

GENDER PAY GAP: RECENT TRENDS AND EXPLANATIONS

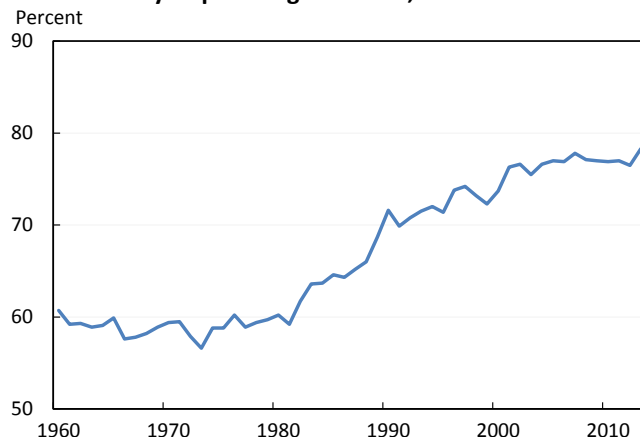
April 14 marks Equal Pay Day, the day that represents how far into 2015 the average American woman has to work, in addition to her work in 2014, in order to earn what the average man did in 2014. In recognition of Equal Pay Day, it's instructive to take a step back and examine what we know about the pay gap.

The Pay Gap

Over the past century, American women have made tremendous strides in increasing their labor market experience and their skills. Today, women account for 47 percent of the labor force and they hold 49.3 percent of jobs (women are more likely to hold two or more jobs and they are less likely to be self-employed). Women's share of the labor force has been rising for more than 50 years and is continuing to increase. Today more households than ever have a woman as the primary or equal breadwinner in the household.

On Equal Pay Day, however, we focus on a stubborn and troubling fact: Despite women's gains a large gender pay gap still exists. In 2013, the median woman working full-time all year earned **78** percent of what the median man working full-time all year earned. Phrased differently, she earned 78 cents for every dollar he did. Although this gap generally **narrowed** between the 1970s and 1990s, it has largely stopped narrowing and has remained between 76 and 78 cents since 2001.

Gender Pay Gap Among Full-Time, Year-Round Workers



Source: Bureau of Labor Statistics, Current Population Survey.

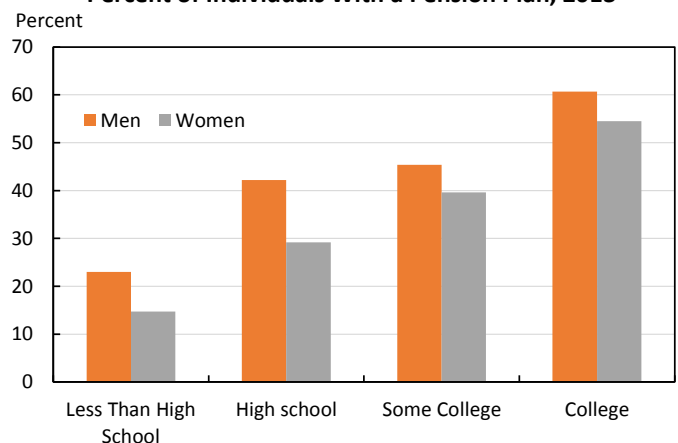
Note: Earnings are based on median earnings for full-time, year-round workers.

The Compensation Gap

The pay gap goes beyond wages and is even greater when we look at workers' full compensation packages. Compensation includes not just wages, but also employer-sponsored health and retirement benefits, training opportunities, flexible work arrangements, and paid family and sick leave.

