## EARNINGS

Stanford Center on Poverty and Inequality

Asubstantial body of work documents the level and evolution of the gender wage gap in the United States. ${ }^{1}$ This gap was very large in the 1960s, shrunk significantly in the 1970s and 1980s, has fallen only slightly since the 1990s, and remains fairly high. The median male full-time weekly wage was 162 percent of the median female wage in 1973. It had fallen to 131 percent by 1993 and stood at 123 percent in 2015. ${ }^{2}$

Yet the wage ratio captures only a fraction of the total gender gap in labor earnings. The typical focus on wage differences ignores that women might (a) be less likely to work, (b) work fewer hours, (c) receive fewer fringe benefits, and (d) have lower self-employment income than men. In addition, the surveys that are frequently used to compute gender wage ratios do not capture the top of the earnings distribution well, due to "top coding" (i.e., lumping high values into one top category that cannot be disaggregated) and measurement error. In short, wage ratios miss much of the gender inequality in the labor market, especially among top earners, where gender gaps may be largest.

## A Better Gender Gap Measure

Given the limitations of survey data, Thomas Piketty, Gabriel Zucman, and I have developed a more comprehensive gender gap measure using individual income tax data. ${ }^{3}$ To divide earnings within married couples, we use information from W2 wage earnings forms. We then augment wage earnings with fringe benefits, such as pension contributions and health benefits, to capture the full compensation of employees. Tax data also provide information on self-employment earnings broken down across spouses. ${ }^{4}$ We use these data to define an individual's labor earnings as the sum of wages, salaries, fringe benefits, and self-employment income. This is a comprehensive measure of labor earnings that is consistent with the definition used in National Accounts. ${ }^{5}$ We measure labor earnings annually, adjusting for inflation to 2014 dollars using the national income deflator.

## KEY FINDINGS

- Gender wage gaps, as conventionally measured, understate the extent of gender inequality in the labor market. When gender differences in wages are examined in conjunction with gender differences in labor force participation, fringe benefits, and self-employment income, men's average labor earnings are 75 percent higher than women's. Under this fuller accounting, women thus earn 57 cents for each dollar earned by men.
- Although women have come to comprise almost 50 percent of the formal labor market, their representation in top labor income groups has risen very slowly. In the most recent available data, just 16 percent of the top 1 percent of labor income earners are women.

Figure 1 provides a summary of the trend in labor income gender inequality since the 1960s. We take two basic statis-tics-total labor earnings per man and total labor earnings per woman-and compute the male-to-female ratio of these two averages. These averages are across all men and women aged 20-64, including those not employed (e.g., women and men who are incarcerated or not employed in the formal labor market). Therefore, this ratio captures not only the gender differences in wages among those who work, but also the gender differences in labor force participation, hours of work, fringe benefits, and self-employment income. This is a relevant metric for studying overall labor income inequality between all working-age men and women.

As Figure 1 shows, men's average labor earnings were 3.7 times women's in the early 1960s and are now 1.75 times women's average labor earnings. Or equivalently, women earned only 27 percent of what men were earning in the 1960s. Today, women earn about 57 percent of what men earn.

This comprehensive gender gap is therefore much larger than the gender gap based on wages alone. When all sources of labor income differences are included, the gender gap has halved since the 1960s but is far from disappearing. Additional breakdowns also show that the gender gap increases with age. Today, young men aged 20-34 earn 1.3 times their female peers; this same ratio reaches almost 2 for adults aged 55-64.

Next, we look at the gender gap at various percentiles of the distribution, looking first at the median, and then at upper percentiles. Figure 2 shows that among the working-age population (again including those who aren't employed), the difference in median annual labor earnings for men versus women has diminished in recent decades. Two forces are at play. For working-age women, median labor earnings stood above $\$ 20,000$ in 2014, more than five times the 1962 level. This is largely the result of the much larger share of women now participating in the formal labor market. For workingage men, median labor earnings have stagnated: They were the same in 2014 as in 1964, at about $\$ 35,000$. Though the median labor income of men grew relatively quickly from 1962 to 1973 and during the 1990s boom, it fell during recessions, effectively erasing all gains. Therefore, the closing of the median gender wage gap is largely driven by the complete stagnation of male median wages in the United States since the early 1970s.

## The Top of the Income Ladder

While median wages have stagnated, labor income at the top has surged. Are women catching up with men at the top? Our data show that considerable gender inequalities persist at the top of the distribution. The top line in Figure 3 depicts the fraction of women among all workers in a given year. Notably, women are almost as likely to work as men are today. In the 1960s, women made up just 37 percent of the formal labor market (when both salaried work and self-employment are included). Yet by the early 1990s, women had almost entirely closed the labor force participation gap, with each gender's share of total employment converging at about 50 percent.

However, as Figure 3 also shows, women are much less represented at the top of the labor income distribution (e.g., the top decile, the top percentile, and the top $0.1 \%$ ). If there were no additional gender gap near the top, we would expect the fraction of women earners in these top groups to equal women's overall fraction of the labor market (i.e., about 50\%). In the 1960s, women accounted for less than 5 percent of the
figure 1. Male-to-Female Average Labor Earnings Ratio for U.S. Adults Aged 20-64, 1962 to 2014


Source: Figures 1-3 are based on the author's calculations.

FIGURE 2. Median Labor Earnings of Adults Aged 20-64, 1962 to 2014


FIGURE 3. Share of Women in the Employed Population by Fractiles of Labor Earnings in the United States, 1962 to 2014

top decile, top 1 percent, and top 0.1 percent of labor income earners, while women made up 35 to 40 percent of all earners. Nowadays, they account for close to 27 percent of the top decile (+22 points), but the proportion of women in top groups falls steeply with income. Women make up only about 16 percent of the top 1 percent (+13 points since the 1960s), and 11 percent of the top 0.1 percent (+9 points).

The representation of women at the very top has thus increased only modestly since 1999. The glass ceiling is nowhere close to being shattered. At the pace of progress we have seen since 2000, it would take over a century for women to reach parity in the top 1 percent or the top 0.1 percent, a very long march toward gender equality.

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## NOTES

1. For a recent and comprehensive survey, see Blau, Francine D., and Lawrence M. Kahn. 2017. "The Gender Wage Gap: Extent, Trends, and Explanations." Journal of Economic Literature 55(3), 789-865.
2. Organisation for Economic Co-operation and Development. 2017. "Earnings and Wages: Gender Wage Gap." Data online at https://data. oecd.org/earnwage/gender-wage-gap.htm.
3. The discussion in this short article is based on recent joint work with Thomas Piketty and Gabriel Zucman. See Piketty, Thomas, Emmanuel Saez, and Gabriel Zucman. Forthcoming. "Distributional National Accounts: Methods and Estimates for the United States." Quarterly Journal of Economics.
4. Piketty et al., forthcoming. Complete methodological details are provided in the online appendix, and complete data are posted in Excel format at http://gabriel-zucman.eu/ usdina/.
5. See Piketty et al., forthcoming, for a history of the measurement of national income and its distribution in the National Accounts system.
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