

Randomised Control Trial of a Financial Inclusion Program in Papua New Guinea

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Outline

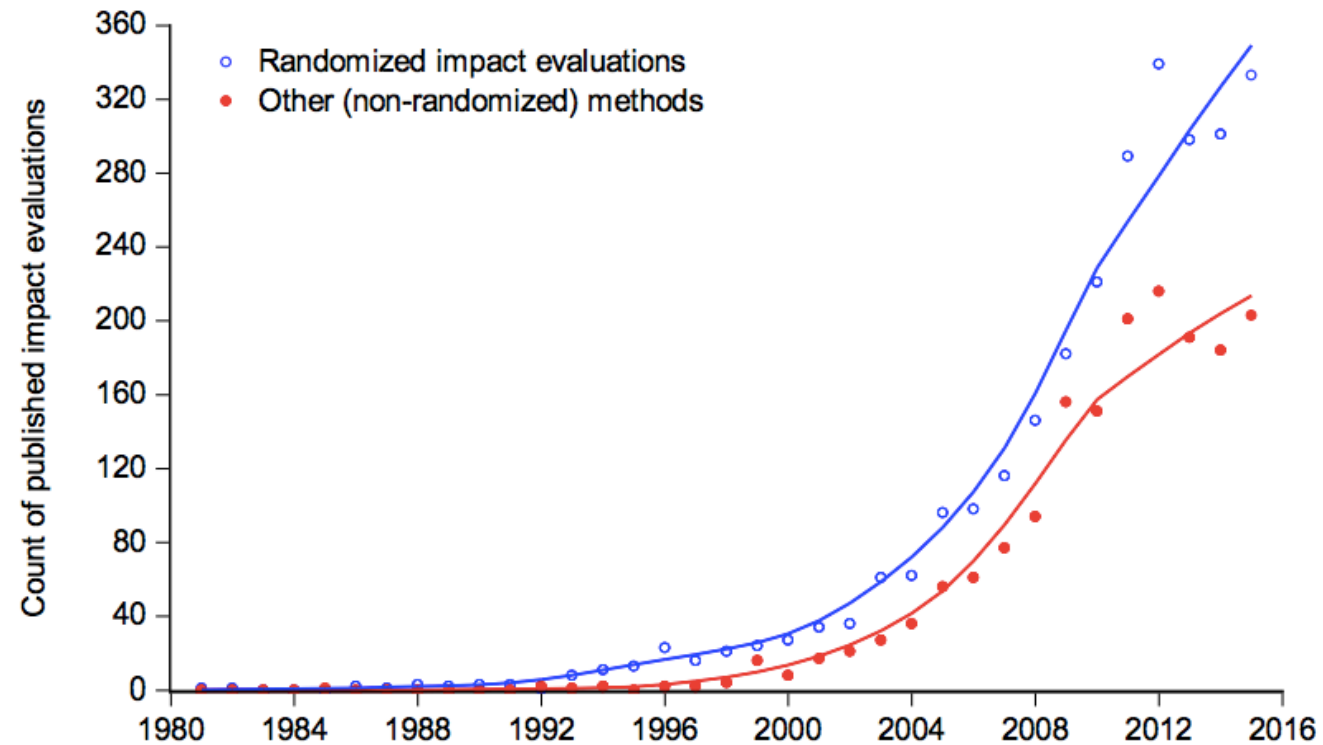
- What is an impact evaluation?
- Background to the program and setting of the evaluation
- The financial inclusion program
- The design of the impact evaluation
- Initial findings

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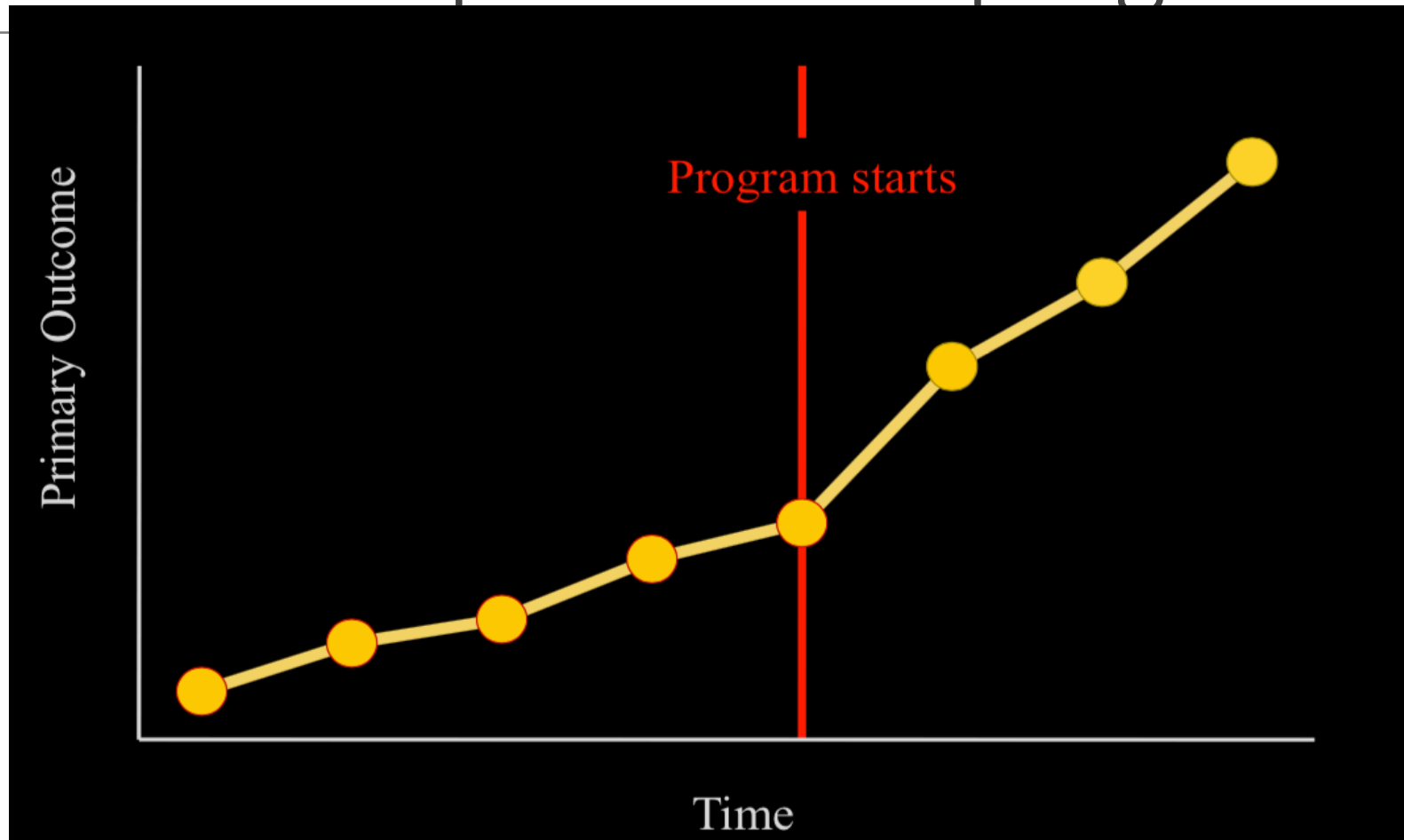
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The number of new impact evaluations has grown exponentially since 2000...

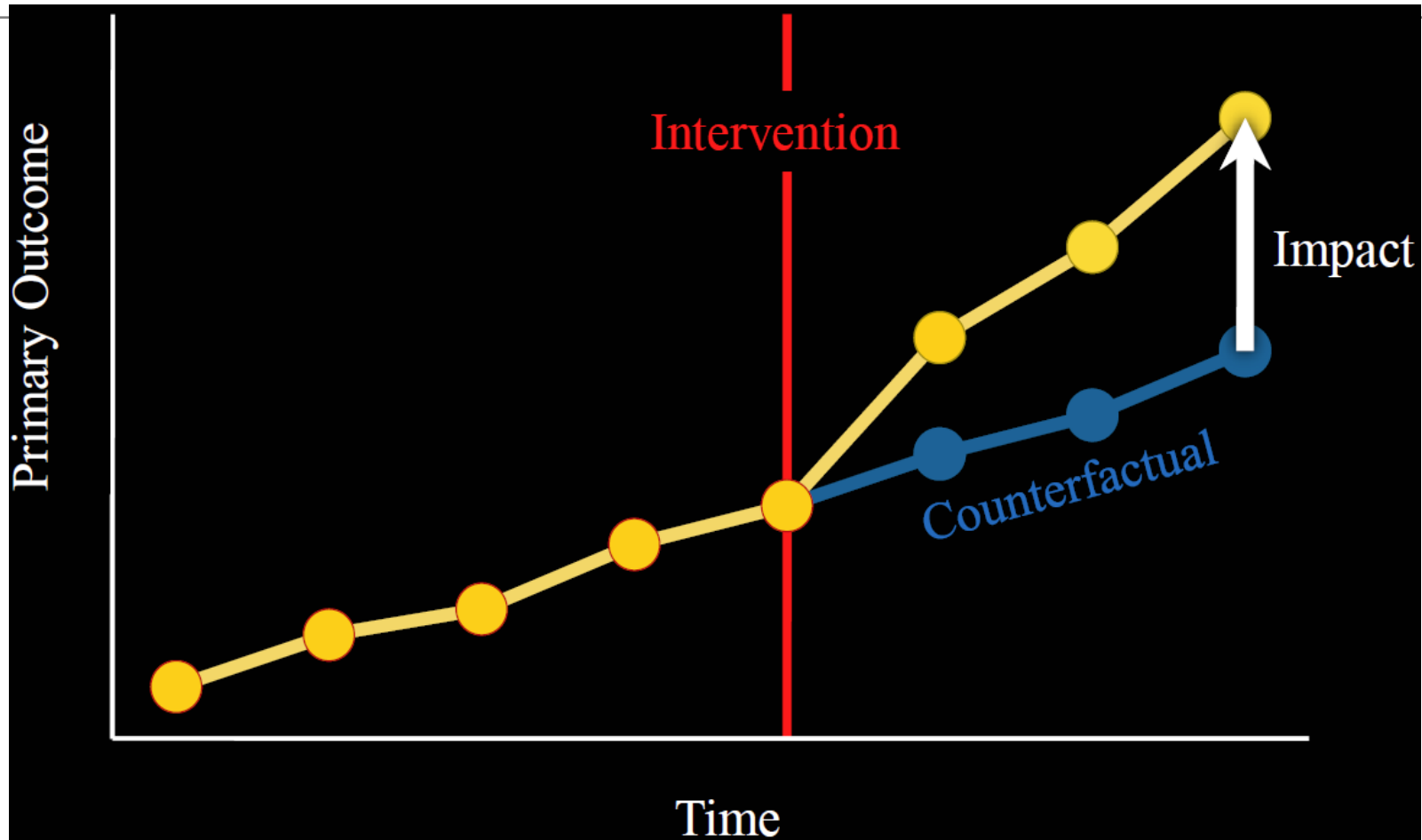
Figure 1. Annual counts of published impact evaluations for developing countries



