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policy analysis on growth and employment



Beyond Technical Skills Training: The impact of Credit Counselling on Entrepreneurial Behavior of Ugandan Youth.

RESEARCH PROPOSAL

Presented to

Partnership for Economic Policy (PEP)

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Abstract

There is a low rate of credit take among educated youth in Uganda. One of the various possible explanations is that the probability of defaulting and the associated risk is too high with respect to preferences. Another possibility is that the probability of defaulting is uncertain or ambiguous (Camerer and Weber, 1992). If the potential beneficiaries are more risk averse in a context of ambiguous probabilities, not knowing the objective probabilities could shy them away from taking credit. In this case, an intervention informing about the risk of taking credit would reduce ambiguity and increase the rate of credit take among youth.

This study will assess the determinants of entrepreneurial risk tolerance using primary data from an entry interview and real-life risk aversion simulation on a random sample of young men and women who own a business and are eligible to take out business expansion credit. The study will further determine the impact of credit counselling on their borrowing choices using a randomised experiment.

The research will contribute to the current policy debate on the need for further interventions that focus on soft skills and extend beyond the standard business and technical skilling to promote youth entrepreneurship and employment.

1 Background

The Government of Uganda has initiated a number of interventions such as training youth in business and management skills, the integration of vocational education at primary and secondary levels, development of serviced industrial parks and promoting agricultural commercialisation and agro-processing through business incubation centers. The training of youth in foundational skills, technical fields, and business related studies has generated a mass of "paraprofessionals" (i.e. craftsmen, technicians, etc.) with skills which are more favoured by the private and informal sectors. The Government has attempted to match this supply by making available a venture capital fund to support growth of viable and sustainable SMEs owned by young entrepreneurs aged between 18 and 35 years in the private sector. However despite all these interventions, youth unemployment remains high. Recent policy debates on this issue have focused on reasons why the youth, even when equipped with the necessary skills, fail to access the available entrepreneurial opportunities and more specifically the start-up capital.

In the financial year 2011/2012, the Government of Uganda made available the Youth Venture Capital Fund of UGX 25 Billion to support growth of viable and sustainable Small and Medium-scale Enterprises (SMEs) owned by young entrepreneurs aged between 18 and 35 years in the private sector. Like any other credit venture, the fund is characterised by typical eligibility conditions such as ownership of a licenced business, registration with the Credit Reference Bureau and security in form of two guarantors of good repute. There is no requirement of any form of collateral.

While the fund has received adequate support from Government and partner institutions, there is concern that certain categories of youth including those with adequate business skills training, remain hesitant to access this fund and exhibit low morale for business start-up and expansion.

2 Justification and scientific contribution of the research

This research aims to highlight the effects of risk tolerance on entrepreneurial choices and to advocate for integration of credit counselling in business training initiatives in Uganda. In most of the national policy debates around Youth Unemployment, little attention has been given to risk tolerance as one of the factors that may affect entrepreneurial activity amongst Ugandan youth. Generally, this issue has not been addressed before in Uganda and has the potential to draw interest of policy makers at a time when the investment climate in the country is uncertain and characterised by escalating borrowing rates and rampant evictions of Small and Medium Scale Enterprises in a bid to modernise the city.

In the decision-making context, there are at least 5 existing policy instruments to which the findings of this research can contribute. These include:

- MSMEs¹ draft policy
- The Skilling Uganda strategic plan
- The National Youth Entrepreneurship manual
- The National Guidelines for the Youth Venture Capital Fund

Many of these policy documents are yet to be submitted to cabinet and are still open to amendment. There is also a Transitional Opportunity offered by the final Evaluation of the current National Development Plan (2011/2014) and design of its 5 year sequel plan is expected to happen this year and offers a chance for application of the research findings.

There is a clear demand for this research as many existing interventions were not necessarily based on existing evidence but political directives and promises. Arising from team discussions with the various stakeholders, key policy makers have shown the willingness to receive and utilise the research findings through their strategic roles.

In terms of contribution to scientific research, much of the literature reveals that gender issues relating to access to micro-credit have been widely researched but there is limited evidence on risk tolerance and its interaction with aspects such as gender and socio-economic factors to influence investment choices among youth. The proposed study covers both males and females and focuses on one's decision to submit a loan application as the outcome of interest highlighting the influence on credit uptake of risk aversion working in combination with other socio-economic factors including cultural roles and the business environment whose effect may not be casually inferred for countries using similar studies. This underscores the need for localized evidence for Uganda.