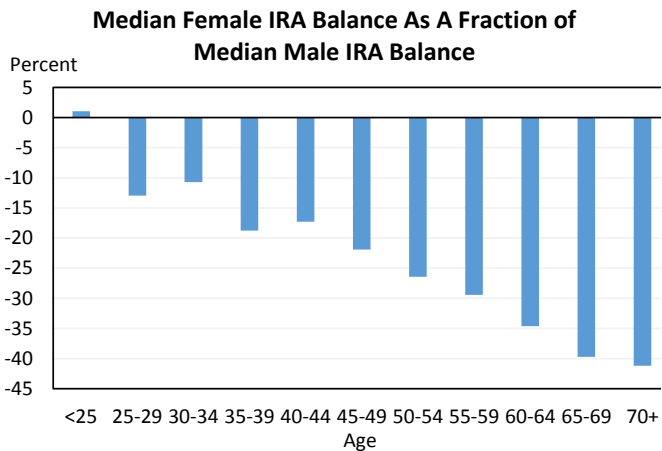
Women are less likely to have an offer of **health** insurance from their employer. Overall, women are also less likely to have **retirement** savings plans, however this gender gap is concentrated among lower income women. Prime-age women with college degrees are about as likely as their male counterparts to be covered by their employer's pension plan, while less-educated women are less likely to have an employer-based retirement plan.

Percent of Individuals With a Pension Plan, 2013



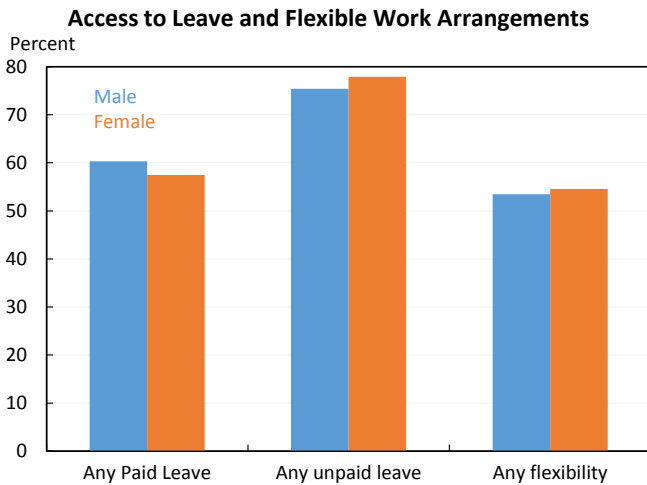
Source: Survey of Consumer Finances; CEA calculations.

Being offered a retirement plan is only the first step in retirement savings. The next step is accumulating retirement savings and even among those with a retirement account, women tend to have lower balances than men, which is partially driven by the pay gap.



Source: EBRI IRA database

Women are also slightly less likely than men to have [access](#) to paid leave and, perhaps as a result, are slightly more likely to take leave without pay. The gap in paid leave is particularly large among workers without a college education: among these workers, 52 percent of men, but only 44 percent of women, have access to paid leave.



Source: American Time Use Survey, CEA calculations.

These broader measures of compensation show that the pay gap is not just about differences in earnings or wages: on numerous dimensions – in access to employer-provided health insurance or pensions and paid leave, women’s compensation falls short of men’s.

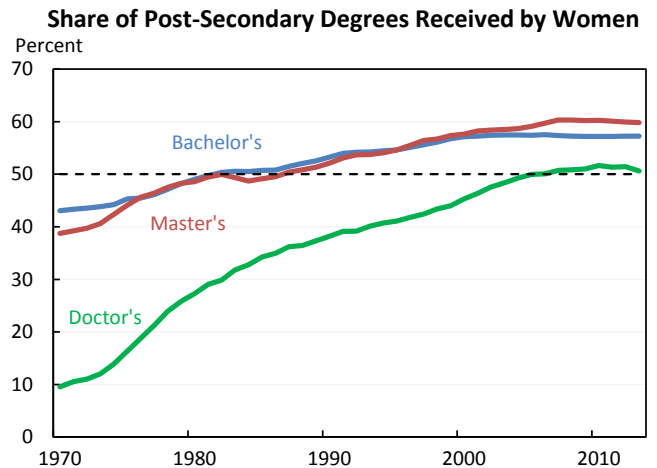
But why do women earn less than men? Some people point to women’s choices, some people point to discrimination, and some people point to differences in men and women’s experience and education. There is no single answer, which is why we need to make progress

on a number of dimensions. Let’s break it apart so we can better understand what is driving the pay gap.

