# How Unfair Chances and Gender Discrimination Affect Labor Supply

Nickolas Gagnon[1,2], Kristof Bosmans[1] and Arno Riedl[1]

[1]Department of Economics, Maastricht University

[2]Economic Science Laboratory, University of Arizona

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# Motivation



- Chances are common feature of labor markets, when information is incomplete—hiring, promoting, firing, wage-setting decisions
- Those chances may be unfair for various reasons, e.g., favoritism, nepotism, outright discrimination

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  - 24% of U.S. corporate female employees report gender played role in missing out on raise/promotion/chance to get ahead, 29% expect it in future
- Shared commonality between female musicians auditioning for orchestra and female economists up for tenure:
  - Lower chances than men of equal ability (Goldin and Rouse, 2000; Sarsons, 2019)

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- Shared commonality between female musicians auditioning for orchestra and female economists up for tenure:
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- Brings general question: as worker, how do you respond to chances being unfair?

**What we do:** First study to investigate the causal effect of...

1. unfair chances based on unspecified source
2. unfair chances based on gender discrimination

...on primary decision for workers: ensuing labor supply at given wage

(i.e., after chances realization, fixing monetary incentives)

# Literature



**Unequal wages:**

- Long tradition investigating how unfair wage inequality can hamper workers' productivity
  (e.g., Adams, 1965; Akerlof and Yellen, 1990; Pfeffer and Langton, 1993; Bewley, 1999)

- Recent evidence shows unequal wages for equal work reduce labor supply
  (Bracha et al., 2015; Breza et al., 2018; Dube et al., 2019)

## Ex-ante/procedural fairness:

- Preferences for equal chances influence equity judgments, but **unexplored in labor markets**

  (e.g., Diamond, 1967; Hammond, 1981; Epstein and Segal, 1992; Karni and Safra, 2002; Bolton et al., 2005; Trautmann, 2009; Krawczyk and Le Lec, 2010; Brock et al., 2013; Cappelen et al., 2013; Saito, 2013; Cettolin and Riedl, 2016)

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## Gender discrimination:

- Associated with negative well-being in psychology and medicine (Pascoe and Smart Richman, 2009)
- Evidence for **demand-side** discrimination, but **missing possible supply-side effects**—on workers' labor decisions (Altonji and Blank, 1999; Blau and Kahn, 2017; Bertrand and Duflo, 2017)

# Methodology



- Pre-registered study—design, hypotheses, tests
- Design can capture differences between treatments of approximately 0.20 SD with medium statistical power (50%)

- Recruit workers on online labor platform, gender-balanced, residing in UK
- Workers exogenously assigned to payment schemes (treatments) varying chances, source of chances, and wages
- Individual work: copy lines of characters for piece-rate wage
  - Worker decides after how many lines to leave
  - Lines gradually become longer
  - Up to 85 lines or 65 minutes
  - Lines entered have no further use for anyone

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  - Complete practice lines (unrelated to wages)

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  - Complete practice lines (unrelated to wages)
- Second
  - Learn procedure determining own wage and wage of another anonymous worker doing same work
  - Learn own wage and wage of other worker
  - Enter lines, decide after how many lines to quit

- Minimalist design: no interaction, risk, reciprocity, future job
- 1,271 workers complete experiment
  - Age: mean=38 (SD=12)
  - Woman: 50%
  - UK National: 93%
  - Student: 16%
  - Full-Time Employed: 50%
  - Part-Time Employed: 20%
  - On average, stayed 26 minutes ($SD = 16$), paid £2.64 ($SD = 1.53$)
- Worker is randomized into one payment scheme, separately by gender (between-subject design)
- **Labor supply measure**: number of lines completed

# 5 Payment Schemes (Treatments)

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  - Both workers receive wage of £0.03
- EqHigh
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- EqHigh
  - Both workers receive wage of £0.06
- UneqFair
  - Both workers: 50% chance to receive £0.06, otherwise receive £0.03 (one worker obtains £0.06, other worker obtains £0.03)

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- EqLow
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- EqHigh
  - Both workers receive wage of £0.06
- UneqFair
  - Both workers: 50% chance to receive £0.06, otherwise receive £0.03 (one worker obtains £0.06, other worker obtains £0.03)
- UneqUnfair
  - One worker: 25% chance to receive £0.06
  - Other worker: 75% chance to receive £0.06
  - Unspecified source of chances: we do not provide reason