¹ MSME: Micro, Small and Medium-Scale Enterprises

Guiso and Piella(2005) in their study, "The Role of Risk Aversion in Predicting Individual Behaviour," found that elicited risk aversion has considerable predictive power for a number of key household decisions such as choice of occupation, portfolio selection, moving decisions and exposure to chronic diseases in ways consistent with theory. Drawing on their finding regarding choice of occupation, our research will investigate whether risk aversion indeed affects the choice to take credit among youth in Uganda.

Mel, McKenzie and Woodruff (2008) in their study, "Returns to capital in microenterprises: evidence from a field experiment.", found out that returns to capital vary with entrepreneurial ability and with measures of other sources of cash within the household, but not with risk aversion or with the perceived uncertainty about future profits and that impacts were higher in male-owned enterprises. The researchers suggested the need for a better understanding of how these micro-entrepreneurs make investment decisions, a question which our research intends to further address.

3 Research Questions and Objectives

The proposed research seeks to examine the determinants of entrepreneurial risk tolerance among youth, the extent to which risk aversion affects subsequent demand for credit among youth and the impact of credit counselling on borrowing choices of young men and women in Uganda. The research also aims to advocate for the inclusion of credit counseling in the business training curriculum of Uganda.

Drawing on the consultations and the main issues arising from the current debate on youth unemployment, the research will focus on the following key questions:

Research question 1: *Which personal factors are responsible for differential risk perceptions amongst the young men and women?*

Objective: To gain a deeper understanding with an engendered focus on personal factors associated with differential risk perceptions of youth.

Research question 2: *Does credit counselling have an impact on entrepreneurial risk tolerance and subsequent credit uptake amongst youth?*

Objective: To estimate the impact of credit counselling on borrowing choices of the youth.

4 Methodology

4.1 The Experiment/intervention:

The proposed intervention will involve delivering **credit counseling through specialized business clinics** with youth aged 18-35 years who currently own a business and are interested in applying for business expansion credit through the Youth Venture Capital Fund (YVCF). The key objective of the credit counseling clinics is to provide advice and assistance to relieve the fears and grey areas inhibiting youth from accessing credit. Ultimately, the intervention is aimed at changing their mindset so that the desired behavior change, improved risk tolerance and increased

demand for credit, is achieved. The longer-term goal is to deliver high impact solutions to accelerate credit uptake for the young entrepreneurs.

In addition, the intervention will include a risk/ ambiguity aversion experiment which mimics real-life choices with which youth are confronted when they have to apply for credit. This experiment will be used to collect individual measures of risk preferences and study the variation of those preferences at different levels of ambiguity. The experiment is a key element to evaluate the correlation between the economic decision of taking credit and preferences for risk in presence of ambiguity. The objective is to shed light on the mechanism through which the youth credit program in Uganda works. Details of this game and the content of the business expansion clinics are included in appendix I of this document.

Each Business clinic will be organized to last 2 days. On the first day, relevant baseline data will be solicited from the participants during the registration session. In addition, all participants will be taken through the preparation of required documentation with regard to their loan applications. This will form the morning session of Day 1.

The enrolled participants will be randomly assigned to two groups with one group (the control) only receiving the loan application forms and standard guidelines that are currently issued to YVCF applicants while the other group (treatment) will receive the loan application guidelines, business mentoring and credit counseling.

After all the required baseline data has been collected, the participants will be advised of their respective group assignment. During the afternoon session of day 1, those assigned to the control group will participate in the risk/ambiguity aversion game while those in the treatment will be taken through a session on preparation of a business portfolio and plan for purposes of a loan application. The treatment group will only participate in the risk/ambiguity experiment on day 2 . At the end of day one, those assigned to the control group will then be excused with a promise to take them through the credit counseling session at a later date. In order to limit spillovers, the two groups will break off at different times, at least an hour apart.

The Credit counseling clinic will be conducted on day 2 for the treatment group. The participants will be exposed to information and training with a focus on encouraging them to break the inhibiting barriers. The counsellors will provide detailed information about available credit or business –financing opportunities and considerations for a successful credit application. Key among these will be the accurate assessment of credit needs, rewards and risks, preparation of the required documentation, presentation of credit applications, follow up requirements, and communication with financiers and guarantors. Such counseling will aim to enhance and accelerate the momentum for credit access while also exposing them to gradual appreciation of the common pitfalls to avoid in their credit application processes.

