



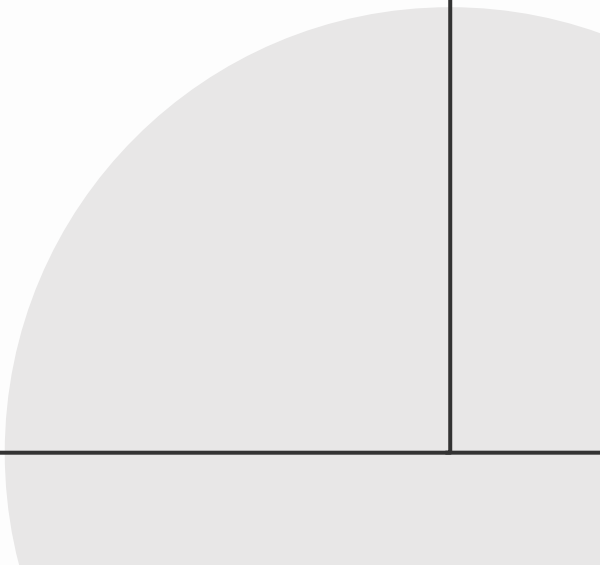
Contact in the Workplace and Social Cohesion: Experimental Evidence from Uganda

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J-PAL Europe & LISER



37,6 million

Refugees worldwide

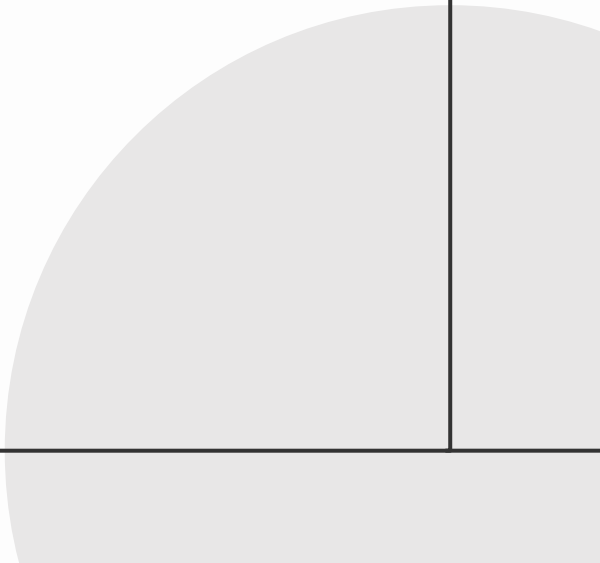


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Refugees worldwide

75%

Hosted in low- and middle-income countries



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Hosted in Uganda, largest host country in Africa

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What types of policies could promote the socio-economic integration of refugees?

Approach



Design a large program to integrate refugees in the labour market in Uganda

Randomized Control Trial (RCT) where we randomly matched local firms with skilled refugee workers to answer two questions:

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2. What is the impact of matching refugee workers and native firms on firms' hiring decisions and attitudes?

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Contact in the Workplace and Social Cohesion: Experimental Evidence from Uganda

Motivation



Social cohesion is a key factor for growth and development, especially in countries with high levels of diversity (Easterly et al. 2006)



However, the shock of forced displacement can disrupt and change social relations in host countries (De Berry and Roberts 2018)



Our program promotes social cohesion in countries with displaced populations by fostering workplace contact

Motivation

Contact theory (Allport, 1954): contact between different groups can reduce prejudice and discrimination, under certain conditions

Previous experiments have shown that **contact in schools, neighbourhoods or sports improves social cohesion outcomes** (Bursztyn et al., 2021; Burns et al., 2019; Mousa, 2020; Okunogbe, 2019; Rao, 2019; Scacco and Warren, 2018); **and adversarial contact can have negative impacts** (Lowe, 2020)

In our study we focus on:

- **Contact in the workplace** respecting all Allport's [conditions](#)
- **Social cohesion as a compound outcome** (implicit and explicit biases, attitudes and behaviours)

Motivation

We run the RCT in Kampala - Uganda

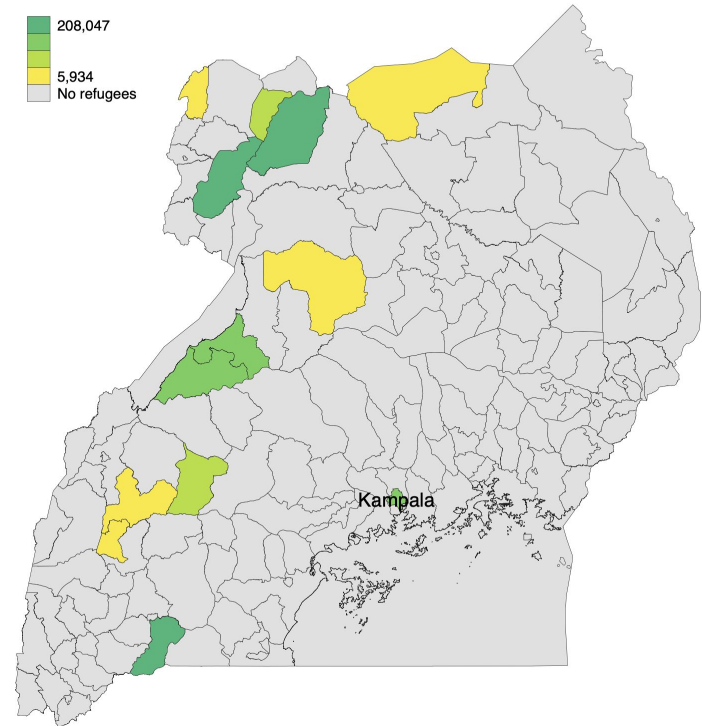
1. Host **8.5% total refugees** in the country
2. Host **44% of all business establishments** and almost **50% of all non-agricultural jobs** in Uganda