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- UneqUnfair
  - One worker: 25% chance to receive £0.06
  - Other worker: 75% chance to receive £0.06
  - Unspecified source of chances: we do not provide reason
- UneqDiscr
  - One worker: "**You are a woman/man, therefore you have**" 25% chance to receive £0.06
  - Other worker: "**The other participant is a man/woman, therefore s/he has**" 75% chance to receive £0.06

# Online Labor Markets



- Boom in popularity, especially for labor and experimental economists

  (e.g., Pallais, 2014 (AER), Bordalo et al., 2016 (QJE), Pallais and Sands, 2016 (JPE), De Quidt et al., 2018 (AER))

- Snowberg and Yariv (2018): online participants are generally inbetween undergraduates and representative sample

  (e.g., DG, PD, time discounting, risk aversion, lying, CRT)

- Horton et al. (2011) and Arechar et al. (2018): classical games replicate online

  (PD, Public Goods Game)

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  3. Large number of workers $\Rightarrow$ statistical power
  4. Crucial: allows us to discriminate in labor market

- Precautions to minimize potential concerns, among which:
  - Exhaustive comprehension questions $\Rightarrow$ repeated mistakes lead to exclusion before experiment
  - Single participation per account, mostly on invitation, many restrictions to prevent duplicate accounts
  - Post-experiment questions

# Theoretical Framework



- Build on existing framework (Breza et al., 2018; Card et al., 2012)
  - Worker **dislikes job with wage inequality** (more if disadvantageous) for equal work $\Rightarrow$ dissatisfaction
  - Creates **marginal disutility of work $\Rightarrow$ lowers labor supply**

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  - Worker **dislikes job with wage inequality** (more if disadvantageous) for equal work $\Rightarrow$ dissatisfaction
  - Creates **marginal disutility of work** $\Rightarrow$ **lowers labor supply**
- Account for unfair chance (based on Saito (2013))
  - Aversion to unequal wage and **unfair chance**
  - Unfair chance creates **additional marginal disutility** $\Rightarrow$ reduces labor supply

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  - Aversion to unequal wage and **unfair chance**
  - Unfair chance creates **additional marginal disutility** ⇒ reduces labor supply
- **Gender discrimination** entails psychological costs
  - **Raises marginal disutility** ⇒ contracts labor supply

- Two workers, $i$ and $j$, engaged in same work with piece-rate wages $w_i$ and $w_j$
- Wages and chances leading to wages are public knowledge
- Worker $i$ chooses labor supply $l_i$ considering $w_i$, $w_j$, distribution of chances, and cost of providing labor

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- Wages and chances leading to wages are public knowledge
- Worker $i$ chooses labor supply $l_i$ considering $w_i$, $w_j$, distribution of chances, and cost of providing labor
- Based on Breza et al. (2018) (similar to Fehr and Schmidt (1999)), marginal disutility created by wage inequality takes form

$$P_i(w_i, w_j) = \alpha_i \max\{w_j - w_i, 0\} + \beta_i \max\{w_i - w_j, 0\}$$

- Based on labor supply evidence, we assume $\alpha_i > \beta_i > 0$

- Marginal disutility created by unfair chances is based on Saito (2013) and others (e.g., Bolton et al., 2005; Trautmann, 2009)

$$A_i(E(w_i, w_j)) = \alpha_i' \max\{E(w_j - w_i), 0\} + \beta_i' \max\{E(w_i - w_j), 0\}$$

- We assume $\alpha_i' > \beta_i' > 0$

- Worker $i$ chooses labor supply $l_i$ so as to maximize utility

$$U_i(w_i, w_j, l_i) = w_i l_i - P_i(w_i, w_j) l_i - A_i(E(w_i, w_j)) l_i - \frac{l_i^2}{2}$$

- Optimal labor supply is then

$$l_i^* = w_i - P_i(w_i, w_j) - A_i(E(w_i, w_j))$$

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- Optimal labor supply is then

$$l_i^* = w_i - P_i(w_i, w_j) - A_i(E(w_i, w_j))$$

- Unequal wage and unfair chance both decrease labor supply
- Decrease is larger for disadvantaged than advantaged workers

- Finally, we posit: gender discrimination entails additional psychological costs for workers
- Marginal disutility is again greater for disadvantaged workers
- Do not explicitly model this
- For instance, discriminatory chances could involve a term $\delta > 0$ that multiplies $\alpha_i'$ and $\beta_i'$

# Hypotheses



- Our hypotheses apply only to workers who do not beat the odds
- For low-wage workers: those who faced equal wages, fair chances, or low chances
- For high-wage workers: those who faced equal wages, fair chances, or high chances
- Reason: our design generates few such workers
- First three hypotheses come from our framework

