATRs, and then repeat for other fixed values of α. Mechanically, varying α has no effect on S corporations in Panels A and B. By contrast, average ATRs increase with α under the C corporation counterfactual, which has the effect of converting future capital gains to current qualified dividends. Increasing α from 0 to 1 increases C corporation counterfactual ATRs by about 5 percentage points (firm-weighted) or 9 percentage points (dollar-weighted). In the absence of Section 199A, dollar-weighted S corporation counterfactual ATRs are similar to the C corporation counterfactual when payout rates are very low. In all other circumstances, including current law Section 199A, C corporation ATRs remain above S corporation ATRs. In Panels C

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[15] The list of six-digit NAICS codes we use to model SSTB status, which we do not report here, is a modeling approximation. Neither the law nor the regulations define SSTB with reference to NAICS codes but rather based on the facts and circumstances of each business. Readers should not infer that the list of NAICS codes represents an interpretation by the Department of the Treasury regarding which businesses would be considered SSTBs.

and D, we use the α_j actually observed and consider heterogeneity by that parameter across firms. The patterns in these panels are similar to when α is a free parameter in Panels A and B.

One benchmark plausible value for α is the observed payout rate for similarly sized C corporations during our analysis window (2018-2021). Using the IRS Statistics of Income samples of C corporations for these years,[16] we estimate a weighted-average α by the following procedure. First we limit the C corporation observations to those with positive net income and positive after-tax income, and we append our S corporation analysis sample. In the appended data, we define 50 income bins with approximately the same aggregate net income in each bin, using the sample weights to ensure representativeness of the full population of profitable corporations. We then apply "matching weights" to each firm in C corporation sample such that the distribution of aggregate net income across bins matches the analogous distribution for S corporations; in practice, this means that the largest C corporations are dropped, as the size distributions for S and C corporations do not overlap at the very top. We then calculate the weighted-average α for C corporations (cash and property dividends divided by after-tax income) in this reweighted sample.[17] The result is 28%, compared to 56% for S corporations. As expected, similarly sized C corporations pay out profits at a substantially lower rate than our sample of S corporations.

Next, we consider sensitivity to the deferral/avoidance parameter β. We assume that retained earnings face a shareholder-level tax that has a present value of β times the contemporaneous marginal tax rate on long-term capital gains. So far, we have assumed $\beta = 0.5$. In Figure 7, we plot average ATRs as we vary β from 0 to 1. As when varying α, ATRs are unaffected by β in the S corporation scenarios. Increasing β increases C corporation ATRs very

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[16] We use Schedule M-2 to measure cash and property dividends paid; hence, we limit the calculation to C corporations that attach this schedule.

[17] That is, the final weight is equal to the SOI sample weight, multiplied by income, multiplied by the matching weights.

slightly when firm-weighted and modestly when dollar-weighted. However, even under the extreme case where we assume $\beta = 0$, such that retained earnings are entirely untaxed, we find that firms in our sample would face a higher tax rate as C corporations than they do as S corporations, even in the absence of Section 199A.

To a substantial extent, the limited quantitative role of β is due to the relatively high observed payout rates (α). As a final exercise, we compute average ATRs for an arbitrary α and β. From Equation (2), given α and β, we can compute the average ATR as[18]

$$E[\tau_j^c] = E[\tau_j^{c,entity}] + \alpha E[(1 - \tau_j^{c,entity})\tau_j^{div}] + (1 - \alpha)\beta E[(1 - \tau_j^{c,entity})\tau_j^{CG}].$$

Each of these expectations can be computed. When firm-weighted, they are 20.7%, 7.0%, and 5.8% respectively. When dollar-weighted, they are 19.9%, 13.8%, and 12.4% respectively. Thus, an interested reader can calculate $E(\tau_j^c)$ for any desired α and β, and compare to the analogous S corporation ATRs reported in Table 2. One immediate observation is that, when firm-weighted, the average S corporation ATR is lower than the C corporation tax rate for any (non-negative) α and β, even in the absence of Section 199A. This implies that the typical S corporation shareholder is in an ordinary tax bracket that is smaller than the entity-level corporate tax rate.

