



## Private Enterprise Development in Low-Income Countries

### Enhancing the Benefits of Formalization: Experimental Evidence from the Introduction of the *Entrepreneur* Status in Benin

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***Using a randomized experiment, we show that enhancing the benefits of formalization through personalized assistance induces more firms to formalize. However, formalization appears to offer limited benefits to the firms, and the costs of assistance are high, suggesting that such enhanced formalization efforts are unlikely to be cost effective.***

### Motivation and Research Questions

Existing evidence suggests that easing entry regulations and providing information on the formalization process has had only very limited impacts on the formalization of existing informal firms, especially with regards to tax registration<sup>1</sup>. One explanation is that although, in theory, formality has advantages in terms of access to business banking, government training programs, and tax certainty, in practice many firms which formalize fail to receive these benefits. As a result, the costs of formalization exceed the benefits, and so most firms decide to remain informal.

In this study, we provide evidence from an African context of the willingness of informal firms to register after introducing a simple, free registration process, and we test the effectiveness of supplementary efforts to enhance the presumed benefits of formalization, by facilitating its links to government training programs, support to open bank accounts, and tax mediation services.



Examples of informal businesses targeted by the program

### Context of the *Entrepreneur* Program

Benin is a low income country in West Africa where the informal sector represents up to 70 percent of GDP and 95 percent of employment<sup>2</sup>. Benin, along with 16 other OHADA<sup>3</sup> countries in Africa, revised its

<sup>1</sup> For a review of the literature see Bruhn, M. and McKenzie, D. (2014): “Entry regulation and formalization of microenterprises in developing countries”, World Bank Research Observer, 29(2): 186-201.

<sup>2</sup> INSAE, (2009): “Comptes nationaux,” Cotonou.



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commercial laws to introduce a new status called *entrepreneur*. This status is designed for micro and small businesses, and registering with this new status is easy, free of charge and takes only one business day. The World Bank Group worked with the Government of Benin to pilot different approaches for how this status should be operationalized. These different approaches were evaluated using a randomized experiment. Note, however, that formalizing entails both costs and advantages to firms: when becoming formal, firms do gain access to many key benefits, such as credit access, training programs, etc, but also will have to pay taxes.

### Methodology and Intervention Design

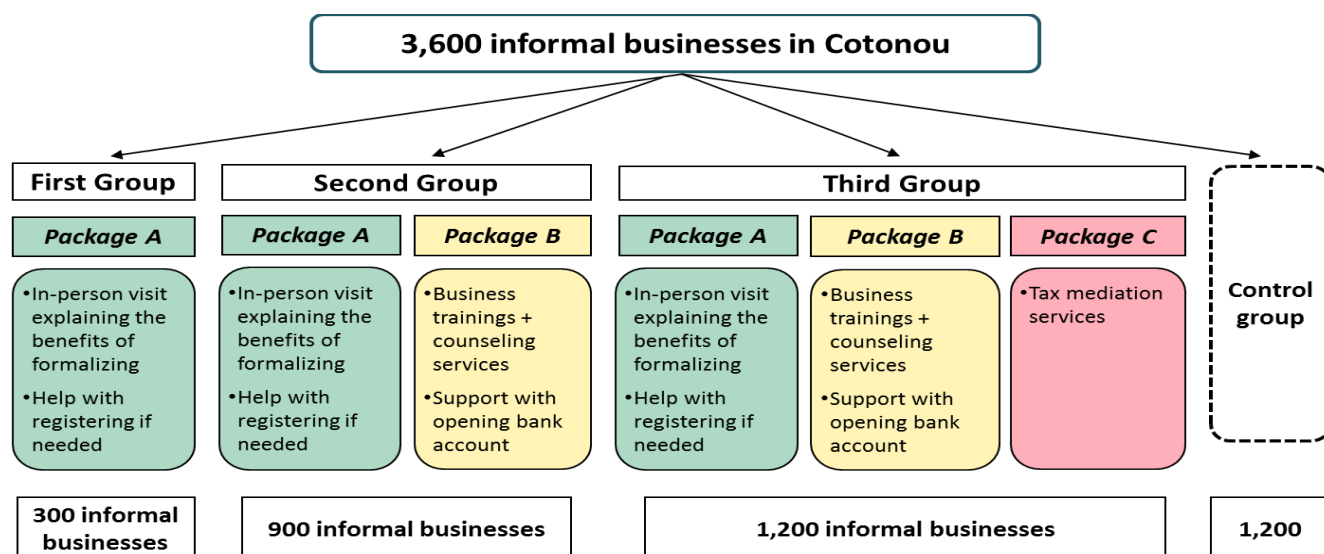
We used a listing survey of businesses around Cotonou in early 2014 to obtain a sample of 3,596 informal businesses. These were randomized into four groups:

- A control group (1,197 firms).
- Treatment group 1 (301 firms): received an in-person visit explaining the benefits of formalizing, and help with registering if needed.
- Treatment group 2 (899 firms): received the in-person visit, and also facilitated access to government training programs, and support to open a business bank account designed for the *entrepreneur*.
- Treatment group 3 (1199 firms): in addition to the services provided to groups 1 and 2, was also offered support in dealing with the tax authorities including tax mediation services.