# Hypotheses



## Hypothesis 1, Low-Wage Workers

For low-wage worker, labor supply ranks across schemes as follows:
EqLow > UneqFair > UneqUnfair > UneqDiscr

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For low-wage worker, labor supply ranks across schemes as follows:
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## Hypothesis 2, High-Wage Workers

For high-wage worker, labor supply ranks across schemes as follows:
EqHigh > UneqFair > UneqUnfair > UneqDiscr

## Hypothesis 3, Disadvantage vs. Advantage

The labor supply decreases in

(a) UneqFair compared to EqLow/EqHigh,

(b) UneqUnfair compared to UneqFair, and

(c) UneqDiscr compared to UneqUnfair,

are greater for low-wage worker than for high-wage worker

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are greater for low-wage worker than for high-wage worker

- Investigate gender difference in responses to negative discrimination

## Hypothesis 4, Gender and Negative Discrimination

Difference in labor supply between UneqUnfair and UneqDiscr is equal for low-wage workers of both genders

# Results—Testing our Hypotheses

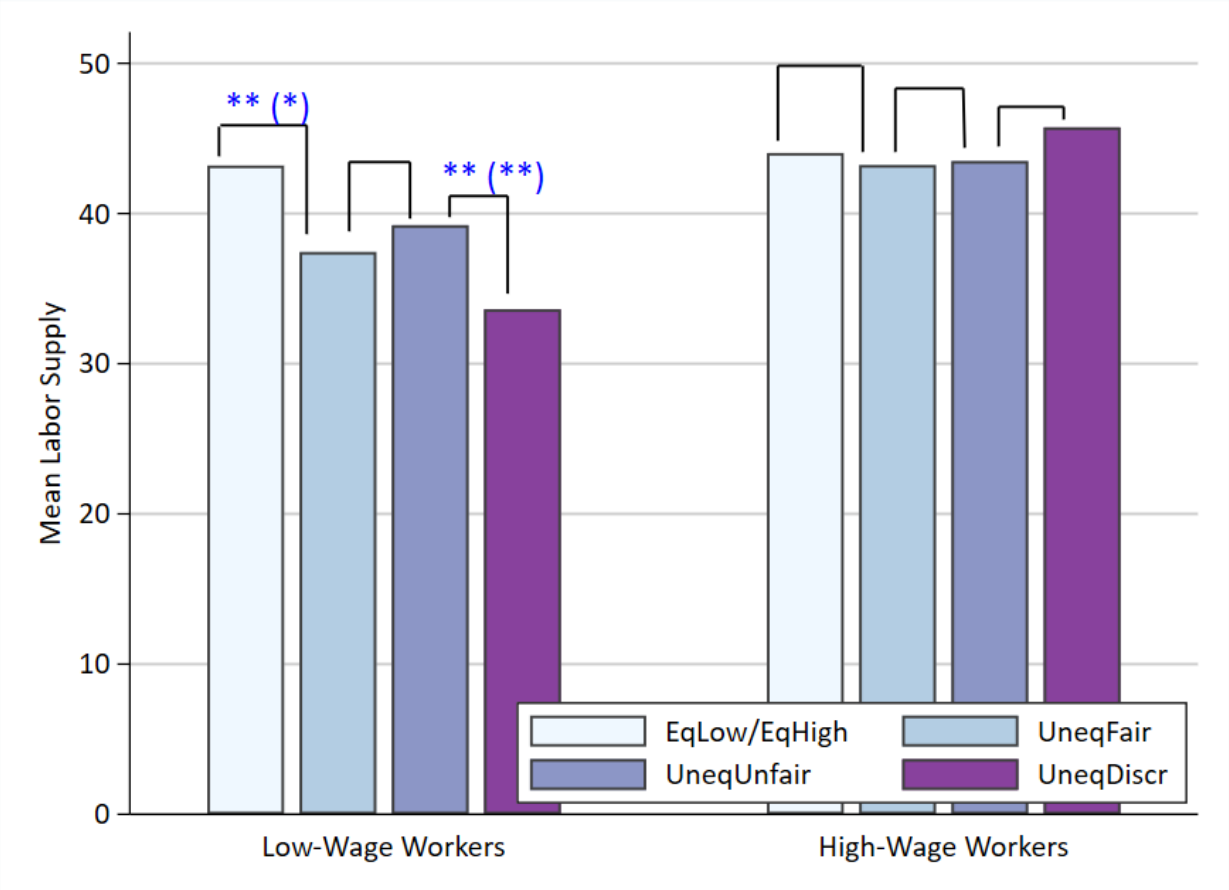


- A few features:
  - Two tests
    - Non-parametric rank test: Dunn's tests for pairwise comparisons, following Kruskal Wallis test
    - Tobit regression
    - Employ one-sided test whenever we made prediction
    - Rely on Dunn's test whenever possible—no normality assumption
  - Present results with and without BH correction (Benjamini and Hochberg, 1995) within each hypothesis
    - False Discovery Rate procedure for multiple hypotheses