Coverage: The Clinics will be delivered in 5 selected districts i.e Kampala city plus 1 district per geographical region of Uganda. These have been selected on basis of presence of small scale enterprises and availability of the Youth Venture Credit facility. Kampala City will be treated distinctly because of its purely urban nature. The other 4 selected districts are: Wakiso, Mbale, Gulu and Mbarara. In order to ensure ease in convening the clinics, all participants will be resident in their respective district and preferably within good proximity of the training center.

They will receive a minimal daily stipend of **USD 20** to cover their meals, communication and transport costs.

Institutional collaboration: The team will collaborate with the Ministry of Gender, Labour and Social Development (MGLSD), the Government Evaluation Facility, UNICEF (UG) and Uganda Investment Authority (UIA) to implement the study.

UNICEF through its youth partnerships programme, will provide the platform required to enroll study participants. The participants will be selected from a database of youth who are currently enrolled as volunteers for the U-report social mobilization initiative. The U-report platform is currently managed by UNICEF and is available to both Government and Non-Government stakeholders to engage Youth in discussions and opinion polls on topical issues concerning their communities. The platform is managed through an open-source gateway which makes it possible that youth receive and respond to polls at NO cost.

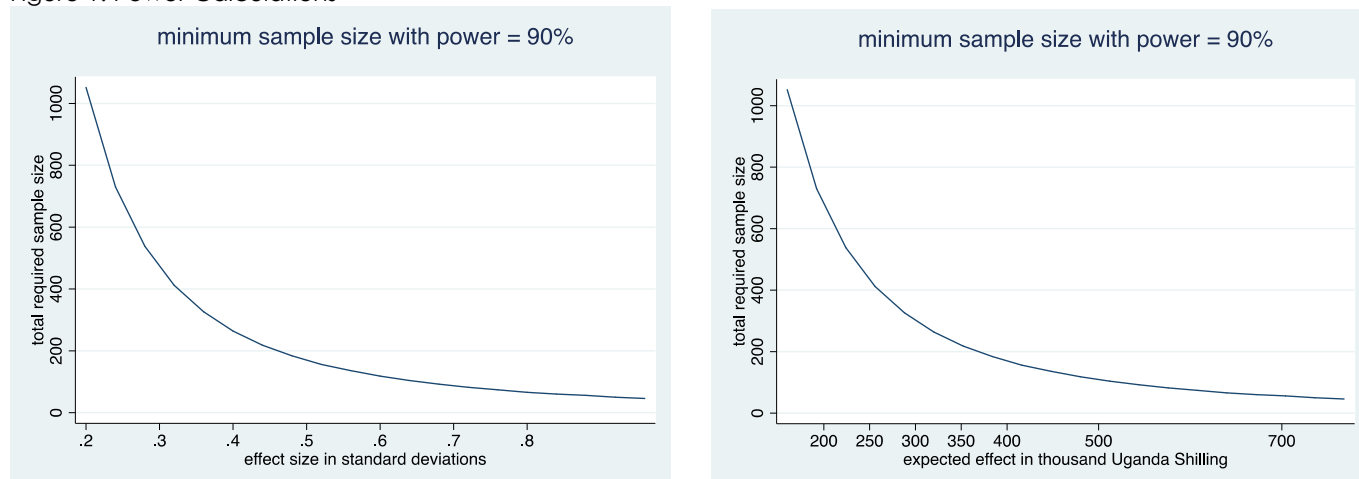
The Uganda Investment Authority will provide technical expertise to do the credit counseling and will be responsible for organizing the business clinics including identification and recruitment of external facilitators from partner bank(s) to guide the participants through the loan application process. The Government Evaluation Facility through the National Evaluation Subcommittee will oversee the implementation of the evaluation. The GEF will also provide researchers to participate in data collection and processing. Centenary Bank Uganda will support introductory sessions on loan applications.

4.2 Sample size computation and allocation:

We expect that, on average, individuals assigned to the control group will ask for a credit of UGX 1,000,000 (average current credit take). Those assigned to the treatment group would ask for a credit around the UGX 1,200,000 (the standard deviation is UGX 800,000) which corresponds to a size effect of 0.2. Therefore, a reasonable effect size would be between 0.2 and 0.3 standard deviations.

