

How do small firms respond to tax schedule discontinuities? Evidence from South African tax data

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The purpose of this study

- Very little evidence exists on the impact of taxes on small firm behaviour in South Africa
- This paper endeavours to establish the causal impact of small business tax and value-added tax on SBCs
- We utilise bunching analysis to demonstrate how firms cluster around the different SBC income tax rates and the VAT registration threshold
- We focus on two types of behavioural effects: kinks (where the marginal income tax rate increases) and notch points (where the average tax rate jumps)

Year of assessment that ended/ending during the period	Taxable income (Rand)	Rate of normal tax on taxable income (Rand)
01/04/2009 - 31/03/2010	1 - 57,000	0%
	57,001 - 300,000	10% of the amount above 300,000
	300,001 and above	24,580 + 28% of the amount above 300,000

The method in more detail

- Main data source: SARS company tax database for 2010-2013
- To only obtain entities registered for the SBC regime, we filtered the main database for:
 - Legal entity status (foreign entities don't qualify)
 - Shareholders need to be natural persons
 - Gross income limitation (<20 million rand)
 - Limitation on shares held by shareholders, investment income, income from personal services
- For the VAT, we examine bunching around the VAT notch of one million rand without restricting the sample
- We then compare the behavioural kink and notch effects against a 'counterfactual' density (i.e. what the firm distribution should look like in the absence of changes in tax incentives)

Preliminary results

- We find that small firms react strongly (i.e. change behaviour) to the SBC graduated income tax schedule and the VAT registration threshold
- Elasticity estimates of the CIT are large (especially upper threshold), but smaller for VAT
- In ongoing work, we will concentrate on the anatomy of the response:
 - Is it real economic behaviour or avoidance that explains the observed clustering (outcome has policy implications)
 - What are the implications for firm growth (Are companies holding back growth for tax purposes?)
- Caution should be exercised in the interpretation of the results

An example of results: lower kink of SBC regime

- Graph shows how firms cluster below first SBC marginal tax rate
- Vertical axis shows number of firms in each income interval, and horizontal axis show distance (in R'000) from the kink
- The counterfactual is represented by the dotted lines, and illustrates how firms 'should' behave in the absence of the tax incentive