Descriptive evidence from pilot: urban refugees more educated and more likely to look for jobs

[Graph](#)

Comparing refugees with natives in Kampala: refugees more educated, but less employed and earn less [Table](#)

Refugees in Uganda



Source: UNHCR 2022

Methodology

RCT: randomly match 377 refugees and 273 local workers in Kampala and randomly assign them into a control arm and three treatments:

- i. **Direct work contact treatment:** directly work together for 1 week
- ii. **Indirect work contact treatment:** watch a video documentary showing a refugee-local work interaction
- iii. A combination of both

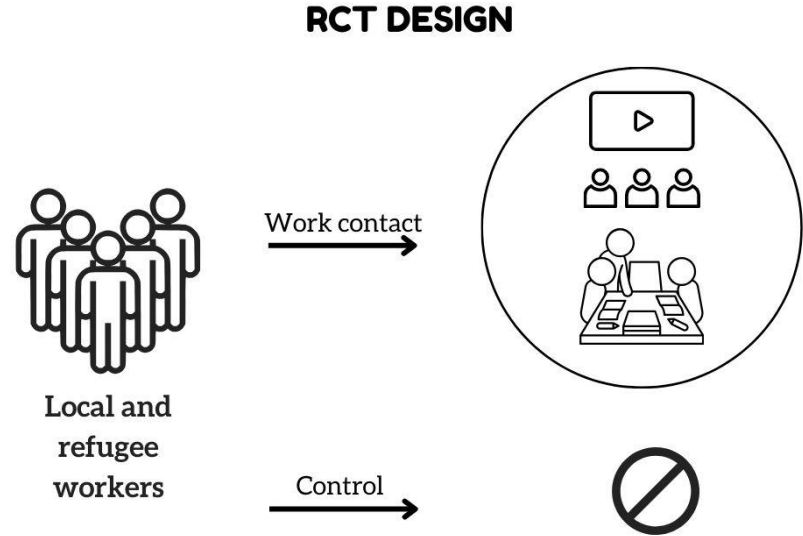
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For the analysis, we pool all treatments together as **“Work contact”**

[Timeline and sample size](#)



Allport's work contact conditions

1. **Equal status condition:** we focus on firm workers from two groups - refugees and locals - that work on similar tasks within a firm. This eliminates any potential hierarchy difference between the employees.
2. **Institutional support:** we focus only on firms that are willing to participate in the program, thus endorsing the contact between employees.
3. **Groups work for a common goal:** workers work in the same department
4. **There is intergroup cooperation:** workers are within SMEs, performing similar tasks

Social Cohesion outcomes



Implicit Bias

2 Implicit Association Tests (IATs):
Work bias and General bias



Attitudes

Statements related to culture, trust,
safety, intermarriage, job collaboration
and perceived discrimination



Explicit Stereotypes

Same stimuli shown in IATs but ranked
using a 7-point Likert-scales



Behaviours

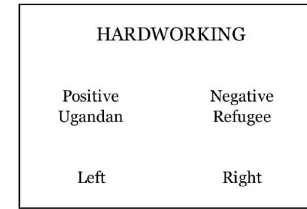
- (i) Partners in hypothetical business
- (ii) SMS to participate in a similar
program in the future (refugees)

IATs

Psychological tools that capture biases using categorization tasks (Greenwald and Banaji 1995).

How it works:

- Respondents see various stimuli (or words) on the screen.
- Must quickly sort stimuli into two categories (e.g., Refugee or Local).
- The faster the respondent associates a stimulus with a group, the stronger the underlying bias.



IATScreen

	General IAT	Work IAT		General IAT	Work IAT
Positive words	Hospitality Kindness Friendship Peaceful	Trust Hardworking Honest in business Professional	National concepts	Entebbe Jinja Domestic Ugandan	National Rolex Chapati Luganda Ugandan Cranes
Negative Words	Danger Jealous Trouble maker Dirty	Laziness Corruption Thief Unserious	Refugee concepts	Resettlement Non-native UNHCR Refugee Camp	Displaced person Foreign Migrant Urban refugee

IAT screen and stimuli for General and Work IATs

In the socio-psychological literature, there is a wide discussion regarding the IAT interpretation (Singal 2017). Mainly, if it measures prejudice and if it is a predictor of discriminatory behavior

Results

Result 1: Work contact **decreases explicit bias** among both groups while **implicit bias increases**
[Graph](#), [Table 1](#)

Result 2: Behaviors improve: local workers are more willing to have a refugee business partner, while more refugees are willing to work in a similar internship in the future, especially in Ugandan firms
[Table 2](#), [Table 3](#)

[Empirical strategy](#)



*Sifa (DRC) and Mariam (Uganda) working together in
"Mama Prince" hair salon
@ The Author*

Results

An increase in implicit bias does not translate into discriminatory behavior.

