Are We There Yet? Women's to Men's Earnings Gap in the 21st Century

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[1] *This paper is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views expressed on methodological issues are those of the authors and not necessarily those of the U.S. Census Bureau.*

Abstract

Historically women have earned less than their male counterparts. Against the background of the downsizing of male-dominated industry sectors during the recent recession, and an increasingly more educated female labor force, this research examines the changes in the earnings of women relative to men during the later part of the first decade of the 21st century. This paper considers the effects of this shifting gender structure by age, education, and occupation, using the large sample size of the American Community Survey for its analyses. We find that the women's to men's earnings ratio increased slightly for full-time, year-round workers from .765 to .773; men with lower education faced earnings declines, and women across many education levels experienced at least modest gains. This resulted in increased parity across all levels of the earnings distribution, with lower earning women making particular gains. Reduced male earnings at the low end of the earnings spectrum also resulted in a modest increase in earnings dispersion among men, as measured by the 90/10 percentile ratio of earnings, while that among female full-time, year-round workers remained unchanged. The workforce aged during the downturn, with older workers increasing in their proportion of the full-time, year-round working population, as younger workers lost employment. The workforce also became more educated during the recession, with highly educated workers retaining their positions at higher rates than less educated workers. Both the shift in the age structure and educational attainment structure of employed full-time, year-round labor force brought on by the economic recession appear to have depressed gains in overall earnings parity.

Introduction

The "Great Recession" which began at the end of 2007 and continued through July 2009 resulted in broad shifts in the labor force. Rates of joblessness "reached historic postwar highs." (Elsby et al. 2010). Many people lost employment, and many remain out of work, in particular men, young, and less-educated workers. While changes occurred in every sector of the labor force, male-dominated occupations of manufacturing and construction were particularly hard hit. In contrast, women fared better in terms of employment than men as the kinds of occupations they concentrate in (education and health care) continued to grow (Kochlar 2011). As with previous recessions, trends in women's

employment during the Great Recession and after differed from men's (Goodman et al. 1993, U.S. Department of Labor 2011).

Among those who remained working, the recession may have affected the earnings of men and women differently. The unequally distributed layoffs across occupations and ages may have perturbed a balance of economic and social forces that may underlie the appearance of stability in the earnings ratio. This paper will attempt to discover if this apparently static situation actually represents a more dynamic equilibrium, using the recent economic downturn as a natural experiment to separate out three potential structural influences on the equality of female and male earnings: age, education, and occupation.

Many authors have documented various reasons why women earn less than men in the United States, including factors such as differences in educational attainment and field of study, occupational choice, work experience and attachment to labor force, work hours, job mobility, employer selection, as well as the unaccounted residual assumed to be discrimination (see for example, Sanborn 1964, Oaxaca 1973, Blau and Kahn 2006). Human capital influencing life-course events, such as leaving the workplace to raise children, disproportionately reduce the relative work tenure of older women, and their accumulated human capital. In general, earnings are more equal between men and women at lower ages as young men and women have similar work tenure (near zero), and diverge with age. For example, one year after college graduation, women earn 80 percent of similarly educated men, and after 10 years the gap expands to 69 percent (Dey and Hill 2007).

Over the past 30 years, the number of women attending college and earning degrees soared, with college graduation rates exceeding men's since the early 1980s. This trend continues across all degree levels, with women earnings about 60 percent of bachelor's and master's degrees, and just over 50 percent of doctoral and professional degrees in 2009. (Perry 2009). Indeed, some of the increases seen in women's earnings may reflect the rising educational attainment of women (Lee and Mather 2008). As cohorts of more and more educated women enter the labor force, the educational mix of women in the labor force has stratified by age, with older women having less education than their younger sisters. Moreover, among younger full-time, year-round workers, the percentage of women with bachelor's degrees is greater than the comparable percentage for men (see Figure 1).[2] Yet, despite

[2] The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences

these ongoing gains in educational attainment, women's median earnings relative to men's have made no appreciable gains since the early 2000s (Walt et al. 2011).