The two graphics in figure 1 show the total required sample size for each effect size in terms of the standard deviation and Uganda Shillings. The expected program impact requires a sample size of 234 individuals per group (treatment/control). However, in case there is some correlation within districts we plan to extend the sample size to 300 individuals per group. Therefore the overall sample for the study will be **600 individuals**.

Figure 1: Power Calculations



A further analysis with STATA assures that if there is no correlation and the program effect is at least 0.2, we achieve a power of 0.95, when we collect data from a treatment and a control group of 300 individuals each.

```

local mean      = 1000000 // 1 million
local sd        = 800000  // 8 hundred
local expected_impact = 200000 // 2 hundred
local mean_treat = `mean' + `expected_impact'

.sampsi $mean_treat $mean_cont, n1(300) n2(300) sd1($sd)
Estimated power for two-sample comparison of means
Test Ho: m1 = m2
where m1 is the mean in population 1 and m2 is the mean in population 2
Assumptions:
    alpha = 0.0500 (two-sided)
    m1 = 1.2e+06
    m2 = 1.0e+06
    sd1 = 800000
    sd2 = 800000
sample size n1 = 300,n2 = 300
    n2/n1 = 1.00
Estimated power:
    power = 0.9568
    
```

Sample allocation:

Uganda is spatially divided into 4 geographical regions. Based on the current participation rates, 5 districts with the highest number of u-report subscribers per region have been selected. These include Kampala City and 1 district from each region. The sample will be allocated in proportion to actual number of subscribers as shown below:

Table 1: Sample allocation

Region	District	U-reporters (July 2013)	Proportion	Sample size
Capital City	Kampala	13,453	33%	200
Central	Wakiso	9,889	25%	150
Eastern	Mbale	4,961	12%	70
Northern	Gulu	9,207	23%	140
Western	Mbarara	2,785	7%	40
TOTAL		40,295	100%	600

4.3 Recruitment:

A recruitment poll will be used to select eligible participants. The recruitment poll will be sent to all subscribers in the 5 selected districts. They will receive an introductory SMS message which signals to them that the Ministry of Gender, Labour and Social Development would like to carry out sensitization clinics on the Youth Venture Capital Fund. The SMS will further invite those who are interested to dial a USSD short code which is already available to UNICEF for interactive interviews. They will then respond to 5 distinct questions:

1. Do you own a business?
2. Have you heard about the Youth Venture Capital Fund?
3. Would you be interested in applying for a business expansion loan through the Youth Venture Capital Fund?
4. What is your age?
5. What is your gender?

Assumptions:**A. About 40% of subscribers in the selected districts will respond to the poll**

This assumption is based on UNICEF (UG)'s experience with similar recruitment polls. UNICEF Uganda is planning a nationwide text-based survey. In March 2013, a trial poll was sent out to enlist Youth that would be interested in participating as investigators in this survey. 30% of u-reporters subscribed to the poll. UNICEF-Uganda also runs the EduTrac for monitoring participation and quality in the education sector. In June 2013, a poll was sent out to selected areas where the EduTrac was recruiting new investigators. The poll received 4,949 Responses out of 7,953 Participants (62%). On the basis of these two polls, we have assumed that 40 % of subscribers will respond to the poll.

B. About 90% of those who respond will be aged 18-35yrs:

This assumption is based on an analysis of a random sample of 43,000 U-reporters (20% of the entire database). The age distribution is shown in the box below:

Aged 18 to 35 yrs	Freq.	Percent	Cum.
No	4,289	9.93	9.93
Yes	38,884	90.07	100.00
Total	43,173	100.00	

C. About 60% of youth aged 18-35 years have their own a business. The ratio is 50:50 between males and females.

According to the Uganda National Labour Force and Child Activities Survey (2011/12), about 57% of youth aged 18-30 years were self-employed with 61% among females and 52% among males. We therefore assume that the overall proportion for the wider age-group 18-35 years would therefore be 60% approximately.

D. About 50% of business owners will be interested in taking credit

The 2010 Survey of Small and Medium Enterprises reveals that about 70% of business owners in Uganda are interested in taking out credit although only about 30% actually access it. Based on this, we have chosen a conservative figure of 50% for our study target population.

E. About 50% of those invited to the clinic will actually show up

Although similar clinics conducted by Enterprise Uganda are known to receive over 90% turn-up, we have kept a conservative response rate of 50% considering that these are business owners who may not always have time at their disposal and may be hesitant to take 2- days off.

