

# Gender Targeting in U.S. Newspaper Ads: 1940-2000

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<sup>1</sup>Research results and conclusions expressed are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia, the Federal Reserve System, or the Federal Reserve Board of Governors.

# Explicit Gender Targeting

## Gender pay gap

- ▶ Rapid convergence in the 80s, 90s; no change in the 60s, 70s
- ▶ Changes in human capital accumulation; technological change; home appliances; gender norms have been linked to progress

## Do employers overtly discriminate when they are allowed to?

- ▶ 1964 Civil Rights Act: “prohibits employment discrimination based on race, color, religion, sex and national origin.”
- ▶ Equal Opportunity Employment Commission formed in 1965.
- ▶ 1969 lawsuit filed by National Organization of Women for segregating job ads.
  - ▶ Pittsburgh Press v. Pittsburgh County on Human Relations et al. (1973)

## How do employers transition from discriminating to not?

- ▶ Do employers substitute towards more subtle targeting?
- ▶ Is any sluggish response correlated with sluggish employment or wage outcomes?

# Background: Job Ads in 1958

THE NEW YORK TIMES, SUNDAY, JAN. 5, 1958. W 7

## Help Wanted—Female

### TEMPORARY

ARE YOU . . .

Frankly 40—but on this side of 60? We take them younger, too . . .

A visitor in New York?

A housewife whose children are at school?

A permanent job seeker — or appointee whose duties do not start immediately?

Your FREE TIME is PROFIT-TIME

Put Your Skill to Work at INTERESTING TEMPORARY ASSIGNMENTS

UPTOWN & DOWNTOWN MANHATTAN LOCATIONS

Work 3 to 5 FULL days or more in our clients' offices

NEEDED NOW . . .

STENOGRAPHERS  
 TYPISTS-STAT TYPISTS  
 TRANSCRIPTION OPERS  
 COMPTR & CALC OPERS  
 SWITCHBOARD OPERS

No part days, evenings or Saturdays!  
 NO FEES TO APPLICANTS  
 interviews & phone calls 10 AM-4 PM

TEMPORARY OFFICE SERVICES

150 NASSAU ST., N.Y.C.  
 ROOM 621, WD 4-1352  
 130 W 42 ST., N.Y.C.  
 ROOM 2001, LA 4-3410

TEMPORARY

## Help Wanted—Female

### TYPISTS

(To Age 50)

— EXCELLENT SALARIES —  
 — REGULAR INCREASES —  
 Experienced Preferred

- MODERN OFFICES (AIR-CONDITIONED)
- COFFEE SERVICE
- LUNCHEON FACILITIES
- FINEST CO BENEFITS
- CONVENIENT LOCATION (DOWNTOWN MANHATTAN)

THE TRAVELERS INSURANCE CO.

80 JOHN ST.  
 MR. MALLORY

DI 4-7000

### TYPISTS EXPERIENCED

We offer a variety of interesting & diversified positions with salaries geared to your abilities. Excellent working conditions and congenial co-workers plus liberal company benefits. 5 DAYS 36 1/2 HOURS

Call Mr. D. Lotuso JU 2-6558

FOSTER WHEELER CORP.  
 666 5th Ave., NY (52-53 STS) 4th Fl

TYPISTS

## Help Wanted—Female

### TYPISTS

A New Job in Sight FOR YOU IN '58 . . .

IF YOU:

- Have a High School diploma
- Type 40-50 W.P.M.
- Are 17-30.

WE OFFER:

Promotional Opportunities IN OUR EXECUTIVE OFFICES

- COMPANY CAFETERIA
- MANY EMPLOYEE BENEFITS

APPLY IN PERSON 9 AM-2 PM  
 300 PARK AVE.  
 at 50th St. 8th Floor

### TYPISTS

Moving Up?

You'll get there faster with this expanding national company. If you're between 17-40, eager to learn we'll provide interesting, varied work. New air-conditioned offices, new equipment—plus low cost cafeteria, free life insurance, 11 paid holidays, company paid pension program, medical facilities.

INSURANCE COMPANY OF NORTH AMERICA COMPANIES  
 770 BROADWAY 19 ST., 10 FL.  
 Phone BE 3-9010, ext 314

### TYPISTS

EXPD BEGINNERS \$60-65 \$56

## Help Wanted—Female

### TYPIST

An experienced typist is needed to do varied work for top engineering company.

A minimum speed of 40 to 45 wpm is required.

Join our friendly professional staff in modern offices, conveniently located on three subways.

CALL MISS A. M. RETTIG BA 7-5000

BURNS and ROE, Inc.  
 Engineers & Constructors  
 160 WEST BWAY, NEW YORK

Typists \$60-\$75

Electric typewriter. Pleasant air-conditioned office. Engineering firm. VOLT TECHNICAL CORP.  
 241 Church St., NYC WO 6-0708

### LAB TECHNICIAN

BIO-CHEMISTRY RESEARCH

Fundamental work on enzymes including isolation. Master's degree or work equivalent preferred. Good starting salary. Modern community hospital located 5 minutes from Penn station on LIRR.

PERSONNEL DEPARTMENT  
 NORTH SHORE HOSPITAL  
 VALLEY ROAD MANHASSET, L.I.  
 MANHASSET 7-5000 EXT 272

### TYPIST-CLERKS

Interesting positions for young women with 6 months' to 1 year experience, providing promotional opportunities, good salaries and liberal benefits. Modern offices are conveniently located near

## Help Wanted—Female

### TYPISTS

COULD YOU TYPE THIS AD IN THREE MINUTES?

That's all it takes to qualify for one of an extremely wide variety of fine jobs we can recently offer. Do this from straight typing to Dictaphone training. From stencil to through multithread and vari-type.

These jobs can start as high as a month or more; all carry an excellent chance for advancement, all include free insurance, medical service and a profit sharing plan that works for you.

