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## Incorporation and Productivity

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One crucial question for any business is its choice of legal form—specifically, whether a business forms as a C corporation and is subject to corporate income taxes or whether it forms as a pass-through business whose income and losses flow to its shareholders and are taxed as individual income. This decision has multiple implications for the businesses (e.g., tax burdens) and for the economy (e.g., productivity). Reductions in the relevant tax wedge—the tax penalty for being corporate rather than pass-through—such as those in the 2017 tax reform, raise the frequency of C-corporate ownership. Moreover, if there are typically productivity advantages associated with C-corporate form—as must be the case if many businesses choose this status despite the often large tax penalty—then shifts in ownership form affect overall productivity. We assess the effects of business taxation and legal changes on choices of legal form and thereby on productivity.

There are several productivity benefits associated with corporate legal ownership. First, a corporation is a distinct and perpetual legal entity, the structure of which—unlike the typical partnership—is not compromised substantially by the departure of its owner(s).

Second, C corporations offer the potential for convenient public trading of shares, typically on organized markets. This public trading is important for the raising of capital and for gaining information from market prices.

Third, C corporations provide owners with limited liability,

a status that also applies to pass-through S corporations, created in 1958. However, S corporations have major limitations on the number and types of shareholders, although the allowable number increased substantially over time from the original 10 to the current 100.

Fourth, the retention of earnings is permissible in C corporations. This retention may be useful for financing investments and for deferring taxes on dividends. Partnerships and S corporations can also retain earnings, but the owners are taxed as though all the earnings had been distributed.

Fifth, C corporations and pass-through businesses have numerous differences in regulations, filing rules, requirements to hold regular meetings, and government supervision.

Overall, U.S. legal changes over recent decades have mostly favored pass-through alternatives to C corporations—notably, the creation of the S corporation in 1958, the IRS tax ruling in 1988 that allowed limited liability corporations (LLCs) to be taxed as pass-through partnerships, and the adoption by all 50 states of LLC laws by 1996.

The main federal tax wedge since 1958 that we measure involves two aspects of U.S. taxation of C-corporate income: the federal corporate profits tax and the federal tax on dividends. The pass-through entities that we focus on are S corporations and partnerships. Sole proprietorships are not covered in our main data. Incomes from S corporations and partnerships mostly flow through to owners and are reported by individuals on IRS form 1040, Schedule E.

By using information from the National Bureau of Economic Research's TAXSIM program, we are able to measure the Schedule E income-weighted average marginal tax rate from 1962 to 2012. Our regression estimates from 1978 to 2013 accord with the hypothesis that a fall in the tax wedge raises the C-corporate share of economic activity.

Despite the overall decline in the tax wedge, the measures of C-corporate share of economic activity—whether measured through IRS data on net capital stock, equity, gross assets, or net income—exhibit downward trends at least since the 1970s. We attribute these trends particularly to legal changes that favored pass-through forms, notably LLCs.

Our model provides estimates of the contribution to businesses' total factor productivity (TFP) growth from the mostly falling gap between underlying C-corporate and pass-through productivity (due especially to legal changes

that favored pass-throughs) and from the mostly declining tax wedge. In our baseline analysis, the combined contribution to TFP growth from 1958 to 2013 was 0.37 percent per year, compared to the total growth rate of 1.09 percent per year. The contribution from the declining gap between C-corporate and pass-through productivity was negligible up to the mid-1980s but became important thereafter. The growth contribution was especially large—0.77 percent per year—in the period from 1994 to 2004, when the observed TFP growth rate was unusually high—2 percent per year.

**NOTE:**

This research brief is based on Robert J. Barro and Brian Wheaton, "Incorporation and Productivity," NBER Working Paper no. 25508, October 2019, <https://www.nber.org/papers/w25508>.