# Labor Supply in each Payment Scheme

DescriptiveStatistics | 3CompHypo1&2 | 6CompHypo1&2

Figure: Labor Supply per Scheme—3 Dunn's tests in predicted direction (parentheses: Benjamini and Hochberg (1995) correction)




Note: Labor supply is measured by the number of lines completed and ranges from 0 to 85. N ranges from 127 to 145 workers per payment scheme. One-sided p-values in direction of hypotheses: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

## Result 1, Low-Wage Workers:

(a) UneqDiscr substantially reduces labor supply, compared to other schemes
- −22% (0.35 SD) relative to EqLow
- −15% (0.21 SD) relative to UneqUnfair

(b) UneqUnfair does not decrease labor supply relative to UneqFair

(c) UneqFair reduces labor supply compared to EqLow
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## Result 2, High-Wage Workers:

UneqDiscr, UneqUnfair, UneqFair, and EqHigh all produce similar labor supply

# Disadvantage and Advantage RegHypo3



## Result 3, Disadvantage vs. Advantage:

(a) Decrease in labor supply caused by UneqDiscr relative to UneqUnfair is larger for low-wage than high-wage workers

(b) Decreases caused by UneqUnfair relative to UneqFair and by UneqFair relative to EqLow/EqHigh do not differ significantly for the two types of workers

# Men and Women Reactions to Negative Discrimination



Table: Descriptive Statistics—Labor Supply of Low-Wage Men and Women in UneqUnfair and UneqDiscr

| Low-Wage Workers | Mean | SD | Min. | Max. | N |
|---|---|---|---|---|---|
| Men | | | | | |
| UneqUnfair | 36.13 | 27.44 | .04 | .14 | 72 |
| UneqDiscr | 36.92 | 29.27 | .06 | .15 | 71 |
| Women | | | | | |
| UneqUnfair | 42.37 | 27.92 | .04 | .15 | 71 |
| UneqDiscr | 30.38 | 23.00 | .11 | .06 | 72 |

Note: Labor supply is measured by the number of lines completed and ranges from 0 to 85. Min. and Max. indicate the percentage of workers completing the minimum and maximum number of lines.

Table: Hypothesis 4—Tobit Regression of Labor Supply on UneqUnfair and UneqDiscr, for Low-Wage Men and Women

| Scheme | Low-Wage Workers |
|---|---|
| UneqDiscr | -1.363 |
| | (5.510) |
| UneqDiscr × Woman | $-16.105^{**}$ |
| | (7.805) |
| Woman | 1.736 |
| | (6.077) |
| Controls | Yes |
| Prob >F | 0.039 |
| Pseudo R2 | 0.012 |
| *N* | 283 |

Note: UneqUnfair serves as baseline. Standard errors are indicated in parentheses. Two-sided p-values: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$, $^{****}p < 0.001$.

## Result 4, Gender and Negative Discrimination:

Decrease in labor supply caused by UneqDiscr relative to UneqUnfair is larger for women than men