When dollar-weighted, the story is more nuanced. If $\alpha = 0$ and $\beta = 0$ – meaning that there is never any shareholder-level tax for C corporations – C corporation status is tax-preferred relative to S corporation status on average. In Figure 8, we show all combinations of α and β such that the average C corporation ATR is less than the average S corporation ATR. Under current law, the indifference points are roughly $\alpha = 0.25, \beta = 0$ and $\alpha = 0, \beta = 0.25$; points closer to the origin than the approximate triangle formed by these points and the origin leads to lower C corporation

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[18] In this part, we make the simplifying approximation that τ_j^{div} does not depend on α. We compute τ_j^{div} as the average of τ_j^{CG} and the value of τ_j^{div} when $\alpha = 1$.

tax than S corporation tax. In the absence of Section 199A, there are a broader set of parameters that favor C corporation status: the approximate triangle extends to roughly $\alpha = 0.5, \beta = 0$ and $\alpha = 0, \beta = 0.6$.

IV.   Discussion and Conclusion

The analysis here is mechanical and narrow. We have calculated effective tax rates for a certain subsample of S corporations in a counterfactual scenario where they are organized as C corporations, all else equal. We view this as a useful thought experiment, but before we discuss its merits, it is important to highlight some of the shortcomings of this analysis.

First, we have restricted attention to S corporations with positive net income. As quantified in Lim et al. (2018) and Goodman et al. (2023), pass-through taxation is generally more favorable for firms in a loss position, as losses from the business can often be used to offset other unrelated income, unlike C corporations where losses are trapped at the entity level.

Second, if the law were to change such that all large S corporations were now taxed as C corporations, there would be substantial behavioral effects given the new tax regime, including businesses re-structuring, changes in payout rates, and potentially changes in the wages paid to owners. We have abstracted away from such matters, for the most part. Therefore, our estimates do not correspond to revenue estimates for such a policy change.

Third, we have addressed only the effective tax rates paid by these firms, ignoring all other considerations that might affect the choice of entity type. Such considerations include the abilities to expand beyond one hundred shareholders, to have shareholders that are businesses, to become publicly traded, to pass through losses in future years, etc.

Despite these caveats, we view the exercise as informative. Given current arrangements, we find that a large majority of profitable S corporations pay less tax than they would if they were

taxed as C corporations. In other words, for these firms, the tax code is not neutral with respect to organizational form choice. Moreover, while Section 199A advocates "sought tax relief comparable to any reduction in corporate tax rates" in the 2017 Tax Cuts and Jobs Act (Congressional Research Service, 2024), we find that even if Section 199A were repealed, most S corporations would continue to pay less tax than they would as C corporations, holding behavior fixed.

To some extent, these findings depend upon the values of the payout rate (α) and the deferral/avoidance parameter (β) that affect the C corporation counterfactual. On the one hand, a simple average across firms results in lower ATRs for S corporations relative to the C corporation counterfactual, regardless of the values of α and β and regardless of Section 199A. On the other hand, if we give more weight to higher-income firms, reflecting their greater economic importance, then there are some values of α and β that yield lower ATRs in the C corporation counterfactual. Relative to current law, only values of α and β quite close to zero would suffice (see Figure 8). Relative to the no-199A counterfactual, if we set $\alpha = 0.28$ (the average payout rate for similarly sized C corporations), then retained earnings would need substantial benefits from deferral to result in lower ATRs in the C corporation counterfactual. In our parameterization, this would require $\beta < 0.36$. The true value of β for C corporations is not known. Future research estimating this parameter would assist with the tax-rate comparison we have undertaken.

Finally, we leave a similar analysis for partnerships to future work. Partnerships bring additional complexity both due to large numbers of owners who are not natural persons (as documented in Cooper et al., 2016 and Love, 2021) and the flexibility permitted regarding which income is allocated to which partner. Our result – that the tax rate as a C corporation would be higher – may hold even more strongly for partnerships, as the flexibility of non-proportional

allocations and presence of non-taxable partners generally reduces partnership ATRs. On the other

hand, it is possible that partnership income is more concentrated among higher-income individuals,

raising partnership ATRs. Further research is needed to answer this important question.

