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Gender stereotyping and self-stereotyping among Danish managers

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1. Introduction

It remains a puzzle why so few women have reached top management positions or become directors in large firms despite the fact that in many countries women have overtaken men in terms of educational qualifications and have been full-time labor force participants for decades. This is even true in the ‘female-friendly’ Nordic countries (Author, 2008), and (Author (2013)). Notably, Arulampalam *et al.* (2007) and Mandel (2012) find that the invisible barriers for high skilled women to reach top management positions, often referred to as “the glass ceiling”, are stronger in the Nordic countries than in many other European countries, although the former are considered as having some of the smallest gender gaps in labor markets. What can explain this? Explanations offered range from differences in human capital and ability, lack of role models or working time flexibility, and work-life balance problems (Bertrand (2018)). Recently, focus has increasingly shifted to mechanisms like ‘unconscious bias’, gender stereotyping, and self-stereotyping attitudes (Schein (2007), Koenig *et al.* (2011)). This is also the literature this paper wants to add to.

Despite many similarities, the Nordic countries differ in a number of respects. Norway and Iceland were among the first in the world to implement a binding gender quota of 40 percent women for boards of directors in listed firms. Denmark and Sweden have no binding quotas for boards of directors. All Nordic countries have fairly long maternity and parental leave periods and generous schemes for days to take care of sick children (Author *et al.* (2008)). However, Denmark differs from the other Nordic countries. Thus, the Danish leave schemes related to child birth have continuously been extended, and since 2002 it is 18 weeks maternity leave and 32 weeks parental leave. None of these weeks are earmarked to the fathers. Danish mothers take up around 90% of the one year long leave period. Sweden, Norway, and Iceland have for decades had a parental leave policy that aims at a more equal split of the leave periods between parents in connection to child births. In these countries, fathers tend to take up a much higher share of the leave period compared to Danish parents (Author, 2008), Kleven *et al.* (2019).

According to the EIGE Gender Statistics Database on the largest listed companies, Denmark has the lowest female share (17 percent in 2019) among executives in decision making positions when comparing to other Nordic countries. For Norway, the same figure is 27 percent, while Sweden, Finland, and Iceland have slightly lower female shares (24, 21, and 20 percent, respectively). The average female share in all 28 EU countries was 19 percent in 2019, i.e. marginally higher than in Denmark.

One hypothesis may be that the very gender unbalanced family friendly schemes in Denmark where women still tend to be the primary care-taking persons after child birth may maintain or even reinforce gender stereotypes among younger cohorts of families which have been exposed to the parental leave schemes during recent decades. Research on the German parental leave schemes and the father months introduced in 2007

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4 indicates that a more equal split of parental leave periods between the parents has a direct effect on the gender
5 norms and gender stereotypes (Unterhofer and Wrohlich (2017)).
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9 The aim of this study is to enhance our understanding of how gender stereotypes and self-stereotyping
10 contribute to the highly persistent dearth of females in top management positions by using data collected from
11 a large sample of managerial employees in Danish private sector firms. Thus, our study differs from earlier
12 studies of gender stereotypes and managers that are mostly based on (experimental) studies of samples drawn
13 from the general population or consisting of students. Based on the survey we construct measures of gender
14 stereotypes and self-stereotypes and examine the gender differential in stereotypes and self-stereotypes.
15 Thanks to the relatively large size of the sample and rich data, we can in addition to gender explore variation
16 in stereotypes and self-stereotypes in other dimensions like individual, job and employer characteristics.
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23 The remainder of the paper is structured as follows. Section 2 highlights relevant aspects of the literature on
24 gender stereotypes and self-stereotyping. In Section 3, the data is presented, Section 4 describes the
25 measurement of stereotypes and self-stereotyping, and how these measures vary with the managers' individual
26 characteristics. In Section 5 we run some simple regressions in order to take a closer look at how gender-
27 stereotype attitudes and beliefs about own managerial ability vary by characteristics of the managerial
28 employee and the firm s/he is employed at. In Section 6, the results and their implications for policy and further
29 research are discussed.
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36 2. Theoretical background and previous research

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39 The traditional approach to study gender gap in top management positions is to look at the “demand” side, the
40 processes by which men are more likely become promoted into management positions. Stereotype attitudes of
41 managerial employees are important as they are the persons with influence on promotion decisions and hence
42 may have an impact on the supply of candidates for managerial positions and the gender composition of the
43 pipeline of future managers. Stereotype attitudes towards female managers are often considered to be a key
44 determinant of the glass ceiling. There is scant direct evidence on the extent to which stereotypes among
45 decision makers belonging to the favored group contribute to the persistence of or slow changes in the
46 managerial gender gap.
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53 2.1 Stereotype attitudes of managers

54 A typical definition of stereotypes is ‘a widely held but fixed and oversimplified image of a particular type of
55 person or thing’, Bordalo *et al.* (2016). Gender stereotypes can be *descriptive* (how people do or are), as in
56 statistical discrimination models where they are rational as the differential treatment reflects imperfect
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4 information. Following Schein (1973) and Bem (1974) a literature has built up documenting the prevalence of
5 gender differences in gender stereotypes regarding successful managers.
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8 What gives rise to gender stereotypes? A prominent theory in psychology is Social Role Theory (Eagly, 1987)
9 according to which gender stereotypes develop from society's gender division of labor. That is, how tasks and
10 jobs are divided by gender is the key driver of differences in behaviors also in other domains, and contributes
11 to persistent gender stereotype attitudes. Social Role Theory is potentially interesting in the case of Denmark
12 as a strong feature of the Danish labor market is the pronounced gender segregation by sector and industry
13 (Mandel, 2012). Moreover, as mentioned above, a feature of Danish family policies, and parental leave policies
14 in particular, is that they target the woman in the household as the person mainly responsible for taking care
15 of the children. Thus, there are no weeks of parental leave earmarked for the fathers.
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21 Role incongruity theory (Eagly and Karau, 2002) and the identity theory of Akerlof and Cranton (2000) stress
22 that if the stereotypes of male behavior and traits are more congruent with the role as a successful leader, then
23 women will tend to be disadvantaged in promotions to leadership positions.
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27 The literature on discrimination has mainly documented unequal treatment of members of minorities, whereas
28 less is known about how to reduce prejudice against minorities like female managers and how to mitigate
29 stereotypes and their consequences for those affected, see the survey by Bertrand and Duflo (2017). Prominent
30 research themes are the impact of increasing the exposure of minority members to majority decision makers
31 and the role of interpersonal contacts. The evidence that policies increasing exposure, such as quotas or
32 affirmative action, affect majority members' attitudes towards the minority is rather mixed. Moreover, studies
33 from business settings are rare.
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40 Researchers in psychology have carried out lab experiments with so-called de-biasing treatments (surveyed by
41 Bertrand and Duflo (2017)), which aim at reducing prejudice and stereotyping views. In a workplace context,
42 firm policies to promote gender equality and improved work and life balance can be seen as de-biasing
43 strategies, as ways of "teaching" employees to be less biased against female employees. Systematic evidence
44 of the impact of these policies and "gender aware" workplaces is scarce, however.
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51 2.2 Self-stereotyping attitudes of managers

