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Does inducing informal firms to formalize make sense? Experimental evidence from Benin[☆]

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ABSTRACT

Efforts to bring informal firms into the formal sector are often based on a view that this will bring benefits to the firms themselves, or at least benefit governments through increasing the tax base. A randomized experiment based around the introduction of the *entreprenant* legal status in Benin is used to test these assumptions, along with supplementary efforts to enhance the presumed benefits of formalizing to firms. Few firms register when just given information about the new regime, but our full package of supplementary efforts boosts formalization by 16.3 percentage points. However, this formalization does not bring firms higher sales or profits, and the cost of formalizing these firms exceeds the added taxation they will pay over the next decade. We show how better targeting of these policies towards firms that look more like formal firms to begin with can increase the formalization rate and improve cost-effectiveness.

1. Introduction

A large majority of micro, small, and medium-sized firms throughout the developing world operate in the informal sector (La Porta and Shleifer, 2014a). This is certainly the case in Benin, where the national statistics agency has estimated that the informal sector represents up to 70% of GDP and 95% of employment (INSAE, 2009). There are two main reasons why governments usually view these high levels of informality as a problem.[1] The first, spurred by the work of De Soto (1989), is the idea that informality is costly for the firms themselves, who are unable to access bank financing, public contracts, or government programs, and suffer from low productivity as a result. The second reason is the idea that a large informal sector represents lost tax revenues for the government. In response, many countries have implemented business entry regulation reforms designed to make it easier for firms to become formal (World Bank, 2016). However, even after these regulatory reforms, the majority of firms remain informal in many developing countries (Bruhn and McKenzie, 2014), raising the question of whether governments should undertake additional efforts to induce informal firms to formalize.

We use a randomized experiment with 3600 informal businesses in Benin to help answer the question. We do this in the context of the launch of the *entreprenant* legal status, a simplified regime being offered to small informal businesses in 17 African states with the goal of making it easier for them to enter the formal economy. In the pilot phase of launching this new status, we worked with the Government of Benin to experimentally test three interventions designed to induce these informal firms to register. The first treatment group received in-person visits in which the new status was explained, the potential benefits verbally described, and advisors helped firms with paperwork as needed. A second treatment aimed to enhance the benefits of formalizing by offering business training and support opening a business

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[1] See, for example, Levy, 2008; Farrell, 2004; Perry et al., 2007; and La Porta and Shleifer, 2014b.

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bank account. The third treatment built on the first two by also offering tax mediation services. A supplementary treatment provided information in the form of leaflets to test whether information alone had an impact.

We use administrative data on formalization coupled with two rounds of follow-up surveys to measure the impact of these treatments. Only 2% of the control group formalized over a two-year period, showing that, in the absence of any intervention, most informal firms stay informal. All three treatments had significant impacts on formalization, with the impacts larger as more supplementary services were offered: there was a 9.6 percentage points increase in registration in the first treatment group, 13 percentage points in the second, and 16.3 in the third, with these differences between groups all statistically significant. In contrast, information leaflets alone had no impact on formalization. We then measure the consequences of formalizing for these firms. Formalizing leads to increased participation in business training, more formal accounting, lower tax harassment, and less taxes paid (due to a tax exemption in the year after formalizing). However, formal firms are not significantly more likely to obtain business bank accounts or loan financing, do not gain more customers, and have no significant gains in sales, profits, or standard of living.

While the benefits of formalizing for firms are thus modest, the cost of the intervention is not. We calculate an average cost of US $1200–2200 per firm formalized. Even assuming 100% compliance with tax payments, and that firms achieve turnover growth at the very top of our estimated confidence interval, we calculate that it would take a decade or more for this additional tax revenue to cover the costs of formalizing. As such, our analysis suggests that while introducing a simplified registration system offers at least time-saving benefits for firms that want to formalize on their own, adding additional services or in-person visits to attempt to get additional firms to become formal is unlikely to pass a cost-benefit test.

Although these results suggest it is not beneficial for governments to try to formalize all firms, better targeting may identify a subgroup for whom formalization makes more sense. We examine heterogeneity in impact according to key characteristics specified in a pre-analysis plan.[2] We find the formalization impacts of our treatments are higher for male business owners, those with more education, those operating outside the biggest market in Cotonou (Dantokpa), and those that we classified ex ante as being more similar to businesses already formal using species classification (De Mel et al., 2010). Targeting on these characteristics could increase formalization rates to over 20%, and lower the cost per firm formalized to $600–700, which could be recouped in tax revenues within 6 to 13 years. However, we still find no profits or sales benefit to these targeted firms of formalizing.