Though women have made remarkable gains in educational attainment, they tend to major in relatively few fields and consequently concentrate in relatively fewer and different occupations than men, often those occupations with lower overall earnings (England 2005; Gabriel and Schmitz; Day and Rosenthal, 2009). A disparity in occupational choice accounts for some of the disparity in men's and women's earnings (Boraas and Rogers 2003, Seiling 1984). Blackburn (2002) suggests men and women seek different rewards from their choice of work as men seek monetary rewards whereas women prefer "socially worthwhile professions".

Researchers have described a "vintage effect," where younger women have had more occupational choices than their older counterparts (Hecker 1998). Some of this is driven by women's increasing educational attainment as minimum educational qualifications and related professional credentials can serve as barriers to entry for some occupations, giving educated workers greater occupational choices. Thus, a shift in the relative proportions of people employed in different occupations might bring women's and men's earnings closer to parity.

During recent decades, the workforce has polarized along educational attainment lines (Autor 2009). Keller (2009) shows a shift in employment from middle-paying occupations to the highest- and lowest- paying occupations. Between 2002 and 2007, lower paying occupations gained employment share relative to higher paying occupations. Highly educated and skilled workers have also benefited most from technology-driven economic gains, while wages for workers in occupations requiring less education have stagnated or even fallen (Steelman and Weinberg 2005, Jones 2009). In effect, highly educated workers operate in what amounts to a different labor market than people with less education.

Women not only earn less than men on average, they also have historically had fewer opportunities to achieve the highest earnings in their professions. Earnings dispersion, that is, the spread of earnings from the highest to lowest earning workers, has been smaller among women than among men; women earn less then men, on average, at every percentile along the earnings distribution (Weinberg 2007). This may reflect reduced work tenure or work hours among women due to child

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between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

rearing, which may prevent their taking higher earning positions within their workplaces, or other processes (Hilgeman 2009).

Economic recession and full-time year round employment

We begin by considering the effect of the economic recession on full-time, year-round employment for men and women. As shown in Figure 2, the proportion of both men and women working full-time, year round declined across most ages between 2008 to 2010. However, as a proportion of their respective populations, men suffered greater job losses than women. Even with these greater losses, however, the proportion of men working full time, year round exceeded the proportion of women working full time, year round during the period.

We also explore the effect of the downturn on the high and low skill labor markets (Figures 3a and 3b). First we consider the effects of education level on job losses, and find that job losses occurred differentially. Men with a bachelor's degree or more experienced proportionately fewer job losses than men without a college degree. Likewise, the same pattern holds true for women. Indeed women for the most part fared better than their male counterpart. Even with job losses, both men and women with a higher education experienced greater rates of full time employment than those with less education.

These figures also reveal the importance of the age structure of the full-time, year-round labor force. Both men and women are more likely to be employed full time, year round between their middle twenties to their early fifties. However, more educated men and women reach their peak of full-time, year-round employment at an earlier age than those with less education. The age pattern for women is also revealing; some women with a bachelor's degree or more appear to drop out of the full-time, year-round labor force during their thirties and early forties, presumably to attend to child rearing. Yet even with this dip, more educated women generally experience higher full time employment than less educated women in the same age cohorts.

These interactions illustrate some of the complex dynamics between labor force participation, life course events, the shifting economy, and different investments in human capital. They also suggest possible interactions between the women's- to- men's earnings ratio and the differential impact of job losses on male and female workers.

Data and Limitations

This paper uses data from the 2008, 2009, and 2010 American Community Surveys (ACS). The ACS is a nationally representative survey that contains detailed demographic, social, economic, and housing data obtained from approximately 2 million final interviews per year. This data source is rich in detail about labor force activities, with over 500 reported occupation classifications. The large sample size and extensive demographic detail of the ACS allows for a more in-depth analysis than may be possible with other national surveys. The ACS file allows an opportunity to study in fine detail occupational differences for men and women.

