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Gender Gaps in the Labor Market

The gap in earnings between men and women has narrowed, but why haven't we closed it entirely?

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One of the most remarkable changes in the U.S. economy starting in the early 20th century was the rise of women's participation in the labor force. The share of women participating in the labor force has increased from around 20 percent in 1900 to around 57 percent as of 2022. During the same period, men's labor force participation rate fell from 86 percent to 68 percent.¹ This period also saw enormous changes in women's education and career opportunities. But women overall are still paid less than men, and this is the subject of public and academic debate. In this article, I review recent research into the determinants of the gender gap in earnings, and I suggest how this gap might evolve.

Measuring the Gender Gap

The conventional measure of the gender gap in earnings is the ratio of median annual earnings among women to median annual earnings among men. Each year, the U.S. Census Bureau estimates two versions of this ratio, one for full-time, full-year workers and one for all workers.

The Census Bureau's most recent (2022) estimate of the ratio for full-time, full-year workers is 0.84 (Figure 1). This estimate is the source of statements such as, "For every dollar a man makes, a woman makes 84 cents." But this more limited category excludes many workers. When we include those workers, the ratio is 0.79. The fact that the ratio for all workers is smaller than the ratio for full-time, full-year workers allows us to identify one source of the gender gap: Women are more likely to work in part-time jobs, which tend to be lower paid. But this can only be a partial explanation. Otherwise, there would be no gap for full-time, full-year workers.

After remaining quite stable in the 1960s, the ratio for full-time, full-year workers began to shrink in the 1970s and 1980s, and since then the gender gap has continued to shrink at a steady pace. Why has this gap shrunk since the 1960s? One explanation is that women are increasingly catching up to men in terms of work experience and have surpassed men in terms of high school and college degree attainment. Another explanation is that structural changes in the economy have increased the demand for cognitive skills and lowered the demand for manual skills, which are usually more associated with male workers.² And yet, despite these changes, the gender gap in earnings persists.

What Explains the Gender Gap Today?

Researchers are converging on a consensus view of what drives much of the gender gap.³ This explanation centers around the time allocation decisions a couple must make after having a child. For a couple, there is an incentive to have the parent with better labor market opportunities spend more time working while the other parent focuses on child care. This *specialization* can increase the couple's total earnings. Meanwhile, a worker's hourly wages rise as they spend more time working. These *increasing returns to time spent working* can come from the skills the worker learns on the job and the value an employer places on having someone willing to work longer hours. Together, specialization and the increasing returns for time spent working can explain why one half of a couple spends more time working and the other half spends more time on child care.

But why do *women* tend to specialize in child care? Economists have focused on four explanations. First, women may earn less than men on average, so that couples simply allocate their time in a way that maximizes total income. Second, childbirth could affect a mother's health and, thus, her ability to work. Third, women may face discrimination in the labor market, and this discrimination may encourage them to focus on child care. And fourth, individual preferences or social norms could influence a mother's decision to spend more time on child care.

We can use empirical evidence to assess each of these explanations.