This work builds on a literature which tests different interventions designed to bring informal firms into the tax system. Providing information and removing the upfront cost of registration had no effect on tax registration in randomized experiments in Sri Lanka (de Mel et al., 2013), Bangladesh (De Giorgi and Rahman, 2013), Brazil (Andrade et al., 2016), Malawi (Campos et al., 2015), or Colombia (Galiani et al., 2017). We add evidence from Africa, where development levels are lower, and the informal sector larger still. One interpretation of this evidence is that burdensome regulations are not the main reason these firms are informal, but instead they are rationally choosing to be informal because the benefits of formalizing are low for them compared to the tax and other costs (Maloney, 2004).[3] The limited success of these studies in getting firms to formalize has meant there have been few opportunities to measure the benefits of tax registration for informal firms. Some evidence is available from Sri Lanka, where de Mel et al. (2013) paid firms to formalize, and from Brazil, where Andrade et al. (2016) used tax inspectors to force formalization. In neither case were firms able to benefit from many of the purported advantages of formal status, including access to business banking, participation in government training programs, receiving government contracts, or increased certainty over taxes. De Mel et al. (2013) find some impact of formalization on firm profitability, but this impact appears to be driven by a handful of firms for which profit increased substantially, with most firms experiencing no change. Our paper shows this finding of little benefit to informal firms from formalizing continues to hold, even when additional interventions were undertaken to attempt to increase these supposed benefits, and complements this with analysis on the taxation side, which was not present in these earlier studies. Moreover, because of the larger sample, we can provide the first guidance over targeting of such efforts towards firms more likely to respond.

2. Formalization in Benin

The seventeen OHADA (*Organization pour l'Harmonisation en Afrique du Droit des Affaires*) member countries adopted a revised General Commercial Law in December 2010, which came into effect in May 2011. The new law, introduced the *entreprenant* status, a simplified legal regime specifically designed for small entrepreneurs, whose intended objective is to facilitate the migration of businesses operating in the informal sector into the formal sector. However, the law did not make explicit how the *entreprenant* status practically functioned, nor the specific combination of incentives that it would include, instead allowing each country to fill in the vacuum through ad-hoc secondary legislation and institutional changes. Benin, as a member of OHADA, was the first OHADA country to implement the *entreprenant* legal status.[4]

The *entreprenant* status can apply to a physical person running a micro or small business involved in any type of activity. Formalization with this new status is easy, free of charge and takes only one business day. The introduction of the *entreprenant* status is part of a broader effort from the Government of Benin to simplify and reduce the costs of formalization. Reforms of other existing legal status were implemented a few months before the creation of *entreprenant* status, and included the creation of a one-stop shop for business registration, and a significant reduction of the registration costs associated with the main existing legal status. The registration cost for individual enterprises dropped from CFAF 65,000 (USD109[5]) to CFAF 10,000 (USD17) and from CFAF 225,000 (USD378) to CFAF 17,000 (USD29) for limited liability companies (only the *entreprenant* status is totally free of charge). For all statuses, the time to register was reduced to one business day. The only documentation required to become formal is a legal ID, and then firm owners fill out a short form, provide two pictures and sign a declaration saying that they were never imprisoned. As these reforms (including the creation of the *entreprenant* status) were implemented recently, information on the new conditions to formalize was not likely to be known by the majority of informal businesses operating in Cotonou at the time of the start of the program.

Formalizing in Benin means to choose a legal status and register at the GUFE (*Guichet Unique de Formalization des Entreprises*), the one-stop-shop for formalization that gathers services of the chamber of

[2] This study was registered in the AEA RCT Registry on October 7, 2014, prior to any follow-up survey data being collected https://www.socialscienceregistry.org/trials/515

[3] Larger impacts on formalization have occurred in settings where firms could register for a status not directly linked to tax registration, such as a municipal license in Peru (Alcãzar et al., 2010), and a business registration certificate in Malawi (Campos et al., 2015). Non-experimental evidence from a reform in Mexico to municipal registration is mixed as to whether this induced registration of existing informal firms. Bruhn (2011) and Kaplan et al. (2011) both find this reform increased formal registrations by 5%, but

(*footnote continued*)
disagree as to the extent to which this came from registration of existing informal firms versus new entrants registering.

[4] Other developing countries often have a similar form of legal status, but these typically require more documentation and are usually not free as in Benin. See Appendix 1 for a description of similar legal statuses in other countries in West Africa.

[5] Exchange rate on June 1, 2016 on *oanda.com*: 1 USD = CFAF 596.