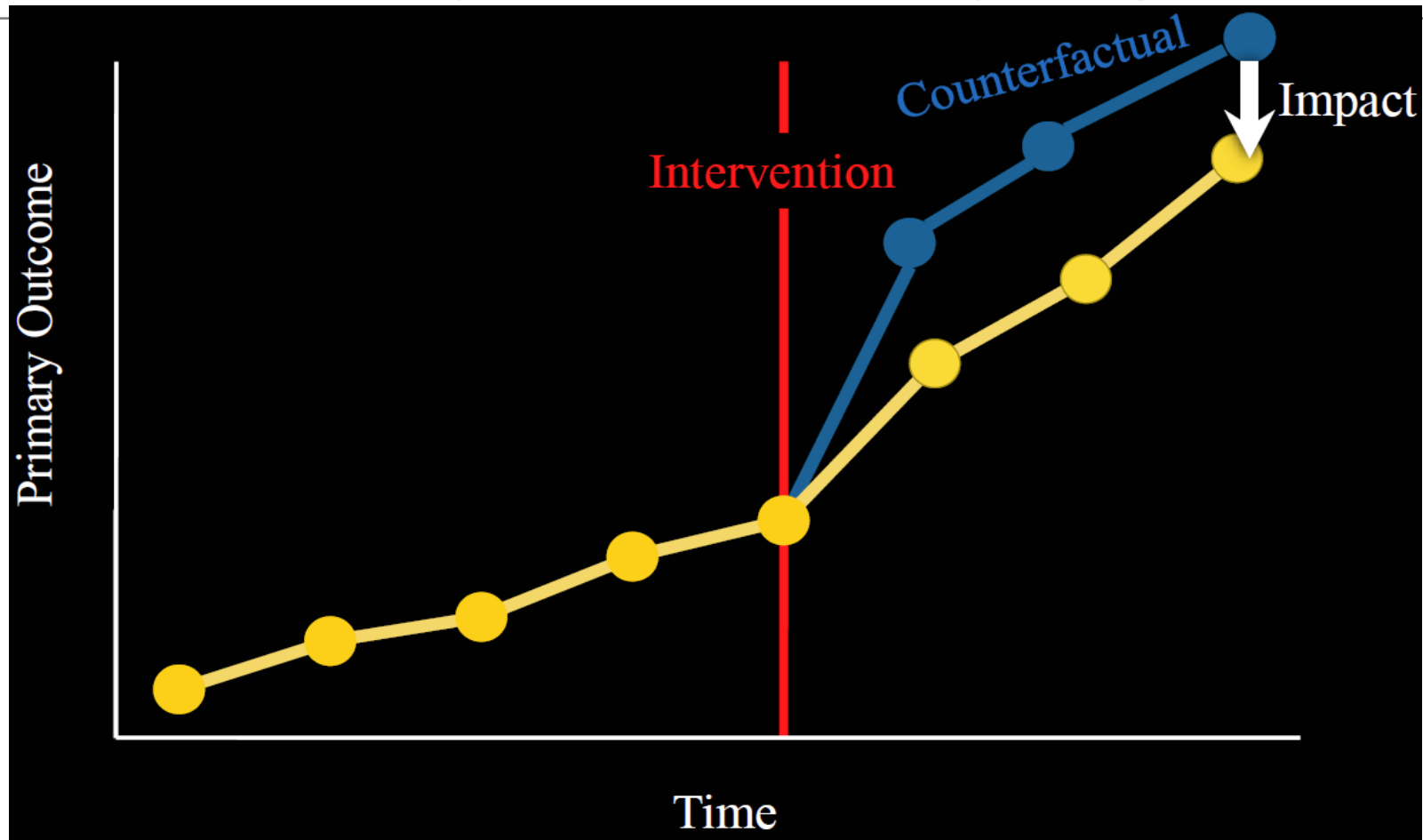
What is the impact of this program?



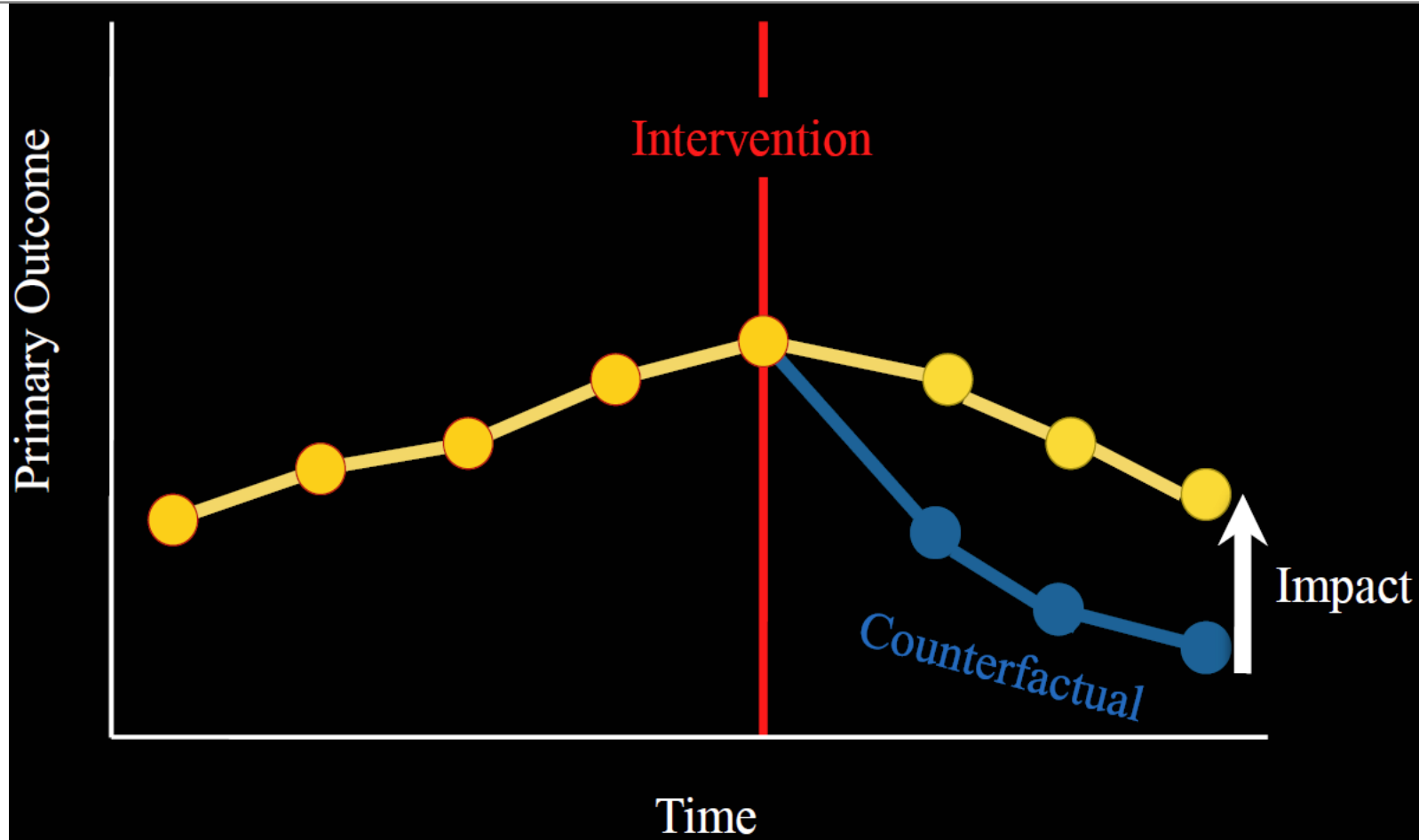
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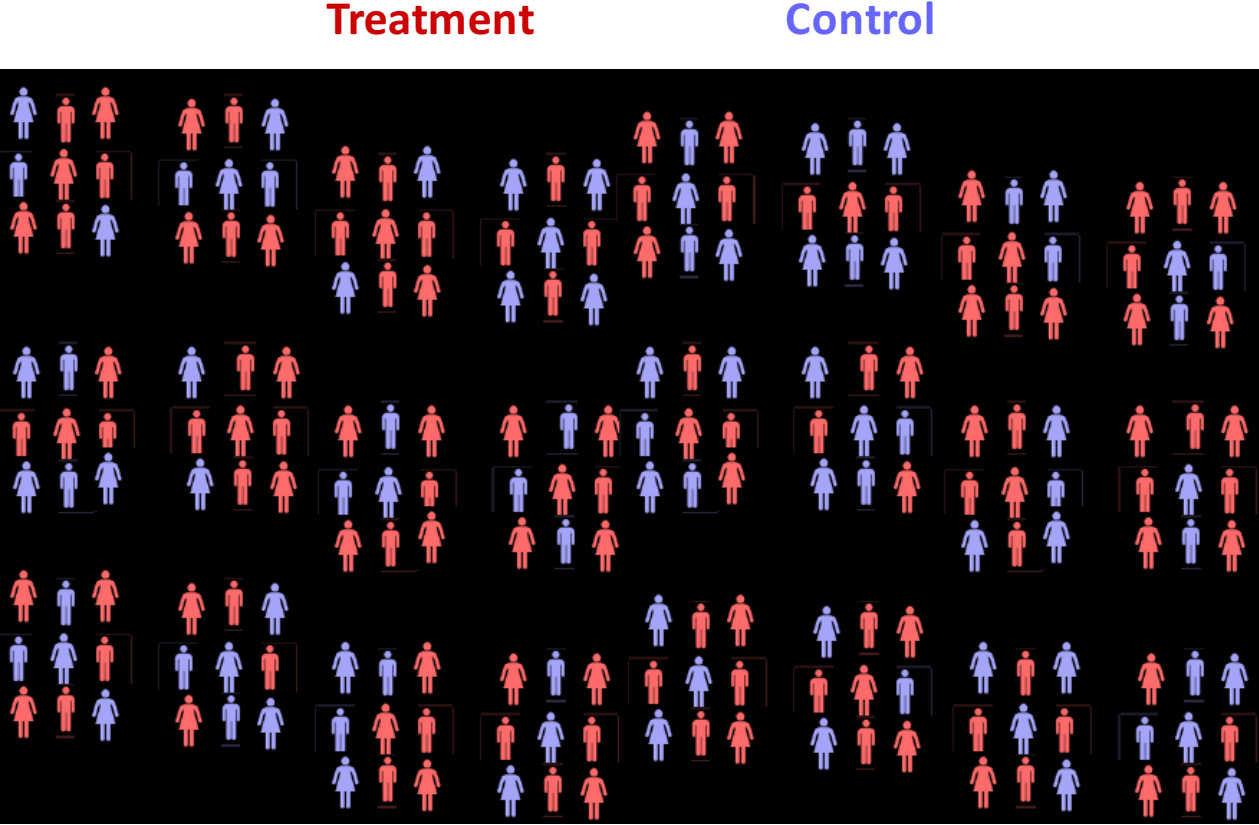
What is the impact of this program?



