

ISSUE BRIEF

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Equal Pay for Equal Work: Examining the Gender Gap

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The White House and many in Congress argue that employers pay women less than men for the same work. They point to figures showing that women earn 77 cents for each dollar men earn.¹ Such statistics ignore other factors that influence pay.

Education, choice of industry and occupation, hours worked, experience, and career interruptions all affect the productivity—and compensation—of workers, whether male or female. Accounting for such factors reduces the difference between average male and female wages to just 5 cents on the dollar. Other factors, such as the cost of fringe benefits, may account for much or all of the remaining gap.

The Gender Gap

Differences in average pay do not necessarily indicate discrimination. Many factors affect workers' productivity and thus their pay, including:

- **Work hours.** Employees who work longer shifts—including overtime—usually produce and earn more than those who do not.
- **Education and human capital.** More educated workers often have more skills and greater pro-

ductivity than less educated workers. Consequently, they usually command higher pay.

- **Occupation and industry.** Jobs in some occupations and industries (e.g., construction, manufacturing) are more physically unpleasant or dangerous than others: 92 percent of workplace fatalities in the U.S. are male.² In order to attract potential employees, these jobs must pay a compensating wage differential that accounts for the dangerousness or unpleasantness of the work. Other jobs require specialized skills or expertise.
- **Experience.** Employees become more productive as they gain experience. Economists also find that their pay tends to rise as well.
- **Career interruptions.** The skills and productivity of workers who drop out of the labor force can erode. When they return, they usually earn less than they would have had they remained employed continually throughout.
- **Benefits.** Cash wages make up only two-thirds of workers' total compensation. Non-cash benefits, such as health coverage and paid leave, make up the rest. Employers care about the total compensation they pay but do not particularly care about how it divides between cash wages and benefits. Workers who want more benefits may accept jobs with lower wages, and vice versa.

Market forces compel employers to set pay on the basis of factors such as these that affect productivity. Businesses that pay their workers below their pro-

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ductivity see them accept better job offers from competitors. A company that paid experienced workers and new hires the same amount would have great difficulty retaining experienced workers. A hospital that paid its doctors and nurses fast-food wages would find itself chronically understaffed—if it had any staff at all.

Consequently, economists would not expect men and women with different levels of education and experience working in different occupations in different industries and with different benefit packages to make the same amount. To the contrary, pay differences would naturally arise in the absence of any discrimination.

Government Pay Gap

The pay gap in the federal government demonstrates this fact. Congress sets the pay of most federal white-collar employees through the General Schedule (GS). GS grade and seniority almost entirely determine the pay of federal employees. Other factors—including gender, market pay rates, and individual productivity—play little role.³ Federal managers have no ability to discriminate in favor of or against female employees.

Nonetheless, the federal government has a substantial pay gap. The average woman on the GS makes 89 cents for each dollar earned by the average man.⁴ How so? The Office of Personnel Management (OPM) investigated and determined:

When we examined pay gaps by grade level for the GS population, we found that there was no significant gap between female and male salaries. However, more females were found in lower grades, which may be a reflection of differences in occupational distribution.⁵

For example, OPM data show that among the federal workforce, females make up 75 percent of all social workers but only 17 percent of all general engineers.⁶ On average, federal social workers earn \$79,569, while federal general engineers earn \$117,894.

A comparison of wages within each occupation reveals very little wage gap. Without accounting for any potential differences in education, experience, hours, or other factors that could affect wages, female engineers earn more than 95 percent as much as male engineers, and female social workers earn more than 97 percent as much as male social workers.⁷

Accounting for Factors Influencing Pay

Many economists have examined how the pay gap changes after controlling for factors that influence pay. Most studies find that observable characteristics explain a large portion of the apparent gap in pay between male and female workers—with differences in occupation and experience having the largest effect.

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1. See, for example, U.S. Census Bureau, "Income, Poverty, and Health Insurance Coverage in the United States: 2012," September 2013, Figure 2, <https://www.census.gov/prod/2013pubs/p60-245.pdf> (accessed May 15, 2014).
 2. U.S. Department of Labor, Bureau of Labor Statistics, "National Census of Fatal Occupational Injuries in 2012," Table 4, August 22, 2013, <http://www.bls.gov/news.release/pdf/foi.pdf> (accessed May 15, 2014).
 3. Technically General Schedule "within grade increases" are based on performance. However, any employee who attains a "fully successful" performance evaluation qualifies for the pay increase once they have enough seniority. The union can file grievances over less than "fully successful" performance evaluations and supervisors must work intensively with low-performing employees to develop a performance improvement plan. Consequently, federal managers very rarely award a less than a "fully successful" evaluation and the within grade increases effectively function as seniority-based raises that almost all GS employees collect.
 4. Office of Personnel Management, "Governmentwide Strategy on Advancing Pay Equality in the Federal Government," April 2014, http://cdn.govexec.com/media/gbc/docs/pdfs_edit/041114kl1.pdf (accessed May 20, 2014).
 5. *Ibid.*, p. 2.
 6. Office of Personnel Management, FedScope: Federal Human Resources Data, Employment, December 2013, <http://www.fedscope.opm.gov/employment.asp> (accessed April 28, 2014).
 7. Based on the December 2013 data, female engineers had average earnings of \$113,534 compared to an average of \$118,979 for males. Female social workers had average earnings of \$70,504 compared to \$72,509 for males.

