



Private Enterprise Development in Low-Income Countries

Contract Design, Business Growth, and Female Entrepreneurship: Evidence from Microfinance in India

Erica Field, Rohini Pande and Natalia Rigol

Several field experiments find positive returns to grants for male and not female micro-entrepreneurs. But these analyses overlook that female entrepreneurs often reside with a male business owner. Using data from randomized trials in India, Sri Lanka and Ghana, we show that the gender gap in microenterprise performance is not due to a gap in aptitude. Instead, low average returns of female-run enterprises reflects the fact that women's capital is typically invested into their husband's enterprise. Household-level income gains are equivalent regardless of the grant or loan recipient's gender.



Policy context

In many developing countries, half or more of the labor force is employed in small, informal firms. Understanding the constraints to growth for microenterprises is, therefore, a pressing policy and research problem. Several recent empirical studies have tested whether expanding access to capital would help microentrepreneurs grow their businesses. These studies have consistently found that male-operated – but not female-operated – microenterprises benefit from access to grants or loans. A common explanation for this is that female-run enterprises have low returns to capital or, alternatively, that women are less able to make sound or timely enterprise investments. This finding would suggest that credit programs for the poor, such as microfinance, should direct loans to men rather than women. Yet previous analysis has overlooked the fact that female entrepreneurs often reside with a male business owner. When female microentrepreneurs have multiple investment opportunities available to them within their household, they may choose to invest their grant or loan in a business that is not their own.



Private Enterprise Development in Low-Income Countries

In this paper, we study female microentrepreneurs' returns to grants and loans through the lens of household-level – and not individual-level – investment decisions. We re-examine data from previous studies in India, Ghana and Sri Lanka which experimentally varied access to grants or loans in order to estimate entrepreneurs' returns to capital. We use this data to assess whether estimates of female microentrepreneurs' returns to capital differ when all household investment opportunities (i.e. the female's business, along with all other household members' businesses) are taken into account.

Study context and methodology

Our analysis uses data from three studies which investigate microentrepreneurs' marginal returns to capital:

(1) Field, Papp, Pande, and Rigol (2013) partnered with Village Financial Services, a microfinance institution that operates in the peri-urban areas of Kolkata, India and lends to low-income women. In the original study, the researchers randomly assigned borrowers to receive one of two loan contracts: (1) the standard microcredit product where borrowers received a loan and began repayment two weeks after loan disbursement or (2) a grace period contract where repayment began two months after loan disbursement. The authors find that the grace period contract leads to significant business growth, which continues three years after the completion of the study.

(2) De Mel, McKenzie, and Woodruff (2008) selected a group of 408 microenterprise owners in Sri Lanka (190 of whom are female) and randomly assigned them to be offered either cash or in-kind grants, worth either USD 100 or USD 200, or to a comparison group. The authors find that while men exhibit marginal returns to capital of 9 percent per month, women's returns to capital are zero percent per month.

(3) Fafchamps, McKenzie, Quinn and Woodruff (2014) selected a group of 793 microenterprise owners in Ghana (479 of whom are female) and randomly them to be offered either cash or in-kind grants worth USD 120, or to a comparison group. The authors find that while in-kind grants led to an increase in profits of 30-60% for men, there is no average increase in profits for women.

Across all three settings, female entrepreneurs in the study sample frequently live in households with male entrepreneurs. Among the Indian, Sri Lankan, and Ghanaian entrepreneurs in our samples, the share of females who live with another business owner at baseline ranges from 41% to over 50%.

Findings

Finding 1: Households benefit from capital-shock interventions, regardless of whether the intervention is directed towards male or female enterprise owners.

When we analyze the impact of the capital-shock by looking only at changes in profits of intervention recipients' enterprises, we replicate the results of earlier studies: it appears as though female-owned enterprises do not benefit from more flexible loans (in the India study) or grants (in the Sri Lanka study). But when we instead examine household-level impacts of access to capital, a different conclusion emerges: in the India study, household profits of female borrowers who receive the flexible contract increase by 20-29% relative to household profits of those in the comparison group. Similarly, in Sri Lanka, we observe a significant rise in household income among the full sample of households in which female entrepreneurs receive a grant¹. These results demonstrate that previous estimates of female

¹ Fafchamps McKenzie, Quinn and Woodruff (2014) do not collect household income data or profit data for other household enterprises, so we omit their sample from this part of the analysis.



Private Enterprise Development in Low-Income Countries

entrepreneurs' returns to capital are low in part because women frequently use the capital shock to invest in businesses that are not their own.

Finding 2: Female grant or loan recipients' investment decisions are linked to their household's occupation composition.

We find that when women are the sole enterprise owner in their household, they invest into their own enterprise and grants or loans lead to substantial growth. In India, the grace period contract leads to a 70-81% increase in profits for women who are the sole household business owner. In the Sri Lanka sample, we similarly find that among female micro-entrepreneurs who report no other household business owners, grants lead to a statistically significant 7% increase in profits. In all three studies, when women are in single-enterprise households their enterprises have returns to capital comparable to those of male-owned enterprises. Conversely, when there are multiple entrepreneurs in the household, capital interventions have no effect on female borrowers' enterprise outcomes.

Our findings suggest that female entrepreneurs are as capable as male entrepreneurs of making sound investment decisions. But, while there may be household-level returns to interventions that aim to improve women's business skills, such programs are unlikely to have a significant impact on women's level of profits when there are male enterprise owners in the house. Research and policies that further our understanding of female entrepreneurs' sectoral choice and investment constraints hold more promise for closing the gender gap in microenterprise returns.

Moving Forward...

Our findings highlight the importance of taking households' entire portfolio of investment opportunities into consideration when studying microenterprise behavior. These results also raise important research questions: how do households choose the number of businesses to operate and who will manage them? And, are household investment decisions efficient?

Across all three samples, households invest in male- and not female-owned enterprises when there is opportunity to do so. Households might maintain multiple enterprises with disparate returns because diversification lowers their exposure to risk. On the other hand, our findings might be the result of intra-household conflict and women's low bargaining power: when female microentrepreneurs reside in a household with male business owners, they might not have the power to choose to invest capital into their own enterprises. In future work, we hope to study the mechanisms behind women's occupational choice and investment decisions.