For a job with a future here's a chance to select one from our collection. Stop in any day this week, for Mrs. Kestelco on the 5th floor, look them over for yourself at MR. RILL LYNCH PIERCE, FENNER & BEANE, 70 Pine Street, New York 6

### TYPISTS

BEGINNERS—EXP

Five positions open at \$50-\$60 to start. Diversified duties. 35 wpm satisfied 9 to 11:30 3 days. Full employe benefits.

APPLY IN PERSON

120 Bway (Rm 41)  
 (Near Wall St)

### TYPISTS

Various Locations  
 Salary \$52 to \$60 Per Week  
 AGES 20-45 YEARS  
 Many employe benefits.

# Background: Job Ads in 1978

Help Wanted 2600

## PURCHASING ASSISTANT

m/W  
Increase your professional skills at a major book publisher

An Associate's Degree or equivalent plus 2 years work experience earns you an opportunity to enlarge the scope of your know-how and puts you in position for long range growth with this major book publisher. You'll be involved in invoice preparation, documentation, obtaining competitive bids. Heavy phone contact with vendors and company requisitioners. Salary \$168+ depending on experience. Excellent fringe benefits. Interesting environment. For interview appointment:

Call Janet Twiss  
935-3127

An equal opportunity employer M/F

### PURCHASING

## Join A Winning Team! BUYER

Foster Wheeler a leading Fortune 500 company serving the electric utility field has an exciting career opportunity available for a buyer.

We are seeking an individual with an engineering degree and a strong background in buying castings.

Salary will be commensurate with experience. We offer a wide range of benefits and a professional and congenial atmosphere. Please send resume and salary history in confidence to:

Royal M. Cowles, Dept NTB 11/12

**FOSTER WHEELER ENERGY CORPORATION**  
110 SOUTH ORANGE AVENUE  
LIVINGSTON, NEW JERSEY 07039  
Equal Opportunity Employer M/F/H

## PURCHASING ASSISTANT BUYER

Due to growth and expansion of our company, we have a position avail-

Help Wanted 2600

## QUALITY CONTROL MANAGER

An interesting opportunity for an experienced Quality Control Manager to join the staff of the Northern NJ facility of this rapidly expanding consumer products manufacturer.

The individual we seek will have prior background to further develop, implement, and monitor an on-going corporate program in Quality Control. Previous experience in the printing industry is desirable, but not mandatory.

The successful candidate will receive an attractive compensation package as well as outstanding company paid benefits program.

Please send resume, in strict confidence, stating work history and salary requirements, to:

V.P. PERSONNEL  
**RUDCO INDUSTRIES, INC.**  
123 Tryon Ave. West  
Teaneck, NJ 07666

An equal opportunity employer M/F

### QUALITY

## SUPERVISION

Excellent opportunity to join top rated manufacturer electro/mechanical/plastic consumer goods.

Technically oriented person to seek out problem areas and initiate corrective test processes.

We seek college trained person with good verbal and written skills capable of accepting responsibility and growth.

- ...PAID Blue Cross
- ...PAID Blue Shield
- ...PAID Major Medical/Life
- ...PAID Dental
- ...PAID Pension
- ...PAID Holidays
- ...PAID Sick Days
- ...PAID Vacation
- ...PAID Tuition Refund

Submit resume or call Victor Turoman : 381-7000

Emerson Quiet Cool

Help Wanted 2600

## RADIATION THERAPIST

Full time. Experienced. Licensed. Good benefits.  
**DEEP DALE GENERAL HOSPITAL**  
55-13 LITTLE NECK PARKWAY  
Little Neck, N.Y. 11362  
(212) 428-3000; ext 618

## RADIOGRAPHER

-Level, 1 or 2-

Perform radiography of power plant pipe welds in accordance with Section 111 ASME code.

NIGHT SHIFT

Steady work, good pay & benefits. In-cluding profit-sharing. Ridgewood/Maspeth area.

(212) 386-0700 Ext 356

## RADIOLOGY TECHNOLOGIST

Full time plus some call position available for registered ARRT or CRT to work with EMI 700 Scanner (experience preferred but will train) and as a staff technologist.

Please join our JCAH expanding to the needs of our multicultural bilingual area with the beautiful sevier, rocky country, 2 hours east of San Diego, south of Palm Springs and just 30 miles from Mexico. Good salaries and benefits. Contact PERSONEL DEPT.

(714) 344-2120 Ext. 226  
8:30 AM to 5:00 PM  
Monday through Friday

## PIONEER'S MEMORIAL HOSPITAL

207 W. Legion Rd.  
Brawley, CA, 92227

RADIOLOGY Temp. approx 4 mos

## RADIO THERAPY TECHNOLOGIST

LICENSE REQ'D. Dvys. 9-5  
Major voluntary teaching hospital seeks exp'd Radio Therapy Technologist to work in fast-paced Radiology Dept. Challenge & good starting salary.  
Call Stan Giovannelli, 780-1862

LI College Hospital  
354 Henry St., Bklyn, NY 11201  
An Equal Opportunity Employer M/F

Help Wanted 2600

## REAL ESTATE

## OFFICE MGR. FOR PROMINENT FIRM

Process leases, handle collections at site office, no new government added, hi-rise bids. Supervise small staff. Typing required.

CALL: 575-1053

REAL ESTATE F/P/D \$25-\$35K

## CORPORATE REP

Our client, a Fortune 500 corporation, is seeking 2 management level individuals to administer a program of acquisition, disposition & leasing of office & industrial properties within their \$200MM+ portfolio. Corporate or institutional exp. a must. To apply, call (212) 227-8000 or write LOGIC Personnel Assoc., 170 Broadway, NYC 10038 (Agency).

## RECEIVING CLERK

Elizabeth Arden has an opening in its shipping & receiving area. The responsibilities will include handling and lifting cartons of merchandise plus associated clerical duties. Experienced applicants preferred.

