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Short-Term Impacts of Formalization Assistance and a Bank Information Session on Business Registration and Access to Finance in Malawi

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Abstract

Despite regulatory efforts designed to make it easier for firms to formalize, informality remains extremely high among firms in Sub-Saharan Africa. In most of the region, business registration in a national registry is separate from tax registration. This paper provides initial results from an experiment in Malawi that randomly allocated firms into a control group and three treatment groups: a) a group offered assistance for costless business registration; b) a group offered assistance with costless business registration and (separate) tax registration; and c) a group offered assistance for costless business registration along with an information session at a bank that ended with the offer of business bank accounts. The study finds that all three treatments had extremely large impacts on business registration, with 75 percent of those offered assistance receiving a business registration certificate. The findings offer a cost-effective way of getting firms to formalize in this dimension. However, in common with other studies, information and assistance has a limited impact on tax registration. The paper measures the short-term impacts of formalization on financial access and usage. Business registration alone has no impact for either men or women on bank account usage, savings, or credit. However, the combination of formalization assistance and the bank information session results in significant impacts on having a business bank account, financial practices, savings, and use of complementary financial products.

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1. Introduction

The informal sector accounts for 30 to 40 percent of total economic activity in the poorest countries, and a much higher share of employment (La Porta and Shleifer, 2014, Gollin, 2002). It is particularly pervasive in poor African countries such as Malawi, where 93 percent of firms have not registered with the government.[1] These firms are largely small and unproductive (La Porta and Shleifer, 2014), and the informal status of these firms is often associated with a number of costs to firms, including lack of access to external finance (de Soto, 1989; World Bank, 2013). Governments around the world have attempted to reduce informality by making it easier to formally register a business, with the *Doing Business* project of the World Bank finding 368 reforms took place in 149 economies between 2003 and 2012 (World Bank, 2013).

However, despite these efforts to make it easier for firms to formalize, a recent review of the effects of these reforms by Bruhn and McKenzie (2014) finds that the reforms have had limited effects, with the majority of existing informal firms not formalizing after it became easier to do so. This is seen in the results of four recent randomized experiments to encourage formalization. In Sri Lanka, de Mel et al. (2012) find no impact of information and free registration costs on registration with the tax authority, but they do find that a significant number of firms are willing to register when offered money to register. In Brazil, Andrade et al. (2014) find no impact of either information or of free registration costs on registration under a one-stop shop for municipal, state, and federal taxes, although they do find that increased municipal enforcement does result in more municipal registration. In Bangladesh, de Giorgi and Rahman (2013) find no impact of an information campaign on business registration (separate from tax registration). Finally, in Lima, Peru, Alcázar et al. (2010) and Jaramillo (2009) find that information and the reimbursement of direct costs leads about one quarter of those treated to register at the municipal level. These existing studies suggest that the majority of informal firms do not find the benefits of registering for taxes at the national level to be enough to outweigh the costs that formality brings in the form of taxes. At the municipal level tax enforcement tends to be much higher than at the national level. However, annual municipal licensing fees tend to be relatively modest, so

[1] Source: 2004-05 Integrated Household Survey, which shows 93 percent of firms are not registered with the Department of the Registrar's General (DRG).

firms are more willing to take this step. Finally, this work suggests that information alone might not be sufficient to motivate firms to register.

This paper presents initial results from a randomized experiment designed to increase business formalization in Malawi. While many countries have moved towards simultaneously registering businesses in a national registry, obtaining a tax registration, and also registering at the municipal level, Malawi, like a large number of countries in Africa (Figure 1), separates the process of business registration from that of tax registration. Business registration provides the government with information about the existence of a firm, and the firm with a business registration certificate. In Malawi, this business registration certificate is the main form of identification needed to open a business bank account, register land, and apply to government assistance programs. Tax registration allows the firm to provide tax invoices to customers and access government procurement systems, but also requires them to pay national taxes.

We randomly assign informal firms to receive detailed assistance in obtaining a business registration certificate, or a business registration certificate along with tax registration. In both cases we make the process as costless as possible, by visiting the business in person, helping them to fill out the registration forms, transporting the registration application including photo of the business owner to and from the registration office, and paying all fees associated with registration. This resulted in an extremely high take-up rate for business registration, with 75 percent of those offered this assistance obtaining a business registration certificate. In contrast, only 4 percent of those offered tax registration assistance obtained a Tax Payer Identification Number (TPIN). At an all-in cost of approximately $27 per business registration achieved, this intervention is a low cost way of enabling firms to become more formal.

This high take-up of business registration enables the opportunity to measure the impact of this type of formalization on firm behavior and firm outcomes. Increased access to finance is the mechanism most likely to change in the short-term. The question is then whether business registration by itself is enough to enable firms to set up business bank accounts, or whether they also need assistance in this step. A third treatment arm offered both assistance in business registration along with an information session at a private bank, and the offer of a business bank

account at this bank. We find business registration alone does not result in any increase in the likelihood of having a bank account, savings, borrowing, or separation of household and business accounts. However, coupling the business registration assistance with the bank information sessions leads to a higher rate of formalization than with registration assistance alone, as well as resulting in an increase in the proportion of firms with a business bank account, increased separation of business and household finances, and greater access to insurance. These short-term results suggest that complementary efforts to enable firms to access the purported benefits of formalization may be needed for these benefits to actually be realized.

We oversampled female-owned enterprises in order to be able to examine how these interventions differ by gender. Given that female-owned enterprises tend to be smaller and have a lower capital base than male-owned enterprises on average, female-owned enterprises may be further away from the margin of formalizing and less likely to respond to the assistance. We find this to be the case when business registration is offered together with tax registration, but not for business registration alone. Although access to finance is often thought to be particularly difficult for female-owned businesses, the gender gaps in who has a bank account in Africa tend to be small (Demirguc-Kunt and Klapper, 2012), and in fact we find female business owners to be more likely to have a personal bank account than male business owners in our baseline. As a result, we find smaller effect on bank accounts of the bank information and business bank account treatment for women than for men.

A growing literature has shown some positive effects of access to personal bank accounts on microenterprises' investment and profits (Ashraf et al, 2006; Brune et al, 2011; Dupas and Robinson, 2013; Schaner, 2013). However, many microenterprises do not separate household and business resources (e.g. Drexler et al, 2013). The combination of bank information sessions on separating these expenses and having a separate business bank account may better help owners to separate business and personal expenses. In addition, setting up a business bank account that is only available to registered firms may also enable firm owners to subsequently access additional financial products and business contacts that can help grow the business. Two more rounds of follow-up surveys are planned that will enable us to measure these longer-term

impacts, as well as to use the high rate of business registration to measure whether this form of formalization alone has any benefits for firms.

The remainder of the paper is structured as follows: Section 2 describes in detail the business registration process in Malawi, contextualizing these in terms of the procedures in other countries. Section 3 explains the impact evaluation and the data collection methodology and discusses baseline characteristics of our sample. Section 4 presents the short-term impacts of the interventions on formalization and access to financial services. Section 5 concludes and outlines next steps in the research.

2. Business Registration in Malawi

This evaluation takes place in the context of a broader effort by the Government of Malawi to improve the business environment and to streamline the process of business registration. As part of the Business Environment Strengthening Technical Assistance Project (BESTAP) supported by the World Bank, the government introduced a new Business Registration Bill seeking to enforce the registration of informal enterprises; drafted a new Business Licensing Bill; and transitioned to an online-based electronic system of business registration reducing the time to register firms[2]. The goal was to reduce the turnaround time from 14 days to less than five.

The government is also considering combining these reforms with outreach campaigns promoting the potential benefits of business registration, and is committed to experimentally assessing the value of MSMEs becoming formal. Ultimately, the government aims to provide further information to firms about registration in the future (if the impacts of registration are positive) or to identify other bottlenecks that constrain enterprise performance (if the results are negative or zero).

2.1 The Formalization Process

According to the *Doing Business* report (2011), a limited liability company in Malawi had to go through 10 procedures in order to become formal. These included reserving a unique name, applying for a business registration certificate (BRC), registering at the Malawian Revenue

[2] The effects of these reforms have not yet been recognized in the 2015 Doing Business Report because some of its details (regulations under the auspices of the Bills to be enacted, launch of automated system) are being finalized.

Authority (for income tax and workers' pay as you earn - PAYE), obtaining a company seal, applying for a license from the City Assembly (4 procedures), and applying for a registration of the workplace.

However, the majority of firms in Malawi register as sole traders or in partnership, which is termed registering as a "Business Name".[3] The three key steps to registration for these smaller enterprises are: 1) business registration at the Department of the Registrar's General (DRG) to obtain a Business Registration Certificate (BRC); 2) tax registration at the Malawian Revenue Authority (MRA) to obtain a Tax Payer Identification Number (TPIN); 3) and registration at the local City Council (CC) to obtain a business license. The three institutions that provide these documents operate independently and do not share information on registered firms and taxpayers, although a BRC is a pre-requisite for obtaining a TPIN. As a result, business registration and tax registration can be separated, as in much of the rest of Africa (Figure 1), and businesses can choose which aspects of formality, if any, to obtain. We discuss the steps and costs of each of these dimensions of formality in turn, and then discuss the potential benefits of each to the firm.

2.2 Obtaining the Business Registration Certificate

The business registration process involves filling in the *Application for Registration of Business Name* form and submitting it with one passport photo or a copy of the National ID card to the Registrar General's office in Blantyre. The cost of applying to register as a sole trader or in partnership was Malawian Kwacha (MWK) 200, or US$ 1.30, at time of baseline. This cost was increased during the study (in mid-2012) to MWK 2,000 (equivalent to $8 in 2012 when intervention took place, but $4 in 2013). In addition to the registration costs, there are transport costs for those not living in Blantyre.[4] The transport cost for firms in capital city of Lilongwe of traveling to Blantyre and returning to collect the certificate is around $32 by bus ($8 each way for one trip to drop off the paperwork and another trip to pick up the certificate when ready, with it being a 5-6 hour bus ride each way). The official wait time for processing a registration application is 14 days. However, this appears to vary considerably in practice, with conversations

[3] Approximately 135,000 firms are registered as "Business Names" vs 11,000 as limited liability firms.
[4] In 2010, the Registrar's office opened a branch in Mzuzu, but has since closed the office due to lack of human resources. It is hoping to open a branch in the capital Lilongwe sometime in the near future.

with lawyers and business owners suggesting that it takes some people just one day to register, while others are told it takes two months to register (and they are often offered help by a middleman for 5 to 10 times the actual price).

