

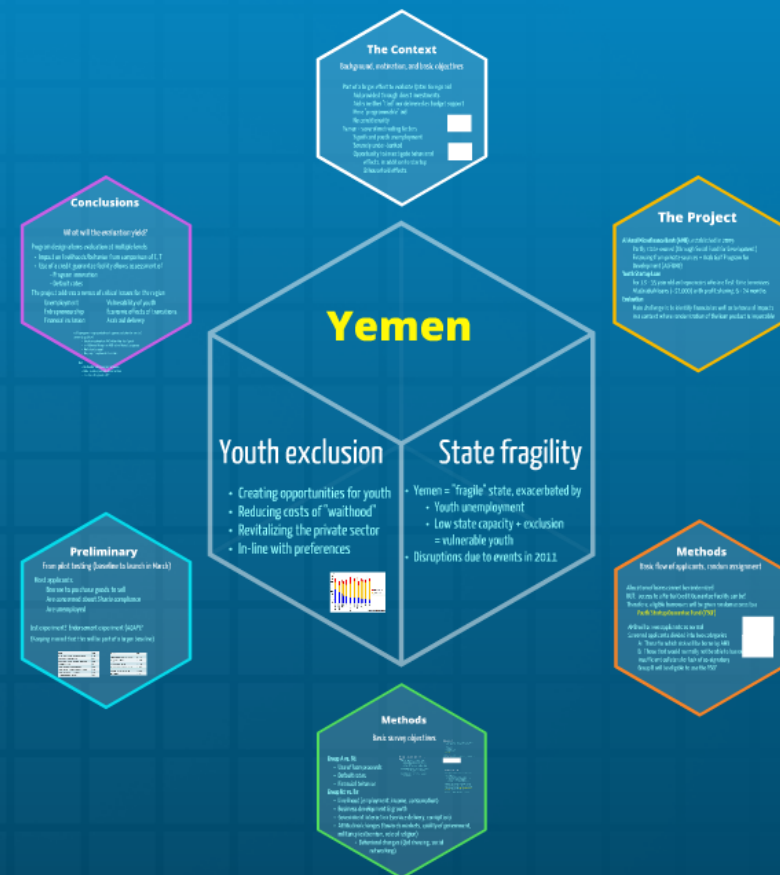
Self-Employment and Entrepreneurship

An Evaluation of a Youth Startup Credit Program

Raj M. Desai

Georgetown University and
The Brookings Institution

Doha Evidence Symposium, March 5 - 8



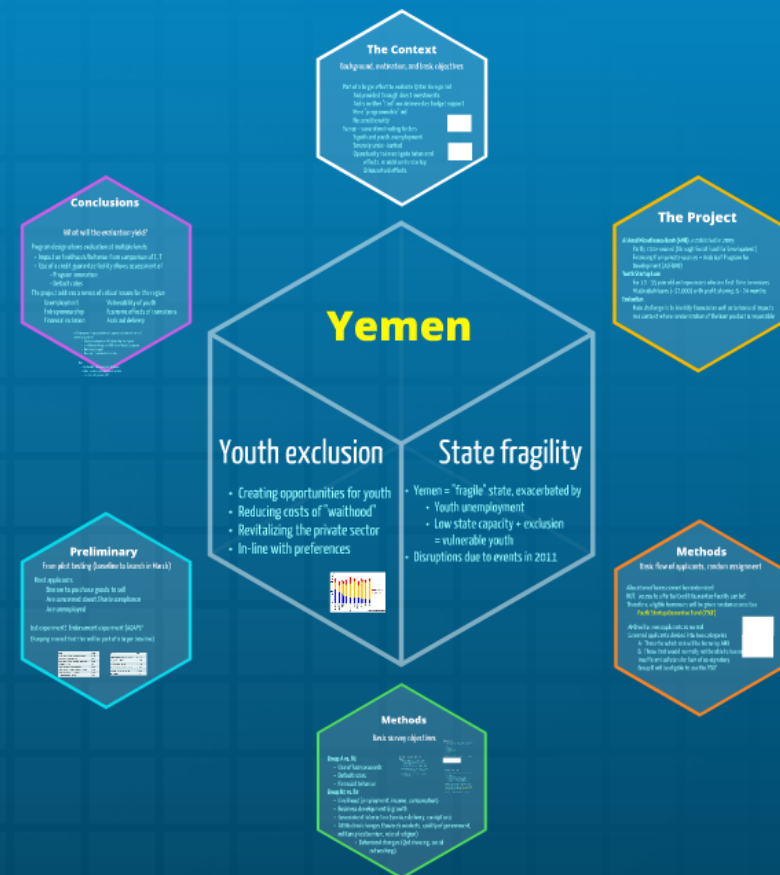
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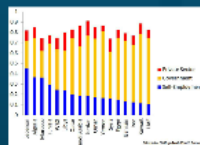
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Yemen

Youth exclusion

- Creating opportunities for youth
- Reducing costs of "waithood"
- Revitalizing the private sector
- In-line with preferences



State fragility

- Yemen = "fragile" state, exacerbated by
 - Youth unemployment
 - Low state capacity + exclusion = vulnerable youth
- Disruptions due to events in 2011

Al Amal Microfinance Bank (AMB), established in 2005. Partly state-owned (through Social Investment Fund for Development (AGFUND))

Youth Startup Loan

For 18 - 35 year old entrepreneurs. Mudarabah loans (~\$2,000) with 10% interest.

