# Labour Markets, Behavioural Norms and Identity

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### Question

• Do labour markets reinforce gender norms by rewarding individual traits differently according to gender?

#### Supreme Court Ruling in Sex-Bias Case Hailed by Women's Rights Groups

and difficult to work with.

COURT, From Al The case began in 1983 when Ann B. Hopkins, a management consultant, was not among the 47 employees selected for partnership at Price Waterhouse, one of the nation's "big eight" accounting firms, even though she brought in more business than any of the other 87 candidates for partnership. One supervisor suggested that she should "walk more femininely, talk more femininely, dress more femininely, wear makeup, have her

er's decision before an employee there was no discrimination in the first place and that Hopkins could can be made to justify it. Justice Byron R. White also connot show that the comments she cited played any role in the specific

curred but said that Brennan was decision in her case. The reason she requiring employers to produce obwas rejected, the company argued, jective evidence, as opposed to testimony, to meet their burden of was because she was too abrasive proof

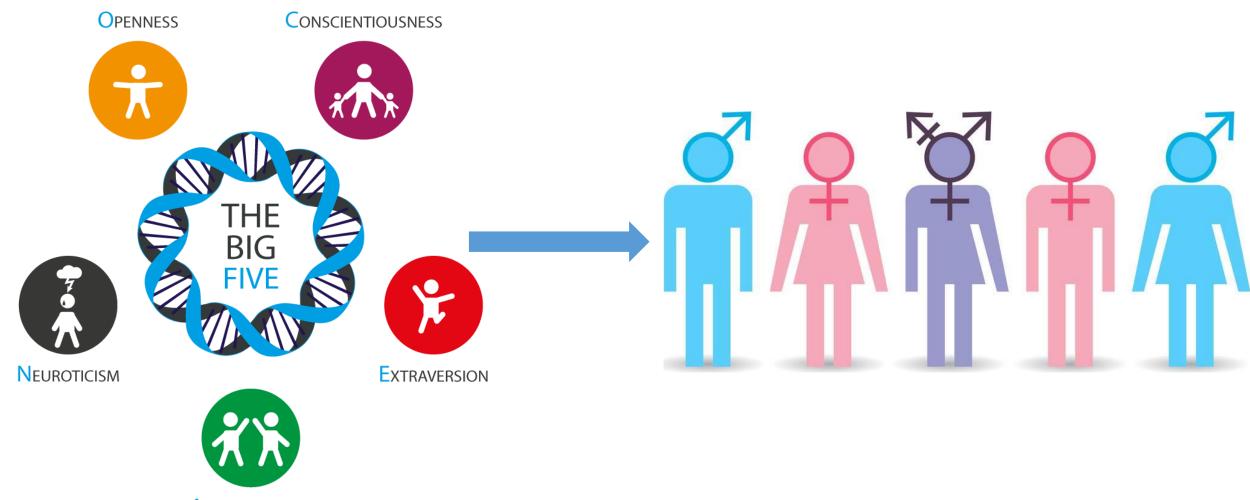
The company said that an em-Justice Anthony M. Kennedy joined in dissent by Chief Justice ployee must prove "sex stereotyping" by male partners was the cen-William H. Rehnquist and Justice tral reason; that Hopkins must Antonin Scalia, said the decision was "certain to result in confusion" show she would have been made a partner "but for" the discrimination. rather than clarify already "complex But Brennan said that an employrules for employment discriminaee must present evidence only that tion." In these cases, Kennedy said,

