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on Forced Displacement

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Entrepreneurship as a Pathway to Economic Inclusion in Forced Displacement

What Drives Venture Creation? Evidence from Inkomoko in Rwanda

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Motivation & Research Question

CONTEXT

The Policy Question

Entrepreneurship training is key for refugee self-reliance, yet evidence often ignores which designs work best.

Why Venture Entry?

In highly constrained contexts, simply starting an income-generating activity is a first-order outcome, more meaningful than growth or formalization.

THE GAP

The Evidence Gap

Far less is known about *who* benefits and if programs reach the most constrained in camp-based, Global South settings.

RESEARCH QUESTIONS

- 01** Which participant characteristics are associated with disparities in venture creation?
- 02** Do different sources of finance (loans, grants, savings) raise venture creation and close gaps?

The Program

Inkomoko, since 2012

- Market-systems social enterprise for displacement-affected and host entrepreneurs in East & Central Africa
- Livelihood program - Integrated training, advisory, market linkage, access to finance, & advocacy
- 120,000+ entrepreneurs across 5 countries; 60%+ in Rwanda

The Data

- Administrative MERL panel data, Rwanda, 2018-2024 (7 years)
- Matched baseline (entry) and endline (final advisory) records
- **Analytic sample:** 4,275 entrepreneurs
- 66% existing-business; 34% idea-stage; ~65% women



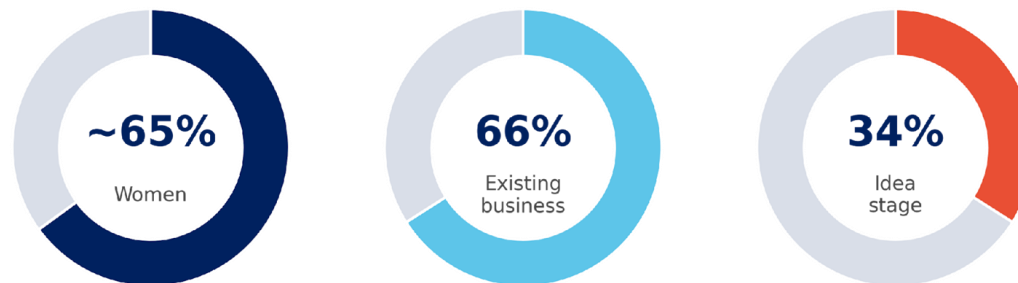
Sample & Participant Profile

A. ANALYTIC SAMPLE

- **4,275** entrepreneurs with matched baseline and endline records, Rwanda cohorts 2018-2024
- Inclusion threshold: completion of at least 75% of training and advisory activities

B. PARTICIPANT CHARACTERISTICS

- Youth (17-24): a substantial share of idea-stage entrants
- Refugee and host-community members across camp-based and urban/peri-urban settings
- Disadvantage indicators studied: youth, no formal education, unemployment, no assets



Analytic sample (N = 4,275): gender and program-segment composition.

Methodology & Analytics

A. OUTCOME & ESTIMATION

Outcome Variable

Binary indicator (1 = start business within 6-8 months post-program).

Primary Model (LPM)

Linear Probability Models with high-dimensional fixed effects; coefficients represent changes in predicted probability.

Fixed Effects Control

Year, refugee camp, and nationality absorb temporal, locational, and cultural confounds.

Software & Robustness

Estimated via **reghdfe** in STATA 19; robust standard errors applied.

B. ROBUSTNESS & INTERPRETATION

Consistency Checks

Conditional logit (**xtlogit**) models are consistent in sign, magnitude, and significance.

Model Selection Logic

LPM preferred over probit/logit due to multiple non-nested FE and incidental-parameter concerns.

