

Can mobile money adoption induce microenterprises to formalise? Evidence from a field experiment in Burkina Faso

Authors: Ky Serge Stéphane and Rugemintwari Clovis

This research investigates whether the adoption of mobile money can induce microenterprises to formalise. We use as setting Burkina Faso and exploit survey data on informal business and randomised incentives and information. Our major findings indicate that mobile money adoption by informal firms increases their transition to the formal sector. Considering our treatments, we show that their impact depends on whether the recipient of the programme indicated being willing to formalise or adopted the merchant account at baseline. Therefore, our findings reveal that policies that promote formalisation should be carefully designed to improve their efficacy.

Introduction

In developing countries, the prevalence of informality is often associated with lack of information about advantages associated with formalisation, high costs of registration, cumbersome process to have required documents, and to some extent the delay for processing (Bruhn & McKenzie, 2014, 2018; FinScope, 2016; World Bank Group, 2019). Taking Burkina Faso as the case study, this research builds upon recent studies on policies designed to bring small firms into the formal sector (Benhassine et al., 2018; Campos et al., 2018), the effect of the costs of operating formally (Galiani et al., 2017) and barriers to mobile money adoption by SMEs and its consequences (Bastian et al., 2018; Dalton et al., 2019). In fact, it has been shown that mobile money can increase household resilience, financial inclusion, security, savings, payments and poverty reduction with a more pronounced outcome for female-headed households (Aker et al., 2016; Bharadwaj et al., 2019; Economides & Jeziorski, 2017; Jack & Suri, 2014, 2016; Ky et al., 2018; Munyegera & Matsumoto, 2016; Riley, 2018). In this context, we investigate whether mobile money adoption can induce microenterprises to formalise in Burkina Faso. Hence, this study contributes to the existent literature on the barriers and opportunities associated with mobile money adoption and makes several contributions. While our study is close in spirit to that of Dalton et al. (2019) conducted in Kenya, the mobile money account for business (merchant account) in Burkina Faso offers unique features. As such, whereas only registered firms can adopt mobile money in Kenya, Burkina Faso has a Bronze¹ merchant account designed for informal firms, which allows us to tackle simultaneously mobile money adoption and formalisation in this research.

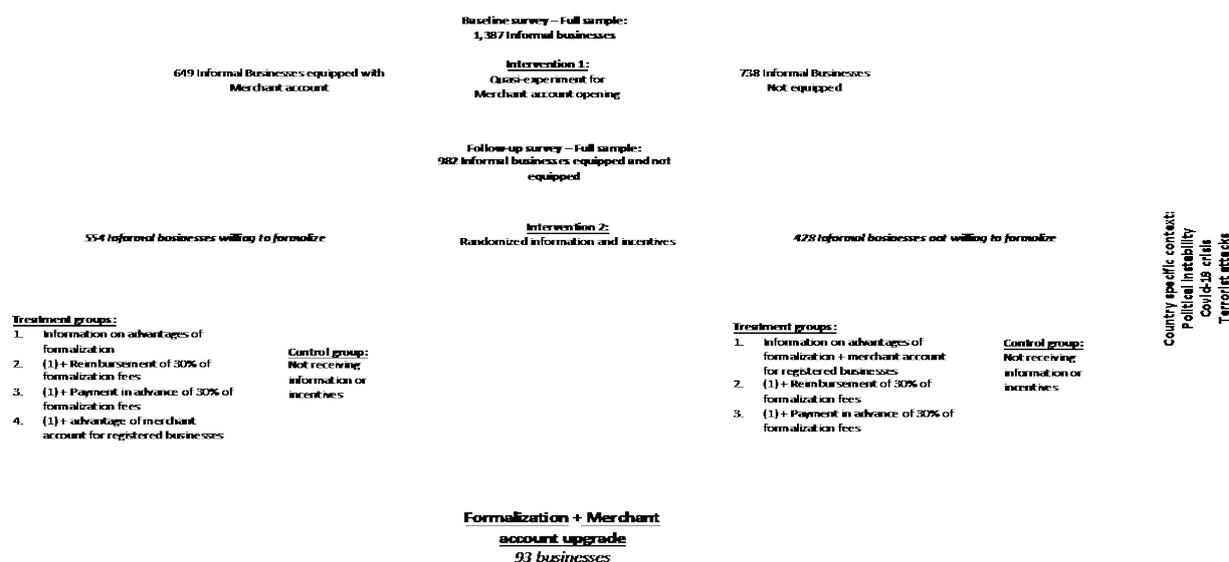
Policy context

Since 2015, Burkina Faso faces acute security threats triggered by frequent terrorist attacks in most parts of the country (HRW, 2020). The context has recently worsened, culminating in two consecutive coups d'état on

¹ Note that registered firms can open a Gold merchant account that mimics Kenya's Lipa Na M-Pesa with better options; for instance, in terms of cash-out ceilings.

