

# **Hidden Discrimination in Frictional Labor Markets**

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NBER

# Introduction

- Labor market frictions shape the **skills employers value**.
- “Soft” skills are hard to observe → carry **identity** connotations.
- **Frictions and discrimination**: addressing frictions via technology changes which skills matter; since skills are connected to identity, this shifts hiring choices in a way that affects the extent of discrimination.
- Different from standard framework: solving frictions can **amplify gaps**.

# Focus: Women entry in male-dominated sectors

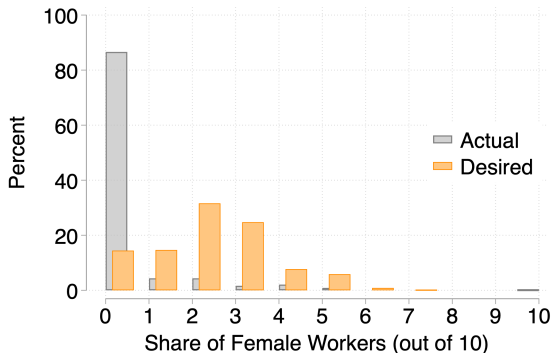
We study hiring in **921 SMEs in Uganda**: mechanics, welding, carpentry.

## Sub-Saharan Africa:

- Despite high female labor force participation (+70%), extreme gender segregation.
- Policies promote women's entry, but **demand-side barriers?**

# Unmet Demand for Female Workers

Actual vs. Desired (“Best”) Share of Female Workers



Desired female share is  
**10× actual**: 2% actual  
→ **20% best**

Why not hiring more  
women? **No supply**  
(77.4%)

# Experimentally Measure Demand for Female Workers

## Relax supply constraint

Limited supply of female workers

- Opportunity to hire from VTI: male or female trainees
- Incentivized experiment



# Design

## Build hypothetical trainee profiles from VTI admin data

### VT Worker Profile 1

#### Personal Details

female, 23 years old  
Married  
Ugandan nationality



#### Educational background and skills

Educational achievement: Secondary School (S6)  
Spoken Language(s): Luganda and english  
Drivers Licence: No

#### Vocational training and experience

Training: 6+ months at Kyeyunga Vocational and Technical School in Kawempe

Ranking in VT: 5 out of 5 (first class) ★★★★★

Certificate: No certification exam taken

#### Motivation

I want to learn practical skills that I can apply in life.

#### References

Please, call the training center manager Ja Ma at 774 9

### VT Worker Profile 2

#### Personal Details

male, 25 years old  
Single  
Ugandan nationality



#### Educational background and skills

Educational achievement: Secondary School (S4)  
Spoken Language(s): Luganda and Alur  
Drivers Licence: Yes

#### Vocational training and experience

Training: 12+ months at Kyeyunga Vocational and Technical School in Kawempe

Ranking in VT: 3 out of 5 ★★★

Certificate: No certification exam taken

#### Motivation

I want to help out my parents and siblings because they are not well off

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# Design

## For each profile, cross-randomize gender × skill level

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**Personal Details**

Female, 25 years old  
Married  
Singapore nationality

**Educational background and skills**

Educational achievement: Secondary school (S6)  
Spoken language(s): Singapore and English  
Written language: No

**Vocational training and experience**

Training: 45 months at Polytechnic Vocational and Technical School in Singapore

Ranking in VET: 3 out of 5 ★★★

Certification: No certification exam taken

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**VT Worker Profile 2**

**Personal Details**

Female, 25 years old  
Single  
Singapore nationality

**Educational background and skills**

Educational achievement: Secondary school (S6)  
Spoken language(s): Singapore and Malay  
Written language: No

**Vocational training and experience**

Training: 120 months at Polytechnic Vocational and Technical School in Singapore

Ranking in VET: 3 out of 5 ★★★

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# Design

## Employers complete **24 incentivized profile evaluations**

- see one version of each profile
- choose who they want to “meet”
- choices → **trainee referrals**