What is the impact of this program?



People are randomly allocated to either participate or not participate in a program



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Background on the Program being Evaluated

- Microfinance Expansion Project is a **US\$25 million project** administered by the **Bank of PNG** and financed by ADB and DFAT.
- A key component is the **Financial Literacy Program (FLP)** that aims to increase the **use of financial services**, particularly in rural areas and among women in PNG.
- The FLP has occurred in **all provinces in PNG** since it began in 2010 and **over 225,000 people** have participated, around half of which are women.

Setting of the Evaluation



There are 3 main banks for personal accounts that operate in Wewak Town

Bank of South Pacific



MiBank



People's Micro Bank



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Three components of Financial Inclusion Program

1



2-day **financial literacy training** on topics including saving and budgeting

Three components of Financial Inclusion Program

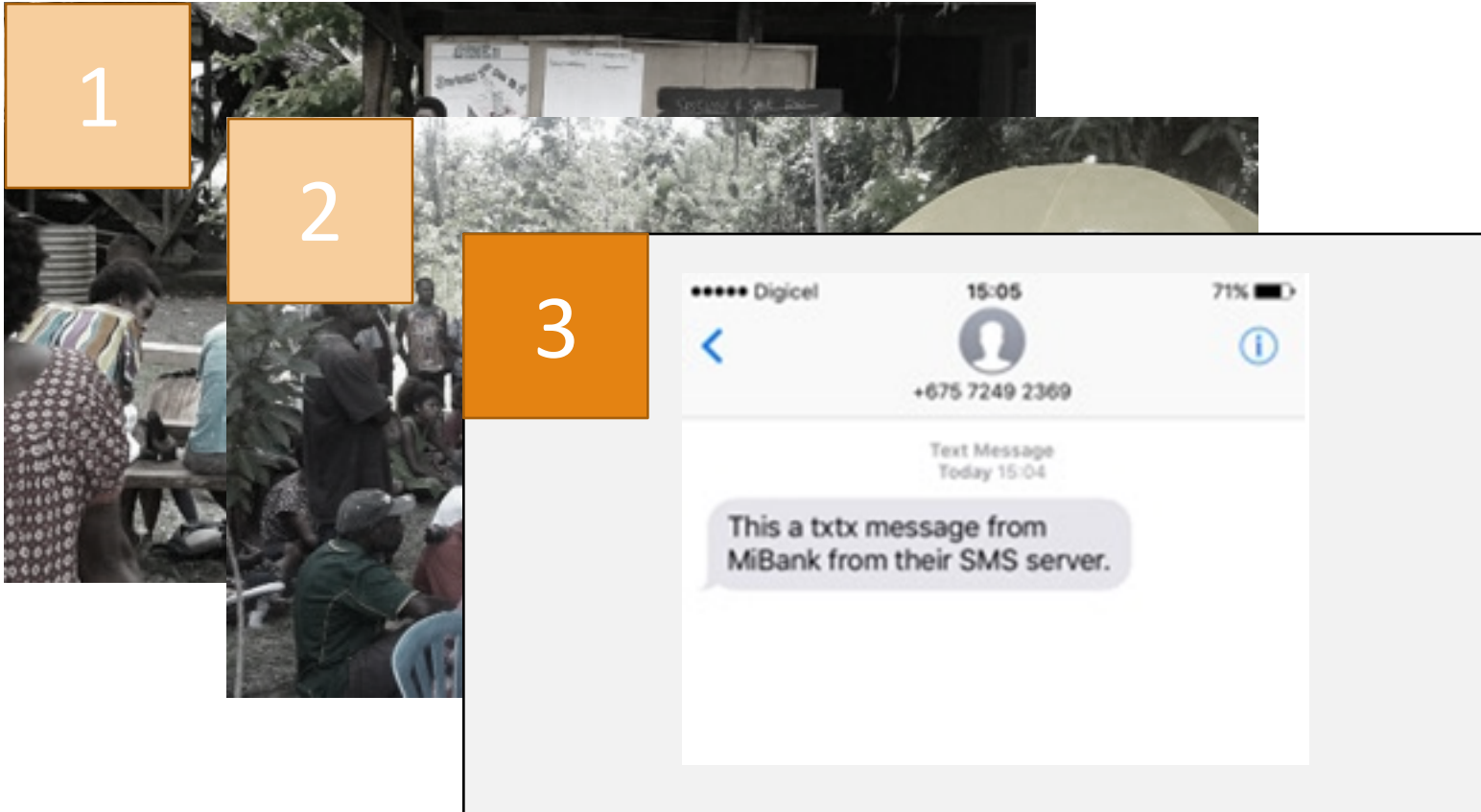
1

2



Bank agents from 3 banks offer **bank accounts** on day 2 of training

Three components of Financial Inclusion Program



6 SMS reminders to save, every 2 weeks after the training

Three components of Financial Inclusion Program

1



Simple and Actionable



Personalized



Timely



Convenient and Entertaining



Targeted to Youth and Young Adults

This a txtx message from MiBank from their SMS server.

The program has a number of features that were highlighted by Innovations for Poverty Action as **best practice for financial inclusion** in such settings.

The main **outcomes** that the program aims to improve are:

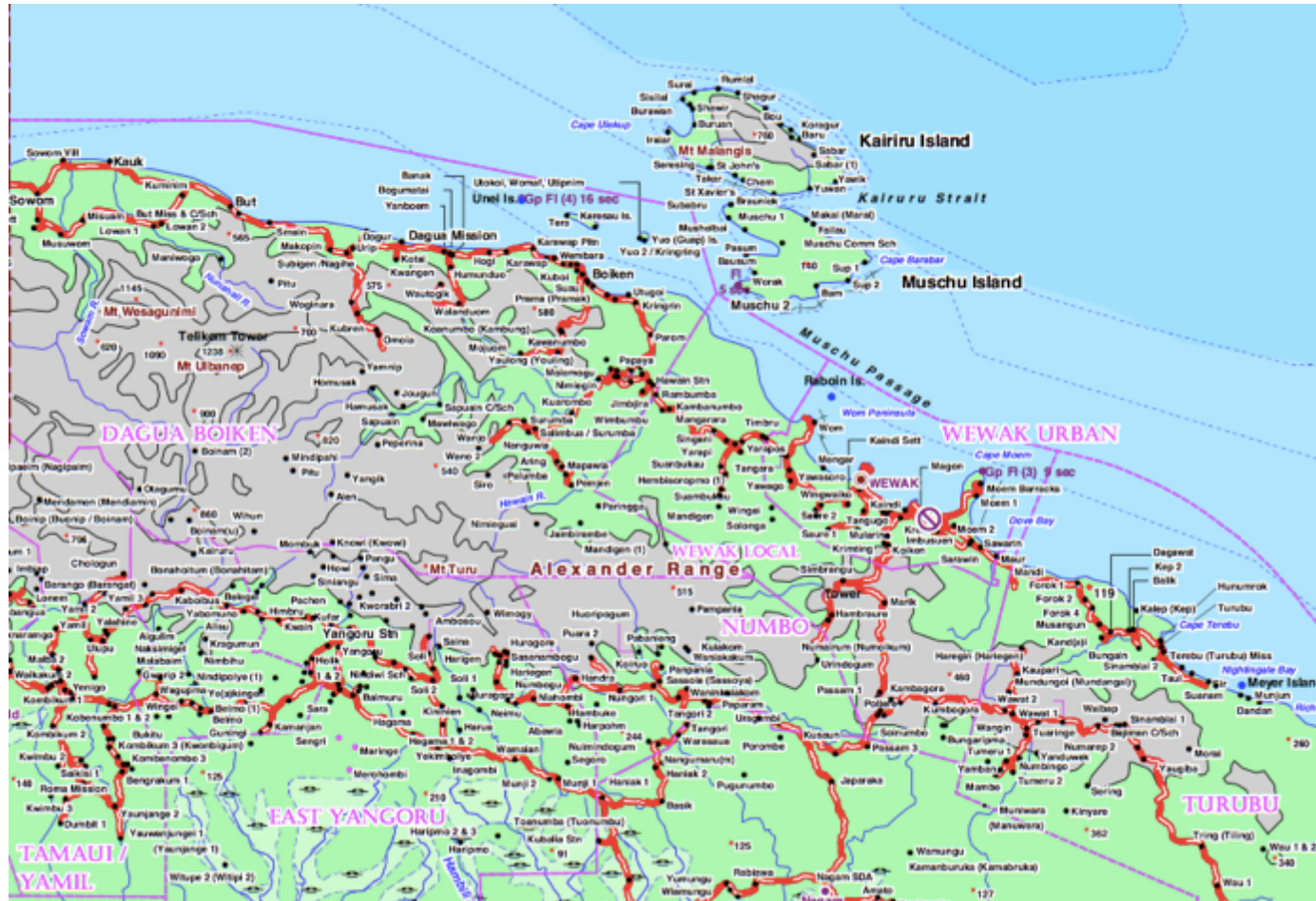
- 1. Financial literacy and financial planning behaviour (eg budgeting and savings)**
 - i. Share of respondents that **sets a target** of how much to spend each week/month
 - ii. Share of respondents that **saves a fraction** of their income each week/month

