

Combating the Gender Profit Gap

SMEs in Ghana: From Evidence to Action

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The gender profit gap

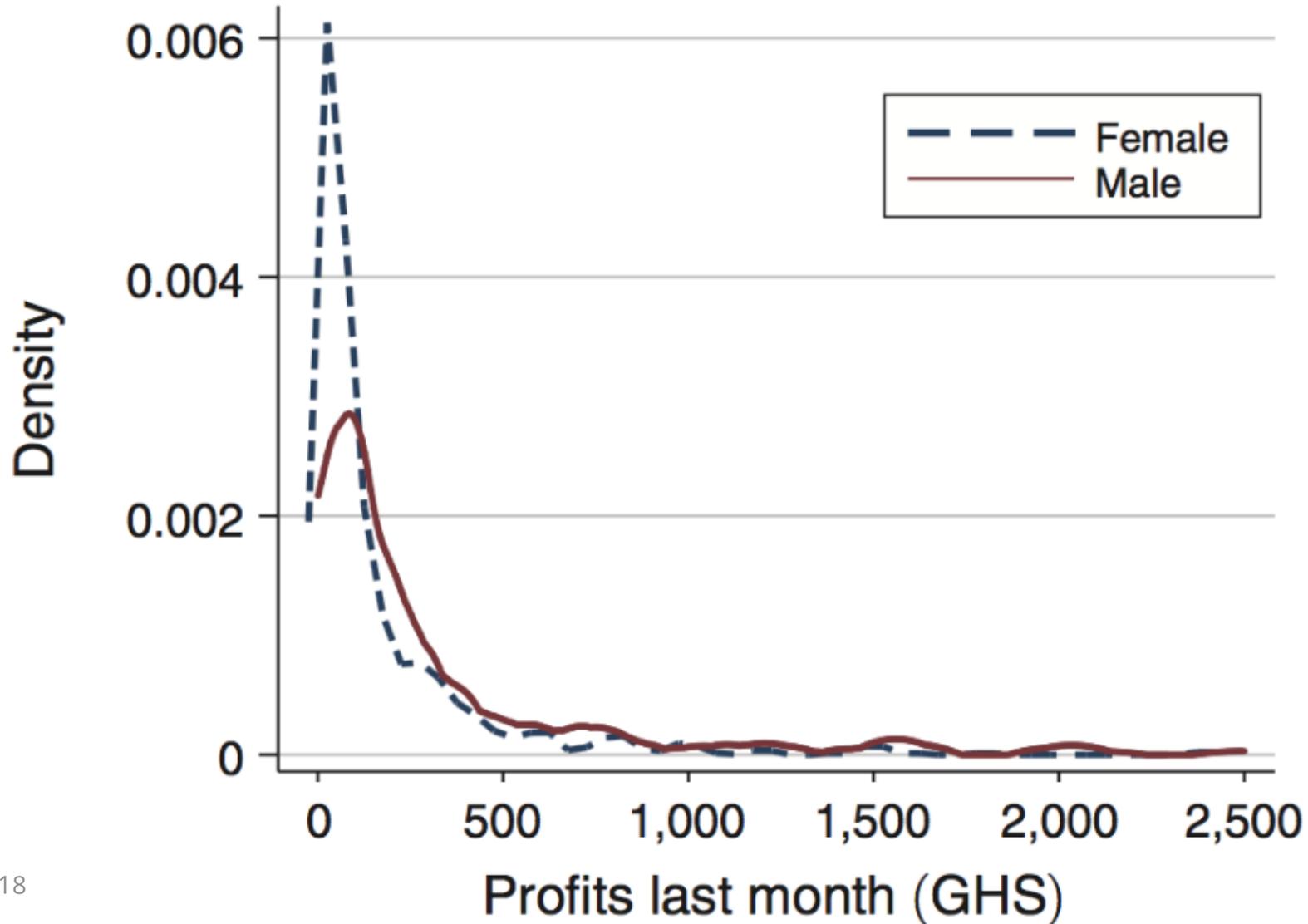
A policy problem

1. Understanding **barriers to the economic empowerment of women** is of primary importance within any country's path toward development.¹
2. In low-income countries, **micro-entrepreneurship** is a growing (and often a woman's only) alternative to agriculture for work outside of the home.²
3. Similar to the gender wage gap found in high-income countries, **female-owned** microenterprises **earn less than male-owned** microenterprises.³



