Project adopted from Abhijit Banerjee, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei,William Parienté, Jeremy Shapiro, Bram Thuysbaert, Christopher Udry, "A multifaceted program causes lasting progress for the very poor: Evidence from six countries" *Development Economics* (2018)

Effective Poverty Reduction - Lessons from 6 RCTs

In this empirical project, you will analyze data from six randomized controlled trials (RCTs) designed and implemented by the Abhijit Banerjee and team (referenced above, paper for greater detail on the experiments provided on Canvas) that evaluated a multifaceted intervention aimed at improving livelihoods among the very poor. The trials were conducted in Ethiopia, Ghana, Honduras, India, Pakistan, and Peru.

About the RCTs: Participants were selected from the poorest segments of the population, living on less than $1.25 per day. In each country, eligible households were randomly assigned to one of two groups:

1. Control group - received no intervention beyond what was already available through existing services.
2. Treatment group - received an integrated set of services designed to improve long-term economic outcomes. These services included:
    a. A one-time transfer of a productive asset (e.g., goats, cattle, or hogs),
    b. Short-term consumption support,
    c. Training and coaching to support use of the asset,
    d. Encouragement to save,
    e. Health education and/or services.

Participants in the treatment group were not required to use all services offered, and the program was implemented by different partners in each country.

Participants were surveyed at three points: before the intervention (pre-treatment), one year after the intervention was completed (endline-1), and two years after that (endline-2). The RCTs were designed to account for wide variation in geographic and institutional contexts, offering a valuable opportunity to study the effectiveness and adaptability of this approach.

Data Set:

There are 2 datasets, these datasets can be merged into one but can also be analyzed separatetly:

1. pooled_hh provided data on assets, income, consumption and expenditure, food security, finance
2. pooled_mb provides data on physical health, mental health, time use, political empowerment, and women's empowerment.

Variables available in each dataset have clear labels for your information.

Specific questions to address in your research paper (in addition to the general paper guidelines)

For this project, you may choose to analyze a single country, multiple countries, or all six. Your focus can be on monetary outcomes—such as income, consumption, food insecurity, or assets—or on other dimensions, including physical and/or mental health, time use, and political and/or women's empowerment.

Whichever focus and scope you choose, be sure to clearly articulate your approach in your write-up. You may adapt the questions below to fit your specific case.

Guidelines for Analysis

1. Motivation for the Experiments
Begin with a paragraph or two explaining the rationale behind the experiments. What problems were they designed to address? What questions were the researchers trying to answer? Frame the experiments in the broader context of development economics and poverty alleviation.

2. Literature Review
Include a short summary of the paper by Banerjee and co-authors. In addition, cite one or two other relevant studies that investigate the impact of interventions aimed at alleviating poverty. Briefly describe the findings of these works and how they relate to your study.

3. Description of the Experiments
In your own words, describe the experiments you are analyzing. Spend a paragraph or two explaining the design, intervention, context, and key features of the study. Be sure to include details that will help the reader understand how the experiment was carried out.

4. Evidence of Random Assignment (Pre-Treatment Balance)
Demonstrate that treatment was randomly assigned by presenting balance tables:

a. Create a well-formatted table that reports:
i. Means of 5–6 relevant baseline characteristics for families in the control group.
ii. Differences in means between treated and control groups, along with standard errors.
iii. Statistical significance of these differences (e.g., p-values or t-tests).
b. Evaluate the table. Is the evidence consistent with random assignment? Justify your conclusion.
c. Summarize your findings in one or two paragraphs. Be clear about how the balance checks support (or don't support) the validity of the randomization.
Note: Part of this step involves choosing which baseline variables are most relevant. Review your dataset carefully to select the 5–6 variables that should reasonably be balanced in a randomized experiment.

5. Estimating Treatment Effects
Use treatment assignment as your primary regressor to estimate the effect of the intervention on your outcomes of interest.

Analyze outcomes at **endline-1** and **endline-2**. Choose at least 3 outcome variables, but feel free to explore more.

a. Discuss and explain the estimated impacts.

b. Compare coefficients across time: Does the treatment effect fade, strengthen, or stay constant?

c. List and discuss the assumptions underlying your regression models.

d. Comment on the validity of these assumptions, using tests or summary stats where appropriate.

6. Test whether the treatment effect varies across different subgroups. Report results for at least four groups, these are just examples, and you can choose others based on your data:

(i) By Country – Compare treatment effects across countries.

(ii) By Household Size – Split the sample into small vs. large households.

(iii) By Income Level – Compare lower vs. higher income groups.

(iv) By Education Level – Group by education (e.g., no schooling, primary, secondary+).

Compare these subgroup estimates. Discuss potential reasons why the treatment might work differently across these dimensions.

7. Conclusion

Wrap up your analysis by summarizing your main findings. What do you conclude about the impact of the intervention? What does the experiment achieve, and what are the broader implications?