Evaluation

Main challenge is to identify financial viability in a context where randomization is difficult.

Methodology

Basic flow of applicants

Allocation of loans cannot be randomized. BUT: access to a Partial Credit Guarantee. Therefore, eligible borrowers will be divided into two groups:

Youth Startup Guarantee Fund

AMB will screen applicants as normal. Screened applicants divided into two groups:

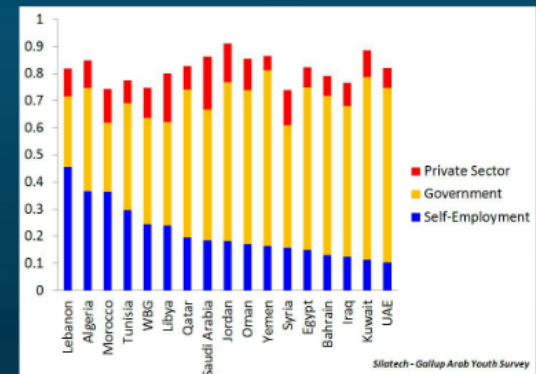
A: Those for which risk will be low

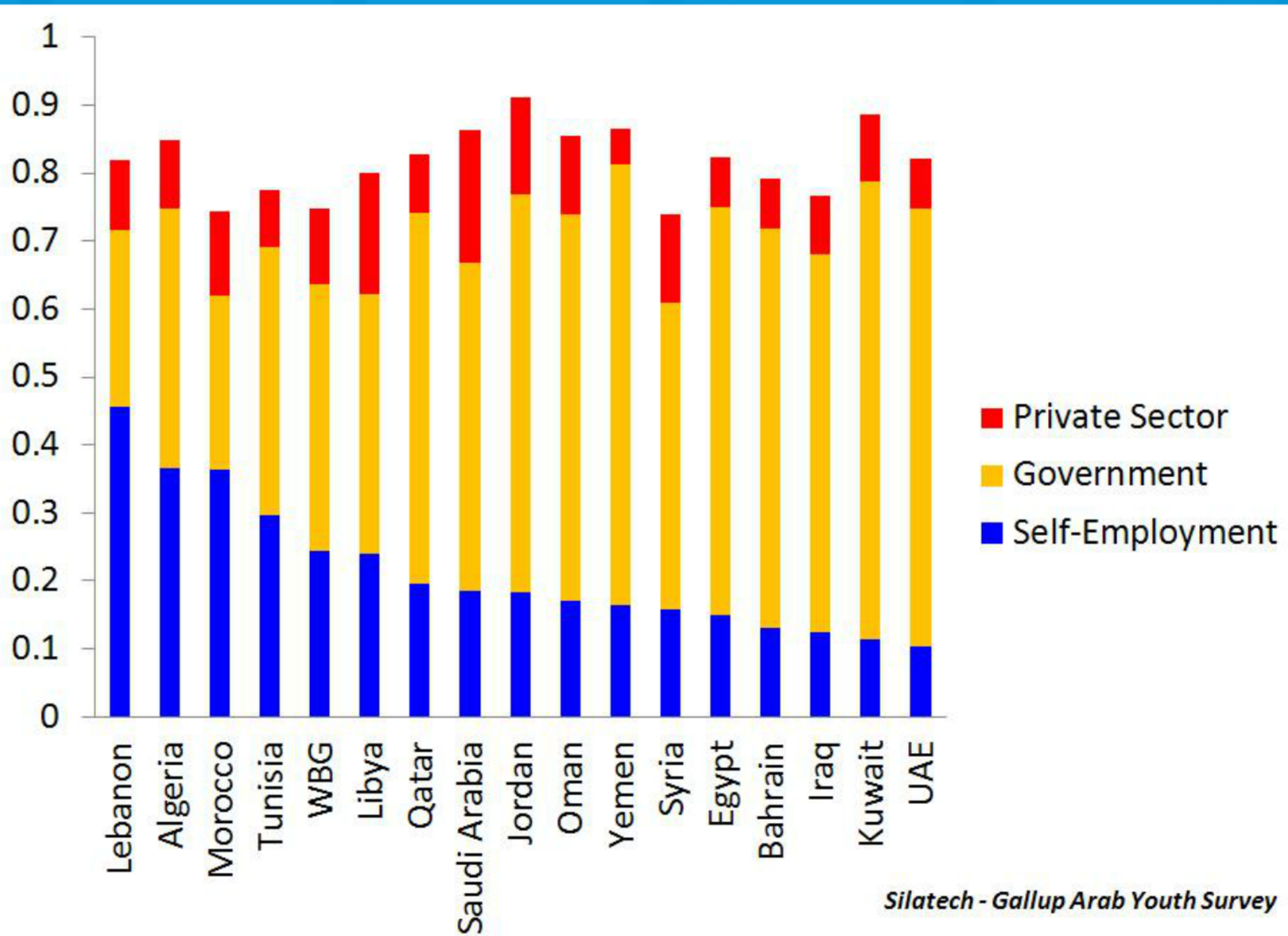
B: Those that would normally be rejected due to insufficient collateral or lack of credit history.