Suggestive evidence that the increase is related to fear of job competition:

- High level of skills refugees \neq local initial beliefs
[Graph](#)
- Local workers are keen to work with refugee workers in the future due to the high level of skills

Refugee workers are more interested in employed work, particularly in Ugandan firms and are less interested in starting a business.



*Sifa (DRC) and Mariam (Uganda) working together in
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Conclusion

Work contact improves social cohesion by reducing explicit biases and encouraging positive behaviors.

- **Local workers:** Small increase in implicit bias, but no discriminatory behavior. More willingness to collaborate with refugee workers due to recognition of refugees' skills.
- **Refugee workers:** Significant reduction in explicit bias. Greater willingness to participate in future job programs, especially with Ugandan firms.

Measurement and interpretation of implicit bias:

- Implicit and explicit biases are distinct and largely unrelated.
- Implicit bias increased, but explicit bias decreased.
- No evidence that implicit bias leads to discriminatory behavior.



*Two skilled refugee workers in cooking
@ The Author*

Policy implications

Enable skilled refugees to access employment opportunities: this can aid their integration process, while boosting the socio-economic prosperity of local businesses

Support open-door policies and issuance of labor permits to refugees

Considerations: covering refugees' costs to increase take up of the program

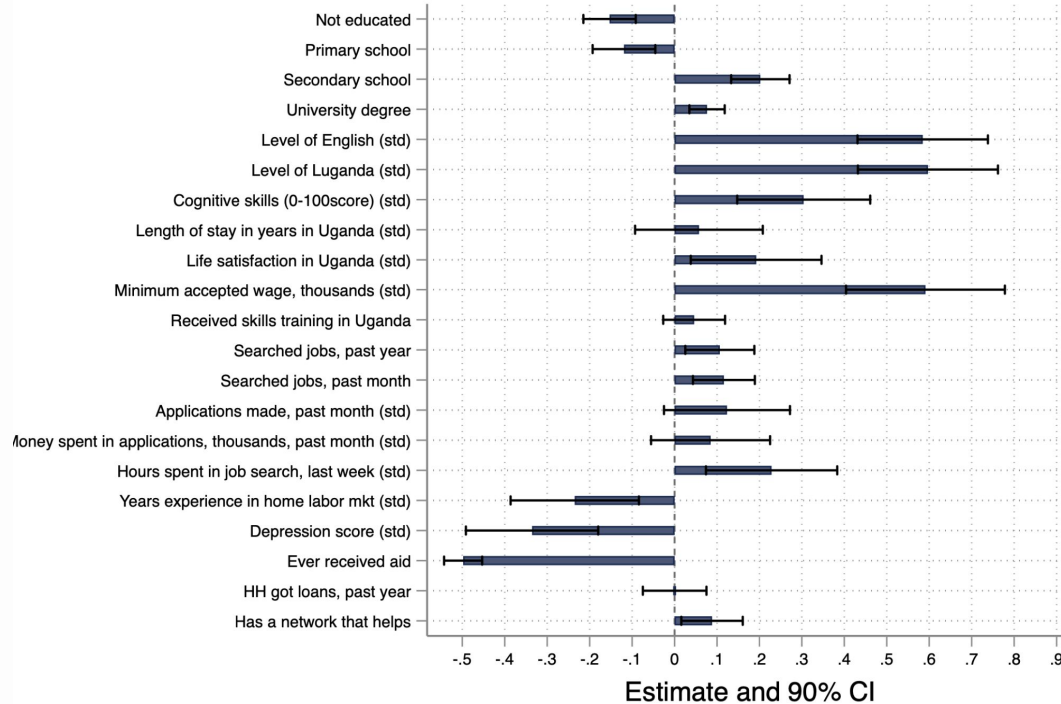


¡Gracias!

05

Appendix

Refugees in urban vs rural areas



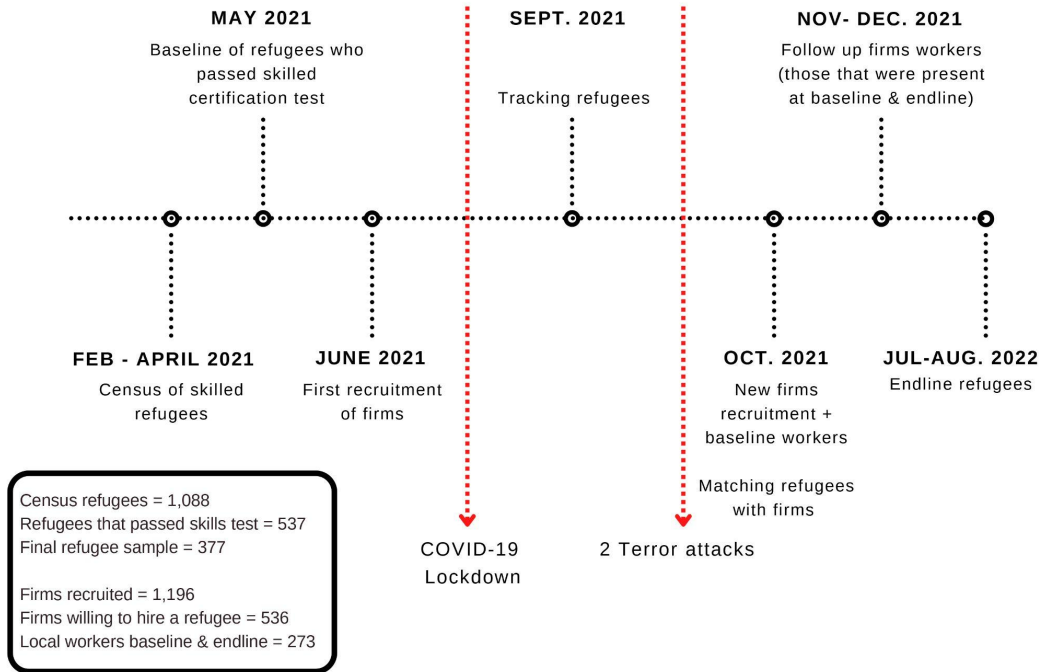
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Refugees vs natives in Kampala