24 January 2022 and 30 September 2022. Such a volatile political context, coupled with the Covid-19 crisis and a hampered economic activity, threatens livelihoods and exacerbates existing vulnerabilities. In addition to this fragility, informality is widespread mainly among small firms with low productivity and which do not pay taxes. The particular features of mobile money designed for informal businesses (i.e. the Bronze merchant account) offer a specific setting to investigate whether it could be leveraged to supplement existing policies aimed at promoting small firms' formalisation.

Figure 1: Conceptual framework.



Note: This figure describes the different steps of our project in the specific context of the country.

Methodology

We collected survey data on informal businesses in three cities of Burkina Faso: Ouagadougou, Bobo-Dioulasso and Ouahigouya. We exploit a quasi-experiment for merchant account opening during the baseline survey. Precisely, we present the mobile money merchant account to business owners and let them decide whether they agree to open the account. We used these data to conduct our first empirical analysis on the determinants of merchant account adoption among informal businesses, while taking into account both the political and the covid-19 crises. Next, we conducted a follow-up survey on the same informal businesses during which we randomised incentives offered to them for registration. Our treatment packages included information about the registration process, a merchant account for registered businesses (i.e. a Gold merchant account), and coverage of 30% of registration fees (through reimbursement or payment in advance). We designed specific incentives depending on the responses (obtained during the baseline survey) about whether businesses were willing to formalise. The data collected during this follow-up survey were used to investigate the effect of using a Bronze merchant account on the formalisation decision². Furthermore, we evaluate which incentives are the most effective in the formalisation decision. We complement our analysis by constructing a formalisation score based on the willingness and/or capacity of business owners to provide all required documents (ten in all) for business registration. Thus, a score of 0 indicates that the business owners did not

² Recall that only firms willing to transition from the informal to formal status can upgrade from a Bronze to a Gold merchant account.

provide a single document while a score of 10 indicates that they managed to secure all the required documents in due time and were able to engage in the registration process.

Main findings

Two major findings emerge. First, we find that business owners who perceive that their businesses are located in an unsafe area or face challenges to handle small cash are more likely to adopt a mobile money merchant account. Interestingly, business owners able to conduct their activities remotely are more likely to adopt mobile money merchant accounts and to overcome the negative effect of the temporary closure of businesses during the covid-19 crisis. Furthermore, we find that business owner factors such as being younger, male, and formally educated, as well as having a household with better living conditions and a business with higher turnover, all increase the likelihood to adopt a merchant account. The results are robust to alternative model specifications and dependent variables.

Second, we find a positive impact of merchant account adoption on the decision to formalise, particularly for businesses that are comparatively younger (less than 3 years old), lack sales records or are located outside the political capital Ouagadougou. Hence, by financially including informal businesses, a merchant account appears to be a stepping stone toward formalisation. Interestingly, we find that the businesses that received information about the registration process, the Gold merchant account, and the partial coverage of registration fees (through reimbursement or payment in advance), are more likely to formalise compared to those in the control group (i.e. those that did not receive neither information nor financial support). Particularly, our findings also reveal that - for businesses already inclined to formalise - the 30% registration fees coverage through reimbursement has greater impact on formalisation. Instead, for businesses reluctant to formalise, the 30% coverage offered through payment in advance is most effective in inducing formalisation. We interpret this result as time preference problems: businesses that were already willing to formalise appear ready to incur the costs of formalisation before being reimbursed, while those not willing to formalise prefer to receive the support in advance before engaging in the formalisation process.

Policy impact

This study suggests that the adoption of mobile money designed for businesses could be leveraged as a possible channel for increasing the benefits that come with formalisation. Subsidies meant to alleviate registration fees are clearly important, and when designing them policy makers should pay attention to the disbursement channel as well as to the characteristics of the targeted firms.

Moving forward

Our next steps will consist in investigating the potential (short-term) effects of merchant account adoption and formalisation on firms' performance. This will help better understand the mechanisms underlying the positive impact that we found. Aside from this immediate goal, there is a possible follow-up to our current project. As female take-up was very low, representing only 18% of our final sample, a possible extension would be to rebalance the sample as well as to thoroughly investigate the medium-term effects of our interventions on access to finance and firm performance. Towards this aim, it would be important to explicitly target women while offering incentives that were highlighted during our baseline survey. These were financial and digital literacy sessions, to which we could add subsidies if the budget were to allow it.

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