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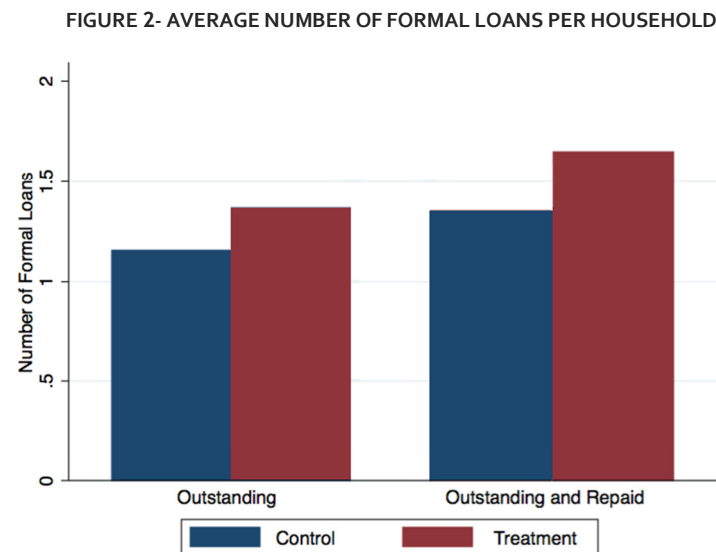
# KGFS Impact on Lending Patterns

## Background

Pudhuaaru, Vellaru and Thenaaru KGFS (Kshetriya Gramin Financial Services), an innovative rural financial services provider tailoring its products for the underserved has randomly rolled out branches in rural Tamil Nadu, allowing researchers to identify the causal impact of access to financial services on the borrowing behavior of rural populations there. The following results are based on the sample of the eight branches opened by Pudhuaaru KGFS in 2010. The study is being conducted by EPoD researchers from Harvard and Duke University, in partnership with the Centre for Microfinance at IFMR Research.

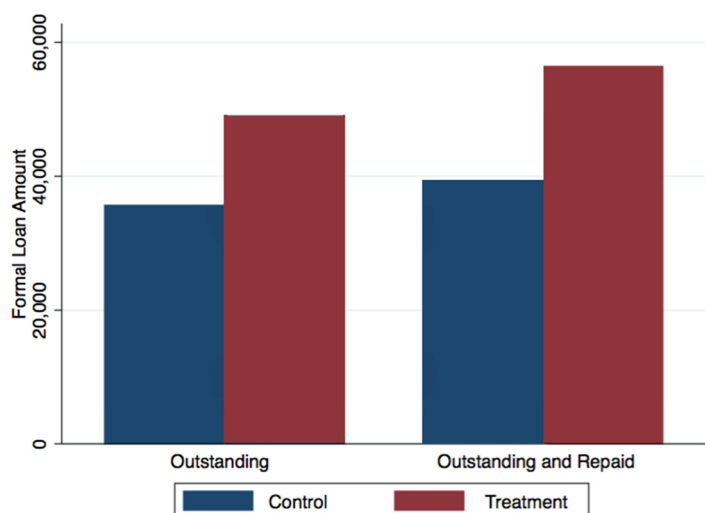
The data used for these results was collected during a follow-up survey conducted between October 2011 and January 2012 for eight “treatment” service areas where Pudhuaaru KGFS provided its financial services, and eight control areas. The sample consisted of 673 households.

Households were asked to only report loans greater than Rs. 2,000 so these estimates are likely to underestimate the total effect on borrowing. Only statistically significant results are reported here. Types of loan providers are divided into two categories: formal and informal. Formal loan providers



correspond to private or public banks, MFIs, Self Help Groups and credit cooperatives, whereas informal loan providers are friends, neighbors, relatives, shopkeepers, moneylenders, pawnbrokers, landlords and employers.

**FIGURE 1- AVERAGE AMOUNTS OF FORMAL BORROWING PER HOUSEHOLD**



## Increased Formal Financial Access

In areas serviced by a branch, outstanding formal borrowing is 40% higher, and the average amount repaid on formal loans is twice as large at Rs. 7,300 (Figure 1).

Comparison between treatment and control groups implies that the opening of a Pudhuaaru KGFS branch in a service area increased the number of formal loans by roughly 20% per household (on a base of 1.15 loans), as seen in Figure 2. The number of repaid formal loans was about 40% higher in treatment areas, with 28 loans repaid within the past year for every hundred respondents in treatment areas as opposed to 20 for every hundred respondents in control areas.

