



# Private Enterprise Development in Low-Income Countries

## Managerial Human Capital in Small and Medium Enterprises

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*This randomized controlled trial evaluates a business training programme for women-owned small and medium enterprises in urban Uganda, examining both the direct effects on the management and growth of businesses invited to participate, and the indirect effects on the rest of the community.*

### Background

Small businesses are widely believed to serve as engines for innovation, employment and economic mobility, due to their flexibility in responding to new opportunities and their potential for rapid growth. Yet, data suggest that very few small and medium enterprises (SMEs) in developing countries grow into larger businesses. The owners of these businesses often have limited human capital and lack management experience or skills, which may make it difficult for them to grow their businesses or overcome obstacles<sup>1</sup>.

Hoping to unleash the growth potential of small businesses, an increasing number of public and non-profit organizations offer technical assistance programmes aimed at training and mentoring entrepreneurs and helping SMEs develop expansion strategies. However, little is understood about whether, when, and how such programmes work. Moreover, a programme that is beneficial for participants may or may not be beneficial for the community as a whole – understanding how training or resources offered to a subset of firms may affect their competitors, collaborators, and customers is key to assessing the value of such programmes and policies as development strategies.



### Evaluating the Women Mean Business programme in Central Uganda

In this study, we collaborated with the international NGO TechnoServe to evaluate their Women Mean Business (WMB) programme, which intends to help female small business owners scale up their enterprises. The WMB programme has three components. First, participants attend a series of classroom trainings, which teach general management concepts related to finances, human resources, and marketing. Second, participants receive individual visits at their place of business from “coaches” – mainly MBA students from a local business school – who help them to create business plans based on a template provided by TechnoServe. Finally, participants are each paired with a mentor, who is a more experienced business person. In the realm of existing studies of training or consulting programmes for SMEs in developing countries, this falls in the mid-range, both in terms of the size of participating businesses and the intensity of the intervention<sup>2</sup>.

In order to be eligible for the WMB program, a business must be owned or co-owned by a woman at least 23 years old, open for at least 2 years prior to the start of the programme, have at least one full-time

<sup>1</sup> Bruhn et al., 2012; Bloom et al., 2010; Drexler et al., 2011.

<sup>2</sup> McKenzie and Woodruff, 2012.



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employee, and have monthly revenue between 580,000 and 22,000,000 shillings (at the time, approximately \$250 to \$9,000). Training sessions were held in four cities in Central Uganda (Kampala, Entebbe, Jinja, and Mukono). The training was completely free to participating businesses, aside from the time commitment involved in attending events.

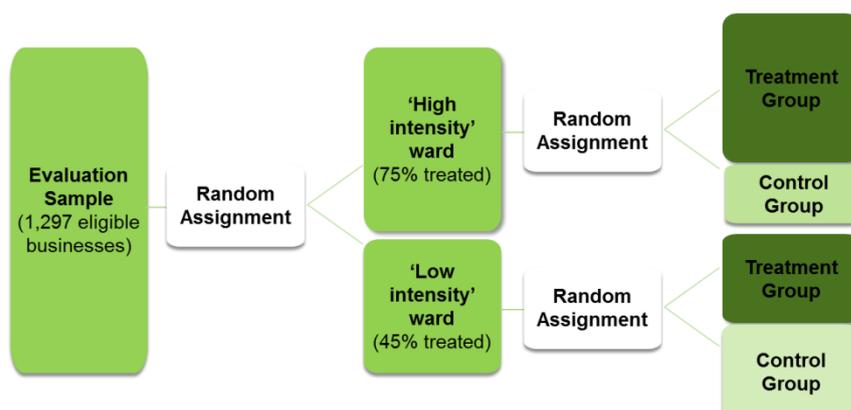
To measure the scope for expansion of WMB or similar programmes, we conducted a census of businesses in commercial areas in Central Uganda, surveying 32,224 businesses, of which 17,774 (55%) were woman-owned or operated. Only 5,178 (29% of women-owned businesses) appeared to meet WMB eligibility criteria, with the most common excluding factors being the lack of an employee or having been in operation for less than 2 years. TechnoServe received 2,332 applications via in-person marketing visits to businesses identified through the market survey as well as usual outreach methods through business service organizations, radio, and word-of-mouth. Among these applicants, 1,298 turned out to be fully eligible for the programme, and 806 were randomly selected to be invited to participate.

A little over half (57%) of those invited attended at least one programme event. Among the group that was invited to join the programme, attendees differed from non-attendees: they were younger, more highly educated, had more years of business experience, and spent slightly fewer hours per week in their businesses. The majority of businesses were in service or retail sectors, most commonly running restaurants, hair salons, or small clothing or general merchandise shops.

### A two-tiered RCT to evaluate direct and indirect effects of the training programme

We conducted a randomized controlled trial (RCT) to evaluate the direct and indirect effects of the WMB programme. The study was designed to expand on previous research on SME training programmes in several ways. First, IPA and TechnoServe worked together to expand the size of the WMB programme, both in order to understand the potential for scale-up to a broader set of businesses that might not normally be reached, and to ensure a sufficiently large sample for analysis. Second, we collected data in ten rounds of surveying over a four-year period, from before the programme began in June 2012, to almost three years after it had ended, in June 2016. This contributed to the statistical power of the analysis, but also gives a picture of how the programme affected participants at different points in time after its implementation, from just a few months after the start to well after the programme itself had ended.