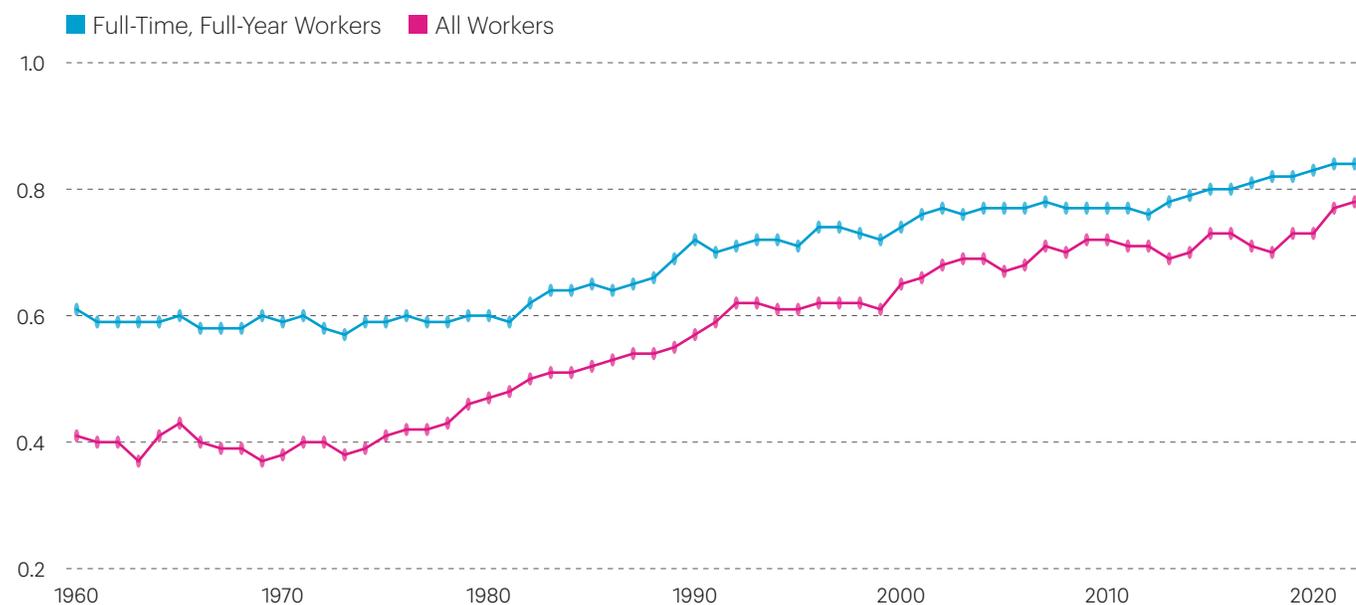
The gender gap in earnings is small for entry-level workers but grows over time (Figure 2). Between the ages of 18 and 25, women and men have similar median annual earnings. But start-

FIGURE 1

Men Earn More Than Women

But the gender gap has narrowed over time.

Median annual earnings for women as a share of the median for men, 1960–2022



Data Source: U.S. Census Bureau Analysis of Current Population Survey, Annual Social and Economic Supplements

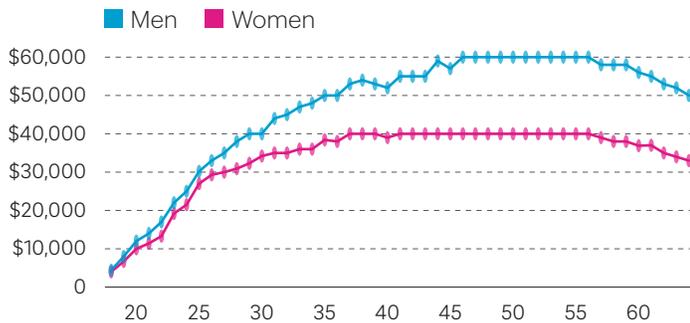
Note: Sample contains workers ages 15 and above. Full-time, full-year workers are defined as those working at least 50 weeks per year and 35 hours per week.

FIGURE 2

The Gender Gap in Earnings Is Small at the Start of Workers' Careers

But it grows over time.

Median annual wage and salary earnings for working women and men, by age in years, 2019



Data Source: 2019 U.S. Census Bureau American Community Survey

Note: Sample contains individuals ages 18–64 who are not institutionalized or in the armed forces and have positive annual wage and salary earnings. Annual earnings data in the American Community Survey are rounded to the nearest \$100 and show substantial heaping at each \$1,000 value.

ing in their late 20s, men’s earnings grow faster than women’s, and by the time they are 45, men earn almost 50 percent more than women. This divergence coincides with the age at which many couples have their first child. Indeed, when looking at workers who do not have children, there is very little difference in median earnings between women and men (Figure 3). This suggests that women’s lower earnings are the result rather than the cause of women specializing in child care.

