

# Briefing Paper



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## How Equal Pay for Working Women would Reduce Poverty and Grow the American Economy\*

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Persistent earnings inequality for working women translates into lower pay, less family income, and more poverty in families with a working woman, which is of no small consequence to working families. About 71 percent of all mothers in the United States work for pay. Of these, about two-thirds (68 percent) are married and typically have access to men's incomes, but married women's earnings are nevertheless crucial to family support. One-third (32 percent) are single mothers and often the sole support of their families. And many without children, both single and married, work to support themselves and other family members.

This briefing paper summarizes analyses of the 2010-2012 Current Population Survey Annual Social and Economic supplement and uses statistical controls for labor supply, human capital, and labor market characteristics to estimate: 1) how much women's earnings and family incomes would rise with equal pay; 2) how much women and their families lose because women earn less than similarly qualified men; and 3) how much the economy as a whole suffers from inequality in pay between women and men.

Findings from this analysis include:

- Nearly 60 percent (59.3 percent) of women would earn more if working women were paid the same as men of the same age with similar education and hours of work.
- Providing equal pay to women would have a dramatic impact on their families. The poverty rate for all working women would be cut in half, falling to 3.9 percent from 8.1 percent. The very high poverty rate for working single mothers would fall by nearly half, from 28.7 percent to 15.0 percent, and two-thirds would receive a pay increase.
- For the 14.3 million single women—divorced, widowed, separated, and never married women living on their own—equal pay would mean a very significant drop in poverty from 11.0 percent to 4.6 percent (falling by more than half).
- The U.S. economy would have produced additional income of \$447.6 billion if women received equal pay; this represents 2.9 percent of 2012 gross domestic product (GDP).
- The total increase in women's earnings with pay equity represents more than 14 times what the federal and state governments spent in fiscal year 2012 on Temporary Assistance to Needy Families (TANF).

\*This briefing paper summarizes work prepared for use in The Shriver Report's *A Woman's Nation Pushes Back from the Brink* (2014), a study by Maria Shriver in partnership with the Center for American Progress.

## Pay Inequality Stifles Growth of the U.S. Economy

Table 1 shows women's annual earnings, hours worked, annual family incomes, and poverty rates for all women workers aged 18 and older. Nearly 60 percent (59.3 percent) of women would earn more if working women were paid the same as comparable men. Overall, average earnings for women would increase from \$36,129 to \$42,380 or \$6,251 (17.3 percent) annually if women were compensated for their labor supply and human capital the same way as men in their regional labor markets. The poverty rate would be cut in half, falling to 3.9 percent from 8.1 percent among working women.

The U.S. economy would have produced income of \$447.6 billion more if women received equal pay; this represents 2.9 percent of 2012 gross domestic product.<sup>1</sup> The total increase in women's earnings under a regime of pay equity represents more than 14 times what the Federal and state governments spent in fiscal year 2012 on Temporary Assistance to Needy Families.<sup>2</sup>

The failure to pay women fairly results in the misallocation of human capital and contributes to women working at less productive pursuits than they otherwise would, thus holding back economic growth. For this reason, the estimate of the growth in GDP if women were paid equally with comparable men is very likely an underestimate, since women's work hours, educational achievement, or occupational attainment were not increased, as they almost surely would be if women received pay equal to that of comparable men.

**Table 1. Mean Annual Earnings, Mean Family Income, and Poverty Rates if Working Women Earned the Same as Comparable Men, 2009-2011 Average, in 2012 Dollars**

	<b>All Working Women</b>
Population Size	71,597,123
Annual Hours Worked	1,707
<b>Women's Annual Earnings</b>	
Current	\$36,129
After Pay Adjustment	\$42,380
Percent Adjusted	59.3%
Average Increase (inc. zero)	\$6,251
Percent Increase	17.3%
<b>Annual Family Income</b>	
Current	\$84,909
After Pay Adjustment	\$91,987
Total Income Gains (\$billions)	\$447.6
Increase in Income as Percentage of 2012 GDP	2.9%
<b>Poverty Rate</b>	
Current	8.1%
After Pay Adjustment	3.9%

Source: Institute for Women's Policy Research calculations based on the Current Population Survey Annual Social and Economic supplements, 2010-2012, for calendar years 2009-2011; all in 2012 dollars.

## Pay Inequality Contributes to Lower Family Income and Increased Poverty among Families with a Working Woman

Table 2 shows women's annual earnings, hours worked, annual family incomes, and poverty rates in three different types of families with women workers classified according to the status of the family head or spouse: 1) married working women aged 18 and older, 2) working single mothers aged 18 and older, and 3) self-supporting single women aged 25 and older. Single women—never married, divorced, separated and widowed—are limited to those who live alone; these women are clearly dependent on their own earnings and for them it is easy to calculate household income. Many other single women live in a variety of household formations—and also suffer from wage discrimination—but it is more difficult to determine the relevant household income for complex households, whose members may or may not pool income with each other.

