

## Gender Wage Gap: Fact or Fiction?

### 1 - What Defines the Gender Wage Gap?

The Gender Wage Gap (GWP) is typically the ratio of what the average man makes compared to what a woman will annually. In the 1960's it was 64% and in 2020 rose to around 83 - 84%. [1] [3, p2] Comparing just workers ages 25-34y it is approximately 93%. [1] The 2020 ratio found on [3, p2]:

$$r = \frac{50,982}{61,417} \approx 0.8301 \implies 83\%$$

### 2 - Why Does it Exist?

There are typically a list of reasons people on either side of the argument bring up as to why this exists or even is accurate. As [3, p4] outlines: (1) "Work done by women is undervalued." (2) "Women are more likely to work in lower-paying jobs." (3) "Mothers face discrimination in the form of the "motherhood penalty."" (4) "Caregiving expectations suppress women's earnings over time." These are the big reasons why proponents of the GWP say it exists.

On the other side here are the parameters they use to explain why it doesn't: (1) "Among full-time workers (those working 35 hours or more per week), men were more likely than women to work a greater number of hours" [4] (2) "When controlling for marital status and comparing the earnings of unmarried men and unmarried women, more than half of the raw wage gap is explained" [4] (3) "once you control for marital status and children at home, we can explain about two-thirds of the unadjusted gender earnings gap" [4] (4) "Men constitute greater shares of certain types of jobs, or occupations, and women greater shares in others." [5]

### 3 - Doing the Calculations

As [4] outlines for 2015 BLS data:

- (1) men working full-time last year were nearly twice as likely as women to work 41 hours per work or more
- (2) men working full-time were also 2.5x more likely than women to work 60+ hour weeks
- (3) women working full-time were about 2.5x more likely than men to work shorter workweeks of 35 to 39 hours per week
- (4) women working 35-39 hours per week last year earned nearly 10% more than men who worked those hours
- (5) the average man employed full-time worked nearly 2 more hours per week
- (6) When controlling for marital status and comparing the earnings of unmarried men and unmarried women, more than half (53.4%) of the raw 18.9% wage gap is explained by just one variable (among many): marital status.
- (7) full-time single workers with no children under 18 years old at home (includes never married, divorced, separated, and widowed), women's median weekly earnings were 93.4% of the weekly earnings of their male counterparts in that cohort
- (8) for married workers with a spouse present, women working full-time earned only 78.1% of what married men with a spouse present earned working full-time

(9) young workers ages 20-24 years, women earned 89.7% of the median earnings of male full-time workers

He states rather succinctly at the end of his article: "once we start controlling individually for the many relevant factors that affect earnings, e.g. hours worked, age, marital status, and having children, most of the raw earnings differential disappears. In a more comprehensive study that controlled for all of the relevant variables simultaneously, we would likely find that those variables would account for nearly 100% of the unadjusted, raw earnings differential." [4]

**Most of the 2015 numbers have repeated with little change.** For instance, the average hours worked differential among full-time workers stayed between the historical 0.3 - 0.7h value. Men still maintained workplace majorities in various jobs just like women did in others. To give a couple examples of where women have been a majority from [18]: 68.1% Retail Bakeries (see p2), 59.7% Apparel Cutting & Sewing (see p2), 56.6% Cosmetics Manufacturing (see p2), 51.1% Apparel Merchants (see p3), 66.8% Pharmacists (see p3), 71.5% Clothing Stores (see p3), 64.1% Clothing Stores (see p3), 66.3% Jewelry Stores (see p3), 70.4% Department Stores (see p3), 72.6% Florist (see p3), 61.9% Accounting and Payroll Services (see p5), 82.4% Veterinarian Services (see p5), 74.6% All Education or Health Services (see p5), 89.6% Beauty Salons (see p6), etc. Doing the same for men: 72.3% All Agriculture (see p1), 85.5% All Mining/Oil Operations (see p1), 89.1% Construction Workers (see p1), 70.5% All Manufacturing Operations (see p1), 84.1% Lumber Merchants (see p3), 67.6% Hardware Stores (see p3), 66.3% Lawn/Garden Stores (see p3), 92.6% Rail Transportation (see p4), 87.6% Truck Transportation (see p4), 78.6% All Utilities (see p4), 72.7% Investigative Services (see p5), 91.2% Landscaping Services (see p5), 91% Automotive Repair (see p6), 90.5% Industrial Machinery Maintenance (see p6), 53.6% All Administration (see p6), etc. **As you can see there are obvious career genre differences that account for a large portion of the GWP.**

