

Gender differences in corporate hierarchies

How and why do the careers of men and women differ? What policies could reduce the differences?

Keywords: promotions, gender wage gap, job assignment

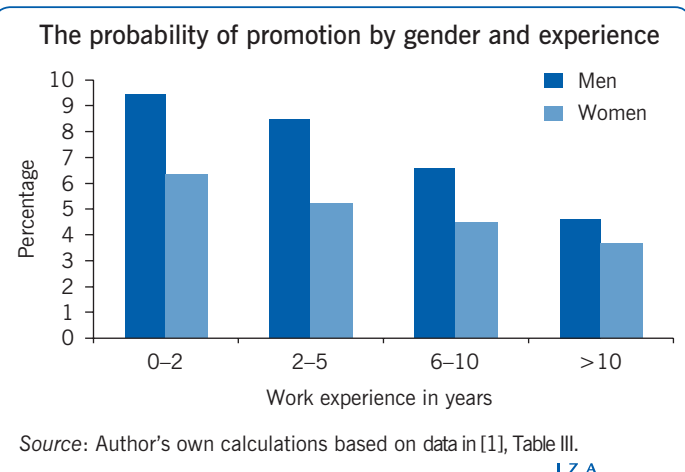
ELEVATOR PITCH

The gender wage gap is largely due to men and women holding different kinds of jobs. This job segregation is partly driven by gender differences in careers in corporate hierarchies. Research has shown that the careers of men and women begin to diverge immediately upon entry into the labor market and that subsequent career progress exacerbates the divergence. This divergence of career progress explains a large part of the gender wage gap. Understanding how and why the careers of men and women differ is necessary to design effective policies that can reduce the gender differences in hierarchies.

KEY FINDINGS

Pros

- + Research has identified many feasible policy options to address gender differences in initial job assignments, promotion rates, and the wage returns of various career events.
- + Appropriate policies may be designed based on research showing that gender differences in career outcomes are largely due to differences in educational background, children and other career interruptions, hours worked, psychological attributes, and social norms.
- + Societal and organizational policies that challenge gendered social norms about the appropriate roles of men and women in the labor market are likely to diminish gender differences in careers, at least in the long term.



Cons

- Designing effective policies is difficult due to lack of agreement about the relative importance of the causes of gender differences in careers.
- Little evidence exists on the effects of concrete policy interventions on gender differences in careers.
- Most policies will require a long time to take effect; for example, policies to reduce gender gaps in specific fields of study will take a long time to be reflected in career outcomes.

AUTHOR'S MAIN MESSAGE

Research has shown that men begin their careers at higher levels in the corporate hierarchy and are also more likely to be promoted. These differences in careers are an important factor underlying the gender wage gap. Gender differences in careers reflect both the differing choices of men and women before and after entering the labor market and the different treatment of men and women in the labor market. Policy has traditionally focused on reducing discrimination in the labor market, but equally important are policies that address gender differences in career breaks, hours worked, psychological attributes, and social norms.

MOTIVATION

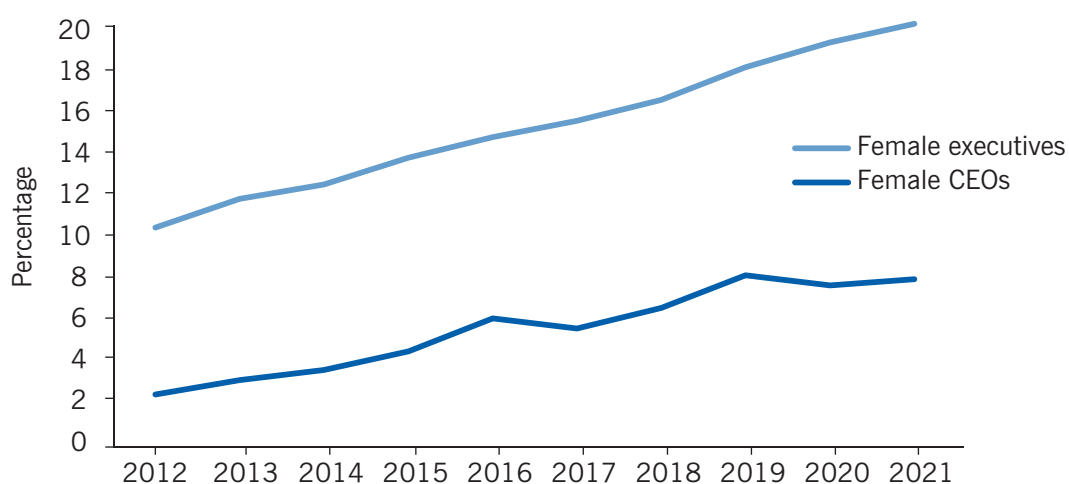
The last 50 years have witnessed a notable convergence between men and women in labor force participation, hours worked, wages, and educational level [2]. Despite this progress, however, women are still less often found in high-paying occupations, and a substantial gender wage gap emerges in early career.