The gender profit gap in Ghana

Distribution of Firm Profits by Gender

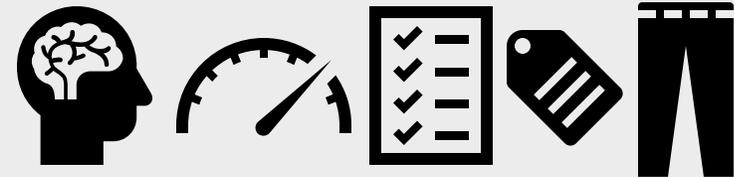


Previous studies found:

Microenterprises owned by men and women are different, but these observed differences do not explain the gender profit gap:



Nix, Gamberoni and Heath (2016)¹



Hardy and Kagy (2018)²

The reasons for this profits gap are still unknown.

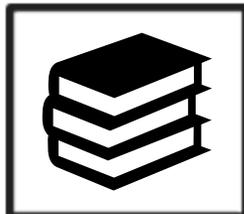
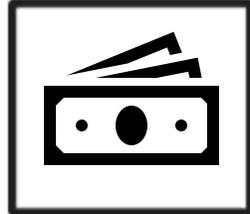
1. marital status, experience, education, number of children, and hours worked. 2. cognition, productivity, reasons for self-employment, and product quality, in Ghana garment making



Previous evaluations have found:

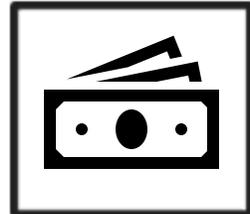
Male and female firm owners respond differently to programs intended to ease “production” constraints:

De Mel, et al. 2009;
Berge et al, 2014



Financial (cash/credit) and owner-training programs beneficial for male-own microenterprises, but not for female-owned.

Bernhardt
et al., 2017



Cash/credit interventions are also less effective if a woman’s husband also owns a business.

Fafchamps
et al., 2014



Female-owned microenterprises respond more to grants of business specific machinery/tools than cash.



It's Getting Crowded in Here: Experimental Evidence of Demand Constraints in The Gender Profit Gap

with Gisella Kagy (Vassar College)

What: Is demand a constraint for female-owned businesses?

Where: Garment making industry in Hohoe, Ghana

How:

1. Experiment: Randomly increase number of garments ordered
2. Project Data: (firm census/survey, market research survey)
3. National Employment Data (Ghana Living Standards Survey)



Preview of Evidence

Experimental Evidence:

1. Gender profit gap disappears during experiment as order size increases
2. Female-owned firms absorb (expand for) experimental demand; male-owned firms do not

Descriptive Evidence:

1. Female-owned firms are selling less and making less per order
2. Lack of customers is most reported barrier for female owners
3. There are three times as many female-owned firms in the market, but not three times as many potential customers (demand is gender segregated).

National Employment Data Evidence:

Women work in less sectors, less industries, and more crowded industries than men

Take-away: Demand constraints are a likely piece of the gender profit gap puzzle. 