	UNRHS			Baseline survey			Diff
	N	Mean	SD	N	Mean	SD	
High. educ.: None	601	0.02	0.14	527	0.01	0.10	-0.010
High. educ.: Primary	601	0.73	0.44	527	0.11	0.32	-0.617***
High. educ.: Secondary	601	0.23	0.42	527	0.88	0.33	0.644***
Employed	714	0.56	0.50	527	0.48	0.50	-0.079***
Unemployed	714	0.11	0.32	527	0.16	0.37	0.047**
Out of labor force	714	0.32	0.47	527	0.36	0.48	0.033
Monthly earnings	247	620.59	1108.03	255	301.54	294.08	-319.046***

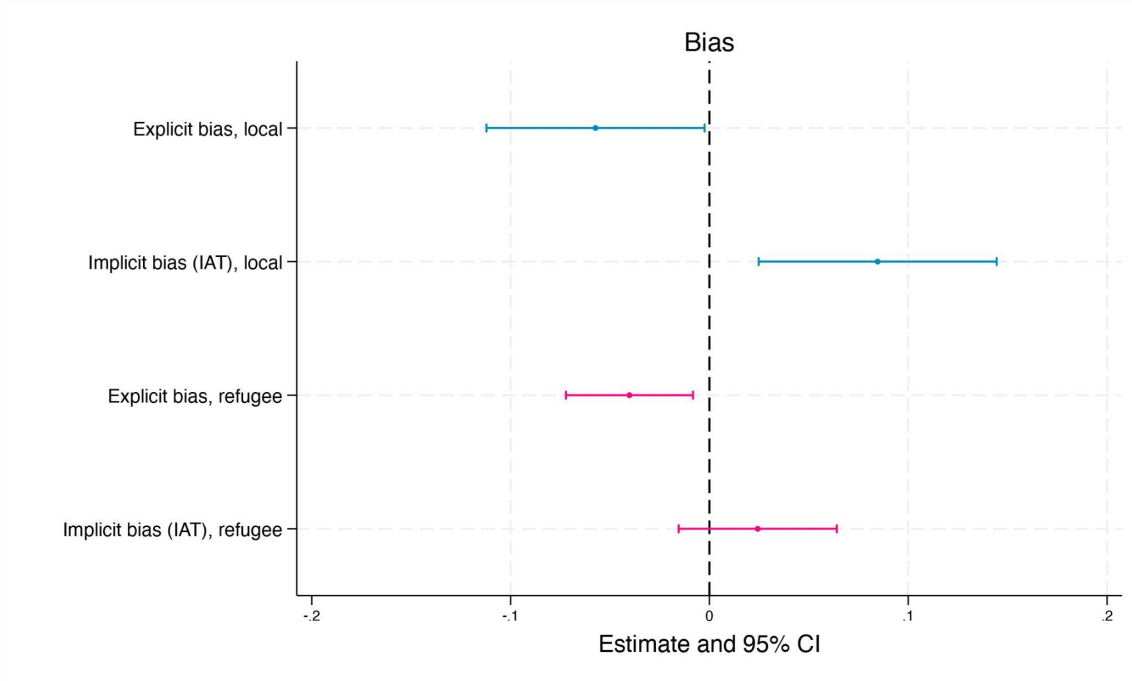
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Timeline and sample size



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Explicit and implicit biases



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Empirical Strategy

$$\begin{aligned} BiasIndex_{i1} = & \beta_1 T \times local \times implicit + \beta_2 T \times local \times explicit + \\ & + \beta_3 T \times refugee \times implicit + \beta_4 T \times refugee \times explicit \\ & + \beta_5 local \times implicit + \beta_6 local \times explicit + \\ & + \beta_7 refugee \times implicit + \beta_8 refugee \times explicit + \\ & + \alpha BiasIndex_{i0} + X'_i \delta + \varepsilon_i \end{aligned} \tag{1}$$

$$y_{i1} = \beta_1 Treatment_i + \beta_2 Local_i + \beta_3 Treatment_i \times Local_i + \alpha y_{i0} + X'_i \delta + \varepsilon_i \tag{2}$$