Enforcement of the BRC is very limited, with no general inspection process at present for checking whether firms have this document. The BRC does not, by itself, impose any further obligations on the firm to pay annual fees or taxes. In common with evidence from other countries (e.g. de Mel et al, 2013; Andrade et al, 2014), baseline knowledge of the registration process and cost was limited. Eighty three percent of respondents said they did not know the minimum cost of obtaining a BRC, while for the remaining 17 percent, the median response was ten times more expensive than the actual cost at that time. This difference may partly be associated with incorporating the costs of travelling, as for those that provided a response in Lilongwe the median estimated cost was fifteen times higher than the actual cost. In Blantyre, the median response was five times more expensive (16 and 18 percent of those in Lilongwe and Blantyre were able to provide a response). The response may also be influenced by the cost experienced by peers when using the services of a middleman to submit the application.

2.3 Obtaining a Tax Payer Identification Number

Registration for taxes (TPIN) is free but businesses have to fill in an application form, attach a BRC, and submit it to the Malawian Revenue Authority (MRA), which has branches throughout the country. Once a business has a TPIN - it can be obtained in the same day if application is hand delivered - tax authorities may contact the business if it does not file a monthly declaration of earnings. Enforcement of the monthly declaration is rare for small firms. Firms with less than MK 6 million in annual turnover are required to pay 2 percent of their sales in taxes (according to baseline data, this threshold is applicable for about 95 percent of the firms in this study). All firms with a TPIN are required to report their turnover to the MRA and pay the corresponding tax every month.

2.4 City Council Licenses

All firms are also supposed to obtain licenses at the local City Council (Lilongwe, Blantyre, etc.) in order to operate. The exception to this is firms operating in a trading market, since they have to pay a fee at the market, typically MK 50 ($0.30), for every day of operation. Small shops

adjacent to a major market are also covered by the rules governing those trading in the market. For firms obtaining licenses directly at the City Council, the exact licenses required depend on the type of business. If the enterprise has its own premises, it needs to get the *Annual General Business License* and then specific licenses for the sector it is operating. For the General License, a hairdresser in Blantyre pays $13[5] annually while a retail company in a better location[6] pays $133. For a food license, a grocery shop pays $27 for operating in a township, but $67 for operating in the city center. These licenses have to be renewed every year. Entrepreneurs who do not pay but operate from a visible place, such as a main street, are often subject to inspections by the City Council. The municipality is highly dependent on these revenues for their budget, and hence has a big incentive to find non-payers, who can be closed down by the council if they fail to comply.

2.5 The potential benefits of different types of formalization

Table 1 summarizes the main benefits to the business of the three different aspects of formalization. The main benefit of the business license issued by the City Council is to avoid the risk of being shut-down or harassed by municipal inspectors[7]. Most of the benefits of becoming formal can be achieved just with the business registration certificate. A BRC is required, and sufficient, for firms wishing to open a business bank account or to take a business loan from a formal bank. In addition, it is required for registration at the Malawian Chamber of Commerce, for registering land, and to access business development services provided by the government. The Tax Payer Identification Number requires a BRC to be issued. The main additional benefits it offers on top of the BRC are that: (i) firms cannot be paid for a successful government tender without a Tax Payer ID; (ii) avoiding fines or harassment for failing to pay taxes (although enforcement is infrequent); and (iii) firms may be able to use their history of paying taxes to document their financial history to financial institutions when applying for loans.

[5] All the fees mentioned in this section refer to those practiced in Blantyre at the time of the impact evaluation design (2011), and are converted into the dollars at the fixed exchange rate at that time (165 MWK/USD).
[6] This is defined by the City Council considering access to city center business activities.
[7] City council inspectors do not check on whether or not firms have a BRC or TPIN.

3. Data and impact evaluation design

This study - the Business Registration Impact Evaluation (BRIE) - is a randomized controlled trial that aims at estimating the impact of business registration for informal micro and small enterprises in Malawi. In addition, it examines the added effect on top of business registration of bank information sessions. We discuss first the process of obtaining a sample of informal firms, before providing details on the randomization process and interventions.

3.1 Obtaining a sample of informal firms

In this study we target the informal micro and small enterprises that are likely to be able to benefit the most from business registration, and that the government has said would be their first group of interest for a future road-show on business registration. We target firms in urban Lilongwe and Blantyre, the major commercial cities in the country. At the end of 2011, we listed over 100 business centers – that is, concentrations of firms including industrial parks, markets, streets with shops, set of workshops, etc. – and randomly sampled 46 of these business centers (23 in each city) to list all businesses operating within these areas. Through this process we listed 7,603 enterprises, 85 percent of which were not registered at the DRG. With this process, we excluded from the sample household-based enterprises. Surveys in Africa have shown that household-based enterprises tend to be the smaller on average than those operating in business centers (see for example, Bossuroy et al., 2013). Similar proportions of unregistered firms were identified in Blantyre and Lilongwe, despite the DRG being located in Blantyre. Only one quarter of the firms listed were female-owned.

We had a workshop with government officials, as well as consultations with various stakeholders including the private sector to inform the criteria for targeting firms within the informal sector for this study. There was a consensus around targeting larger firms (measured in revenues), as a proof of concept. In addition to revenues, other selection criteria that were identified by stakeholders included the number of workers and whether the firm operated from a fixed location. The firms to be identified would be those more likely to be targeted[8] or incentivized for

[8] While the government was preparing accompanying regulations to a new Business Registration Bill, which indicated the type of firms that should be registered, it requested information on the distribution of revenues and formalization status using the listing data collected for this study. This aimed at preparing documentation on the type of firms that ought to be registered.

formalization by the government, as well as more likely to realize the potential benefits of business registration. At the same time, we aimed in design at equalizing sample sizes by gender and city location (50% by gender and by city) in order to increase statistical power in the analysis of heterogeneous effects.

We identified 3,600 firms within the listing data with the objective of visiting them again and completing a baseline survey for a minimum of 3,000 enterprises[9]. Starting with 3,600 firms aimed at increasing the likelihood that we would find 3,000 informal businesses to be interviewed at baseline. The risks in the absence of this strategy were: not finding the business owner again given the listing exercise did not allow for collecting very detailed contact details information; having firms in the impact evaluation sample that had indicated in the listing to be informal but that were actually registered – this risk would materialize if there were significant measurement problems during the listing.

By location and gender of the business owner, we identified the initial 3,600 firms by selecting the firms with larger revenues that complied with one of the following criteria: (i) had at least one worker contracted outside of family members and business owners, (ii) were operating in a fixed location with more than one person working in the business, (iii) were at the 25 percentile of revenues or above.

Through this two-step process, we completed a detailed baseline survey for 3,002 informal firms, of which 1,195 were female-owned and 1,494 were from Lilongwe. Given only about one quarter of the informal firms captured in the listing was female-owned[10], our final sample of women entrepreneurs for the impact evaluation that complied with the sampling criteria was lower than the initial objective of 50 percent.

The baseline survey was done between December 2011 and April 2012. The baseline survey collected information on the characteristics of the firm and owner, including their usage of financial services and finance, their financial literacy and knowledge about business registration processes, and the financial performance of their business.

[9] This process requires attempting to visit all 3,600 firms at least once and keep tracking through a protocol those not found in the first attempt. The work would be concluded when at least 3,000 informal firms were interviewed for baseline.

[10] This is consistent with data from South Africa (Bossuroy et al., 2013) where a large number of female-owned businesses are found in household surveys, but not as much when sampling SMEs directly in business centers.

3.2 Summary Characteristics of Sample by Gender

Table 2 compares the baseline characteristics of our sample by gender. Forty percent of the sample is made up of female entrepreneurs. Half the sample is located in Lilongwe, and the other half in Blantyre. Over 70 percent of the firms in our sample were in the retail sector, including selling groceries (21 percent of total), selling agricultural produce (10 percent), selling animal produce (10 percent), and hardware shops (8 percent). The focus on retail was particularly pronounced for men, while women were more prevalent in services (35 percent for women versus 14 percent for men).

Most firms in our sample were owned by a single individual and had an average of two people working in the business[11]. The average business was started by the owner and had been in operation for 8 years. Male-owned enterprises were more likely to operate in a space owned by the entrepreneur, to regularly advertise, to have a written business plan, to provide receipts to customers, to have a larger network of contacts, to pay city council (market) fees, and to be able to identify the benefits of business registration. In sum, male-owned enterprises were larger and more "formal". Indeed, sales, profits and investments were also larger for male-owned enterprises. Average monthly profits were $243 per month for male-owned firms, versus $169 per month for female-owned firms. In terms of harassment, while men were more likely to have been asked for a business-related bribe in the past 12 months (5.5 percent versus 3.4 percent for women), women were significantly more likely to have been sexually harassed while on the job (11 percent for women versus 3 percent for men).

Education levels are similar by gender, 92 percent of the sample is literate, 65 percent have completed primary school or higher, but only 29 percent have completed secondary school. Men had, on average, a higher score than women on an index of financial literacy questions[12]. Male entrepreneurs were also more likely to be married or to be living with someone (86 percent vs 71

[11] In Malawi it is difficult to find businesses with more than 5 employees that are still informal, for two main reasons. First, there are very few firms at those levels: according to 2004-2005 Malawi Integrated Household Survey (IHS), 99% of non-farm enterprises in the country have no more than 5 employees. And second, associated with that, larger firms are usually visible and hence subject to enforcement. It was thus critical to have the right balance between sampling informal firms that are large enough to benefit from the intervention, and targeting a meaningful number of businesses operating in Malawi.

[12] This index comprises nine questions, such as "Suppose you need to take a loan of Malawian Kwacha (MWK) 10,000 and you have two opportunities. One is to pay an interest rate of MWK 100 every month for twelve months, and the other is pay an interest rate of MWK 1,200 at the end of one year. Which one has a higher interest rate?"

percent for females), and to have a more significant role in the household decision making. Women's spouses were much more likely than men's to be in wage employment (30 percent versus 5 percent).

At baseline, over 60 percent of firms saved money in some form of an account, with 57 percent using a bank account. This is considerably higher than the average bank account usage of 22 percent in a national survey of MSME owners in Malawi (Finscope, 2012). However, almost all of these bank accounts were personal accounts, as only about 2 percent of the firms (self-reported) had access to a business bank account at baseline (which is consistent with the fact that business registration is almost always a pre-condition for opening an account in the name of the business). In our sample, women were more likely to use saving mechanisms than men, including bank accounts (60 percent for women vs 55 percent for men), but also informal mechanisms such as ROSCAs and SACCOs[13] (12 percent vs 5 percent). Mixing of household and business finances is common, with 78.5 percent saying they take business money whenever required for household needs[14].