The Gap from Education and Experience

Both education and experience shape what economists call “human capital” – the skills and qualifications learned either through education or on the job that make workers productive employees. In the past, men had greater levels of both education and experience than women, but this has radically changed since the 1970s.

While men were more likely to graduate from college in the 1960s and 1970s, in recent decades women have responded with greater force than men to the rising demand for education. Since the 1990s, the majority of all undergraduate and graduate degrees have gone to women. If these trends continue, women will represent a growing majority of our skilled workforce in the years ahead. These gains in educational attainment are particularly [important](#) for women’s future earnings and employment. The wage difference between workers with a college and high school education has grown since the 1980s, and today, college graduates earn more than twice what high school graduates earn. And by some estimates, in just five years, two-thirds of all job openings will require at least some college education.



Source: Department of Education, Integrated Post-Secondary Education Data System. Note: Dashed line indicates 50 percent.

On-the-job experience is also an important determinant of wages, and in the past, women typically left the labor force after marrying or having children. Today, even though women are still more likely than men to temporarily exit the labor force, compared to previous decades, they are more likely to work throughout their

lifetimes. For example, economists Francine Blau and Lawrence Kahn [found](#) that one-third of the decline in the pay gap over the 1980s was due to women’s relative gains in experience. Today, even the [majority](#) of mothers with an infant are in the labor force.

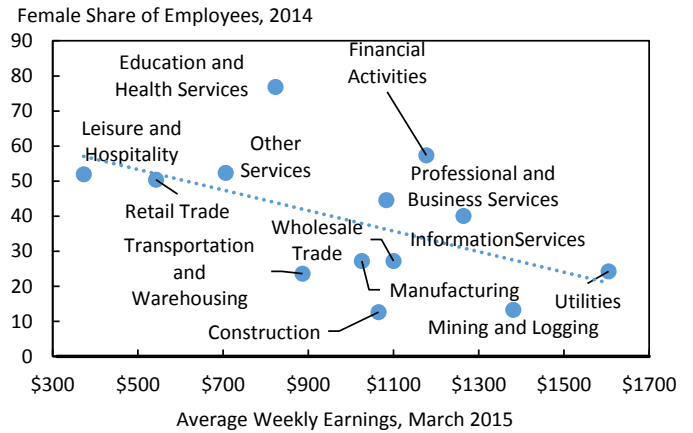
Much of the decline in the pay gap that occurred in recent decades has been because women have closed education and experience gaps. In fact, since women have increasingly become our most skilled workers, after accounting for education, even more of the pay gap is unexplained. In fact, once we hold differences in men’s and women’s education constant, the pay gap actually widens today; 20 years ago taking account of differences in education narrowed our estimates of the pay gap. The gender pay gap tends to rise with education, with the smallest differences between the earnings of men and women with less education and the biggest gaps among those with advanced degrees. The pay gap among women and men with professional degrees is currently about 67 cents.

The Gap from Occupation and Industry

As women’s labor market participation and education increased, so did their career opportunities. Women have made tremendous progress in entering occupations that were once heavily male-dominated, part of what Claudia Goldin has [termed](#) the “quiet revolution.”

Although occupational segregation has fallen, women are still more likely to work in lower-paying occupations and industries. Women remain underrepresented in the three industries with the highest average wages: information services, mining and logging, and utilities, but represent more than half of employees in the three industries with the lowest average wages: leisure and hospitality, retail trade, and other services.