Very few women reach the highest rungs on the corporate ladder. Currently in Europe, only around 10% of board members are women, and in the mid-1990s in the US, the share of women among the five highest-paid executives in firms was about 2.5%. If women and men are equally capable as managers, this represents a severe misallocation of talent. Figure 1 shows the share of female CEOs and executives in the two highest decision-making bodies in the largest European publicly traded companies; usually this refers to the supervisory board and the management board in a two-tier governance system and, in case of a unitary system, to the board of directors and executive/management committee. The data cover approximately 600 companies in the EU27. The graph shows that there are very few women CEOs in these companies, although the number has risen in recent years. There are more women in executive positions, but even in these positions, only around 20% are women.

The gender wage gap is relatively small (6–10%) [1], [3], or non-existent [4] upon labor market entry, but it increases substantially during the first ten years in the labor market. For example, in the UK, the gender wage gap is virtually zero at labor market entry but rises to more than 25% during the first ten years [4]. For MBA graduates in the US the gender wage gap is about 10% at labor market entry but increases to 55% in ten years [3].

Both the relatively small gender wage gap at entry and its subsequent increase are driven partly by gender differences in careers in corporate hierarchies. Understanding these differences in career progress is important when considering appropriate policy responses.

Figure 1. Share of women in CEO and executive positions in Europe

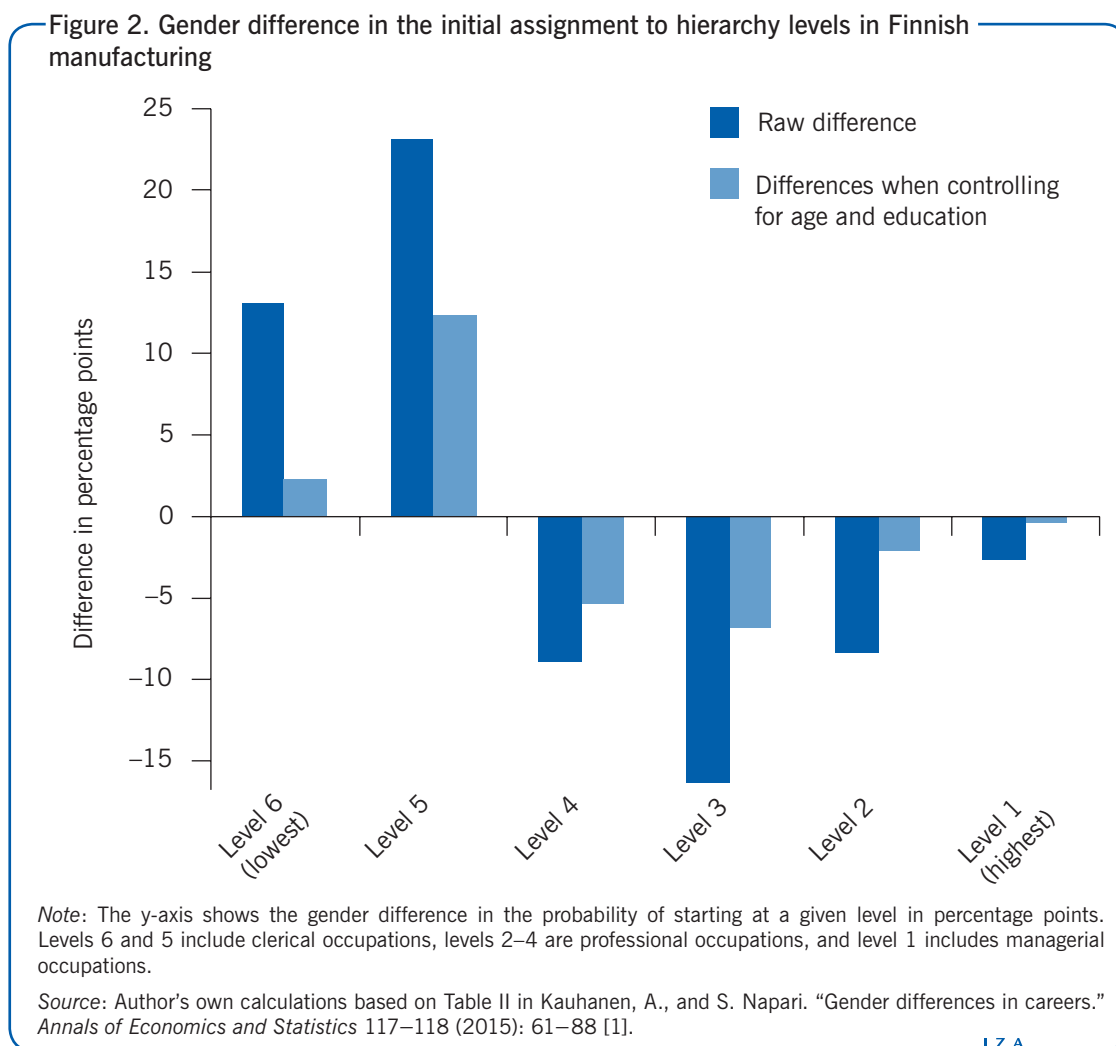


Source: Author's own calculations based on European Institute for Gender Equality data. Online at: https://eige.europa.eu/gender-statistics/dgs/indicator/wmidm_bus_bus_wmid_comp_compex/datatable

DISCUSSION OF PROS AND CONS

Gender differences in initial job assignments

The gender differences in careers are already evident in the first job assignments. In a study that investigates the careers of white-collar workers in Finnish manufacturing over time, beginning from labor market entry, approximately 40% of the workers are women [1]. Men and women in white-collar Finnish manufacturing differ in their educational background, and women work