Please pick up applications on the 26th floor from 10AM to 12 Noon on Monday, November 13th.

## ELIZABETH ARDEN

1345 Avenue of the Americas  
New York, New York 10019  
An Equal Opportunity Employer M/F

## RECEPTIONIST

Front desk spot in rapidly growing E.Side co. for dynamic individual. Hrs 9-5. Some travel. To 1115 F-PD  
CALL ELSA ABBEY 679-6644

## SNELLING & SNELLING

18 E. 41 St (Agency)

## RECEPTIONIST

## SALES PERSONALITY

Sales and Marketing Firm Grand Central Area, needs Bright, Hardworking person to handle phones, type and learn files. \$25-\$180 per week. Call Miss Ralph 535-0749 between 9-12 Bele Bele

Help Wanted 2600

## RECEPTIONIST

## Cosmopolitan MEET TOP EXECUTIVES

Flush new offices of executive health group seeks from desk receipt with pleasant, personable manner & the ability to handle some managerial duties. This is a low-keyed, non-pressured position with the apply to work with a professional staff, excel benefits program. Acquisition typog 50 wpm.

## Cosmopolitan

## THE SOURCE FOR PERMANENT & TEMPORARY POSITIONS

505 5th Ave 15th Fl 986-0590  
150 Broadway 4th Fl 964-5431  
118-09 Queens Bldg 544-5600  
Forest Hills Street Level

Equal Oppty/No Fee Agency

RECEPTIONIST F/P/D to \$175

## FASHION

Discount on clothes, plush offices Exc co. benefits have sm typog & wk bkgrnd. Gd command of language Call Anne Avon for appt. 679-6644

## SNELLING & SNELLING

18 E. 41 St (agency)

RECEIPT F/p/d \$170

## FORTUNE 500

Plush Park Ave corp needs poised, charming individual who types 45-50wpm. Outstanding benefits, medical, dental & profit sharing. Call Mary Trainor, 986-2040 (agency)

## DONNELLY

505 Fifth Ave (4251-181R)

Receptionist Fee Pd \$200

## PUBLISHING

Help Wanted 2600

## RECEPTIONIST

## Cosmopolitan PERSONNEL

Are you a bright, outgoing, warm, energetic individual? If so, we have the opportunity available for you with one of the leading universities. You will be responsible for creating a comfortable atmosphere in this busy receptionist's office, including everything from luggage to the use of our tennis courts. Some typog req. CL

## Cosmopolitan

## THE SOURCE FOR PERMANENT & TEMPORARY POSITIONS

505 5th Ave 15th Fl 986-0590  
150 Broadway 4th Fl 964-5431  
118-09 Queens Bldg 544-5600  
Forest Hills Street Level

Equal Oppty/No Fee Agency

RECEPTS F/P/D \$175

## PARK AVENUE

Type 40wpm Work in plush office facilities package. Call/see Doran, 986-5885

## ACCURATE agency 41E24St Rm 505

## EDITORIAL SECY F/P/D to \$175

## BI-LINGUAL

Fluent Spanish essential for changing position where flexibility & attention to details are essential: Precise, excellent skills, work on own initiative. Accurate packages provided by research oriented organization. See Brody Luckhurst, 796-5805  
ACCURATE agency 41E24St Rm 505

## RECEPTIONIST

Experienced on PBX 507 M switchboard a must. To greet the distinctive gentlemen. Prefer grad. No typing, some clerical. Top salary. Apply in person.

DUNHILL FIELDS  
45 East 57 St., N.Y. City

## This Paper

Use digitized newspaper text from the *Boston Globe*, *New York Times*, and *Wall Street Journal* ads from 1940-2000.

What were the trajectories of explicit gender targeting pre and post-legislation?

Did employers substitute in their language after passage of the Civil Rights Act and the formation of the EEOC?

Did substitution towards implicit targeting impede convergence in labor market outcomes?

## This Paper

Use digitized newspaper text from the *Boston Globe*, *New York Times*, and *Wall Street Journal* ads from 1940-2000.

What were the trajectories of explicit gender targeting pre and post-legislation?

- ▶ Common before mid-1960s, equally so for male and female applicants, concentrated in low-skill occupations
- ▶ Declines throughout the 60s, but still prevalent in the early 70s.

Did employers substitute in their language after passage of the Civil Rights Act and the formation of the EEOC?

- ▶ Occupations (or employers) who previously mentioned an explicit gender preference when it was legal use more "gendered" adjectives later on.
- ▶ These differences abate slowly.

Did substitution towards implicit targeting impede convergence in labor market outcomes?

## Previous Literature

- ▶ Prevalence of explicit gender targeting / policies
  - ▶ Darity Jr. and Mason (1998): Comb through newspaper ads from 1960
  - ▶ Goldin (1990): Employer surveys asking about gender roles.
  - ▶ Kuhn and Shen (2013), Hellester, Kuhn, and Shen (2017, 2020): Online ads in Mexico and China
    - ▶ Targeting in low-skill jobs, equally likely to be male or female
    - ▶ Age twist (target young females, old males)
    - ▶ Effects on applications, callbacks
- ▶ Impacts of legislation on discrimination
  - ▶ Donohue III and Heckman (1991), Kurtulus (2012, 2016), Miller (2017)
  - ▶ Unintended consequences: Chan and Eyster (2003), Autor and Scarborough (2008), Yagan (2016)

# Outline

1. Data Sources
2. Explicit Gender Targeting
3. Substitution to Implicit Gender Targeting?
4. Wages and Occupational Segregation

## Processing newspaper text files

ProQuest processes images of newspaper pages into text files (OCR)

- ▶ Job ads from *New York Times* (1940-2000), *Wall Street Journal* (1940-1998), and *Boston Globe* (1960-1983)

Steps to construct the data set (steps 1-3 are from earlier work)

1. Distinguish vacancy postings from other advertisements
2. Find the boundaries between vacancy postings
3. Identify the ad's job title  $\Rightarrow$  SOC code
4. Identify the party posting the ad; salary; personal adjectives; page on which ad appears
5. Explicit gender targeting:
  - ▶ Men: "young man," "young boy," "young men," (or old, mature, experienced), "guy friday," "male position,"...
  - ▶ Women: "young woman," "young girl," "young women," (or old, mature, experienced), "gal friday," "female position,"...

