Asset-based Microfinance in Pakistan

Sector(s): Finance

Sample: 757 Entrepreneurs

Target group: Entrepreneurs

Outcome of interest: Earnings and income Asset ownership Consumption smoothing Profits/revenues

Intervention type: Credit

AEA RCT registration number: AEARCTR-0003886

Data: https://doi.org/10.3886/E195984V3

Partner organization(s): Innovations for Poverty Action (IPA), Gates Foundation, Private Enterprise Development in Low-Income Countries (PEDL)

Many small business owners in low- and middle-income countries struggle to access financing to invest in tools or equipment that can help their businesses grow and improve household welfare. In Pakistan, researchers partnered with a microfinance institution to conduct a randomized evaluation to test how larger asset-based loans for purchasing business equipment, combined with flexible repayment options, affected business performance and household well-being. Business owners who received these loans increased their profits, had larger businesses, and spent more on food and education, particularly for girls.

Policy issue

In low- and middle-income countries, small business owners often struggle to access financing to grow their businesses and improve their families' well-being. Early studies on microfinance found limited effects of traditional microcredit—short-term loans with rigid repayment schedules—on business performance and household consumption. Traditional microfinance loans are typically too small to cover the cost of productive assets, which can help businesses grow and increase income. As a result, microenterprises face challenges in expanding and improving household livelihoods.

Asset-based financing, which provides larger loans tied to the purchase of equipment or other fixed assets, offers a potential solution. However, there is little evidence on whether this type of financing helps small business owners grow their businesses, increase household income, or improve their quality of life. Additionally, many have irregular income due to factors like seasonal demand or unexpected expenses, which can make it difficult to keep up with regular loan repayments. Flexible repayment plans that allow borrowers to adjust payments during tough times could provide much-needed support, but it is unclear if these types of plans are effective or sustainable for lenders. Can larger, asset-based loans with flexible repayment options help small business owners invest in their businesses, increase their earnings, and improve household welfare?

Context of the evaluation

Small business owners in Pakistan face challenges accessing capital to grow their enterprises. Credit options are often limited or too small to support larger, one-time purchases—such as rickshaws, industrial sewing machines, or food processing equipment. While these larger fixed assets are viewed as essential inputs for improving business owners' productivity and income, they are typically out of reach through standard microloans. To address this gap, *Akhuwat*, one of the country's largest microfinance institutions, piloted an asset-based loan program. The initiative provided Shariah-compliant financing—meaning that loans are

structured to avoid interest and based on shared asset ownership—for assets worth up to US$1,900. This amount was nearly four times the standard microloan and capable of tripling the fixed assets of the average firm. The study focused on small business owners who had successfully repaid smaller loans (up to US$475) and were seeking additional financing to expand their businesses. Participants were primarily male, with an average age of 38. Most operated microenterprises in sectors like rickshaw driving, tailoring, food production, and retail. On average, monthly business profits of small business owners eligible for the study were US$245, and the average value of their fixed business assets was US$920.



Photo credit: Nick Fox, Shutterstock.com

Details of the intervention

Researchers conducted a randomized evaluation to test the impact of asset-based microfinance with flexible repayment options on microenterprise performance, household income, and welfare. The study comprised 757 microenterprise owners who had successfully repaid smaller loans and reached the borrowing limit of Akhuwat's standard microfinance program. Eligible participants were randomly assigned to one of three groups ：

1. *Fixed-Repayment Contract Group (257 participants):* Participants were offered an asset-based loan contract to finance up to three assets of their choosing worth up to $1,900. Under this contract, participants initially purchased 10 percent of the asset and made fixed monthly payments equivalent to 5 percent ownership over eighteen months, after which full ownership would be transferred to the borrower.
2. *Flexible-Repayment Contract Group (246 participants):* Participants were offered the same asset-based loan contract worth up to US$1,900, but with a flexible repayment structure. Borrowers could adjust their repayments monthly, provided they

paid a minimum of 2.5 percent ownership of the asset each month, allowing them to adjust repayment speed based on their income flow.

3. *Comparison Group (254 participants):* Participants were eligible only for Akhuwat's standard zero-interest microloan of US$475.

Akhuwat staff introduced the contracts through group meetings where they explained the terms, repayment structures, and ownership transfer process. Participants could then select the assets they wished to purchase based on their business needs.

The evaluation lasted for 18 months, corresponding to the loan repayment period. Researchers conducted in-person surveys at multiple intervals—including up to two years after the intervention began—to measure changes in business profits, asset ownership, household income, and consumption patterns. Researchers also measured behavioral factors, such as risk preferences and repayment behaviors, to understand how participants responded to the different contract options.

Results and policy lessons

Borrowers in the asset-based loan program saw improvements in business performance, household income, and welfare outcomes. Flexible repayment plans provided additional benefits for borrowers with unstable incomes, suggesting potential advantages in tailoring microfinance products to meet diverse needs.

Take-up of loan: 53 percent of participants assigned to fixed repayment contracts and 50 percent of those assigned to flexible repayment contracts proceeded with the financing. Overall, 281 participants purchased business assets through the program, with an average loan amount of US$1,517. By the end of the contract, 80 percent ownership shares were achieved on average, with many completing asset purchases after extensions.

Business outcomes: Eighteen months after the loan offer , participants who were offered loans tied to asset purchases were 9 percentage points more likely to be running a business than those in the comparison group (80 percent). The value of their business assets increased by forty percent on average, amounting to US$401 more than the US$1,003 average in the comparison group. Business profits also grew by 11 percent, an average increase of US$27 from an average of US$249 in the comparison group. There were no effects on business revenue. Researchers suggest that the profit gains were primarily due to lower business expenses, particularly a 17 percent reduction in spending on raw materials. Additionally, 68 percent of borrowers reported that the asset helped them grow their business, and 90 percent understood the financing terms. There were no effects on employment.

Recipients improved inventory management by negotiating prices, comparing suppliers, and maintaining adequate stock levels—likely a necessity for handling larger fixed assets. Some participants also implemented better marketing practices. Importantly, these advancements occurred without any direct training or guidance in business management, indicating that asset-based financing can indirectly encourage more effective business operations.

Household spending: Households that received asset-based loans, monthly household income increased by US$31 from a base of US$357 (a 9 percent increase), driven by higher business profits rather than other income sources. Household spending also rose by US$13 from a base of US$220 (a 6 percent increase), with increases observed in key areas such as food and education. For instance, food spending increased by 5 percent relative to the comparison group.

Household spending on education: Households increased their spending on schooling by 26 percent, rising from US$22 to US$28 per month for those who received the asset-based loan. There was an increase for both girls and boys, though the effects were generally larger for girls. No changes were observed in savings levels.

Cost analysis: Asset-based loans proved highly cost-effective. Even if benefits lasted only two years, the value created was nearly four times the cost. If impacts continued for five to ten years, returns could rise to eight to twelve times the investment. These

results suggest the model offers a sustainable and impactful way to support small business growth.

Researchers suggest that offering asset-based financing for experienced microfinance clients, can boost their business performance and household welfare. The model proved cost-effective for both borrowers and the lender, with high repayment rates and minimal defaults.

1.