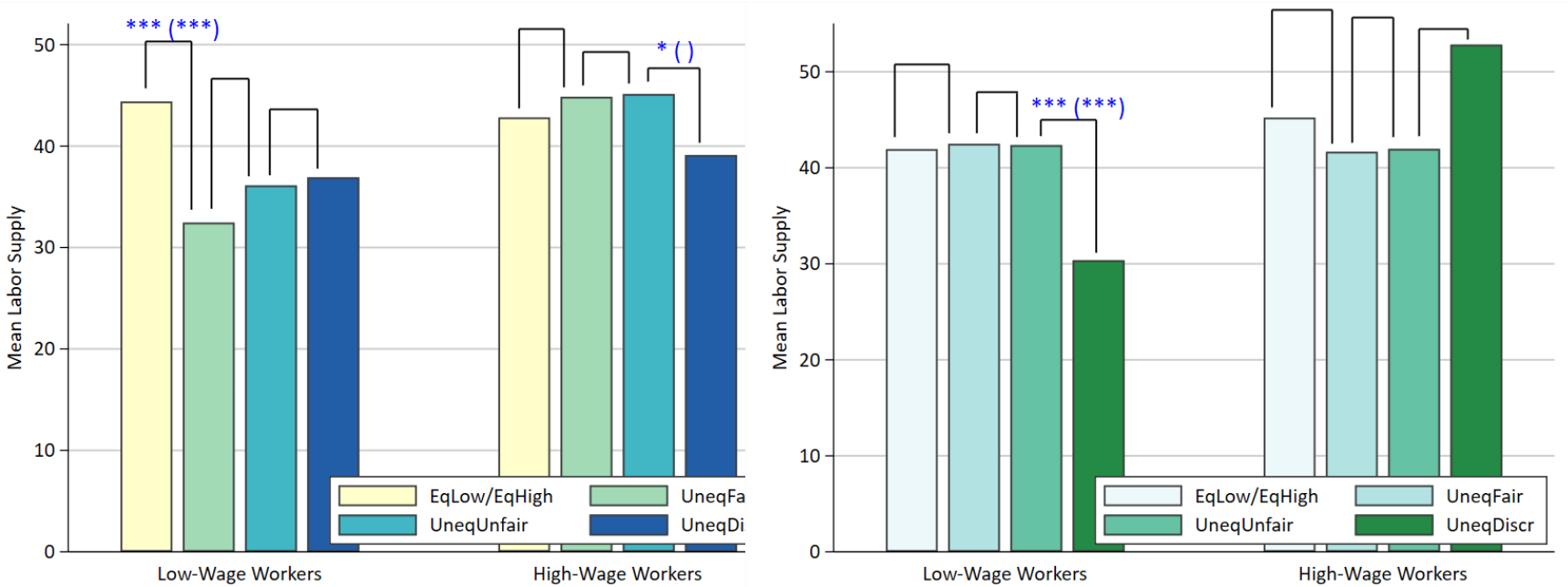
# Exploratory Analyses

# Exploratory Analyses—Further Gender Differences

DetailsGender



Figure: Labor Supply per Gender/Scheme—3 Dunn's tests in predicted direction (parentheses: BH correction)




Note: Labor supply is measured by the number of lines completed and ranges from 0 to 85. N ranges from 62 to 75 workers per payment scheme. One-sided p-values in direction of hypotheses: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

# Positive Discrimination of Women



- Setting aside our hypotheses... could positive discrimination increase women's labor supply?

Table: P-Value of Test that Positive Discrimination of Women does not Affect their Labor Supply

| Inequality | High-Wage Female Workers |
|---|---|
| Technique | Dunn |
| EqHigh $\neq$ UneqDiscr | **0.055** |
| UneqUnfair $\neq$ UneqDiscr | **0.012** |
| *N* | 273 |

Note: Two-sided p-values are presented.

- This is question for future research

# Extensive and Intensive Margins

MarginsDetails



- Discriminatory chances increase probability that low-wage workers refuse to work
- And decrease labor supply for low-wage workers deciding to work

# Discussion

# Discussion—Unequal Wages and Labor Supply



- We replicate finding that unequal wages *for same work* decreases labor supply of disadvantaged worker
  - Bracha et al. (2015); Breza et al. (2018); Dube et al. (2019)
- Gender: *BGL* find low wages only affect men, *BKS* study only men, *DGL* study mostly women; we find no effect on women
  - However, low wages from gender-discriminatory chances do decrease labor supply of men and women
- Advantageous unequal wages: only *BKS* find some negative effect and argue it might come through work tensions
  - With our design without peer interactions: no effect for high-wage workers

# Fairness of Chances



- Large literature on ex-ante fairness (Diamond, 1967)
  - Potential issue is dynamic inconsistency: ex-ante fair becomes ex-post unfair (Myerson, 1981)
- Bolton et al. (2005) show that ex-ante chances do influence ex-post behavior
  - Less ex-post rejection of bad outcomes in mini-UG if chances are fair
- In contrast, workers' ex-post labor supply decision is independent of ex-ante chances

# Discrimination and Genders' Labor Outcomes



- Lower labor supply of women explains most of gender income gap (Goldin, 2014; Blau and Kahn, 2017)
  - Women are less present in high-pay occupations, typically demanding long work hours—lawyers, managers, professors
  - Women work less hours and earn less *within same occupation*—high-pay jobs have high returns to long hours

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  - Women work less hours and earn less *within same occupation*—high-pay jobs have high returns to long hours
- Standard explanation: women prefer job flexibility due to household tasks (Bertrand et al., 2010; **?**; Goldin, 2014; Wiswall and Zafar, 2017)
- Our results suggest: gender discrimination can also lower women's labor supply (for given monetary incentives)