- 2. Use of formal financial products**
 - i. Share of respondents that **own a commercial bank account**
 - ii. Share of respondents that **deposit money in their bank account** at least once a month

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There are 80 wards in Wewak district that are relatively accessible from Wewak Town

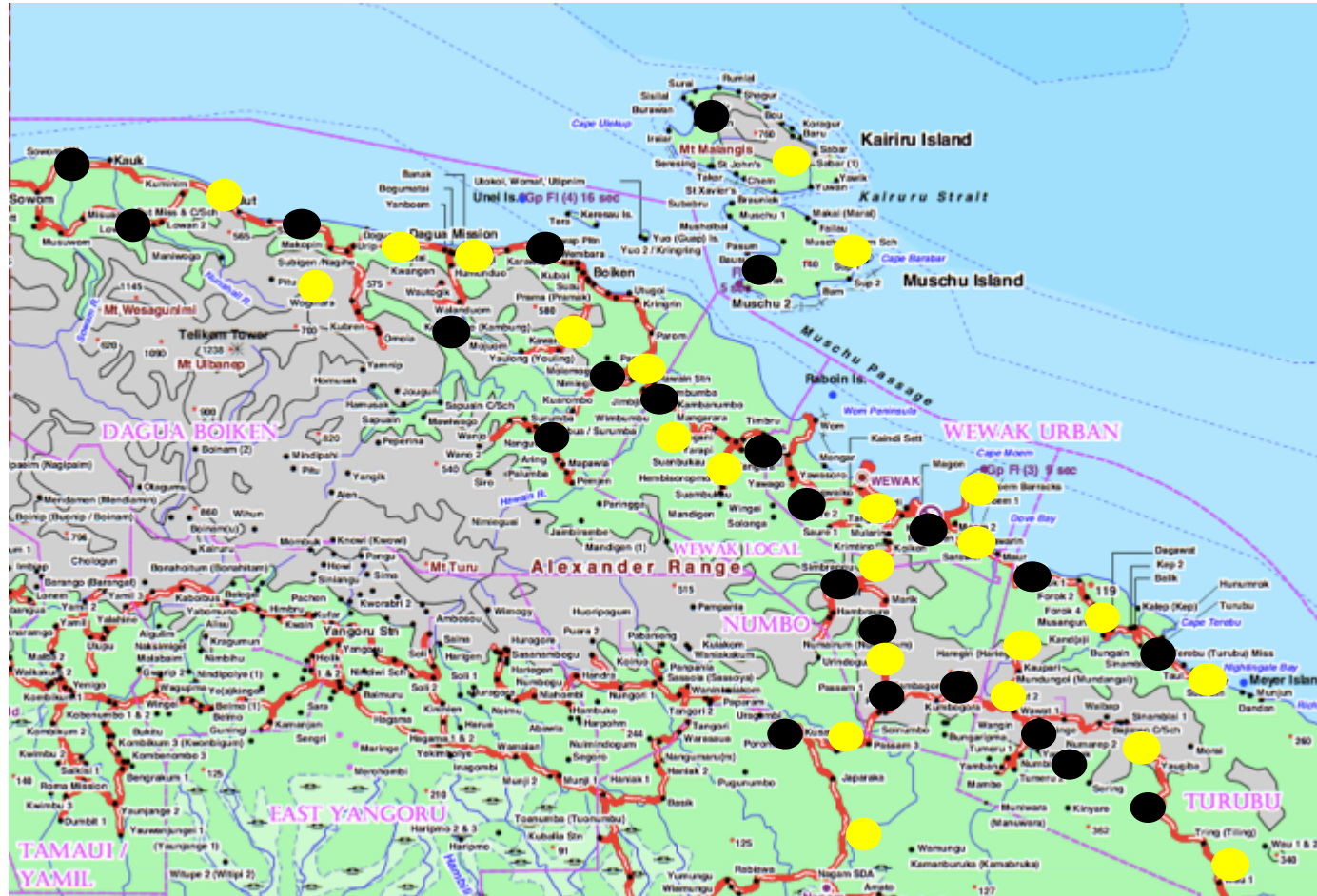


40 of these wards were randomly selected to receive the program through a public lottery



Selection of Wards

In Wewak district, there were 40 wards in the treatment group and 40 wards in the control group



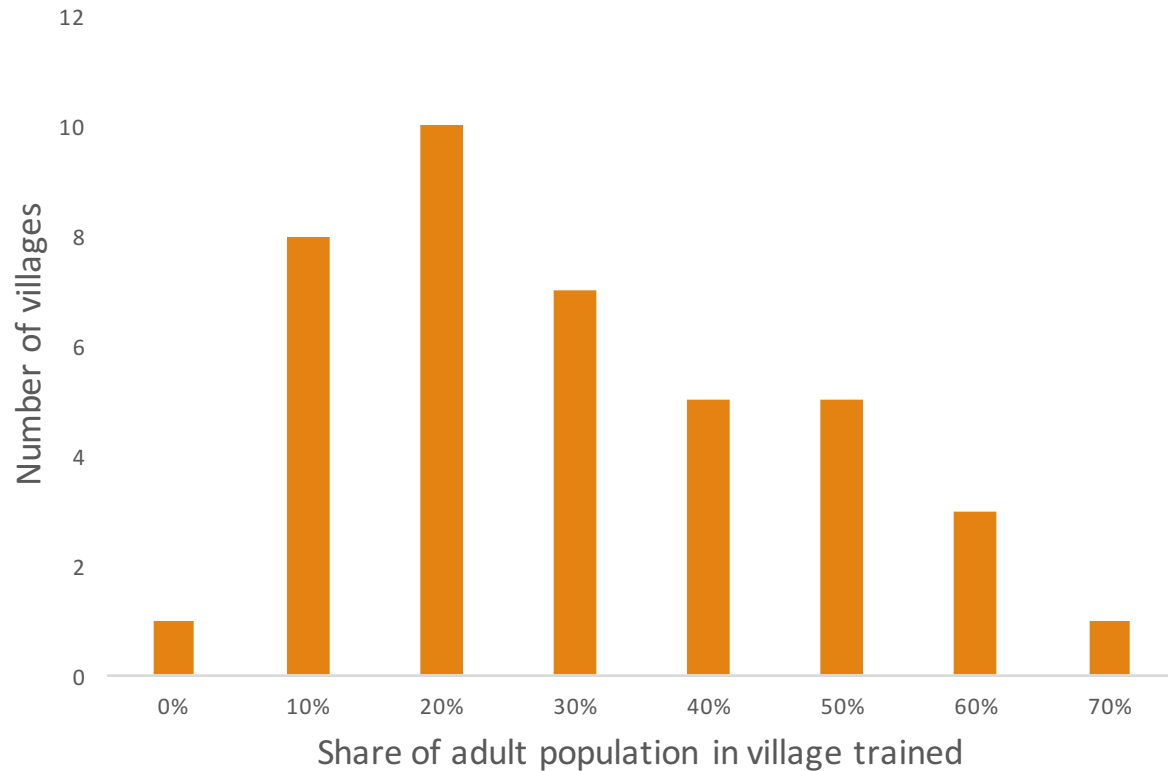
The treatment and control wards were statistically identical prior to the program

	Treatment	Control	Difference	P-value
Share of respondents less than 30 minutes to Wewak Town	0.514	0.514	0.000	0.999
Share of respondents that pay less than 10 kina to reach Wewak Town	0.786	0.783	0.003	0.973
Total number of household members	5.75	5.824	-0.074	0.645
Number of household members between 18 and 50	3.44	3.428	0.012	0.934
Share of male respondents	0.543	0.545	-0.002	0.956
Share of respondents who are the head of their household	0.573	0.59	-0.017	0.553
Total household income (PGK)	216.667	232.196	-15.529	0.423
Share of household's relying on food crops as a major income source	0.657	0.576	0.081	0.198
Share of household's relying on cocoa as a major income source	0.528	0.526	0.002	0.979
Share of household's relying on non-farm business as a major income source	0.536	0.533	0.003	0.922
Share of household's relying on wages as a major income source	0.401	0.432	-0.031	0.555
Share of households with secondary or tertiary education	0.375	0.427	-0.052	0.174

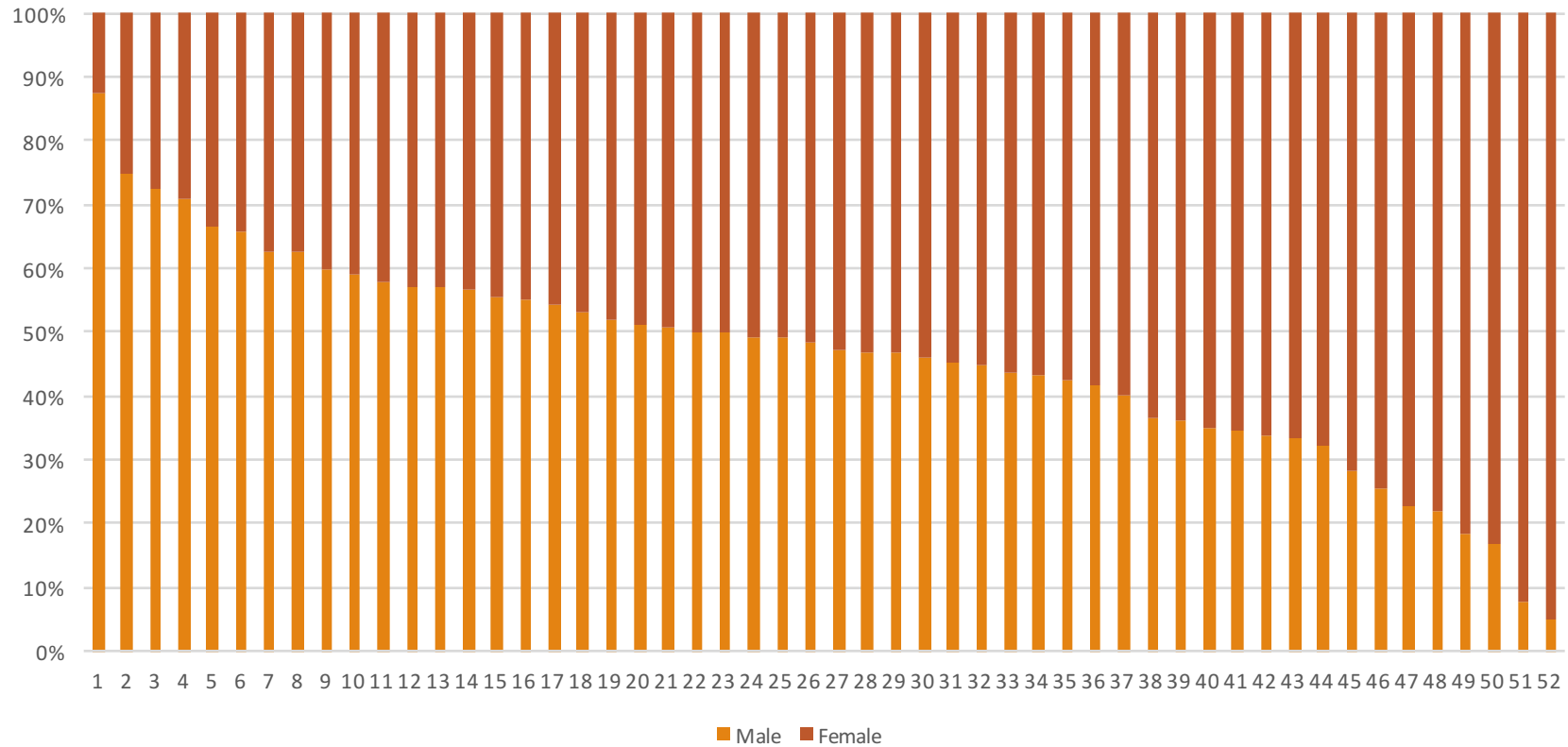
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- ❑ **Initial findings**