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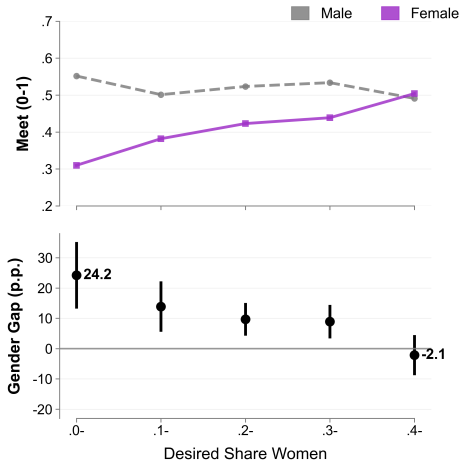
# Demand for Female Workers in the Experiment

Selected Profiles That Are Female



- Gender hiring gap: **10 p.p.**
- Much smaller than hiring studies in similar context ( $\approx 50\%$  lower than Buchmann et al. 2025)

# Stated Preferences Predict the Gender Gap



Demand for women increases in stated preferences for women in workplace.

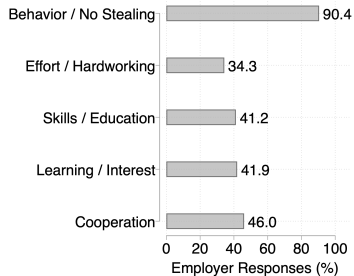
Employers in the **top 20%** of stated preference: hiring gender gap  $\approx$  **zero**.

# Frictions and Gendered Beliefs

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Monitoring frictions affect the demand for skills.

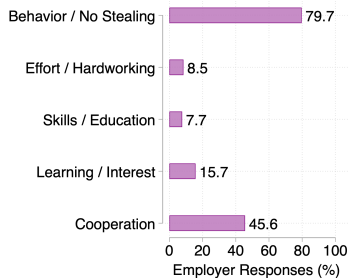
## Hardest to Find Skills



# Frictions and Gendered Beliefs

Monitoring frictions:  
gendered.

Women Rated Better At

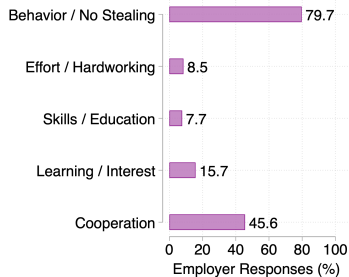


# Frictions and Gendered Beliefs

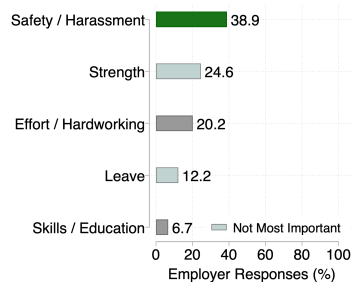
Monitoring frictions:  
gendered.

Safety concerns:  
gendered.

Women Rated Better At



Worries If Hiring Women



# Does Solving Frictions Affect the Gender Gap?

Introduce **gender-neutral monitoring technology**: external audits

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Treatment Assignment: 3 Monitoring Regimes

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No external monitoring.

Business as usual.

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### Monitoring – Behavior

External audits focus on  
workers' behavior:  
prevent stealing.