Table 2 presents a simulation based on the above scenarios. If all assumptions stated above would hold, then the current selection of districts and their number of subscribers should give us the desired sample size. However, the research team will need to run a recruitment pilot to confirm that the assumptions would hold.

Recruitment Pilot:

A recruitment Pilot will be done in Mukono district. This district has the least obvious convergence point or district center and would allow an objective assessment of the expected recruitment turnout and associated challenges. The trial poll will be sent to 100 randomly selected U-reporters. The poll for the pilot may be differently worded although on a related subject. A budget for the recruitment poll has been included in the overall cost estimate on page 13 of this document.

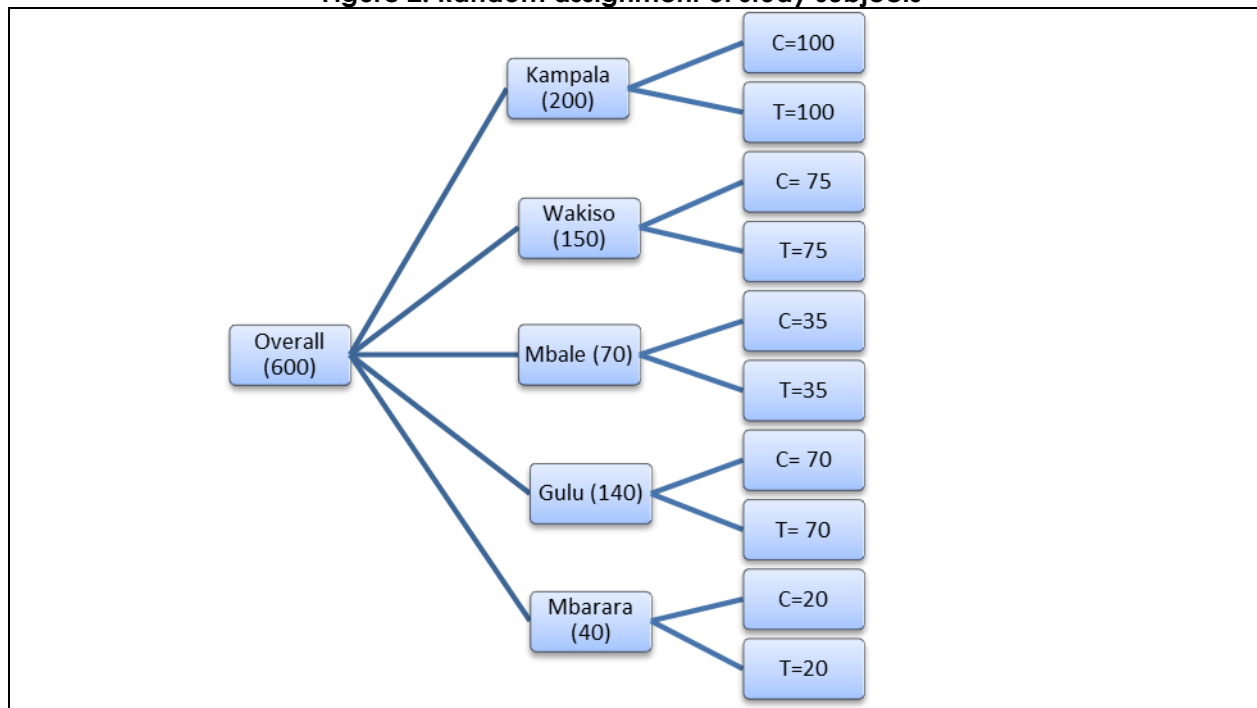
Table 2: Recruitment simulation by selected districts

Region/ District	Capital City	Central	Eastern	Northern	Western	Row Total
	Kampala	Wakiso	Mbale	Gulu	Mbarara	
A. U-reporters to receive recruitment poll	13,453	9,889	4,961	9,207	2,785	40,295
B. Respond to poll(40% of A)	5,381	3,956	1,984	3,683	1,114	16,118
C. Aged 18-35yrs (90% of B)	4,843	3,560	1,786	3,315	1,003	14,506
D. Own business (60% of C)	2,906	2,136	1,072	1,989	602	8,704
E. Interested in taking credit (50% of D)	1,453	1,068	536	994	301	4,352
F. Could potentially show up for clinic on invitation(50% of E)	726	534	268	497	150	2,176
G. To be invited by phone-call	400	300	140	280	80	1200
Number needed for study	200	150	70	140	40	600

4.4 Random assignment

Figure 2 shows the assignment of participants to control and treatment groups by district. They will be assigned to their respective groups through the registration process as they enroll for the clinic.