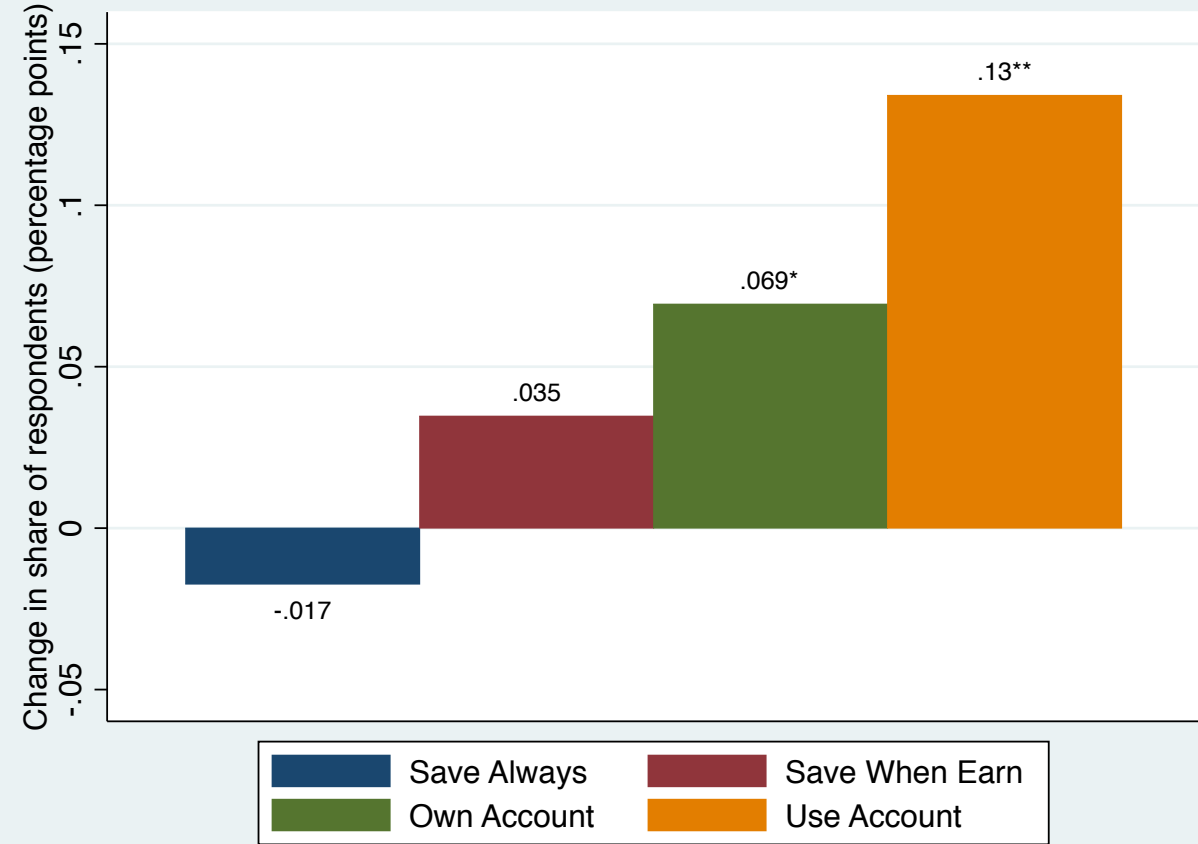
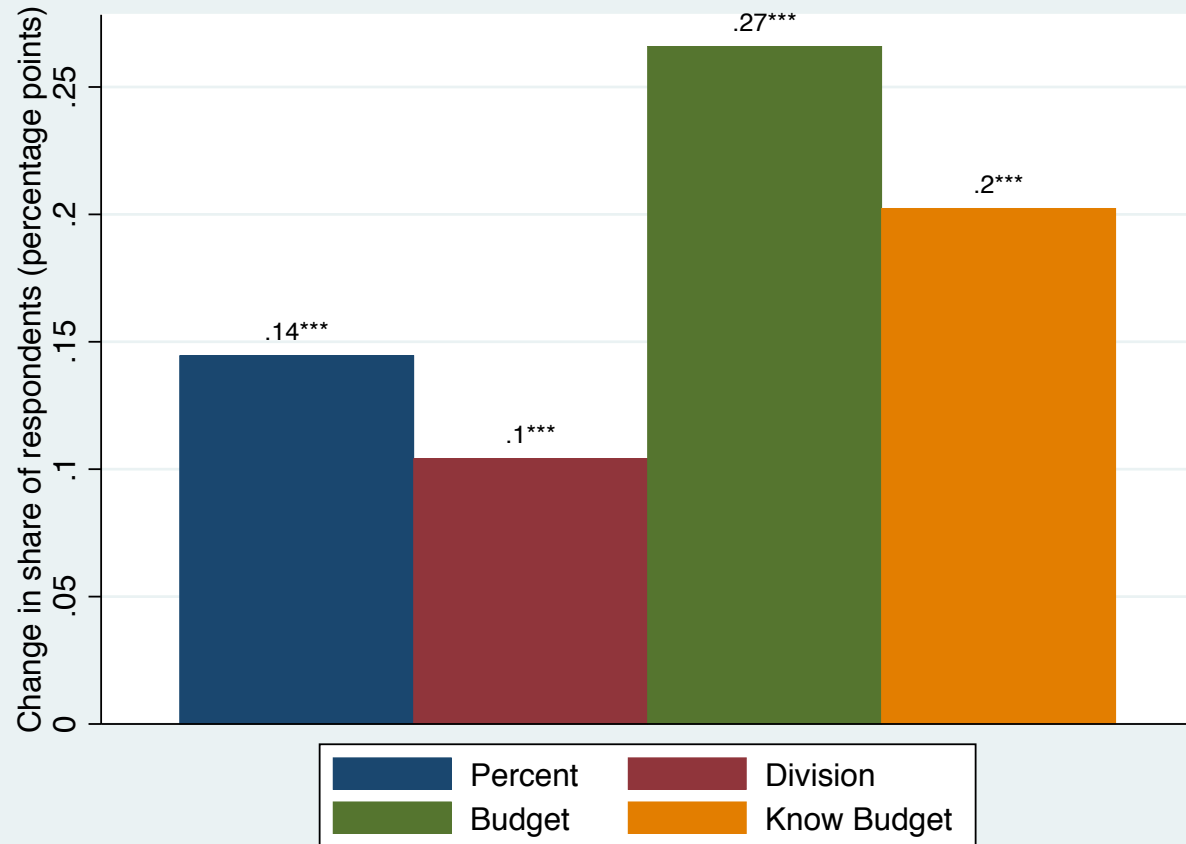
Almost 30% of adults in treatment villages have attended the training