The primary universe for this paper is employed, full-time, year-round workers between the ages of 20 and 64 with an unweighted sample size of 1,427,409 for 2008; 1,339,737 for 2009; and 1,297,633 for 2010. Where we analyze occupations, the universe is limited include only detailed occupations with at least 100 sampled cases of men and 100 sample cases of women to ensure statistical soundness. The unweighted sample size of this group is 1,303,962 for 2008; 1,229,101 for 2009; and 1,192,090 for 2010 and includes 265 occupations, representing 92 percent of the full-time, year-round workers. Despite these limitations, the large sample size of ACS allows an examination of changes in women's and men's employment patterns in a large number of occupations with statistical precision. More information on the ACS Sample Design and Weighting is available in the documents titled "Accuracy of the Data" found at http://www.census.gov/acs/www/data_documentation/documentation_main/.

Employment status is determined through a series of questions beginning with, "Last week, did this person work for pay at a job (or business)?" Employment status is measured for the week preceding the interview. Employment status includes employed, unemployed, and not in the labor force. In 2008, a follow-up question was added to the ACS, "Last week, did this person do ANY work for pay, even for as little as one hour?" The resulting increased estimates of the employed population more closely approximate official Bureau of Labor Statistics employment figures derived from the Current Population Survey.

Full-time, year-round labor force status is determined by two questions – number of weeks worked and usual number of hours – and is defined as working 35 hours or more a week and 50 weeks or more in a year. Beginning in 2008, the weeks-worked question changed in the ACS to a two part

question directly asking if the person had worked 50 to 52 weeks in the preceding 12 months, followed by a categorical check-box response.

Occupational information is gathered for the person's primary job and is measured for the week prior to the survey. Responses are classified into one of more than 500 detailed occupations according to the Standard Occupation Classification system. In the 2008 and 2009 ACS, occupational data are classified using the 2000 Standard Classification System (SOC); the 2010 ACS occupations are classified using the 2010 SOC. To allow for comparison across the two classification systems, that is, between ACS 2008/2009 and 2010, we have re-assigned the 2010 categories back to the prior version. About 10 percent of codes were affected by the change in the SOC and most were easily recoded. More information is available about the change in the occupational codes including the 2000 to 2010 crosswalk file at: http://www.census.gov/hhes/www/ioindex/crosswalks.html.

Another key variable in these analyses is annual earnings. Earnings are defined as the sum of wage or salary income and net income from self-employment, and are reported for the 12 months preceding the interview/survey date. Since the ACS is collected every month throughout the year, the resulting reference period reflects 24 months for each survey year. The earnings data are inflation-adjusted, using the Monthly Consumer Price Indices (CPI) factors, to the reference calendar year (January through December). Since the reference period for earnings data for two consecutive years of ACS overlap by 12 months (though inflation is adjusted to reflect the reference year), for earnings comparisons, we compare only 2008 and 2010, which have non-overlapping reference periods. All earnings data are shown in constant dollars, adjusted to year 2010 dollars using the CPI-U-RS (www.bls.gov/cpi/cpirsdc.htm). Earnings data on the Census Bureau internal data files used for these analyses are not top-coded.

This paper uses two measures of earnings distribution. The first, the women's- to- men's earnings ratio based on median earnings, provides a common measure to balance where the halfway earnings mark is for men and women. To capture adequately the tail ends of the earning distribution and how polarized workers earnings may be from one another, this paper examines earnings dispersion as defined by the 90/10 ratio, that is, the earnings at the 90th percentile divided by the earnings of the 10th.

It is important to note that the women's- to- men's earnings ratio is strictly a relative measure; while this conveys analytical advantages in making comparisons over time, it provides no information about whether the change occurred in its numerator, denominator, or both. In short, women may appear to be making progress compared with men, while in absolute terms both men and women are losing earnings.

