Private Enterprise Development in Low-Income Countries

Exit from Informality: The Stick Treatment

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Most firms are informal throughout the developing world; and most small and medium enterprises (SMEs) (60-80%) do not register with tax authorities, lowering the tax base. This remains a persistent phenomenon despite the numerous attempts made to encourage registration. While those interventions focused largely on a carrot approach, we tested the effectiveness of a stick intervention. The latter involves threat of fines if caught SME still not registered after a grace period. Our intervention increased the rate of registration, but the overall number of registered firms remained quite small.

Introduction

Firms' informality is pervasive throughout the developing world, and in particular in the form of businesses not registering with tax authorities. According to available data, 60-80% of micro, small and medium businesses in developing countries are informal (IFC, 2013). Bangladesh is no exception as about three quarters of firms are not registered with the tax authority. The informal status of many firms substantially reduces the tax basis and therefore impacts the provision of public goods. At the same time formal and informal firms might coexist in a given market and sector and therefore compete with a substantially different costs structure.

Why do firms remain informal? According to the most acclaimed view, theorised by De Soto (1989), firms are willing to formalize but costly and cumbersome regulatory processes and bureaucratic red tapes inhibits them from doing so. This view has significantly influenced developing countries policy making, often through donor funded aid programmes and, in turn, has inspired simplification and streamlining of business entry and tax registration in recent years in Bangladesh. For instance, the World Bank Doing Business database reports that 368 regulatory reforms took place in 149 countries between 2003 and 2012, this process has lowered the average time to start a legal business from 50 to 30 days. At the same time, the cost of starting a business is one-third of what it was (World Bank, 2013). Yet, the majority of firms in many of the less developed countries remain in the informal sector.

A number of randomized controlled trials provided carrots interventions (i.e. experiments providing benefits) in the form of lowering or eliminating the costs of registration and providing free information about the registration process but found essentially no impact of such carrots on formalization (de Mel et al., 2013; De Giorgi and Rahman, 2013). Conversely, paying cash-grants equivalent to one-half to one month (alternatively, two months) of the median firm's profits leads to registration of around one-fifth (alternatively, one-half) of firms (de Mel et al., 2013).

Firms might be informal simply because they do not perceive formalization as leading to better business outcomes and public good provision. Moreover, firms might perceive that the cost of remaining informal is relatively low as the expected value of penalties might simply be too low either because of the low probability of getting caught or the size of the penalties. Indeed, motivated by de Soto (1989), policy and research attention has been on regulatory simplification and much less attention has been paid to the enforcement of regulations. De Andrade et al. (2013) is, to the best of our knowledge, one of the first studies in developing countries that investigates the effect of stricter enforcement on formalization. They find that offering information on how to register and full waiver of the registration cost (approximately USD 200) has zero effect on firm registration while a visit from a municipal inspector to check the proof of municipal licenses, and a follow-up visit if firms failed to show those documents, seems to increase the municipal registration by 21-27 percentage points. However, there is no effect on a firm's registration on a neighbouring firm being inspected (absence of spillover effects). These findings suggest that sticks (i.e.

punishments) rather than carrots seem more promising at getting firms to formalize. However, this stick treatment seems to have its own limitations as many of the firms assigned to get inspections were never found by the inspectors, and some informal firms the inspectors had previously closed down were found open again by the time of the follow-up survey. While innovative, this stick intervention does not however deal with the most direct and dominant form of informality: the registration with tax authorities that has a direct link to the country's potential revenue base and thus public goods provision. Furthermore, the form of stick treatment implemented in De Andrade et al. (2013) might fail at improving government revenues. As the authors note, revenues are split among the Federal, State, and Municipal governments, which lessens the incentive of the municipality to pay for more inspections.

In the current paper, we implement a “stick” intervention directly dealing with a country's tax authority. A stylized fact about informality, as evidenced from cross-country data analysis, is that informality is negatively associated with a country's level of development (Loayza and Rigolini, 2006; Schneider, 2005). Conventionally economists have explained such negative correlation in terms of simplified regulatory regime and relatively higher benefits from formalization (e.g. access to credit, public good provision etc) in higher income countries. Clearly also the State's enforcement mechanism and capacity could be an important part of the story in high income countries. Stricter enforcement and better state capacity makes it difficult for firms to operate informally and those aspects seem to have been overlooked in the previous discussions on informality. Our paper attempts to address this enforcement issue in an experimental setting in Bangladesh, a low income country characterized by a very high level of informality.

Methodology and results

In our experiment, firms are randomly split into treated and control groups. Treated firms are therefore visited by tax authority representatives who deliver an official letter from the Bangladesh National Tax Authority stating the punishment if a firm fails to register with the tax authority within a given timeframe. On the other hand, control firms do not receive any visits. **We find that the intervention is effective at increasing the rate of registration among treated firms, while firms located in the same market but not treated do not seem to respond significantly**, which is consistent with the no-spillover results of the municipal inspections in De Andrade et al. (2013). The effects are small in levels but extremely large in percent terms, relative to the control group. Three months after the intervention only up to 20 percent of the firms declared to be registered in the treatment group versus 15 percent in the control group (post intervention), which amounts to a 30 percent increase in registration.

