Not(ch) your average tax: corporate taxation in a middle income country

Paper available at: https://sites.google.com/site/pierrebachas1/

The design of optimal tax policy in low and middle income countries needs to take into account tax evasion and limits to enforcement. Under these constraints, we have limited knowledge of how to set the corporate tax rate and how to determine the base. Costa Rica's corporate income tax offers a quasi-experimental setting to study optimal rates and bases under evasion. Using a novel methodology which combines bunching on revenue and discontinuity in profit, I recover important behavioral parameters for optimal tax policy. First, the profit elasticity is very large which implies that the revenue maximizing corporate tax rate is much lower than in advanced economies. Second, the revenue elasticity is smaller than the cost elasticity which rationalizes the use of wide tax bases and revenue thresholds for tax enforcement across developing countries. Third, I show strong evidence that tax evasion drives the results. Finally, a simple model of tax evasion where firms can evade on both revenue and cost but where third party information bounds revenue evasion explains the observed patterns. Third party information on revenue provides a bound on revenue evasion since declaring revenue below third party revenue implies tax evasion. The same does not hold for cost: third party reported cost only provides a lower bound on true cost. This asymmetry combined with the incompleteness of third party information generates different observed revenue and cost elasticities from the same micro evasion elasticity.

Figure 1: Identifying moments for Costa Rica tax elasticities

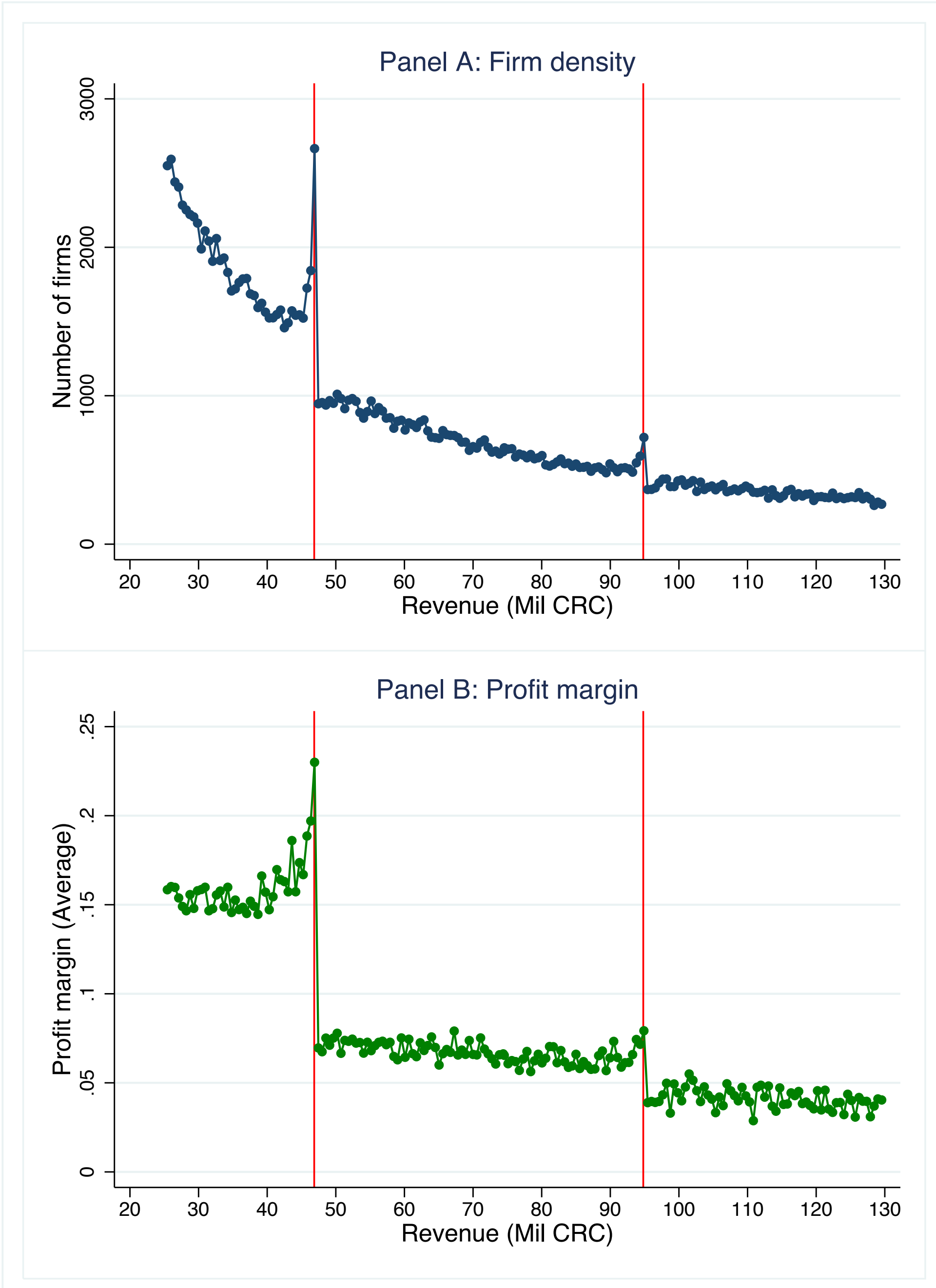


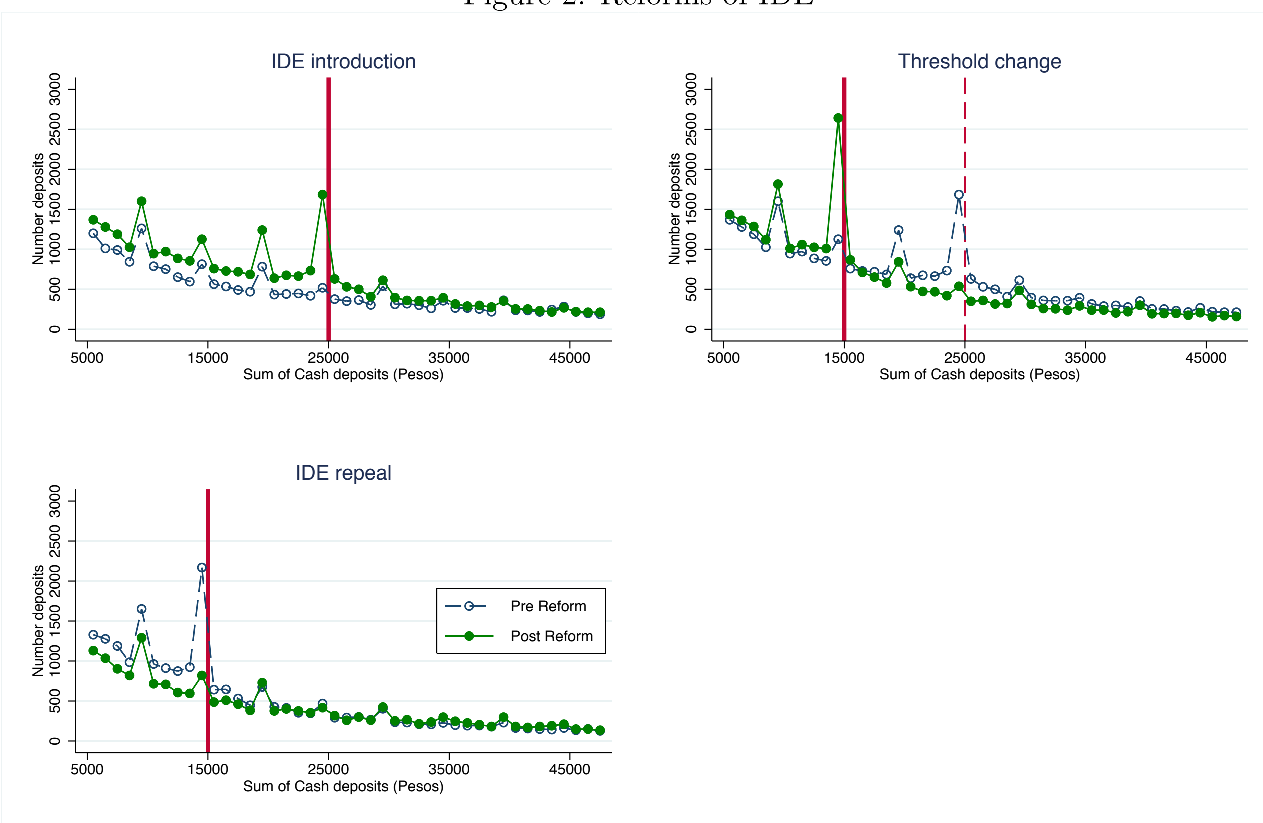
Figure 1 presents the identifying variation: firms with revenue below the first red line pay an average tax rate of 10% on their profits, of 20% in between the red lines and of 30% above the second red line. Figure 1.A provides evidence of firms bunching at each revenue threshold which allows the estimation of the revenue elasticity. Figure 1.B shows large drops in average profit margin, past each threshold. This variation is used to estimate the total profit elasticity and together with bunching to separate the profit elasticity into a cost and revenue elasticity.