more often in administrative jobs, whereas men work more typically in production and research and development (R&D). The study concludes that women are much more likely than men to begin their careers at the bottom levels in the hierarchy. Figure 2 shows that women are more likely to enter at the two lowest levels (mainly clerical jobs), whereas men are more likely to begin their careers at higher levels (e.g. expert and professional jobs). The differences are substantial. For example, women are 10% more likely than men with similar educational backgrounds to begin at the second-lowest level. Similar results have been obtained in studies looking at individual firms [5] and particular industries [6].



The differences in initial job assignments are partly due to differences in educational background. Figure 2 shows, for white-collar Finnish manufacturing industries, that without controlling for education, women are 13 percentage points more likely to start their careers at the lowest hierarchical level, but controlling for the years of education and the field of education reduces this difference to around 2 percentage points. Other hierarchical levels show a similar pattern: controlling for educational background reduces the gender differences.

Although the gender differences in years of education are small, differences in the field of education chosen are large. In the data used in this study, 80% of the men have a degree in technology, whereas less than 20% of women do. The majority of women in this sector have a degree in business studies. This difference in the field of education has a large effect on initial job assignments in corporate hierarchies, which shows that educational choices have a notable impact on the careers of men and women.

The differences in initial job assignments contribute to the emergence of the gender wage gap. As wages are lower at lower hierarchical levels, lower initial job assignments mean that women, on average, tend to earn less than men, even when they have similar educational backgrounds. However, this is not the only source of the gender wage gap at labor market entry. The same study shows that the wages at labor market entry are lower for women even when controlling for the initial job assignment. Women's wages at entry are about 6% lower than men's, even when comparing men and women with the same initial job assignment and the same educational background.