52 Stereotypes may also operate by being *prescriptive*, that is, inform people how a member of their group should
53 be like or behave (Kanter (1977), Heilman (2001), Bertrand (2020)). It is especially the prescriptive nature of
54 stereotypes that are important for the question we are dealing with, as prescriptive stereotypes can influence
55 the "supply side" of the managerial labor market and employees' managerial career aspirations (Correll (2004),
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4 Nielsen and Madsen (2019)). Two mechanisms are important here. First, stereotypes act as gender identity
5 norms and affect the person's view of her/himself. Thus, if according to the norms, some jobs, tasks or roles
6 in the workplace are seen as more male or female, the stereotype will influence the person's career aspirations
7 as s/he adjusts her/his self-view to what is considered appropriate for her/his gender group. When gender
8 identity norms are strong, the minority (women) are likely to share the beliefs with the majority (men). Second,
9 social image concerns may also play a role, as the employee may fear sanctions for deviating from the
10 prescribed stereotype, and so, if the costs of deviation are high, this influences your career aspirations.
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17 The prescriptive property of stereotypes may affect employees' beliefs about their own performance. For a
18 model and experimental evidence; see Bordalo *et al.* (2019). When the tasks are in what is considered as the
19 male domain, and a male and a female employee's actual ability is the same, the stereotypes make the man
20 having higher expectations of his performance than the woman. As a consequence, males tend to overestimate
21 and females underestimate their true ability. Self-stereotyping attitudes has been shown by e.g., Latrofa *et al.*
22 (2010) to be stronger for low status groups as their members identify themselves more strongly with their
23 ingroup.
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30 Psychology scholars have examined how the minority members' attitudes can be influenced focusing on
31 mentoring or coaching as means to undo stereotype threat effects. Short-term impacts are often found to be
32 positive. A related line of research focuses on female leaders/managers as role models for other women and
33 how they influence attitudes of their group members and their beliefs about their own abilities (and hence
34 increase their aspirations). As noted by Bertrand and Duflo (2017), only few studies are available and even
35 fewer are about managerial employees.
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40 Common to both descriptive and prescriptive stereotypes is that they give rise to self-fulfilling prophecies. If
41 employers and top managers experience fewer female managers they invest less in their female employees'
42 management skills, and the same logic applies to the employees themselves (females invest less as the pay-off
43 is higher for males). The prescriptive nature of stereotypes implies that even if others (superiors) do not hold
44 stereotyping attitudes, the employees adjust to what is expected of their gender, with the same outcome as a
45 result.
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51 The subsequent empirical analysis is partly guided by the existing literature and hypotheses developed therein,
52 partly explorative in nature. For the latter, we exploit the information about individual characteristics, aspects
53 of careers and employer characteristics, which are rarely available in data used in previous research. The aim
54 is to shed light on questions like: Do gender stereotypes and self-stereotypes differ by gender of managers?
55 Do the expectations of the skills demanded for successful managers differ by gender? As especially top
56 managers have an influence on promotions and the composition of the pipeline, their stereotypes are of
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particular interest. Do gender self-stereotypes (beliefs in own ability) differ by gender? The prescriptive nature of stereotypes makes persons adjust their self-views leading females (males) to conceive of themselves as less (more) able to hold managerial positions. The under- and overestimation of one's own managerial ability affects the individual's career aspirations. Thus, exploring variation in stereotype and self-stereotype attitudes between different levels in the corporate hierarchy is of interest. Do stereotypes vary with age (cohort), tenure in current firm or position? Plausibly, managers with different length of experience and at different levels have been exposed to varying degrees to different managers of both genders. Learning from experience and exposure could influence their stereotype attitudes. This question is important because policies that aim at increasing the exposure of the minority to the majority (and vice versa) builds on the assumption that the learning mechanism is effective. Attitudes toward gender among top managers are potentially very important. A recent study by Duchin, Simutin and Sosyura (2020) shows that CEOs' attitudes impact gender-related policies including the promotion of women. Thus, learning is a key component of policies like gender quotas and affirmative action. It is of course also central to the idea of the importance of role models.

3. Sample description

The bulk of data used in this study have been collected in cooperation with an organization called *Lederne* (The Association of Danish Managers), which regularly analyzes questions related to corporate governance and management issues based on surveys among their members. Members of *Lederne* are managerial employees in firms and organizations in Denmark, in the 'for profit' as well as in the non-profit sectors. The main topic in the survey used in this study was firms' use of different management practices and the respondents were asked a fairly large number of questions regarding the management form, style, and practices of the organization in which they are employed in managerial positions. In addition, two questions about gender stereotypes (see below) were included at the end of the questionnaire. By this procedure, we expect to reduce a potential risk of answering in a politically correct manner and to reduce attrition due to unwillingness to answer questions exclusively related to gender stereotyping.

The internet-based survey was sent out by YouGov to randomly selected members of the Association of Danish Managers in May 2014. The sampling strategy was to stop sampling when 3,500 survey respondents had been obtained. Eventually, 3,737 members answered the survey, out of which 538 members were from non-profit or public-sector organizations. The latter are excluded from the sample analyzed here (as the recruitment process is different in public sector organizations), leaving us with 3,199 managers in the private sector employed in 1,953 different companies. This means that 1,454 firms had more than one respondent participating in the survey. Due to missing or incomplete information, only 2,972 observations can be used,

918 female and 2,054 male managers, respectively, employed in 1,875 firms; see Table 1 for further information about the respondents.¹

(Table 1 about here)

The average age of the respondents is 47 years, and they have 26 years of work experience and 10 years of tenure in the current firm. Female managers are slightly younger and accordingly have accumulated fewer years of experience and shorter firm tenure. On the other hand, female managers have a higher level of formal education than their male peers.