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Figure 1. Histogram of payout rates
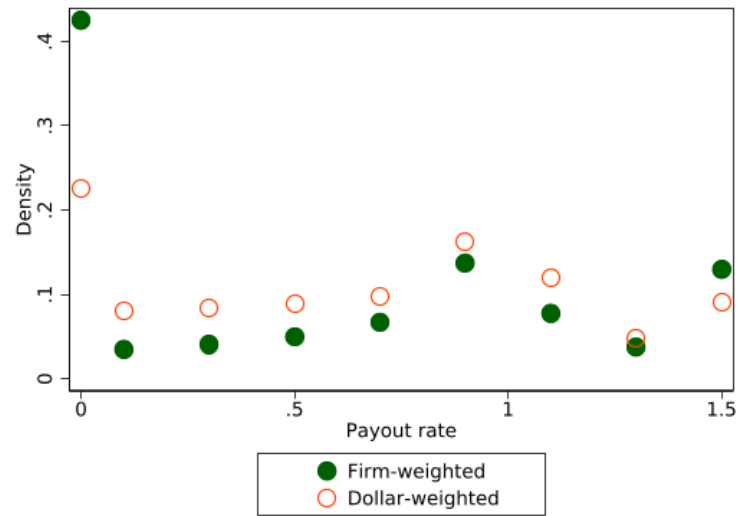
Notes: This figure reports a histogram of estimated payout rates in the analysis sample, defined as the ratio of (distributions less tax liability) to (total income less tax liability), where "tax liability" is the incremental tax that we estimate shareholders owe as a result of their ownership of the S corporation. The rightmost bin includes all observations further right as well. "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. Source: Authors' calculations from confidential tax data.

Figure 2. Heterogeneity in average tax rate wedge

A. Firm-weighted

B. Dollar-weighted

C. Firm-weighted, no 199A

### D. Dollar-weighted, no 199A
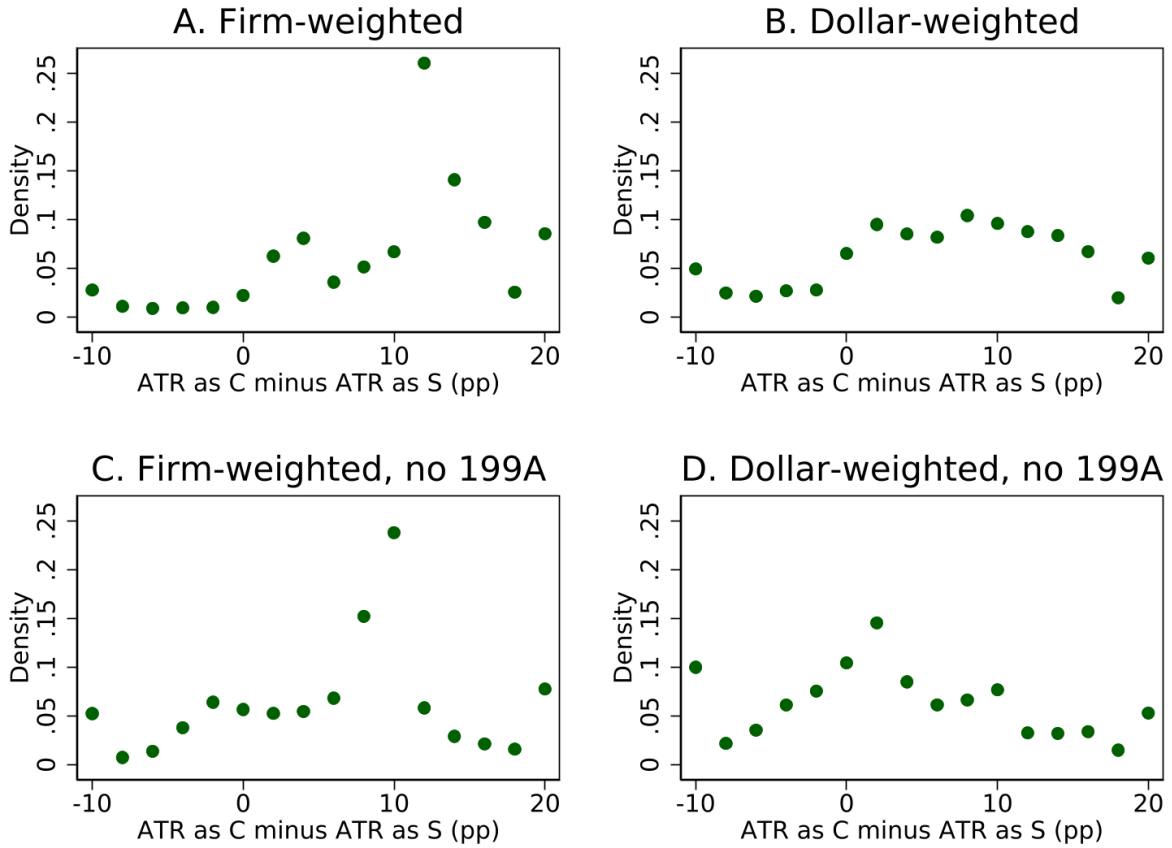
Notes: This figure reports a histogram of the firm-level difference between the ATR under the C corporation counterfactual and the ATR under an S corporation counterfactual. In Panels A and B, the S corporation counterfactual is current law; in Panels C and D, the S corporation counterfactual assumes no Section 199A. "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta = 0.5$. See text for further details regarding computation of each firm's ATR. The leftmost and rightmost bins contain observations further left and further right, respectively. Source: Authors' calculations from confidential tax data.