# Self-Fulfilling Prophecy



- Young female lawyer starts new job, willing to work extra hours

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- Unsatisfied, she chooses not to work extra hours, thereby decreasing her value to firm
- Observing her behavior, initial choice of older partners is validated: their (wrong) belief now appears correct

# Conclusion



- Main Results:
  1. Negative gender discrimination in chances considerably reduces labor supply ($-22\%$ compared to equal low wages)
  2. Effect is roughly twice as large as decrease induced by low relative wages coming from fair or unfair chances
  3. Workers are insensitive to whether their disadvantageous wages result from fair chances or unfair chances
  4. Workers are unresponsive to any types of advantageous inequality that we examine

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  - First to study labor responses to facing discrimination, keeping monetary incentives constant
  - Different perspective on lower labor supply of women

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  - Among rare studies examining discriminated workers' behavior (e.g., Parsons et al., 2011; Glover et al., 2017)
  - First to study labor responses to facing discrimination, keeping monetary incentives constant
  - Different perspective on lower labor supply of women
- Open new avenues for research on workers' reactions to discrimination

# Thank you for your attention

# Demographics





Table: Demographic Characteristics of Workers

| Demographic Characteristic | Mean (SD) or Percentage |
|---|---|
| Age | 38 (12) |
| Participations | 141 (176) |
| Woman | .50 |
| Student | .16 |
| UK National | .93 |
| Caucasian/White | .88 |
| Employed Full-Time | .50 |
| Employed Part-Time | .20 |
| Job Seekers | .18 |
| Not in Paid Work | .06 |
| Other Work Situation | .05 |

Note: N varies from 1263 to 1271 by characteristic, because we could not obtain data from the platform on certain characteristics of a few workers.

Table: Descriptive Statistics—Labor Supply per Payment Scheme

| Low-Wage Workers | Mean | SD | Min. | Max. | *N* |
|---|---|---|---|---|---|
| EqLow | 43.20 | 27.63 | .04 | .16 | 128 |
| UneqFair | 37.44 | 29.16 | .06 | .17 | 125 |
| UneqUnfair | 39.22 | 27.76 | .04 | .15 | 143 |
| UneqDiscr | 33.62 | 26.41 | .08 | .11 | 143 |
| **High-Wage Workers** | **Mean** | **SD** | **Min.** | **Max.** | ***N*** |
| EqHigh | 44.03 | 28.93 | .04 | .20 | 128 |
| UneqFair | 43.23 | 29.64 | .03 | .20 | 127 |
| UneqUnfair | 43.50 | 28.85 | .02 | .20 | 143 |
| UneqDiscr | 45.74 | 26.72 | .02 | .16 | 145 |

Note: Labor supply is measured by the number of lines completed and ranges from 0 to 85. Min. and Max. indicate the percentage of workers completing the minimum and maximum number of lines.

Table: Hypotheses 1 and 2—P-values of Predicted Differences in Labor Supply between Payment Schemes

| | Low-Wage Workers | | | | High-Wage Workers | | | |
|---|---|---|---|---|---|---|---|---|
| Predicted Inequality | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Technique | Tobit | Dunn | Tobit | Dunn | Tobit | Dunn | Tobit | Dunn |
| BH Correction | No | No | Yes | Yes | No | No | Yes | Yes |
| EqLow(High) > UneqFair | 0.170 | **0.017** | 0.255 | **0.050** | 0.387 | 0.371 | 1.000 | 1.000 |
| UneqFair > UneqUnfair | 0.513 | 0.878 | 0.513 | 0.878 | 0.473 | 0.780 | 0.709 | 1.000 |
| UneqUnfair > UneqDiscr | **0.006** | **0.021** | **0.019** | **0.031** | 0.752 | 0.886 | 0.752 | 0.886 |
| *N* | 533 | 539 | 533 | 539 | 542 | 543 | 542 | 543 |

Note: One-sided p-values are presented, in the direction predicted. Dunn's tests are non-parametric. BH correction (Benjamini and Hochberg, 1995) is a False Discovery Rate procedure accounting for multiple hypothesis testing.