# Example

From the February 20, 1966 *New York Times*

Classified Ad (20) - The Times  
No. 100  
© 1966 The Times Company. All rights reserved. Printed in the U.S.A.

**Big Wage-Freeze**  
**Over 15 Years Experience**

**RECEPTIONIST**  
**TYPIST**

Very active management office seeking  
top notch sales people and clerical help.  
Training. Will train working with phone.  
Excellent benefits.  
Apply: STERN BROTHERS  
c/o Tom Perpeti  
51 West 27 St.  
New York, N.Y.

Receptionists \$70-95

**Airline**  
NO EXPERIENCE - CO. TRAINS. INC.  
DIAL Agency, 20 East 42 St  
DIAL Agency, 135 Bway  
NEAR WALL STREET

**RECEPTIONIST-EXEC**  
1000+ experience, well  
trained in the office &  
customer service.  
Apply: STERN BROTHERS  
c/o Tom Perpeti  
51 West 27 St.  
New York, N.Y.

\$90-100 **FEE NEGOT**  
**FRONT DESK AGENCY**  
FRONT DESK AGENCY  
111 W. 42 St. 10th Fl. N.Y.C.

**RECEPTIONIST/OAL FRIDAY**  
No. 1000. No. 1000. No. 1000.  
Apply: STERN BROTHERS  
c/o Tom Perpeti  
51 West 27 St.  
New York, N.Y.

**ROBERT HALF PERSONNEL**  
200 Madison Ave. 10th Fl. N.Y.C.

**receptionists**  
a new modern office  
great benefits  
Apply: STERN BROTHERS  
c/o Tom Perpeti  
51 West 27 St.  
New York, N.Y.

**madison avenue agency**  
OFFICE MANAGER  
FRONT DESK AGENCY  
111 W. 42 St. 10th Fl. N.Y.C.

**T A F T**  
OVER 1000+ EXPERIENCE  
1000+ EXPERIENCE  
1000+ EXPERIENCE

**THEATRICAL**  
**JOYCE**

11 W. 42 St. 10th Fl. N.Y.C.  
RECIPT TYPISTS \$80-90

Personnel Trainers  
No. 1000. No. 1000. No. 1000.  
Apply: STERN BROTHERS  
c/o Tom Perpeti  
51 West 27 St.  
New York, N.Y.

**RECEPTIONIST**  
1000+ EXPERIENCE  
1000+ EXPERIENCE  
1000+ EXPERIENCE

**GRAHAM-WHITE**  
99 E. 42 St. 10th Fl. N.Y.C.

# Example

**receptionist i typist** very active . office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

**receptionist** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

**receptionist gal friday** we operate an executive personnel . the position is for our staff . we require an alert . brie . reliable person with a rood phone voice . no skills -no exp . required . 365-75 start . many benefits . no fee , of course [[Robert Half Agency](#)]

**receptionist** a new Madison avenue agency designed for those interested in extra-ordinary and unique public con- tact positions . tee negotiable typing trainees or exp . Madison avenue agency

**corner mad th lobby receipt typist** 9 b divers i fiend work in plush aft . co pays fee 585 Taft open Washington s birthday 150 Broadway agency di 90330 one east 42 st mu p640 receipt no skills fee pd to theatrical Joyce 11 w 42 , 1 rm 700 ( ) receipt ty pi ts \$ 80-90 personnel trainees np exp , company trains gals with 40 wpm in the personnel department of a rep steel company . interesting-fee paid appeal agency , 20 e 42 st near wall street [[Appeal Agency](#)]

**receptionist \$ 80** this plush cg seeks gal with typing and that clean scrubbed look to meet 8 greet clients . any exp ok benefits bonus co pays fee graham-white vj e also interview eve s . call for apple 1 dl ag d i 9-1280 reception desk to 90 fee paid large park ave coy teach and reservations ; type ; attar and poised [[Graham White Agency](#)]

**record clerk r tv \$ 90-95** ad figure apt . 2-3 vars exp in banking r-insurance . hunt 8 peck , fee reimbursed emerita a en v 2 4 in for full time position in media- cal research of medical ' school ) r or intensive care experience . call . fy 2-600d , ext 177

# Example

**receptionist i typist [439022]** very active . office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

**receptionist [434171]** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

**receptionist gal friday [434171]** we operate an executive personnel . the position is for our staff . we require an alert . brie . reliable person with a rood phone voice . no skills -no exp . required . 365-75 start . many benefits . no fee , of course [\[Robert Half Agency\]](#)

**receptionist [434171]** a new Madison avenue agency designed for those interested in extra-ordinary and unique public con- tact positions . tee negotiable typing trainees or exp . Madison avenue agency

**corner mad th lobby receipt typist [436014]** 9 b divers i fiend work in plush aft . co pays fee 585 Taft open Washington s birthday 150 Broadway agency di 90330 one east 42 st mu p640 receipt no skills fee pd to theatrical Joyce 11 w 42 , 1 rm 700 ( ) receipt ty pi ts **\$ 80-90** personnel trainees np exp , company trains gals with 40 wpm in the personnel department of a rep steel company . interesting-fee paid appeal agency , 20 e 42 st near wall street [\[Appeal Agency\]](#)

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**record clerk r [434071] tv \$ 90-95** ad figure apt . 2-3 vars exp in banking r-insurance . hunt 8 peck , fee reimbursed emerita a en v 2 4 in for full time position in media- cal research of medical ' school ) r or intensive care experience . call . fy 2-600d , ext 177

