GENDER DIFFERENCES IN CAREERS AND PAY[‡]

Changes in the US Gender Gap in Wages in the 1960s[†]

By MARTHA J. BAILEY, THOMAS HELGERMAN, AND BRYAN A. STUART*

In the 1960s, landmark legislation targeted the long-standing practice of labor market discrimination against US women. The Equal Pay Act of 1963, an amendment to the Fair Labor Standards Act (FLSA), became the first piece of federal legislation mandating equal pay for equal work. Title VII of the Civil Rights Act followed in 1964 with a provision that more broadly prohibited *any* sex-based discrimination in employment. Complementing this legislation, the 1961 and 1966 FLSA amendments increased the real minimum wage by 24 percent by 1970 and almost doubled the number of workers it covered, extending the FLSA's provisions to an additional 22.6 million individuals (US Department of Labor 1961, 1970). These changes benefited many workers in some of the economy's lowest-earning industries, such as services, retail trade, and government (that is, schools and hospitals)—industries where many women worked.

Yet the gender gap in pay was unchanged over the 1960s. Figure 1 shows that the ratio of women's to men's median annual and weekly wages for full-time, full-year (FTFY) workers hovered around 60 percent of men's until the early 1980s (Blau and Kahn 2017).
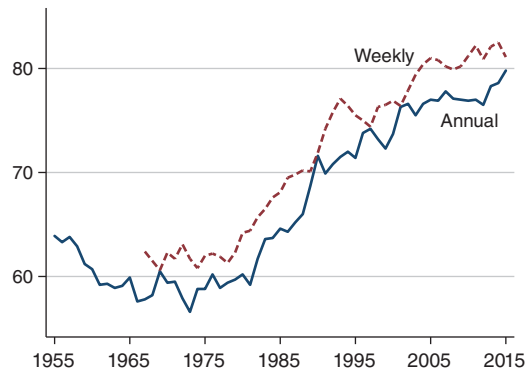
FIGURE 1. GENDER EARNINGS RATIO IN THE UNITED STATES, 1955–2015

Note: This figure recreates Figure 1 of Blau and Kahn (2017) using multiple sources (US Census Bureau 1956–1962; Mellor 1984; DeNavas-Walt and Proctor 2015; Bureau of Labor Statistics 2015, 2020).

This paper examines changes in the *distribution* of wages for clues about the persistence of the gender gap in the 1960s. Our key finding is that the 1960s witnessed *large* increases in women's relative pay in the lower part of the wage distribution, where the Equal Pay Act, Title VII, and the FLSA would have tended to increase wages. These gains are not explained by improvements in working women's observed characteristics and run contrary to simple models of negative selection, which predict that women's increased entry into the labor market would tend to decrease wages in the lower part of the skill distribution (Beller 1977, Heckman 1979).

I. Changes in the Distribution of Wages in the 1960s

We use the 1962–1971 March Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) to track the

evolution of women's and men's wages in the 1960s (Flood et al. 2020). To account for differences in the work intensity of women and men, we construct implied hourly wages by dividing annual wage earnings by weeks worked last year and hours worked in the reference week. We also compare samples of all wage earners to a sample of more attached FTFY workers as in Figure 1.

Over the 1960s, both men and women benefited from strong wage growth—around 20 points at the mean and median. Figure 2 displays growth across the wage distribution by plotting different percentiles for both men and women. Consistent with the stability of the gender gap in Figure 1, Figure 2F shows little change at the median. (The gender gap at the mean is also stable over the 1960s.)

Figure 2B and Figure 2D, however, show strong convergence in women's wages below the median. The tenth percentile for women gained 16 points on the tenth percentile for men in the sample of all wage earners; this statistic was 21 points in the FTFY sample. Gains in the twenty-fifth percentile were 7 points among all wage earners and 8 points in the FTFY sample.

Above the median, the pattern differed. At the seventy-fifth percentile, Figure 2H shows that women lost ground to men by around 1 point in both samples. Figure 2 omits the ninetieth percentile for brevity, but here too women fell behind. Despite little movement in the middle of the distribution and above, women's wages caught up to men's below the median.