Gender differences in promotions

The gender differences in career progress exacerbate the divergence in men's and women's careers that is evident at labor market entry. There are several studies on gender differences in promotion rates, and their most common finding is that men are more likely to be promoted than women [1], [7]. However, a study using UK data finds no gender differences in promotion rates [8].

All studies control for a variety of personal characteristics, including age, years of education, work experience, firm tenure, and occupation. This means that the gender differences in human capital or occupations do not explain the gender differences in promotion rates. One possible explanation for the differences is job performance. Typically, job performance is not included in the set of control variables, but one study finds that even when controlling for supervisors' assessment of job performance, women are less likely to be promoted [7]. In contrast, a study focusing on young lawyers finds that differences in job performance, measured by hours billed and the amount of new customer revenue generated, do explain the gender gap in being promoted to partner status in a law firm [9]. Thus, the role of gender differences in job performance for career progress remains an important issue for future studies.

The gender differences in promotion rates tend to be highest during the first years in the labor market. As seen in the Illustration on p. 1, promotion rates fall for both men and women as they gain work experience, but the decline is larger for men. Gender differences in early promotions matter to the evolution of the gender wage gap because

of the large wage gains typically attached to promotions. A part of the gender wage gap is therefore caused by the fact that men are more likely to move into higher paying jobs more quickly.

Studies have also addressed whether men or women gain more from promotions in terms of wages, but the results are inconclusive. Some studies find that women gain more from promotions, some find that men gain more [8], and others find no clear differences [1], [7]. In sum, women are less likely to reach the higher rungs on the corporate ladder because they begin their careers at lower levels and are less likely to be promoted quickly.

Why do the careers of men and women differ?

There are various reasons for the gender differences in careers. Traditionally, economists have emphasized gender differences in the years and fields of education, work experience, and labor market discrimination. More recently, the literature has focused on child bearing, differences in psychological attributes, and hours worked.

Children and other career interruptions

Having children and other career interruptions have big effects on career progress [3], [10], [11]. Women are more likely than men to have career interruptions due to having children and often have greater responsibility for childcare. This means that women have less work experience compared to men of the same age and may face difficulties taking more demanding and time-consuming jobs that would offer better possibilities for career advancement. In addition, a large share of the career breaks typically occur during the first ten years in the labor market, when a substantial amount of career progress takes place.

A study using a large Norwegian data set finds that women with children enter firms at lower hierarchical levels than women without children [10]. In addition, women with children have more career breaks than women without children and are less likely to be promoted, particularly during the first ten years in the labor market. All in all, the results show that having children has significant negative implications for women's careers.

A study focusing on MBAs from a top US business school finds similar results [3]. A substantial gender wage gap emerges during the first ten years in the labor market, and a large part of this gap is due to women having more career breaks. To gain some understanding of the importance of career interruptions to the gender wage gap, this study compares the earnings of men to the earnings of women who do not have any career interruptions or children. The results show that after ten years in the labor market, women earn 24% less. This gap is almost twice as large when the earnings of men are compared to the earnings of all women. This difference shows that career interruptions have a large impact on earnings. An important finding in this study is that small differences in career continuity have large effects on labor market outcomes. The gender differences in career breaks are not very large, but the wage penalties associated with them are.

An influential event-study analysis that follows the birth of the first child shows that the arrival of children leads to a persistent drop in labor supply and earnings for women but not for men, despite similar trajectories before the birth of the child [11]. In fact, the results show that most of the remaining gender inequality in the labor market is due to children. The large earnings penalty for women is partly driven by occupational and sectoral choices. Following the birth of the first child, the career trajectories of men and women start to diverge: men are more likely to advance in their careers compared to women. Men are also much more likely to become managers than women following the birth of the first child. The results also show that the arrival of children leads women, but not men, to choose more family-friendly work environments.