Female Share vs. Average Earnings by Industry



Source: Current Employment Statistics, CEA calculations

Even when women and men are working side-by-side performing similar tasks, however, the pay gap does not fully disappear. Blau and Kahn decomposed the pay gap and [concluded](#) that differences in occupation and industry explain about 49 percent of the wage gap, but 41 percent of the wage gap is not explained by differences in educational attainment, experience, demographic characteristics, job type, or union status, using the Panel Survey of Income Dynamics. Using a similar approach, but newer data from the Current Population Survey, the Council of Economic Advisers finds that industry and occupation can explain about 20 percent of the wage gap, but about two-thirds of the gap is not explained by potential experience, age, race, education, industry, or occupation.

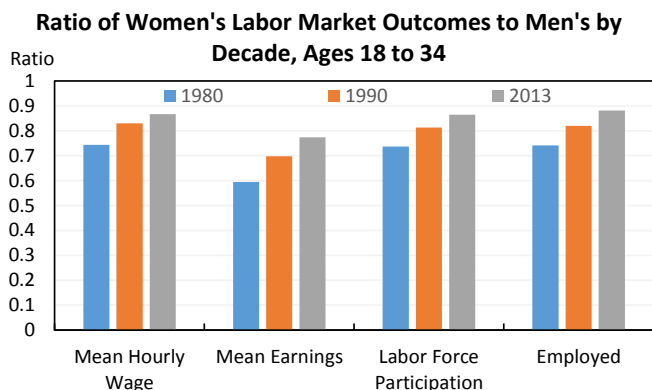
The real question, though, is why men and women end up in different occupations in the first place. It’s not clear whether we *should* account for differences in industry and occupation in wage gap decompositions. If these differences stem from preferences, it is reasonable to account for them. On the other hand, if men and women choose different jobs because of discrimination, industry and occupation should not be included. In many situations, the line between discrimination and preference is ambiguous.

Take the example of computer science, where the share of women is [lower](#) today than it was in 1985. This gap doesn’t start when workers are making career choices; rather, it results from a series of events and decisions that begin at very young ages. A recent OECD [report](#) finds that even high school girls who score high on math and science tests report low levels of confidence and

proficiency in math and science. And once in college, women pursue science and math degrees at lower rates than men: in the 2013 school year, women received 57 percent of all bachelor degrees, but only 35 percent in STEM fields. Even among women who begin a science-related career, more than half leave by mid-career, double the rate of men. Forty percent of those who leave [cite](#) a hostile or “macho” culture as the primary reason. Given why women leave these fields, at least some occupational differences appear to be driven by negative factors that prevent the full range of talented Americans from succeeding in the workplace.

The Gap from Family Responsibilities

At the early stages of their careers, each generation of young women has [fared](#) better than the previous generation. For example, in 1980, 18-34 year-old employed women earned about 74 cents for every dollar a man earned in an hour, but by 2013, this figure had increased to 87 cents. Reflecting increases in full-time work, the gap in annual earnings has narrowed even more. Some people point to this as evidence the pay gap reflects women’s different choices and priorities.



Source: Current Population Survey March Supplement, 1981, 1991, 2013, 2014; CEA calculations.
 Note: Earnings ratio is the ratio of mean wage and salary income of all workers. Hourly wage ratio is the ratio of mean hourly wages of all workers.

One reason the gender wage gap has narrowed faster among younger women is that between 1980 and 2013, the median age of first birth rose from 22.6 to 26.0. Among college-educated women, increases in the age of first birth have been even greater. Among women with advanced degrees the median age of first birth rose to age 31 by 2012.

Because motherhood is [associated](#) with a wage penalty and lower wage gains later in a woman’s career these

delays in childbirth have helped narrow the pay gap. Research has shown that [delaying](#) child birth for one year can increase a woman’s total career earnings and experience by 9 percent. Yet men [continue](#) to experience pay increases when they have children. While economists have long speculated that these different experiences reflect household decisions about specialization and women with children do work fewer hours and are more likely to take parental leave, more recent [research](#) has documented patterns of discrimination against women with children.