Group B will be eligible to receive loans.

Youth exclusion

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= vulnerable youth
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The Context

Background, motivation, and basic objectives

Part of a larger effort to evaluate Qatari foreign aid

Aid provided through direct investments

Aid is neither "tied" nor delivered as budget support

More "programmable" aid

No conditionality

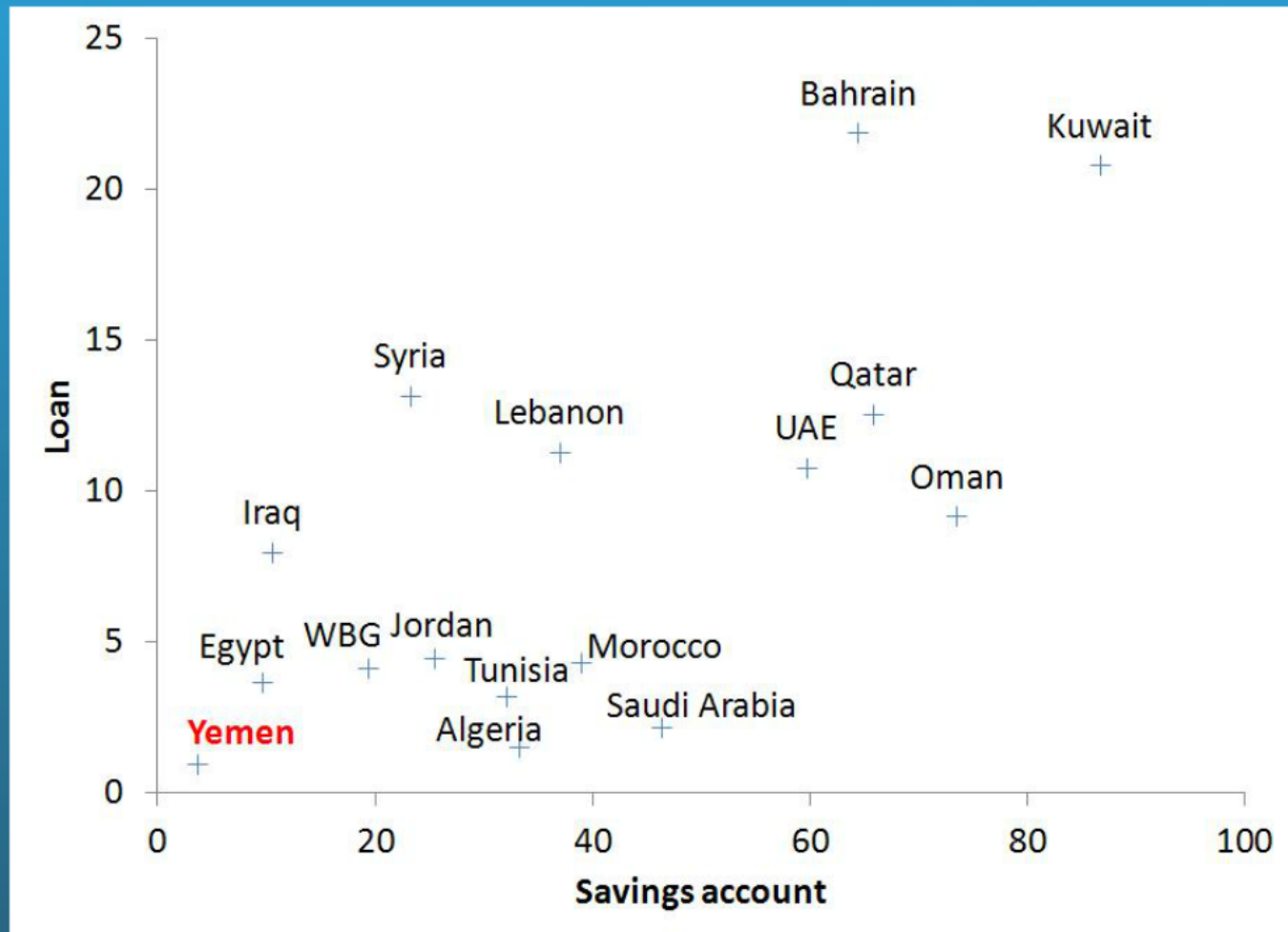
Yemen - several motivating factors

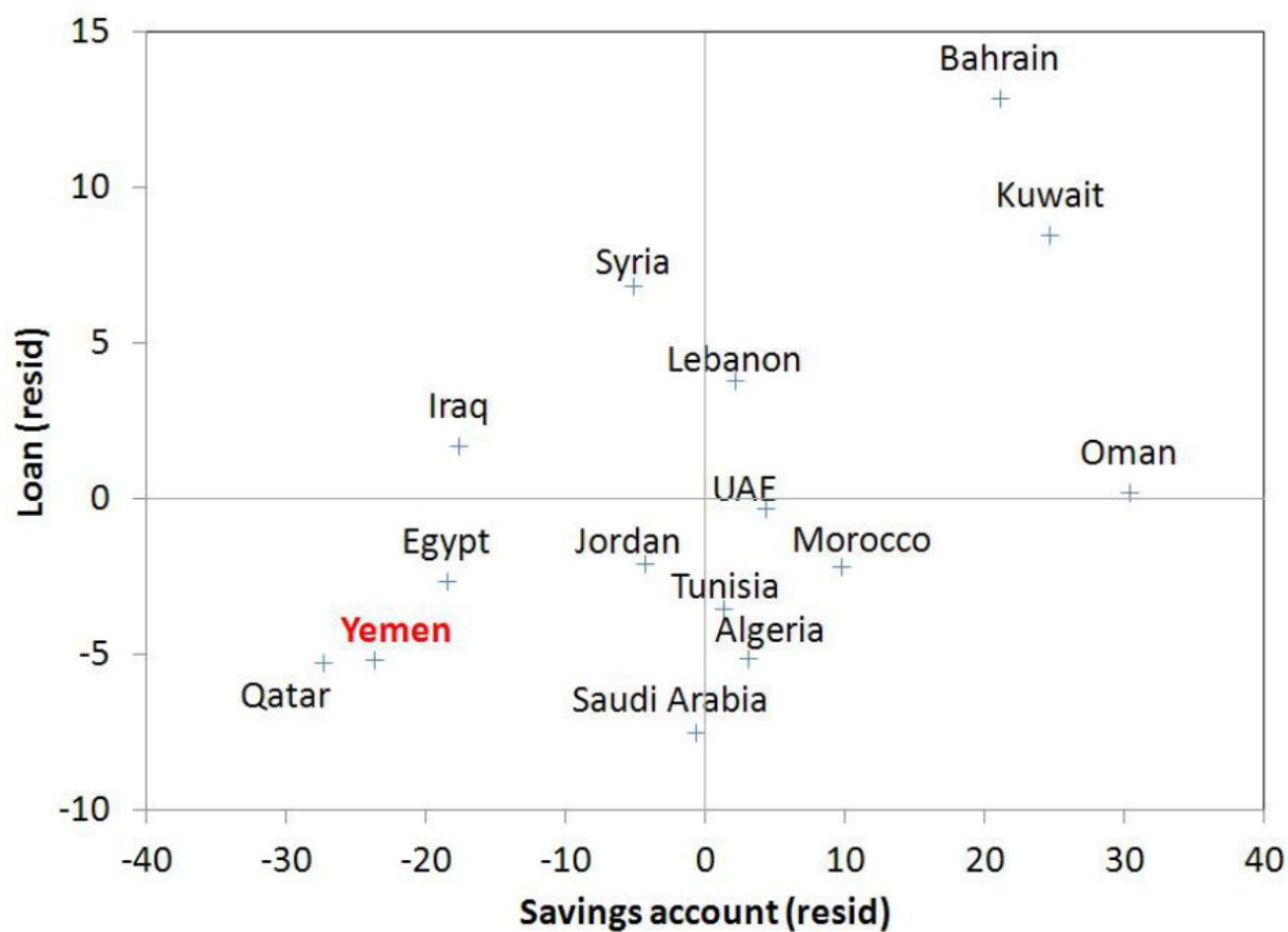
Significant youth unemployment

Severely under-banked

Opportunity to investigate behavioral effects, in addition to startup & household effects







The Project

Al Amal Microfinance Bank (AMB), established in 2009

Partly state-owned (through Social Fund for Development)

Financing from private sources + Arab Gulf Program for Development (AGFUND)

Youth Startup Loan

For 18 - 35 year old entrepreneurs who are first-time borrowers

Mudarabah loans (~\$2,000) with profit sharing, 6 - 24 months

Evaluation

Main challenge is to identify financial as well as behavioral impacts in a context where randomization of the loan product is impossible

Methods

Basic flow of applicants, random assignment

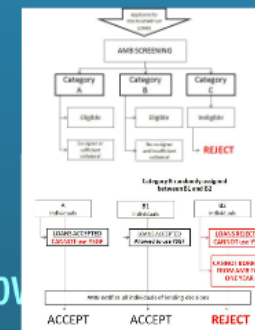
Allocation of loans cannot be randomized
BUT: access to a Partial Credit Guarantee Facility can be!
Therefore, eligible borrowers will be given random access to a
Youth Startup Guarantee Fund (YSGF)