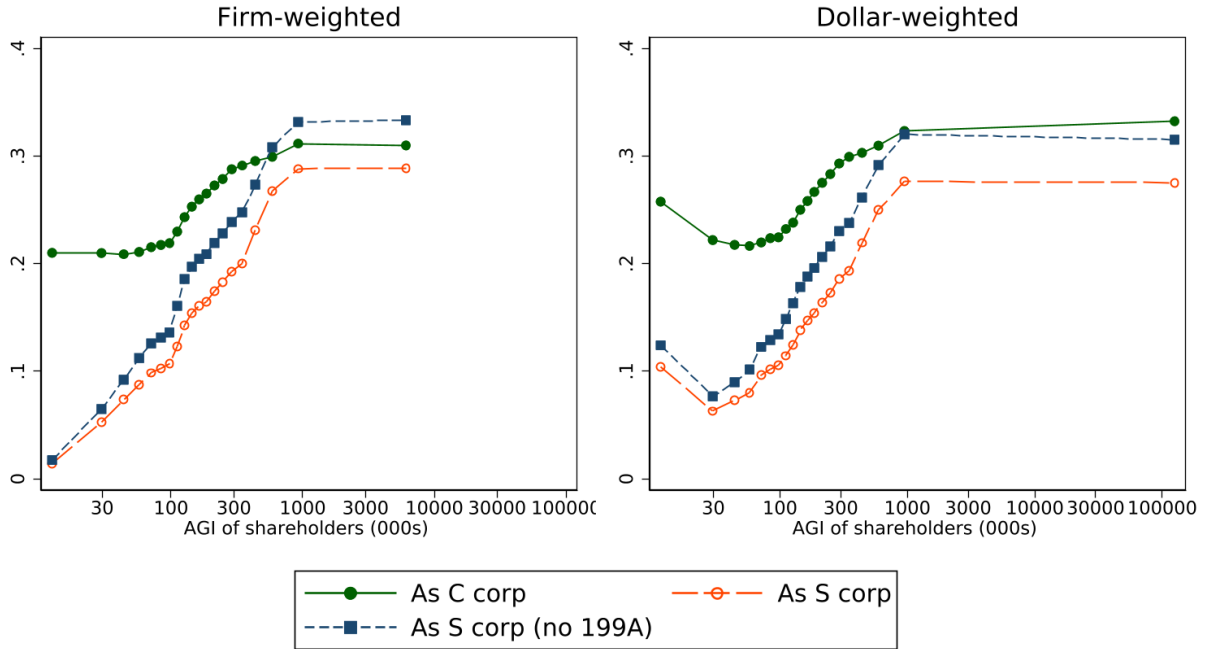**Figure 3. Heterogeneity in average tax rates by firm size**
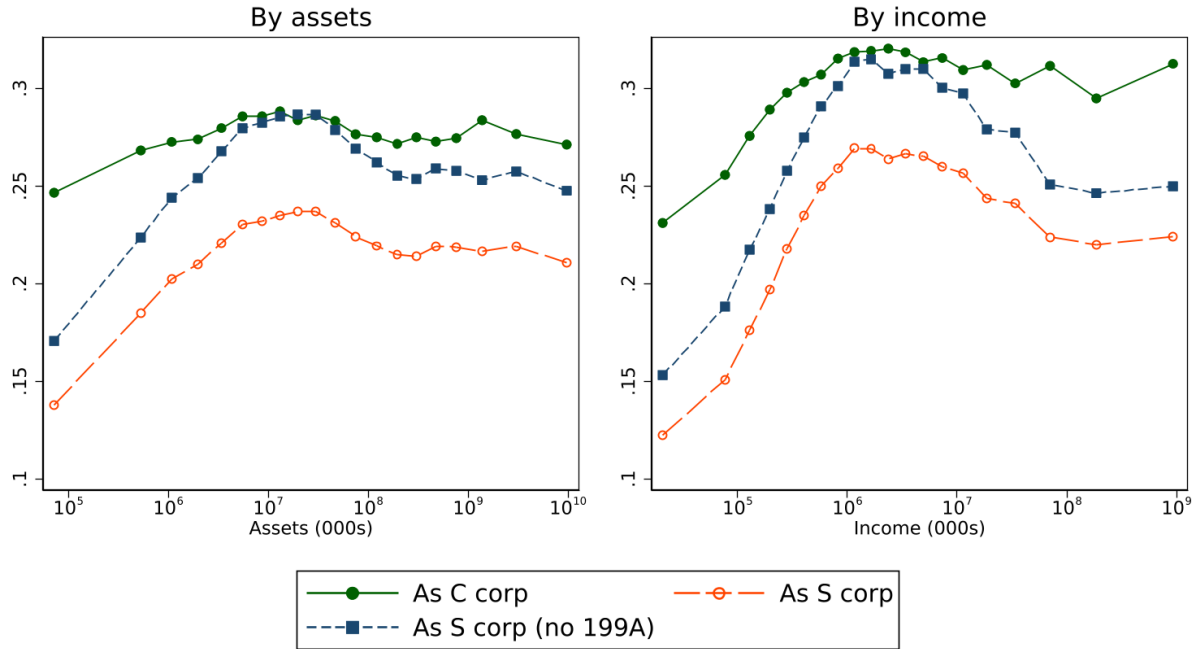
Notes: The figure plots firm-weighted average ATRs for S corporations under various counterfactuals as a function of assets (Panel A) or total income (Panel B). "Firm-weighting" weights by the sample weights only. Total income is ordinary income plus capital gains plus qualified dividend income. When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta = 0.5$. See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