4. Measures of gender stereotypes

One of the first empirical analyses of management and gender stereotypes is the study by Schein (1973). Here the *Schein Descriptive Index* (SDI) was introduced where respondents are asked to select a number of characteristics (out of 92 items) which they consider to be ‘typically male’, ‘typically female’, and ‘typical for a successful manager’. The correlation between ‘typically male/female’ and ‘typical for a successful manager’ is used as the measure of gender stereotypes; for details, see Schein (1973). Schein formulated the ‘think manager – think male’ hypothesis based on this approach. If the correlation between the selected items for ‘typically male’ and ‘typical for a successful manager’ is high and the correlation between ‘typically female’ and ‘typical for a successful manager’ is low, this is taken as an indication of a high degree of gender stereotypes.

According to the surveys in Gmür (2006) and Koenig *et al.* (2011), typical correlations between traits of successful managers and typical males are found in the [+0.50, +0.75] range (higher for male respondents than for female respondents), while the same correlations for female traits typically lie in the [0.00, 0.40] interval. As for the latter, the female respondents tend to have much higher correlations than the male respondents.

An alternative measure is the *Bem Sex Role Index* (BSRI), first proposed in Bem (1974). To construct this measure, the items are classified a priori as either ‘masculine’, ‘feminine’, or ‘neutral’, and the respondents are then asked to choose among these items to characterize an ‘ideal manager’. When the respondents tend to pick many items from the masculine list and few items from the feminine list, this is seen as reflecting gender-stereotype attitudes. Empirical studies using the BSRI index, which are also in most cases based on samples of students or a small number of managers as respondents, find that the majority of the selected items tend to be chosen from the ‘masculine’ list; see for instance Powell and Butterfield (1979) and the survey in Gmür (2006). The advantage of the BSRI approach relative to the SDI is that fewer items need to be included in the survey. The advantage of the SDI approach is, however, that it is not necessary to construct the groups ‘masculine’, ‘feminine’, and ‘neutral’ in advance. These are defined by the answers of the respondents. Since masculine and feminine characteristics are not fully objective categories and since they may change over time,

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4 this can be a weakness of the BSRI approach. Based on these considerations from earlier research, we propose
5 two measures of stereotyping and self-stereotyping attitudes, using a modified BSRI approach.
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8 A number of more recent studies of gender stereotypes use lab experiments in order to circumvent the problems
9 of revealing underlying attitudes and norms in a reliable way. The problem when it comes to analyzing
10 managers in lab experiments is that it is extremely difficult to get a large and representative sample of busy
11 managers to participate in time-consuming lab experiments. As is clear from the survey by Niederle (2016),
12 most lab experiments are using students as subjects. There are several reasons why they may not be
13 representative of the population of managers. Managers are almost by definition a highly selected group – 2-3
14 per cent of the labor force are in senior management positions – that have passed several ‘hurdles’ during their
15 careers, have been willing to participate in competitive promotion contests, and have proven managerial skills.
16 Their preferences for competition and their attitudes concerning what is needed to become a successful leader
17 and stereotypes may also have changed during this process, either because they are influenced by their peers
18 or because they have to adopt these attitudes in order to become promoted or to survive as a manager. Hence,
19 as has been shown by Adams and Funk (2012), their economic preferences differ markedly from those of the
20 general population. It is therefore important to complement the evidence from lab experiments with student
21 subjects with analyses of data collected from ‘real managers’.
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33 *Definition of the Stereotype Index SI*

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36 As managerial employees are busy people the survey has to be fairly short in order to avoid severe attrition
37 problems. Furthermore, the survey questions have to be relevant for managers. This means that, unlike studies
38 using the BSRI approach, traits which could be considered completely irrelevant for being a (successful)
39 manager cannot be included. Consequently, 11 items relevant for successful managers, which at the same time
40 differ with respect to being considered as masculine, feminine, or neutral were selected. The respondents were
41 asked: *To which extent do you consider the following traits to be important for a successful manager:*
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46 *Masculine Items:* Determined, in self-control, willing to take risk, competitive, self-confident

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48 *Feminine Items:* Socially competent, dialogue-oriented, helpful

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50 *Neutral Items:* Result-oriented, visionary, innovative
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52 The categorization above is based on previous studies, primarily summarized in Gmür (2006). As discussed
53 by Gmür, it is difficult – to some degree by definition - to identify relevant feminine stereotype characteristics,
54 which are also relevant for successful managers. Thus, only three items are included, and their choice is guided
55 by what the literature (Berkerey *et al.* (2013), Gmür (2006)) has considered as predominantly feminine traits.
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Unlike earlier studies using the BSRI approach, the respondents were asked to *grade* the 11 items on a Likert scale from 1 to 5 (observations with “don’t know” answers were discarded), where 5 stands for ‘important to a very high extent’ and 1 for ‘not at all important’.

The information about the importance of each item allows us to rank masculine and female items according to the scores given by the respondents and we utilize this information in the construction of our Stereotype Index (*SI*). We define the stereotyping index as:

$$SI = \frac{M+}{2m} - \frac{F+}{2f} - \left(\frac{M-}{2m} - \frac{F-}{2f} \right)$$

where *M+* is number of masculine items among the 5 highest ranked items, *F+* is number of feminine items among the 5 highest ranked items, *M-* is number of masculine items among the 5 lowest ranked items, and *F-* is number of feminine items among the 5 lowest ranked items. *m* and *f* are The number of masculine and feminine items, *m* and *f*, are included to control for the difference in the number of masculine and feminine items. All values of *SI* lie in the interval [-1,+1]. Respondents who rank all masculine (feminine) items highest and all feminine (masculine) items lowest will obtain a value for *SI* of +1 (-1). In case of ‘ties’ where more than 5 items have the same score, the formula is modified and 5 is substituted by 5+x where 5+x is the number of items with highest score. The same procedure applies for *M-*, *F+*, and *F-*.

As can be seen from Table 2, the mean values of the *SI* vary across managerial subgroups. In line with other studies, such as Mihail (2006) and Berkery *et al.* (2013), female managers tend to have significantly lower *SI* scores than their male peers. The difference is not large, however, the variation within gender is about the same and so, distributions of stereotypes by gender overlap to a high extent. Thus, women seem largely to share men’s beliefs about important managerial traits. Exploiting the richness of our data, we can explore variations in stereotypes by other individual traits. Thus, we may note that the gender difference is smallest for the oldest and youngest age groups, partly driven by the fact that the youngest (male and female) managers, maybe somewhat surprisingly, have higher values on the gender stereotyping index (i.e., more masculine stereotypes) than managers in older age groups. This pattern is more pronounced for the female managers.

