

The Regulatory Costs of Being Public

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An important explanation for the significant decline in the number of publicly listed companies in the United States is the increased burden of disclosure and governance regulations. Indeed, practitioners often point to heightened regulatory costs as the culprit of the disappearing public firms, while major deregulations such as the 2012 Jumpstart Our Business Startups (JOBS) Act were directly motivated by perceived costs of being public. Thus, understanding the role of regulations in the cost of being public and the decline in the number of public firms can address concerns about possible capital market dysfunction.

Researchers have explored whether this regulatory overreach hypothesis is correct, but the evidence is mixed. A key challenge faced by prior studies is that firms often engage in regulatory avoidance in response to regulations, as many public firm regulations are only triggered when

a firm's size exceeds a certain threshold. Firms seeking to avoid costly regulation can bunch their public float (i.e., a measure of firm size related to market capitalization) below the threshold. Such manipulation creates a selection bias, which may hinder traditional strategies for identifying the effects of these regulations. Furthermore, the methods used to quantify the regulatory effects are not actually well-suited for quantification of regulatory costs, so the existing evidence has been mainly qualitative rather than quantitative. Numerous authors have reported that quantifying the effects of regulations pertaining to disclosure and financial reporting is a difficult task and thus far a challenge for traditional empirical methods.

In our work, we attempt to advance this area of study in two respects. First, we use firms' self-selecting bunching around the regulatory threshold to infer regulatory costs. The central insight of this approach is a revealed preference



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argument: greater bunching by public firms to avoid financial regulation implies higher regulatory costs. This approach allows us to analyze multiple regulatory changes over 20 years, which provides a more comprehensive understanding of the regulatory costs borne by public firms. Second, this approach quantifies the monetary value of regulatory costs, which allows us to conduct a novel set of counterfactual analyses on the effects of regulation on the choice of public and private status. These regulatory cost estimates can also be used as critical feedback for quantitative cost-benefit analyses by regulators and policymakers.

We begin by documenting three regulatory thresholds on a firm's public float introduced since 1992. Each regulatory threshold is associated with a set of exemptions from disclosure and internal governance rules. The first threshold is \$25 million, which stemmed from the introduction of small business issuers and scaled disclosures in 1992. Firms below \$25 million float had less-stringent disclosure requirements on financial data, business operation, risk, and governance. The second threshold is \$75 million, introduced in 2002. Firms below \$75 million are exempted from the requirement set in Section 404 of the Sarbanes-Oxley (SOX) Act to hire an outside auditor to attest to their internal controls. The third threshold is \$700 million, implemented in the JOBS Act of 2012. Newly public firms below this threshold (designated as emerging growth companies) receive several financial reporting accommodations, deferred compliance with new accounting rules, and an exemption from certain parts of Section 404 of the SOX Act. These regulatory thresholds create variations in the major components of disclosure and internal governance regulations faced by public firms.

Next, we document significant bunching in the distribution of firms' public float around each regulatory threshold in years when the regulations are in place. The density of firms falls discretely at each regulatory threshold. On its own, such bunching provides compelling evidence that regulations triggered by these thresholds impose significant compliance costs on firms and that these costs seem to outweigh the regulations' potential firm-level benefits, such as lower costs of capital. We find that firms close to the thresholds manipulate their public float mainly by substituting debt for equity, without changing their operations or insider ownership.

Using a model motivated by these bunching patterns, our estimates show that the median U.S. public firm spends 0.3 percent of its earnings before interest, taxes, depreciation, and amortization on enhanced disclosure compliance, 0.9 percent on tightened internal control, and 2.1 percent on a combination of disclosure and internal control rules every year. The present value of these regulatory costs represents 4.1 percent of the median firm's equity value. Aggregate regulatory costs have increased significantly in the first few years after the SOX Act but have been declining since, especially after the JOBS Act. Smaller firms bear disproportionate amounts of regulatory costs relative to their size because a large portion of these costs are fixed. Nevertheless, various regulatory exemptions introduced by the Securities and Exchange Commission substantially alleviated the regulatory burden for firms below the regulatory thresholds.

Using the estimated regulatory costs, we investigate how regulation affects the number of public firms. We first examine the effects of regulatory costs on private firms' initial public offering (IPO) decisions using a sample of 21,066 firms backed by venture capital. We find that regulatory costs significantly impact these firms' decisions to go public: a one-standard-deviation increase in regulatory costs is associated with a 7 percent decrease in IPO likelihood. However, our counterfactual analysis shows that major regulatory changes in the 2000s have limited impact on IPO volumes. Removing the SOX Act only increases the average IPO likelihood after 2000 from 0.95 percent to 0.96 percent because many potential IPO candidates are small enough to be exempted from this regulation. Removing all estimated regulatory costs increases the average IPO likelihood after 2000 from 0.95 percent to 1.4 percent, which explains only 7.4 percent of the decline in IPO likelihood from pre-2000 to post-2000.

Next, we examine the impact of our estimated regulatory costs on public firms' decisions to go private. We find that regulation costs do not appear to be a significant driver of these decisions. This finding is likely to be explained by the fact that some of the regulatory costs are irreversible and upfront, which would enter into a firm's decision whether to go public but are sunk costs for its decision to go private.

Overall, the findings suggest that regulatory costs primarily affect a private firm's choice to either go public or remain private. Nevertheless, quantitatively, regulatory

costs only explain a small fraction of the disappeared IPOs, in contrast to the popular claim by practitioners. Instead, our results are consistent with research that suggests regulatory changes in the early 2000s did not appear to cause the decline of public firms.

NOTE

This research brief is based on Michael Ewens, Kairong Xiao, and Ting Xu, “Regulatory Costs of Being Public: Evidence from Bunching Estimation,” NBER Working Paper no. 29143, August 2021.