The short-list of those who express interest in participating in the clinic will be dichotomized by male and female within each district and invitations made to a pre-determined number of randomly selected participants on each list ensuring a 50: 50 gender balance. Through a follow-up phone-call, the prospective participants will receive details on the training location and other arrangements for the training. They will be asked to confirm that they would be available to participate for the two days of the clinic. The research team will confirm attendance at this point targeting at least double the actual number of participants required for the clinic on assumption that only 50% of these will actually show up for the clinic. If this assumption holds, then the number of invitees who actually show up will only fall back to the intended sample size.

Figure 2: Random assignment of study subjects

*C=Control, T=Treatment

4.5 Analytical Approach

Measurement of Outcomes: The aim of this study is to establish the extent to which personal factors are responsible for differential risk perceptions and to estimate the impact of credit counseling on entrepreneurial choices (specifically credit take) among youth. For purposes of the study, Entrepreneurial Risk Tolerance is defined as willingness to acquire and invest more money with an aim to increase business returns.

The key outcome of interest will be the principal amount that the youth is willing to apply for. The baseline value of this variable will be captured alongside other baseline data during the entry interview. The final value of the outcome variable will be captured during follow-up as that value that is actually submitted by the loan applicant. The intent to submit an application will also be considered as one of the intermediate outcome variables and will be measured during follow-up as a composite score based on the stages in the loan application process that the youth have accomplished.

Research question 1: *What personal characteristics are responsible for differential risk perceptions amongst the young men and women?*

Micro-econometric modelling will be used for this question; we will relate baseline risk scores of participants to data on their socio-demographic characteristics, local business environment to investigate the contribution of each of these factors to entrepreneurial risk perceptions. Similar to the work of Antonites & Wordworth(2009), Van de Venter (2006) and Grable et al. (2004) the control variables for this analysis will include:

- Prior entrepreneurial experience of parents while growing up
- Prior entrepreneurial experience while at school
- Gender
- Age
- Ethnic group
- Marital status
- Number of financial dependents
- Home ownership status
- Total household income
- Highest level of education
- Objective measure of financial decision-making.

Research question 2: *Does credit counselling have an impact on entrepreneurial risk tolerance and subsequent credit uptake amongst youth?*

A randomised Controlled Trial will be used to answer this question. Using the basic impact evaluation approach, comparing the outcomes for the treatment group with the estimate of the counterfactual obtained from the control group, the impact of credit counselling will be estimated.

Specific focus will be given to analysing the extent to which women's risk aversion contributes to the gender gap in credit seeking behaviour and whether this gap can be remedied through financial risk counselling. To explain the gender gap, a probit model of the financial credit demand will be estimated. We will model the change in demand for credit as dependent on receipt of credit counselling, the initial level of participant's risk tolerance, a set of demographic variables and business environment measures that generally influence demand for credit. For this particular analysis, the dependent variable will be binary with value 1 if there is an increase in amount of credit take that participants are willing to borrow and 0 otherwise.

Empirical considerations: After random assignment has been done, participants choose whether or not to attend the credit counselling sessions (they are not mandatory). Consequently, it is possible that participants who choose counselling are signalling a greater willingness to apply for credit than a comparison group of participants with similar risk scores who do not seek counselling. This implies that some or all of any observed change in performance could be attributable to a participant's motivation instead of the counselling itself. The analysis will compare characteristics of those who eventually enroll for the clinics and those who opt out to highlight any possible traits that could be sources of bias.

5 Data requirements and Sources

The table below provides the data requirements, explanations as to why the data is and its source.

Research aspect	Data Requirements	Method/Source
Sample selection, allocation and recruitment	Contact information Area of residence Ownership of business Age Sex	Mobile-based poll ; U-report platform.
Question 1: What socio-economic factors are responsible for differential risk perceptions amongst the young men and women?	Data on the social demographic characteristics e.g. age, sex education attainment of parents, religion, place of residence, exposure to other business/skills training etc. that may contribute to different risk perceptions among young women and men.	Risk/ambiguity simulation
	Risk aversion of the participating youths	Risk/ambiguity simulation
	Data on the economic and infrastructure situation in the communities where the group members live.	Baseline interview
	Data on other factors such as the legal system, Taxes, tariff and non-tariff barriers that might be responsible for risk perceptions	Uganda Investment Authority
Question 2: Does credit counseling have an impact on entrepreneurial risk tolerance and subsequent credit uptake amongst youth?	Data on the entrepreneurial risk behavior of the individuals before credit counseling.	Risk/ambiguity simulation Baseline Interview
	Data on whether one has received credit counseling or not.	Assignment record, Attendance
	Follow up data on the entrepreneurial choices of the participants.	Follow-up/ Endline
	Data on the Loan application outcome through a	Follow-up survey on participants with partner bank(s)