Evidence in support of this hypothesis comes from an analysis of how workers’ earnings evolve around the time of the birth of their first child. In the United States, mothers experience a nearly 25 percent decrease in their annual earnings in the year after their first child’s birth.⁴ This decrease grows in subsequent years, amounting to over 40 percent within a decade. The decrease in earnings reflects decreases in the probability that a mother will work, in the number of hours she will work, and in how much she is paid per hour of work. In contrast, fathers experience little change in their annual earnings in the first year of their first child’s life and a much smaller decrease in earnings thereafter. These differences account for around two-thirds of the total gender gap in earnings today.⁵

Education is strongly correlated with an individual’s current and future income, so if couples are simply having the parent with lower earnings specialize in child care, we would expect that parent to have less education regardless of gender. But that’s not what we see in the data. On average, a mother experiences a decline in earnings even when she has substantially more years of schooling than her child’s father.⁶ This suggests that differences in potential income do not drive a mother’s decision to specialize in child care.

We also don’t see a change in how mothers’ earnings evolve after the arrival of a new child when the child is adopted, which suggests that we can’t explain the wage gap by looking at the

health consequences of childbirth or the biological link between mother and child.⁷

Discrimination against women is another potential explanation for the gender gap. Assessing this explanation is very difficult because researchers usually cannot observe discrimination directly. A common approach to studying discrimination today is an audit study, where researchers submit randomized, fictitious résumés to job postings and note how many employers reply with an invitation to an interview. There is little evidence that women receive fewer contacts from employers on average.⁸ However, other studies find evidence that *mothers* receive fewer contacts than *fathers*.⁹ Although audit studies provide valuable evidence of discrimination in one part of the hiring process, it is not clear how much of the contemporary gender gap in earnings is explained by discrimination.¹⁰

It seems that preferences and social norms account for women’s greater specialization in child care. Preferences and norms are closely linked. For example, a social norm that “women are the primary caretaker” can shape women’s and men’s preferences regarding how much time to spend in school and what kinds of jobs they want to do.

How to Narrow the Gender Gap

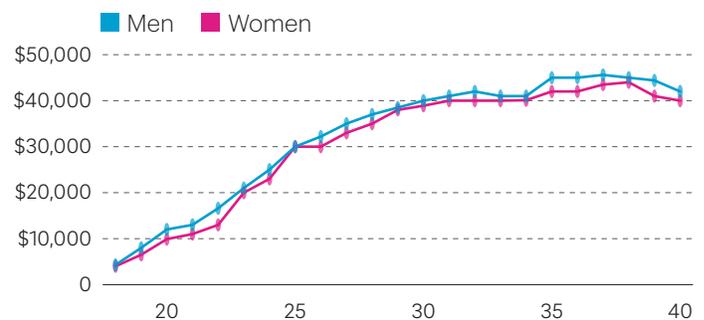
Expanded parental leave could narrow the gender gap by helping new mothers stay attached to the labor market, which would help them preserve job-specific skills and relationships. On the other hand, extended time away from the labor market could lead to an earnings penalty for mothers, either because of reduced skills or discrimination by employers who anticipate their parental leave.

In the United States, the best evidence on this question comes from California’s expansion of paid family leave from six to 12 partially paid consecutive weeks for births after May 20, 2004.¹¹ This sharp change in eligibility allows researchers to

FIGURE 3

The Gender Gap in Earnings Is Small for the Childless

Median annual wage and salary earnings for working women and men without children, by age in years, 2019



Data Source: 2019 U.S. Census Bureau American Community Survey

Note: Sample contains individuals ages 18–40 who do not have a child, are not institutionalized or in the armed forces, and have positive annual wage and salary earnings. Annual earnings data in the American Community Survey are rounded to the nearest \$100 and show substantial heaping at each \$1,000 value.

control for several factors that could confound the relationship between paid leave and postbirth earnings. Researchers found little evidence of paid family leave’s impact on employment or earnings. Indeed, there is evidence that the policy *lowered* first-time mothers’ employment and earnings. Although these results are limited to a single policy change, other papers have found little evidence that an expansion of paid leave in other countries reduced the gender gap.¹² Paid parental leave can be valuable for many reasons, but it does not seem to be a promising tool for closing the gender gap in earnings.