$$y_{i1} = \beta_1 Treatment_i + X'_i \delta + \varepsilon_i \tag{3}$$

Table 1: The Effect of Contact on Implicit and Explicit Bias

	(1) Bias Index	(2) Work bias	(3) General bias
T × Local × Implicit	0.084** (0.035) [0.017]	0.083** (0.037) [0.026]	0.040 (0.029) [0.162]
T × Local × Explicit	-0.056* (0.033) [0.093]	-0.053 (0.035) [0.122]	-0.025 (0.026) [0.322]
T × Refugee × Implicit	0.021 (0.024) [0.377]	0.011 (0.024) [0.650]	0.016 (0.029) [0.594]
T × Refugee × Explicit	-0.039** (0.019) [0.043]	-0.046** (0.023) [0.049]	-0.041** (0.020) [0.040]
Observations	1200	1172	1170
Mean DV	0.480	0.445	0.470
Mean DV Local Implicit Bias	0.460	0.426	0.534
Mean DV Refugee Implicit Bias	0.405	0.460	0.476
Mean DV Local Explicit Bias	0.533	0.443	0.448
Mean DV Refugee Explicit Bias	0.531	0.441	0.448
H_0 : T × Local × Implicit=Refugee	0.134	0.105	0.547
H_0 : T × Local × Explicit=Refugee	0.659	0.853	0.623

Notes: This table reports results from specification 1. Explicit bias index is constructed using the GLS Anderson weighting procedure combining negative attitudes and explicit negative stereotypes. Implicit bias is an average of Work IAT score and General IAT score. Both indices are normalized 0 to 1 for comparison. An increase means more prejudice. Control for refugees strata (refugees' occupations). Robust standard errors in parenthesis and p-values in brackets. ***, **, *, indicate significance at the 1%, 5%, and 10% levels respectively. The sample is not 1300 because we have 56 missing IATs at baseline and 44 missing IATs at endline.

Table 2: The Effect of Contact on Desired Hypothetical Business Partners

	(1)	(2)	(3)
	Out-group	Same group	Any partner
Treated	-0.063 (0.044) [0.155]	-0.027 (0.034) [0.436]	-0.051** (0.025) [0.044]
Local	-0.393*** (0.092) [0.000]	-0.009 (0.053) [0.869]	-0.054 (0.048) [0.261]
Treated × Local	0.231** (0.098) [0.019]	0.059 (0.058) [0.316]	0.094* (0.054) [0.083]
Observations	650	650	650
Mean DV	0.722	0.921	0.952
Mean DV Locals	0.405	0.919	0.919
Mean DV Refugees	0.854	0.897	0.966
Treated + Local × Treated	0.168	0.032	0.043
H_0 : Treated + Treated × Local=0	0.055	0.501	0.362

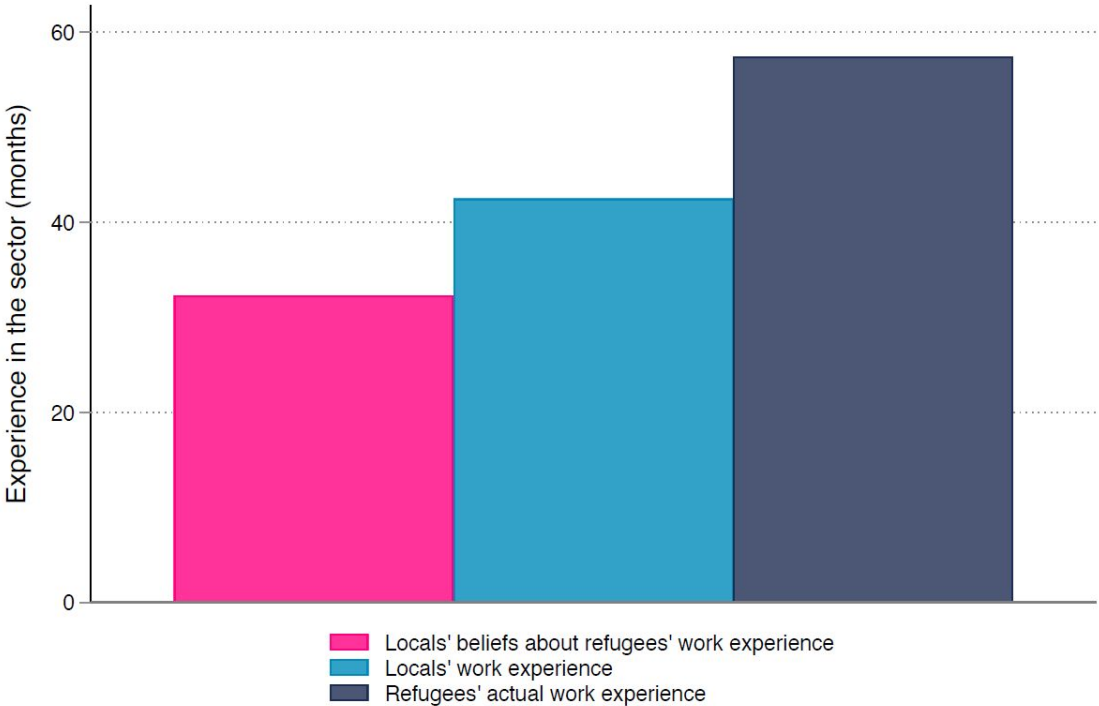
Notes: This table reports results from specification 2. The outcome variables are dummies indicating if respondents want a business partner or not. Control for refugees strata (refugees' occupations). Robust standard errors in parenthesis and p-values in brackets. ***, **, *, indicate significance at the 1%, 5%, and 10% levels respectively.