**Table 2. Mean Annual Earnings, Mean Family Income, and Poverty Rates for Selected Family Types if Working Women Earned the Same as Comparable Men, 2009-2011 Average, in 2012 Dollars**

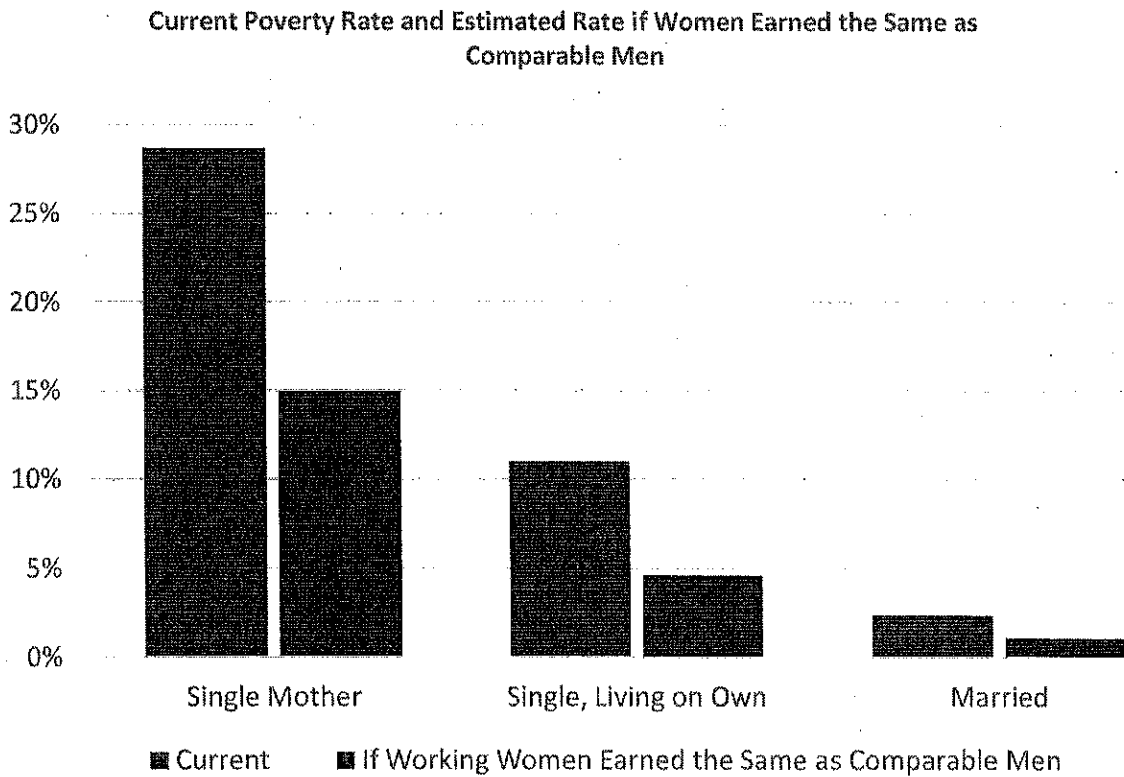
	Families Headed By a Working Woman Who Is:		
	Single Mother	Single, Living on Own	Married
Number of Families	6,903,310	14,325,345	36,200,633
Annual Hours Worked by Women	1,776	1,791	1,861
Number of Women Workers	1.1	1.0	1.1
<b>Annual Family Income</b>			
Current	\$39,731	\$43,425	\$112,177
After Pay Adjustment	\$46,429	\$49,309	\$118,953
Percent with Increase	67%	56%	58%
Increase per Family (including zeros)	\$6,698	\$5,884	\$6,776
Average Increase (Percent)	16.9%	13.6%	6.0%
Total Family Income Gains (\$billions)	\$46.2	\$84.3	\$245.3
<b>Poverty Rate</b>			
Current	28.7%	11.0%	2.4%
After Pay Adjustment	15.0%	4.6%	1.1%

Source: Institute for Women's Policy Research calculations based on the Current Population Survey Annual Social and Economic supplements, 2010-2012, for calendar years 2009-2011; all in 2012 dollars.