AMB will screen applicants as normal

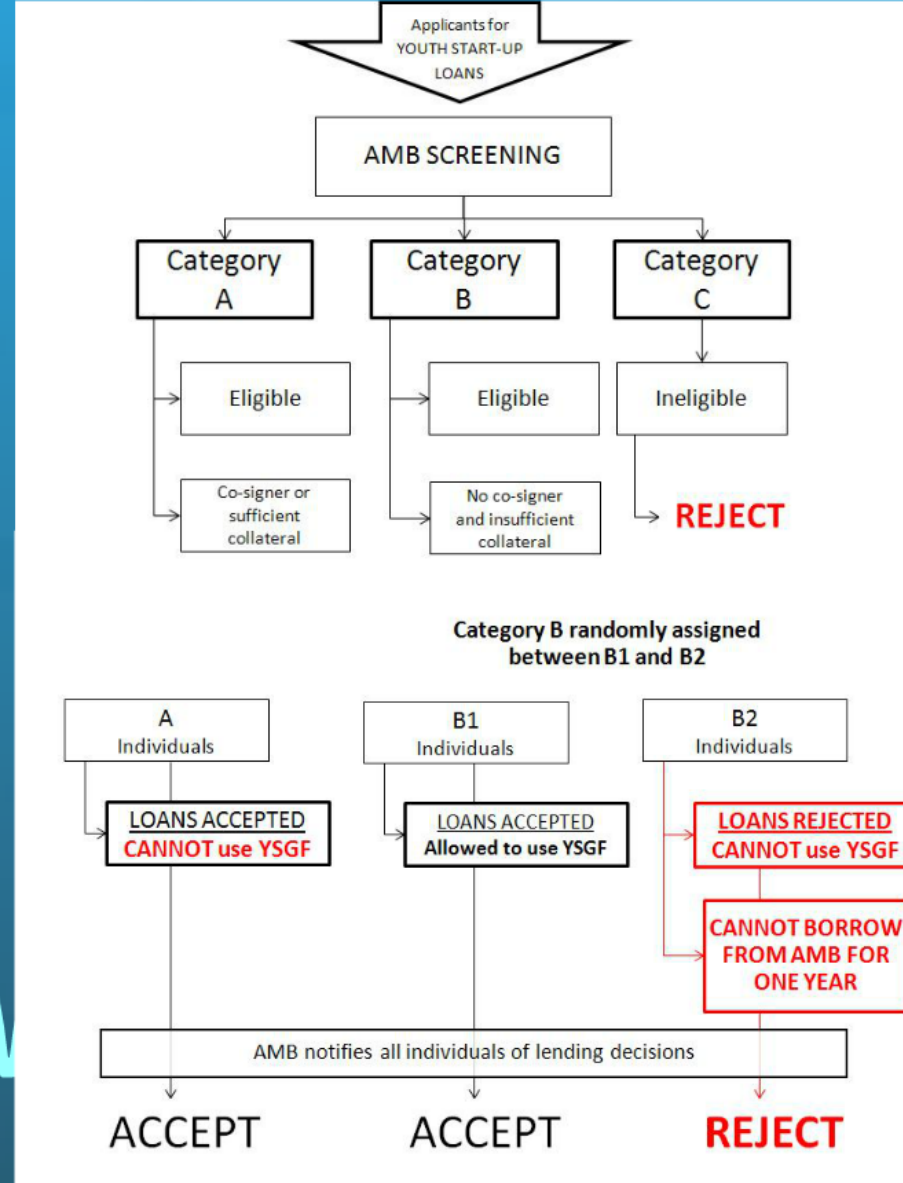
Screened applicants divided into two categories

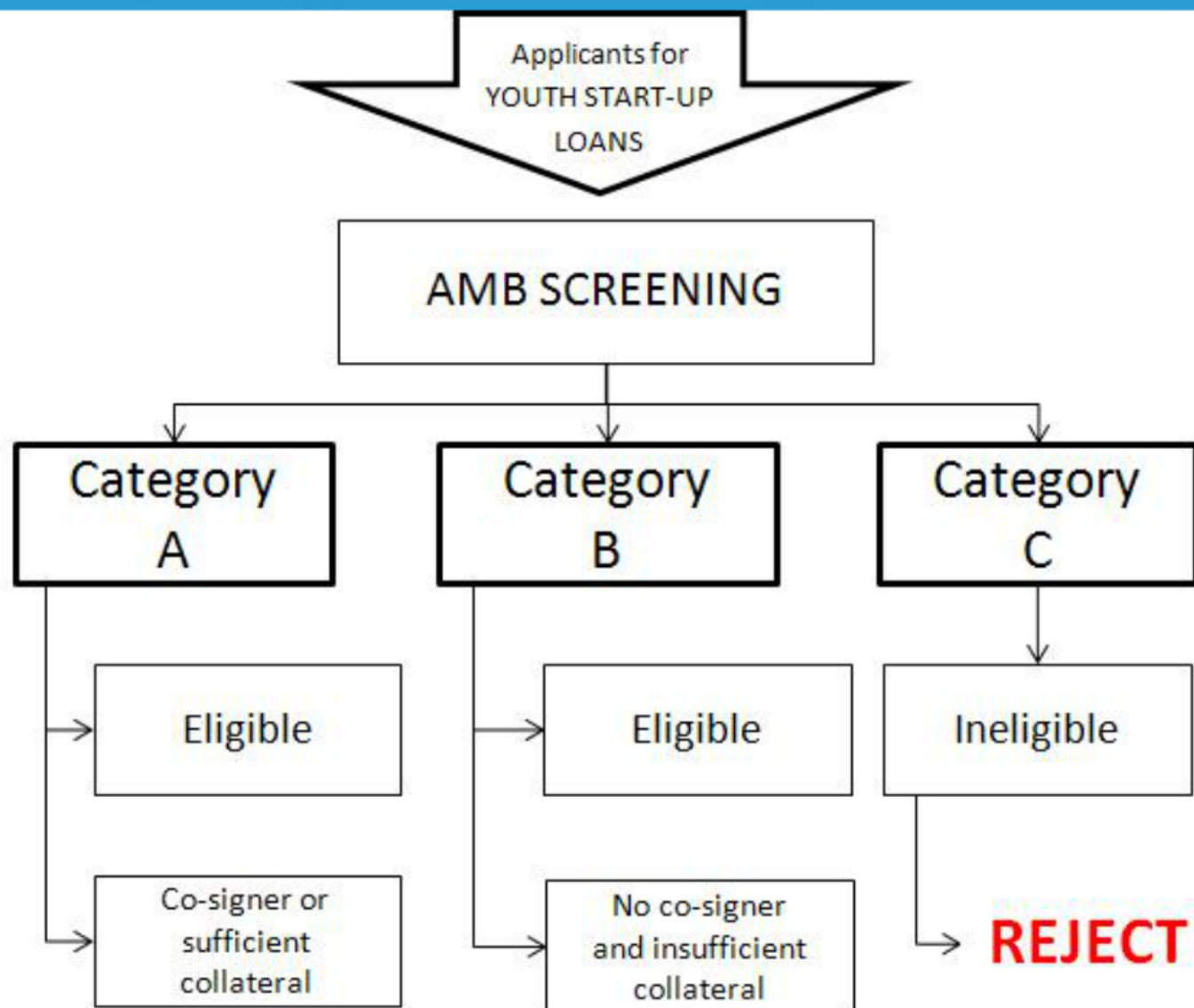
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Group B will be eligible to use the YSGF



