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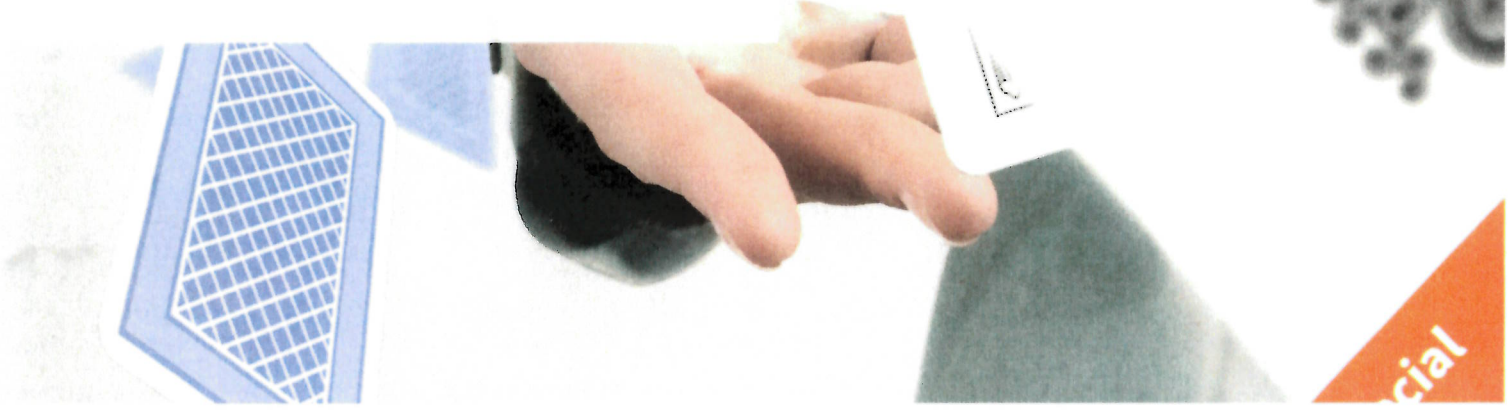

Female Leaders by Lot

Why focal random selection brings more women to the top

Margit Osterloh

Inequality in the labor market between women and men still persist to a high extent though women today are better educated than men. The reason is not only discrimination but also women's aversion to competition on average. In order to motivate more women to throw their hats into the ring, an unusual method is proposed: focal random selection.

Women today are better qualified than ever before. On average, they have a better formal education and achieve higher scores than men. However, despite legal gender equality factual inequality between men and women is substantial, not only in terms of women's underrepresentation in leadership positions but also in terms of income inequality. These differences can only partly be explained by factors such as age differences.

Traditional approaches in gender economics focus on the *demand side*. On the one hand, they take into account different living conditions of men and women. On the other hand, they consider discrimination of professional women. For instance, a famous experiment demonstrated that significantly fewer female contestants were selected as members of symphony orchestras compared to a situation when contestants played anonymously behind a screen.[1] In addition to direct – often unconscious – discrimination, statistical discrimination plays a role. It arises when employers lack detailed information about relevant characteristics of an individual. As a consequence, they go by what they know about average characteristics of the group that an individual belongs to. For example, employers assume that women with children are not prepared to work overtime if needed. Regardless of whether this assumption holds for a specific woman, this may result in discriminating practices based on stereotypes. As a result, the much debated 'glass ceiling' effect arises, which hinders high-performing women from advancing to leadership positions.[2]

Women Shy Away from Competition

Recently, gender economics emphasizes not only the demand side but also the *supply side* of the labor market. It has been studied in particular by the so-called behavioral economics or economic psychology. Different preferences and characteristics of men and women relevant to labor markets are explored.[3] In the spotlight are competitive behaviors. In a number of laboratory and field experiments it has been demonstrated that women – especially high-performing women – are less willing to compete and, when forced to compete, achieve poorer performance than men. This difference has been shown to be the larger among adolescents, the better their school performance is. Whereas the willingness to compete is comparable among girls and boys with poor grades, high-ability girls are about 30 to 40 percentage points less likely to compete compared to boys.[4] Females are particularly unwilling to compete when competing against males. In all-girl groups the gender gap in willingness to compete largely disappears.

> Women and girls are particularly unwilling to compete when competing against males.