# Table: P-Values of Six Predicted Differences in Labor Supply between Payment Schemes

| | Low-Wage Workers | | | | High-Wage Workers | | | |
|---|---|---|---|---|---|---|---|---|
| Predicted Inequality | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Technique | Tobit | Dunn | Tobit | Dunn | Tobit | Dunn | Tobit | Dunn |
| BH Correction | No | No | Yes | Yes | No | No | Yes | Yes |
| EqLow(High) > UneqFair | 0.170 | **0.017** | 0.212 | **0.050** | 0.387 | 0.371 | 1.000 | 1.000 |
| EqLow(High) > UneqUnfair | **0.165** | **0.058** | 0.248 | **0.087** | 0.357 | 0.426 | 1.000 | 1.000 |
| EqLow(High) > UneqDiscr | **0.001** | **0.001** | **0.002** | **0.006** | 0.607 | 0.853 | 0.910 | 1.000 |
| UneqFair > UneqUnfair | 0.513 | 0.878 | 0.513 | 0.878 | 0.473 | 0.780 | 0.946 | 1.000 |
| UneqFair > UneqDiscr | **0.013** | **0.081** | **0.025** | 0.102 | 0.720 | 0.905 | 0.900 | 0.905 |
| UneqUnfair > UneqDiscr | **0.006** | **0.021** | **0.019** | **0.031** | 0.752 | 0.886 | 0.752 | 1.000 |
| *N* | 533 | 539 | 533 | 539 | 542 | 543 | 542 | 543 |

Note: One-sided p-values are presented, in the direction predicted. BH corrections account for multiple hypothesis testing.

Table: Tobit Regression of Labor Supply on Payment Schemes

| | Low-Wage Workers | High-Wage Workers |
|---|---|---|
| Scheme | (1) | (2) |
| UneqFair | -4.144 | -1.309 |
| | (4.337) | (4.547) |
| UneqUnfair | -4.008 | -1.607 |
| | (4.115) | (4.397) |
| UneqDiscr | -13.610**** | 1.146 |
| | (4.051) | (4.220) |
| Controls | Yes | Yes |
| Prob >F | 0.001 | 0.010 |
| Pseudo $R^2$ | 0.011 | 0.008 |
| *N* | 533 | 542 |

Note: EqLow(High) serves as baseline. Standard errors are in parentheses. Two-sided p-values: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$, $^{****}p < 0.001$.

# Reactions to Advantage vs. Disadvantage

Result3



Table: Hypothesis 3—P-values of Predicted Differences in Effect of Payment Schemes, between Low-Wage and High-Wage Workers

| | All Workers | |
|---|---|---|
| Predicted Inequality | (1) | (2) |
| Technique | Tobit | Tobit |
| BH Correction | No | Yes |
| $(\text{EqLow} - \text{UneqFair})_{LowWage} > (\text{EqHigh} - \text{UneqFair})_{HighWage}$ | 0.374 | 0.561 |
| $(\text{UneqFair} - \text{UneqUnfair})_{LowWage} > (\text{UneqFair} - \text{UneqUnfair})_{HighWage}$ | 0.503 | 0.503 |
| $(\text{UneqUnfair} - \text{UneqDiscr})_{LowWage} > (\text{UneqUnfair} - \text{UneqDiscr})_{HighWage}$ | **0.023** | **0.070** |
| $N$ | 1075 | 1075 |

Note: One-sided p-values are presented, in the direction predicted. BH corrections account for multiple hypothesis testing.

# Reactions to Advantage vs. Disadvantage



Table: Tobit Regression of Labor Supply on Payment Schemes, for All Workers

| Scheme | All Workers |
|---|---|
| UneqFair | -4.636 |
| | (4.385) |
| UneqUnfair | -4.432 |
| | (4.098) |
| UneqDiscr | -13.133*** |
| | (4.058) |
| UneqFair × HighWage | 2.030 |
| | (6.318) |
| UneqUnfair × HighWage | 4.066 |
| | (6.050) |
| UneqDiscr × HighWage | 13.307** |
| | (5.790) |
| HighWage | 2.291 |
| | (4.352) |
| Controls | Yes |
| Prob >F | 0.000 |
| Pseudo $R^2$ | 0.008 |
| *N* | 1075 |
| Restriction I | |
| UneqFair × HighWage = 0 | |
| UneqUnfair × HighWage = UneqFair × HighWage | |
| UneqDiscr × HighWage = UneqUnfair × HighWage | |
| Wald Test (two-sided p-value) = 0.073 | |

Note: EqLow serves as baseline. Standard errors are in parentheses. Two-sided p-values: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$, $^{****}p < 0.001$.