Bank non-secrecy: taxation and financial service use in Mexico

Access to financial information is seen as key for tax enforcement and therefore ending bank secrecy has become a hotly debated topic, both regarding international tax avoidance and domestic tax evasion (Gordon & Li 2009, Zucman 2014). However we currently have limited knowledge of the importance of financial information for tax revenue collection and of the behavioral responses that its usage could generate. Mexico's tax on cash deposits (IDE) presents an interesting natural experiment: in order to bypass constitutional limitations on access to bank information, the government implemented a 3% tax on the sum of monthly cash deposits in excess of a threshold. The tax paid could be fully deducted against any other tax liability and financial institutions were liable for withholding the tax. IDE was introduced in 2008, reformed in 2010 and repealed in 2014.

Using panel data from a large private Mexican bank, I study responses of financial service use of bank clients. Figure 2 shows the distribution of monthly cash deposits for each of the three reforms for self-employed. We observe important behavioral response evidenced by excess mass appearing at the initial threshold, moving to the new threshold and disappearing once the law is repealed.

Figure 2: Reforms of IDE



The next steps aim at quantifying deposit losses: what share of the drop in cash deposits is substituted to non-cash deposits that are non-taxable? What is the total deposit loss taking into account substitution? Is there a second-round effect on loan conditions and demand (since a drop in deposits impacts credit conditions)? Part of this work will require identifying a group of clients consistently affected by IDE in order to think of a "treatment" versus "control" group behavior.

I also hope to obtain data from the ministry of finance on the use of financial information for revenue collection and taxpayer registration. From preliminary discussions the information was often used on the extensive margin, non registered taxpayers who paid IDE were pressed to formalize, and sometimes used on the intensive margin by reconstructing presumptive tax estimates. Estimating a potential revenue collection of IDE weighted against financial disintermediation can allow for a welfare estimation of this reform and inform the debate on bank secrecy for low and middle income countries.