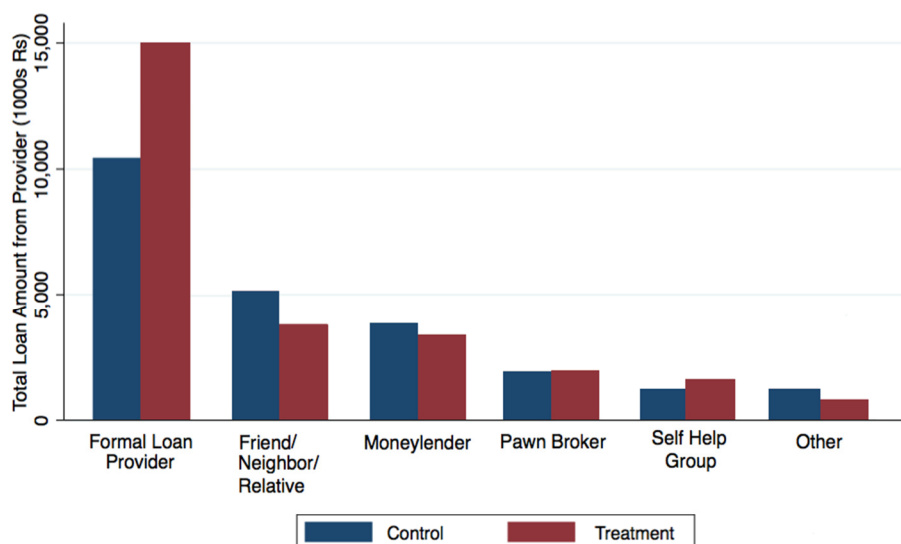
There is no increase in the probability of having a formal loan in areas served by Pudhuaaru KGFS when compared to the areas not served. This suggests that Pudhuaaru KGFS is primarily serving the two-thirds of households that already had access to formal credit by giving them even greater financial access. Before Pudhuaaru KGFS started its services, formal credit was largely provided by MFIs, Self Help Groups, nationalized banks, and credit cooperatives; very little (less than 5%) was provided by private banks.

There is weak evidence of a higher proportion of households<sup>1</sup> stating they had repaid any formal loan in treatment areas: 20% of respondents in Pudhuaaru KGFS service areas reported having repaid at least one loan in the past year, compared to 16% in control areas. This result is consistent with the absence of change in the probability of having a formal loan because of client drop-off across loan cycles.

### A Decline in Informal Lending

As shown in Figure 3, the substantial increase in outstanding formal loans in treatment areas was matched with a decline in borrowing from friends and relatives.

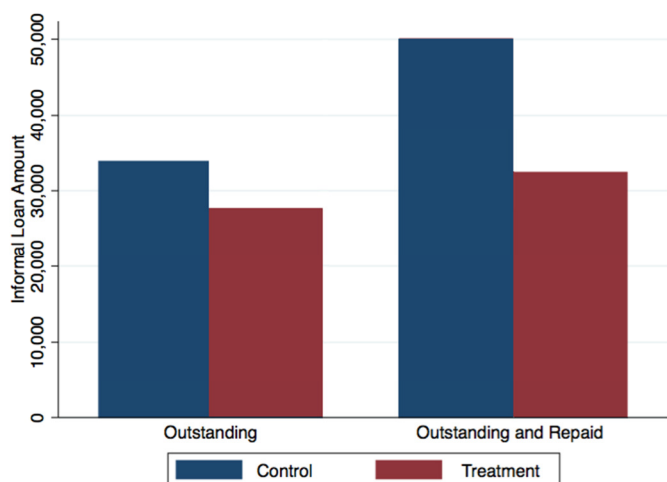
FIGURE 3- TOTAL LOAN AMOUNT BY PROVIDER TYPE



The outstanding informal loan amount was lower by one-sixth in the areas served by Pudhuaaru KGFS (Figure 4). This provides strong evidence that the arrival of the Pudhuaaru KGFS branch affected the overall level of informal lending in the village.

Likewise, the fraction of households reporting any outstanding informal loans was lower: 63% of households reported an outstanding informal loan in treatment areas compared to 71% in control areas (11% decrease). Thus, some of the households were able to completely end all large informal loans (loans greater than Rs. 2000).

FIGURE 4 - AVERAGE AMOUNTS OF INFORMAL BORROWING PER HOUSEHOLD<sup>2</sup>



#### KEY POINTS

- In areas served by a branch, the incidence of outstanding formal borrowing is 40% higher, and the number of formal loans has increased by roughly 20% per household.
- The fraction of households reporting any outstanding informal loans was approximately 11% lower in areas served by PKGFS, and the average outstanding informal loan amount was one-sixth lower.
- In short, the arrival of Pudhuaaru KGFS resulted in both a substantial increase in outstanding formal loans and a decline in borrowing from informal sources.

<sup>1</sup> Please note this paragraph refers to the “proportion of households reporting a repaid formal loan”, as opposed to “the number of repaid formal loans” in the previous paragraph. Some households indeed report having repaid several of these loans.

<sup>2</sup> Though visually the most convincing of all the graphs, the amount of informal borrowing repaid per household (Figure 4) is not statistically significant. All other differences between treatment and control in Figures 1,2 and 4 are statistically significant though. Please refer to the text for all other statistically significant results.