There are several explanations for this phenomenon. On the one hand, explanations focus on psychological differences in preferences, which nevertheless are influenced by various cultural factors.[5]

1. Differences in self-esteem have been suggested. Compared to women, men tend to overestimate their abilities, for instance, with respect to their trading performance. Data analysis of a large brokerage firm revealed that men traded 45 percent more than did women, resulting in poor portfolio outcomes.[6]
2. Women are more risk-averse compared to men. This has been shown both in laboratory and field experiments.[7]
3. Women are supposed to be more anxious about negative feedback than men.

statistical discrimination
Employers have only fragmentary information about the productivity of their individual employees. Therefore, they use representative social statistics of groups (e. g., nationality, age, gender, social background, religion, level of qualification) to judge the characteristics of group members. Thus, group characteristics have an effect independent of the actual individual characteristic. Employees whose actual productivity lies above (below) that level, have too low (too high) wages.

4. Niederle and Vesterlund found in their influential experiment that women are genuinely less willing to compete than men, independent of risk preference, self-esteem and feedback aversion.[8]

Some authors have attributed the aforementioned differences to genetic influences, however, social roles seem to be more relevant.[9]

On the other hand, explanations focus on social norms and socially determined stereotypes.[10] They are not only externally imposed, but also lead to self-stereotyping and internalized identity norms. The newly emerging 'identity economics' argues that 'psychic costs' arise when deviating from identity norms.[11] With respect to gender roles, successful men are well received, whereas – especially in male-dominated domains – successful women risk being punished with disapproval, particularly by men. Mathematics is an example of these male-dominated domains. This would explain why compared to boys, high-ability girls are especially less inclined to compete in mathematics, at least in co-educational schools.[12] Notably, especially girls in puberty are peculiarly susceptible to approval and disapproval of their classmates. Worries about losing approval may also explain why women are less willing to negotiate and to make demands. Men prefer to work with women who do not negotiate their salaries, which women internalize as part of their identity. Consequently, it was found that less than 10 percent of female graduates (compared to more than 50 percent of male graduates) try to negotiate to improve their first job offers.[13] The relevance of identity norms is also evident in the fact that women are less satisfied, report arguing more frequently and are more likely to have divorce when their incomes exceed their husbands'. Therefore, many women reduce their labor force participation once they earn more than their partners.[14] By doing so, women conform with the identity norm according to which men should be the breadwinners. In a similar vein, comparisons between actual and reported incomes showed that women underreport and men overreport their incomes when women's share of total couple income surpassed 40 percent.[15]

> For men success is positively correlated with approval, but successful women often have to fear loss of sympathy rather than praise.

The self-stereotyping is reinforced by the so-called stereotype threat, i. e., threat by negative stereotypes. It refers to the fear members of a social group feel that their behaviors would confirm negative stereotypes of their group. This may lead to self-fulfilling prophecy, i. e., to poorer performance following the cliché that 'women cannot park'. Similarly, when told beforehand that on average women are worse in mathematics than men, girls achieve poorer scores in mathematics. Field experiments reveal that when assigned to a female professor, female students delivered better performance in mathematics and natural sciences and were more likely to choose these subjects as their majors. No such effect was found among male students.[16] Women's aversion to competition as well as poorer performance disappear in female-type tasks.[17] Women are also unaffected when they are among themselves, e. g., in sex-segregated classes and matrilineal societies, in which they are in higher power positions.[18] Under these conditions, negative (self-)stereotyping and stereotype can be assumed to be less salient.

Reducing the Competition between Men and Women

What to do if particularly high-ability women shy away from 'throwing their hats into the ring'? When they are participating in competitions to a lesser extent than men, women stand a poor chance of increasing their share of leadership positions. One possibility is to address (statistical) discrimination on the demand side by reducing role stereotypes.[19] However, this would be time-intensive. Reducing competition in organizations might be more effective in the short or medium term. This implies that interventions target current preferences and role expectations and, therefore, the self-selection of female leaders. According to the empirical findings described above, more high-ability women thus should be motivated to apply for leadership positions. This kind of interventions would counteract the lack of female candidates, as complained by many HR practitioners.[20]

The most controversial intervention to reduce competitions between men and women are gender quotas, as introduced for political elections and appointments of supervisory board members in several countries. However, gender quotas are unpopular. The qualification level of boards is feared to be lowered. Empirical findings suggest this fear to be unfounded. First, with respect to political elections, quotas have been shown to raise the formal qualification level of elected male and female politicians.[21] Second, laboratory experiments demonstrate that the introduction of gender quotas more than doubles the share of women who voluntarily chose to compete up to 64 percent in total. Especially high-ability women self-select into competition under these conditions.[22] Notwithstanding, gender quotas have the disadvantage that they might be perceived as reverse discrimination against men, contributing to criticism of 'gender obsession'.