II. Decomposing Women's Wage Changes across the Distribution

To understand the role of different factors shaping the gender gap in the 1960s, we decompose changes into those attributable to individual characteristics, the minimum wage, and the residual wage structure. Following DiNardo, Fortin, and Lemieux (1996, henceforth DFL), let w denote the log of real wages, x denote a vector of characteristics, and t_w and t_x be binary variables for the year (1961 or 1970) in which w or x, respectively, is observed. The real value of the minimum wage in year t is m_t. The density of wages in 1961 can be written as

$$(1)\quad f_{61}(w) = \int f(w|x, t_w{=}61; m_{61})\, dF(x|t_x{=}61)$$
$$\equiv f(w; t_w = 61, t_x = 61, m_{61}),$$

where $f(w|x, t_w = 61; m_{61})$ is the conditional density of wages in 1961 and $dF(x|t_x = 61)$ is the marginal distribution of attributes.

Separately for men and women, we examine the change in the density of wages from 1961 to 1970, which is written as

$$(2)\quad f_{70}(w) - f_{61}(w)$$
$$= \big[f(w; t_w = 61, t_x = 70, m_{61})$$
$$- f(w; t_w = 61, t_x = 61, m_{61}) \big]$$
$$+ \big[f(w; t_w = 61, t_x = 70, m_{70})$$
$$- f(w; t_w = 61, t_x = 70, m_{61}) \big]$$
$$+ \big[f(w; t_w = 70, t_x = 70, m_{70})$$
$$- f(w; t_w = 61, t_x = 70, m_{70}) \big].$$

The first right-hand side term describes the change in wages due to changes in the characteristics of workers (such as education and potential experience). The second term describes the increase in wages due to the rising level and coverage of the minimum wage, and the third captures the role of residual factors implicit in the wage structure.

Following DFL, we construct the first counterfactual wage density in equation (2) by reweighting the observed 1961 density:

$$(3)$$
$$f(w; t_w = 61, t_x = 70, m_{61})$$
$$= \int f(w|x, t_w = 61; m_{61})\, dF(x|t_x = 70)$$
$$= \int f(w|x, t_w = 61; m_{61})\psi_x(x)\, dF(x|t_x = 61),$$

where

$$\psi_x(x) = dF(x|t_x = 70)/dF(x|t_x = 61)$$

is a reweighting function. Simply stated, the counterfactual density is obtained by reweighting individuals observed in 1961 such that their characteristics occur in proportion to their representation in 1970. For instance, because working women's education rose over the decade, the reweighting function will give more educated
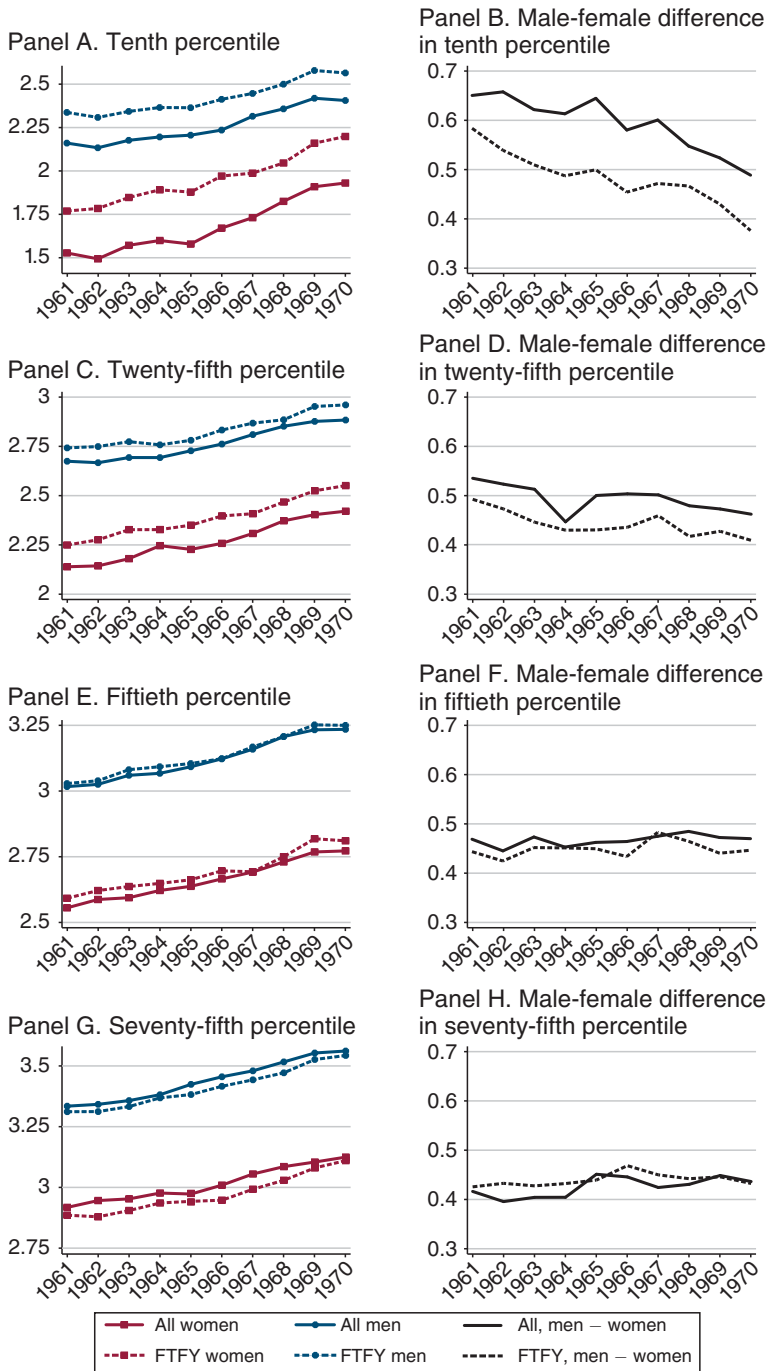
FIGURE 2. CHANGES IN LOG HOURLY WAGES BY PERCENTILE AND SEX, 1961–1970