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**receptionist i typist** [439022] very active . office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

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**record clerk r** [434071] tv \$ 90-95 ad figure apt . 2-3 vars exp in banking r-insurance . hunt 8 peck , fee reimbursed emerita a en v 2 4 in for full time position in media- cal research of medical ' school ) r or intensive care experience . call . fy 2-600d , ext 177

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**receptionist i typist [439022]** very **active** office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

**receptionist [434171]** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

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## Summary Statistics

	1940-63	1964-70	1971-2000	1940-2000
Explicit Male	0.036	0.013	0.002	0.017
Explicit Female	0.036	0.022	0.002	0.018
Male Page	0.292	0.206	0.006	0.150
Female Page	0.239	0.133	0.003	0.115
Male+Female Page	0.000	0.171	0.031	0.048
Ads (million)	3.3	1.8	3.9	9.1
with firm info	0.38	0.43	0.53	1.33
with salary info	0.11	0.09	0.20	0.39

## Summary Statistics

	Explicit Targeting			Gendered Pages		
	Male	None	Female	Male	None	Female
Male Page	0.440	0.262	0.101	1	0	0
Non-gendered Page	0.459	0.542	0.454	0	1	0
Female Page	0.110	0.197	0.454	0	0	1
Prefer Male	1	0	0	0.046	0.025	0.011
No explicit preference	0	1	0	0.945	0.947	0.919
Prefer Female	0	0	1	0.010	0.027	0.069
Percent of Ads	2.6	94.4	3.0	24.6	56.7	18.6

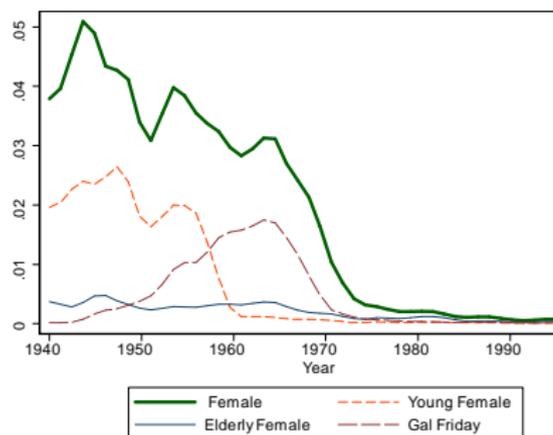
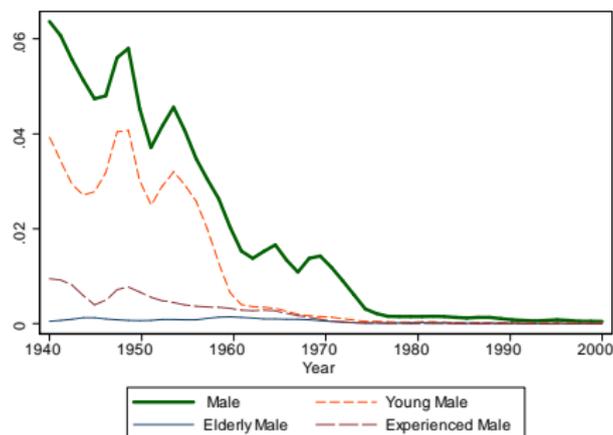
## Summary Statistics

	Explicit Targeting			Gendered Pages		
	Male	None	Female	Male	None	Female
Male Page	0.440	0.262	0.101	1	0	0
Non-gendered Page	0.459	0.542	0.454	0	1	0
Female Page	0.110	0.197	0.454	0	0	1
Prefer Male	1	0	0	0.046	0.025	0.011
No explicit preference	0	1	0	0.945	0.947	0.919
Prefer Female	0	0	1	0.010	0.027	0.069
Log Salary (Resid.)	0.018	0.001	-0.061	0.032	-0.092	-0.022
Regular schedule	0.163	0.146	0.359	0.086	0.133	0.305
Irregular schedule	0.018	0.006	0.009	0.010	0.006	0.005
Percent of Ads	2.6	94.4	3.0	24.6	56.7	18.6

# Outline

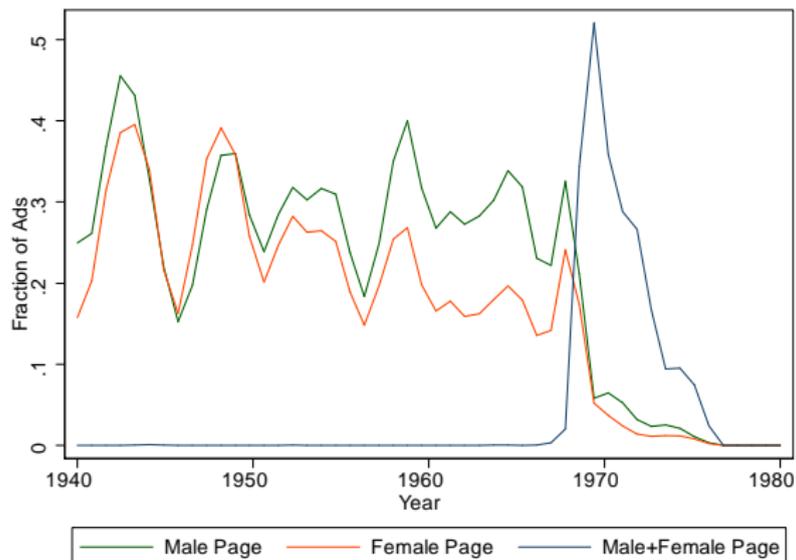
1. Data Sources
2. **Explicit Gender Targeting**
3. Substitution to Implicit Gender Targeting?
4. Wages Gaps and Occupational Segregation