#### 4 - Personal Opinion

**Both sides have acknowledged that hours worked, occupation chosen, marital status, and motherhood are largely to blame for this median difference.** Working down the list in order, the annual hours a man works can be 90 - 100 more than a woman and much of it can be overtime, further increasing the gap. Occupational majorities will dramatically alter the output used to calculate the ratio. For example, imagine if women took the majority of Rail or Truck Transportation. The gap would greatly decrease due to the high salaries they typically have compared to something that pays 35 - 50% less (or more) like Department or Apparel occupations. Marital Status is a bit complicated as it implies some couples rely on one another for income or household securities, with the women typically getting a part-time job. Motherhood prevents women from going to work for months and will give men an advantage in hours worked. Simply put: restriction of hours and increased responsibilities make men look better for other high responsibility jobs compared to mothers getting back into the workspace. So, with that said, do I believe there is a large or crazy GWP? **No, I believe most of the GWP can be explained by those four and some other secondary effects, not structural discrimination like many social activists would say.**

# Compiled References

- [1] **Amanda Barroso & Anna Brown.** [“Gender Pay Gap in U.S. Held Steady in 2020.”](#) *Pew Research Center*, 25 May 2021.
- [2] [“In Coming Decades Women Will Continue To Be Slightly Less Than Half The Labor Force.”](#) *Pew Research Center*, 30 Jan 2017.
- [3] [“The Simple Truth About the Gender Pay Gap: 2021 Update.”](#) *American Association of University Women*, Fall 2021.
- [4] **Mark J. Perry.** [“Data From BLS Report on Women’s Earnings Suggest That Raw Gender Pay Gap Is Explained by Age, Marriage, Hours Worked.”](#) *American Enterprise Institute*, 1 Dec 2016.
- [5] **Elise Gould, Jessica Schieder, & Kathleen Geier.** [“What is the Gender Pay Gap and is it Real?”](#) *Economic Policy Institute*, 20 Oct 2016.
- [6] **Alison Doyle.** [“What is the Average Hours Per Week Worked in the US?”](#) *The Balance Careers*, 25 Jan 2021.
- [7] **Alison Doyle.** [“Average Salary Information for U.S. Workers.”](#) *The Balance Careers*, 23 Mar 2021.
- [8] **Guy Bentley.** [“Equal Pay For Less Work? Every Day Men Work 42 More Minutes Than Women.”](#) *Daily Caller*, 29 June 2016.
- [9] **Guy Bentley.** [“Gender Pay Gap: Study Reveals Why Women Earn Less.”](#) *Daily Caller*, 31 May 2016.
- [10] **Guy Bentley.** [“Global Study Finds Gender Wage Gap Close To Zero.”](#) *Daily Caller*, 15 May 2016.
- [11] **Robin Bleiweis.** [“Quick Facts About the Gender Wage Gap.”](#) *Center for American Progress*, 24 Mar 2020.
- [12] [“Usual Weekly Earnings of Wage and Salary Workers: Second Quarter 2021.”](#) *U.S. Bureau of Labor Statistics*, 16 Jul 2021.
- [13] [“3 - Employment status of the civilian noninstitutional population by age, sex, and race.”](#) *U.S. Bureau of Labor Statistics*, 2020.
- [14] [“7 - Employment status of the civilian noninstitutional population 25 years and over by educational attainment, sex, race, and Hispanic or Latino ethnicity.”](#) *U.S. Bureau of Labor Statistics*, 2020.
- [15] [“8 - Employed and unemployed full- and part-time workers by age, sex, race, and Hispanic or Latino ethnicity.”](#) *U.S. Bureau of Labor Statistics*, 2020.
- [16] [“11b - Employed persons by detailed occupation and age.”](#) *U.S. Bureau of Labor Statistics*, 2020.
- [17] [“12 - Employed persons by sex, occupation, class of worker, full- or part-time status, and race.”](#) *U.S. Bureau of Labor Statistics*, 2020.

- [18] ["18 - Employed persons by detailed industry, sex, race, and Hispanic or Latino ethnicity."](#) *U.S. Bureau of Labor Statistics*, 2020.
- [19] ["18b - Employed persons by detailed industry and age."](#) *U.S. Bureau of Labor Statistics*, 2020.
- [20] ["Report 1051 - Highlights of women's earnings in 2013."](#) *U.S. Bureau of Labor Statistics*, Dec 2014.
- [21] ["Report 1064 - Highlights of women's earnings in 2015."](#) *U.S. Bureau of Labor Statistics*, Nov 2016.
- [22] ["The Employment Situation - December 2016."](#) *U.S. Bureau of Labor Statistics*, 6 Jan 2017.
- [23] ["The Employment Situation - September 2021."](#) *U.S. Bureau of Labor Statistics*, 8 Oct 2021.
- [24] ["American Time Use Survey - 2014 Results."](#) *U.S. Bureau of Labor Statistics*, 24 June 2015.
- [25] ["American Time Use Survey - May to December 2019 and 2020 Results."](#) *U.S. Bureau of Labor Statistics*, 22 Jul 2021.