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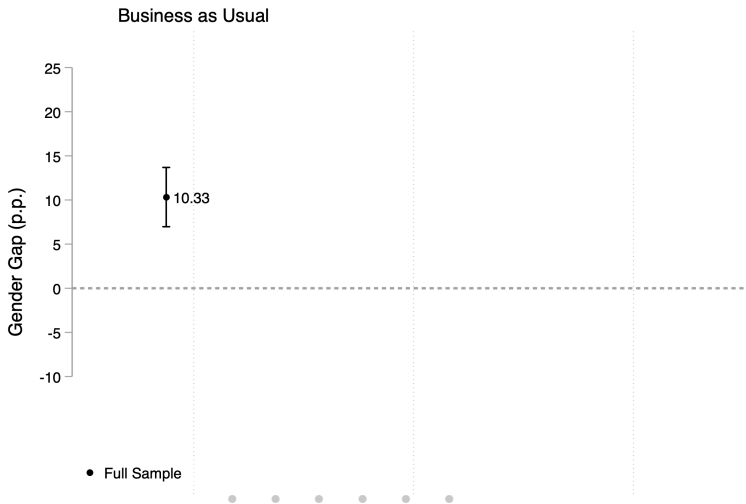
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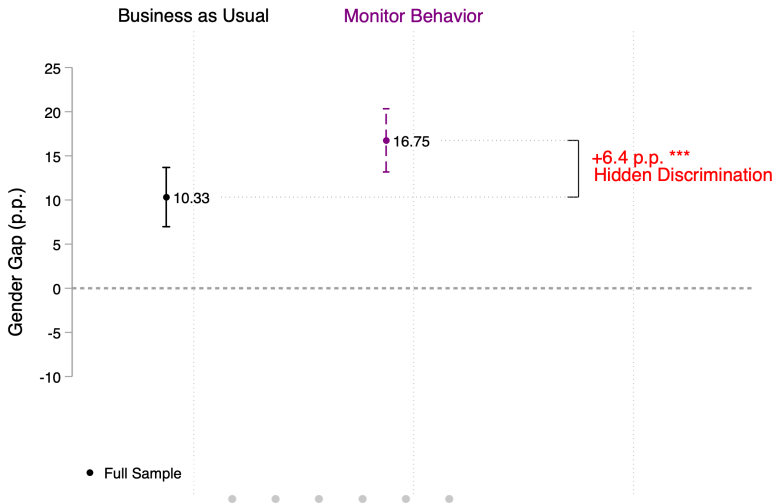
### **Monitoring – Safety**

External audits focus on  
workplace safety  
and harassment risks.

# Do Audits Affect the Gender Gap?



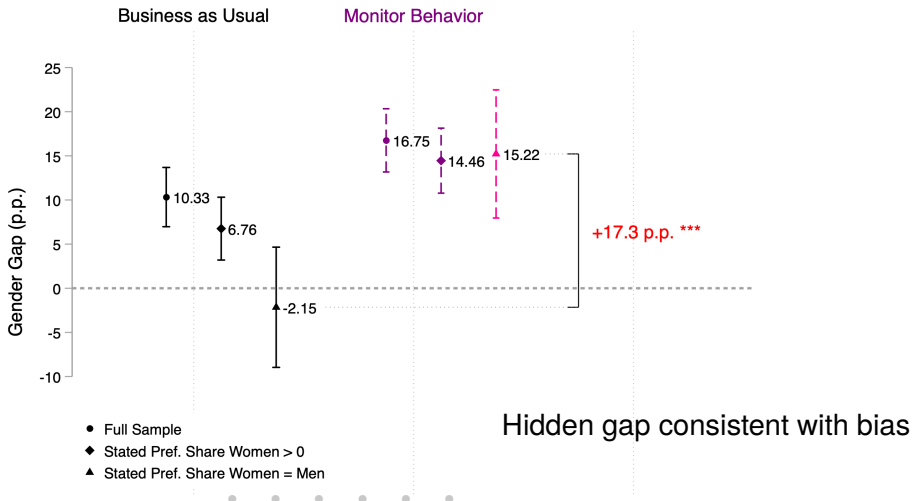
# Audits to Monitor Workers' Behavior Raise Gender Gap: +60%



# Stronger Among Employers with Stated Demand for Women



# Hidden Gap Largest Among “Gender-Neutral” Employers



# Safety Audits Close the Gender Gap





## Why Demand for Female Workers?

Monitoring frictions make employers place high value on **trust**. Women are perceived as more trustworthy, which **raises demand** and **hides** underlying bias → bias emerges with monitoring support

**Why not hiring women in the first place?** Other frictions (search, safety) drive demand for women **down**

## Conclusions

Frictions shape which skills employers value — and these skills are often **gendered**: implications for discrimination in hiring.

In a multi-dimensional skill framework, frictions can compensate bias:

- No outcome gaps need not imply no bias.
- Discrimination as a luxury good.
- **Key implication:** Solving frictions can have identity and discrimination effects — technology is not neutral.

# Thank you!

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# References I