Educational choices

Gender differences in education levels have largely disappeared in developed countries, but there are still large gender differences in the chosen fields of education. As noted earlier, this affects men's and women's initial job assignments in the corporate hierarchy. The field of education also appears to affect the probability of promotion; therefore, gender differences in choice of educational field affect the overall incidence of promotions among men and women [1].

These results raise the question of why men and women choose different fields of education. If women expect to have more career breaks or expect that they will have difficulty holding jobs that require long working hours (due to childcare responsibilities), the theory of human capital predicts that women will choose the types of education that fit their future career prospects. For example, women may not choose fields in which technological progress is very rapid (e.g. engineering) because career breaks would mean that their skills would become outdated during the break.

Societal discrimination is another reason why men and women make different educational choices. Societal discrimination refers to all societal influences that lead women to make educational choices that are not well rewarded in the labor market. An example would be societal views on appropriate educational choices for women. For example, women may not be encouraged to enter science, technology, engineering, and mathematics (STEM) fields as strongly as men.

There is research showing how gender differences in competitiveness affect educational choices [12]. The authors study 15-year-old boys and girls in the Netherlands, who choose their academic track (focal subjects) in secondary school. The results show that even though boys and girls have similar academic abilities, boys choose more prestigious and mathematics-intensive tracks. This is important because it affects the major choice of university education and later labor market outcomes. Furthermore, the authors show that 20% of the gender gap in the choice of study track is accounted for by differences in competitiveness between boys and girls.

Hours worked

Despite the convergence in hours worked by men and women, men still work more hours. One reason for this is the greater responsibility that women have for childcare.

Working fewer hours may have significant consequences for gender differences in career outcomes. At least for young professionals, working more hours increases the probability of promotion [13]. However, only a few studies have information on the actual number of hours worked, so there is no strong evidence on how gender differences in hours worked translate into differences in promotion rates.

It has also been empirically established that hours worked and wages have a strongly non-linear relationship; so, for example, individuals working 20% more hours earn over 20% more than those working less. This type of non-linearity appears to be particularly relevant for the gender wage gap in the financial and corporate sectors [2], [3]. Research has shown that the gender wage gap is larger when the relationship between hours and wages is non-linear (e.g. for lawyers) and smaller when the relationship is linear (e.g. in pharmacies) [2]. Thus, in some occupations (e.g. banking), there is a heavy penalty for working fewer or more flexible hours. Due to non-linearity, small gender differences in working hours lead to large differences in labor market outcomes. It is likely that this non-linearity partly reflects the effects of working more hours on career advancement: if more hours increase the probability of promotion, and promotions come with large wage gains, then small differences in hours lead to large differences in earnings. Women may also choose occupations or jobs that are more linear in terms of hours worked, which may hinder their career advancement if these occupations do not offer similar advancement opportunities as other occupations.

Why is the number of hours worked in some occupations rewarded disproportionately? Research suggests that working fewer and more flexible hours notably decreases productivity in certain occupations, such as the financial and legal occupations [2], the argument being that if a worker is not present to carry out their job, other workers cannot fill in easily. This may be due to information that the employee has that is costly to communicate to others. The employee may also learn less from others if they are not present when important information is shared. In short, when the employee does not have a perfect substitute, small differences in working hours may lead to large differences in productivity and, thus, wages.

Preferences, personality traits, and social norms

Educational choices, career interruptions, and hours worked are important reasons behind gender differences in careers, but they do not completely explain the differences. Recently, economists have turned to gender differences in preferences and personality traits as additional explanatory factors. Laboratory experiments have shown that men and women differ in competitiveness, risk aversion, and attitudes toward negotiation [14], all of which potentially affect gender differences in careers.

Women are generally less competitive than men, which may mean that they choose jobs that do not require as much competitiveness, or that they may be disadvantaged in promotion competitions compared to men. Research has shown that women tend to shy away from competition, especially when men are among the competitors. This means that in modern workplaces, women may fare less well than men in very competitive jobs.