The random allocation of firms ensures that all groups are similar before the implementation of the program and that any difference measured post-program implementation can be attributed to program impact and not to another factor or to a selection bias<sup>4</sup>.

Figure 1 below describes the organizational chart of the intervention.

**Figure 1: Study design**



<sup>3</sup> Organisation pour l'Harmonisation en Afrique du Droit des Affaires (African Organization for Commercial Law Harmonization).

<sup>4</sup> Selection bias can arise when the group of firms receiving the program is different from the group of firms that serves as a comparison to measure program impact. This is often the case when beneficiaries are not selected randomly.



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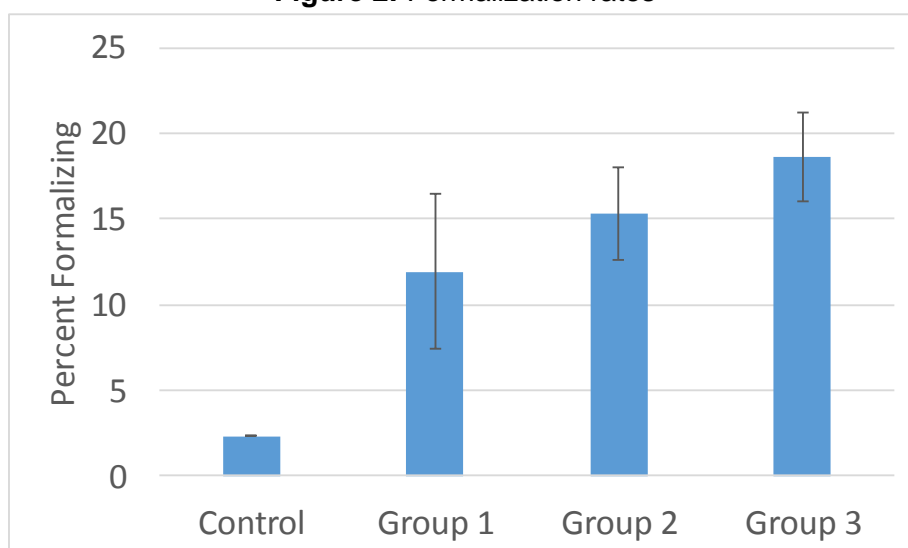
We later implemented a subsequent treatment to test whether information alone improved take-up on formalization by giving half the control group leaflets explaining the new status.

Monthly administrative data on formalization allowed us to trace out the formalization response, while follow-up surveys one and two years after baseline (i.e. a survey conducted before the intervention took place) enabled us to measure impacts on firm outcomes.

### Results

Information alone had almost no effect on formalization. Adding the supplementary services did lead to large increases in take-up of the new status. The most comprehensive package of services (Group 3) boosted the formalization rate by 16.3 percentage points (Figure 2).

**Figure 2: Formalization rates**



Note: Error bars show 95% confidence intervals.

We use pre-specified tests of heterogeneity in take-up to learn how governments could best target these services. We find the impact on formalizing is higher for male business owners, those with more education, those operating outside the biggest market in Cotonou, and those that we classified ex-ante as being more similar to already formal businesses. Targeting on these characteristics could boost the formalization impact to 27 percentage points. Even with this targeting, most informal firms choose to remain so.

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 standards of living.

### Policy implications

The new *entrepreneur* status does offer an improvement for those firms that want to become formal, making the process easier and cheaper. However, the existence of this status alone is not enough to induce many existing informal firms to formalize.



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The supplementary services we tested do increase these formalization rates. However, while the benefits of formalizing are modest, the cost of the intervention is not. We calculate an average cost of US\$1,200-2,200 per firm formalized without targeting, and at least \$600 per firm formalized even if targeting were used. This is large relative to the average monthly profits of these firms of only \$79 and to the tax collection the government can expect to receive from such firms. As such, our analysis suggests that adding additional services or in-person visits to explain this new status is unlikely to pass a cost-benefit test.

Alternative strategies, including targeted enforcement may be needed to bring more of the larger informal firms into the formal system.

### Moving Forward...

The project's next step will be to disseminate these results in Benin and other OHADA countries that will be implementing similar programs in the next years. This project will be also presented in international academic conferences in Development Economics. Finally, we will submit these findings to peer reviewed academic journals.

These findings suggest that while building an easy-to-register system is necessary, more evidence is needed to understand the next step and bring a more significant share of informal firms into the formal sector. Alternative strategies suggested by the literature in other contexts could be experimented in West Africa. It includes directly paying firms<sup>5</sup> or relying on enforcement efforts to get targeted firms to become formal<sup>6</sup>.

<sup>5</sup> De Mel, S., D. McKenzie, and C. Woodruff. (2013): “The demand for, and consequences of, formalization among informal firms in Sri Lanka”, *American Economic Journal: Applied Economics*, vol. 5(2): 122-150.

<sup>6</sup> Andrade, G. H., Bruhn, M., and McKenzie, D. (2016): “A helping hand or the long arm of the law” Experimental evidence on what governments can do to formalize firms”, *World Bank Economic Review*, vol. 30(1): 24-54.