Although use of a bank for (personal) savings is relatively common, the use of bank loans is rare, with only 7.3 percent of entrepreneurs having had a bank loan used for business purposes in the past. On average, the most recent loans had an initial maturity of less than five months for both male and female-owned enterprises. For firms that obtained credit in the past, 42 percent of the most recent loans did not require collateral. When collateral was needed, business owners primarily used cash deposits, followed by household assets and group-lending. These findings confirm that most loans were small in size. The proportion of entrepreneurs having been denied credit was similar for men and women - 19 and 17 percent respectively of male and female entrepreneurs that have applied in the past 12 months. Taken together, these baseline data do not suggest that women are more disadvantaged than men when it comes to access to finance, especially given that female-owned businesses are smaller on average than male-owned firms.

[13] ROSCA - Rotating Savings and Credit Association; SACCO - Savings and Credit Co-operative.
[14] The question asked was: "Do you take money whenever needed (every day, every other day, etc) from the business to pay your own or your family expenses?".

Finally, in terms of formality, these businesses were all screened to ensure they did not have a business registration certificate at baseline. Nevertheless, 55 percent of them pay city council or market fees, with 15 percent saying they had received an inspection from the municipality.

3.3 Random Assignment to Treatment and the Different Treatments

We stratified firms interviewed at baseline on the following five measures: *gender*; *location*[15] (Blantyre, Lilongwe); *sector* (commerce, services and manufacturing); *business owner being able to identify benefits of business registration* (binary variable); and *high capture*[16]. We then randomly assigned the sample within each stratum to either one of the three treatment arms or to the pure control group (Figure 2). The different groups are as follows:

- A control group of 757[17] firms
- A treatment group assigned to receive costless registration for the business registration certificate (745 firms)
- A treatment group assigned to receive costless registration for the business registration certificate, as well as for a tax-payer identification number (293 firms).
- A treatment group assigned to receive costless registration for the business registration certificate, along with an invitation to information sessions at a bank where business bank accounts were offered (1,207 firms).

We discuss each of these treatments in more detail below. Table 3 shows the summary statistics for all four groups, showing that the groups are balanced when compared with the pure control group. The groups are of different sizes for two reasons. First, since based on previous studies we did not expect high take-up of the tax registration, our aim was to test whether this same

[15] Given that the DRG was located only in Blantyre, including firms from Lilongwe in our sample and using location as a strata in the randomization helps to assess whether informal firms closer to the Registrar's office are different than those further away (and whether impacts are different), as well as to assess whether distance matters when explaining different take-up rates of business registration when support is provided.

[16] This last measure is a binary variable similar to Fafchamps et al., 2014, and takes the value of 1 if the respondent agrees with the following two statements: "Whenever I have money on hand, my spouse or other family members always end up requesting some of it", and "People who do well in their business here are likely to receive additional requests from family and friends for money to help out with some expense or another".

[17] Although we targeted rounded numbers, the randomization was done by strata. Misfits (leftovers not divisible by the groups in their proportions) were allocated randomly to treatment/control groups independently of other strata allocations, which resulted in this allocation.

result also applied in Malawi, without expecting to then have sufficient power to test the impact of tax registration on subsequent firm performance. In contrast, since the main benefits of formalization appear in theory to occur through the business registration, we wanted a sufficient sample to have power to measure the impacts of this type of formalization on firm performance. Secondly, the partner private bank requested a larger sample size to offer its services to, which is why the last treatment group is larger.

3.4 The costless business registration intervention

All three treatment groups share the main intervention of making *business registration costless*. To do this, we[18] visited business owners in the treatment groups and offered assistance in registering their businesses, while conveying to them a single-page information flyer with the potential benefits offered by registration. For those that were interested, we assisted them in filling out the Business Registration form, took the required photo, and delivered their entire application to the DRG, including paying the Business Registration fee on their behalf. Once ready – on average certificates take two weeks to be prepared - we delivered the Business Registration Certificates (BRC) back to these firms. Thus, the only cost to these firms was the time it took to fill out the registration form (where they were assisted by our team).

Across the three treatment groups, we invited 2,245 firms from our sample of informal MSMEs to register at the DRG through this costless process. This took place between June and September 2012. There are two competing aspects that make our cost structure different from the normal registration process of individual entrepreneurs. On one hand, the NGO working on this with us has to deploy enumerators to offer hand-holding to firms in the registration process. This is costly. On the other, the NGO is able to save by bringing to the Registrar's General office a large set of applications, minimizing the transport costs. The all-in costs[19] of conducting the business registration intervention was $22 per registration offered and approximately $27 per registration offer accepted.

[18] Although this intervention was led by Innovations for Poverty Action (similarly to the baseline survey), the team presented itself as a separate NGO with a different name (BRC) to reduce the risk of linking the survey to the intervention. Additionally, individual enumerators were not deployed in the same city to conduct both the survey and the intervention to again minimize the risks of survey effects on take-up.

[19] Project Management, Training of team, Registration Fees, Printing of documents, Travel, Communications, Overheads.

Considering the costs per certificate accepted, this is an intervention that can reasonably be scaled up when compared with other interventions typically provided to firms (interventions such as managerial training cost often in excess of $200 per beneficiary). It would make sense to invest in this intervention if the returns from the intervention exceed 0.3 percent of the median firm's monthly profits[20]. An additional reason for governments to offer registration free of charge is that they have an interest in bringing firms into the formal system. One reason expressed for this is to increase the information they have on firms in their economy, while a second is to have firms already take this formalization step so that they may be more likely to be tax-payers as they grow. As a result, many governments around the world are trying to make the initial registration process as cheap and uncomplicated as possible.

At the end of this intervention the government, pressured by declining budget support from the international community, decided to increase the registration fee to MWK 2,000[21], among a set of changes in fees to increase revenues. This followed the floating of the exchange rate and the related depreciation of the Kwacha. The hike in BRC price affected less than 10 percent of the firms which we provided registration support to in our study, and occurred only after firms had already accepted our support. Furthermore, given that the project covered the full cost of registration and that this expense cost was not shared with business owners at time of their decision to participate in the intervention, the actual cost of registering could not have influenced firm behavior. Even considering these new fees, the intervention would make financial sense to scale up when the returns of the intervention exceeds 0.5 percent of the enterprises' median monthly profits.

3.5 The tax registration intervention

Out of the 2,245 firms that were offered business registration, we offered a random group of 293 firms the additional option of assistance in registering for taxes and thus obtaining a Tax Payer Identification Number (TPIN). For the enterprises in this treatment arm, we offered the two interventions together, explaining that the process of formalization included these two steps: first the Business Registration and then the TPIN. Entrepreneurs were allowed to accept just the

[20] The median monthly profits at baseline are of $133. Assuming perpetuity on a 20% annual discount rate on returns of $0.45 per month from this investment, the net present value would be positive.

[21] Although the government was in general seeking to conduct reforms to facilitate registration, the tight budget led to an increase in the business registration fee, which had not been revised for more than 20 years.

national Business Registration. As with the BRC, we assisted the entrepreneurs in filling out the TPIN form and delivered their application to the Malawian Revenue Authority (MRA). We pooled enough applications and delivered them jointly to the MRA, obtaining TPINs in the same day. When hand-delivering the TPIN certificates back to the business owners, we provided an example of the monthly form that needed to be submitted and explained the tax payment process they would need to follow from then on.

3.6 The bank information session and bank account intervention

In the final treatment group, 1,207 of the firms offered Business Registration were also invited to an information session held by the private bank NBS Bank,[22] on the benefits of separating business from household money, and were offered bank accounts in the name of their business at the conclusion of the information sessions. With this intervention, we test the interaction between business registration and these information sessions, not the effect of information sessions on their own, nor the importance of just information sessions versus just business bank accounts. The decision to evaluate the combined effects of these interventions was based on its relevance to potential policy, and because a pre-condition for opening a business bank account (and through that liaising with the SME Department of the bank) is to have a Business Registration Certificate. NBS Bank was not interested in providing information about the benefits of separating household and business money if the firms did not qualify for business bank accounts. Rather, the bank was interested in increasing its reach and saw this combined intervention as a potentially inexpensive mechanism for achieving that goal.

Firms were invited to NBS Bank's information sessions in the businesses' area of operation. Each session included a maximum of 30 participants, and was led by both NBS Bank representatives experienced in dealing with small business clients and a professional trainer in financial literacy. The information sessions comprised 20 hours of activities (two days of eight hours each and a follow-up session one week later, lasting four hours), with information provided on the following modules: (i) formal and informal financial institutions, and the role of banks; (ii) the benefits of bank accounts; (iii) identifying the specific problems that businesses face, namely the intertwining of business and household responsibilities; (iv) the benefits of

[22] NBS Bank was selected based on its interest in developing its SME Department, as well as its previous experience working with the IFC on women entrepreneurship, and with researchers on impact evaluations.

separate business and household responsibilities; (v) how business bank accounts allow for the mental and physical separation of household and business funds and (vi) practical examples of using bank accounts for business purposes. At the end of the second day, NBS Bank offered a recently launched business bank account, which had a lower minimum balance (MWK 500) than previous products offered by the bank. This business bank account was available to all firms in Malawi with a BRC.

3.7 Sources of Data for Measuring Impacts

Currently we have two sources of data for measuring impacts of these interventions. The first are data from our administrative records of program take-up. This includes information on which firms we assisted to get business registration certificates and a Tax Payer Identification Number, as well as information on attendance at the bank information sessions and on which firms signed up for business bank accounts at the conclusion of these sessions.

The second source of data is the baseline and the two first rounds of follow-up surveys. A first follow-up survey took place between November 2012 and March 2013, on average 4 months post-intervention. Attrition was 5.7 percent, and uncorrelated with treatment status[23]. A second follow-up survey took place between November 2013 and March 2014, on average 16 months post-intervention. Attrition for this second follow-up survey was 9.4 percent, and also uncorrelated with treatment status (see Appendix 1). Although attrition rates were low, nine and sixteen percent of the firms interviewed at the first and second follow-up surveys respectively had closed their businesses and not started a new one. This reduces the number of people in our samples that currently operate firms, but there are no differences between groups in closure rates.

4. Results

Table 4 provides take-up results based on the BRC and TPIN certificates delivered with our assistance. Overall take-up of business registration was 75 percent for those offered just the BRC. The take-up of the BRC was 85 percent among those also invited to bank sessions on separating household and business money, and 69 percent among those offered BRC plus the TPIN (since they could opt for the BRC while declining the TPIN). These differences in take-up

[23] The BRC treatment group attrition was statistically different from the control group.

rates of BRC are statistically significant across the treatment groups. In contrast, only 4 percent of those offered assistance with tax registration received a Tax Payer Identification Number with our assistance.