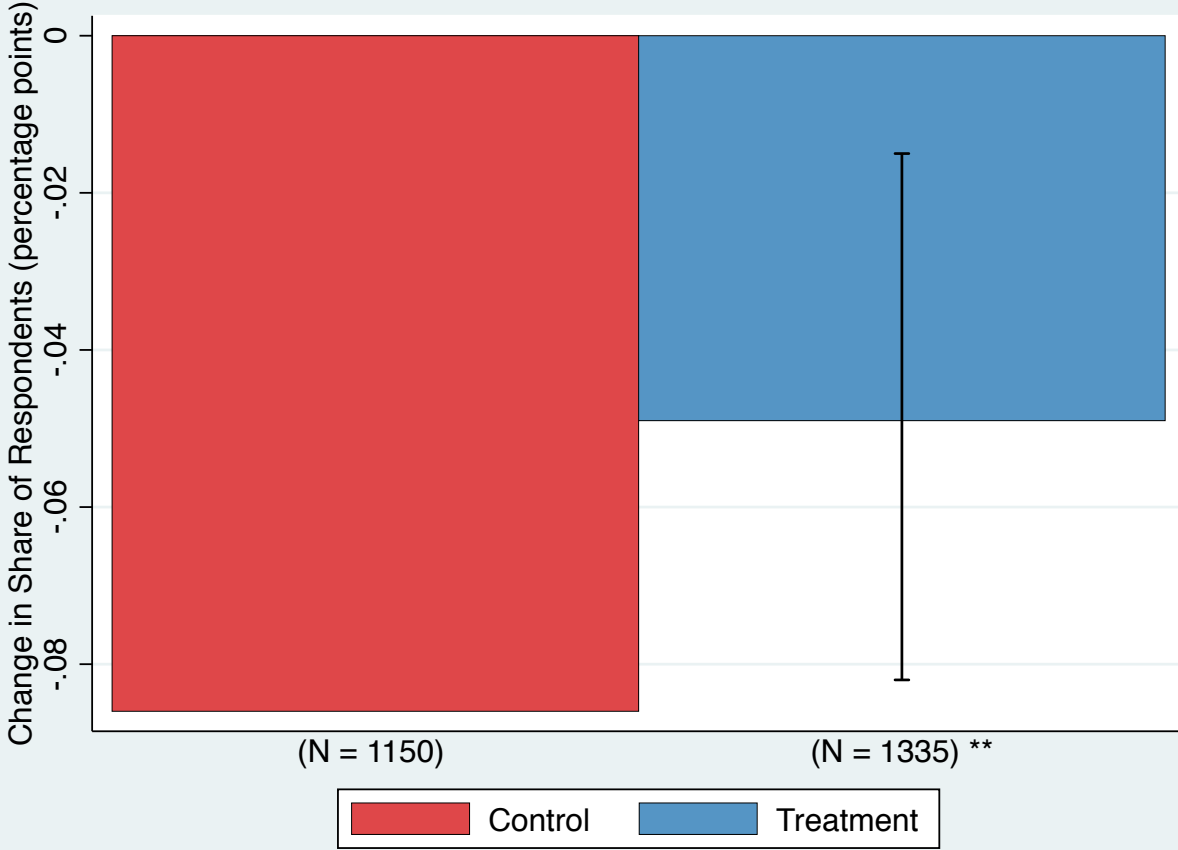
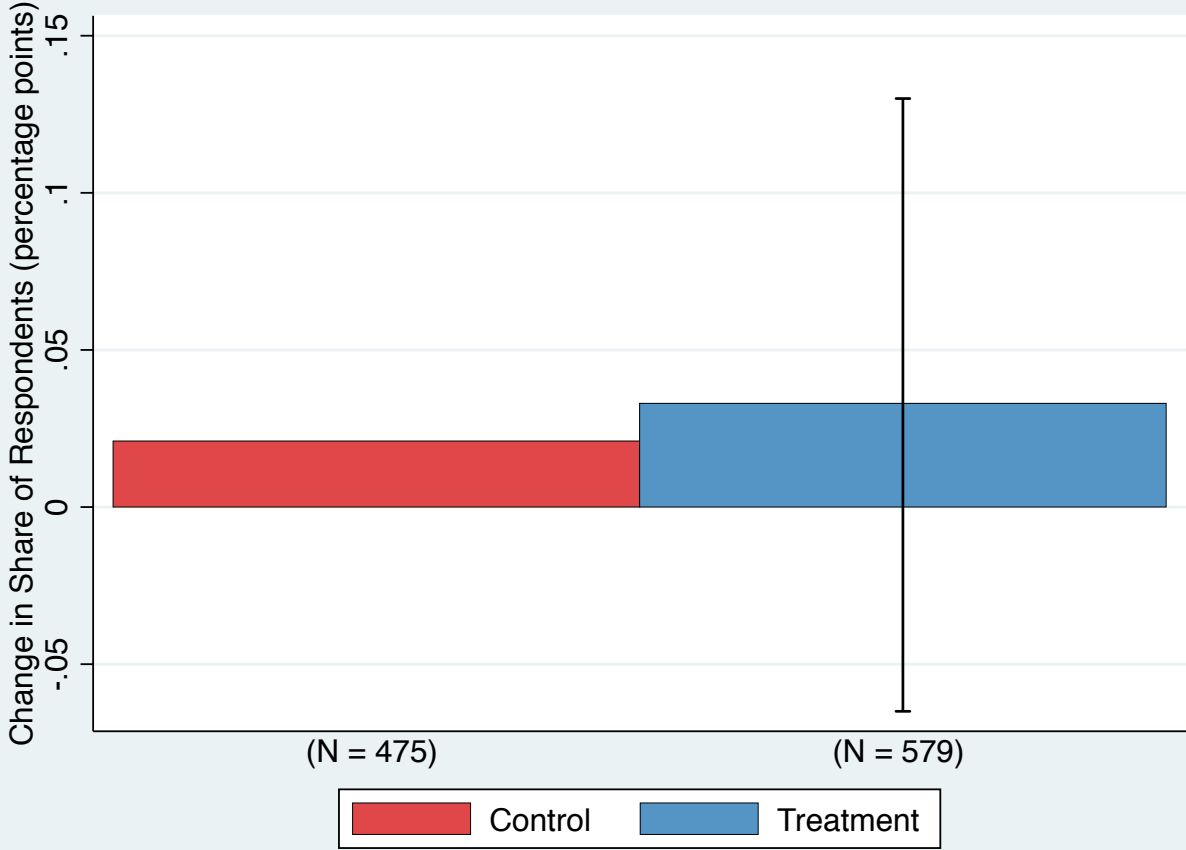
More than half of participants were women



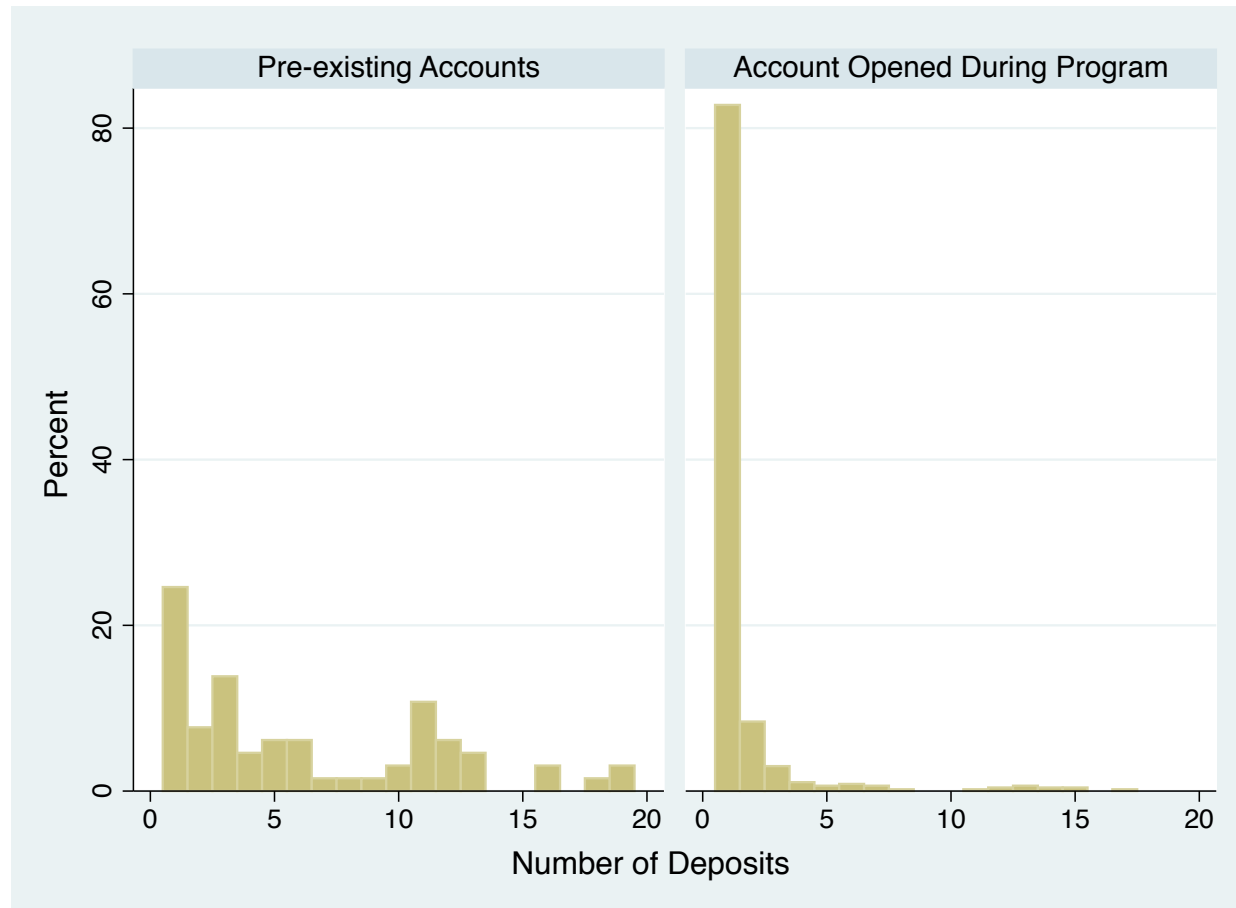
The findings are promising if we restrict our attention to **before and after** comparisons



However the RCT suggests there are **not many large effects** from the program



This is partly because **over 80% of bank accounts** that were opened were **never used**