There is also some evidence that women are less eager to negotiate, especially when negotiating for themselves [14]. This may mean that they do not negotiate as hard as

men concerning wage increases or promotions. This is perhaps one reason for the lower entry wages of women observed in one study [1]. There is evidence that women ask for lower starting wages and that women's lower propensity to negotiate hinders their career advancement [14]. Moreover, occupations where earnings are riskier, perhaps due to a larger share of the pay being dependent on performance, tend to pay more. Research has shown women to be more risk-averse than men, which may be one reason for men and women choosing different jobs.

From a policy perspective, it is important to know whether gender differences in psychological attributes are due to biological differences or environmental influences. Research has shown that both of these mechanisms are at work [14]. There are biological differences that lead to differences in psychological attributes, but these attributes are also influenced by environmental factors (e.g. different treatment of boys and girls by their parents). For example, the willingness of women to compete depends on whether there are men among the competitors.

The choices of men and women in the labor market may also depend on social norms about what is appropriate for men and women [14]. Research has shown that social norms affect labor supply and occupational choice, and that these norms are intergenerationally transmitted [11], [14].

Discrimination

Discrimination refers to a situation in which equally qualified employees are treated differently on the basis of gender, religion, ethnicity, age, or other observable personal characteristics. It is difficult to empirically evaluate the effect of discrimination on gender differences in careers. For example, the Illustration on p. 1 shows that men are around 3% more likely to be promoted than women, even after accounting for many other factors that influence productivity, such as educational background. However, this difference cannot be interpreted purely as discrimination. The number may overstate discrimination because it cannot measure all factors that influence productivity. For example, the controls do not include job performance, as it is typically not available in the data sets available to researchers. On the other hand, the number may understate discrimination if some of the controls, including initial job assignment, reflect discrimination. For example, if women are discriminated against in the initial job assignments and end up in lower-paying jobs, analyses that compare men and women in the same jobs would understate the effect of discrimination on earnings. This does not mean that there would be no evidence of discrimination. There are, for example, lawsuits that reveal cases where women have suffered relative to men in terms of promotions and wages [5]. In sum, showing convincing quantitative evidence on discrimination in empirical studies is difficult.

There is also evidence that women are held to a higher standard for promotion. A potential reason is statistical discrimination [6], in which employers make inferences about the productivity of an individual based on gender. The current, and especially future, productivity of an individual is difficult to assess and thus employers base their inferences partly on gender. Even though the employers' beliefs would be correct on average, this is still a form of discrimination because it treats equally productive individuals differently.

If men are more networked than women (e.g. due to “old boys’ clubs”), then employers may have more accurate information about the productivity of men and may more readily promote them.

Whatever the form of discrimination, it is detrimental due to “feedback effects,” meaning that anticipation of discrimination affects choices concerning education, training, and the types of job sought. Women may choose types of education or jobs in which they anticipate that discrimination will have the least effect on their career. This represents a significant misallocation of talent in the economy.

LIMITATIONS AND GAPS

The existing literature has documented reasonably well the gender differences in careers. There is a lot of research on gender differences in initial positions, promotion rates, wages, and wage gains from promotions. Many of the explanations for gender differences, including differences in educational choices, work experience and career breaks, working hours, discrimination and preferences, and psychological attributes, have also been studied. One factor, however, that has received too little attention in the literature is job performance. An influential study has highlighted the importance of gender differences in performance and more research on this topic is desirable.

The main limitation of the existing research is that the relative importance of the various explanations for the gender differences in careers is unknown, which complicates the design of appropriate policies. Moreover, it is inherently difficult to study this issue, as some of the causes are difficult to identify and many of them are interrelated. For example, the extent of discrimination is very difficult to ascertain empirically. In addition, labor market discrimination may affect the choices made before even entering the labor market, including the chosen field of education.

Furthermore, the recent literature on gender differences in preferences and personality traits suggests that these may influence men’s and women’s labor market outcomes, but it is not yet known how important these factors are. One study investigating this question suggests that psychological factors explain about 20% of the gender wage gap ten years after labor market entry, and that human capital factors, such as education and work experience, explain about 45% [4]. Thus, psychological factors may be important to labor market outcomes, but there has been little research on how they affect gender differences in careers. In addition, psychological factors interact with other factors. For example, as noted earlier, the educational choices of boys and girls are affected by their competitiveness, and educational choices affect career outcomes.