ANN B. HOPKINS

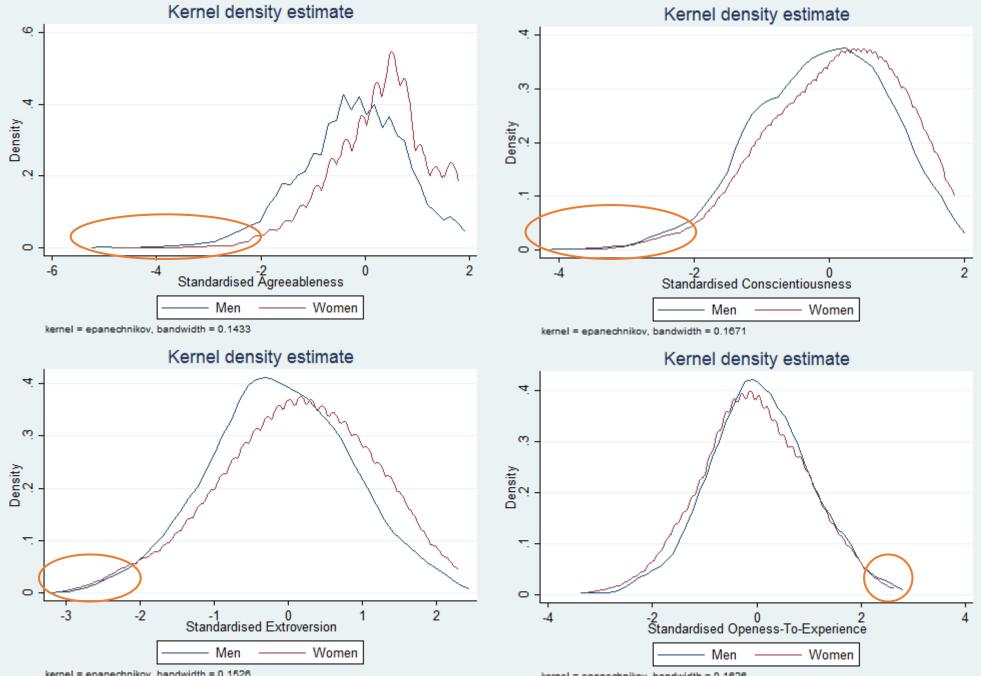


... sucd Price Waterhouse

## Gender Norms and Identity



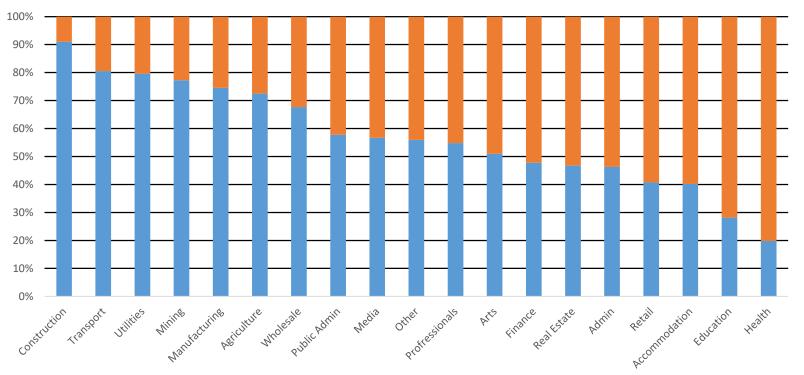
AGREEABLENESS



kernel = epanechnikov, bandwidth = 0.1526

kernel = epanechnikov, bandwidth = 0.1626





| Sector         | Men | Women | Total | Male % | Female % | Dominance |
|----------------|-----|-------|-------|--------|----------|-----------|
| Construction   | 809 | 80    | 889   | 91.00% | 9.00%    | Dominance |
|                | 397 | 96    | 493   | 80.53% | 19.47%   |           |
| Transport      |     |       |       |        |          |           |
| Utilities      | 86  | 22    | 108   | 79.63% | 20.37%   |           |
| Mining         | 180 | 53    | 233   | 77.25% | 22.75%   |           |
| Manufacturing  | 620 | 212   | 832   | 74.52% | 25.48%   |           |
| Agriculture    | 208 | 79    | 287   | 72.47% | 27.53%   |           |
| Wholesale      | 251 | 120   | 371   | 67.65% | 32.35%   |           |
| Public Admin   | 402 | 294   | 696   | 57.76% | 42.24%   |           |
| Media          | 102 | 78    | 180   | 56.67% | 43.33%   |           |
| Other          | 240 | 189   | 429   | 55.94% | 44.06%   |           |
| Profressionals | 466 | 384   | 850   | 54.82% | 45.18%   |           |
| Arts           | 105 | 101   | 206   | 50.97% | 49.03%   |           |
| Finance        | 182 | 199   | 381   | 47.77% | 52.23%   |           |
| Real Estate    | 65  | 74    | 139   | 46.76% | 53.24%   |           |
| Admin          | 149 | 173   | 322   | 46.27% | 53.73%   |           |
| Retail         | 439 | 639   | 1078  | 40.72% | 59.28%   |           |
| Accommodation  | 303 | 450   | 753   | 40.24% | 59.76%   |           |
| Education      | 303 | 773   | 1076  | 28.16% | 71.84%   |           |
| Health         | 302 | 1222  | 1524  | 19.82% | 80.18%   |           |