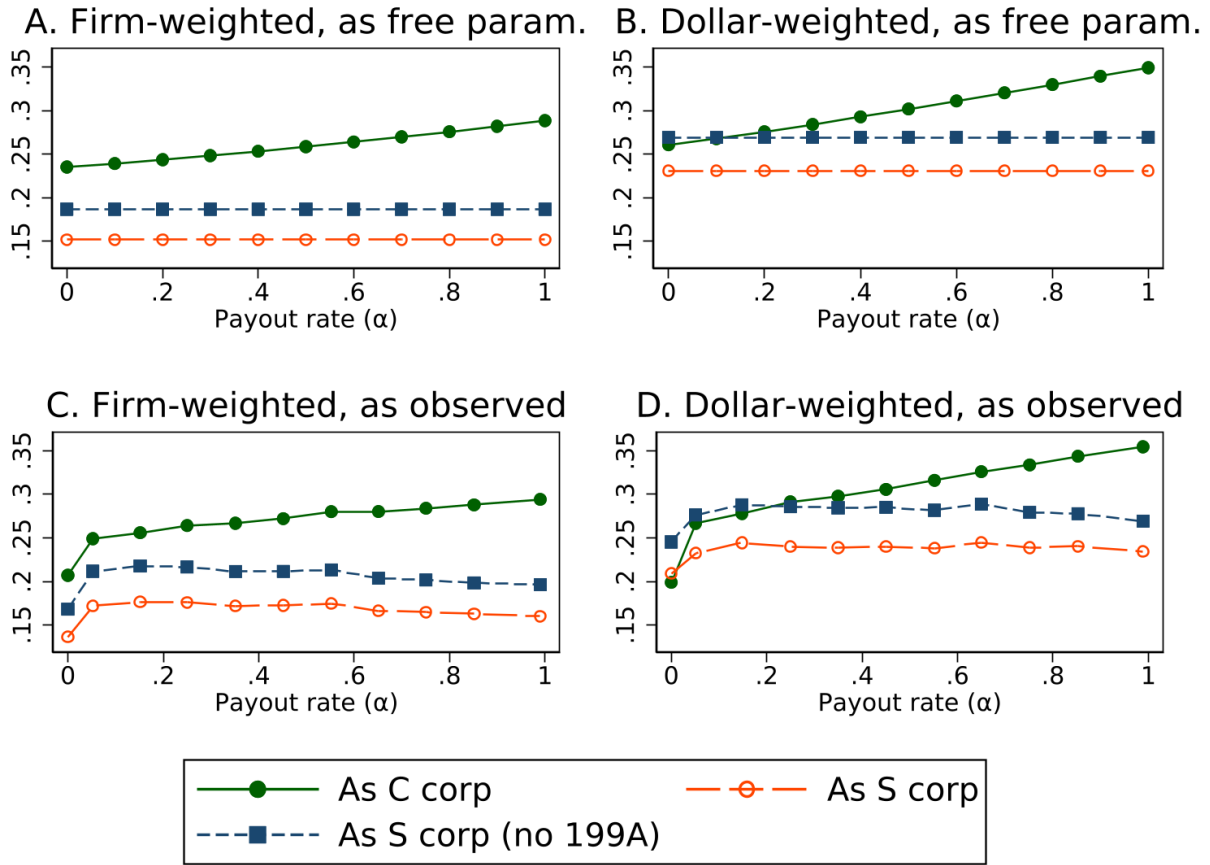**Figure 4. Heterogeneity in average tax rates by number of shareholders**
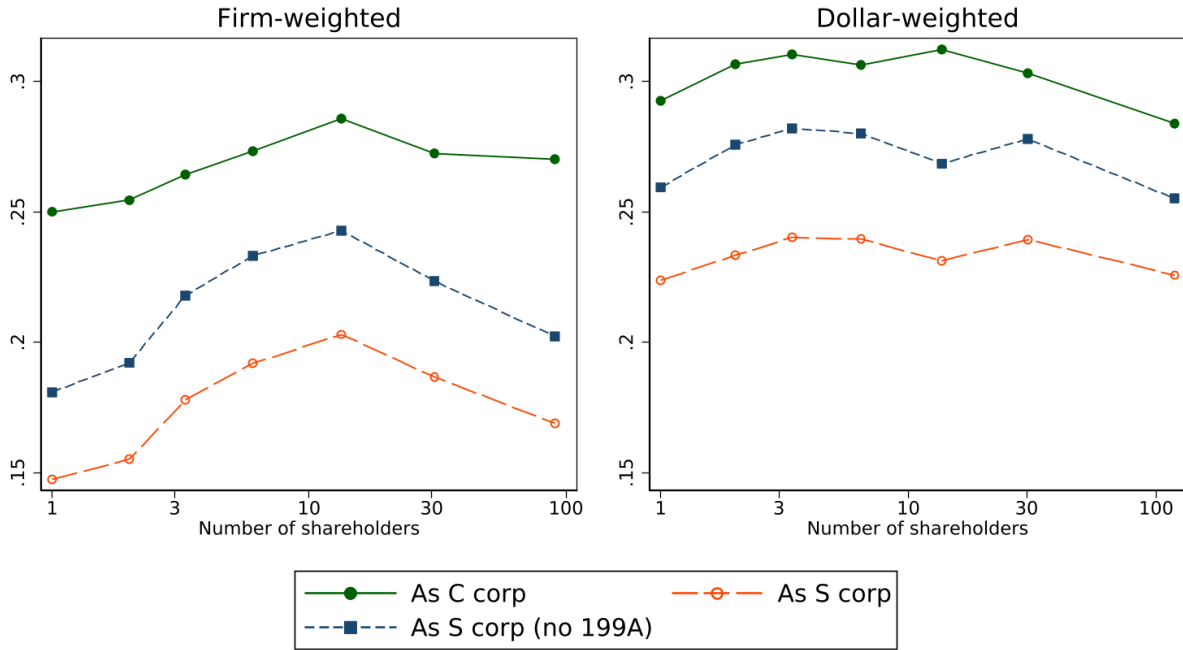
Notes: The figure plots average ATRs for S corporations under various counterfactuals as a function of the number of shareholders. "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta = 0.5$. See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