Table 3: SMS sent by refugee workers

	(1) Sent SMS	(2) SMS Ugandan	(3) SMS Refugee
Treated	0.113** (0.044) [0.010]	0.062** (0.025) [0.016]	0.052 (0.038) [0.174]
Observations	377	377	377
Mean DV	0.124	0.034	0.090

Notes: This table reports results from specification 3. Sent SMS outcome is a dummy indicating if refugee workers sent a SMS to participate in similar future internship programs. SMS for Ugandan and for refugee firm indicate what type of firm the worker would like to work in future interventions. Control for refugees strata. Robust standard errors in parenthesis and p-values in brackets. ***, **, *, indicate significance at the 1%, 5%, and 10% levels respectively.

Work-related experience in the sector in





Annex on second paper

**Matching with the Right
Attitude: the Effect of Matching
Firms with Refugee Workers**



Ch.2 Methodology

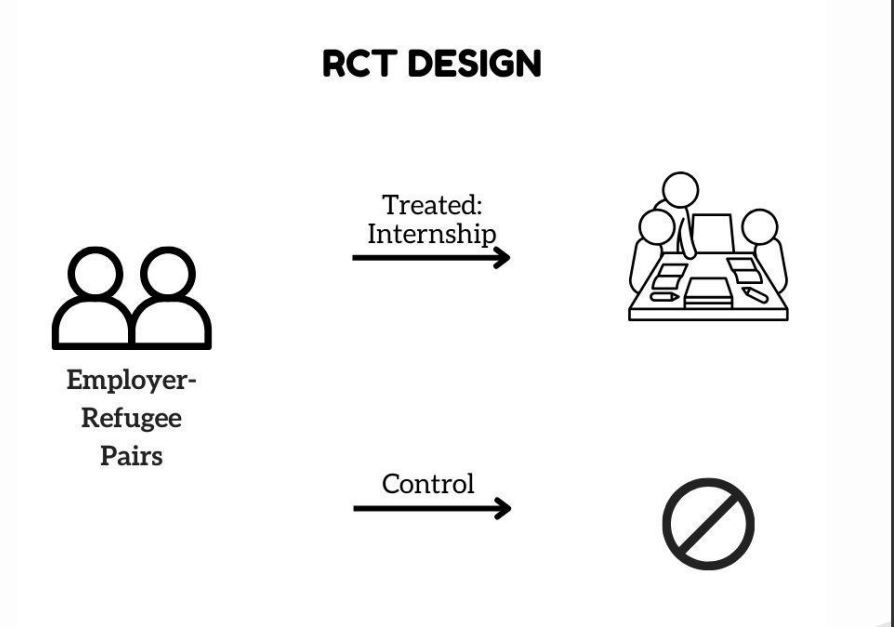
RCT: randomly match 535 pairs of skilled refugee workers to firms in urban markets where refugees' skills can be employed.

Selection and randomization of firms: **WTP elicitation** - BDM mechanism

- **Treatment:** subsidized internship to one refugee for one week
- **Control:** firms and refugees do not meet

Baseline and 2 follow ups: 1 month, 8 months (initial results 16 and 24 months after exposure)

[Elicitation](#), [WTP curves](#)



Ch.2 Firms outcomes

Demand for refugees

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01

Refugees hired

8 months after the exposure
(initial results 24 months)



Demand for refugees

Ch.2 Firms outcomes

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Willingness to hire

New WTP elicitation to
hire a new refugee with
same characteristics



Demand for refugees

Ch.2 Firms outcomes

01

Refugees hired

8 months after the exposure
(initial results 24 months)

02

Willingness to hire

New WTP elicitation to
hire a new refugee with
same characteristics

A diagram consisting of a horizontal line with vertical end caps at both ends. From the center of this horizontal line, a vertical line extends downwards to the text 'Demand for refugees'.

Demand for refugees

A vertical line extending downwards from the text 'Willingness to hire' to the text 'Beliefs about refugees'.

Beliefs about refugees

Ch.2 Firms outcomes

01

Refugees hired

8 months after the exposure
(initial results 24 months)

02

Willingness to hire

New WTP elicitation to
hire a new refugee with
same characteristics

03

Refugees skills

Hard skills (theoretical, practical
and unit performance)
Soft skills (time management, team
work, work ethics, trust, respect)

Demand for refugees

Beliefs about refugees

Ch.2 Results

We run an ANCOVA regression model on two samples: treated and exposed firms

Result 1: hired 3 times more refugees after 8 months of exposure (holds 24 months after) [Graph](#)

Result 2: Exposed firms update their beliefs about refugees skills [Graph](#)

Mechanisms: agnostic approach - **Causal Forest** to investigate heterogeneity

- Results are stronger when **positive match:** firms and refugees have positive initial attitudes towards each other [Graph](#)

[Conceptual framework](#), [Causal forest](#)



*Two skilled refugee workers in cooking
@ The Author*

Ch.2 WTP elicitation

1. Show CVs

2. Multiple Price List (BDM elicitation):

- *Would you be willing to hire this worker for one week under probation starting up to 8 days from today if you:*
 1. *can hire him/her for free*
 2. *have to pay him/her a salary of [5,000]UGX?*
 3. *have to pay him/her a salary of [10,000]UGX?*
 - ...
 21. *have to pay him/her a salary of [100,000]UGX?*

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Ch.2 Randomization into T and C

Envelope with random price (incentive-compatible mechanism) Burchardi et al 2021:

