Goldilocks Case Study: Root Capital

Root Capital: Measuring the Impact of Financing Small and Growing Agricultural Businesses

Agriculture accounts for one-third of gross domestic product and three-quarters of employment in sub-Saharan Africa, yet agricultural yields and productivity are the lowest of any region of the world.[1] While there are many efforts underway to improve the incomes of poor farmers, a number of market weaknesses hamper these efforts, including poor infrastructure, lack of agricultural support services and credit, and difficulty accessing international markets.

Root Capital is an impact investor that seeks to address some of the market problems affecting the rural poor. It provides loans and financial management training to small and growing agricultural businesses, which buy directly from smallholder farmers and sell to larger distributors. Root Capital's assistance is designed to help small and growing agribusinesses to buy better quality products at higher volumes, and with greater consistency from small-scale farmers. Since its founding in 1999, Root Capital has disbursed over $900 million in loans to more than 600 rural businesses and worked with more than one million rural households in 30 countries in Africa and Latin America.

To manage its large and growing portfolio, Root Capital has developed a right-sized monitoring system that reflects the CART principles. The organization collects action-oriented data to inform key decisions and demonstrates a commitment to high data quality. Continual

refinement of the monitoring system, and the use of innovative tools that integrate financial, social and environmental performance into decision-making, reflect a commitment to using data for learning, action, and improvement.

The size of Root Capital loans and the nature of their work with small and growing enterprises poses a challenge for credible impact evaluation using a randomly selected comparison group. Value chain interventions like Root Capital's are typically designed to effect change at multiple stages along the agricultural value chain, and usually involve working with a limited number of organizations at a time with relatively large loan sizes. Randomized evaluations are often not feasible because the sample size is too small to generate valid results.

This case study focuses on the Goldilocks principle of credibility and the challenge of measuring the impact of lending to small and growing businesses. Root Capital's current measurement strategy has utilized a quasi-experimental regression discontinuity approach implemented by an independent researcher. This study appears to validate important elements of Root Capital's theory of change.

Root Capital has also implemented farmer surveys with comparison groups to estimate program impact on businesses and farmers. However, since identifying a credible counterfactual for impact evaluation is probably not feasible, we recommend that Root Capital focus on analyzing the business case for farmers who work with the agribusinesses. If such an analysis found that farmers earned a larger profit after working with the business, it would help validate the program's theory of change, though it would not demonstrate that the program caused the change.

Lessons for Others

1. Know when not to measure impact.

Credible data analysis involves understanding when to measure impact—and also when not to. Even if high-quality data are available, identifying a valid counterfactual to measure impact is not feasible for all programs. A comparison that suffers from selection bias is not credible proof of causality and may not be the best use of scarce analytical and financial resources – meaning it would not adhere to the Responsibility principle of CART.

2. Avoid complex evaluation methods when possible.

Quasi-experimental impact evaluation methods can sometimes be a good alternative when a randomized controlled trial is not feasible, but these methods are complex and also have a number of limitations, including technical challenges and potentially high costs. Implementing organizations should avoid investing a lot of resources in methods that require a large number of assumptions, a great deal of additional data collection or require a high level of statistical knowledge to validate them. Simpler methods of operational research, such as using regression discontinuity to examine the effects of different treatments, can yield evidence of impact as well as useful program learning at a reasonable cost.

3. Consider evaluating the business model, rather than measuring impact.

When measuring impact is not feasible, a social enterprise organization could consider evaluating the business proposition of an investment. While such an estimate cannot attribute any positive return on investment to the program or investment (i.e. it cannot show the program caused the change), negative returns may be an indicator the program is not working as intended. Such data, especially when combined with uptake and engagement data from end-users, can shed light on how the model can be strengthened.

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