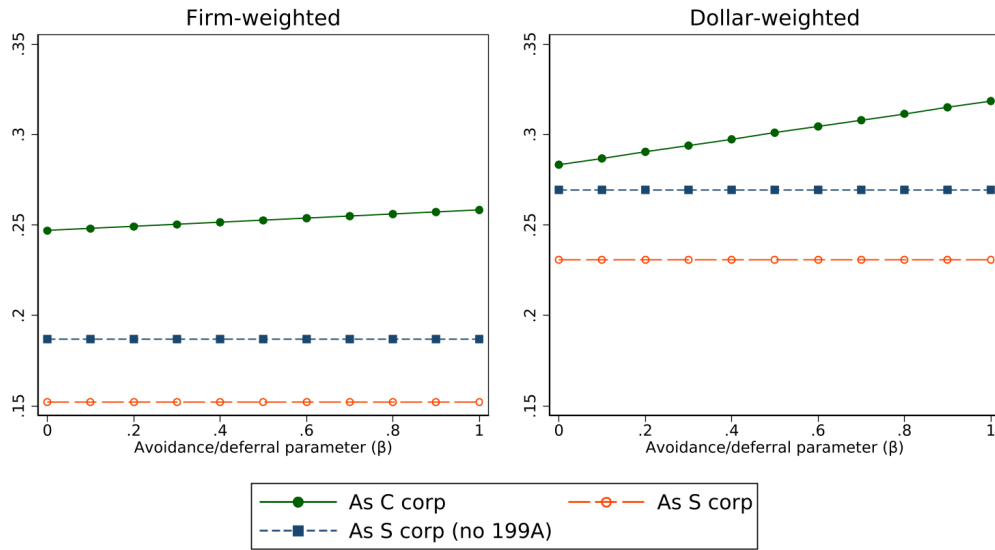**Figure 5. Heterogeneity in average tax rates by owner income**