The BRC take-up rates are extremely high compared to the formalization rates in other studies that have offered assistance with formalization (De Mel et al., 2012; Alcázar et al. (2010); Jaramillo (2009); Andrade et al., 2014; de Giorgi and Rahman, 2013). With the exception of de Giorgi and Rahman (2013), all the existing studies have focused on tax or municipal registration, which has involved ongoing cost obligations to the firm in the form of taxes. De Giorgi and Rahman (2013) provide information to aid in business registration, but not the costless assistance that we used here. However, we see that even with costless assistance, take-up rates for the TPIN are extremely low, suggesting that it is the combination of a business formalization status that offers potential benefits (like bank access), low transaction costs, and no implied future cost that is responsible for the high BRC take-up rates.

The remainder of table 4 examines differences in take-up rates by gender, and by location. Take-up rates are similar by gender for business registration when offered alone, or with the banking information session. However, there is a significant difference in take-up of the business registration certificate when offered together with the TPIN assistance: only 58 percent of women obtain a BRC in this case, compared to 76 percent of male owners. Table 5 examines the reasons for not accepting assistance to obtain a BRC. Across all treatment groups, the main reason for not getting a BRC is that the business had closed, moved, or could not be located to offer the assistance. This reason accounts for about two-thirds of the gender difference in take-up of the BRC under the BRC and TPIN treatment. Since this gender difference in closure or failure to locate is much higher for this treatment group than the other treatment groups, it may just reflect chance. There are no differences in take-up rates of the BRC in any of the three treatment groups by location, despite the implied cost savings being much greater in Lilongwe than Blantyre. This suggests that it is the personal assistance and information provided, rather than cost savings that are driving the high take-up.

The take-up rate of the bank information sessions was 72 percent, which is above the average of 65 percent for typical business training programs reported by McKenzie and Woodruff (2014). An important factor for the high take-up of these sessions was likely the close proximity of the

sessions with the firms' place of operations. Out of the business owners that participated in NBS Bank information sessions, 89 percent of them opened bank accounts in the name of the business.

4.1 Estimating Treatment Impacts

To estimate the impact of the different treatments on outcomes of interest, we run the following ANCOVA specification for outcome *y*:

$$y_{i,t} = \alpha + \beta_1 Treat1_i + \beta_2 Treat2_i + \beta_3 Treat3_i + \lambda y_{i,0} + \sum \delta_s d_{i,s} + \varepsilon_{i,t} \quad (1)$$

Where *Treat1*, *Treat2*, and *Treat3* are assignment to the BRC assistance, BRC+TPIN assistance, and BRC + bank information sessions treatments respectively, $y_{i,0}$ is the baseline value of the outcome of interest (included to increase power as per McKenzie, 2012), and the $d_{i,s}$ are randomization strata dummies (Bruhn and McKenzie, 2009). We currently estimate equation (1) separately by follow-up round to estimate the trajectory of treatment impacts over time, but will also consider pooling multiple rounds to improve power in follow-up work that looks at the impacts on noisier outcomes like profits and sales. The coefficients β_1, β_2, and β_3 then provide the intent-to-treat effects of being offered assistance formalizing on our outcomes of interest. Since randomization was at the individual level within strata, we use robust Eicker-White standard errors for the $\varepsilon_{i,t}$. In addition to estimating the average effects, we allow for treatment interactions with gender to test whether impacts vary for male versus female business owners.

When it comes to estimating business outcomes, a key issue is how to handle businesses which are closed. Our approach is to code the outcomes for these firms as zero.[24] That is, a business which is closed is assumed no longer to have a formal license, a business bank account, or other such outcomes. For several savings outcomes for which it is possible that individuals are saving even without operating a business, we use the sample of firms still in business since we lack data on these outcomes for those whose businesses have closed.[25] Appendix 1 shows there is no impact of any of the different treatments on business closure rates.

[24] We obtain similar results if we treat the businesses that are closed as attrition.

[25] Regressions use sample of existing businesses at follow-up 1 and 2 for dummies "Has a bank account (personal or business)", "Saves at home", and "Save in a ROSCA or SACCO". Although these are not business-specific indicators (a person without a business may have an account), we have no data on these at follow-ups for

4.1 Impacts on Formalization

Table 6 reports the impacts of our different treatments on the three key dimensions of formality. These measures are self-reported by business owners from our two follow-up surveys. Although we asked the business owners to show the certificates for each of the dimensions of formality, a significant number of them – including of those that we have delivered business registration certificates - said they had them in a secure place like at home. Hence, reporting only on certificates shown to enumerators would underestimate the impacts on these measures.

We see that obtaining a business registration certificate is rare in the absence of our treatment – only 6.1 percent of the control group firms have a BRC at the time of the first follow-up (4 months post-intervention), and 6.7 percent at the time of the second follow-up (16 months post-intervention). All three treatments have large and significant impacts on the likelihood a firm has a BRC, varying from a 54 percentage point increase for the BRC alone assistance to 64 to 68 percentage point increase for the BRC + bank information session treatment. This provides a powerful first stage to enable us to later measure the impact of business registration on firm outcomes.

However, it is notable that the treatment effects are lower than suggested by our take-up numbers, and we can no longer reject equality of effects for the BRC versus BRC+TPIN treatments. One-quarter of the difference in treatment effects compared to the take-up rate can be explained by the counterfactual provided by the control group, which suggests that 6 percent of those treated would have got a BRC without our assistance. In line with that, about 3.5 percent of those in treatment groups that did not take our assistance reported in the survey having registered during the period, which may be associated with people that went on their own, but may also suggest a measurement problem[26] (which could also apply to the control group). This BRC registration of people that had not received our support attenuated the difference between take-up and the treatment effects. The remaining gap is mostly driven by those who our records indicate that they received a BRC with our assistance and reported in the survey that they didn't have

respondents without an operating businesses. We get similar results when using the full sample of non-attrition for these surveys, i.e. when we assume a "0" for respondents that do not run a business anymore.

[26] In theory, this could be a measurement problem in both administrative and survey data.

one. This accounts for about two thirds of the remaining gap, with the rest being explained by those with BRCs that have closed down or attrited.

The survey data confirm that treatment effects on other forms of registration are small. City council licenses are common, with 62 to 67 percent of the control group having one, but there is no significant difference across treatment groups. Receiving a business registration certificate is therefore not changing registration behavior on this other margin. Recall that the BRC is a prerequisite for being able to register for a tax-payer identification number. We see that only 4 to 6 percent of the control group gets a TPIN. In the first follow-up round we see statistically significant (at ten percent), but small, effects of the BRC treatment on the likelihood of reporting having a TPIN, but surprisingly no impact of the BRC+TPIN treatment. By the second round none of the treatments has a significant effect. This suggests that those who were assisted to get the TPIN were those few firms that were going to go and get tax registration anyway, and that, at most, the BRC helped speed up the process of tax registration for a few other firms that were otherwise going to register for taxes. It could also indicate that knowledge about tax registration process increased in the BRC+TPIN group and we are capturing a more accurate measure of tax registration in that group than in others.

Panel B of table 6 shows how these formalization results vary by gender. In contrast to the administrative data, we find female business owners to have significantly lower treatment effects on obtaining a BRC from all three treatments in the first follow-up round, and from two out of the three treatments in the second follow-up round. One part of the gap is explained by differences that already existed in the administrative data, even if not statistically significant for two of the treatment groups. Two thirds of the remaining gender difference in treatment effects, when compared with the administrative data, is explained by the higher rate of business closure among female-owned firms – there is a 5 percentage point difference between female-owned and male-owned enterprises among those in the treatment groups that had accepted the certificate. Firms not reporting in surveys on BRCs delivered with our assistance are more common for women and largely explains the rest of the gender gap. Differences between men and women in the control group are small and attenuate the effect, and there is no significant gap on attrition. Nevertheless, we still find sizeable and significant impacts of our treatments on the likelihood

that female owners have a BRC, enabling us to estimate the effects of business registration separately for male and female-owned businesses.

4.2 Impacts on Access to, and Use of, Financial Services

Table 7 examines the impacts of the intervention on use of bank accounts and use of other mechanisms of savings. The intervention which combined the BRC assistance with bank information sessions and the offer of a business bank account was successful in increasing both the likelihood individuals have any bank account (by 21 percentage points, relative to a control mean of 63-66 percent), and especially the likelihood that entrepreneurs have a business bank account (by 46-48 percentage points, relative to a control mean of only 2-4 percent). This is accompanied by a reduction of saving at home, and in the short-run, by lower saving through ROSCAs and SACCOs. In contrast, just being offered assistance obtaining a BRC has limited impact on savings. There is a significant, but relatively small (2-4 percentage point) increase in the likelihood of having a business bank account, which is significantly smaller than for the assistance combining BRC assistance with bank information sessions.

While the take-up of business bank accounts was 64 percent of those offered information sessions with NBS Bank (table 4), the treatment effects are smaller (46-48 percentage points). The control group mean is of 2-4 percent, but there is also a similar percentage of entrepreneurs with business bank accounts in the bank information sessions group, which did not participate in NBS Bank's program. Thus, the difference of about 16-18 percentage points is accounted for other reasons: about 80 percent of the difference is explained by people still operating businesses that do not report in the survey having a business bank account. Contrary to the assistance with the BRC where the registration certificates do not expire, this might not necessarily be a measurement problem because some business owners may have closed bank accounts since the intervention. The remaining difference is explained by businesses closing.

The impact of the BRC and bank information session treatment on having any type of bank account is significantly smaller for female business owners than for male owners. The gender difference in terms of any type of bank account is driven by the higher likelihood of women having a bank account to start with. At first follow-up, a similar proportion of women and men

have bank accounts in the BRC and information session treatment arm (85 percent)[27], while in the control group that proportion is 70 and 59 percent for women and men respectively. Therefore, the impact is larger for men as they close the gender gap.

The impact of the BRC and bank information session treatment on having a business bank account is also smaller for women. About half of the gender gap on having a business bank account is actually associated with lower take-up during the information sessions (as per table 4), despite a difference of only one percentage points in participation in the information sessions. The other half is equally explained by business closure among women-owned businesses and a higher proportion of women than men who report no business bank account at follow-up surveys, differing from the information collected through the administrative records.