Notes: Sample contains individuals ages 16–64 who are civilians, not in group quarters, and not self-employed. FTFY workers are those who worked at least 50 weeks in the prior year and usually work at least 35 hours per week. Because weeks worked last year is only available as a categorical variable, we impute it using the average weeks worked from 1976–1979 by sex, non-white, and age category (16–25, 26–35, 36–45, 46–55, 56–64).

women more weight in the 1970 counterfactual. Bayes' rule transforms the estimation of $\psi_x(x)$ into a simple problem:

$$(4) \quad \psi_x(x) = \frac{\Pr(t_x = 70 | x)}{\Pr(t_x = 61 | x)} \frac{\Pr(t_x = 61)}{\Pr(t_x = 70)}.$$

We estimate the first ratio with a logit model in which the dependent variable is an indicator for 1961 and the x vector contains indicators for race, marital status, and state group; interactions between education and potential experience categories; occupation and industry categories to account for women's integration into higher-earning fields; and categorical variables for the number of hours and weeks worked to account for changes in work intensity.[1] We compute the second ratio using the weighted number of observations by year.

The second counterfactual wage density simulates an increase in the level and coverage of the minimum wage between 1961 and 1970 after setting the distribution of individual characteristics to their 1970 level and holding the residual wage structure fixed at its 1961 level. Following DFL, we construct the minimum wage counterfactual by selecting the part of the characteristic-reweighted 1961 density above m_{70} and the part of the 1970 density at or below m_{70}. The federal minimum wage was \$1.00 for most of 1961 and \$1.60 in 1970 (or \$8.46 and \$10.66 in 2019 dollars). There is good reason to believe that the Equal Pay Act would have had greater effects on women at the lower end of the wage distribution, where it was easier to assess compliance with "equal pay for equal work." For instance, the tasks of hourly employees (often less skilled work) are often easier to compare than in salaried jobs. However, any change in the wage structure below the 1970 minimum wage due to the Equal Pay Act, Title VII, or other factors will be attributed to the "minimum wage" in this decomposition.

