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# The impact of the corporate income tax: evidence from state organizational form data

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**Abstract**

By taxing the income of corporate firms at a different rate than non-corporate firms, taxes can play an important role in a firm's choice of organizational form. The sensitivity of the organizational form decision to tax rates provides a key indicator of the distortion created by the corporate income tax. This paper uses new cross-sectional data on organizational form choices across states compiled in the Census of Retail Trade to estimate this sensitivity. The results document a significant impact of the relative taxation of corporate to personal income on the share of real economic activity that is done by corporations and that the impact is many times larger than has been found in the previous empirical literature based on time-series data. The results show little impact, however, on the actual operations of firms such as their labor intensity, wages and the like. They do indicate that firms are able to exploit the progressivity of the corporate income tax system by dividing into numerous firms.


*JEL classification:* H25 Business taxes; L22 Firm organization and market structure
*Keywords:* Corporate taxation; Organizational form; Taxation

## 1. Introduction

The corporate income tax generates a distortion by taxing corporate income at a different rate than if the same income were earned in non-corporate form. Typically, corporations pay tax on income earned at the corporate level and then shareholders pay either capital gains or dividend taxes when it is distributed to them. The fact that the

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taxation of corporate income generally exceeds that of personal income raises the question of how distortionary the corporate income tax is in practice.

The issue is central to standard work on the subject such as Harberger (1966), Shoven (1976) or Ballard et al. (1985). These models have view some industries as being corporate (e.g., manufacturing) and others non-corporate. When simulated in computable general equilibrium models, the results tend to suggest relatively small efficiency costs from corporate taxation because activity does not easily shift between sectors.

A more recent literature, Gravelle and Kotlikoff (1988, 1989, 1993), in particular, argues that, because there can be both corporate and non-corporate production in the same industry, corporate income taxation can lead to large amounts of shifting between organizational forms and that in such a model, the deadweight loss (DWL) from the corporate income tax is extremely large. The key determinant of the DWL in these models is how much firms in the same industry shift to non-corporate forms in response to the corporate income tax and this is an empirically testable idea.

The extent to which a corporate tax increase induces firms to shift out of corporate form then becomes an important way to think about the distortion created by the corporate income tax. This is the subject of Gordon and Mackie-Mason (1990, 1994, 1997) and Goolsbee (1998) specifically but is also implicit in the large literature on how corporate taxes affect organizational form decisions.[1] Empirically, this work has generally not found major shifting of real economic activity out of corporate form in response to tax changes except in special cases. Some data and identification issues exist in most of these studies, however. First, variation in corporate tax rates over the past 30 years has been negligible. More importantly, however, the standard approach has been to look at time-series type regressions. Yet when the corporate tax rate changes, such as in 1986, many other aspects of the tax code change, as well, making it difficult to be sure that one is picking up solely the effect of changing tax rates.

This paper turns to a new data source to identify the impact of the corporate income tax using cross-sectional variation in corporate tax rates in order to avoid the typical problems of the time-series based literature. It does this by looking at variations in corporate income taxes across states and combining that with unpublished data from the Department of the Census on the organizational form by three-digit SIC code in the retail trade sector across states in 1992. Although the census data have some problems that traditional tax data do not have, and although the impact of state and federal corporate income taxes may differ (since firms have an easier time moving to different jurisdictions to avoid state taxes than across national borders), the cross-sectional approach allows for direct estimates of the impact of tax rates on the incentive to incorporate that can control for aggregate factors. In addition, there is considerable interest in the subject of state corporate income taxes themselves.

The results in the paper show three things. First, the responses in the cross-sectional data are large—at least 5 and possibly 15 or more times even the largest estimates of the responsiveness estimated in the time-series studies. Second, although taxes significantly affect the share of activity that is corporate, there is only limited evidence that they affect the operating ratios of continuing businesses such as firms' labor intensity, wages and the

[1] See, for example, such as Ayers et al. (1996), Carroll and Joulfaian (1997), Gentry (1994), Fullerton and Rogers (1993), (Scholes and Wolfson 1990, 1991) Plesko (1995) or Omer et al. (2002).