Key takeaways

1. Women work in **fewer** sectors and industries than men, and the ones they do work in are **more crowded**.
2. When female-owned firms and male-owned firms randomly received access to **more orders** for their products, female-owned firms accommodated new orders, male-owned firms didn't, and the **profit gap** between them **disappeared**.
3. **Programs that expand women's opportunities to sell their goods may be an important strategy for helping their businesses grow.**
4. **Programs that provide women with more employment options may alleviate crowding for those that remain in business.**



Garment-making in Ghana

Context

Similar to other microenterprises in Ghana and other developing countries:

- Firms are of **small scale**, typically **no paid employees** besides owner
- Use **simple production technology**
- Firms are **numerous** and produce **similar products**
- **Demand** comes from **local** population
- Garments are **made to order**



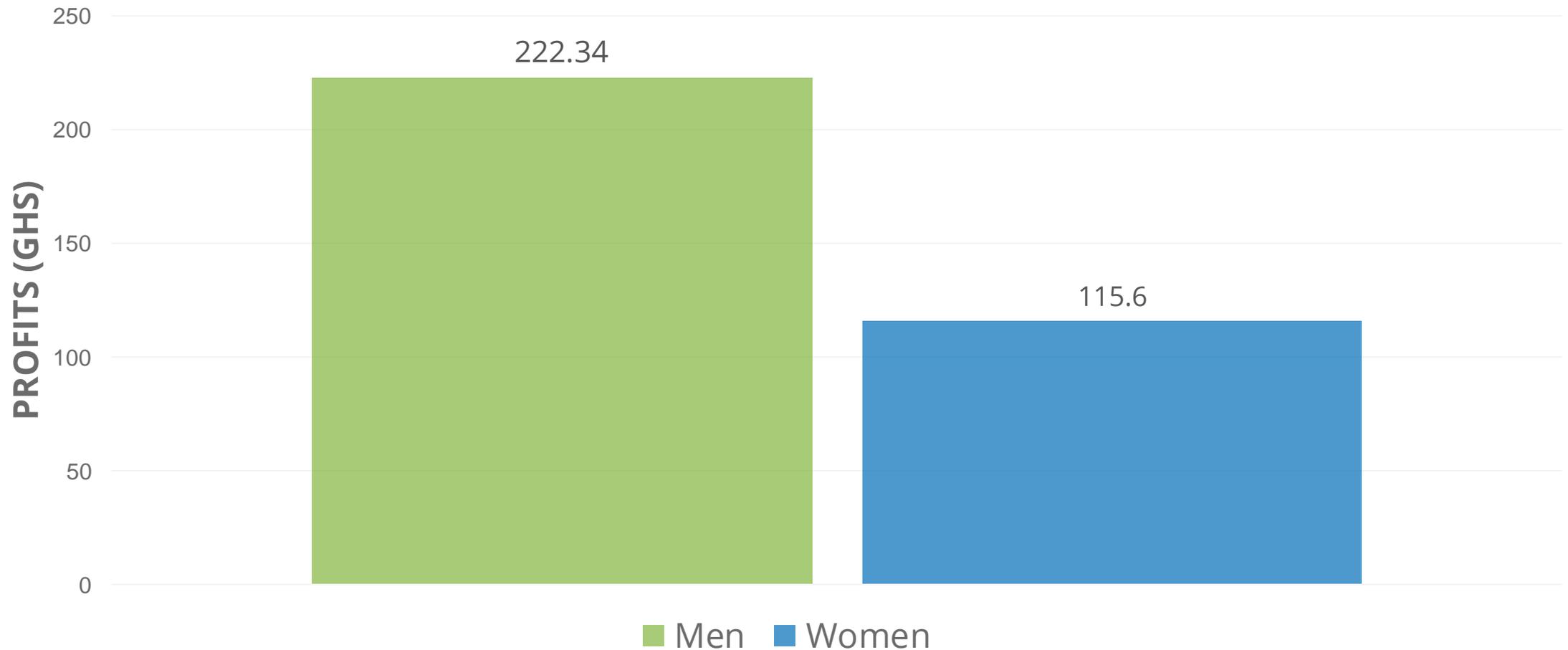
Garment-making in Hohoe

1. Firms in Hohoe owned by **both** men and women.
2. **Three times as many female-owned** garment making firms.
3. **Large gender gap in profit**, not explained by firm and owner characteristics.