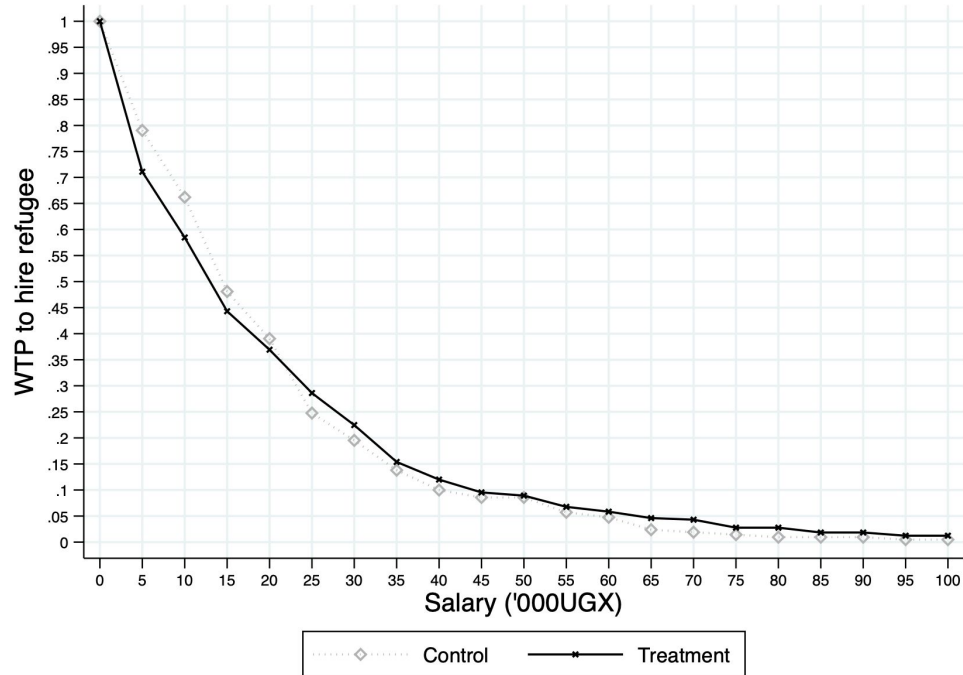
w = 0: The salary you found is lower (or equal) than the salary you stated as the maximum salary you are willing to pay for the worker. Congratulations, you can hire this worker!

w = 100,000: The salary you found is above the salary you stated as the maximum salary you are willing to pay for this worker. I am sorry, but you can not hire this worker.

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Ch.2 WTP Curves

WTP curves (conditional on being non-negative)



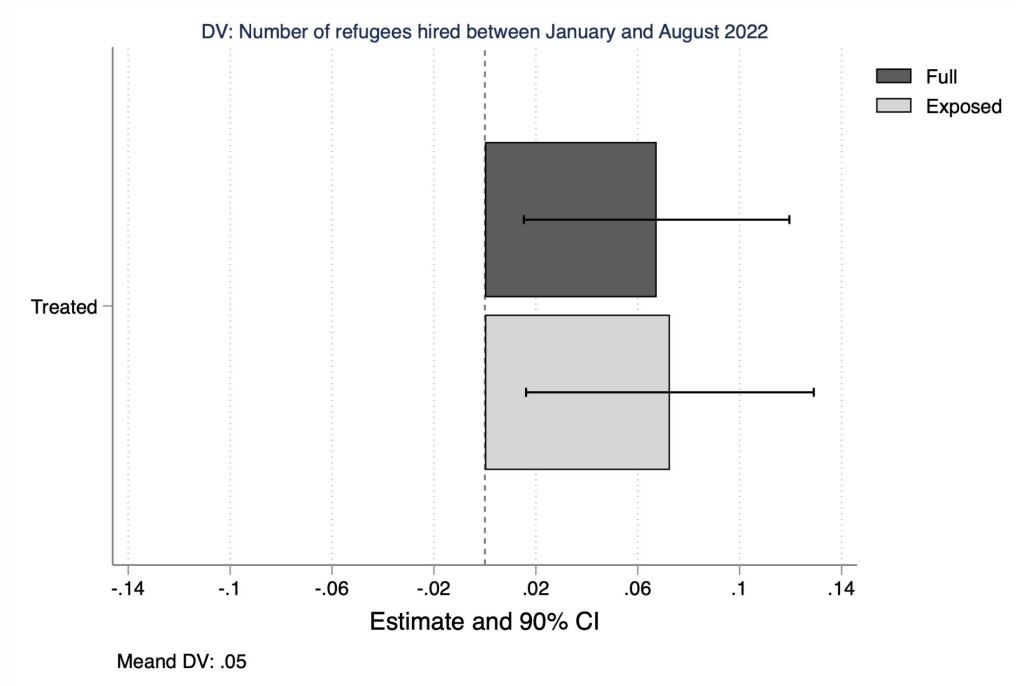
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Ch.2 Conceptual framework

- Worker's output a contains info regarding group mean θ : $a = f(\theta, \epsilon)$
- Exposure produces signal on the worker's ability: $s = a$
- Firm cannot observe group component, but has biased prior beliefs about it: $m_0 < \theta$
- Firm's willingness to hire refugee is a function of initial beliefs about θ
 - Firm will update beliefs upwards
 - Firm's willingness to hire will increase