Men Women

| Occupation:                            | Men  | Women | Total | Male %         | Female % |
|--|------|-------|-------|----------------|----------|
| Machinery Operators and Drivers        | 593  | 51    | 644   | 92.08%         | 7.92%    |
| Technicians and Trades Workers         | 1211 | 215   | 1426  | <b>84.92</b> % | 15.08%   |
| Labourers                              | 667  | 339   | 1006  | 66.30%         | 33.70%   |
| Managers                               | 968  | 546   | 1514  | <b>63.94</b> % | 36.06%   |
| Professionals                          | 1146 | 1461  | 2607  | 43.96%         | 56.04%   |
| Sales Workers                          | 316  | 630   | 946   | 33.40%         | 66.60%   |
| Community and Personal Service Workers | 372  | 889   | 1261  | 29.50%         | 70.50%   |
| Clerical and Administrative Workers    | 392  | 1141  | 1533  | 25.57%         | 74.43%   |

### Finding the impact of being an outlier ( $\beta$ )

$$Y_i = \beta_0 + \beta_{outlier}I + \gamma_x X + \epsilon_i$$

### Does this effect differ for men compared to women?

$$H_0: \beta_{outlier}^W = \beta_{outlier}^M$$

| The whole economy |  | (1)         | (2)           | (3)         |
|-------------------|--|-------------|---------------|-------------|
| The whole economy |  | Outliers    | Psychological | All         |
|                   | VARIABLES  | Hourly Wage | Hourly Wage   | Hourly Wage |
|                   |  |             |               |             |
|                   | Female Outlier Agreeableness                       | -0.0750     | -0.162***     | -0.0945*    |
|                   |  | (0.0468)    | (0.0532)      | (0.0519)    |
|                   | Female Outlier Conscientiousness                   | -0.101*     | -0.00500      | -0.0299     |
|                   |  | (0.0543)    | (0.0622)      | (0.0619)    |
|                   | Female Outlier Extroversion                        | -0.0398     | -0.0929**     | -0.0618     |
|                   |  | (0.0398)    | (0.0440)      | (0.0418)    |
|                   | Female Outlier Openness                            | -0.134***   | -0.114*       | -0.0428     |
|                   |  | (0.0227)    | (0.0593)      | (0.0588)    |
|                   | Male Outlier Agreeableness                         | 0.0308      | -0.0432       | -0.0534*    |
|                   |  | (0.0246)    | (0.0319)      | (0.0308)    |
|                   | Male Outlier Conscientiousness                     | -0.0342     | -0.0159       | 0.0209      |
|                   |  | (0.0453)    | (0.0529)      | (0.0519)    |
|                   | Male Outlier Extroversion                          | 0.184***    | 0.105**       | 0.0391      |
|                   |  | (0.0437)    | (0.0477)      | (0.0463)    |
|                   | Male Outlier Openness                              | 0.0459**    | 0.0667        | 0.163***    |
|                   |  | (0.0210)    | (0.0573)      | (0.0571)    |
|                   | Psychological Controls                             | N           | Y             | Y           |
|                   | Other Controls                                     | N           | N             | Y           |
|                   | Observations                                       | 7,175       | 4,927         | 4,218       |
|                   | R-squared  | 0.010       | 0.099         | 0.287       |
|                   |  |             |               |             |
|                   | $H_0: \beta_{out\_agree}^W = \beta_{out\_agree}^M$ | 0.043       | 0.034         | 0.454       |
|                   | $H_0: \beta_{out\_consc}^W = \beta_{out\_consc}^M$ | 0.339       | 0.888         | 0.507       |
|                   | $H_0: \beta_{out\_extrv}^W = \beta_{out\_extrv}^M$ | 0.000       | 0.001         | 0.082       |
|                   | $H_0: \beta_{out open}^W = \beta_{out open}^M$     | 0.000       | 0.022         | 0.009       |
|                   | - · · · · · · · · · · · · · · · · · · ·            |             |               |             |
|                   |  |             |               |             |