The bank information sessions emphasized the importance of separating household and business expenses, while having a separate business bank account may facilitate this process. Table 8 examines the treatment impacts on measures of the separation of household and business money. We see a significant 6.6 percentage point reduction in the mixing of household and business expenses for the BRC plus business information session treatment group in the first follow-up round, but this effect is smaller and no longer significant by the second follow-up round. This short-run effect appears only to be present for male owners. We do see this treatment group being more likely to have an account that they use just for business purposes. At the same time, this is well below the penetration of accounts in the name of the business for this group. Indeed, 47 percent[28] of the firms (46 percent for men and 49 percent for women) in this third group with bank accounts in the name of business used the funds saved there for other purposes, namely personal expenses. We also see a 7 to 11 percentage point increase in the likelihood of keeping financial records for the group offered bank information sessions. There are few impacts of the other two treatments, although in the second follow-up round the BRC+TPIN group appears less likely to keep follow-up records than the control group.

Finally in table 9 we examine the impacts of the interventions after the first two follow-ups on the usage of credit and insurance. On average, there is no effect of the interventions on the

[27] At the second follow-up, 88 and 86 percent of women and men respectively had a bank account in the group offering information sessions from the bank.
[28] These are the results after the first follow-up, but are about the same (48%) after the second follow-up.

probability of having borrowed in the past 6 months for the business[29]. For the first follow-up, at least, this seems to mask a difference between men and women - men are less likely to have borrowed, while women are more likely to have taken a loan (this latter effect is significant at 10 percent). In addition to the information provided in table 9, we also do not see any change in the outstanding debt of the firms in the treatment groups relative to the control group.

Nonetheless, firms in the group offered bank information sessions seem to be less credit constrained at the first follow-up survey than those in the control group, as there is an economically and statistically significant impact of the activities on the amount of money they say their firms can borrow if suddenly facing an unexpected situation needing extra funds for the business in two weeks. This increased financing capacity seems to be driven by the opportunities of using formal financing institutions rather than depending on family and friends – while 59 percent of businesses in the group offered bank information sessions said they would borrow through a bank to respond to this unexpected financing need (62 percent for men and 54 percent for women), that would only be the case for 46 percent of the control group (47 percent for men and 44 percent for women)[30]. By the time of the second follow-up, the effects on the third group of the amount businesses can borrow in 2 weeks is no longer statistically significant, although still large for women.

The treatment group offered BRC + bank information sessions, which received business bank accounts through the SME Department of a local bank, also had significantly large impacts on the use of insurance schemes in the name of the business. The control group access to insurance schemes was of 1 percent at the first and the second follow-up, but was 9 percent for the third treatment group. Within the firms in the group offered bank information sessions with insurance schemes, 56 percent of them had insurance against weather incidents, 24 percent against fire[31], 20 percent against theft, and 16 percent for life/health coverage of the business owner (data from the second follow-up).

[29] A recent study in Chile (Kast and Pomeranz, 2014) suggests savings and short-term credit could be substitutes.
[30] Conversely, while 23% of group three business owners would borrow from family and friends for this situation of the unexpected need of money (22% for men and 24% for women), that would be the case for 32% of the control group (34% for men and 28% for women).
[31] In 2014, there was a large fire in one of the main markets in Lilongwe where our study is operating: http://www.nyasatimes.com/2014/07/30/fire-guts-lilongwe-tsoka-market/.

5. Conclusions and way forward

In light of the findings in this note we can conclude the following:

(i) we established an effective replicable design of outreaching informal firms and offering support in the different steps of formalization. In fact, this model of *costless registration* is being followed in two pilots in Benin and Guinea for offering a simplified regime of business registration;

(ii) these interventions cost much less than the typical private sector development intervention;

(iii) take-up of business registration can be extremely high when it has no tax implications for the firm;

(iv) but information about benefits and assistance registering is not sufficient for firms to be interested in registering for taxes;

(v) in the short-term, there are no significant effects of business registration alone on increasing access to financial services;

(vi) this combination of business registration assistance combined with the information session at a bank is effective in the short-term in increasing male and female-owned firms' access to bank accounts, as well as in reducing use of informal mechanisms of saving. This package is also effective in significantly facilitating the usage of accounts for business purposes only and increasing the usage of financial records. The package has in the short-term no effects on access to credit, but increases in the short-term the perceived capacity of the entrepreneur of borrowing money from financial institutions. The package is also effective in increasing use of new financial products like insurance schemes;

(vii) in a setting where the gender gaps in access to savings, finance, and other financial products are small, this package of interventions seems to be attractive in developing usage of services provided by the formal financial sector for both male and female business owners.

La Porta and Schleifer (2013) conclude that "lowering registration costs neither brings many informal firms into the formal sector, nor unleashes economic growth; and that the informal economy is largely disconnected from the formal economy". From the evidence presented here, it seems there are no immediate effects of just simplifying formalization if it is not coupled with other interventions. Not only do firms require a helping-hand to formalize, but, in addition, formalization alone does not seem sufficient to lead to changes in key intermediate outcomes of interest. Nonetheless, there is an opportunity for helping firms to formalize if this is attached to interventions like business bank accounts that complement formality and bring the firm closer to important aspects of its development. In this case, the complementary interventions seem to be effective initially for both men and women, although typically larger for male-owned businesses. This opportunity seems to facilitate access to new services.

While we will next discuss these findings with the government of Malawi, we will move for the next stage of this study where we will analyze the mid-term and long-term impacts of the different interventions. We will do that for the intermediate outcomes of interest mentioned here, as well as others like access to markets and harassment. On this latter factor, anecdotal evidence suggests that informality could expose female entrepreneurs to more risks, such as confiscation of merchandise or requests for transactional sex from authorities threatening to shut down their businesses. Thus, women could benefit from formalization in terms of less harassment and its potential relationship with business performance. Additionally, we will analyze the effects of the interventions on firms' performance (profits, investment, etc.) by following all groups through two more rounds of follow-ups. We will use administrative data from the financial institution that we work with to learn from the usage of financial services when accessing the SME Department of a Bank.

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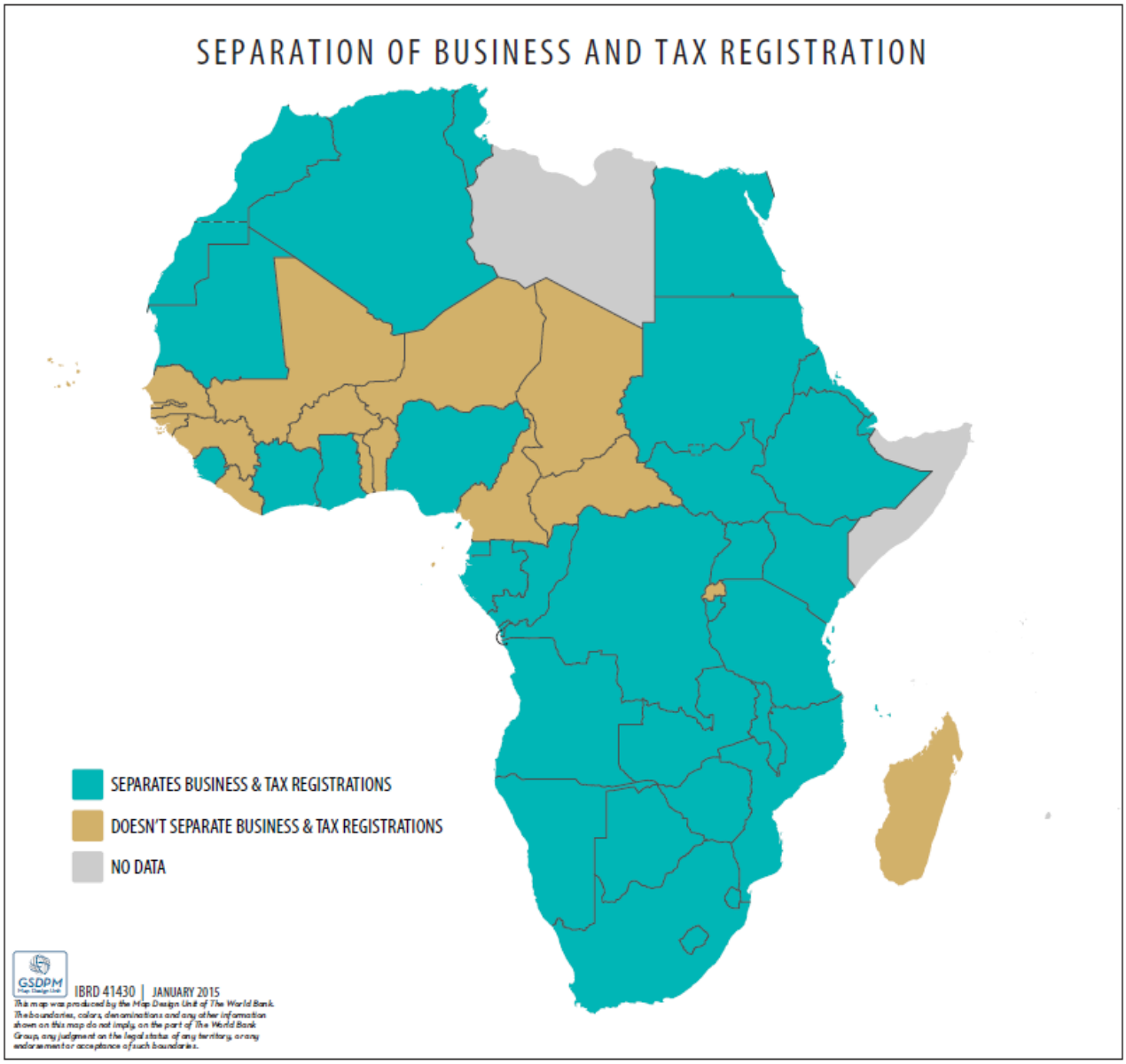
Figure 1: Separation of Business Registration from Tax Registration by country