TABLE 1

Observable Characteristics Explain Most of the Gender Gap

	Gender Gap in Percentage Points	Proportion of Gap Explained by Observable Characteristics
	18%	0%
After controlling for:		
Marital and union status, demographics, education	20%	-8%
and occupation and industry	14%	24%
and overtime hours, part-time status	13%	34%
and number of children and time outside the labor force	5%	74%

Source: Heritage Foundation calculations using data from CONSAD Research Corp., “An Analysis of the Reasons for the Disparity in Wages Between Men and Women,” Final Report Prepared for the U.S. Department of Labor, January 2009, Tables 6 and 7, <http://consad.com/index.php?page=an-analysis-of-reasons-for-the-disparity-in-wages-between-men-and-women> (accessed April 23, 2014).

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The Department of Labor commissioned an examination of this research, which it published in 2009.⁸ It found that the average woman makes 18 percentage points less than the average man. Controlling for demographic factors and education actually slightly increases the gap (to 20 percentage points) primarily because women’s educational attainment now outpaces men’s. However, detailed proxies for occupation and industry reduce the overall gender gap by almost a quarter—to 14 percentage points. Adding controls for hours worked further shrinks the overall gap. And adding additional controls for the number of children a worker has and time out of the workforce reduces the gender gap by three-quarters—to just five percentage points.

Accounting for several observable characteristics shows women with the same skills and doing the same jobs as men are paid almost the same amount. Including other factors would probably further shrink the remaining difference.

Surveys of individual workers cannot reliably measure total compensation, which includes benefits. For example, few workers know how much their companies spend on their health insurance premiums. Consequently, studies examining the gender gap rarely examine total compensation. If women—

particularly working mothers—tend to place a higher value on some benefits than men do (such as more paid time off or better health coverage), this would artificially inflate the pay gap. They would accept lower pay in exchange for better benefits, but surveys asking about wages would report only the lower pay.

Shrinking Gender Gap

An apples-to-apples comparison shows women earn almost as much—and quite possibly just as much—as men for doing the same work. Aggregate differences in pay reflect different choices made by individual men and women.

This explains why the gender gap has shrunk so rapidly over the past generation. In 1979, the median woman working full time made 62.5 percent as much as the median man. By 2013, that figure closed to 82 percent—half the gap disappeared. Since the 1970s, women have become more highly educated and moved into higher paying industries and occupations. For example, a generation ago, very few women worked as doctors or lawyers. Today many women work in these and other high-paying occupations and earn more as a result. Consequently, the aggregate gender gap closed significantly.⁹

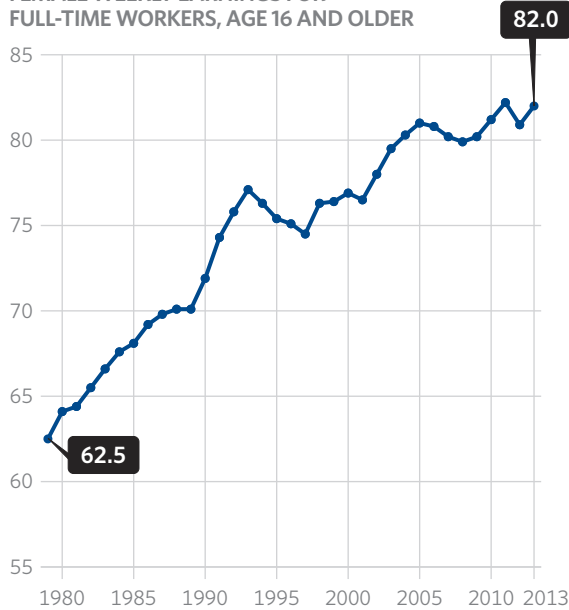
8. CONSAD Research, “An Analysis of the Reasons for the Disparity in Wages Between Men and Women,” final report prepared for the U.S. Department of Labor, January 2009, <http://www.consad.com/content/reports/Gender%20Wage%20Gap%20Final%20Report.pdf> (accessed May 19, 2014).

9. Ibid.

CHART 1

Difference Between Male and Female Earnings Has Closed Sharply

RATIO OF MEDIAN MALE TO MEDIAN FEMALE WEEKLY EARNINGS FOR FULL-TIME WORKERS, AGE 16 AND OLDER



Source: Heritage Foundation calculations using data from the U.S. Department of Labor, Bureau of Labor Statistics, "Usual Weekly Earnings of Wage and Salary Workers," Table 3, <http://www.bls.gov/news.release/wkyeng.t03.htm> (accessed April 23, 2014).

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Misleading Figures Harm Women

The claim that women earn 77 cents on the dollar for doing the same work as men is more than misleading. Perpetuating it discourages women from striving to achieve in the workplace. Few competitors will strive their hardest in a rigged game. Inaccurately telling women that employers have stacked the deck against them dissuades them from making the career investments necessary to get ahead.

Misleading claims about the gender gap can become a self-fulfilling prophecy, discouraging aspiring female workers from making the choices that would enable them to succeed. Advocates would do much more to help female workers if they explained why the gender gap exists—and encouraged them to use their skills to excel in the workplace.

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