Causality Caveat

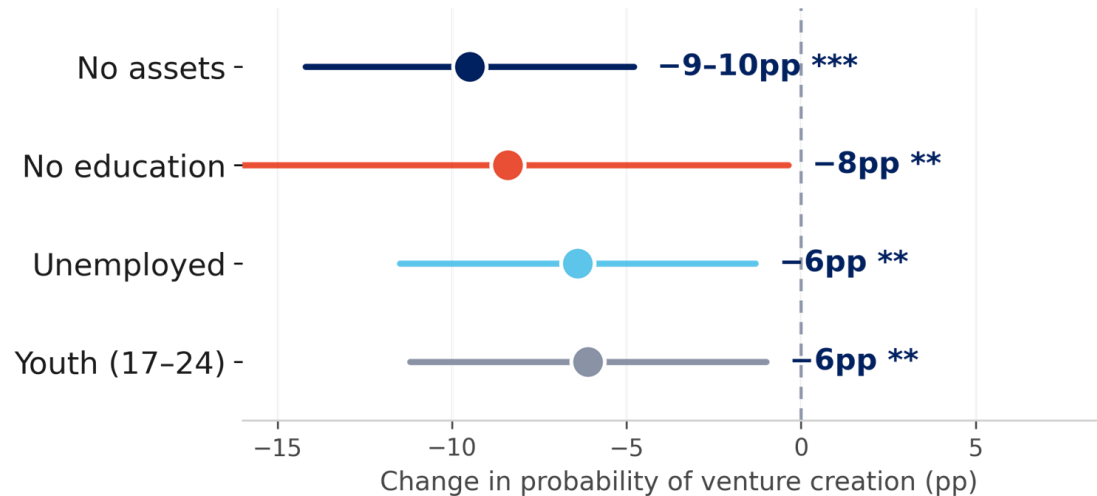
Estimates are interpreted as **correlational**, not causal. Low-to-moderate covariate correlations (no multicollinearity).

Results I: Who Starts a Business?

DEMOGRAPHIC & RESOURCE GAPS IN VENTURE CREATION

(Refer to Table 1) - 40% of participants that receive training and advisory start a business

PERSISTENT, SIMILARLY-SIZED DISADVANTAGES (6-10 pp)



Coefficient plot (Model 1): change in $P(\text{start business})$, 95% CI. ** $p < 0.05$, *** $p < 0.01$.

ADDITIVE, NOT AMPLIFYING

- Interactions among disadvantage indicators are not significant - constraints stack rather than compound
- Notably, the **female** coefficient is small and statistically insignificant (contra prior work)

Table 1: Business Loans & Venture Creation

Regression evidence behind Slide 6 (Results I: gaps) and Slide 7 (Results II: finance)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Youth (17-24)	-0.061** (0.026)	-0.074*** (0.028)	-0.062** (0.026)	-0.059** (0.026)	-0.061** (0.026)
No education	-0.084** (0.041)	-0.083** (0.041)	-0.063 (0.043)	-0.081** (0.041)	-0.084** (0.041)
No assets	-0.095*** (0.024)	-0.095*** (0.024)	-0.095*** (0.024)	-0.088*** (0.024)	-0.083*** (0.026)
Unemployed	-0.064** (0.026)	-0.064** (0.026)	-0.065** (0.026)	-0.085*** (0.027)	-0.066** (0.026)
Female	0.028 (0.023)	0.027 (0.023)	0.029 (0.023)	0.030 (0.023)	0.029 (0.023)
Ran business	0.032 (0.024)	0.031 (0.024)	0.031 (0.024)	0.034 (0.024)	0.029 (0.024)
Business loan	0.276*** (0.043)	0.239*** (0.049)	0.297*** (0.045)	0.203*** (0.050)	0.221*** (0.059)
Business grant	0.346*** (0.061)	0.345*** (0.061)	0.346*** (0.061)	0.345*** (0.061)	0.346*** (0.061)
Savings group	0.378*** (0.032)	0.377*** (0.032)	0.379*** (0.032)	0.374*** (0.032)	0.377*** (0.032)
Own funds	0.768*** (0.040)	0.767*** (0.039)	0.768*** (0.039)	0.769*** (0.039)	0.771*** (0.040)
Prior bus. training	0.143*** (0.026)	0.144*** (0.026)	0.143*** (0.026)	0.138*** (0.026)	0.143*** (0.026)
Youth × Loan		0.142 (0.091)			
No edu. × Loan			-0.240* (0.140)		
Unemp. × Loan				0.261*** (0.090)	
No assets × Loan					0.109 (0.081)
Year FE	Yes	Yes	Yes	Yes	Yes
Location FE	Yes	Yes	Yes	Yes	Yes
Nationality FE	Yes	Yes	Yes	Yes	Yes
Observations	1,230	1,230	1,230	1,230	1,230
R-squared	0.401	0.402	0.403	0.405	0.402