Additional data to be collected (Qualitative data on Exogenous factors):

- **Regulation in product markets and labor markets:** Review of Bank policies and loan processing procedures from Economy Status Reports from the Bank of Uganda. Administration of the Youth Fund.
- **The legal system, Taxes, tariff and non-tariff barriers:** Consultations with Ministry of Tourism, Trade and Industry and the Uganda Investment Authority.
- **Socio-economic and environmental shocks** to the communities. An additional market questionnaire will need to be administered to capture the economic and infrastructure situation in the communities where the group members live.

6. Budget

Activity/ Item	No. of days	No. of units	Unit	Rate (USD)	Cost (USD)
Recruitment Pilot					
Communication	1	100	Telephone calls	1	100
Venue Hire	1	1	Community Halls	150	150
Safari Day Allowance	1	100	participants	20	2,000
Transport costs (Vehicle hire, fuel)	2	1	vehicles	150	300
Sub-total					2,550
Implementation of the RCT					
Research permit (fee)	1	1	times	300	300
Credit Counselling clinics- Venue hire	2	5	Community Halls	150	1,500
Credit Counselling clinics-treatment	2	400	Persons	20	16,000
Credit Counselling clinics- control	1	400	Persons	20	8,000
Risky/ Ambiguity simulation	1	800	Persons	5	4,000
Expert Consultant-credit counselling	30	1	Person	150	4,500
Printing of information materials	1	1	Various	1,000	1,000
External facilitators/Credit counselors	4	10	Persons x clinics	150	6,000
Researcher fees	4	10	researchers	30	1,200
Transport costs (Vehicle hire, fuel)	4	5	times	150	3,000
Sub-total					45,500
Follow-up					
Data collection(Perdiems)	10	20	researchers	30	6,000
Printing costs for questionnaires	1	880	questionnaires	2	1,320
Transport costs (Vehicle hire, fuel)	10	5	vehicles	150	7,500
Sub-total					14,820
Data processing					
Data Entry Clerks- fees	30	5	persons	45	6,750
Consultant- Data entry application design& testing	5	1	person	150	750
Hire of computers	30	5	computers	40	6,000
Data consolidation & Cleaning	7	2	data editors	150	2,100
Sub-total					15,600
Report writing and dissemination					
Report review workshop (Residential)	3	10	participants	300	9,000
National Consultative meeting	1	40	participants	100	4,000
Presentations to PICC & NM&E-TWG	1	30	participants	50	1,500
National Policy workshop	1	120	participants	100	12,000
Conference hire -Report review workshop	3	1	times	200	600
Conference hire- National Consultative meeting	1	1	times	200	200
Conference hire -National Policy workshop	1	1	times	250	250
Printing of final report	1	150	copies	20	3,000
Sub-total					30,550
Total					109,020
Administrative costs (10%)					10,902
Grand Total					119,922

7. Timeline

Activity	Year 1 (Months)											
	1	2	3	4	5	6	7	8	9	10	11	12
Ethical clearance and launch of study	x	x										
Design credit counselling module	x	x	x									
Random selection of the sample			x									
Recruitment				x								
Credit counselling clinics /Baseline					x	x	x					
Follow-up								x	x	x		
Data capture & analysis									x	x		
Report writing										x	x	
National Policy workshop												x
Dissemination of the Report												x

APPENDIX I

1 The Risk/Ambiguity aversion experiment

The experiment is a hybrid of the multiple price list format of Binswanger (1980); Holt and Laury (2002) with an ambiguity aversion measure inspired on Cardenas and Carpenter (2013). This well-established methodology for risk preferences elicitation has been used as the benchmark to evaluate other experimental settings (Anderson and Mellor, 2009; Blavatskyy, 2009; Coble and Lusk, 2010; Dave et al., 2010).

