Distribution of Corporate Book and Taxable Income

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How do taxes affect taxpayer behavior?

Tax Economists Ask

- Observation: an excess of firms reporting $0 in taxable income.
- What is the elasticity of corporate taxable income?
How do market pressures affect reporting behavior?

Tax Accountants Ask

- Observation: excess mass of firms reporting small profits.
- Is there evidence of earnings management?
This paper brings these questions together

- Examines distribution of both book and taxable income for
  - Publicly Traded C Corporations
  - Private C Corporations

- Focus on 2018 implementation of the TCJA

- Conceptual tension in discontinuities
  - Markets create pressure to increase earnings
  - Changing marginal tax rates create pressure to decrease taxable income
  - These two behaviors have opposite predictions.

- Analysis finds that incentive to minimize taxes outweighs incentive to avoid reporting losses to shareholders
Standardized Differences

- Heart of this analysis is one of missing or excess mass
  - Financial Statement Prediction: excess small profits firms and missing small loss firms
  - Taxable Income Prediction: excess $0 taxable income mass

- Empirical tool employed: standardized differences
  - Test of statistical significance of a discontinuity in a density

- Expansion of context and intuition for measurement will help clarify results
  - How sensitive is measure to choice of bin size?
  - Can you use cross-validation techniques for bin size choice?
  - In which contexts is this measure reflective of something causal?
Worlwide Book Income: Missing Small Losses for Public Firms
Placebo Test: How Many Other Standardized Differences Are Significant?
Excess/Missing Mass Analysis: Bunching Analysis?

• Bunching methodology will provide a more rigorous way of identifying missing masses from densities.
  • Bunching mass point varies based on the stock of NOLs available.

• Pros
  • Relatively easy to implement via bunching Stata package.

• Cons
  • Requires making an assumption about the shape of the counterfactual distribution.
  • But, can relax these assumptions somewhat using truncation methods.
  • Relatively data intensive – perhaps insurmountable in the context of public firms.
Expand Direct Comparison of Treated and Counterfactual Firms

• Public and private firms are analyzed separately

• Can you use private firms as a counterfactual distribution for a more direct public/private comparison?

• Comparison might be facilitated by re-weighting private firms to match the density of public firms, rather than scaling by assets

Fig. 3. Distribution of public and private firms by size: gross receipts. Notes: Financial measures are converted to thousands of 2004 dollars based on CPI. DFL weights were generated within 2-digit industry by year to match public and private firms based on firm size as measured by average gross receipts. Source: SOI Corporate Sample, 2005–2015.
“2018 Tax Year”: tax years ending July 1, 2018 – June 30, 2019

TCJA effective for tax years beginning after December 31, 2017
  • Translation: tax years ending after December 31, 2018

Consequence: only those businesses with tax years ending December 31, 2018 and later were subject to the TCJA

Some of the firms in your density graphs are subject to the old tax law
Examination of 2018 data provides an opportunity to exploit this variation to identify a counterfactual density function:

- Treated Firms: Firms with tax years ending December 31, 2018 - June 30, 2019
- Control Firms: Firms with tax years ending July 1, 2018 - December 30, 2018

Tax years for both Treated and Control firms contained in the same calendar year.

You could compare the distribution of book/tax income for treated and control firms in this way within public or private.
Connection to Policy Context

- Motivating policy: 15% minimum tax on adjusted financial statement income.
  - Concern: will induce behavioral responses in financial statement income similar to known distortions to taxable income.

- BBB “adjusted financial statement of income” allows many big adjustments
  - NOLS
  - General Business Credits
  - Foreign AMT

- How different are “adjusted financial statement income” and “taxable income”?  
  - Only timing of income/cost recognition? Something more?

- In 2018: how many firms would have been affected by such a tax?
Thank You!