Source: Adapted by authors from doingbusiness.org

Figure 2: Impact evaluation design

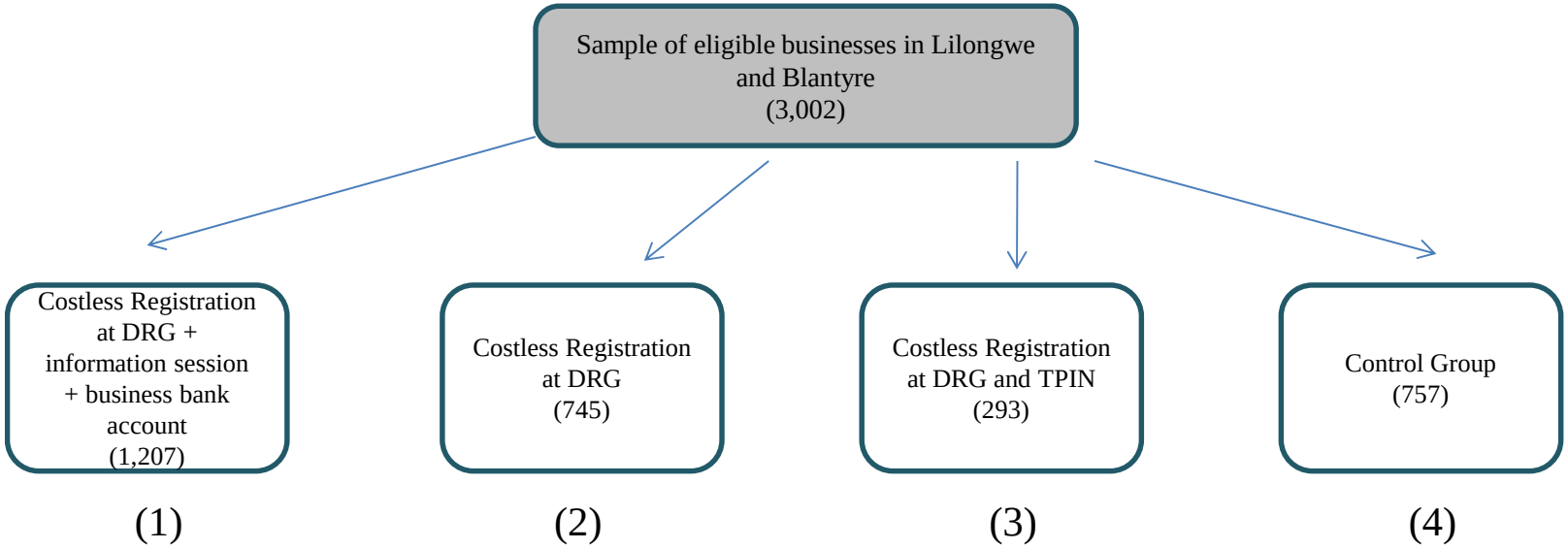


Table 1 - Benefits of becoming formal in Malawi

Benefits	Business Registration Certificate (BRC)	Taxpayer's Identification Number (TPIN)	City Council licenses
Open business bank account	yes		
Apply to bank loan	yes		
Register land in the name of business	yes	needed if seller of land (show tax clearance for capital gains)	
Export license	yes		
Apply to private tenders	Most cases not necessary, helpful in specific cases for large firms		
Required to apply for government's matching grants and business development services	yes		
Access to ODPP (government procurement system)	yes, but also need the TPIN and in some cases the tax clearance	yes , with BRC	
Lower harassment by police/govt officials	yes for MoIT, but not common at all	yes for taxes, but not common for those without a TPIN	yes, within the main streets, the harassment is common as the municipality needs the money, including locking the premises if firm doesn't pay
Apply for being member of Malawian Chamber of Commerce (MCCCI)	yes		
Provide invoices to customers for tax purposes		yes	

Note: Providing receipts to customers – in some countries mentioned as a potential benefit – is not seen as requiring any of these steps of formalization in Malawi.

Table 2: Descriptive information at baseline

Malawi BRIE Baseline Descriptives					
	Full sample	**St Dev**	**Male**	**Female**	**Diff**
N	*3,002*		*1,807*	*1,195*	
Firm Characteristics					
Manufacturing	6.6	25.0	9.4	2.3	7.1***
Retail	71.1	45.0	76.6	62.9	13.7***
Services	22.3	42.0	14.0	34.8	-20.8***
Number of people working in business	2.0	1.3	2.1	2.0	0.0
Number of owners	1.1	0.4	1.1	1.1	-0.0
Age of firm	8.0	7.1	8.9	6.5	2.3***
Lilongwe-based	49.8	50.0	47.4	53.4	-6.0***
Owner started business	90.8	29.0	92.1	88.9	3.3***
Owns space where operates business	34.0	47.0	35.6	31.7	3.9**
# new products introduced past 12 months	0.7	2.7	0.6	0.8	-0.2**
Advertises	5.5	23.0	6.6	3.9	2.7***
Has written business plan	16.6	37.0	17.7	14.8	2.9**
Has written budget	2.4	15.0	2.4	2.3	0.1
Keeps financial records	55.3	50.0	55.4	55.1	0.3
Provides receipts	17.7	38.0	23.5	9.0	14.4***
Business with access to electricity	26.8	44.0	24.0	30.9	-6.9***
Number of customers past month	945.5	1,293.4	1,031.5	815.8	215.6***
Network contacts any sector	105.8	275.5	114.7	92.3	22.4**
# of competitors	14.6	35.0	15.0	14.1	0.9
Individual Characteristics					
Owner age	33.5	9.0	33.4	33.6	-0.2
Married / Living with someone	80.1	40.0	86.1	71.0	15.2***
HH decision making index (0-100)	84.2	20.0	86.7	80.4	6.3***
Main provider of income to household	76.9	42.0	95.0	49.6	45.3***
Literate	91.5	28.0	92.9	89.3	3.6***
Primary school completed is max education	35.6	48.0	36.6	34.2	2.4
Secondary school completed is max education	24.3	43.0	23.9	25.0	-1.2
Higher education completed	5.3	22.0	4.5	6.5	-2.1**
High capture	36.2	48.0	35.8	37.0	-1.2
Financial Literacy knowledge (0-1)	0.43	16.0	0.44	0.42	0.0***
Mother Entrepreneur	21.5	41.0	17.9	27.0	-9.1***
Mother in Wage Employment	5.9	23.0	4.5	8.0	-3.5***
Father Entrepreneur	21.1	41.0	22.0	19.8	2.2
Father in Wage Employment	27.1	44.0	23.1	33.2	-10.1***
Spouse Entrepreneur	28.6	45.0	30.4	25.9	4.6***
Spouse in Wage Employment	15.0	36.0	4.9	30.1	-25.2***
Financials (US$)					
Revenue past month	1,003.8	2,543.7	1,203.9	701.2	502.7***
Profit past month	213.6	277.2	242.9	169.2	73.7***
Business assets	1,911.4	4,646.7	2,174.0	1,514.3	659.6***
Fixed Assets	969.6	3,358.6	1,093.1	782.8	310.3**
Financial services					
Any account (formal or informal)	62.4	48.0	58.4	68.5	-10.0***
Has bank account	56.8	50.0	54.6	60.2	-5.6***
Has bank account in name of business	2.0	14.0	2.1	1.9	0.2
Uses any ccount just for business purposes	4.2	20.0	3.7	4.9	-1.2
ROSCA_SACCO	7.9	27.0	4.9	12.4	-7.5***

Saves at home	28.5	45.0	31.9	23.4	8.6***
Borrowed in the past	37.0	48.0	35.2	39.8	-4.6***
Bank loan in the past	7.3	26.0	6.0	9.3	-3.3***
Debt Outstanding (US$)	33.6	200.2	32.6	35.1	-2.5
Takes business money whenever for HH	78.5	41.0	77.5	80.0	-2.5*
Time to nearest bank (minutes)	20.7	13.9	20.6	20.9	-0.3
Formality					
Pays city council fees / market fees	55.6	50.0	57.2	53.2	4.0**
Identifies benefit(s) of business registration	71.7	45.0	74.1	68.2	5.9***
Was inspected by municipality before	15.3	36.0	16.1	14.1	1.9
Harassment					
Asked for bribe	4.7	21.0	5.5	3.4	2.1***
Sexual harassment in business	6.0	24.0	2.8	10.8	-8.0***

*, ** and *** denote significant at the 1%, 5% and 10% levels respectively.

Table 3: Verification of randomization

Malawi BRIE - Balance at baseline across treatment status	Treatment groups				Differences		
	(1) BRC	(2) BRC+TPIN	(3) BRC+IS+BBA	Control	(1)-Ctr	(2)-Ctr	(3)-Ctr
N	*745*	*293*	*1,207*	*757*	*1,502*	*1,050*	*1,964*
Firm Characteristics							
Manufacturing	6.3	6.8	6.3	7.3	-1.0	-0.4	-1.0
Retail	71.1	72.0	71.3	70.4	0.7	1.6	0.9
Services	22.6	21.2	22.4	22.3	0.2	-1.2	0.1
Number of people working in business	2.0	2.0	2.1	2.0	0.0	0.0	0.0
Number of owners	1.1	1.1	1.1	1.1	-0.0	-0.0	-0.0
Age of firm	8.0	7.7	7.7	8.3	-0.3	-0.6	-0.6
Lilongwe-based	51.0	49.5	50.2	48.0	3.1	1.5	2.3
Owner started business	89.7	88.7	91.9	91.2	-1.5	-2.4	0.7
Owns space where operates business	36.2	31.1	32.6	35.3	1.0	-4.2	-2.6
# new products introduced past 12 months	0.6	0.8	0.7	0.5	0.1	0.3*	0.2
Advertises	5.8	3.4	6.1	5.3	0.5	-1.9	0.8
Has written business plan	17.5	13.0	17.3	15.9	1.6	-2.9	1.5
Has written budget	2.8	2.1	1.7	3.3	-0.5	-1.3	-1.6**
Keeps financial records	54.1	52.2	56.1	56.3	-2.2	-4.1	-0.2
Provides receipts	15.3	17.1	18.5	19.2	-3.9**	-2.1	-0.7
Business with access to electricity	26.9	25.3	28.1	25.1	1.8	0.2	3.0
Number of customers past month	974.3	951.2	909.2	973.1	1.2	-21.9	-63.9
Network contacts any sector	98.8	112.6	109.4	104.4	-5.6	8.2	5.0
# of competitors	14.1	13.8	15.2	14.6	-0.5	-0.8	0.6
Individual Characteristics							
Owner age	33.6	32.8	33.3	34.0	-0.4	-1.2**	-0.7
Married / Living with someone	78.9	79.9	80.0	81.5	-2.6	-1.7	-1.6
HH decision making index (0-100)	83.5	83.7	84.3	84.9	-1.3	-1.2	-0.6
Main provider of income to household	77.6	76.0	78.0	74.7	2.8	1.3	3.3*
Literate	92.7	92.8	90.7	91.0	1.8	1.8	-0.3
Primary school completed is max education	34.8	34.8	35.9	36.5	-1.7	-1.7	-0.6
Secondary school completed is max education	23.9	26.3	24.3	24.0	-0.1	2.2	0.2
Higher education completed	5.5	4.8	5.4	5.2	0.4	-0.4	0.2
High capture	37.6	35.2	35.6	36.3	1.3	-1.2	-0.7
Financial Literacy knowledge (0-1)	0.4	0.4	0.4	0.4	0.0	-0.0	0.0
Mother Entrepreneur	23.5	15.4	21.0	22.6	0.9	-7.2***	-1.6
Mother in Wage Employment	5.9	5.1	5.6	6.6	-0.7	-1.5	-1.1
Father Entrepreneur	20.3	16.7	20.6	24.3	-4.0*	-7.6***	-3.7*
Father in Wage Employment	25.5	23.9	28.7	27.5	-2.0	-3.6	1.2
Spouse Entrepreneur	28.9	28.3	27.1	30.9	-2.1	-2.6	-3.8*
Spouse in Wage Employment	14.9	11.6	16.1	14.5	0.4	-2.9	1.5
Financials (US$)							
Revenue past month	963.8	841.9	1,015.6	1,087.0	-123.2	-245.1	-71.4
Profit past month	210.4	217.3	217.6	209.0	1.4	8.3	8.6
Business assets	1,682.9	1,553.8	2,123.9	1,935.8	-252.9	-382.0	188.0
Fixed Assets	829.2	744.6	1,049.5	1,067.6	-238.4	-323.0	-18.1
Financial services							
Any account (formal or informal)	64.3	62.8	61.9	61.3	3.0	1.5	0.6