Notes: The figure plots average ATRs for S corporations under various counterfactuals as a function of mean AGI of shareholders, in twenty bins. We compute mean AGI of shareholders weighting by ownership share. Bins of shareholder AGI are constructed such that they represent approximately the same number of firms. We restrict the analysis to firms where all owners are natural persons. "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. The x axis plots the mean owner AGI in each bin (firm-weighted in Panel A and dollar-weighted in Panel B). When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta = 0.5$. See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

Figure 6. Sensitivity to assumed payout rate (α)

A. Firm-weighted, as free param.

B. Dollar-weighted, as free param.

C. Firm-weighted, as observed

D. Dollar-weighted, as observed

As C corp — — As S corp

As S corp (no 199A)

Notes: The figure plots average ATRs for S corporations under various counterfactuals as a function of the payout rate (α). "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta = 0.5$. In Panels A and B, we treat α as a free parameter – i.e., assigning a given value of α to all firms in the data; all firms are included in every plotted point in Panels A and B. In Panels C and D, we use the α_j as actually observed and take means within bins of α_j; each firm is included exactly once in each of Panels C and D. See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

Figure 7. Sensitivity to assumed deferral/avoidance parameter (β)

Notes: The figure plots average ATRs for S corporations under various counterfactuals as a function of the deferral/avoidance parameter (β). "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

Figure 8. Combinations of payout rate (α) and deferral/avoidance parameter (β) that favor C corporation status
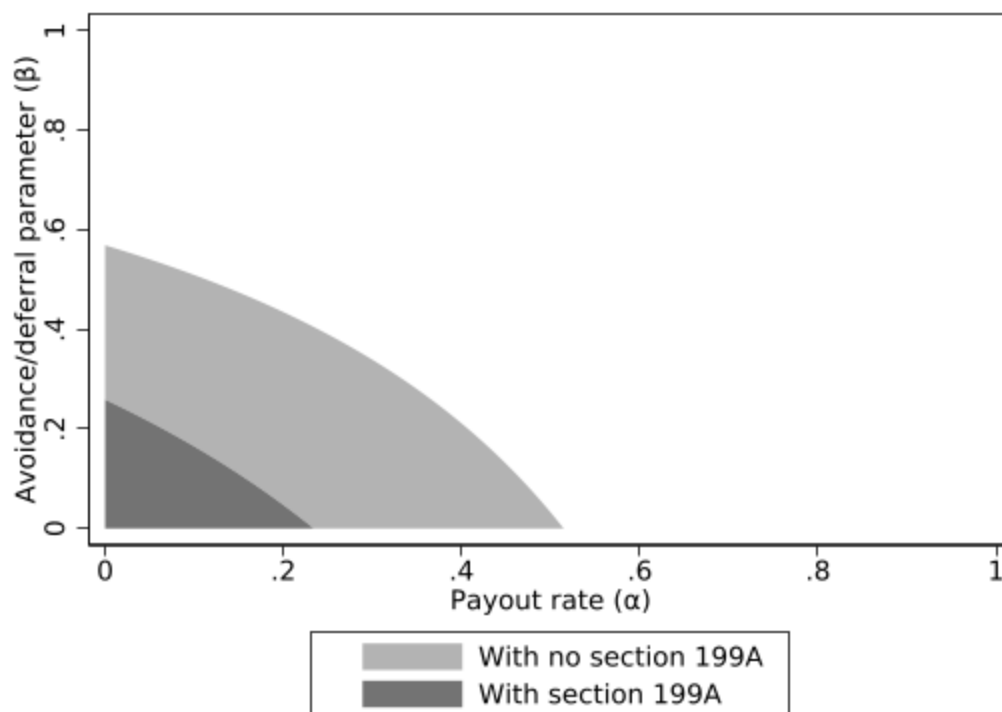
Notes: Shaded regions in this figure represent the combinations of α (payout rate) and β (deferral/avoidance parameter) where the average ATR under the C corporation counterfactual is lower than the average ATR under the S corporation counterfactual. This figure considers average ATRs weighted by total income, where total income is ordinary income plus capital gains plus qualified dividend income. (When weighted evenly by firm, there are no combinations of α and β where the average ATR under the C corporation counterfactual is lower than the average ATR under the S corporation counterfactual, even if Section 199A were repealed.) See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