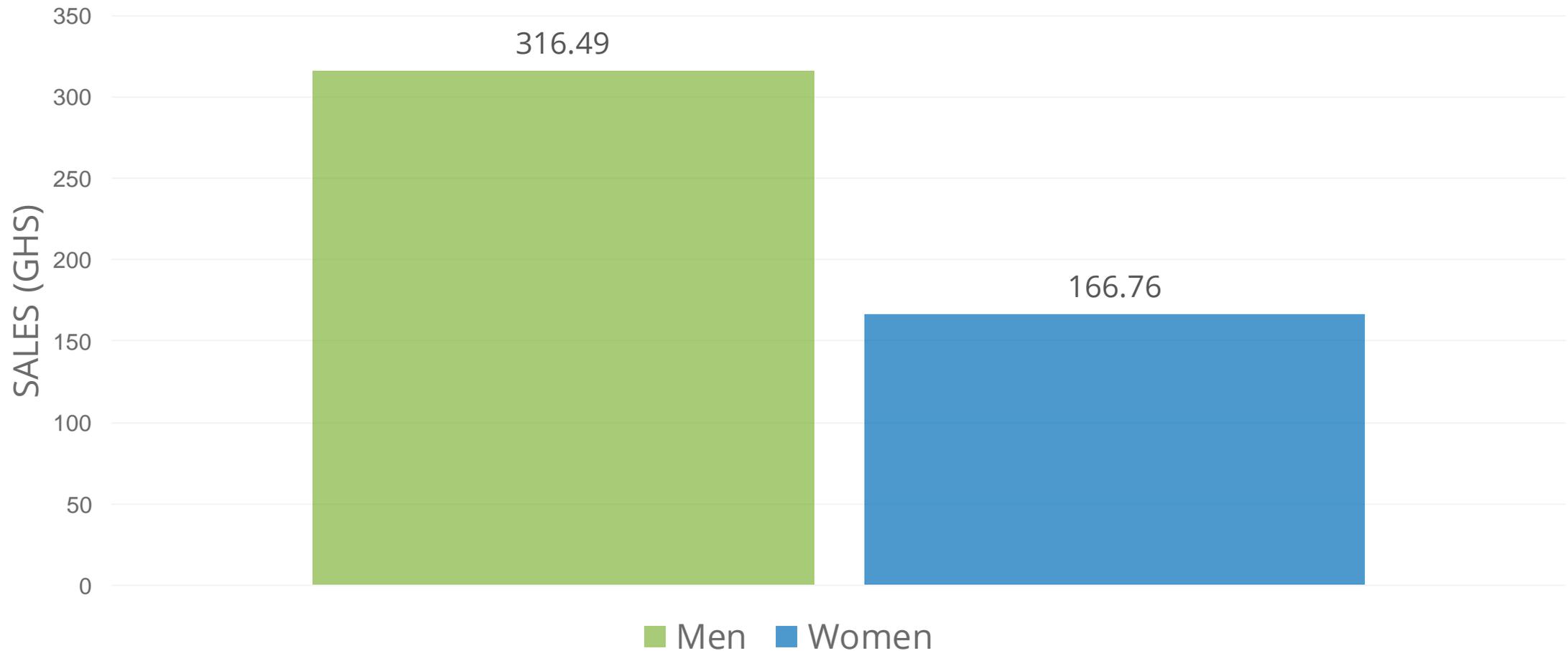
Male-owned firms outperform female-owned firms (on average)