Has bank account (personal or business)	58.8	57.0	56.2	55.8	3.0	1.3	0.4
Has bank account in name of business	2.0	2.1	1.8	2.4	-0.4	-0.3	-0.6
Uses any account just for business purposes	5.0	4.4	3.7	4.2	0.7	0.2	-0.6
ROSCA_SACCO	6.9	9.9	7.5	8.7	-1.9	1.2	-1.2
Saves at home	28.7	27.0	28.2	29.5	-0.7	-2.5	-1.3
Borrowed in the past	36.2	38.2	35.7	39.4	-3.1	-1.1	-3.7
Bank loan in the past	6.6	9.9	7.4	7.0	-0.4	2.9	0.4
Debt Outstanding (US$)	27.4	38.8	35.7	34.3	-7.0	4.5	1.3
Takes business money whenever for HH	77.5	80.2	78.2	79.3	-1.8	0.9	-1.1
Time to nearest bank (minutes)	21.3	18.9	20.5	21.3	0.0	-2.4**	-0.8
Formality							
Pays city council fees / market fees	56.8	58.0	54.0	56.0	0.8	2.0	-2.0
Identifies benefit(s) of business registration	69.9	73.4	71.8	72.7	-2.7	0.7	-0.8
Was inspected by municipality before	14.9	15.7	15.1	15.9	-0.9	-0.1	-0.8
Harassment							
Asked for bribe	3.8	4.8	5.2	4.6	-0.9	0.2	0.6
Sexual harassment in business	5.5	4.8	6.5	6.1	-0.6	-1.3	0.4

*, ** and *** denote significant at the 1%, 5% and 10% levels respectively.

Table 4: Take-up rates

	Received BRC with our assistance					Received TPIN with our assistance			Opened a BBA after IS		
	Full Sample	Male	Female	Lilongwe	Blantyre	Full Sample	Male	Female	Full Sample	Male	Female
Treatment 1: BRC	75.4	76.7	73.4	75.9	74.9						
Treatment 2: BRC + TPIN	68.9	76.2	58.0	70.1	67.8	4.1	4.0	4.3			
Treatment 3: BRC+IS+BBA	84.9	86.1	82.9	84.9	84.9				64.1	65.7	61.7
p-value: Treatment 1=Treatment 2	0.037	0.876	0.003	0.184	0.107						
p-value: Treatment 1=Treatment 3	0.000	0.000	0.002	0.001	0.000						
p-value: Male=Female for Treatment 1			0.315								
p-value: Male=Female for Treatment 2			0.001					0.909			
p-value: Male=Female for Treatment 3			0.142								0.153
p-value: Lilongwe=Blantyre for Treatment 1				0.759							
p-value: Lilongwe=Blantyre for Treatment 2				0.661							
p-value: Lilongwe=Blantyre for Treatment 3				1.000							

Notes: BRC denotes assistance obtaining a business registration certificate; BRC+TPIN denotes assistance with a BRC and with getting a tax-payer identification number; BRC+IS+BBA denotes assistance with a BRC, along with a bank information session and the offer of a business bank account at the end of this session. All specifications include strata dummies.

Table 5: Reasons for not accepting BRC

	All treatment groups (N=2245)			BRC+TPIN group (N=293)		
	Male	Female	Diff	Male	Female	Diff
Already registered	0.9	1.2	-0.3	1.7	0.9	0.9
Needed to consult spouse	0.2	2.7	-2.5***	0.6	4.3	-3.7**
Failed to locate/closed/moved	14.5	16.3	-1.8	18.2	29.9	-11.7**
Refusal	0.9	1.0	-0.1	0.0	0.9	-0.9
No info on reason	1.9	2.0	-0.1	3.4	6.0	-2.6
Accepted registration	81.6	76.7	4.9***	76.1	58.1	18.0***

*, ** and *** denote significant at the 10%, 5%, and 1% levels respectively.

Table 6: Impacts on Formalization

	Business Registration (BRC)		Tax Registration (TPIN)		Any city council license	
	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2
Panel A: Full Sample						
Treatment 1: BRC	0.544***	0.544***	0.020*	-0.001	0.020	0.025
	(0.021)	(0.021)	(0.012)	(0.012)	(0.024)	(0.025)
Treatment 2: BRC + TPIN	0.569***	0.536***	-0.005	0.015	-0.013	-0.011
	(0.031)	(0.031)	(0.014)	(0.018)	(0.032)	(0.034)
Treatment 3: BRC+IS+BBA	0.680***	0.642***	0.016	0.011	0.013	0.021
	(0.016)	(0.017)	(0.011)	(0.012)	(0.021)	(0.023)
Control group mean	0.061	0.067	0.044	0.055	0.670	0.616
Sample size	2,830	2,720	2,830	2,720	2,830	2,720
p-value: Treatment 1=Treatment 2	0.481	0.819	0.084	0.394	0.294	0.289
p-value: Treatment 1=Treatment 3	0.000	0.000	0.744	0.311	0.757	0.855
Panel B: Results by Gender						
Treatment 1: BRC	0.580***	0.562***	0.035**	0.005	0.029	0.028
	(0.026)	(0.027)	(0.015)	(0.015)	(0.029)	(0.031)
Treatment 2: BRC + TPIN	0.617***	0.610***	0.017	0.037	0.010	0.046
	(0.038)	(0.039)	(0.019)	(0.024)	(0.038)	(0.041)
Treatment 3: BRC+IS+BBA	0.716***	0.680***	0.024*	0.016	0.031	0.028
	(0.020)	(0.022)	(0.013)	(0.014)	(0.027)	(0.029)
Treatment 1: BRC * Female	-0.089**	-0.044	-0.037	-0.015	-0.024	-0.007
	(0.042)	(0.043)	(0.025)	(0.026)	(0.050)	(0.052)
Treatment 2: BRC + TPIN * Female	-0.125**	-0.192***	-0.058**	-0.059*	-0.059	-0.149**
	(0.064)	(0.064)	(0.026)	(0.036)	(0.067)	(0.072)
Treatment 3: BRC+IS+BBA * Female	-0.093***	-0.095***	-0.019	-0.012	-0.045	-0.018
	(0.033)	(0.034)	(0.022)	(0.024)	(0.045)	(0.047)
Control group mean: Male	0.063	0.078	0.035	0.049	0.705	0.646
Control group mean: Female	0.057	0.051	0.057	0.066	0.618	0.571
p-value: Treatment 1=Treatment 2 for males	0.381	0.266	0.403	0.182	0.604	0.650
p-value: Treatment 1=Treatment 3 for males	0.000	0.000	0.485	0.464	0.943	0.991
p-value: Treatment 1=Treatment 2 for females	0.971	0.084	0.033	0.644	0.320	0.035
p-value: Treatment 1=Treatment 3 for females	0.000	0.081	0.712	0.481	0.592	0.768

Notes: All specifications include strata dummies and a variable representing the baseline of the outcome of interest. Panel B includes a dummy for "female". Robust standard errors in parantheses. *, ** and *** denote significant at the 10%, 5%, and 1% levels respectively.

Table 7: Impacts on Financial Access and Savings

	Has a Bank Account (Personal or Business)		Has a bank account in the name of the business		Saves at home		Save in a ROSCA or SACCO	
	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2
Panel A: Full Sample								
Treatment 1: BRC	-0.006	0.021	0.038***	0.020*	-0.025	-0.011	-0.023	0.006
	(0.022)	(0.024)	(0.011)	(0.012)	(0.027)	(0.029)	(0.021)	(0.022)
Treatment 2: BRC + TPIN	0.003	0.003	0.023	0.006	0.018	0.032	-0.041	0.024
	(0.029)	(0.031)	(0.014)	(0.015)	(0.036)	(0.038)	(0.027)	(0.031)
Treatment 3: BRC+IS+BBA	0.213***	0.207***	0.480***	0.461***	-0.132***	-0.076***	-0.058***	-0.003
	(0.019)	(0.020)	(0.016)	(0.017)	(0.025)	(0.026)	(0.018)	(0.020)
Control group mean	0.628	0.660	0.024	0.039	0.545	0.528	0.202	0.188
Sample size	2,574	2,288	2,830	2,720	2,574	2,288	2,574	2,288
p-value: Treatment 1=Treatment 2	0.745	0.569	0.328	0.373	0.229	0.253	0.514	0.563
p-value: Treatment 1=Treatment 3	0.000	0.000	0.000	0.000	0.000	0.013	0.053	0.652
Panel B: Results by Gender								
Treatment 1: BRC	0.015	0.039	0.028**	0.003	-0.036	0.027	-0.006	0.011
	(0.029)	(0.031)	(0.013)	(0.016)	(0.034)	(0.031)	(0.023)	(0.024)
Treatment 2: BRC + TPIN	0.031	0.023	0.004	0.008	0.006	0.024	-0.007	0.049
	(0.036)	(0.039)	(0.015)	(0.022)	(0.046)	(0.046)	(0.030)	(0.034)
Treatment 3: BRC+IS+BBA	0.247***	0.227***	0.512***	0.486***	-0.136***	-0.080***	-0.035*	-0.015
	(0.025)	(0.025)	(0.021)	(0.022)	(0.031)	(0.026)	(0.020)	(0.020)
Treatment 1: BRC * Female	-0.057	-0.046	0.027	0.044*	0.029	-0.101*	-0.046	-0.012
	(0.045)	(0.048)	(0.023)	(0.025)	(0.056)	(0.053)	(0.047)	(0.051)
Treatment 2: BRC + TPIN * Female	-0.073	-0.052	0.051*	-0.005	0.034	0.025	-0.091	-0.074
	(0.062)	(0.064)	(0.031)	(0.029)	(0.074)	(0.083)	(0.059)	(0.069)
Treatment 3: BRC+IS+BBA * Female	-0.090**	-0.052	-0.082**	-0.062*	0.010	0.013	-0.059	0.033
	(0.039)	(0.040)	(0.032)	(0.034)	(0.050)	(0.039)	(0.041)	(0.045)
Control group mean: Male	0.587	0.634	0.026	0.051	0.567	0.540	0.126	0.106
Control group mean: Female	0.695	0.702	0.021	0.022	0.510	0.509	0.325	0.321
p-value: Treat1=Treat 2 for males	0.672	0.686	0.158	0.822	0.361	0.954	0.980	0.268
p-value: Treat 1=Treat 3 for males	0.000	0.000	0.000	0.000	0.001	0.002	0.134	0.219
p-value: Treat 1=Treat 2 for females	0.985	0.660	0.999	0.058	0.426	0.113	0.356	0.698
p-value: Treat 1=Treat 3 for females	0.000	0.000	0.000	0.000	0.003	0.881	0.215	0.639

Notes: All specifications include strata dummies and a variable representing the baseline of the outcome of interest. Panel B includes a dummy for "female". Robust standard errors in parantheses. *, ** and *** denote significant at the 10%, 5%, and 1% levels respectively.