# Trends in Explicit Gender Targeting

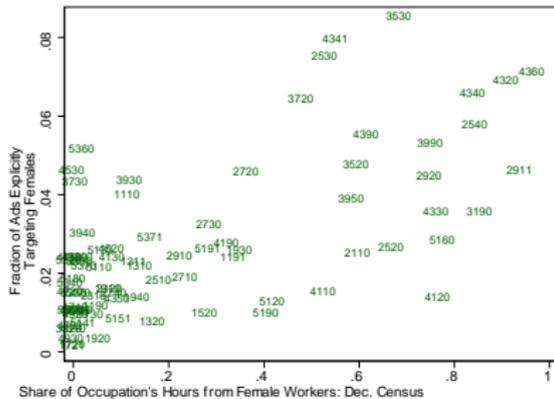
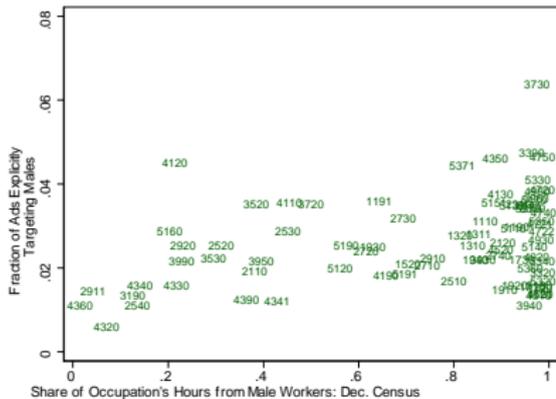


- ▶ 4.5 (1.4) percent of ads in the early 60s (70s) have an explicit mention of applicants for a gender.

# Trends in Gender-Specific Pages of Ads



# Overt Targeting by Occupation



# Outline

1. Data Sources
2. Explicit Gender Targeting
3. **Substitution to Implicit Gender Targeting?**
4. Wages and Occupational Segregation

## Gendered Adjectives

In the period in which targeting is legal (1946-63), regress targeting against a list of (500) personal adjectives  $\in \{\text{abrupt, accessible, ... , worrying, youthful}\}$

- ▶ Penalized regression, control for ad length, year fixed effects, and occupation fixed effects

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- ▶ Call  $w_a^{\text{male}}$  and  $w_a^{\text{female}}$  the number of mentions of the "male-predicting" or "female-predicting" personal adjectives in ad  $a$

## Regression Specification

In the pre-period, compute

- ▶ the frequency of explicit targeting  $\Rightarrow \bar{d}_o^{\text{female}}$  or  $\bar{d}_o^{\text{male}}$ .
- ▶ the average of "male" or "female" gendered adjectives  $\Rightarrow \bar{w}_o^{\text{female}}$ ,  $\bar{w}_o^{\text{male}}$
- ▶  $o$  indexes either occupations (4-digit) or firm  $\times$  occupation (2-digit) cells

## Regression Specification

In the pre-period, compute  $\bar{d}_o^{\text{female}}$ ,  $\bar{d}_o^{\text{male}}$ ,  $\bar{w}_o^{\text{female}}$ ,  $\bar{w}_o^{\text{male}}$

After gendered targeting is prohibited, compute  $w_{ot}^{\text{female}}$  and  $w_{ot}^{\text{male}}$  by  $o \times t$  pair

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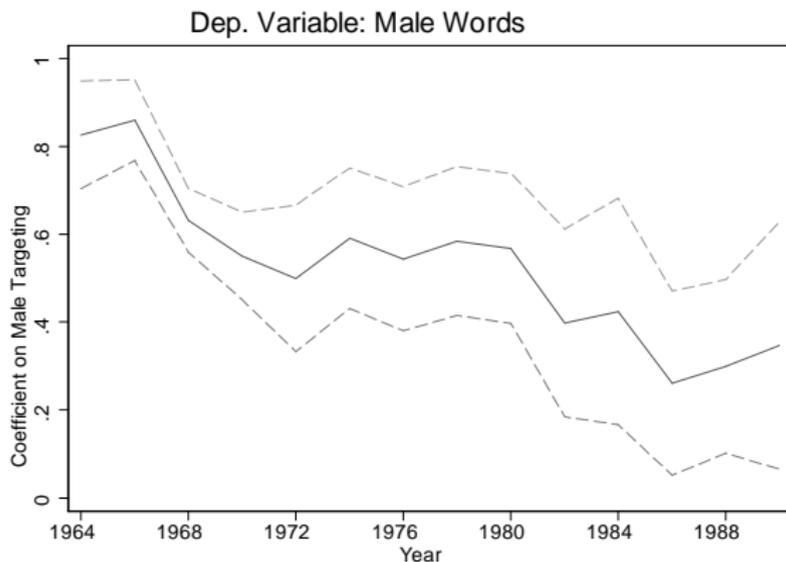
Regression:

$$w_{ot}^{\text{male}} = \beta_t + \mu_t \cdot \bar{d}_o^{\text{male}} + \nu_t \cdot \bar{w}_o^{\text{male}} \\ + \phi_t \cdot \bar{d}_o^{\text{female}} + \gamma_t \cdot \bar{w}_o^{\text{female}} + \epsilon_{ot}$$

(with a corresponding regression with  $w_{ot}^{\text{female}}$  as dependant variable)

- ▶ Coefficients of interest:  $\mu_t$  and  $\phi_t$ : relationship between past explicit targeting and current use of gendered adjectives.