The task consists in choosing between pairs of lotteries with identical payoffs and varying probabilities. Lotteries and probabilities are introduced as two urns containing different combination of red and blue balls. Choices are marked in a color sheet with pie charts as a graphical illustration of lotteries.

1.1 Risk

In each of the series, participants choose between 'A', namely the safe option, and 'B' - the risky option. The probabilities of the high payoffs increase throughout. The appropriate increase in probability is yet to be determined. To obtain a simple measure of risk preferences in each series, we consider at which probabilities subjects switched from the safe option to the risky option. The higher the switch point of an individual, the more risk averse they are.

1.2 Ambiguity

Throughout the experiment the lotteries have identical distribution of the known probabilities (the same risk), but with ambiguity, a second level of uncertainty is exogenously introduced by varying the number of balls of unknown color such that the ambiguity of probabilities changes.

1.3 Stakes

Participants will be informed in advance that on each series one of their choices will be randomly selected for payment and everyone will be paid according to that lottery outcome at the end of the session. The outcomes will reflect substantial stakes.

2 The Business Expansion Clinics

The clinic has been arranged for two days: Day 1- All participants; Day 2- Only treatment group. The specific aims of the specialized business expansion clinics are to;-

- Share testimonies from youth who had embarked on their credit uptake process;
- Identify compelling stories/testimonies for recognition;
- Pick key lessons from previous errors made in credit applications.
- Motivate and re-energize those who had not yet embarked on their credit uptake processes;
- Elicit personal action plans that will form the basis for credit uptake and subsequent mentoring sessions.

Once the participants arrive at the training center they will receive a name badge behind which a color sticker is placed for purposes of random assignment. Baseline information on all of them will be collected during registration. They will then be invited to a general clinic where they will be taken through the standard loan application process as it is recommended for the Youth Venture Capital Fund. This talk will be delivered by Partners from Centenary Bank and will comprise 2 modules.

Module 1: Identifying the right loan for your business.

Objective: *To enable participants understand the credit facility and its applicability for their sectors.*

Content: The facilitator will explain to participants various business and personal loan features that are available on the Market with an emphasis on the Youth Venture Capital Fund and with consideration of the different sectors within which the participants operate.

Module 2: Approaching the bank for credit/Preparing your business portfolio

Objective: *To equip participants with key skills required to "sell" their business and demonstrate capability to repay the loan to the bank.*

Content: The participants will be taken through a simple but straightforward process of enhancing their respect and getting the full consideration of a loan officer. This will focus on preparing the participants on how to present a positive and professional demeanour at the interview. It will also take them through how to be prepared for a variety of questions and how to back up loan application claims with facts. The facilitator will take the participants through some of the following items:

- Basics of establishing a relationship with a bank and what benefits it brings.
- Potential questions that can be asked about a business that enhances the applicants' creditworthiness.
- Assessing the bank checklist and preparing the required documentation
- Presenting business financials and attendant assumptions in a professional manner.
- Personal presentation and dressing

Special attention will be placed on how they can build confidence in their business as well as their ability to make good on their loan. Mock exercises will be done to enable them communicate clearly how much money one needs, what they intend to use it for and exactly where the business loan will be allocated.

During this clinic, the participants will receive loan application forms and will be instructed to initiate their loan application process.

THE TREATMENT

Session 1: One-on-one Counselling

After the business clinic, the young entrepreneurs in the treatment group will be paired with established business counsellors in a formalized mentoring programme. The key objective of this stage is to making borrowers objectively aware of probability/risk associated with credit options on the assumption that this is what normally inhibits young entrepreneurs from breaking new ground in the credit application process. The young entrepreneurs will be put "under the mentor's wings" and the interactions will be carefully monitored to ensure attainment of set objectives. Emphasis will be on the gray areas identified during the high impact business clinic.

Session 2: Group Counselling/Peer Mentoring

This session involves inviting successful young entrepreneurs who have a track record of successful credit access to share their experiences with young entrepreneurs. The entrepreneur shares his/her testimony highlighting his journey, successes achieved, challenges experienced and how he/her has dealt with them. The purpose of this approach is to encourage, inspire and equip the young entrepreneurs with knowledge on how to deal with their own challenges in accessing credit. These follow-up sessions will be highly participatory and the youth will be encouraged to ask questions especially in areas they have encountered challenges and where necessary, schedule follow-up meetings with the entrepreneur and/or the counsellors for a one-on-one interaction to “walk” them through the process of credit access.

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