Average Monthly Firm Profits by Gender



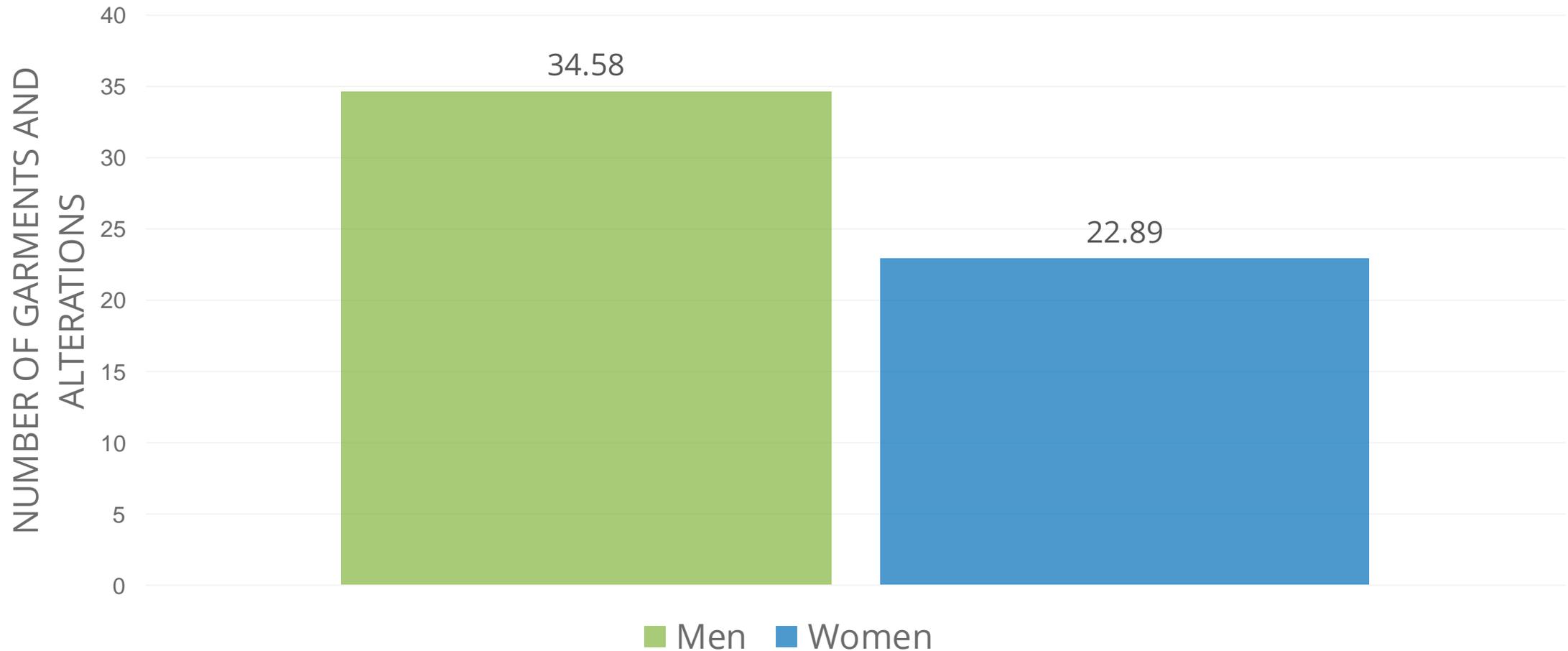
Male-owned firms outperform female-owned firms (on average)

Average Monthly Firm Sales by Gender



Male-owned firms outperform female-owned firms (on average)

Average Monthly Firm Production by Gender



Evaluation background

Factual Implications

The 2-to-1 profit gap is composed of both that:

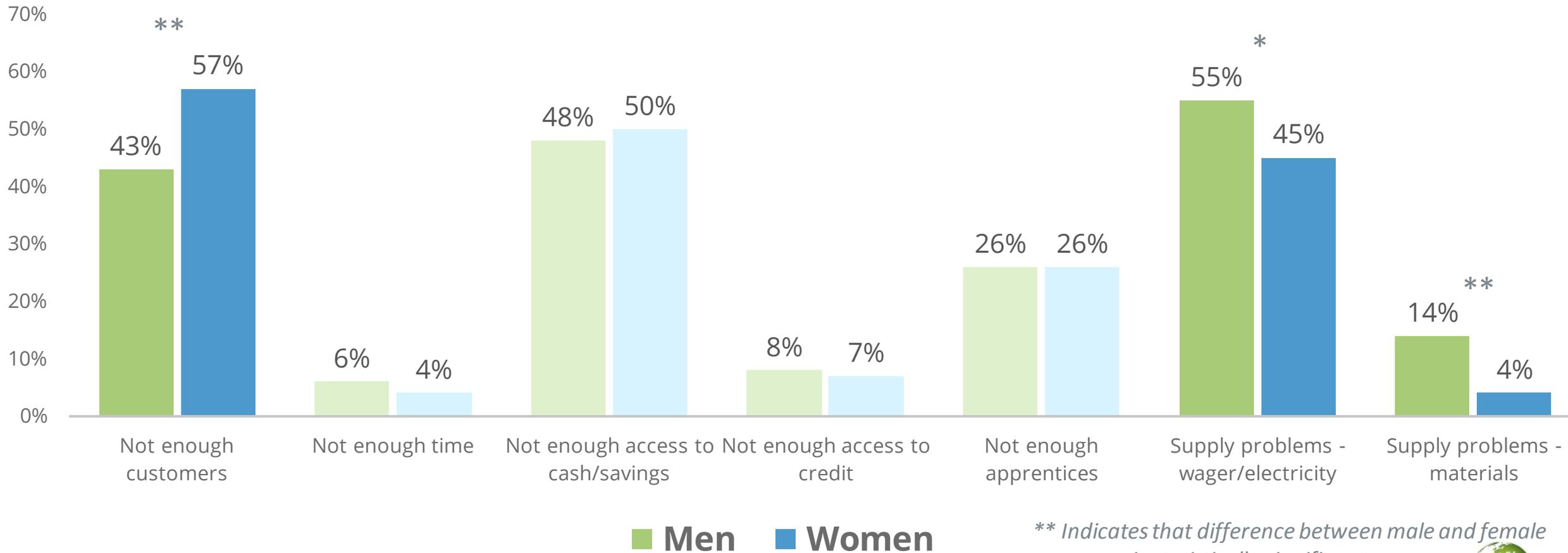
- **Male-owned firms sell 50% more quantity.**
- **Male-owned firms receive 33% more “mark-up.”** ($3/2 * 4/3 = 2$)

This suggests that male-owned firms face less competition.



Women most likely to cite lack of customers as biggest barrier

Percent of Owners Reporting Barrier as Main Barrier



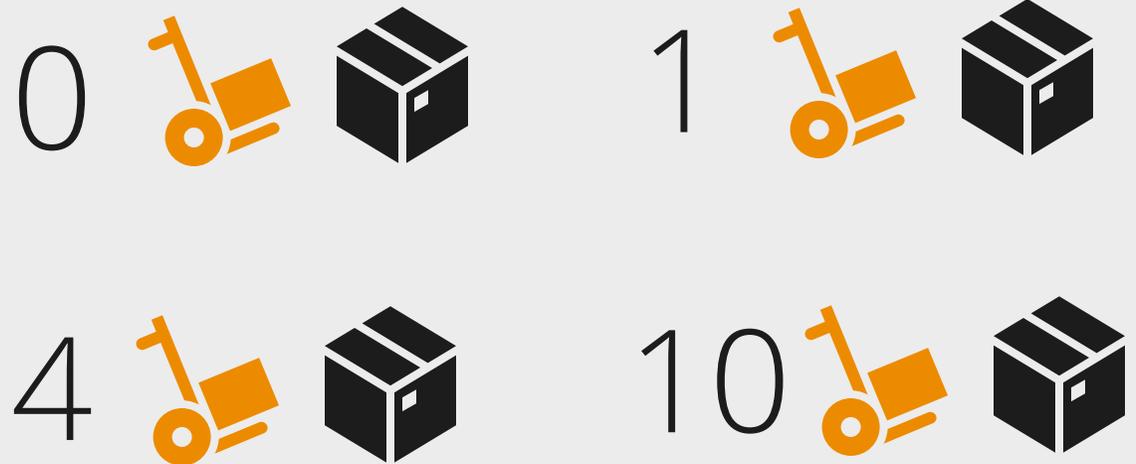
** Indicates that difference between male and female responses is statistically significant.