(Table 2 about here)

There is no significant gender difference in the stereotype index for CEOs, while at lower levels of the managerial pyramid, female managers have significantly lower scores (less masculine) on the stereotype index than their male peers. Interestingly, among the categories of male managers included in the survey, male CEOs have the lowest stereotype score. This is not the case for (the comparatively rather few) female CEOs in comparison with their female colleagues at lower levels.

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Definition of Self-Stereotype Measure: Beliefs about Own Ability Index, BOA

The survey also includes a question, henceforth called the BOA question: “*To which extent do you yourself possess the following traits?*”, followed by a list of the same 11 managerial abilities that were used in connection with the stereotypes question. The respondent is asked to rank to which degree s/he possesses the same traits as in the stereotype question on a Likert scale from 1 to 5 (as before ‘don’t know’ answers are discarded), where 5 stands for ‘important to a very high extent’ and 1 for ‘not at all important’.

The information from the answers to the BOA question is used to calculate a BOA index, parallel to the definition given for SI above. The higher the value of BOA, the higher is the relative score for typical masculine traits. Only managers who have subordinates have answered the self-stereotype question. As a consequence, there are somewhat fewer respondents: 1,485 male and 576 female managers, respectively.

As can be seen from Table 3, the mean and median values of BOA are lower for female managers than for male managers. Exploring additional dimensions, we observe that female managers in the age group 40-49 have on average the lowest value of the BOA index, i.e. female managers in this age group (curiously enough, the daughters of the so-called “red stockings”, the feminist cohort of the early seventies) have the most pronounced tendency to rate themselves highest on feminine traits and lowest on masculine traits.

(Table 3 about here)

The small number of female CEOs (16 observations) have the highest (numerically smallest) value of BOA among all female managers, confirming the hypothesis by Latrofa *et al.* (2010) that individuals in higher-status positions are less prone to self-stereotype into their own gender category (a similar pattern is also observed for male CEOs). Next, the differences described above are examined in a more formal regression analysis that caters for the determinants discussed above and includes a host of control variables.

5. Regression analyses

This section probes deeper into how stereotypes and beliefs about own managerial ability vary with the manager’s gender, age, tenure, and job level in the corporate hierarchy by estimating regression models in which *SI* and *BOA* are the dependent variables. The estimations are performed as OLS regressions on the full sample and firm fixed effects (FE) estimations on the subsample of observations with at least two respondents from the same, typically larger, firm. The FE estimations control for unobserved time invariant heterogeneity among firms.

The explanatory variables are of three types. The first is individual characteristics, that is, in addition to gender, age (a proxy for experience) and tenure in current firm and current job. The age and tenure variables capture

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4 differences in exposure to different managers and potential for learning. The same is true for job characteristics
5 which are indicators for level of the position in the corporate hierarchy. The third type consists of firm
6 characteristics, which focus on firm-level gender equality policies, the share of female managers in the firm
7 and on the presence of a role model female CEO. In addition, several firm variables are included as controls.
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11 12 13 14 *Stereotype Index regressions*

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16 Table 4 reports results from OLS and firm fixed effects estimations where the stereotyping index, *SI*, is
17 regressed on individual characteristics. Beginning with the former, the average stereotype index for female
18 managers is 0.080 points lower than that of their male peers. This number is only slightly higher than the “raw”
19 difference in Table 2 (-0.073). It is worth noting that the gender difference is very robust to inclusion on
20 individual, job and firm characteristics. Gender stereotype attitudes do not vary by age, are positively
21 correlated with tenure in current firm and are weaker for CEOs than for other managerial employees. The
22 positive tenure effect could reflect that longer tenure in same firm is associated with exposure to fewer and
23 less different managers. Likewise, CEOs who have been exposed to more managerial employees of both
24 genders could be better informed and hence, have less gender stereotype attitudes. When the regressions are
25 run separately by gender, the above-mentioned results turn out to be mainly driven by the male managers. In
26 fact, the results for female managers are different. Stereotype attitudes are strongly decreasing with age and
27 the rather small group of female CEOs do not have weaker stereotypes than other female managers. Both male
28 and female CXOs (CEOs and other members of the executive board) have more masculine stereotypes than
29 lower level managers. For males, stereotype attitudes are stronger, i.e. more masculine, the longer the person
30 has been in his current firm, whereas for females, this is not associated with differences in stereotyping
31 attitudes.
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42 The firm FE estimates are qualitatively similar to the OLS estimates.² The within firm gender differential is
43 somewhat lower (0.069). Splitting the sample by gender reveals that there for females is a U-shaped relation
44 with a minimum around 50 years, i.e. somewhat surprisingly, young female managers tend to hold more gender
45 stereotype norms than their older female peers. Female managers at the age of 50 tend to be the least gender-
46 stereotyping managers. Because of the cross-sectional nature of the data, it is not possible to conclude whether
47 gender stereotyping attitudes have become less prevalent, but the age patterns observed do not indicate that
48 gender stereotypes are less prevalent in younger cohorts of female managerial employees. Worth of note, also
49 within firms, CEOs have significantly less masculine stereotypes than other managers, indicating some
50 learning could take place as they climb the corporate ladder.
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57 *(Table 4 about here)*
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In Table 5, the results from extended OLS regressions are shown. Here, a number of observed firm characteristics are entered, for instance gender share of managerial employees and the use of family friendly policies in the company. The latter are three dummy variables constructed from answers in the survey about the strength of the focus of the firm on being a family-friendly workplace and on striving to have work-life balance for employees, and finally a dummy for whether the firm has a gender equality agreement with its employees. Besides these variables, leadership style (variables indicating external or internal recruitment, performance based promotions, and rules or dialogue based management style, described in (Author, 2017)), firm size (number of employees) and firm age, industry are included, but not shown in Table 5. Since these variables do not vary within the firm, their coefficients cannot be estimated in a firm fixed effects regression.

(Table 5 about here)

Most of the results from the OLS results in Table 4 are confirmed when adding a large number of firm controls. In particular, the estimate of the female dummy (-0.081) is remarkably robust. An interesting difference is the change in the coefficients of female CEOs and other female CXOs. In Table 5, the coefficient of the CEO variable is 0.128 and highly significant. For other CXOs, the opposite happens and the coefficient of female other CXOs turn negative (albeit insignificant). This means that when controlling for firm heterogeneity, female CEOs are significantly more masculine stereotyping than other female managers. For male CEOs, the opposite pattern is observed, also after controlling for observed firm characteristics.