Figure 3A presents results for women, showing the actual wage densities in 1961 and 1970 along with vertical lines for the minimum wage
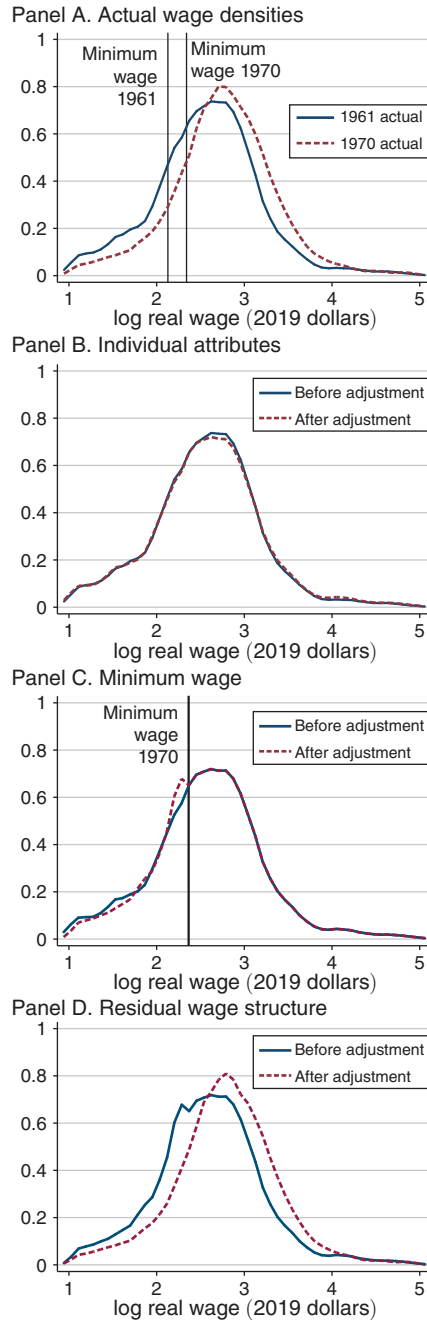

Panel A. Actual wage densities

Panel B. Individual attributes

Panel C. Minimum wage

Panel D. Residual wage structure

FIGURE 3. ACTUAL AND COUNTERFACTUAL WAGE DENSITIES FOR WOMEN, 1961–1970

Notes: Figure 3 show densities of real log hourly wages. Panel A displays actual densities. Panels B–D display wage densities before and after adjusting for individual attributes, the minimum wage, and the residual wage structure, as indicated in equation (2).

[1] There are 21 state groups observed in the CPS in this period. Education categories include $[0, 12)$, 12, $(12, 16)$, $16+$. Potential experience (equal to age-education-6) categories are $[0, 5)$, $[5, 10)$, $[10, 19)$, $[20, 29)$, $30+$. Weeks worked categories are $(0, 20)$, $[20, 50)$, $50+$. Hours categories are $(0, 20)$, $[20, 35)$, $35+$.

TABLE 1—DECOMPOSING CHANGES IN LOG HOURLY WAGES, 1961–1970

		Percent of change explained by:		
	Change (log pts)	Individual attributes	Minimum wage	Residual wage structure
Panel A. Women				
10th percentile	0.413	−0.053	0.431	0.623
25th percentile	0.282	−0.015	0.211	0.802
50th percentile	0.220	−0.004	0	1.003
75th percentile	0.207	0.059	0	0.942
90th percentile	0.223	0.142	0	0.859
Mean	0.261	0.020	0.168	0.812
Panel B. Men				
10th percentile	0.252	−0.170	0.043	1.126
25th percentile	0.209	−0.098	0	1.096
50th percentile	0.221	−0.008	0	1.008
75th percentile	0.227	0.063	0	0.937
90th percentile	0.258	0.113	0	0.887
Mean	0.238	−0.009	0.016	0.992
Panel C. Women − Men				
10th percentile	0.162	0.130	1.033	−0.164
25th percentile	0.073	0.223	0.819	−0.041
50th percentile	−0.001	−0.875	0	1.875
75th percentile	−0.020	0.112	0	0.888
90th percentile	−0.035	−0.072	0	1.072
Mean	0.023	0.319	1.722	−1.041

Notes: Column 1 displays the change from 1961–1970 in the wage distribution. Columns 2–4 report the percent of the 1961–1970 change explained by each factor. See equation (2) for the underlying decomposition.