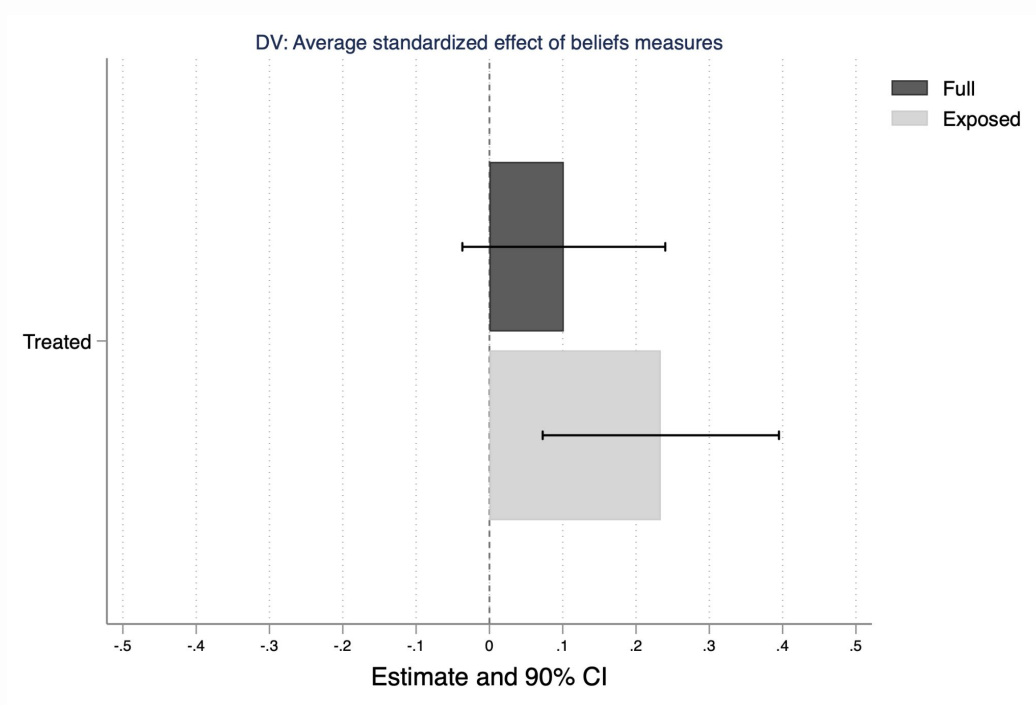
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Ch.2 Result 1 Hiring



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Ch.2 Result 2 Beliefs



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Ch.2 Causal Forest

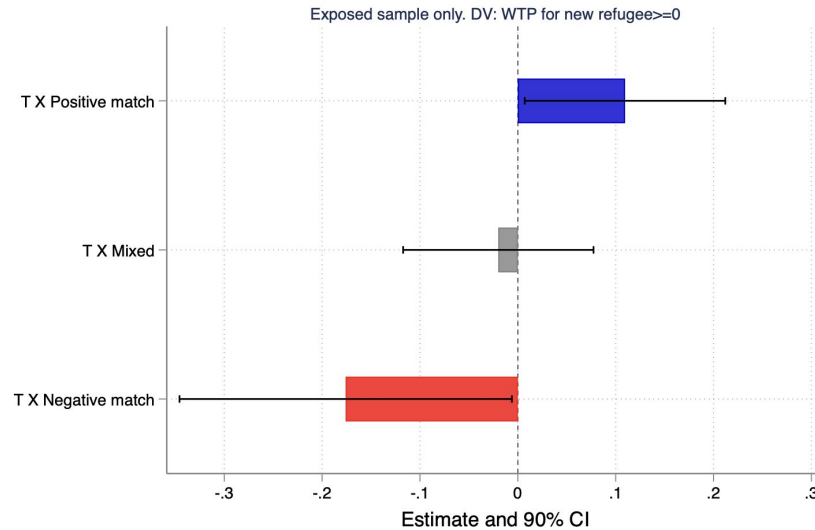
Causal forest

Variable	Low CATE	High CATE	Diff.	MHT pval
Ever hired a migrant	0.383	0.344	-0.040	0.976
Owner is Muganda	0.705	0.635	-0.069	0.818
Employer's attitudes	0.642	0.839	0.196	0.000
Firm's beliefs	0.430	0.552	0.122	0.192
Employer's perceived cost of learn.	0.528	0.490	-0.039	0.970
Firm's expansion plan	0.269	0.286	0.017	0.918
Firm's quality	0.446	0.521	0.075	0.825
Firm's size	0.523	0.474	-0.049	0.975
Refugee's ability	0.534	0.469	-0.065	0.908
Refugee's attitudes	0.052	0.865	0.813	0.000
Refugee's knowledge of languages	0.161	0.104	-0.056	0.731
Manufacturing sector	0.316	0.339	0.022	0.953
Refugee ever employed by Ugandan	0.275	0.250	-0.025	0.972
Refugee's age	33.565	34.323	0.758	0.951
Refugee is Congolese	0.912	0.849	-0.063	0.499
Employer+worker live in same neigh	0.109	0.120	0.011	0.750
Employer+worker same gender	0.829	0.792	-0.037	0.963

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Ch.2 Heterogeneity

Demand for refugees and initial attitudes



→ ↑ when matching with the right attitudes; ↓ when negative