A second policy would make child care more affordable. Lowering the cost of child care can raise mothers’ earnings by increasing their availability for work and the predictability of that work. Public kindergarten in the United States is the largest source of subsidized child care nationwide, and research has found an increase in the employment of single mothers when their youngest child enters kindergarten.¹³ The introduction of universal, low-cost child care for children ages 3 and above in the Canadian province of Quebec provides further evidence that this policy increases mothers’ participation in the labor force.¹⁴ Child care could help narrow the gender gap, and providing child care for younger children could help mothers pursue their careers after childbirth.

The gender gap may also evolve for reasons that do not relate to gender-based policies. For example, the pharmacist profession has become much friendlier to working women in recent decades because of technological and organizational changes that make it easier for a pharmacist’s work to be subdivided among coworkers in a team.¹⁵ These changes, which were not motivated by gender equity concerns, eliminated the penalty faced by women who work fewer hours than men. Another potentially important development is the rise of work-from-home opportunities. Although we have yet to fully understand how the rise in work-from-home that emerged during the COVID-19 pandemic affected people’s careers, evidence from before the pandemic suggests that expanded work-from-home opportunities can increase mothers’ employment.¹⁶ If large enough, both changes could address the gender gap in earnings, and policy-makers could implement policies that encourage these changes. But these changes might be limited to white-collar jobs; closing the gender gap might require additional changes.

The gender gap could be addressed by changing social norms. Gender norms have become more supportive of working women. The share of men who agree with the statement that “it is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family” decreased from 68 percent in 1977 to 29 percent in 2022, with a similar decrease of 62 to 21 percent for women. Research suggests that changing social norms partly result from the increase in women’s employment, which raises the possibility that changes in norms are self-reinforcing.¹⁷

Conclusion

The gender gap in earnings has narrowed considerably since the early 20th century. However, a sizable gender gap remains, and research ties this disparity to mothers’ role in child care, which

is reinforced by preferences and social norms. In the rest of the 21st century, changes in the gender gap are likely to depend on changes in the affordability of child care, in the nature of work, and in social norms. [E](#)

Notes

- 1 The 2024 numbers come from the Current Population Survey. The 1900 numbers come from Acemoglu et al. (2004). Labor force participation rates do not include individuals doing unpaid labor (such as raising one’s own children).
- 2 See Goldin et al. (2006) and Beaudry and Lewis (2014).
- 3 See Goldin (2021) and Cortés and Pan (2023).
- 4 See Cortés and Pan (2023). For an alternative view, see Lundborg et al. (2024).
- 5 The contribution of child-related inequality to the overall gender gap in earnings combines estimates of the share of adults who have children with the differential evolution of earnings among parents.
- 6 See Cortés and Pan (2023).
- 7 See Kleven et al. (2021).
- 8 There is, however, evidence that some employers systematically favor women while others favor men. See Deming et al. (2016) and Kline et al. (2022) for more about these studies.
- 9 See Correll et al. (2007) and Becker et al. (2019).
- 10 Labor market discrimination against women was once widespread and institutionalized. Bailey et al. (2024a) find that federal antidiscrimination legislation passed in the 1960s narrowed the gender gap in earnings.
- 11 See Bailey et al. (2024b).
- 12 See Olivetti and Petrongolo (2017).
- 13 See Gelbach (2002), Cascio (2009), and Fitzpatrick (2012).
- 14 See Baker et al. (2008).
- 15 See Goldin and Katz (2016).
- 16 See Harrington and Kahn (2023).
- 17 See Fernández et al. (2004) and Fárre and Vella (2013).

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