Gender Wage Gap May Be Much Smaller Than Most Think

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The gap between earnings of male and female workers has declined significantly over the past 30 years. The Bureau of Labor Statistics reports that in 1979 median weekly earnings of full-time female workers were 63.5 percent of male workers' earnings, implying a gap of 36.5 percent. The earnings gap dropped to 30 percent in 1989 and to 23.7 percent in 1999. In the second quarter of 2011, the gap reached a low of 16.5 percent.

Despite the accuracy of these numbers, many researchers believe that the mere com-

together accounted for one-third of the decline in the gap in the 1980s and 1990s.¹ As women become more educated, they have more employment opportunities in occupations that require higher skills and pay higher wages.

Such occupational "upgrades" helped to narrow the wage gap. However, there are still significantly fewer women in highly paid occupations. Men are more likely to be lawyers, doctors and business executives, while women are more likely to be teachers, nurses

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parison of median weekly earnings of male and female workers presents an incomplete picture. First, women are likely to work fewer hours than men, which would make a gap in weekly earnings between the two groups substantial even if their hourly wages are the same. For this reason, most economic studies of a gender gap, including all of the studies reviewed in this article, use hourly wages instead of weekly earnings as a measure. Second, many other factors (such as education and labor force attachment) could affect wages. Research suggests that the actual gender wage gap (when female workers are compared with male workers who have similar characteristics) is much lower than the raw wage gap.

Many studies point out that differences in educational attainment, work experience and occupational choice contribute to the gender wage gap. Economists Francine Blau and Lawrence Kahn found that women's gains in education and work experience and office clerks. This gender occupational segregation might be a primary factor behind the wage gap.

Another important reason for the gender gap is the difference in labor force attachment between men and women. Women are likely to leave their careers temporarily for childbirth and raising children. Such leaves may be associated with a decrease in human capital and with temporary delays in training and promotion, which consequently lead to lower wages. In addition, women are more likely to work part time and less likely to work overtime than men because of family responsibilities.

One study found that, because women have weaker labor force attachment than men, women tend to be assigned to positions where turnover is less costly.² As a result, women are employed in positions that have a shorter duration of on-the-job training and that use less capital. The study concludes that these differences in on-the-job training and capital in positions filled by men and women, along with an implied lower value placed on women's prior labor market experience, account for a substantial part of the gap in wages between males and females.

A recent report prepared for the U.S. Department of Labor analyzed the gender wage gap using Current Population Survey (CPS) data for 2007.³ The report takes into account differences between men and women in educational attainment, work experience, occupation, career interruptions, part-time status and overtime worked. The result is striking—these factors explain approximately three-fourths of the 2007 raw gender hourly wage gap of 20.4 percent. The adjusted 2007 gender hourly wage gap is roughly 5 percent.⁴

To better match women and men with similar characteristics relevant in a job market, another study used the very detailed National Survey of College Graduates 1993 (NSCG), which provides information not only on the highest degree attained, but also on major field of study and labor force experience.⁵ To explore racial differences in the gender wage gap, the study compared women of various ethnicities with white men who had similar education, work experience and academic major and who spoke English at home. The study reports a wage gap of 9 percent for white women, 13 percent for black women, 2 percent for Asian women and 0.4 percent for Hispanic women. When the analysis was restricted to unmarried, childless women only, the wage gap shrunk to 7 percent for white women, 9 percent for black women and to virtually zero for Asian and Hispanic women.

Some researchers believe that it is not enough to compare wages of similar men and women. They argue that total compensation

Median Weekly Earnings of Full-time Workers



The graph shows median weekly earnings of males and females as reported by the BLS and the corresponding earnings gap between males and females. For example, in the second quarter of 2011 the gap in weekly earnings was 16.5 percent. The studies reviewed in the article show, however, that the gap in hourly wages between males and females who have similar characteristics is much smaller, about 5 percent, or about \$35 a week.

(wages together with benefits) must be compared. Women of child-bearing age may prefer jobs with a lower wage but with employer-paid parental leave, sick leave and child care to jobs with a higher wage but without such benefits. A study that used National Longitudinal Survey of Youth 1979 (NLSY79) found that female workers were indeed more likely to receive family-friendly fringe benefits.⁶ Some economists believe that female workers "pay" for the benefits they prefer by accepting a lower wage. If that is the case, excluding fringe benefits would exaggerate the actual gender wage disparity.

Economists Eric Solberg and Teresa Laughlin applied an index of total compensation, which accounts for both wages and benefits, to analyze how these benefits would affect the gender gap.⁷ They found a gender gap in *wages* of approximately 13 percent. But when they considered *total compensation*, the gender gap dropped to 3.6 percent.

Despite the difficulty in measuring the gender gap in earnings, the topic attracts much attention of policymakers and payequity advocates. Hopefully, continued economic research on the subject will add to a meaningful discussion and will guide effective public policy.

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ENDNOTES

- ¹ See Blau and Khan.
- ² See Barron et al.
- ³ CONSAD Research Corp.
- ⁴ It is reasonable to believe, therefore, that the actual gender earnings disparity in the second quarter of 2011 is closer to 4 to 5 percent rather than 16.5 percent as presented in the graph. Put differently, the current gender gap in average weekly earnings is about \$35.
- ⁵ See Black et al.
- ⁶ See Lowen and Sicilian.
- ⁷ See Solberg and Laughlin.
- ⁸ In our estimation, the gap is 18.4 percent.

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Gender Earnings Gap in the Eighth Federal Reserve District

with the national gap? The Bureau of Labor Statistics (BLS) does not provide the median weekly earnings data by state or metro area. Fortunately, the National Bureau of Economic Research provides the data used by the BLS for its estimates through 2010. Using these data, we were able to closely replicate the raw U.S. gender earnings gap of 18.8 percent as reported by the BLS for 2010.⁸ We then expanded the analysis and calculated the raw gender gaps in weekly earnings for states and large metro areas in the Eighth Federal Reserve District.

Among the states within the Eighth District, Arkansas has the lowest gender earnings gap (18.5 percent), slightly better than the national gap. Gender earnings gaps in Tennessee (19.4 percent) and Mississippi (20.5 percent) are slightly higher than the nation's, while the gap in Illinois (22.2 percent) is 21 percent higher than the nation's. Kentucky (24.3 per-

cent), Missouri (24.8 percent) and Indiana (25.0 percent) have the highest gender earnings gaps among the Eighth District's states, each about a third above the national average.

All major metro areas within the Eighth District exhibit higher gender earnings gaps than the national average. Memphis has a gender earnings gap of 23.3 percent, while Louisville posts a gap of 23.4 percent. Despite Arkansas' having the lowest gender earnings gap among the Eighth District's states, the gender gap in Little Rock is as high as 25 percent. St. Louis has the highest gender gap among the major metro areas in the District (27.3 percent), which is 48 percent higher than the national average.

The available data do not allow us to estimate the degree to which differences in education, occupational choice, and labor force experience and attachment between men and women in the Eighth District account for higher gender earnings gaps in the District.