Measures of central tendency move slowly in a population. The women's- to- men's earnings ratio in particular, since it is created out of median earnings, may move only very slightly in response to movements in the economy that individuals experience as large. Earnings dispersion, since it focuses on the extremes of the earnings distribution, may be more sensitive. However, both measures are subject to demographic inertia. Over the short time frame considered by this study, it is unlikely that these measures will move far regardless of the economic forces at play. Therefore, we expect to see only small changes. This paper assumes that the large sample size of the American Community Survey will provide measures sensitive enough to detect shifts in the economy over this very short time frame. Other measures of earnings inequality, such as the women's- to- men's mean earnings ratio and the Gini index, may be more sensitive to slight changes in earnings but are not included in this paper.

Methods

This paper begins with an examination of the change in populations of full-time, year-round workers, both men and women, cross-tabulated by age, education, and major occupational category. The paper next considers median earnings of male and female workers, and the ratio of these quantities, cross-tabulated across the same groups. Both of these analyses, and all others here focus on the period from 2008 to 2010.

The paper then turns to the earnings ratio across the earnings spectrum, that is, at each earnings decile. A split by educational attainment provides further detail on the relationship between women's- to- men's earnings parity at the upper and lower ends of earnings. This leads to an exploration of earnings dispersion (the ratio of earnings at the 90^{th} and 10^{th} percentiles), also with an emphasis on change over the period.

Next the paper attempts to tease out the individual effects on women's- to- men's earnings disparity of these three dimensions during the downturn. In the first of these individual examinations,

the paper sets both male and female proportions of the labor force to a common "standard" age distribution (derived from age distribution of the total population in Census 2010), and thus removes the affect of any disparate male and female age distribution changes caused by uneven job losses. The individual examination uses a similar approach to account for the affect of differential job losses across occupational categories. The "standard" occupation distribution derives from 2010 ACS. The third examination uses the same approach, but standardizing according to educational attainment.

Age/Occupation/Education adjustment formula

$$P_k = \frac{\sum_i X_{i,k}}{\sum_i X_i}$$

$$P_k^{\bullet} = \sum_j \left(\frac{\sum_i X_{i,j,k}}{\sum_i X_{i,j}} \cdot \omega_j \right)$$

P_k The proportion in earnings category k.

$X_{i,k}$ The weight for respondent i, in earnings category k.

X_i The weight for respondent i.

$P_k^{\bullet}$ The adjusted proportion in earnings category k.

$X_{i,j,k}$ The weight for respondent i, in age/education/occupation group j, in earnings category k.

$X_{i,j}$ The weight for respondent i, in age/education/occupation group j.

ω_j The age/occupation/education adjustment factor for group j, equals the proportion for that group from the standard distribution.

Results

Consistent with other reports, more men lost full-time, year-round work during the downturn than women (Table 1). Among workers in the 265 occupations covered by this study, there were 9 percent fewer full-time, year-round employed men in 2010 than in 2008, while women experienced a 4 percent decline. For both men and women, these losses were concentrated in younger ages, lower educational attainment, and varied across occupational groups.

Both men and women 20 to 24 years experienced losses of full-time, year-round positions at high levels (19 and 17 percent, respectively). Job losses in all age groups were larger among male workers. Among the oldest workers there was a 4 percent increase in male workers 60 to 64 years, and a 9 percent increase in female workers between 2008 and 2010. This may represent people who have found that they are unable to retire due to the falling value of their investments, and so have either continued to work or actually returned to work (Levanon, Cheng, Goldman 2011).

Men at almost every educational attainment level (except for those with a doctorate) lost full-time, year-round positions during the downturn. Less educated women also lost employment, though at lower rates than their male counterparts. Among those with less than a bachelor's degree, there were 12 percent fewer men and 7 percent fewer women working full time, year round. However, women with a bachelor's degree or more experienced increased employment during the period (with 3 percent more women employed full time year round compared with 4 percent fewer men with a bachelor's degree or more). In a pattern similar to older workers who have found themselves unable to afford to retire, this increase in employment among educated women includes cohorts who have chosen to continue working full time rather than taking time off for child rearing (Livingston 2011).