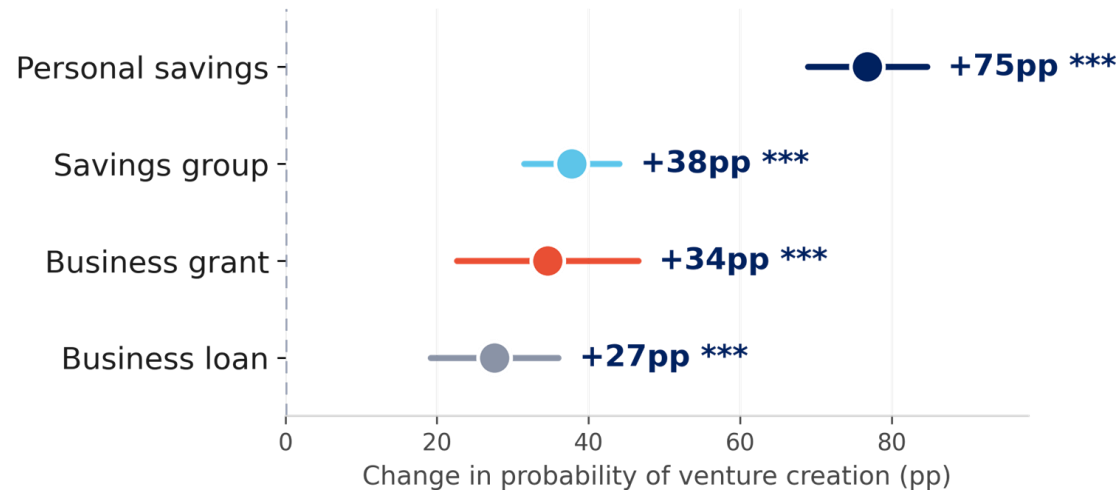
Linear probability models (reghdfe). Robust SE in parentheses. * p<0.10, ** p<0.05, *** p<0.01. FE: year, location, nationality.

Results II: Access to Finance

ALL FUNDING SOURCES STRONGLY RAISE VENTURE CREATION

(Refer to Table 2)

ASSOCIATION WITH PROBABILITY OF STARTING A BUSINESS



Coefficient plot (Model 1): change in $P(\text{start business})$, 95% CI. *** $p < 0.01$.

EFFECTS ARE LARGELY ADDITIVE

- Funding (Capital) shifts the overall probability of venture creation upward for everyone
- Business loans help unemployed participants partially (+2pp) close the venture-creation gap; but show limited impact for those without assets.

Table 2: Personal Savings (Own Funds) & Venture Creation

Regression evidence behind Slide 8 (Results II: closing the gaps using personal savings)

Variable	Model 10	Model 11	Model 12	Model 13
Youth (17-24)	-0.070** (0.028)	-0.061** (0.026)	-0.061** (0.026)	-0.062** (0.026)
No education	-0.083** (0.041)	-0.094** (0.044)	-0.084** (0.041)	-0.085** (0.041)
No assets	-0.095*** (0.024)	-0.094*** (0.024)	-0.094*** (0.024)	-0.107*** (0.025)
Unemployed	-0.062** (0.026)	-0.064** (0.026)	-0.069** (0.028)	-0.065** (0.026)
Female	0.028 (0.023)	0.027 (0.023)	0.027 (0.023)	0.030 (0.023)
Ran business	0.032 (0.024)	0.032 (0.024)	0.031 (0.024)	0.030 (0.024)
Business loan	0.276*** (0.043)	0.276*** (0.043)	0.276*** (0.043)	0.276*** (0.043)
Business grant	0.346*** (0.061)	0.347*** (0.061)	0.347*** (0.061)	0.350*** (0.061)
Savings group	0.377*** (0.032)	0.379*** (0.032)	0.378*** (0.032)	0.377*** (0.032)
Own funds	0.750*** (0.044)	0.762*** (0.041)	0.749*** (0.054)	0.895*** (0.089)
Prior bus. training	0.144*** (0.026)	0.143*** (0.026)	0.143*** (0.026)	0.146*** (0.026)
Youth × Own savings	0.076 (0.079)			
No edu. × Own savings		0.070 (0.110)		
Unemp. × Own savings			0.037 (0.069)	
No assets × Own savings				0.151 (0.096)
Year FE	Yes	Yes	Yes	Yes
Location FE	Yes	Yes	Yes	Yes
Nationality FE	Yes	Yes	Yes	Yes
Observations	1,230	1,230	1,230	1,230
R-squared	0.402	0.401	0.401	0.402

Linear probability models (reghdfe). Robust SE in parentheses. * p<0.10, ** p<0.05, *** p<0.01. FE: year, location, nationality.