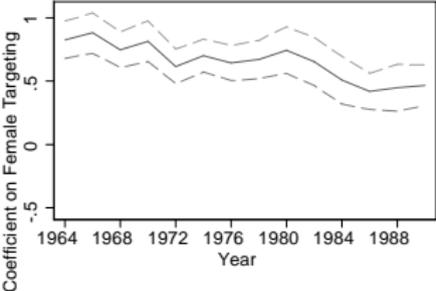
## Results: SOC



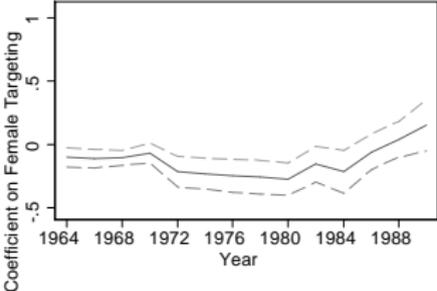
- ▶ Occupations with 1 extra mention of explicit targeting for males had 0.5 more mentions of male-specific gendered adjectives in the 1970s

# Results: SOC

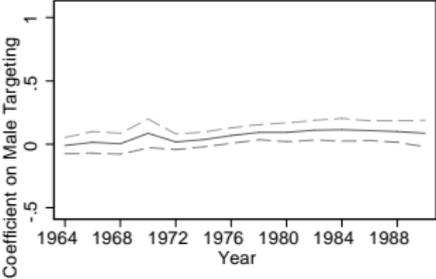
Dep. Variable: Female Words



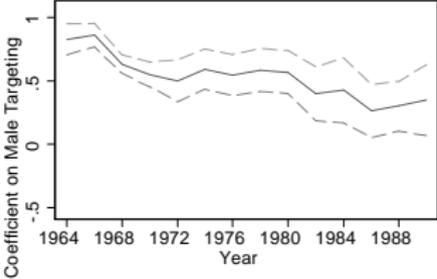
Dep. Variable: Male Words



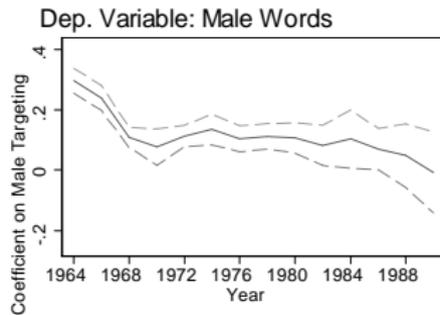
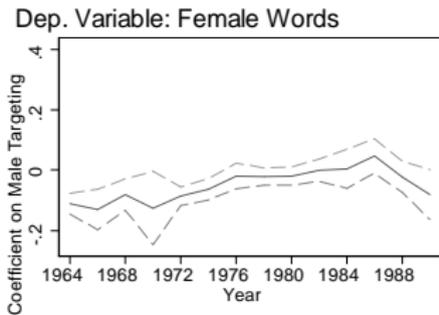
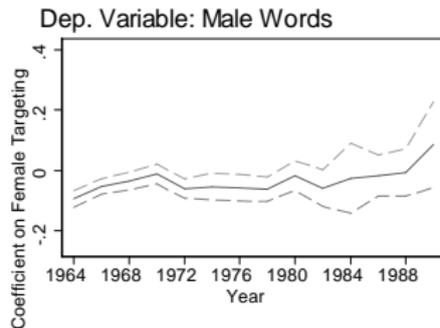
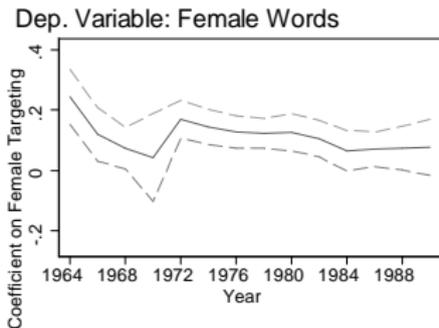
Dep. Variable: Female Words



Dep. Variable: Male Words



# Results: Firm-by-SOC



# Outline

1. Data Sources
2. Explicit Gender Targeting
3. Substitution to Implicit Gender Targeting?
4. **Wages and Occupational Segregation**

# Correlation between gendered language and labor market outcomes

In the pre-period, compute  $\bar{d}_o^{\text{female}}$ ,  $\bar{d}_o^{\text{male}}$ ,  $\bar{w}_o^{\text{female}}$ ,  $\bar{w}_o^{\text{male}}$

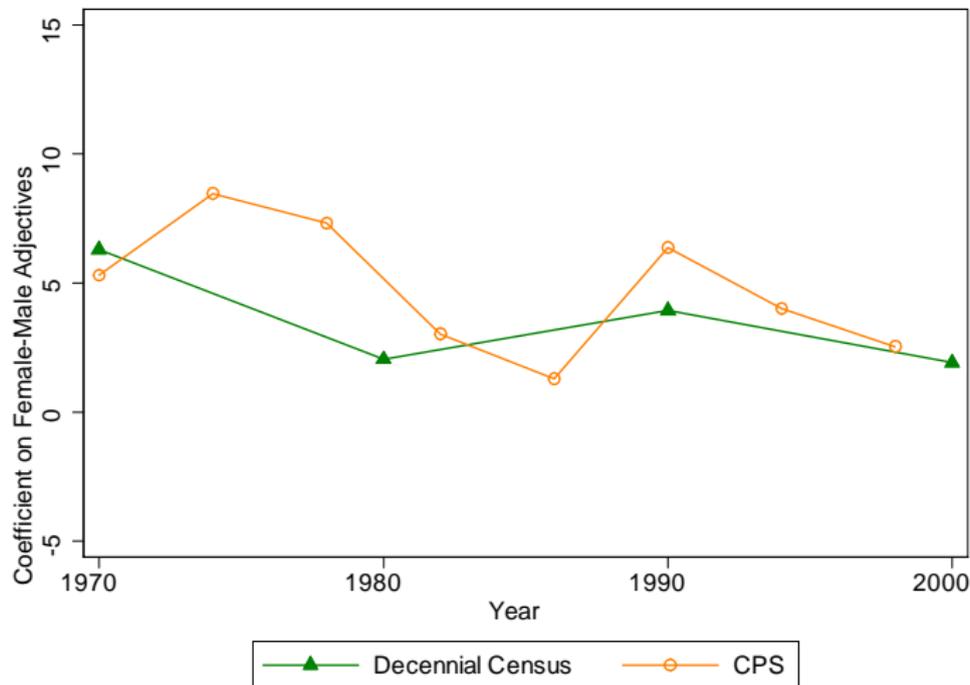
After gendered targeting is prohibited, compute  $w_{ot}^{\text{female}}$  and  $w_{ot}^{\text{male}}$  by  $o \times t$  pair