Men's employment declined in most occupational categories shown in Table 1, with the exceptions of Farming, fishing and forestry occupations and Healthcare practitioners and technical occupations, which did not show a significant change. Male-dominated occupations like those in the Construction and extraction occupations experienced particularly large declines (27 percent), as well as Installation, Maintenance and Repair occupations (9 percent), the Production occupations (16 percent), and Transportation and moving occupations (13 percent). Women experienced reduced full-time, year-round employment in many occupational categories as well, but often with smaller decreases than men. For example, in the Management, Business, and Financial occupations, there were 1.6 percent fewer

women compared with 6.4 percent fewer men. Women in the Health Practitioners and Technical occupations experienced increased employment, with 3.7 percent more workers in 2010 than in 2008.

Overall, the earnings ratio increased slightly between 2008 and 2010 from 0.765 to 0.773. [3] However, this masks more dynamic movement within particular groups. Within nearly all age groups (except 25-29), women's earnings moved closer to men's. Women's earnings, especially for those over 25 and older, rose appreciably more than men's earnings in the corresponding age groups. In the 20-24 age group, both men's and women's earnings fell. Similarly, within groups separated by their educational attainment, women experienced advances in median earnings for the most part, while men mostly experienced losses. Women's earnings parity with men's rose for most educational attainment levels from 2008 to 2010. The picture by major occupation group is more mixed, with 8 of the 12 occupation groups showing a statistically significant upward movement. Women working full time year round in Installation, Maintenance, and Repair occupations experienced a statistically significant reduction in earnings parity with men.

Figure 4 illustrates a clear pattern linking the earnings ratio and the level of earnings (the decile). As women earn greater salaries, they tend to have less pay equity with men. This pattern was exacerbated during the economic downturn, with pay equity rising appreciably across the bottom three deciles, while pay equity for those with higher earnings remained much flatter.

This relationship is even stronger among women with higher educational attainment (Figure 5). Among full-time, year-round, workers with a bachelor's degree at the 90th percentile of earnings, women earned about 60 percent of what similarly situated men did. Women at the 90th percentile among women with less education earned about three-fourths of similarly situated men (note that deciles are relative measures forming here two separate income distributions. That is, people with a bachelor's degree at the 90th percentile of earnings had higher earnings than those at the 90th percentile of earnings for people with less education). During the 2008 to 2010 period, both women with a bachelor's degree and those with less education experienced forward movement toward earnings parity with male workers. For those women in the lower deciles, women with less education appear to have experienced greater gains than those with a bachelor's degree or more.

[3] The universe used in this paper to compute the median earnings and women's to men's earnings ratios differs from that shown on the Census Bureau's tables shown in the American FactFinder; the median earnings shown here represent that for civilians, currently employed, aged of 20 to 64.

Table 3 shows earnings dispersion – as measured by the ratio of the 90th to the 10th percentile – was somewhat greater among male workers than among female workers (about 6 compared with about 5). Between 2008 and 2010, dispersion increased among male workers, but had no statistically significant movement in female workers. Across the age groups, ages 25-29 and 50-54 showed greater dispersion for both men and women. Dispersion increased for men with less than a college education and decreased among men with a bachelor's degree or more, while for women no significant change appears at either level. Earnings dispersion increased for men in Construction and extraction occupations as well as Installation, Maintenance, and repair occupations; and decreased in Management, business, and financial occupations, which may result from lower skilled/less educated workers losing their jobs in the construction industry at the same time highly paid financial managers lost their jobs.

In Tables 4, 5, and 6, we standardized our population universe by age, education, and occupation to remove their influences on the earnings ratio as the recession drove changes in each. In other words, what would have happened to the earnings ratio in the absence of these recession driven changes? In addition, by looking at the 2010 estimates with and without the standardization we can explore the effect of differing age, education, and occupation distributions for men and women on earnings parity.