Table 2 reflects gains to family incomes and reductions in poverty rates that would result from boosting women's pay to that of comparable men.<sup>3</sup> Estimated additional income for the average family of each type is calculated from the earnings gains working women would enjoy if they earned as much as men who work the same number of hours, are the same age, have the same educational attainment and urban/rural status and live in the same region of the country. As shown in the table and reflected in Figure 1, raising women's pay would have dramatic impacts on their families:

- Paying women in the **36.2 million families headed by married women** the same as comparable men would increase incomes for married couples by 6.0 percent. This translates into an average of \$6,776 per year for each family and a total of \$245.3 billion nationwide. Poverty rates would fall by more than half, from 2.4 percent to 1.1 percent.
- If the **6.9 million single mothers** earned as much as comparable men, their annual family incomes would increase \$6,698, on average, or nearly 17 percent. Two-thirds would receive a pay increase. Total income gains for this group of families amounts to \$46.2 billion, and the very high poverty rate for families headed by working single mothers would fall by nearly half, from 28.7 percent to 15.0 percent.
- The **14.3 million single women** living independently of other family members, including divorced, widowed, separated, and never married women, would earn a total of \$84.3 billion more if they were paid the same as comparable men. These single working women each would earn \$5,884 more per year. Single women would also experience a very significant drop in poverty -- from 11.0 percent to 4.6 percent, a fall of more than half.

**Figure 1. Equal Pay Would Reduce Poverty by Half for Families with a Working Woman**



### Progress on Closing the Gender Wage Gap Has Stalled

As the analyses reported above show, paying working women the wages of comparable men would increase individual earnings and family incomes and dramatically cut poverty—by half overall for all

working women and for most family types with a working woman. In single mother families, poverty would be cut by near half. Yet, the gender wage gap is at the same level—77 percent—as it was in 2002.<sup>4</sup> If trends of the past five decades are projected forward, it will take almost another five decades—until 2058—for women to reach pay equity.<sup>5</sup> Women, on average, earn less than men in virtually every single occupation for which there is sufficient earnings data for both men and women to calculate an earnings ratio.<sup>6</sup>

According to results from the IWPR/Rockefeller Survey of Economic Security, nearly half of all workers nationally are either contractually forbidden or strongly discouraged from discussing their pay with their colleagues.<sup>7</sup> Such pay secrecy makes it difficult for women and men to find out whether they are paid fairly and undermines attempts to reduce the gender wage gap. The gender wage gap in the federal government—with high levels of pay transparency—is only 11 percent.<sup>8</sup> Greater pay transparency, along with strengthened enforcement of U.S. EEO laws, a higher minimum wage, more collective bargaining, and better family friendly policies, such as paid family leave, would go a significant way towards ensuring that working women are paid fairly and are better able to support their families.

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#### Notes

<sup>1</sup> According to the U.S. Department of Commerce Bureau of Economic Analysis (June 6, 2013) GDP by state, in 2012 the U.S. gross domestic product (GDP) was \$15,566.1 billion. This values may differ from the National Income and Product Account (NIPA) values because of revisions to the NIPA values as well as the GDP-by-state accounts excluding Federal military and civilian activity located overseas that cannot be attributed to a particular state.

<sup>2</sup> Total Federal TANF and State Maintenance of Effort (MOE) Expenditures were \$31.4 billion in fiscal year 2012.

<sup>3</sup> IWPR researchers use annual earnings and employment information reported in the Current Population Survey Annual Social and Economic supplement (CPS-ASEC) for the years 2010-2012 to estimate women's and men's earnings. For a more detailed discussion of the methodology used for this analysis, please see the Technical Appendix.

<sup>4</sup> Ariane Hegewisch and Claudia Williams. 2013. "The Gender Wage Gap: 2012." IWPR Publication #C350 (Updated September 2013) Washington, DC: Institute for Women's Policy Research. <<http://www.iwpr.org/publications/pubs/the-gender-wage-gap-2012-1/>> (accessed January 10, 2014)

<sup>5</sup> Jeffrey Hayes. 2013. "Gender Wage Gap Projected to Close in Year 2058: Most Women Working Today Will Not See Equal Pay during their Working Lives." IWPR Publication #Q004 (Updated September 2013). Washington, DC: Institute for Women's Policy Research. <[http://www.iwpr.org/publications/pubs/gender-wage-gap-projected-to-close-in-year-2058-most-women-working-today-will-not-see-equal-pay-during-their-working-lives](http://www.iwpr.org/publications/pubs/gender-wage-gap-projected-to-close-in-year-2058-most-women-working-today-will-not-see-equal-pay-during-their-working-lives/)> (accessed January 10, 2014)

<sup>6</sup> Ariane Hegewisch and Maxwell Matite. 2013. "The Gender Wage Gap by Occupation." IWPR Publication #C350a (Updated April 2013). Washington, DC: Institute for Women's Policy Research. <<http://www.iwpr.org/publications/pubs/the-gender-wage-gap-by-occupation-2/>> (accessed January 10, 2014)