This disadvantage can be avoided by using focal random selection instead of gender quotas to reduce competition. Focal

Impulses for Practice

- To encourage more women to apply for executive positions, we do not only have to reduce discrimination, but also take into account the aversion of high-performing women in particular towards competion.
- Quotas serve to reduce competition. They are effective, but still not popular.
- Setting up focal random selection from a shortlist of appropriate candidates may motivate more women to 'throw their hat into the ring'.

matrilineal societies
are societies that classify individuals by their maternal descent (matrilineal), e. g., the inheritage of rank, title and properties. With marriage, the husband becomes part of the family of his wife, but he will stay a member of his mother's kin. The wife has a prominent position in society, without the presence of a matriarchy.

Matthew Effect
This term was introduced by the sociologist Robert K. Merton in 1968. He used it to describe the phenomenon in academic life that well-known authors are more likely to become even better known as they are often asked to write further publications and their work is also cited more often.

random selection – i. e., drawing a lot after a careful preselection of candidates – can be proceeded following the historical example of the selection of professors in Basel (see the article by Katja Rost and Malte Doehne in this issue): First, in a conventional preselection, a shortlist consisting of suitable candidates is made along with the announcement that the vacant position is drawn by lot from the shortlist.

Which are the advantages of this procedure? On the one hand, women who are on the shortlist would not suffer from direct and statistical discrimination (see the article by Katja Rost, Joël Berger and Margit Osterloh in this issue). On the other hand, more women are expected to forward their applications in the final round through this process. The downplay of competition is likely to motivate them to throw their hat into the ring.[23] The objection concerning the reverse discrimination against men would be overcome.

> Women selected by lot would bear lower identity costs with respect to the traditional female role norms.

What is the background of this expectation? Selection by lot deals with psychological and sociological differences in behavior between men and women described above. First, the problem that successful women in a male-dominated environment are disliked would be reduced.[24] Women selected by lot would bear lower identity costs with respect to the traditional female role norms. Men would suffer less from not winning because losing in a lottery does not mean losing one's face. Cooperation between winners and losers would be facilitated. Husbands and partners would accept their selection with fewer negative feelings because their male role is not challenged. Second, as shown by the selection in Basel, the introduction of random selection would motivate those people to apply who 'are humble enough not to think themselves as superior to all others'.[25] This would counteract low self-confidence often attributed to women. Lastly, selection by lot would reduce women's greater anxiety concerning negative feedbacks.

The objection that 'the best' would not be selected by lot can be met by two arguments.

1. Due to women's aversion to competition, which on average is higher than men's, only a small number of high-ability and talented women applies for top positions so far. As a consequence, the pool of suitable persons is not sufficiently exploited. This imbalance is reinforced by the Matthew Effect (see the article by Chengwen Liu in this issue), so that it is not true that with conventional selection methods always 'the best' reaches the top.
2. Thanks to a careful preselection, selected top candidates may meet different performance criteria, but all on the shortlist would have the necessary qualification for the vacant post. The better the preselection works, the smaller is the difference between candidates with respect to suitability. Therefore, HR practitioners should not worry about losing their job by focal random selections – the opposite is likely to be true.

Conclusion

To motivate high-ability women to run for leadership positions, new and unusual ideas are warranted. Women's dramatic underrepresentation at top levels still exists despite their excellent qualification and despite numerous equality and diversity programs. One of the most important reasons is that especially high-performing women are less willing to compete in male-typed domains. They have to bear psychic costs, which men are spared: For men, success is positively correlated with approval, whereas for women, the opposite is often the case, especially in male-dominated contexts.[26] We suggest that in order to make it easier for women to 'throw their hat into the ring', competition within the ring should be eliminated by lot.[27] As demonstrated by Katja Rost and Joël Berger in this issue, reducing the competition by lot leads to less antisocial behavior among persons who tend to overestimate themselves. Female leadership by lot, therefore, is a bold but promising idea which in the meantime has been tested successfully.[28]

Abstract

Today women are highly qualified. Yet there are significant differences between women and men in the labor market. Until recently, research to explain these differences was devoted to the side of organizations. Today behavioral economics focuses on another reason: the aversion of many women to entering competiton with men, and thus self-selection. To motivate women to enter the race we recommend a procedure that was applied successfully in the past, namely focused randomisation. A two-stage procedure is proposed. In the first step a shortlist of suitable candidates is made or generated by conventional measures. In the second step a lottery is applied to select the winner. This procedure mitigates role conflicts of female leaders. It therefore will help to motivate more women to throw their hat into the ring.

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