Programs



Firms learned a **new design technique** to be used on garments

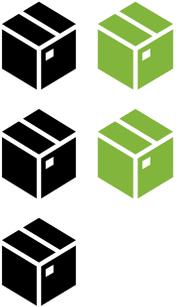
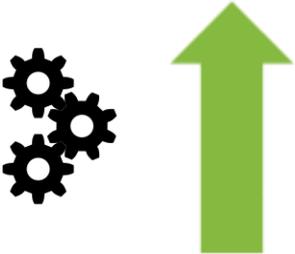
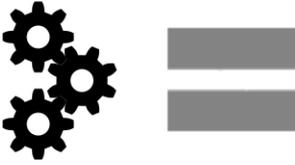


Firms were randomly assigned to **receive additional orders**



Results

Effects of Additional Garment Orders

Orders	Production Inputs	Profits and Sales
 <p>Female-owned firms' non-experimental orders and sales do not.</p>	 <p>Female-owned firms increase wages and input expenditure.</p>	 <p>Female-owned firm sales and profits increase.</p>
 <p>Male-owned firms' non-experimental orders and sales decrease.</p>	 <p>Male-owned firms do not increase any production inputs.</p>	 <p>Male-owned firm sales and profits do not.</p>

The gender profit gap closes during the order period.



Review of evidence

Interpretation

Background Evidence:

1. Profit gap composed of both lower quantity and lower mark-ups
2. Lack of customers is most reported barrier for female owners

Evaluation Evidence:

1. Female-owned firms absorb (expand for) experimental demand; male-owned firms do not
2. Gender profit gap disappears during experiment as order size increases

Overall Take-Away:

1. **Male-owned firm behavior consistent with binding production constraints**
2. **Female-owned firm behavior consistent with binding demand constraints**



Is demand a constraint for women-owned shops?

Supply of female-owned firms vs male-owned firms: **3 to 1** ¹

Demand is gender-segregated and women order approximately one more garment per year than men. ²