Table 1. Summary

	All firms			Firms in analysis sample		
	Mean	Median	Share non-zero	Mean	Median	Share non-zero
Business income	$151,250	$16,386	0.99	$233,130	$44,778	1.00
Assets	$1,012,382	$56,131	0.76	$1,111,212	$70,736	0.79
Number of shareholders	1.58	1.00	1.00	1.57	1.00	1.00
Mean AGI of owners	$492,523	$129,529	0.99	$494,527	$149,093	0.99
Payout rate	0.32	0.00	0.39	0.46	0.40	0.58
ESOP ownership	0.01	0.00	0.01	0.01	0.00	0.01
Observations (weighted)	18,290,048			12,255,684		

Notes: The table provides summary statistics on our S corporation sample from 2018 to 2021. Payout rate is censored at zero and one. For disclosure avoidance, we calculate the median as the mean of all observations between the 49.9th and 50.1st percentiles. The row for mean AGI of owners is restricted to S corporations where all owners are natural persons. The analysis sample includes S corporations with positive total income, non-negative potential QBI, and non-negative capital gains. Total income is ordinary income plus capital gains plus qualified dividends. Source: Authors' calculations from confidential tax data.

Table 2. Average Tax Rates for S corporations

Counterfactual	Firm-weighted	Dollar-weighted
S corporation (current law)	0.152	0.231
S corporation (with no 199A)	0.187	0.270
C corporation	0.253	0.301

Notes: This table reports estimates for the average ATR facing S corporations under various counterfactuals. "Firm-weighting" weights by the sample weights only, while "dollar-weighting" weights by the sample weight multiplied by total income. Total income is ordinary income plus capital gains plus qualified dividend income. When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta = 0.5$. See text for further details regarding computation of each firm's ATR. Source: Authors' calculations from confidential tax data.

Table 3: ATRs by industry

	Firm-weighted				Dollar-weighted			
	As S corp (current law)	As S corp (no 199A)	As C corp	Share of sample	As S corp (current law)	As S corp (no 199A)	As C corp	Share of sample
Panel A: By sector								
Education/health	0.197	0.226	0.275	0.104	0.272	0.290	0.322	0.079
Goods producing	0.138	0.174	0.246	0.187	0.222	0.269	0.293	0.240
Leisure/hospitality	0.134	0.170	0.234	0.069	0.208	0.254	0.285	0.048
Professional services	0.162	0.197	0.261	0.209	0.235	0.266	0.307	0.224
Trade/transportation	0.142	0.178	0.245	0.183	0.235	0.283	0.299	0.220
All else	0.149	0.184	0.251	0.248	0.221	0.254	0.300	0.188
Panel B: By imputed SSTB status								
Non-SSTB	0.144	0.180	0.248	0.831	0.223	0.267	0.297	0.848
SSTB	0.194	0.221	0.276	0.169	0.273	0.284	0.322	0.152

Notes: This table reports our estimates for the average ATR facing S corporations under various counterfactuals, separately by industry. When calculating tax rates under the C corporation counterfactual, we assume our deferral avoidance parameter $\beta=0.5$. See text for further details regarding computation of each firm's ATR. In Panel A, we aggregate industries into supersectors, based on two-digit NAICS codes. The two-digit NAICS codes for the education/health sectors are 61 and 62; for the goods producing sector are 11, 21, 23, 31, 32, and 33; for the leisure/hospitality sector are 71 and 72; for the professional services sector are 54, 55, and 56; and for the trade/transportation sector are 22, 42, 44, 45, 48, and 49. In Panel B, we aggregate into a list of NAICS codes (up to six digits) that we model as being SSTBs. The list of six-digit NAICS codes we use to model SSTB status, which we do not report here, is a modeling approximation. Neither the law nor the regulations define SSTB with reference to NAICS codes but rather based on the facts and circumstances of each business. Readers should not infer that the list of NAICS codes represents an interpretation by the Department of the Treasury regarding which businesses would be considered SSTBs. Source: Authors' calculations from confidential tax data.