In companies with a female CEO the other female managers tend to have less masculine stereotyping attitudes than in firms with male CEOs (coefficient -0.072 and significant). The managers, men as well as women, also tend to be less masculine stereotyping if they are employed in a company, which more strongly “strives to have work-life balance”. However, other gender composition and company level family-oriented policy variables are not significant, i.e., gender stereotypes do not seem to vary significantly between firms that differ with respect to these variables.

Self-stereotype index (BOA) regressions

The respondents' perceptions of their *own* managerial traits vary with individual, job, and employer characteristics as shown in Table 6. The table contains OLS as well as firm FE estimates with the *BOA* index as the dependent variable. Recall, the more negative the value of the *BOA* index is, the more does the manager consider herself/himself to have typical feminine managerial traits (and hence less typical masculine traits). Since only managers who have subordinates have answered the self-stereotype question, the estimations based on the *BOA* index are from a sample in which there are more managers at higher levels in the organizations.

When female managers assess their own managerial ability, they tend, as expected, to rate it significantly lower (that is rate their feminine traits higher) than their male peers. The OLS coefficient of the female dummy is

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4 significantly negative (-0.115) and quite robust to inclusion of firm fixed effects which only reduces the
5 numerical size marginally to -0.100. In fact, besides age, gender is the only other explanatory variable that has
6 an impact on the managerial employee's beliefs in own ability. Thus, women's self-stereotyping attitudes are
7 pronounced and do not change as they move up the corporate ladder, when controlling for age.
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14 The age profile for BOA is U-shaped. However, the estimates are only significant for female managers with a
15 minimum around the age of 45. In other words, middle-aged female managers tend to be the more feminine
16 self-stereotyping than younger and older female managers. The within-firm estimates display a similar pattern,
17 but do not differ significantly from zero. Differences in tenure in current firm or job position are, with one
18 exception, males staying longer in the same firm, not associated with systematic differences in beliefs about
19 own managerial ability.
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24 Controlling for unobserved between-firm differences, male executive suite members have significantly higher
25 BOA scores, i.e. *within* the firm, the top managers rate themselves significantly higher than other male
26 managers on the traits, which are typically considered important for successful managers. Unfortunately, due
27 to lack of data (that is, too few female CEOs in the sub-sample) this pattern cannot be estimated for female
28 managers.
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32 33 **6. Conclusions and discussion**

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35 This paper provides a fairly detailed documentation of the prevalence of gender-stereotyping attitudes and
36 beliefs about own managerial skills in a large sample of managers at different levels in Danish private-sector
37 firms. Although the data are from 2014, we think the analysis of them is still applicable today as there has been
38 very little progress regarding the position of women in top management of Danish firms. Thus, the share of
39 women on corporate boards was 19.3 per cent in 2014 and according to most recent numbers from Statistics
40 Denmark 19.4 per cent in 2018. Like some other studies, see Koenig *et al.* (2011), we find that female managers
41 on average have less gender stereotype attitudes of successful managers than their male peers, and that these
42 differences remain strikingly unchanged also after catering for a host of firm and individual characteristics. In
43 other words, there is a significant gender differential in stereotypes that is not due to the manager's labor
44 market experience, current job position or several observable differences in the workplace s/he is employed at
45 but seems to be widespread among all companies in Denmark.
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53 But there are notable differences among female managers, depending on where they are in the organization.
54 Compared to other female managers in the company, female CEOs hold significantly more gender stereotype
55 attitudes than their female peers at lower levels in the organization. Corresponding results are found by Adams
56 and Funk (2012) for Sweden. Interestingly a similar pattern is not observed for male CEOs and other managers.
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4 In fact, male CEOs have less gender stereotyping attitudes than other male managers, suggesting that some
5 learning has occurred as they advanced in their careers. Female managerial employees in firms with a female
6 CEO have less gender stereotype attitudes whereas male managers' attitudes are the same as in companies led
7 by a male CEO.
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11 With the data at our disposal, it is not possible to conclude whether this finding reflects the fact that the very
12 few women who succeed to reach top positions in Danish companies are a highly selected sample of female
13 managers with relatively masculine stereotypes compared to other managers. Or, that female managers who
14 have successfully climbed the ladders in the hierarchy, have changed their norms and attitudes and become
15 more masculine stereotyping over their careers. That is, they learn to overcome the problems of incongruence
16 between the role as a leader and female stereotypes by adopting and signaling mainly masculine stereotypes.
17 They also seem to have overcome lack-of-fit problems in the sense that they rate themselves significantly
18 higher on masculine traits than female managers at lower levels. Again, whether it is a selection effect or a
19 change in norms over time is a question which cannot be answered without access to panel data sets where
20 these managers can be followed over time.
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28 It might be expected that gender stereotype attitudes among Danish managers will be diminishing over time
29 and that younger cohorts of managers will be less masculine stereotyping. This has been observed in other
30 countries, Koenig *et al.* (2011).³The results in this study are different. Young and older female managers in
31 our data set are more gender stereotyping than women in mid-life (around the age 50) who have the lowest
32 score for the masculine stereotyping index also when controlling for many other factors. Thus, it is not obvious
33 that gender stereotyping in Danish companies will diminish over time, simply because there are no signs of an
34 overall convergence towards less stereotyping.
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40 There is some evidence from other countries that female led companies are more female friendly for women
41 at lower job levels with respect to gender gap in wages, promotions and employment. These results have been
42 found for the US, Bell (2005), Norway, Kunze and Miller (2017), but not for Denmark, Author *et al.* (2013).
43 In the current study it is found that managers (of both genders) in firms with a stronger focus on work-life
44 balance have less stereotypical attitudes. Other female friendly policies have no impact. Future studies should
45 analyze whether Denmark is different from other (Nordic) countries with respect to stereotyping behavior.
46 Surveys undertaken by the EU indicate that Denmark is different from Sweden, Iceland, and Norway with
47 respect to gender stereotyping attitudes relating to women in management, see EU Commission (2012). This
48 study cannot answer why there are these differences but point to different policies in Denmark with respect to
49 parental leave policies, Ellingsæter (2000), Albrecht *et al.* (2014), and Kleven *et al.* (2019), and the absence of
50 gender quotas for boards of directors, Author (2018), as a possible part of the explanation. A hypothesis is that
51 these policies may contribute to a slower change in gender stereotypes and hence also in self-stereotypes.
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4 A robust result from our analysis of self-stereotypes or beliefs about own managerial ability is that female
5 managers tend to rate themselves lower than their male peers on the masculine management traits and higher
6 on the feminine management traits. In other words, we find indications of distinct self-stereotyping patterns
7 and that the prescriptive nature of gender stereotypes contribute to females' (males') views of themselves as
8 less (more) able to hold managerial positions in the firm. Notably, for the whole sample, gender is the key
9 explanatory variable in explaining the variance in self-stereotype attitudes. Top executives rate themselves
10 higher on most managerial traits than managers at lower levels. In this regard, we observe no significant gender
11 differences.
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18 Overall, the results confirm the theories on the role of stereotyping norms and behavior. The lack-of-fit theory
19 seem to be highly relevant for the analysis of gender differences among managers in Danish private sector
20 companies. Whether this will change in the future is a difficult question to answer, based on analyses of cross-
21 sectional data. What is needed is longitudinal analyses that follow the managers over time allowing us to
22 observe what happens when the young cohorts become parents and climb the ladders in the organization or,
23 eventually, end up in flat careers. Longitudinal analyses would also be valuable for examination of the impact
24 of female top executives as role models and revision of gender stereotypes due to learning.
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30 The slowly changing norms and stereotypes may be an important explanation behind the paradox that Danish
31 women apparently are at least as qualified as their male peers and have been full-time labor market participants
32 for decades but still have large difficulties in climbing the last ladders in the organizations of private
33 companies. In her seminal paper from 2014, Claudia Goldin expressed the optimistic view that "The solution
34 does not (necessarily) have to involve government intervention and it need not make men more responsible in
35 the home (although that wouldn't hurt). But it must involve changes in the labor market, especially how jobs
36 are structured and remunerated to enhance temporal flexibility", Goldin (2014, p. 1091). The results of this
37 study indicates, however, that it may take more than getting more flexibility in the scheduling of work hours
38 in order to change the gender gap in careers, wages and hierarchical positions. Government policies and
39 affirmative actions that influence, directly or indirectly, norms and stereotypes may still be needed. Binding
40 gender quotas for board of directors may be one instrument which has already been implemented in many
41 countries. However, a potentially more effective instrument which may affect gender norms and stereotypes
42 much more broadly in the labor market might be to introduce father quotas on parental leave like in many other
43 European countries, i.e. reserve part of the very long Danish leave period related to child birth to the fathers in
44 order to promote a more equal division of the household responsibilities in the early careers of managers.
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References