Regression:

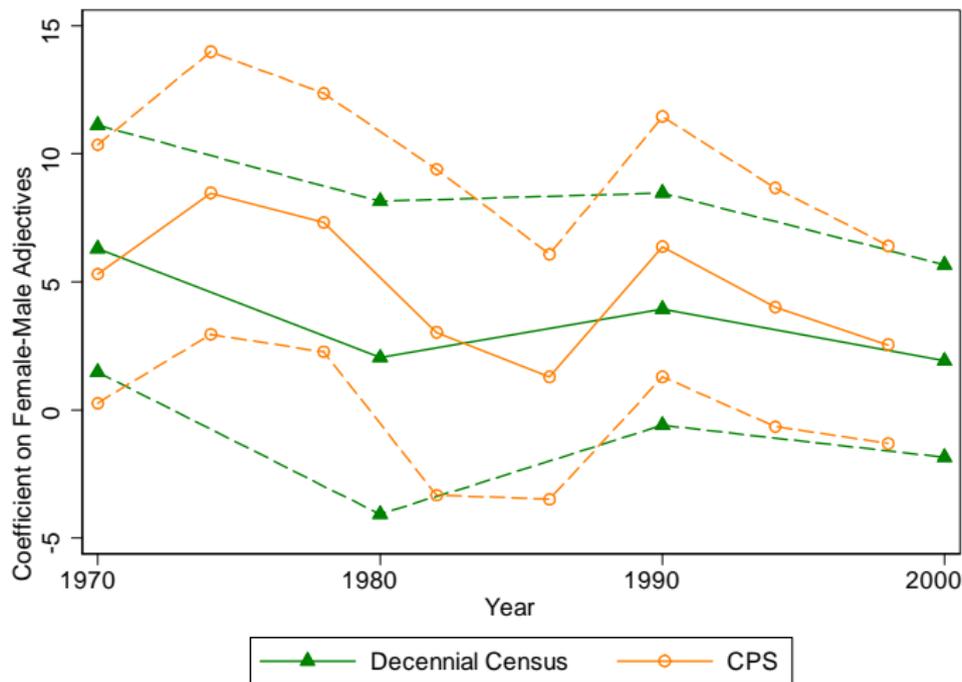
$$y_{ot} = \beta_t + \delta_t \cdot (w_{ot}^{\text{male}} - w_{ot}^{\text{female}}) + \mu_t \cdot \bar{d}_o^{\text{male}} + \phi_t \cdot \bar{d}_o^{\text{female}} \\ + \nu_t \cdot (\bar{w}_o^{\text{male}} - \bar{w}_o^{\text{female}}) + \theta_t \cdot \bar{y}_o + \epsilon_{ot}$$

- ▶  $y_{ot}$ : labor market variable:  
{share of female workers, log average wage} from CPS ASEC or Decennial Census

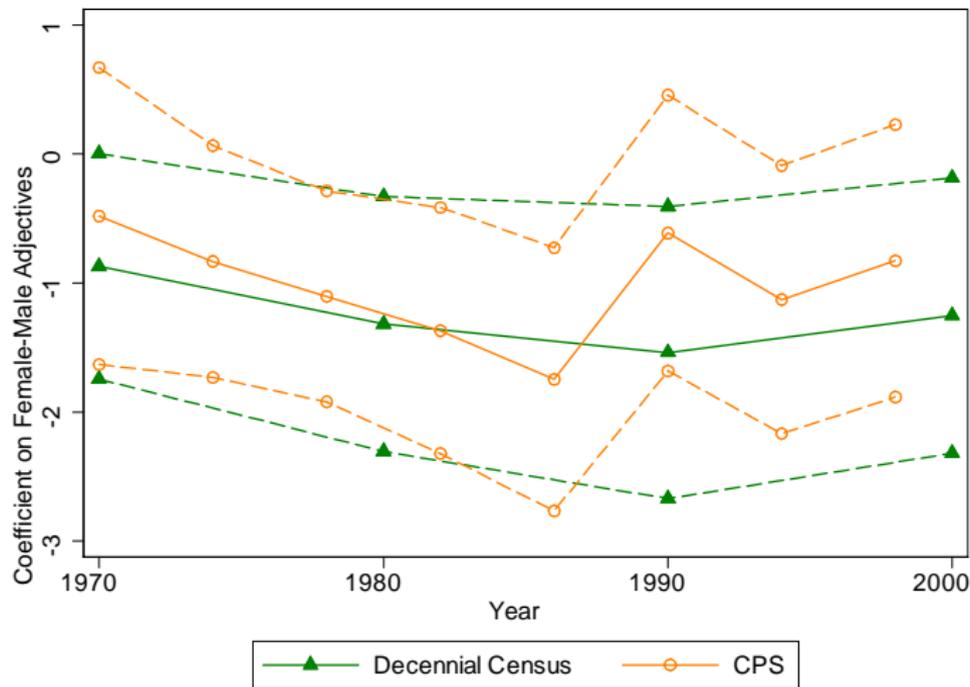
## Substitution to Female Words, Away from Male Words Correlated with Higher Female Labor Share



# Substitution to Female Words, Away from Male Words Correlated with Higher Female Labor Share



# Substitution to Female Words, Away from Male Words Correlated with Lower Wages



# Recap

- ▶ Study firm gender targeting between 1940s to 90s (primarily 50s to 70s)
- ▶ Explicit gender targeting was common up to early 1970s
- ▶ Occupations (firms) with more explicit gender targeting before mid 1960s use more gendered adjectives after
- ▶ Gendered adjectives post 1970 correlate with labor outcomes: female share of workers, average wages, female-male wage gap.