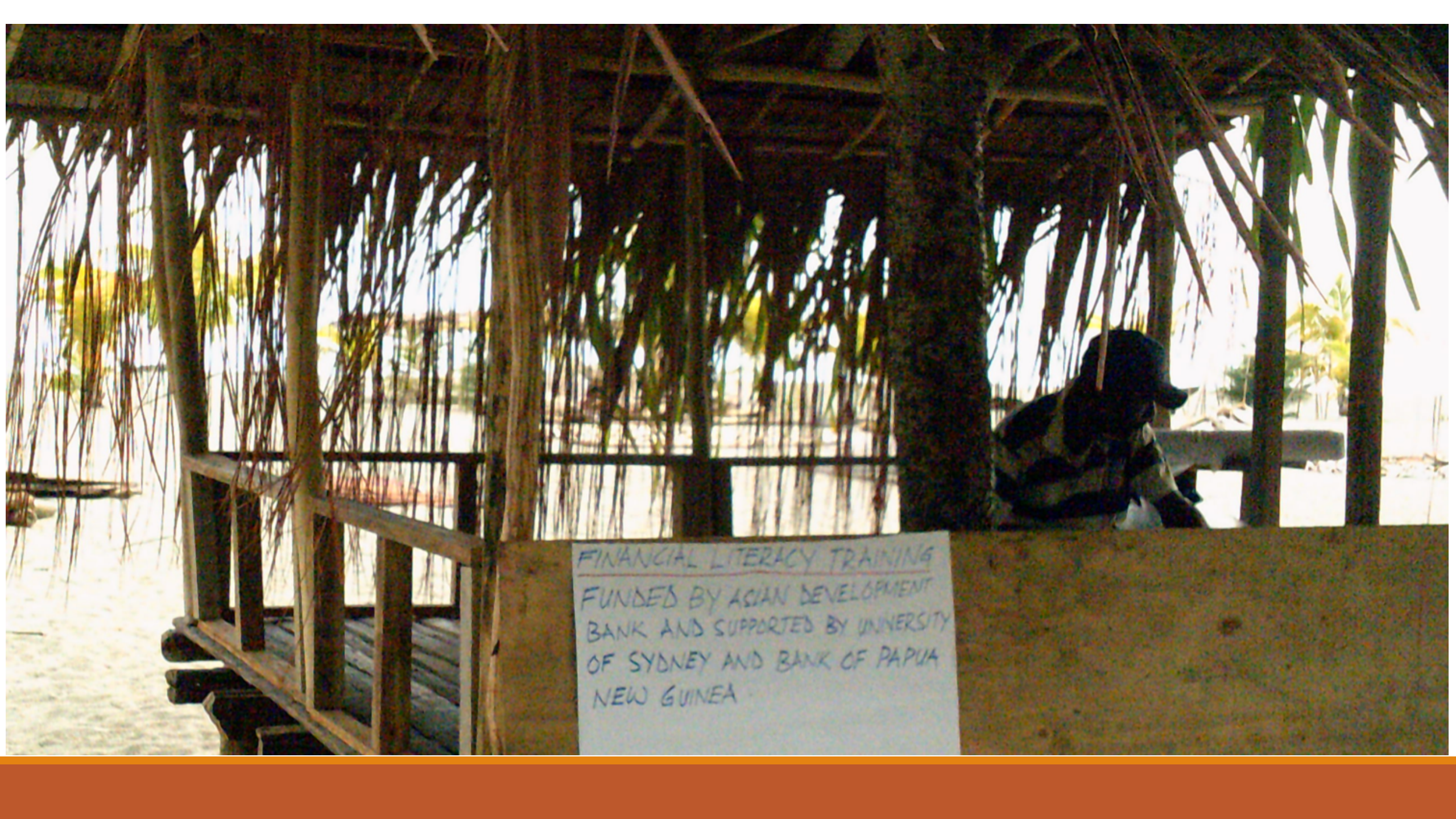


Some key takeaways from the study

- ❑ These **results are in line** with a number of mixed findings from more basic **financial inclusion programs globally**.
- ❑ **Bundling together of multiple interventions** doesn't seem to lead to a **significant change in results**, at least in this setting.
- ❑ The results from this impact evaluation suggest financial inclusion **activities focused on outputs may not always translate into a large effect on outcomes**.

Questions this study raises that are important to explore?

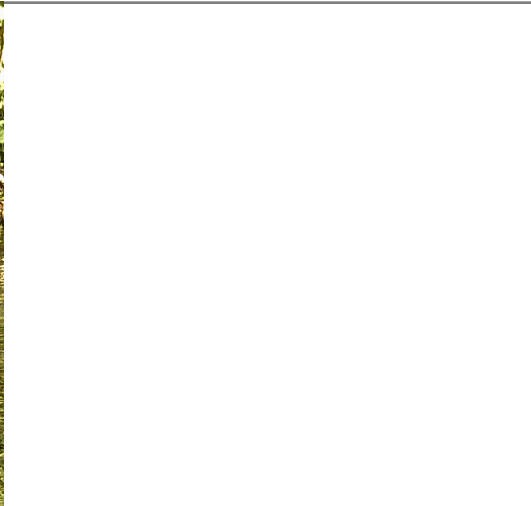
- ❑ Would the **impact be larger** if the program focused on people who are **deeply integrated into the cash economy**?
 - ❑ E.g. If we had conducted this impact evaluation on people in the informal sector in urban locations
- ❑ Is it possible to get **people who already have a bank account to save more** by drawing on the **insights of behavioural economics**?
 - ❑ E.g. What types of SMS messages to bank account holders would lead them to save more?

A person wearing a dark cap and a patterned shirt is sitting on a wooden bench inside a traditional thatched hut. The hut's structure is made of wooden poles and thick bundles of palm fronds. The person is looking towards the right. In the foreground, a white sign is attached to a wooden post. The sign contains text about financial literacy training, mentioning funding from the Asian Development Bank and support from the University of Sydney and the Bank of Papua New Guinea. The background shows a bright, outdoor setting with palm trees and a body of water.

FINANCIAL LITERACY TRAINING
FUNDED BY ASIAN DEVELOPMENT
BANK AND SUPPORTED BY UNIVERSITY
OF SYDNEY AND BANK OF PAPUA
NEW GUINEA

Additional Slides

Wewak is a very remote and isolated part of the world



Overview of rural Wewak district

- The **population of 90,000** in Wewak district is concentrated around Wewak town
- More than half of households in the remote sub-districts earn **less than US\$30 a month**
- In rural regions people typically **grow food crops**
 - Cocoa main cash crop, also bananas
- The **cost to reach Wewak Town** from within the district can be as high as US\$5 one way



Theory of Change of the Program



Theory of Change of the Program



Theory of Change of the Program



E.g.,

- Avoiding unnecessary purchases
- Stick to savings and budgeting targets

Theory of Change of the Program



E.g.,

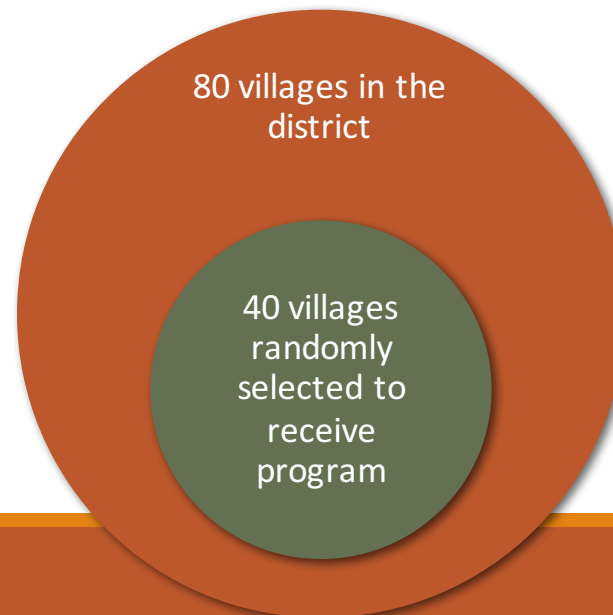
- Keep money for planned future expenses
- Keep money to cover unforeseen events

Theory of Change of the Program



50% have a bank account at baseline, but half of those not regularly used

How the counterfactual is being estimated

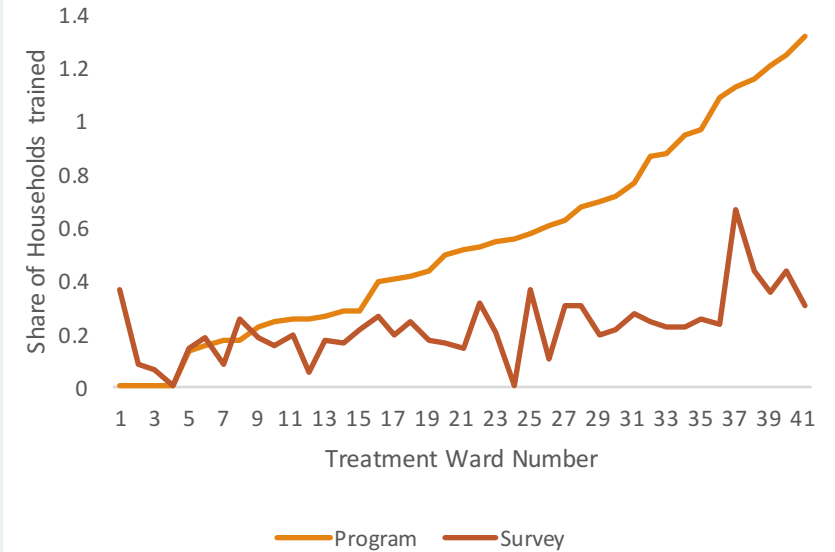
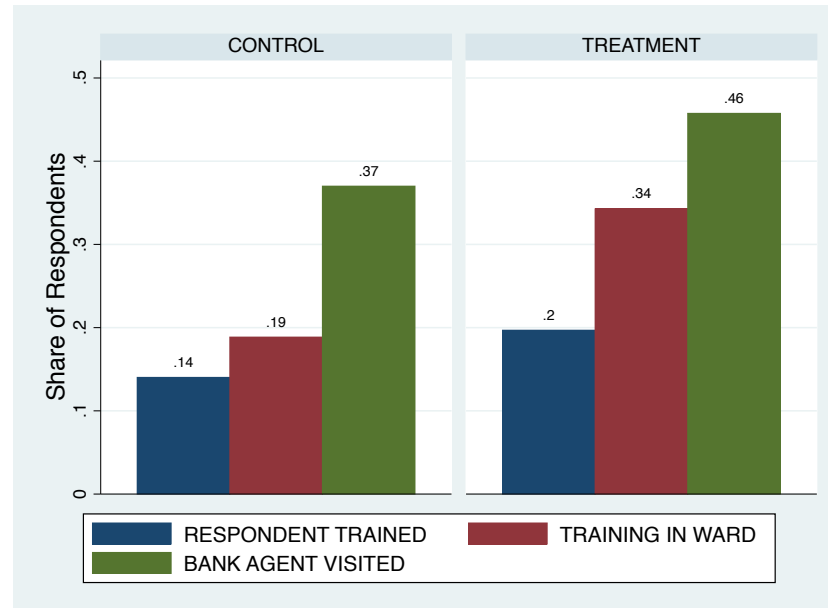
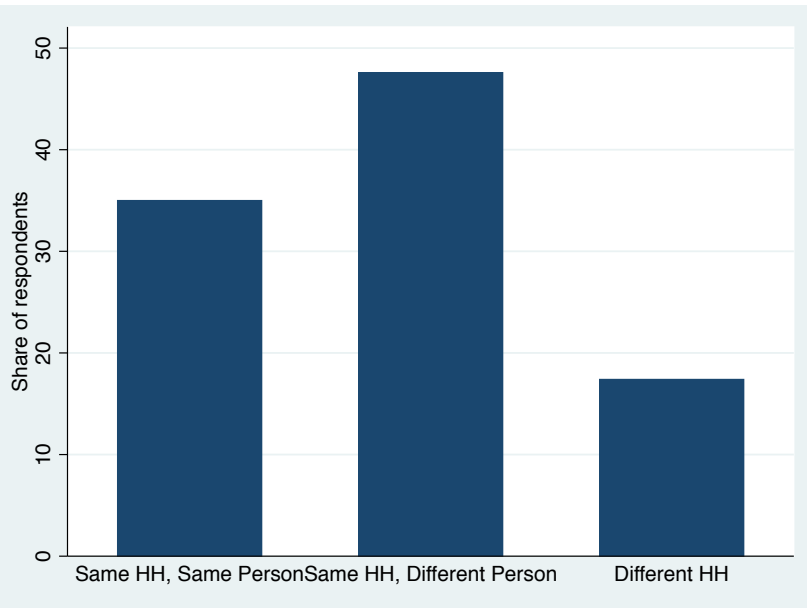