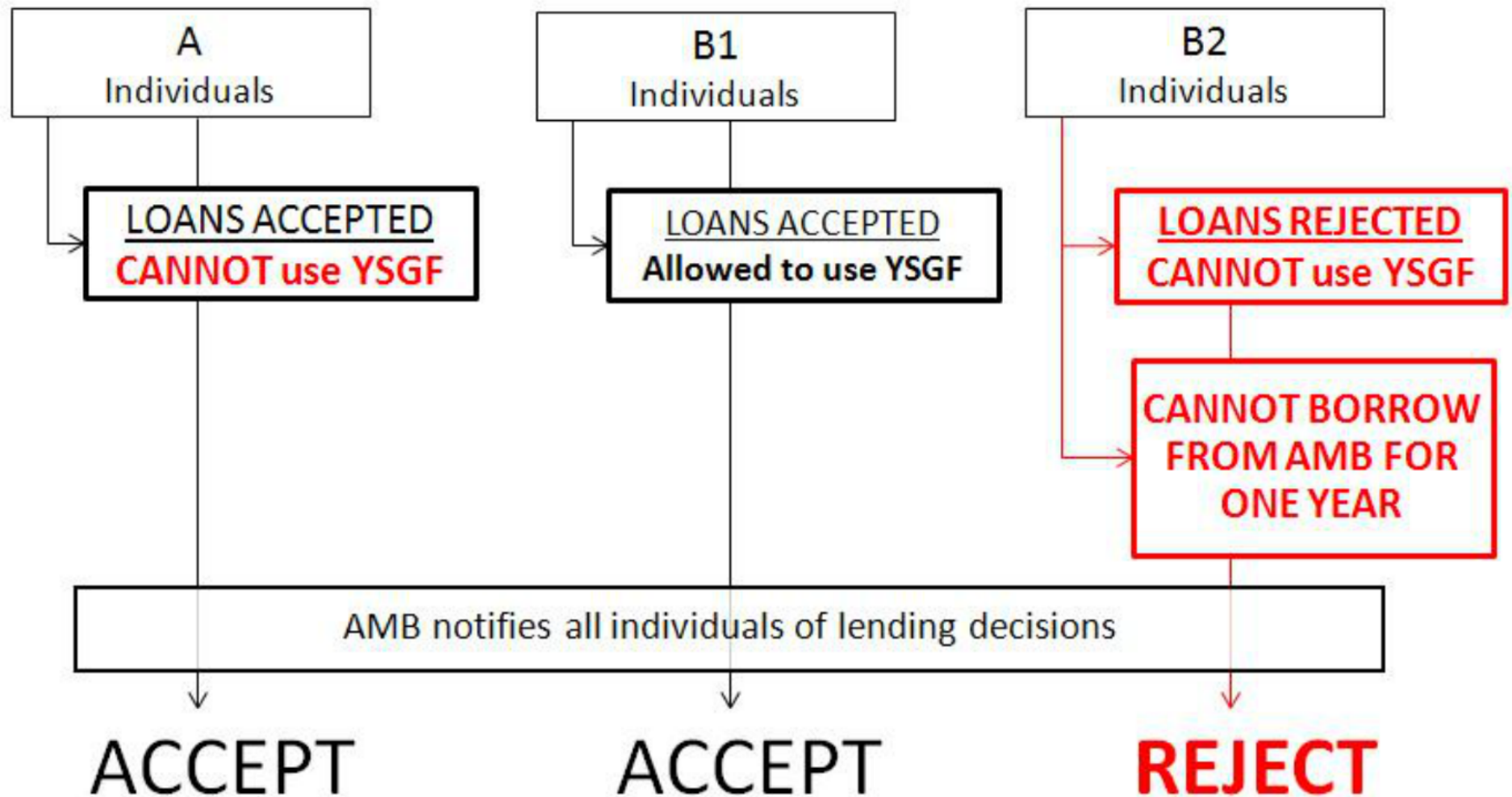
ies
AMB
e to borrow
tory





**Category B randomly assigned
between B1 and B2**

Category B randomly assigned
between B1 and B2



Methods

Basic survey objectives

Group A vs. B1

- Use of loan proceeds
- Default rates
- Financial behavior

Group B1 vs. B2

- Livelihood (employment, income, consumption)
- Business development & growth
- Government interaction (service delivery, corruption)
- Attitudinal changes (towards markets, quality of government, militancy/extremism, role of religion)
 - Behavioral changes (Qat chewing, social networking)

Obtaining accurate item-responses to sensitive questions

Validity of survey depends on the accuracy of self-reports

- Sensitive questions = social desirability, privacy concerns
- Lies and non-responses
- How can we elicit truthful answers to sensitive questions?