A further limitation is that there is little research on concrete policy interventions that would aim to reduce gender differences in careers. Recent research emphasizes the role of children for different career outcomes of men and women, but there are few studies investigating the role of family policies on the aggregate gender differences in the labor market. A recent study using Austrian data finds that large expansions of parental leave and childcare subsidies during the last half century have not affected gender equality in the labor market [15]. This result may be due to gendered norms and preferences. Much more research is needed to understand how norms and preferences are formed, and how public policy may influence them.

Recent research has also emphasized that the gender differences in the labor market vary by occupation [2]. In some occupations, small differences in hours worked lead to large differences in productivity. A better understanding of these occupational differences is needed to design appropriate policies.

SUMMARY AND POLICY ADVICE

The careers of men and women begin to diverge even before entry into the labor market. Men and women make different educational choices, which in turn influence their labor market outcomes. This is already evident in their respective entry positions in the labor market: men tend to begin their careers at higher hierarchical levels, which partly reflects the gender differences in education. Subsequent career progress exacerbates gender differences. Men are more likely to be promoted, even after accounting for many factors related to productivity. These differences in career progress are an important driver of the emergence of the gender wage gap in the first ten years in the labor market.

To increase gender equality in careers, policy must therefore affect the reasons underlying these gender differences. Research has shown that gender differences in careers are due to differences in educational choices, work experience, children and other career breaks, hours worked, discrimination, worker preferences, and psychological attributes. Recent research also emphasizes how the choices that men and women make in the labor market reflect social norms about what is appropriate for men and women.

Education policies aimed at reducing gender differences in the field of study would reduce gender differences in careers. The gender differences in competitiveness suggest that one policy option would be gender-segregated teaching in some subjects, including mathematics. Gender differences in educational outcomes may also be reduced by providers of education, such as universities. There are, for example, universities that aim to increase the number of women in computer science by using a variety of approaches, such as mentoring.

The gender differences in career breaks may be affected by family leave policies. For example, in the Scandinavian countries, there are policies to increase fathers' use of family leave—the idea being that such policies would reduce the gender gap in career breaks and, over time, even affect the educational choices of women, thereby further reducing the gender disparity in the labor market. Policies increasing the participation of men in childcare could, over time, affect the social norms concerning parenthood and labor market participation.

The effect of gender differences in hours worked on labor market outcomes can be addressed mainly by reducing the gender gap in hours worked, since the non-linearity between hours and wages is difficult to address through policy initiatives. Policies that improve the availability and quality of childcare could potentially offer women better chances to work more hours or to work at more convenient times. Alternatively, policies could try to increase the responsibility that men have for childcare. The Scandinavian initiative to increase fathers' use of parental leave might be one such policy. Again, for these policies to be effective, they should affect the social norms affecting the choices of men and women in the labor market.

Perhaps in the future, firm-level policies will effectively reduce the non-linearity between hours and wages. For example, new information and communication technologies may make it feasible to redesign jobs so that tasks can be shared more easily between workers. According to one study, this would reduce the pay penalty associated with temporal flexibility [2].

All developed countries have legislation prohibiting gender discrimination in the labor market. At the same time, subtle barriers to women's career progress still exist. Some of these barriers amount to discrimination, but they are difficult to address with policy because of their nature.

The gender differences in psychological attributes and social norms are likely to be important to gender differences in careers, but the appropriate policy response is unclear. To the extent that these gender differences are due to "nurture," rather than "nature," they may be addressed by educational policy. For example, if the lesser competitiveness of women is due to environmental influences, it might possibly be addressed by policy. However, it would take a long time for the effects of such policies to be reflected in the labor market, as they do not produce "quick wins."

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Competing interests

The IZA World of Labor project is committed to the IZA Code of Conduct. The author declares to have observed the principles outlined in the code.

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