Most importantly, the study was designed to allow us to evaluate both the impact of the programme on individual participating businesses, and any broader spillover effect<sup>3</sup> on non-participating businesses or the neighbourhoods in which they are located. To achieve this goal, the randomization was two-tiered, with clusters at a neighbourhood level and programme assignment at an individual business level. Businesses were first located using GPS coordinates collected during the baseline survey, which is the survey conducted before the intervention. Then, businesses were broken into groups by neighbourhood, primarily following the boundaries of political “wards”, with the densest wards in the central business district of Kampala broken in half. Half of the neighbourhoods were randomly chosen to have a higher proportion of their businesses selected into the treatment group. In these high treatment intensity



<sup>3</sup> In economics, spillover effects are economic costs or benefits that individuals or firms that did not participate to the programme experience as a result of it.



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neighbourhoods, 75 percent of individual sample businesses were invited to join the programme, while in low treatment intensity neighbourhoods, only 45 percent were invited (see diagram to the left-hand side for a visual representation). To the extent that businesses in high intensity neighbourhoods have different outcomes from those in low intensity neighbourhoods, we can attribute that to the causal effect of having more neighbours with access to the WMB programme.

### Preliminary findings

#### *How did the programme affect participants' attitudes and networks?*

Treatment group businesses reported more positive attitudes about their businesses and more confidence in their management abilities across a wide range of indicators. The existing level of confidence was relatively high among all businesses – for instance, control group businesses rated their confidence in their ability to grow their businesses at an average of 3.58 on a scale from 1 to 4. However, the treatment group showed small but statistically significant increases in reported confidence across most areas of management ability: overall ability to grow the business, recordkeeping, marketing, financial management, and employee management. We found no changes in confidence regarding customer care. Treatment group businesses also rated their businesses more highly on a ten-step ladder, both when reflecting on the current status of the business, and on where they expected it to be in five years.

We also investigated whether the WMB programme expanded the size of businesswomen's networks of contacts (e.g. the number of people they who know are running a similar type of business), or the intensity of interaction with those networks (how frequently they speak with their business contacts), but did not find any changes.

#### *How did it affect the way they run their businesses?*

We found changes in some of the business practices targeted by the programme, particularly in the areas of financial management and recordkeeping, and relationships with customers and suppliers. The treatment group was 7 percentage points more likely to keep records (over an average of 80% who do in the control group) and also 7 percentage points more likely to separate between personal and business expenses (over 54% in the control group who do so). They were more than twice as likely to have a written business plan (32 percentage points more likely, over 30% in the control group), consistent with this being a major focus of the coaching portion of the programme.

Although there was little change in actual borrowing behaviour, they were more likely to say they could access funds if they needed to. They were also more likely to have recently negotiated with their suppliers and to have compared the price or quality available from alternative suppliers. They spent slightly more on marketing, were more likely to have made changes to their business based on customer feedback, and saw small increases in the fraction of customers who are repeat or regular customers. We found no changes in pricing, introduction of new products or services, hours of operation, or the amount of labour employed in the business.

#### *How did it affect their financial and other outcomes?*

In contrast to many studies of business training programmes, we found statistically significant changes in business financial outcomes due to the WMB programme. We found that the programme increased average monthly revenues by 22% (an increase of 1,295,938 shillings, or about \$385 at current exchange rates) and take home income from the business by 17% (67,792 shillings per month, or \$20). The results also suggest that this increase in income from the business may have translated into small improvements in home circumstances – owners of treatment businesses had more people living in their households, were more likely to own their homes, and owned more household assets (such as vehicles and electronics). However, the programme does not seem to have caused any transformational “take-off” in



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the growth or scope of participating business: we found no changes in the likelihood that the business was still in operation, number of branches, employment in the business, or reliance on the business as the main source of family income.

*Were there spillover effects of the program on other businesses?*

Preliminary analysis suggests that there may have been a “rising tide” effect in neighbourhoods with a high fraction of businesses invited to join the WMB programme. We find no evidence that specific business practices taught in the programme diffused out to control group businesses, either via collaboration with treatment group businesses or copy-cat behaviour. However, control group businesses had higher revenues and take home earnings in high treatment intensity neighborhoods. While treatment group businesses in those neighbourhoods also did better, they were less far ahead of their control group neighbours than those in low intensity neighbourhoods. Ongoing analysis is investigating potential explanations for this surprising finding.

### Moving Forward...

In ongoing analysis, we are investigating the channels through which learning from the WMB programme translated into changes in revenue and earnings, both for participants and for their control group neighbours. We are also looking at time patterns in the treatment effects of the programme, to see whether there is evidence either that it took participants some time to learn or perfect new practices, or in contrast, whether they may have forgotten or intentionally discarded after the programme ended. Finally, we are interested in how evenly distributed gains from the programme were – did a large number of participants make modest improvements, or are the average effects driven by a few businesses that made transformational changes?