Given that we have reason to believe that firms might misreport their registration status, we also analyse more stringent definitions of registration. In particular, a smaller share of firms can give us their registration number, 4 percent in the treatment versus 1.5 percent in the control group, and even fewer firms are able to show us a valid tax ID card, 3.6 percent versus 1.3 percent in the control group. Clearly those effects are small in levels but would imply a tripling in the number of firms forming the country’s tax base. We also find that, consistently with a simple theoretical framework, only more profitable firms at baseline (i.e. more profitable firms before intervention), above median baseline revenues (see Figure 1 below), respond to the threat and register.

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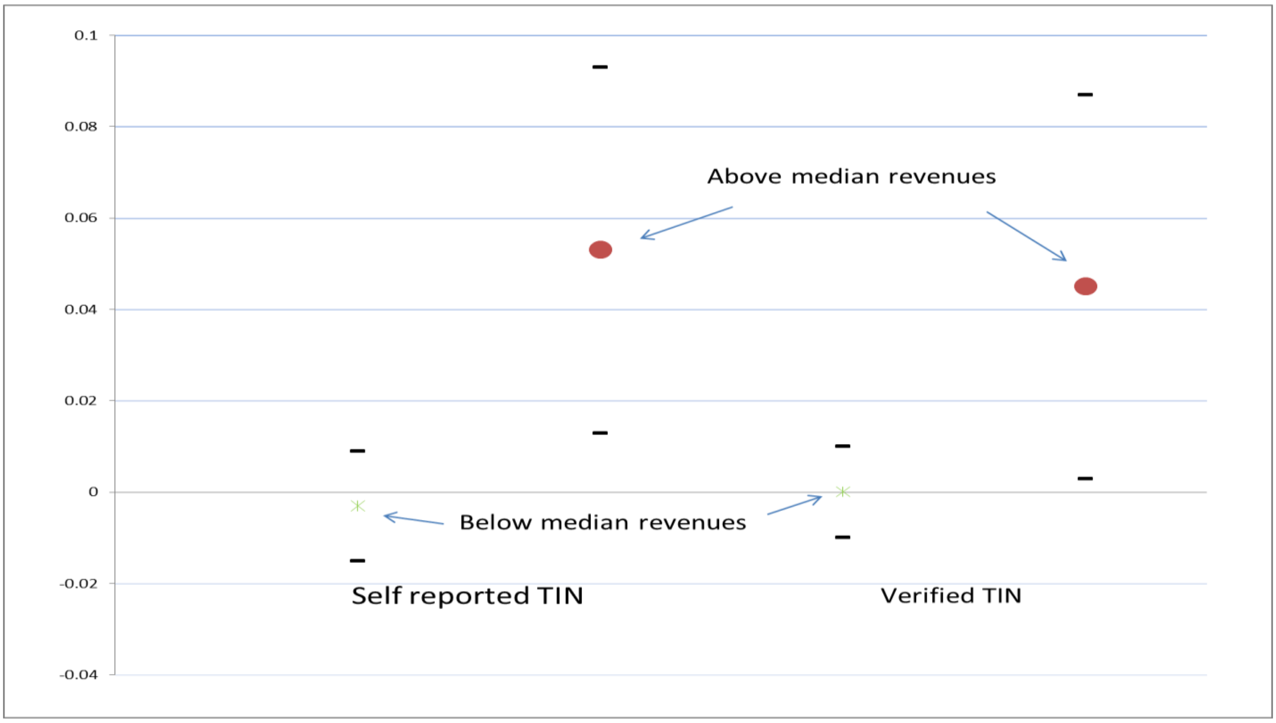
Figure 1: Effect of the treatment for firms Above and Below median revenues at baseline



Note: black dashes are 95% confidence intervals.

Policy recommendations

As far as we know, our intervention is one of the first ones in a developing country that deals directly with the issue of enforcement and informality that has direct link to the country's tax base. Indeed the majority of the work in this field approaches the issue of informality in terms of registration with business registrar, business association, and registration and licensing with municipal authority, and mainly adopting the "carrot" solution. As such, our paper has important policy implications regarding improving a state's enforcement capacity.

In particular we find the "stick" treatment to be effective at increasing registration rates for tax purposes; however the overall number of firms that registered is small. Noticeably, we find that higher turnover (revenues) firms tend to respond more to the regulation and this can be appreciated better in percent terms rather than in levels. From a policy perspective this means that the threat of punishment might not be enough to modify firms' behaviour for smaller/lower revenues firms. At the same time the policy maker might want to target policy different policy interventions to different firms depending on observable dimensions like turnover (revenues) and size.

Moving Forward…

Further research is needed into whether the actual enforcement punishment might change the behaviour. In our study design we did not have the opportunity to analyse the effect of actual penalties been levied against non-compliant firms. It clearly would be important to know whether the enforcement of those penalties would result into larger registration effects, and whether that would extend to firms of different sizes.