in each year.[2] Table 1 shows what share of women's wage gains were explained by changes in their characteristics between 1961 and 1970 at different points in the distribution. At the tenth percentile, changes in women's characteristics predict that their wages should have *fallen*, whereas above the median, changes in their characteristics suggest wages should have *risen* (Table 1A). These patterns hold for men as well (Table 1B and Figure 4B). Below the median, changes in men's attributes predicted a larger relative fall in their wages, whereas the reverse is true above the median. Consequently, changes in characteristics predict a convergence of the gender gap below the median but an increase above the median (Table 1C). As also shown in Figure 3C and Figure 4C, the amendments to the FLSA (potentially including the Equal Pay Act and other policies affecting wages at

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[2] Notably, the distribution of wages in the ASEC does not display bunching at the minimum because of measurement error (Bailey, DiNardo, and Stuart forthcoming).
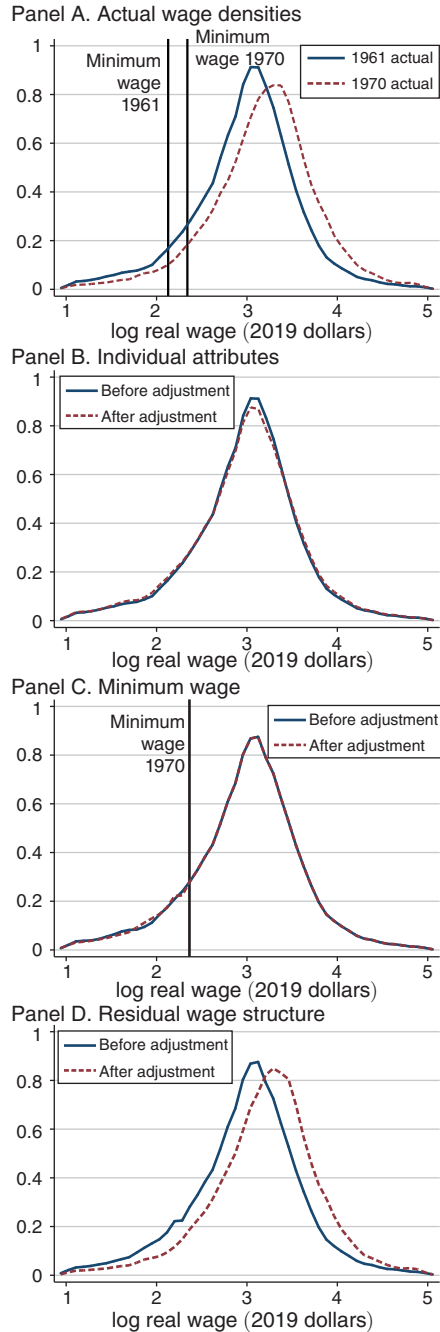

Panel A. Actual wage densities

Panel B. Individual attributes

Panel C. Minimum wage

Panel D. Residual wage structure

FIGURE 4. ACTUAL AND COUNTERFACTUAL WAGE DENSITIES FOR MEN, 1961–1970

Notes: Figure 4 show densities of real log hourly wages. Panel A displays actual densities. Panels B–D display wage densities before and after adjusting for individual attributes, the minimum wage, and the residual wage structure, as indicated in equation (2).

the lower end of the distribution) play a large role—much larger for women than men, more than explaining the narrowing of the gender gap at the tenth percentile and accounting for 80 percent of the convergence at the twenty-fifth percentile.

Figures 3D and 4D show that shifts due to factors unexplained by individual attributes or the minimum wage are by far the dominant factors in raising women's and men's wages. These unexplained factors worked against convergence in the gender gap below the median, but they were not large enough to offset women's gains from the minimum wage and related policies. Above the median, changes in the residual wage structure benefited men more than women, accounting for 89 percent of the divergence in the gender gap at the seventy-fifth percentile and over 100 percent at the ninetieth.

III. Conclusion

The stability of the male-female difference in average and median wages in the 1960s obscures large gains by women in the lower part of the wage distribution. Below the median, women's wages increased sharply relative to men's during the 1960s, and those gains were especially large for the lowest earners. Although this paper does not isolate the contribution of different policies that may have benefited lower-earning women, the amendments to the FLSA as well as the Equal Pay Act of 1963 and Title VII of the Civil Rights Act are strong contenders. Future work should explore the roles of these statutes in greater detail.

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