<sup>7</sup> Jeffrey Hayes and Heidi Hartmann. 2011. *Women and Men Living on the Edge: Economic Insecurity After the Great Recession*. IWPR Publication #C386. Washington, DC: Institute for Women's Policy Research. <[http://www.iwpr.org/publications/pubs/women-and-men-living-on-the-edge-economic-insecurity-after-the-great-recession](http://www.iwpr.org/publications/pubs/women-and-men-living-on-the-edge-economic-insecurity-after-the-great-recession/)> (accessed January 10, 2014)

<sup>8</sup> Ariane Hegewisch, Claudia Williams, and Robert Drago. 2011. "Pay Secrecy and Wage Discrimination." IWPR Publication #C382. Washington, DC: Institute for Women's Policy Research. <[http://www.iwpr.org/publications/pubs/pay-secrecy-and-wage-discrimination](http://www.iwpr.org/publications/pubs/pay-secrecy-and-wage-discrimination/)> (accessed January, 10, 2014)

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## Technical Appendix

This study updates a more refined measure of labor market discrimination on gender wage gaps.<sup>1</sup> Using the 2010-2012 Current Population Survey Annual Social and Economic supplement (CPS-ASEC), the analysis of women's and family earnings gains is based on a model that predicts women's earnings as if they were not subject to wage inequality. In this model, we control for many factors that contribute to wage differences and account for a portion of the wage gap and then correct women's earnings as if the unexplained portion of the wage gap in this analysis did not exist.

An ordinary least squares (OLS) model is employed that controls for the differences between men and women in age, education, annual hours of work, metropolitan residence, and region of the country. The dependent variable is the natural log of annual earnings. The variables for age and age squared are included as proxies for work experience, since specific information about work experience is not available in the CPS-ASEC. This is a more realistic assumption for men than for women because at any given age men typically have spent more years in the workforce and fewer years out of the workplace. Use of this experience variable (for lack of a better one in this data set) tends to overstate their earnings losses relative to comparable men (they may be less comparable than the data indicate). On the other hand, including variables such as education and hours of work, which may themselves be affected by labor market discrimination against women (causing them to invest less in human capital and work less than they otherwise would) tends to understate their true earnings losses relative to men.

In this model, men's earnings are predicted based on a sample of men aged 18 or older with positive earnings and positive hours of work during the previous year. Since a key component of the analysis is the contribution of women's earnings to family income and the resulting changes in family poverty rates if women's earnings were not subject to discrimination, the sample of men is restricted to those who earn at or below the 90<sup>th</sup> percentile of men's annual earnings, or \$105,291 in 2012 dollars. This selection assures that the predicted earnings for those at middle or lower income levels are not upwardly-biased by the few high earners in the sample. Poverty rates are calculated using preliminary poverty thresholds for 2012 adjusted for family size provided by the U.S. Bureau of the Census.

Women's earnings are predicted using the coefficients from the men's earnings equation (this method assumes that women retain their own human capital but are rewarded at the same rates as men would be) and calculated only for the actual hours that women worked during the year. The average earnings estimates include only those predicted to have positive earnings adjustments. Those with reduced predicted earnings are assigned their actual earnings during the year.

The model is used to estimate women's earnings in the absence of gender-based wage inequality. The control variables for marital status and the presence of children younger than 18 are explicitly excluded since these characteristics are often linked to gender-based discrimination. For instance, higher earnings are typically predicted by researchers for men who are married, but lower earnings are typically predicted for married women. Likewise, the presence of children often predicts lower earnings for women but does not have a significant effect for men (or in some studies, increases their earnings).

### Note

<sup>1</sup> Heidi Hartmann, Katherine Allen, Christine Owens. 1999. *Equal Pay for Working Families: National and State Data on the Pay Gap and Its Costs*. IWPR Publication #C343. Washington, DC: Institute for Women's Policy Research and the AFL-CIO. <<http://www.iwpr.org/publications/pubs/equal-pay-for-working-families-2>> (accessed January 10, 2014)

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## Acknowledgements

This briefing paper is an adaptation of “Equal Pay for Working Women and Their Families: National Data on the Pay Gap and Its Costs,” a paper prepared by Heidi Hartmann, Ph.D., and Jeffrey Hayes, Ph.D., for use in The Shriver Report’s *A Woman’s Nation Pushes Back from the Brink*, a study by Maria Shriver in partnership with the [Center for American Progress](#). Excerpts from the full report and additional information are available at [ShriverReport.org](#) and [AmericanProgress.org](#).

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