Results III: Closing the Gaps

SAVINGS GROUPS CLOSE THE GAP *(Refer to Table 3)*

Interaction effects (savings group × disadvantage)

- No education: **+16.5pp*** interaction
*(base gap: -12.4pp^{***}) → 133% of gap offset*
- Unemployed: **+10.8pp*** interaction
*(base gap: -8.2pp^{***}) → 132% of gap offset*
- No assets: **+13.8pp**** interaction
*(base gap: -6.2pp^{**}) → 223% of gap offset*

THE YOUTH GAP PERSISTS

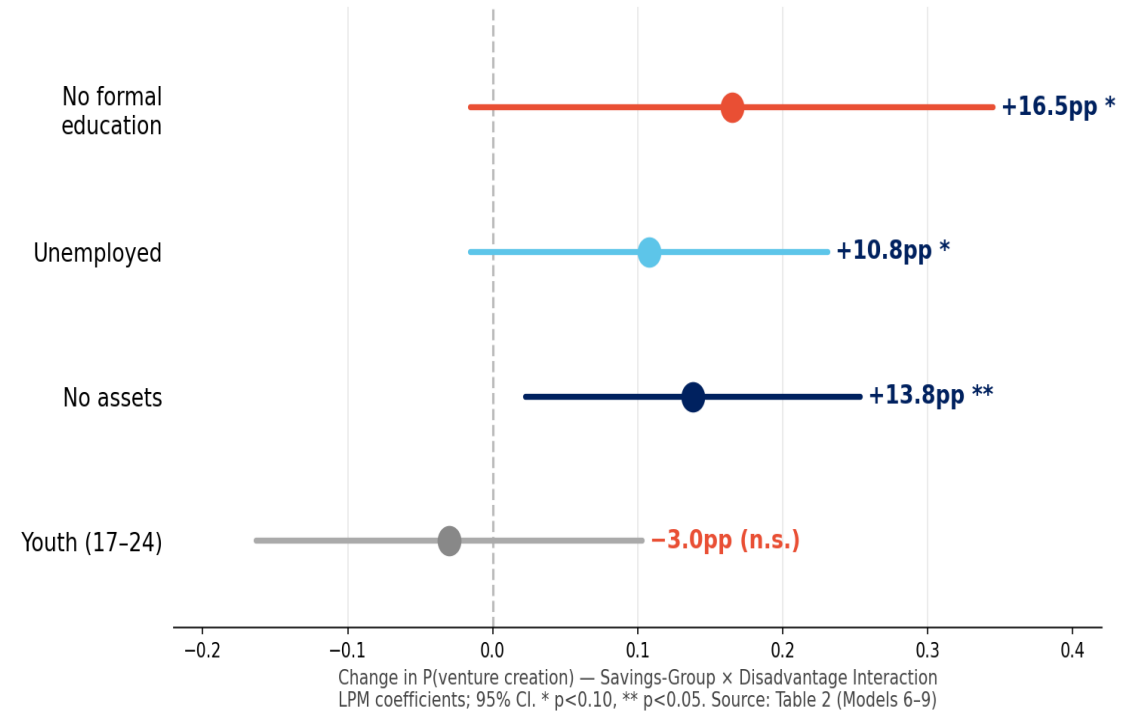
- Youth × savings-group: -3.0pp (not significant n.s) — no funding source closes the youth gap
- Suggests **non-financial constraints** for youth: limited experience, agency, networks, institutional barriers

TAKEAWAY

- Heterogeneity reflects **participant constraints and complementary resources**, not training content

LPM (reghdfe); robust SE. Year, location, nationality FE. * p<0.10, ** p<0.05, *** p<0.01. Table 2, Models 6–9.

Savings-Group Participation: Interaction Effects on Venture Creation



Coefficient plot (Models 7–9): savings-group × disadvantage interaction terms, 95% CI.

Table 3: Savings-Group Funding & Venture Creation

Regression evidence behind Slide 10 (Results III: closing the gaps using saving groups)