In fact, once they have children, women do earn less and are more likely to leave the labor force. However, not all women who do so are doing it by choice. [Research](#) shows that when women have access to paid maternity leave, a year later they work more and have commensurately higher earnings. A lack of access to leave or affordable quality childcare prevents some women who would like to work from doing so.

This evidence all indicates that a lack of paid leave is particularly detrimental to women’s long-term salaries and careers. Women are more likely than men to take extended time away from their careers when they don’t have access paid leave that allows them to take temporary time off for the birth of a child. Research examining both maternity leave programs in [other](#) countries and in [California](#) concludes that paid leave can help new mothers maintain a connection to the labor force, and increase the likelihood they return to their employer.

The Gap over Workers’ Careers

In general, the pay gap grows over workers careers. Young people tend to start their careers with more similar levels of earnings, but over time, a gender gap emerges and grows.

This pattern exists across the spectrum of education and skills. For example, economists Marianne Bertrand, Claudia Goldin, and Lawrence Katz [examined](#) the salaries of MBA graduates from a top business school and found that although men and women had fairly similar earnings at graduation, after a decade, men earned approximately 60 percent more than women.

In their research they found that much of the growth in the earnings gap in the first decade was due to women

being more likely to take time away from work – associated with child birth – and working fewer hours – also typically related to family and caregiving responsibilities.

In another example, Goldin [found](#) that law school graduates had similar earnings upon graduation. Although a small and insignificant pay gap opened after 5 years, it was similar among people with the same level of experience and working the same hours. After 15 years, however, male lawyers earned 55 percent more than female lawyers, and even after accounting for time out of work and job tenure, a 13 percent gap remained.

Therefore, even though gaps in work experience can account for some of the pay gap as women progress in their careers, a gap still remains between men and women with similar levels of experience, tenure, and credentials.

The Gap Due to Differences in Negotiations and Promotions

As the pay gap grows over time, even for workers who don't have children, some have hypothesized that a growing gap is due to differences in negotiating salaries and receiving promotions.

In general, women, even highly-educated women, are [less](#) likely to negotiate their first job offer than men. But even when women do negotiate, if the norms of negotiation and salary expectations are not transparent, they are likely to receive less than men. While gaps in negotiated salaries are small in “low-ambiguity situations,” in “high-ambiguity situations”, women received about \$10,000 less than similarly-qualified men.

Even though negotiation can lead to greater career prospects and higher wages, it can also be detrimental, particularly for women. Hannah Riley Bowles, Linda Babcock, and Lei Lai [found](#) that women were more often penalized for initiating negotiations, largely because female negotiators, while perceived as technically competent, were also viewed as socially incompetent.

While pay transparency can help reduce the ambiguity of negotiating situations, it cannot by itself eliminate the social penalties women face for initiating negotiations.

Underlying all of the possible explanations for the gender pay gap is the potential for discrimination. This discrimination doesn't need to be overt: some [work](#) has suggested that implicit biases are more common. If implicit, or subconscious, biases are at play, a pay gap stemming from discrimination will be more difficult to overcome.

The Role of Discrimination

It is difficult to isolate how much of the pay gap is due to discrimination. As this issue brief has discussed throughout, discrimination and implicit bias can impact the pay gap through many channels. It can influence what women choose to study in school, the industry or occupation that they choose to work in, the likelihood of a promotion or a raise, and even the chances that they stay working in their chosen profession.

Yet even when we ignore these forms of discrimination and hold education, experience, employment gaps due to children, occupation, industry, and job title constant, there is a pay gap. This “unexplained” pay gap leaves little beyond discrimination to explain it. Some research has found that this unexplained portion is a sizeable share of the total gap – 41 percent.

While it is difficult to get a measure of discrimination from data sets, more experimental research is starting to show evidence of discrimination in hiring, pay, and advancement. [Resume studies](#) have shown that, among identical resumes where only the name differs, gender affects whether the candidate is hired, the starting salary offered, and the employer's overall assessment of the candidate's quality. These findings echo the conclusions of earlier [audit studies](#). And even when women succeed in traditionally-male roles, studies find that women are perceived as less competent and likable than men.