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

| Gendered Industri | es   | (1)<br>Male Dominated | (2)<br>Balanced | (3)<br>Female Dominated |
|-------------------|--|-----------------------|-----------------|-------------------------|
|                   | VARIABLES  | Hourly Wage           | Hourly Wage     | Hourly Wage             |
|                   |  |                       |                 |                         |
|                   | Female Outlier Agreeableness                       | -0.0776               | -0.0630         | -0.0631                 |
|                   |  | (0.143)               | (0.0739)        | (0.0888)                |
|                   | Female Outlier Conscientiousness                   | -0.161                | 0.0642          | -0.0751                 |
|                   |  | (0.240)               | (0.111)         | (0.0742)                |
|                   | Female Outlier Extroversion                        | -0.142                | -0.0329         | -0.0380                 |
|                   |  | (0.137)               | (0.0678)        | (0.0556)                |
|                   | Female Outlier Openness                            | 0.0928                | -0.0248         | -0.0677                 |
|                   |  | (0.207)               | (0.107)         | (0.0703)                |
|                   | Male Outlier Agreeableness                         | -0.0644               | -0.0500         | -0.193**                |
|                   |  | (0.0605)              | (0.0456)        | (0.0933)                |
|                   | Male Outlier Conscientiousness                     | 0.200*                | -0.0921         | 0.248**                 |
|                   |  | (0.109)               | (0.0765)        | (0.121)                 |
|                   | Male Outlier Extroversion                          | 0.0497                | 0.0327          | 0.208*                  |
|                   |  | (0.103)               | (0.0640)        | (0.112)                 |
|                   | Male Outlier Openness                              | 0.00679               | 0.0993          | 0.366***                |
|                   |  | (0.136)               | (0.0920)        | (0.0981)                |
|                   |  |                       |                 |                         |
|                   | Psychological Controls                             | Y                     | Y               | Y                       |
|                   | Other Controls                                     | Y                     | Y               | Y                       |
|                   | Observations                                       | 932                   | 1,784           | 1,290                   |
|                   | R-squared  | 0.281                 | 0.342           | 0.319                   |
|                   |  |                       |                 |                         |
|                   | $H_0: \beta_{out\_agree}^W = \beta_{out\_agree}^M$ | 0.929                 | 0.866           | 0.286                   |
|                   | $H_0: \beta_{out\_consc}^W = \beta_{out\_consc}^M$ | 0.161                 | 0.225           | 0.017                   |
|                   | $H_0: \beta_{out\_extrv}^W = \beta_{out\_extrv}^M$ | 0.236                 | 0.448           | 0.040                   |
|                   | $H_0: \beta_{out\_open}^W = \beta_{out\_open}^M$   | 0.723                 | 0.367           | 0.000                   |
|                   |  |                       |                 |                         |

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

| Gendered Occupations |  | (1)<br>Male Occupation | (2)<br>Balanced Occupation | (3)<br>Female Occupation |
|----------------------|--|------------------------|----------------------------|--------------------------|
|                      | VARIABLES  | Hourly Wage            | Hourly Wage                | Hourly Wage              |
|                      | Female Outlier Agreeableness                       | -0.137                 | -0.161*                    | -0.0882                  |
|                      |  | (0.114)                | (0.0887)                   | (0.0686)                 |
|                      | Female Outlier Conscientiousness                   | 0.104                  | -0.105                     | 0.00893                  |
|                      |  | (0.165)                | (0.0986)                   | (0.0834)                 |
|                      | Female Outlier Extroversion                        | -0.0759                | 0.00153                    | -0.103*                  |
|                      |  | (0.106)                | (0.0696)                   | (0.0546)                 |
|                      | Female Outlier Openness                            | -0.247                 | -0.148*                    | 0.0624                   |
|                      |  | (0.233)                | (0.0852)                   | (0.0829)                 |
|                      | Male Outlier Agreeableness                         | -0.0522                | -0.0961*                   | -0.0339                  |
|                      |  | (0.0553)               | (0.0508)                   | (0.0538)                 |
|                      | Male Outlier Conscientiousness                     | 0.0778                 | -0.0218                    | 0.0580                   |
|                      |  | (0.0980)               | (0.0864)                   | (0.0821)                 |
|                      | Male Outlier Extroversion                          | -0.0670                | 0.0673                     | 0.0307                   |
|                      |  | (0.0957)               | (0.0678)                   | (0.0864)                 |
|                      | Male Outlier Openness                              | -0.0579                | 0.244***                   | 0.291***                 |
|                      |  | (0.127)                | (0.0823)                   | (0.101)                  |
|                      | Psychological Controls                             | Y                      | Y                          | Y                        |
|                      | Other Controls                                     | Y                      | Y                          | Y                        |
|                      | Observations                                       | 930                    | 1,950                      | 1,375                    |
|                      | R-squared  | 0.230                  | 0.168                      | 0.208                    |
|                      |  | •                      |                            | ·                        |
|                      | $H_0: \beta_{out\_agree}^W = \beta_{out\_agree}^M$ | 0.467                  | 0.487                      | 0.490                    |
|                      | $H_0: \beta_{out\_consc}^W = \beta_{out\_consc}^M$ | 0.889                  | 0.499                      | 0.660                    |
|                      | $H_0: \beta_{out\_extrv}^W = \beta_{out\_extrv}^M$ | 0.946                  | 0.466                      | 0.167                    |
|                      | $H_0: \beta_{out\_open}^W = \beta_{out\_open}^M$   | 0.472                  | 0.001                      | 0.071                    |
|                      |  |                        |                            |                          |