Table 8: Impacts on Separation of Business and Household Money

	Takes business money whenever for the household		Uses any account just for business purposes		Keeps financial records	
	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2
Panel A: Full Sample						
Treatment 1: BRC	-0.019	0.035	0.000	0.012	0.004	0.030
	(0.026)	(0.026)	(0.016)	(0.017)	(0.026)	(0.027)
Treatment 2: BRC + TPIN	0.010	0.021	-0.028	-0.021	-0.002	-0.085**
	(0.035)	(0.034)	(0.020)	(0.021)	(0.035)	(0.034)
Treatment 3: BRC+IS+BBA	-0.066***	-0.028	0.201***	0.197***	0.109***	0.071***
	(0.024)	(0.024)	(0.018)	(0.018)	(0.024)	(0.024)
Control group mean	0.553	0.634	0.105	0.105	0.482	0.442
Sample size	2,830	2,720	2,830	2,720	2,830	2,720
p-value: Treatment 1= Treatment 2	0.415	0.665	0.160	0.121	0.875	0.001
p-value: Treatment 1= Treatment 3	0.049	0.006	0.000	0.000	0.000	0.092
Panel B: Results by Gender						
Treatment 1: BRC	-0.007	0.042	-0.007	0.017	-0.022	0.030
	(0.034)	(0.033)	(0.020)	(0.022)	(0.034)	(0.024)
Treatment 2: BRC + TPIN	0.041	0.062	-0.019	0.018	0.031	-0.068
	(0.044)	(0.043)	(0.025)	(0.029)	(0.045)	(0.034)
Treatment 3: BRC+IS+BBA	-0.106***	-0.016	0.227***	0.216***	0.133***	0.097***
	(0.031)	(0.030)	(0.023)	(0.023)	(0.031)	(0.024)
Treatment 1: BRC * Female	-0.030	-0.017	0.019	-0.010	0.064	0.002
	(0.054)	(0.053)	(0.034)	(0.035)	(0.054)	(0.042)
Treatment 2: BRC + TPIN * Female	-0.084	-0.106	-0.023	-0.099**	-0.086	-0.043
	(0.072)	(0.071)	(0.041)	(0.040)	(0.072)	(0.053)
Treatment 3: BRC+IS+BBA * Female	0.101**	-0.032	-0.066*	-0.048	-0.059	-0.065*
	(0.048)	(0.048)	(0.037)	(0.037)	(0.048)	(0.038)
Control group mean: Male	0.585	0.638	0.098	0.097	0.487	0.454
Control group mean: Female	0.504	0.626	0.114	0.117	0.475	0.425
p-value: Treatment 1=Treatment 2 for males	0.274	0.646	0.658	0.968	0.237	0.004
p-value: Treatment 1=Treatment 3 for males	0.001	0.051	0.000	0.000	0.000	0.021
p-value: Treatment 1=Treatment 2 for females	0.934	0.214	0.093	0.002	0.082	0.008
p-value: Treatment 1=Treatment 3 for females	0.390	0.051	0.000	0.000	0.406	0.990

Notes: All specifications include strata dummies and a variable representing the baseline of the outcome of interest. Panel B includes a dummy for "female". Robust standard errors in parantheses. *, ** and *** denote significant at the 10%, 5%, and 1% levels respectively.

Table 9: Impacts on Access to Credit and Insurance

	Borrowed in the past 6 months for business		Amount can borrow in 2 weeks (MWK)		Has insurance	
	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2
Panel A: Full Sample						
Treatment 1: BRC	-0.025	0.030	4,393	-15,648	0.006	0.001
	(0.025)	(0.023)	(14,634)	(22,589)	(0.006)	(0.005)
Treatment 2: BRC + TPIN	-0.035	0.022	2,893	3,424	0.013	0.005
	(0.034)	(0.032)	(19,220)	(34,967)	(0.010)	(0.008)
Treatment 3: BRC+IS+BBA	-0.028	0.003	39,423***	23,429	0.076***	0.084***
	(0.022)	(0.020)	(13,895)	(21,676)	(0.009)	(0.010)
Control group mean	0.371	0.241	178,137	246,664	0.010	0.009
Sample size	2,830	2,720	2,830	2,720	2,830	2,720
p-value: Treatment 1=Treatment 2	0.768	0.799	0.939	0.579	0.548	0.670
p-value: Treatment 1=Treatment 3	0.886	0.197	0.016	0.057	0.000	0.000
Panel B: Results by Gender						
Treatment 1: BRC	0.006	0.030	-16,615	-56,073*	0.007	0.002
	(0.032)	(0.030)	(19,999)	(34,064)	(0.008)	(0.007)
Treatment 2: BRC + TPIN	-0.033	0.033	-12,422	-10,936	0.013	0.003
	(0.043)	(0.041)	(26,375)	(50,470)	(0.013)	(0.010)
Treatment 3: BRC+IS+BBA	-0.062**	0.001	47,051**	11,096	0.082***	0.099***
	(0.029)	(0.026)	(20,300)	(33,424)	(0.012)	(0.013)
Treatment 1: BRC * Female	-0.077	-0.002	53,240*	102,730**	0.000	-0.002
	(0.050)	(0.047)	(28,832)	(41,216)	(0.013)	(0.011)
Treatment 2: BRC + TPIN * Female	-0.004	-0.031	39,710	36,166	-0.002	0.005
	(0.069)	(0.064)	(37,622)	(65,668)	(0.020)	(0.018)
Treatment 3: BRC+IS+BBA * Female	0.086*	0.005	-18,895	30,988	-0.016	-0.037*
	(0.046)	(0.042)	(26,196)	(38,989)	(0.019)	(0.019)
Control group mean: Male	0.375	0.235	213,225	316,180	0.009	0.007
Control group mean: Female	0.364	0.249	124,629	141,755	0.011	0.011
p-value: Treatment 1=Treatment 2 for males	0.363	0.941	0.871	0.350	0.615	0.906
p-value: Treatment 1=Treatment 3 for males	0.017	0.269	0.001	0.025	0.000	0.000
p-value: Treatment 1=Treatment 2 for females	0.525	0.598	0.755	0.630	0.734	0.604
p-value: Treatment 1=Treatment 3 for females	0.007	0.491	0.690	0.851	0.000	0.000

Notes: All specifications include strata dummies. "Borrowed in the past 6 months" include a variable representing the baseline of the outcome of interest (other two outcomes not asked at baseline). Panel B includes a dummy for "female". Robust standard errors in parantheses. *, ** and *** denote significant at the 10%, 5%, and 1% levels respectively.

Annex 1: Attrition and Business Closure

	Attrition		Business Closure	
	Follow-up 1	Follow-up 2	Follow-up 1	Follow-up 2
Panel A: Full Sample				
Treatment 1: BRC	-0.020*	-0.005	0.009	-0.013
	(0.012)	(0.015)	(0.016)	(0.020)
Treatment 2: BRC + TPIN	-0.007	-0.006	-0.014	0.001
	(0.016)	(0.020)	(0.020)	(0.027)
Treatment 3: BRC+IS+BBA	-0.006	0.002	-0.013	-0.018
	(0.011)	(0.014)	(0.014)	(0.018)
Control group mean	0.066	0.095	0.095	0.171
Sample size	3,002	3,002	2,830	2,720
p-value: Treatment 1=Treatment 2	0.407	0.952	0.246	0.616
p-value: Treatment 1=Treatment 3	0.177	0.603	0.118	0.754
p-value test of equality	0.351	0.853	0.392	0.729
Panel B: Results by Gender				
Treatment 1: BRC	-0.010	-0.004	0.001	-0.015
	(0.015)	(0.019)	(0.018)	(0.024)
Treatment 2: BRC + TPIN	-0.028	-0.031	-0.017	-0.036
	(0.018)	(0.023)	(0.021)	(0.031)
Treatment 3: BRC+IS+BBA	-0.008	-0.009	-0.018	-0.030
	(0.014)	(0.017)	(0.015)	(0.022)
Treatment 1: BRC * Female	-0.026	-0.001	0.018	0.007
	(0.024)	(0.031)	(0.035)	(0.042)
Treatment 2: BRC + TPIN * Female	0.053	0.064	0.008	0.095
	(0.035)	(0.042)	(0.044)	(0.058)
Treatment 3: BRC+IS+BBA * Female	0.004	0.028	0.013	0.029
	(0.023)	(0.028)	(0.030)	(0.038)
Control group mean: Male	0.064	0.096	0.070	0.150
Control group mean: Female	0.070	0.093	0.132	0.201
p-value: Treatment 1=Treatment 2 for males	0.277	0.229	0.375	0.507
p-value: Treatment 1=Treatment 3 for males	0.884	0.797	0.192	0.498
p-value: Treatment 1=Treatment 2 for females	0.036	0.275	0.448	0.171
p-value: Treatment 1=Treatment 3 for females	0.039	0.268	0.348	0.804

Notes: All specifications include strata dummies. Panel B includes a dummy for "female". Robust standard errors in parantheses. *, ** and *** denote significant at the 10%, 5%, and 1% levels respectively.