Variable	Model 6	Model 7	Model 8	Model 9
Youth (17-24)	-0.057** (0.029)	-0.061** (0.026)	-0.062** (0.026)	-0.062** (0.026)
No education	-0.084** (0.041)	-0.124*** (0.047)	-0.084** (0.041)	-0.087** (0.041)
No assets	-0.095*** (0.024)	-0.093*** (0.024)	-0.094*** (0.024)	-0.062** (0.028)
Unemployed	-0.064** (0.026)	-0.064** (0.026)	-0.082*** (0.028)	-0.062** (0.026)
Female	0.028 (0.023)	0.028 (0.023)	0.028 (0.023)	0.029 (0.023)
Ran business	0.032 (0.024)	0.032 (0.024)	0.032 (0.024)	0.034 (0.024)
Business loan	0.275*** (0.043)	0.273*** (0.043)	0.273*** (0.043)	0.271*** (0.043)
Business grant	0.347*** (0.061)	0.347*** (0.061)	0.345*** (0.061)	0.342*** (0.061)
Savings group	0.384*** (0.035)	0.360*** (0.033)	0.349*** (0.036)	0.296*** (0.047)
Own funds	0.769*** (0.040)	0.771*** (0.040)	0.770*** (0.040)	0.776*** (0.040)
Prior bus. training	0.143*** (0.026)	0.143*** (0.026)	0.140*** (0.026)	0.146*** (0.026)
Youth × Savings group	-0.030 (0.068)			
No edu. × Savings group		0.165* (0.092)		
Unemp. × Savings group			0.108* (0.063)	
No assets × Savings group				0.138** (0.059)
Year FE	Yes	Yes	Yes	Yes
Location FE	Yes	Yes	Yes	Yes
Nationality FE	Yes	Yes	Yes	Yes
Observations	1,230	1,230	1,230	1,230
R-squared	0.401	0.403	0.403	0.404

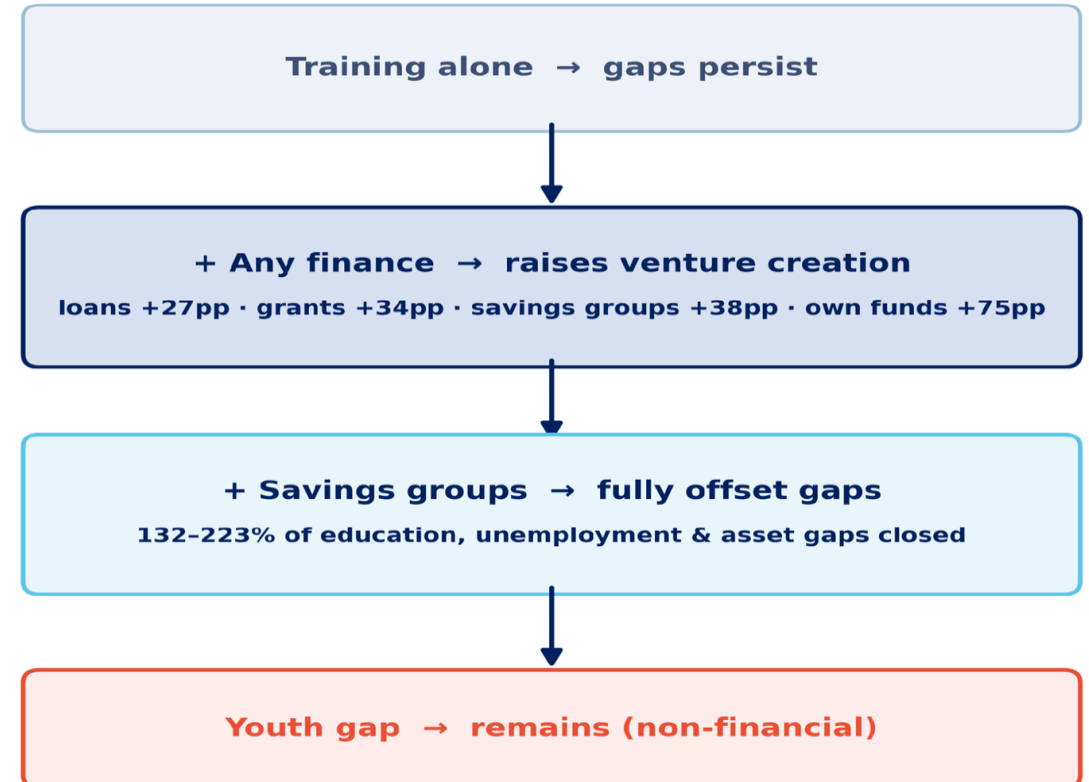
Linear probability models (reghdfe). Robust SE in parentheses. * p<0.10, ** p<0.05, *** p<0.01. FE: year, location, nationality.

Discussion & Implications

The participant, not the curriculum, drives heterogeneity

- **Training alone does not overcome key barriers** for youth, unemployed, less-educated and asset-poor refugees.
- **Finance (capital)** increases business creation, but demographic gaps remain.
- **Savings groups** show the strongest potential to reduce inequality gaps.
- **Youth barriers are more than financial** - networks, experience and agency also matter.
- **Programs design** - need to combine training with targeted, gap-reducing finance support.

What moves venture creation?



Target who benefits + pair training with gap-reducing finance



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THANK YOU

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