Item Count techniques: also known as "list experiment" or "unmatched count techniques" using aggregation to protect privacy

Endersement Experiments - use of randomized endorserments to measure support levels

List experiment

Here is a list of things some people do every day. After I read them, just tell me how many of them *you* do (NOT how I do them) (I don't want to know who it is, just how many)

- 1) Participate in sports
- 2) Go to a restaurant
- 3) Read a newspaper
- 4) Visit a friend
- 5) Take a vacation

Number of responses

Number of responses in experimental group minus number of responses in control group

$$\hat{\tau} = \frac{\sum_{i=1}^N X_i^T}{N_T} - \frac{\sum_{i=1}^N X_i^C}{N_C}$$

Endersement Experiment

Is someone in support for action, group, or politician, when combined "worded"

Experimental design

1. Select policy questions
2. Randomly divide sample into control and treatment groups
3. Ask each respondent a question, randomly adding additional actions for endorserment (endorsement) for the control group
4. Compare support level for each policy endorsed by different actors

Endorserment question: The Government of Yemen is planning to reform a energy and fuel subsidies for Yemeni citizens. How much do you support such a plan?

Control question: The Government of Yemen is planning to reform a energy and fuel subsidies for Yemeni citizens. How much do you support such a plan?

Endorserment question: The Government of Yemen is planning to reform a energy and fuel subsidies for Yemeni citizens. How much do you support such a plan?

Control question: The Government of Yemen is planning to reform a energy and fuel subsidies for Yemeni citizens. How much do you support such a plan?

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Endorsement Experiments - use of randomized endorsements to measure support levels

List experiment

Here is a list of things some people do every day. After I read them, just tell me HOW MANY of these things you do EVERY DAY (I don't want to know which ones, just how many):

- (1) Participate in sports
- (2) Go to a restaurant
- (3) Read a newspaper
- (4) Post something on Facebook
- (5) Travel more than 20 km
- (6) Chew qat

standard difference-in-means estimator:

treatment group mean - control group mean = fraction of respondents engaged in sensitive activity

$$\hat{\tau} = \frac{\sum_{i=0}^N X_i^T}{N_T} - \frac{\sum_{i=0}^N X_i^C}{N_C}$$

Endorsement Experiment

To measure support for actors, groups, organizations, when considered "sensitive"

Experimental design:

- 1 Select policy questions
- 2 Randomly divide sample into control and treatment groups
- 3 Across respondents and questions, randomly assign political actors for endorsement (no endorsement for the control group)
- 4 Compare support level for each policy endorsed by different actors

Control version: The Government of Yemen is planning to reduce energy and fuel subsidies for those above the poverty line. How much do you support such a plan?

Treatment version: The Government of Yemen is planning to reduce energy and fuel subsidies for those above the poverty line. **This plan is supported by *al-Tajmu al-Yamani li al-Islah*.** How much do you support such a plan?

(1 = strongly oppose, 2 = oppose, 3 = neither, 4 = support, 5 = strongly support)

Preliminary

From pilot testing (baseline to launch in March)

Most applicants

Borrow to purchase goods to sell

Are concerned about *Sharia* compliance

Are unemployed

List experiment? Endorsement experiment (AQAP)?

(Keeping in mind that this will be part of a larger baseline)

Action	Effect
Do not want a woman running a business	0.150
Oppose terrorist kidnappings	0.025
Oppose destruction of property by militants	0.238
Chew qat everyday	0.075
Want an Islamic Emirate of Yemen	0.000
Would not hire employees of different sect	0.150
Would not work for a female boss	0.363
Participated in the revolution	0.095

Policy	Effect
National corruption authority	-0.158
Support to SMEs	-0.167
Rural infrastructure	-0.111
Reduction of fuel subsidies	-0.158
Greater local autonomy	-0.225
Average	-0.164

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Conclusions

What will the evaluation yield?