Female-owned vs. Male-owned Demand Ratio = 1.5

Gender Gap in Demand-to-Supply Ratio: $1.5/3 = .5$

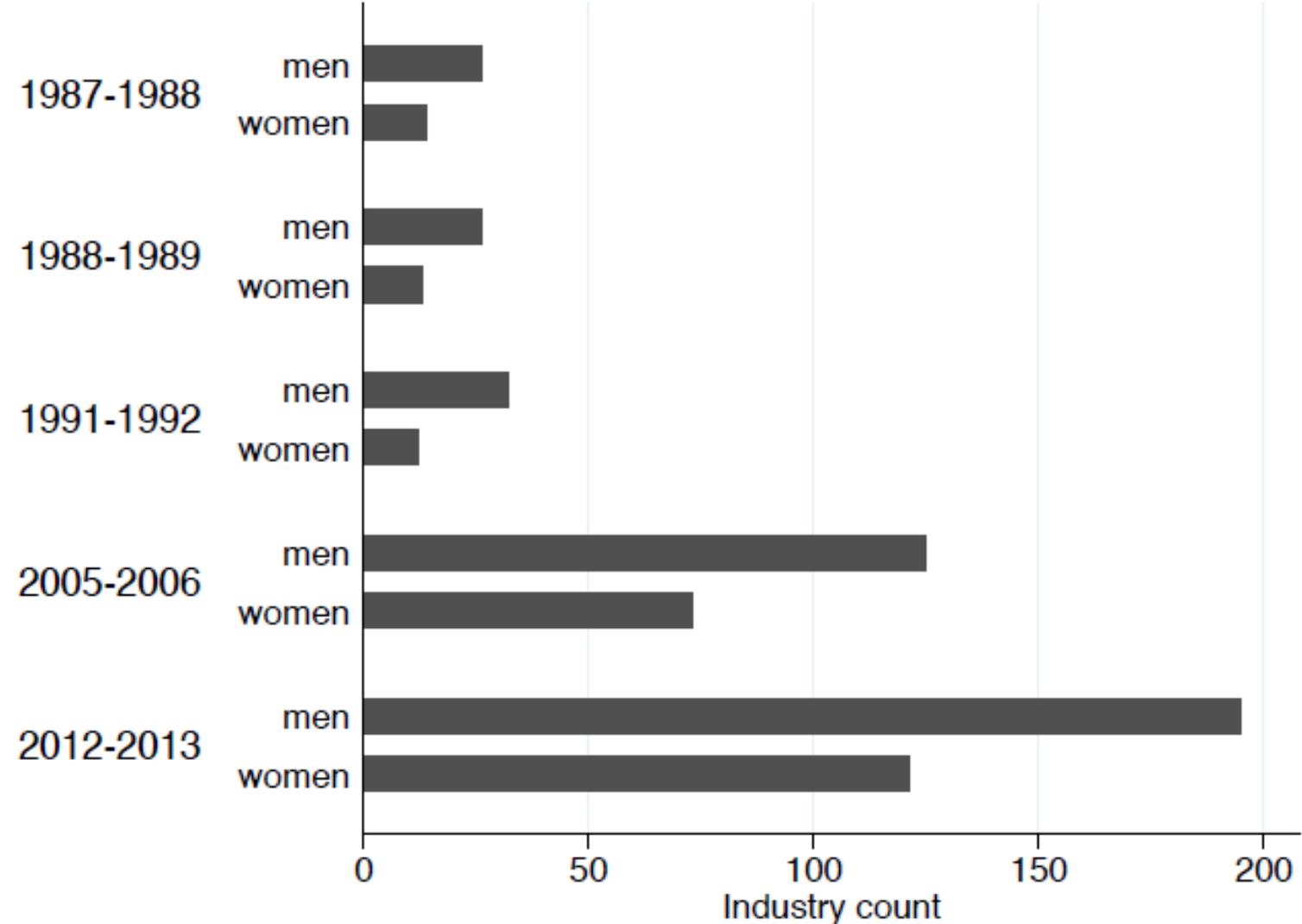
1 Firm Census;

2. Market Research Survey:



Female entrepreneurs work in fewer industries

Number of Industries for Self-Employed by Gender - GLSS



Working theory

Discussion

Limited formal employment opportunities for women ->

- Oversupply of female micro-entrepreneurs

Female micro-entrepreneurs crowding into few industries →

- Lower market-size-to-firm ratio for women
- Higher demand scarcity
- Lower profits for female-owned firms



Policy implications

Our study suggests that:

- **Crowded industries** are a likely **piece of the gender profit gap puzzle: male micro-enterprises face less competition.**
- Programs that **expand women's opportunities to sell** their goods and services may be an **important strategy for helping their businesses grow.**
 - *This may help explain why programs that provide women with access to finance or capital have shown mixed results.*
- **More work toward understanding why sector and industry choice** differ by gender



Conclusions

- Micro-enterprises crucial in the developing world, especially among women.
 - Large profit gap between women- & men-owned firms has remained a puzzle.
 - Our findings suggest that **demand-side constraints add to the gender profit gap**
 - Demand-side interventions may complement supply-side interventions
 - Research/policies/programs focused on:
 - (i) increasing alternative labor market opportunities for women and
 - (ii) creating alternative customer sources for female-owned firms
- may see strong results in the fight against gendered income inequality**



Thank you!



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