- Adams, R.B. and Funk, P.C. (2012), "Beyond the Glass Ceiling: Does Gender Matter?" *Management Science*, Vol. 58 No.2, pp. 219–235.
- Akerlof, G. A. and R. E. Kranton (2000), Economics and Identity. *Quarterly Journal of Economics*, Vol. 115, pp. 715–753.
- Albrecht, J., P. S. Thoursie and S. Vroman (2014), "Parental Leave and the Glass Ceiling in Sweden", *Research in Labor Economics*, Vol. 41, pp. 89-114.
- Arulampalam, W., Booth, A. and Bryan, M. (2007), "Is there a Glass Ceiling over Europe? Explaining the Gender Pay Gap across the Wage Distribution", *Industrial and Labor Relations Review*, Vol. 60 No. 2, pp. 163-186.
- Bell, L. (2005). Women-led Firms and the Gender Wage Gap in Top Executive Jobs, IZA DP no. 1689, Bonn.
- Bem, S.L. (1974), "The Measurement of Psychological Androgyny", *Journal of Consulting and Clinical Psychology*, Vol. 42, pp. 155-162.
- Berkery, E., Morley, M. and Tiernan, S. (2013), "Beyond Gender Role Stereotypes and Requisite Managerial Characteristics: From Communal to Androgynous, the Changing Views of Women", *Gender in Management: An International Journal*, Vol. 28 No. 5, pp.278-298.
- Bertrand, M. (2011), "New Perspectives on Gender", ch 17. In: Ashenfelter O. and D. Card (eds.), *Handbook of Labor Economics*, pp. 1544-1590.
- Bertrand, M. (2018), "The Glass Ceiling", *Economica*, Vol. 85, pp. 205-231.
- Bertrand, M. (2020), "Gender in the Twenty-First Century", *American Economic Review, Papers and Proceedings*, Vol. 110, pp. 1-124.
- Bertrand, M. and E. Duflo (2017), "Field Experiments on Discrimination", in: Banerjee A. and E. Duflo (eds.), *Handbook of Economic Field Experiments*, pp. 309-393.
- Bhatia, N. and S. Bhatia (2021), "Changes in Gender Stereotypes over Time: A Computational Analysis", *Psychology of Women Quarterly*, Vol. 45, Issue 1, pp. 106-125
- Bordalo, P., Coffman, K., Gennaioli, N. and Shleifer, A. (2016), "Stereotypes", *The Quarterly Journal of Economics*, Vol. 131, Issue 4, November 2016, pp 1753–1794.
- Bordalo, P., Coffman, K., Gennaioli, N. and Shleifer, A. (2019), "Beliefs about Gender", *American Economic Review*, Vol. 109, Issue 3, pp 739–773.
- Correll, S. (2004), "Constraints into Preferences: Gender, Status, and Emerging Career Aspirations", *American Sociological Review*, Vol. 69, pp. 93-133.

1
2
3
4 Duchin, R., Simutin, M., and Sosyura, D. (2020), "The Origins and Real Effects of the Gender Gap:
5 Evidence from CEOs' Formative Years", forthcoming in *Review of Financial Studies*.

6
7
8 Eagly, A.H. (1987), *Sex Differences in Social Behavior: A Social-role Interpretation*. Hillsdale, NJ:
9 Lawrence Erlbaum.

10
11 Eagly, A.H. and Steffen, V.J. (1984), "Gender Stereotypes Stem from the Distribution of Women
12 and Men into Social Roles", *Journal of Personality and Social Psychology*, Vol. 46 No. 4, pp. 735-754.

13
14
15 Eagly, A. H., and Karau, S. J. (2002), "Role Congruity Theory of Prejudice toward Female
16 Leaders", *Psychological Review*, Vol. 109 No 3, pp. 573-598.

17
18
19 Ellingsæter, A. L. (2000), "Welfare States, Labour Markets and Gender Relations in Transition: The
20 Decline of the Scandinavian Model" in Boje T. P. and A. Leira (eds), *Gender, Welfare and the Market:
21 Towards a New Division of Labour*, London: Routledge. pp. 89-110.

22
23 EU Commission (2012), Special Eurobarometer 376, Women in Decision-making Positions, Report,
24 http://ec.europa.eu/public_opinion/index_en.htm.