Program design allows evaluation at multiple levels

- Impact on livelihoods/behavior from comparison of C, T
- Use of a credit guarantee facility allows assessment of
 - Program innovation
 - Default rates

The project address a nexus of critical issues for the region

Unemployment
Entrepreneurship
Financial inclusion

Vulnerability of youth
Economic effects of transitions
Arab aid delivery

AMB's program = representative of approaches taken by non-DAC donors (e.g. Qatar)

- Direct investment in AMB rather than loan/grant
- Aid delivery through an NGO rather than state agency
- No budget support
- No project implementation units

But

- No benchmarking for performance
- Data reporting standards are unclear

conclusions

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- No project implementation units

But

- No benchmarking for performance
- Data reporting standards are unclear
- Absence of rigorous M&E

The Context

Background, motivation, and basic objectives

- Part of a larger effort to evaluate Qatari foreign aid
- Aid provided through direct investments
- Aid is neither "hard" nor delivered as budget support
- More "invisible" aid
- No accountability
- However – several motivating factors
 - Significant size of the investment
 - Security under Jordan
 - Open family to investigate behavioral effects, in addition to startup
 - No household effects

- Part of a larger effort to evaluate Qatari foreign aid
- Aid provided through direct investments
- Aid is neither "tied" nor delivered as budget support
- More "programmable" aid
- No conditionality

Yemen – several motivating factors

- Significant youth unemployment
- Severely under-banked
- Opportunity to investigate behavioral effects, in addition to startup & household effects



Conclusions

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The project address a nexus of critical issues for the region

Unemployment	Vulnerability of youth
Entrepreneurship	Economic effects of transitions
Financial inclusion	Aid delivery

Challenges – operational opportunities for the RCT

- 1. High attrition rates and low take-up rates
- 2. High cost of credit and high interest rates
- 3. Lack of information on business opportunities
- 4. Lack of information on business management practices
- 5. Lack of information on business financing
- 6. Lack of information on business marketing
- 7. Lack of information on business legal and regulatory environment
- 8. Lack of information on business social and cultural environment
- 9. Lack of information on business political environment
- 10. Lack of information on business economic environment

- Program design allows evaluation at multiple levels
 - Impact on livelihoods/behavior from comparison of C, T
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 - Default rates

The project addresses a nexus of critical issues for the region

Unemployment	Vulnerability of youth
Entrepreneurship	Economic effects of transitions
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- **AND operators** = represent logical approaches like **AND** or **OR** between log. data
 - **AND** is introduced in the **WHERE** clause
 - **OR** is added through the **WHERE** clause
 - **NOT** is used to negate a condition
- **SQL**
 - **SELECT** is used to retrieve data
 - **UPDATE** is used to modify data
 - **DELETE** is used to delete data

The Project

Al Awd Microfinance Bank (AMB), established in 2009

- Partly state-owned (through Social Fund for Development)
- Financing from private sources + Arab Gulf Program for Development (AGFD)

Bank Started in:

- For 8-35 year old entrepreneurs who are first time borrowers
- Microfranchise loans (~\$2,000) with profit sharing 5-24 months

Evaluation

Main challenge is to identify financial as well as behavioral impacts in a context where randomization of the loan product is impossible

Al Araf Microfinance Bank (AMF), established in 2009
Partly state-owned (through Social Fund for Development)
Financing from private sources + Arab (Gulf Program for Development) (AGFUND)
Youth Start-up Loan
For 18–35 year old entrepreneurs who are first-time borrowers
Modest loan sizes (\$2,000) with profit sharing, 6–24 months
Evaluation
Main challenge is to identify financial as well as behavioral impacts in a context where randomization of the loan products is impossible

Yemen

Youth exclusion

- Creating opportunities for youth
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YOUTH EXCLUSION BY COUNTRY AND YEAR (2000-2010)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Yemen	5	6	7	8	9	10	11	12	13	14	15
Other Countries	3	3	3	3	3	3	3	3	3	3	3

State fragility

- Yemen = "fragile" state, exacerbated by
 - Youth unemployment
 - Low state capacity + exclusion = vulnerable youth
- Disruptions due to events in 2011

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Most applicants

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- Are concerned about Shariah compliance
- Are unemployed

List eye-invent? Endorsement experiment (AQAP)?

(Keeping in mind that this will be part of a larger baseline)

	Baseline	Endorsement	Endorsement
Share of respondents who are employed	40%	40%	40%
Share of respondents who are unemployed	60%	60%	60%

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Share of respondents who are employed	40%	40%	40%
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[illegible]

Methods

Basic survey objectives

Group A vs. B1

- Use of loan precedents
- Default rates
- Financial behavior

Group B1 vs. B2

- Unemployment (employment, income, consumption)
- Business development & growth
- Government interaction (service delivery, corruption)
- Attitudinal changes (towards markets, quality of government, militancy/extremism, role of religion)
 - Behavior of changes (Quit throwing, social networking)

Group A	Group B1
Group B1	Group B2
Group B2	Group C

- Group A vs. B1
 - Use of loan proceeds
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Methods

Basic flow of applicants, random assignment

Allocation of loans cannot be randomized
HUF: access to a Partial Credit Guarantee facility can be!
Therefore, eligible borrowers will be given random access to a
Youth Startup Guarantee Fund (YSG)

AMB will screen applicants on no real
Screened applicants divided into two categories
A: Those for which risk will be borne by AMB
B: Those that would normally not be eligible to borrow
insufficient collateral or lack of satisfactory
group B will be eligible to use the YSG



```
graph TD
    A[Eligible Borrowers] --> B[Random Access to YSG]
    B --> C[Screened Applicants]
    C --> D[Category A: Risk borne by AMB]
    C --> E[Category B: Normally not eligible]
    E --> F[Eligible to use YSG]
```

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Screened applicants divided into two categories:

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