More practically, the need for enforcement against gender discrimination in hiring, pay, and advancement is clear by the number of discrimination cases still being pursued and won.

The Gap and Policy Implications

The President's proposals to ensure that all workers receive fair pay for a day's work do not hinge on the existence, or the magnitude, of a gender pay gap. These are common-sense policies that ensure all workers are treated fairly in the workplace and are able to select jobs that best match their skills, not their family obligations.

Since the beginning of the Administration, the President has prioritized eliminating workforce discrimination and enforcing anti-discrimination policy. The first piece of legislation he signed into law, the Lilly Ledbetter Act, empowers workers to recover wages lost due to discrimination by extending the time period in which an employee can file a claim. Many workers, however, are unaware whether they face wage discrimination. For example, a 2010 [survey](#) found that 19 percent of employees reported their employer formally prohibits discussing salaries and another 31 percent are discouraged from discussing pay.

A pay gap stemming from discrimination is particularly likely to exist under conditions of pay secrecy, where workers do not know whether they are being discriminated against. In order to improve pay transparency and ensure fair pay, the President continues to call on Congress to pass the Paycheck Fairness Act, which would enable millions of workers to discuss compensation without fear of retaliation. Last year, the President signed an Executive Order prohibiting federal contractors from retaliating against employees who choose to discuss their compensation.

Government agencies are also increasing collaboration and making interagency collaboration a regular component of their agencies' enforcement work. Agencies are also addressing the implications of pay secrecy norms and policies by focusing on how better data on pay can improve enforcement. The President signed a Presidential Memorandum last year instructing the Secretary of Labor to establish new regulations requiring federal contractors to submit to the Department of Labor summary data on compensation paid to their employees, including data by sex and race. The Department of Labor will use the data to encourage compliance with equal pay laws and to target enforcement more effectively by focusing efforts where there are discrepancies and reducing burdens on other employers.

Other policies that can help ensure fair pay include modernizing outdated overtime regulations and raising the minimum wage. When employers are requiring people to work long, unpredictable hours this can be particularly challenging for those who need to plan for childcare and other family responsibilities. Fair compensation for hours worked, access to workplace flexibility to shift either time or place of work, and advanced notice of work schedules can go a long way to making it easier for workers to balance their work and family responsibilities. Raising the minimum wage and the tipped minimum is particularly important for women since women are disproportionately represented in lower-wage sectors. Although women are 47 percent of the labor force, they represent about 56 percent of workers who would benefit from increasing the minimum wage to \$10.10 and indexing it to inflation.

Family-friendly workplace policies can also better enable workers to choose jobs in which they will be most productive. [Increasingly](#), mothers and fathers are sharing caregiving and family obligations, but many workplaces have been slower to adapt, and as a result, both men and women are voting with their feet. For example, [work](#) by Claudia Goldin shows that women are particularly likely to select careers that offer flexibility, like pharmacy or obstetrics. The demand for family-friendly workplace policies, however, is not limited to women. For example, nearly half of all working parents have [reported](#) rejecting a job because they felt the position would interfere with their family responsibilities.

Individual businesses and the economy as a whole [benefit](#) when workers are in jobs that are well-suited to their skills and qualifications. From a business's perspective, these policies can also increase worker productivity and worker retention. For example, in a [study](#) of over 700 firms, work-life balance policies were associated with higher productivity, and a [survey](#) of California employers found that 90 percent reported that paid leave did not harm productivity, profitability, turnover, or morale.

Moving forward on policies that ensure fair pay for all Americans and help workers find jobs that best suit their talents are key aspects of the President's middle class economics agenda. While these policies can help narrow the pay gap, they also allow businesses to attract and retain the strongest talent, which benefits the economy as a whole.

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