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

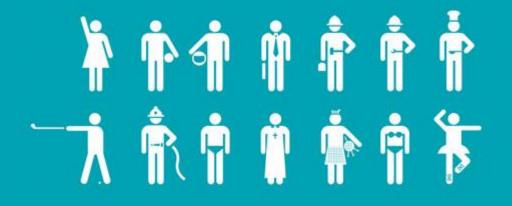
|  | actinition  |             |             |
|--|-------------|-------------|-------------|
|  | (1)         | (2)         | (3)         |
|  | 2 S.D.      | 1.5 S.D.    | 1 S.D.      |
| VARIABLES  | Hourly Wage | Hourly Wage | Hourly Wage |
|  |             |             |             |
| Female Outlier Agreeableness                       | -0.0945*    | -0.0268     | 0.0338      |
|  | (0.0519)    | (0.0413)    | (0.0300)    |
| Female Outlier Conscientiousness                   | -0.0299     | -0.0645     | -0.0123     |
|  | (0.0619)    | (0.0405)    | (0.0299)    |
| Female Outlier Extroversion                        | -0.0618     | -0.0167     | -0.0125     |
|  | (0.0418)    | (0.0329)    | (0.0278)    |
| Female Outlier Openness                            | -0.0428     | -0.113***   | -0.0618**   |
|  | (0.0588)    | (0.0353)    | (0.0270)    |
| Male Outlier Agreeableness                         | -0.0534*    | -0.0217     | 0.0393      |
|  | (0.0308)    | (0.0278)    | (0.0242)    |
| Male Outlier Conscientiousness                     | 0.0209      | -0.00390    | -0.0204     |
|  | (0.0519)    | (0.0346)    | (0.0267)    |
| Male Outlier Extroversion                          | 0.0391      | 0.0635**    | 0.0402      |
|  | (0.0463)    | (0.0314)    | (0.0250)    |
| Male Outlier Openness                              | 0.163***    | 0.0529      | 0.0392      |
|  | (0.0571)    | (0.0338)    | (0.0261)    |
| Psychological Controls                             | Y           | Y           | Y           |
| Other Controls                                     | Y           | Y           | Y           |
| Observations                                       | 4,218       | 4,218       | 4,218       |
| R-squared  | 0.287       | 0.289       | 0.288       |
|  |             |             |             |
| $H_0: \beta_{out\_agree}^W = \beta_{out\_agree}^M$ | 0.45        | 0.907       | 0.854       |
| $H_0: \beta_{out\_consc}^W = \beta_{out\_consc}^M$ | 0.51        | 0.204       | 0.802       |
| $H_0: \beta_{out\_extrv}^W = \beta_{out\_extrv}^M$ | 0.08        | 0.042       | 0.073       |
| $H_0: \beta_{out_open}^W = \beta_{out_open}^M$     | 0.01        | 0.000       | 0.001       |

#### Widening the definition of an outlier

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# **Discussion and future research**



|                          | outw_a~e         | outw_e~v | outw_c~c          | outw_o~e |
|--------------------------|------------------|----------|-------------------|----------|
| outw_agree<br>outw_extrv | 1.0000<br>0.0219 | 1.0000   |                   |          |
| outw_consc<br>outw_opene |                  |          | 1.0000<br>-0.0570 | 1.0000   |