25
26 Goldin, C. (2014). "A Grand Gender Convergence: Its Last Chapter", *American Economic Review*,
27 Vol. 104, No. 4, pp. 1091-1119.

28
29 Gmür, M. (2006), "The Gendered Stereotype of the 'Good Manager': Sex Role Expectations towards
30 Male and Female Managers", *Management Review*, Vol. 17 No. 2, pp. 104-121.

31
32
33 Heilman, M.E. (2001), "Description and Prescription: How Gender Stereotypes Prevent Women's
34 Ascent Up the Organizational Ladder", *Journal of Social Issues*, Vol. 57, pp. 657-674.

35
36
37 Kanter, R. M. (1977), *Men and Women of the Corporation*. New York, Basic Books.

38
39 Kleven, H., Landais, C., and Sjøgaard, J.E. (2019), "Children and Gender Inequality: Evidence from
40 Denmark", *American Economic Journal: Applied Economics*, Vol. 11, No. 4, pp. 181-209.

41
42
43 Koenig, A. M., Eagly, A. H., Mitchell, A. A. and Ristikari, T. (2011). Are Leader Stereotypes
44 Masculine? A Meta-analysis of Three Research Paradigms. *Psychological Bulletin*, 137(4), 616-642.

45
46
47 Kunze, A. and A. R. Miller (2017), "Women Helping Women? Evidence from Private Sector Data
48 on Workplace Hierarchies", *Review of Economics and Statistics*, Vol. 99, No. 5, pp. 769-775.

49
50
51 Latrofa, M., Vaes, J., Cadinu, M. and Carnaghi, A. (2010), "The Cognitive Representation of Self-
52 Stereotyping", *Personality and Social Psychology Bulletin*, Vol. 36, pp. 911-922.

53
54
55 Mandel, H. (2012), "Winners and Losers: The Consequences of Welfare State Policies for Gender
56 Wage Inequality", *European Sociological Review*, Vol. 28 No. 2, pp. 241-262.

57
58
59 Mihail, D. (2006), "Gender-based Stereotypes in the Workplace: The Case of Greece", *Equal
60 Opportunities International*, Vol. 25 No. 5, pp. 373-388.

1
2
3
4 Niederle, M. (2016), "Gender", in: J. Kagel and A. E. Roth (eds.), *Handbook of Experimental*
5 *Economics*, Princeton University Press, pp 481-553.

6
7
8 Nielsen, V. and Madsen, M. (2019), "Gender Diversity and Management Aspirations in Public Sector
9 Workplaces in Denmark", *Gender in Management*, Vol. 34 No. 6, pp. 465-488.

10
11 Powell, G. N. and D. A. Butterfield (1979), "The "Good Manager": Masculine or Androgynous?",
12 *Academy of Management Journal*, Vol. 22, No. 2, pp. 395-403.

13
14
15 Schein, V.E. (1973), "The Relationship between Sex Role Stereotypes and Requisite Management
16 Characteristics", *Journal of Applied Psychology*, Vol. 57 No. 2, pp. 95-100.

17
18
19 Schein, V.E. (2007), "Women in Management: Reflections and Projections", *Women in Management*
20 *Review*, Vol. 22 No. 1, pp. 6-18. <https://doi.org/10.1108/09649420710726193>.

21
22 Unterhofer, U. and K. Wrohlich (2017), "Fathers, Parental Leave and Gender Norms", DIW Berlin
23 Discussion Paper No. 1657. Available at SSRN: <https://ssrn.com/abstract=2952289>.

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¹ Sample representativeness and the construction of stereotype and self-stereotype indices are described in more detail in Author *et al.* (2017). This paper also contains a detailed description, means, and standard deviations of all variables used in this study including the large battery of firm characteristics.

² The fixed effects sample is considerably smaller. As a check we have also estimated an OLS regression based on exactly the same observations as included in the FE estimation. The results are not different from the OLS estimates shown in Table 4 for the full sample.

³ [Bhatia and Bhatia \(2021\) examine changes in gender stereotypes in the general population during 1910-1990 using machine learning techniques to large word data sets and applying several alternative measures of stereotypes, including the BSRI. They find changes to be slow and that changing associations can only be observed for feminine traits.](#)

Table 1. Mean sample values, individual characteristics

	All	Females	Males
Age, years	47.0	45.6	47.7
Work experience, years	25.8	23.8	26.7
Tenure in current firm, years	10.2	9.50	10.6
<i>Highest educational degree obtained:</i>			
Primary, lower secondary, upper secondary,	0.086	0.081	0.088
Vocational training	0.263	0.212	0.285
Short higher education	0.225	0.224	0.225
Medium higher education	0.291	0.328	0.274
Long higher education, master or higher	0.108	0.134	0.096
<i>Management level (%):</i>			
CEO	0.028	0.017	0.033
Other top executives	0.034	0.024	0.038
Manager, high level	0.231	0.166	0.260
Manager, medium level	0.402	0.422	0.393
Manager, low level	0.306	0.372	0.276
Number of observations	2,972	918	2,054

Table 2. Mean values of the stereotype index, *SI*, male and female managers

	All	Males	Females	Males-females
Means	-0.022	0.000	-0.073	-0.073 (0.000)
Median	0.000	0.000	-0.067	
Std. Dev.	0.307	0.308	0.301	
<i>Sample Means by Group:</i>				
<i>Age group</i>				
≤ 39	0.005 (578)	0.020 (379)	-0.022 (199)	-0.042 (0.118)
40-49	-0.027(1170)	0.008 (764)	-0.092 (406)	-0.100 (0.000)
50-59	-0.035 (1024)	-0.016 (738)	-0.083 (286)	-0.067 (0.002)
60+	-0.010 (200)	-0.005 (173)	-0.042 (27)	-0.037 (0.538)
<i>Managerial level</i>				
CEO	-0.076 (84)	-0.083 (68)	-0.046 (16)	0.038 (0.606)
Other top executives (CXO)	0.015 (100)	0.069 (78)	-0.174 (22)	-0.243 (0.001)
Manager, high level	0.007 (686)	0.016 (534)	-0.025 (152)	-0.041 (0.146)
Manager, medium level	-0.023(1194)	0.004 (807)	-0.080 (387)	-0.084 (0.000)
Manager, low level	-0.041 (908)	-0.018 (567)	-0.080 (341)	-0.062 (0.004)

Note: Number of observations are given in parentheses in columns 1, 2, and 3, and significance levels (prob. values) for t-tests are given in column 4. Higher (lower) values of *SI* reflect more (less) masculine stereotypes.