Table: P-values of Tests of Inequalities in Labor Supply between Payment Schemes, for Men and Women

| | Low-Wage Workers | | | | High-Wage Workers | | | |
|---|---|---|---|---|---|---|---|---|
| Predicted Inequality | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Technique | Tobit | Dunn | Tobit | Dunn | Tobit | Dunn | Tobit | Dunn |
| BH Correction | No | No | Yes | Yes | No | No | Yes | Yes |
| Men | | | | | | | | |
| EqLow(High) > UneqFair | **0.016** | **0.002** | **0.049** | **0.006** | 0.783 | 0.818 | 0.783 | 0.818 |
| UneqFair > UneqUnfair | 0.716 | 0.920 | 0.716 | 0.920 | 0.508 | 0.248 | 0.762 | 0.372 |
| UneqUnfair > UneqDiscr | 0.398 | 0.238 | 0.598 | 0.358 | 0.123 | **0.063** | 0.369 | 0.190 |
| N | 268 | 271 | 268 | 271 | 270 | 270 | 270 | 270 |
| Women | | | | | | | | |
| EqLow(High) > UneqFair | 0.732 | 0.767 | 0.732 | 0.767 | 0.206 | 0.104 | 0.619 | 0.311 |
| UneqFair > UneqUnfair | 0.305 | 0.751 | 0.457 | 1.000 | 0.517 | 0.801 | 0.775 | 1.000 |
| UneqUnfair > UneqDiscr | **0.001** | **0.003** | **0.004** | **0.009** | 0.981 | 0.994 | 0.981 | 0.994 |
| N | 265 | 268 | 265 | 268 | 272 | 273 | 272 | 273 |

Note: One-sided p-values are presented, in the direction predicted. BH corrections account for multiple hypothesis testing.

# Table: Tobit Regression of Labor Supply on Payment Schemes, for Men and Women

| | Low-Wage Workers | | | High-Wage Workers | | |
|---|---|---|---|---|---|---|
| | Men | Women | Men & Women | Men | Women | Men & Women |
| Scheme | (1) | (2) | (3) | (4) | (5) | (6) |
| UneqFair | -12.788** | 3.919 | -12.682** | 4.947 | -5.478 | 3.238 |
| | (5.950) | (6.311) | (5.909) | (6.307) | (6.674) | (6.351) |
| UneqUnfair | -9.366* | 0.715 | -8.896 | 5.069 | -5.213 | 3.342 |
| | (5.585) | (5.938) | (5.669) | (6.368) | (6.347) | (6.273) |
| UneqDiscr | -10.802* | -15.378*** | -11.092* | -1.698 | 7.046 | -3.679 |
| | (5.952) | (5.561) | (5.831) | (5.640) | (6.390) | (5.649) |
| UneqFair × Woman | | | 17.242** | | | -8.769 |
| | | | (8.605) | | | (9.269) |
| UneqUnfair × Woman | | | 9.878 | | | -9.287 |
| | | | (8.163) | | | (8.848) |
| UneqDiscr × Woman | | | -5.021 | | | 10.430 |
| | | | (7.966) | | | (8.533) |
| Woman | | | -5.400 | | | 5.317 |
| | | | (6.212) | | | (6.854) |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Prob >F | 0.053 | 0.000 | 0.000 | 0.045 | 0.000 | 0.003 |
| Pseudo $R^2$ | 0.014 | 0.019 | 0.013 | 0.013 | 0.010 | 0.010 |
| *N* | 268 | 265 | 542 | 270 | 272 | 542 |

Note: EqLow(High) serves as baseline. Standard errors are indicated in parentheses. Two-sided p-values: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$, $^{****}p < 0.001$.

# Extensive and Intensive Margins

Margins



Table: P-Values of Six Predicted Differences in Labor Supply between Payment Schemes for Low-Wage Workers, Hurdle Model

| Margin | Extensive | | Intensive | |
|---|---|---|---|---|
| Predicted Inequality | (1) | (2) | (3) | (4) |
| BH Correction | No | Yes | No | Yes |
| EqLow(High) > UneqFair | 0.228 | 0.285 | **0.044** | **0.087** |
| EqLow(High) > UneqUnfair | 0.208 | 0.312 | 0.168 | 0.210 |
| EqLow(High) > UneqDiscr | **0.003** | **0.021** | **0.006** | **0.035** |
| UneqFair > UneqUnfair | 0.501 | 0.501 | 0.787 | 0.787 |
| UneqFair > UneqDiscr | **0.039** | **0.078** | 0.138 | 0.206 |
| UneqUnfair > UneqDiscr | **0.026** | **0.079** | **0.029** | **0.086** |
| *N* | 533 | 533 | 533 | 533 |

Note: One-sided p-values are presented, in the direction predicted. BH corrections account for multiple hypothesis testing.

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