Random selection of villages

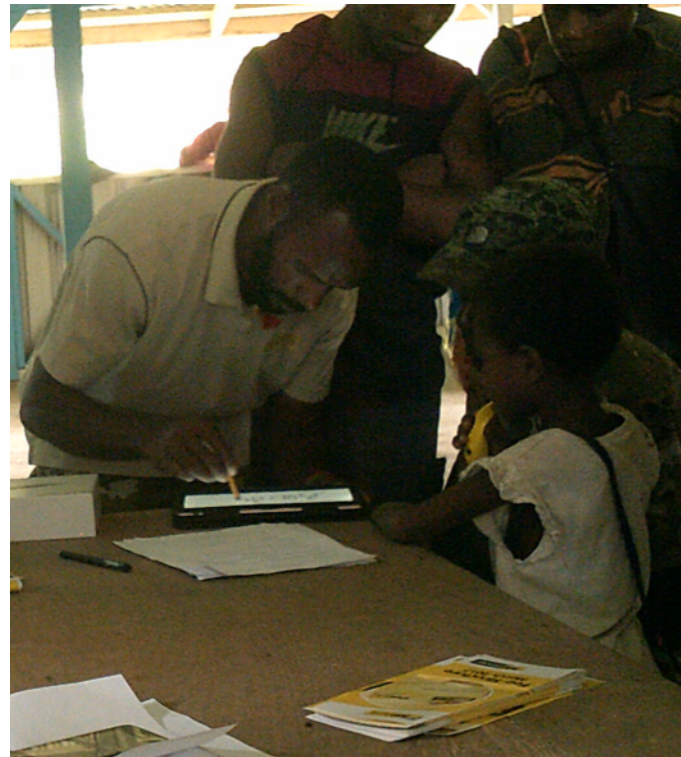
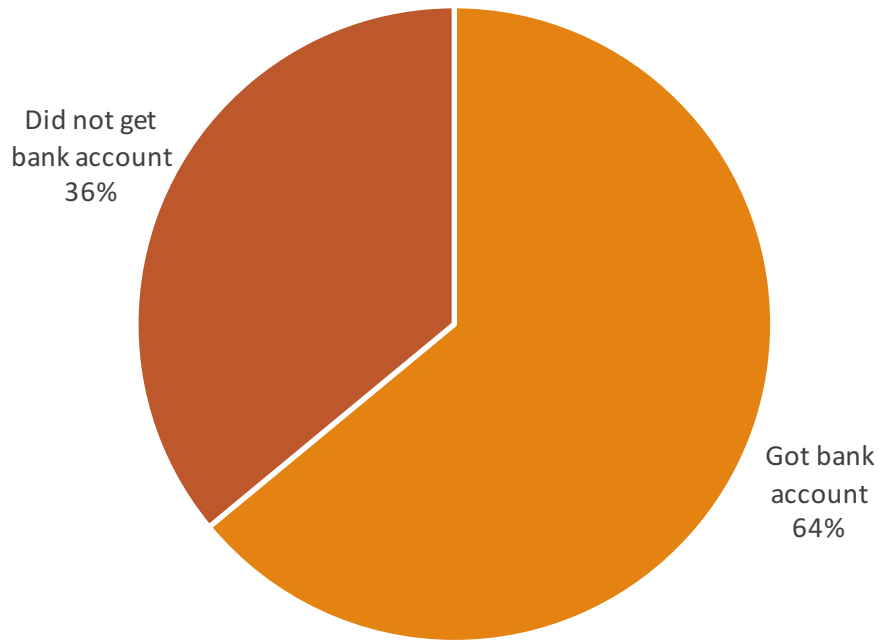


Selection of Wards

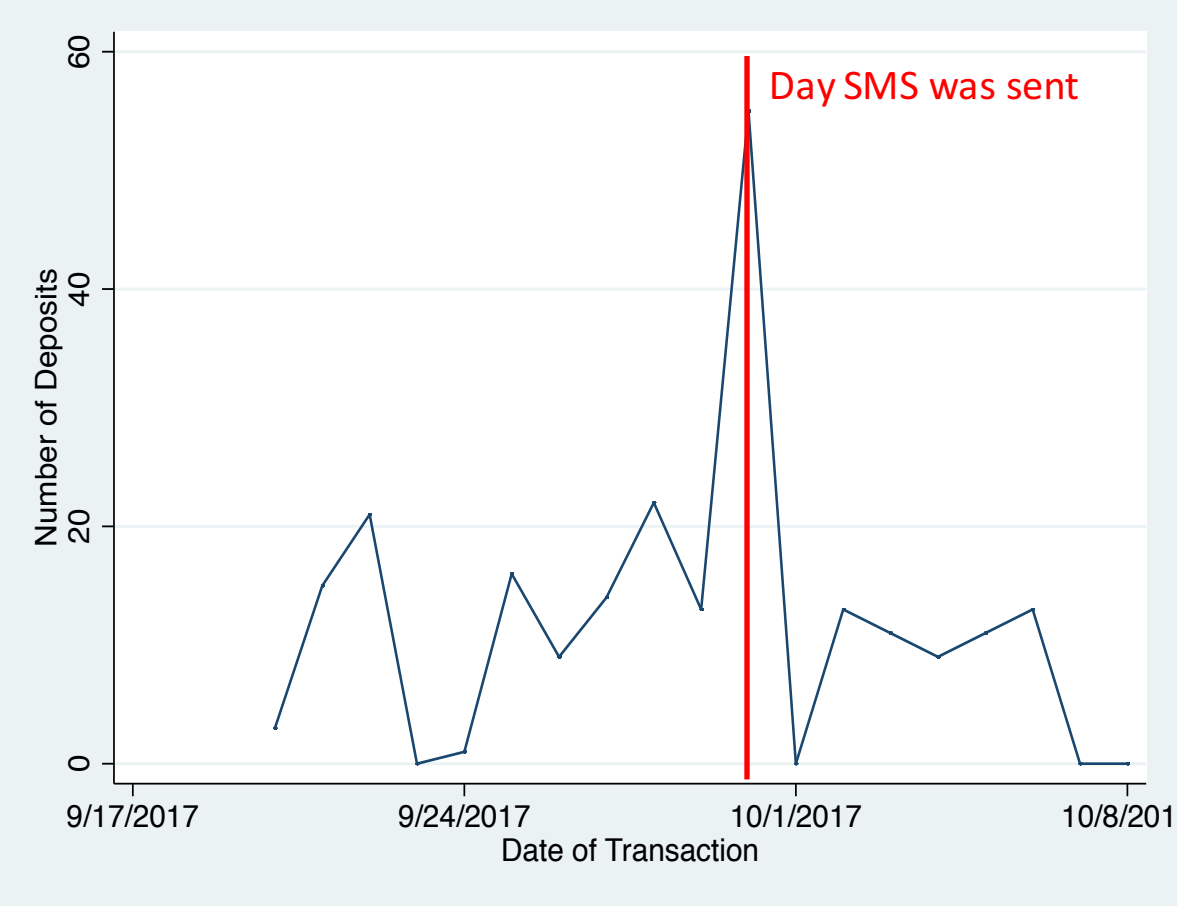
Issues with implementation of program and/or survey



Around 2/3 of participants have got a bank account



Effect of SMS messages

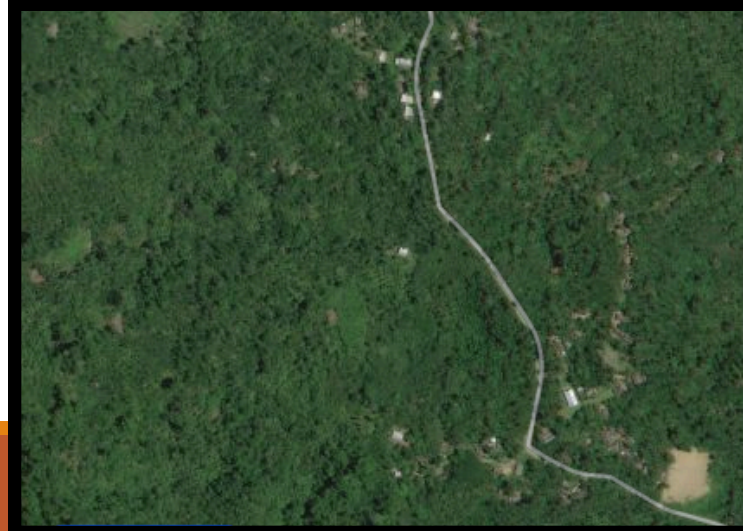


Geographic challenges with overlaying survey and program data

Forok 1 →



Forok 2 →



Change in financial literacy and budgeting behaviour

	Same Respondent in both surveys			Same Household in both surveys		
	Treatment Effect	Control Mean	N	Treatment Effect	Control Mean	N
Understood Basic Percentages	0.012	0.681	1054	0.042	0.670	2485
	(0.05)			(0.03)		
Understood Basic Division	0.04	0.825	1054	0.014	0.819	2485
	(0.03)			(0.02)		
Set a weekly or monthly Budget	-0.049	0.661	1054	0.006	0.649	2485
	(0.05)			(0.03)		
Know what a budget is	-0.039	0.812	1054	-0.008	0.812	2485
	(0.04)			(0.03)		

To generate the table, OLS regressions are used to calculate the co-efficient on a dummy variable for respondents in the treatment group and standard errors (presented in brackets) are clustered at the ward level. Statistically significant differences reported as follows *p-value<0.1, **p-value<0.05, ***p-value<0.01

Change in savings, resilience to shocks as well as ownership and use of bank accounts

	Same Respondent in both surveys			Same Household in both surveys		
	Treatment Effect	Control Mean	N	Treatment Effect	Control Mean	N
Always save money after paying for expenses	0.025 (0.04)	0.440	1054	0.045 (0.03)	0.490	2485
Always save money when receiving an income	-0.034 (0.05)	0.268	1054	-0.008 (0.03)	0.296	2485
Could cover unexpected expense size of two months HH income	0.001 (0.02)	0.030	1054	0.037** (0.02)	0.054	2485
Store money in a bank account	0.031 (0.04)	0.469	1054	0.023 (0.03)	0.514	2485
Always use bank account to save money (conditional on having an account)	-0.073 (0.05)	0.270	494	-0.009 (0.03)	0.280	1279

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