Table 3. Mean values of the BOA-index, male and female managers

	All	Males	Females	Males-females
Means	-0.102	-0.072	-0.180	0.108 (0.000)
Median	-0.100	-0.067	-0.200	
Std. Dev.	0.343	0.338	0.343	
<i>Sample means by group:</i>				
<i>Age group</i>				
≤ 39	-0.101 (419)	-0.077 (285)	-0.152 (134)	0.076 (0.041)
40-49	-0.113 (837)	-0.067 (575)	-0.214 (262)	0.147 (0.000)
50-59	-0.103 (683)	-0.087 (516)	-0.155 (167)	0.069 (0.025)
60+	-0.018 (122)	-0.010 (109)	-0.085 (13)	0.075 (0.410)
<i>Managerial level</i>				
CEO	-0.023 (84)	-0.018 (68)	-0.046 (16)	0.028 (0.770)
Other top executives (CXO)	-0.052 (99)	-0.006 (78)	-0.224 (21)	0.218 (0.022)
Manager, high level	-0.058 (684)	-0.040 (532)	-0.120 (152)	0.079 (0.013)
Manager, medium level	-0.137(1,194)	-0.103 (807)	-0.206 (387)	0.103 (0.000)

Note: Number of observations are given in parentheses in columns 1, 2, and 3, and significance levels (probability values) for t-tests are given in column 4.

Table 4. OLS and FE regressions (firm) of Stereotype Index (SI) on individual characteristics on the subsample of firms with two or more managers in the survey

	OLS			Firm FE		
	All	Males	Females	All	Males	Females
Female	- 0.080*** (0.013)			- 0.069*** (0.027)		
Age (years)/10	-0.081 (0.054)	-0.006 (0.066)	-0.212** (0.094)	-0.104 (0.118)	-0.030 (0.150)	-0.570*** (0.222)
Age (years) ² /100	0.006 (0.006)	-0.002 (0.007)	0.020 (0.011)	0.010 (0.013)	0.001 (0.016)	0.062*** (0.025)
Years of tenure firm/10	0.011* (0.006)	0.012* (0.007)	0.009 (0.015)	0.018 (0.013)	0.026 (0.014)	-0.013 (0.036)
Years of tenure job/10	0.004 (0.011)	0.013 (0.012)	-0.024 (0.022)	-0.021 (0.022)	-0.020 (0.027)	-0.048 (0.049)
CEO	-0.060* (0.031)	-0.082** (0.034)	0.034 (0.065)	-0.166*** (0.071)	-0.232*** (0.093)	-
Other top executive (CXO)	0.030 (0.034)	0.067* (0.040)	0.100* (0.051)	0.022 (0.026)	0.003 (0.035)	0.0201 (0.058)
Constant	0.223* (0.121)	0.052 (0.148)	0.459** (0.204)	0.258 (0.268)	0.104 (0.353)	1.228 (0.488)
R ²	0.018	0.017	0.053	0.018	0.017	0.053
N individuals	2,698	1,880	818	1,104	691	236
N firms	1,804	1,340	654	378	247	94

Note: Control for firm clusters in OLS-estimation. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table 5. OLS regression of Stereotype Index (SI) on individual and firm characteristics

	All	Males	Females
Female	-0.081** (0.013)	-	-
Age(years)/10	-0.059 (0.055)	0.035 (0.067)	-0.252*** (0.100)
Age (years) ² /100	0.004 (0.006)	-0.006 (0.007)	0.025*** (0.011)
Years of tenure firm/10	0.012** (0.006)	0.013* (0.007)	0.011 (0.016)
Years of tenure job/10	0.006 (0.011)	0.015 (0.012)	-0.022 (0.023)
CEO	-0.036 (0.031)	-0.061* (0.035)	0.128** (0.062)
Other top executive (CXO)	0.036 (0.033)	0.069* (0.039)	-0.084 (0.055)
Gender equality agreement with employees (dummy)	-0.013 (0.015)	-0.026 (0.018)	0.023 (0.028)
Focus on family-friendly workplace (dummy)	-0.021 (0.015)	-0.017 (0.018)	-0.021 (0.027)
Firm strives to have work-life balance (dummy)	-0.040*** (0.015)	-0.035* (0.019)	-0.056** (0.027)
Female managers share above 50%	0.011 (0.020)	0.005 (0.027)	0.019 (0.029)
Female CEO in firm (dummy)	-0.012 (0.021)	0.019 (0.025)	-0.072** (0.036)
Controls for firm characteristics and leadership variables	Yes	Yes	Yes
Constant	0.127 (0.127)	-0.123 (0.154)	0.545 (0.226)
R ²	0.052	0.046	0.070
N of obs.	2,668	1,867	801
N clusters	1,788	1,333	645

Note: Control for firm clusters in estimation. Standard errors in parentheses. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table 6. OLS and FE regression (firm) of BOA index on individual characteristics on the subsample of firms with two or more managers in the survey

	OLS			Firm FE		
	All	Males	Females	All	Males	Females
Female	-0.115*** (0.018)			-0.100** (0.040)		
Age(years)/10	-0.135* (0.082)	-0.103 (0.090)	-0.254** (0.149)	-0.086 (0.157)	-0.112 (0.189)	-0.348 (0.307)
Age (years) ² /100	0.015* (0.009)	0.011 (0.010)	0.030* (0.016)	0.012 (0.017)	0.014 (0.020)	0.049 (0.037)
Years of tenure firm/10	0.003 (0.009)	0.006 (0.010)	-0.009 (0.021)	0.025 (0.021)	0.037** (0.017)	-0.044 (0.040)
Years of tenure job/10	-0.001 (0.014)	-0.002 (0.016)	0.003 (0.031)	0.029 (0.034)	0.012 (0.037)	0.015 (0.077)
CEO	0.056 (0.039)	0.039 (0.040)	0.140 (0.115)	0.139 (0.096)	0.179* (0.105)	-
Other top executive (CXO)	0.041 (0.041)	0.063 (0.048)	-0.041 (0.073)	0.105*** (0.033)	0.077* (0.040)	0.026 (0.066)
Constant	0.221 (0.187)	0.155 (0.206)	0.338 (0.324)	-0.016 (0.355)	0.066 (0.439)	0.393 (0.641)
R ²	0.018	0.017	0.053	0.018	0.017	0.053
N individuals	2,698	1,880	818	1,104	691	236
N firms	1,804	1,340	654	378	247	94

Note: Control for firm clusters in OLS-estimation. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.