After controlling for age on the male and female full-time, year-round population through the application of a standard age distribution based on the 2010 total population ages 20 to 64, the change in overall earnings parity appears to increase (Table 4). The age-standardized earnings ratio for the overall full-time, year-round labor force increased from 0.774 to 0.788 between 2008 and 2010. Removing the differences in the men's and women's age structure across the time period, we still find a significant difference by educational attainment for most levels. This suggests that at the lower levels of educational attainment, changes over the period were driven by more than just a differing age structure. Furthermore, the age-standardized earnings ratios for the bachelor's degree or more group were higher in the age-standardized 2010 earnings ratios compared with the non-standardized earnings ratios (.764 and .712). Thus, differing age structures between male and female workers may be an important factor in earnings disparity of men and women at higher educational attainment levels.

Some differences by occupational group are apparent when standardizing by age. A few occupation groups no longer show a significant change between 2008 and 2010 with the age

standardization (Healthcare practitioners/technical, Service, and Installation, maintenance and repair occupations) indicating that these occupational groups were affected by changes in the age structure between men and women caused by differential layoffs. The earnings ratio shown for the Management, business, and financial occupation group had a large shift when age standardized (from .723 to .773), which implies some of the earning gap between men and women in this group derives from age structure differences.

In Table 5 we find that after standardizing all male and female full time, year round workers to a single educational attainment distribution, overall parity appears to increase between 2008 and 2010, rising from .752 to .770. Many age groups and occupational groups that had significant differences between 2008 and 2010, no longer have them. However, the much larger differences for the Construction and Extraction occupations (.177) and the Installation, maintenance, and repair occupations (-.158) suggest the recession had opposite effects on the change in the educational structure for men and women for these two occupations. The earnings ratio for healthcare occupation shifts from .712 to .904 when accounting for educational structure differences.

Finally Table 6, we see that after controlling for occupational structure through the application of a standard population distribution to all occupations, overall earnings parity appears unchanged. The occupation-standardized earnings ratio for the overall full-time, year-round labor force rounds to .76 for all years, compared with .77 for all years when uncontrolled. Occupation-standardized earnings ratios for most age groups between 2008 and 2010 changed similarly to those of uncontrolled earnings ratios. However, the 2008-2010 change using occupation-standardized earning ratios within most educational attainment groups were not significant.

Discussion and Conclusions

The economic downturn of 2007-2009 resulted in widespread job losses. However, these losses occurred unevenly across the labor force. This perturbation, paired with the large sample size and statistical sensitivity of ACS, has allowed us to look into some of the dynamics behind the apparently static women's- to- men's earnings ratio. We looked in particular at age, educational attainment, and occupation. We also considered earnings parity across the earnings spectrum as well as dispersion.

Both the shift in the age structure and educational attainment structure of employed full-time, year-round labor force brought on by the economic recession appear to have depressed gains in overall

earnings parity. The workforce aged, with older workers increasing their proportion of the full-time, year-round working population, while younger workers lost employment. This resulted in more older women in the workforce, and older women typically have less earnings parity with their male counterparts. The workforce also became more educated during the recession, with highly educated workers retaining their positions at higher rates than less educated workers. With the increasing educational attainment among women, the distribution of higher educational attainment workers differs across age for men and women, where men are more educated among older, better paid cohorts and women concentrate among younger cohorts who have yet to accumulate higher earnings. This age effect has no counterpart among the less educated part of the labor force. The net result is that the women's- to- men's earnings ratio is lower within the more educated labor force, that is, among workers with a bachelor's degree or more. Thus, an increase in the relative size of the more educated part of the labor force results in an overall lowering of earnings parity. The change in the occupational structure of the economy during the downturn appears to have had little independent impact on the earnings ratio.

Earnings dispersion among female full-time, year-round workers remained constant from 2008 to 2010, while that of men somewhat increased. This may have the same underlying cause as the finding that women at the lower end of the earnings spectrum experienced a rise in earnings parity with men as less educated men experienced earnings losses during the period.

The first decade of the 21st century ended with a plateau in progress toward earnings parity between women and men. Yet, these results show this apparently static situation arose from a complex interplay of competing forces, some of which tended to increase parity, while others reduced it. Identifying the forces involved, and the directions of their influences, may be an avenue for further research. An examination of these dynamics in detailed occupations may more precisely help us identify and understand the forces involved.

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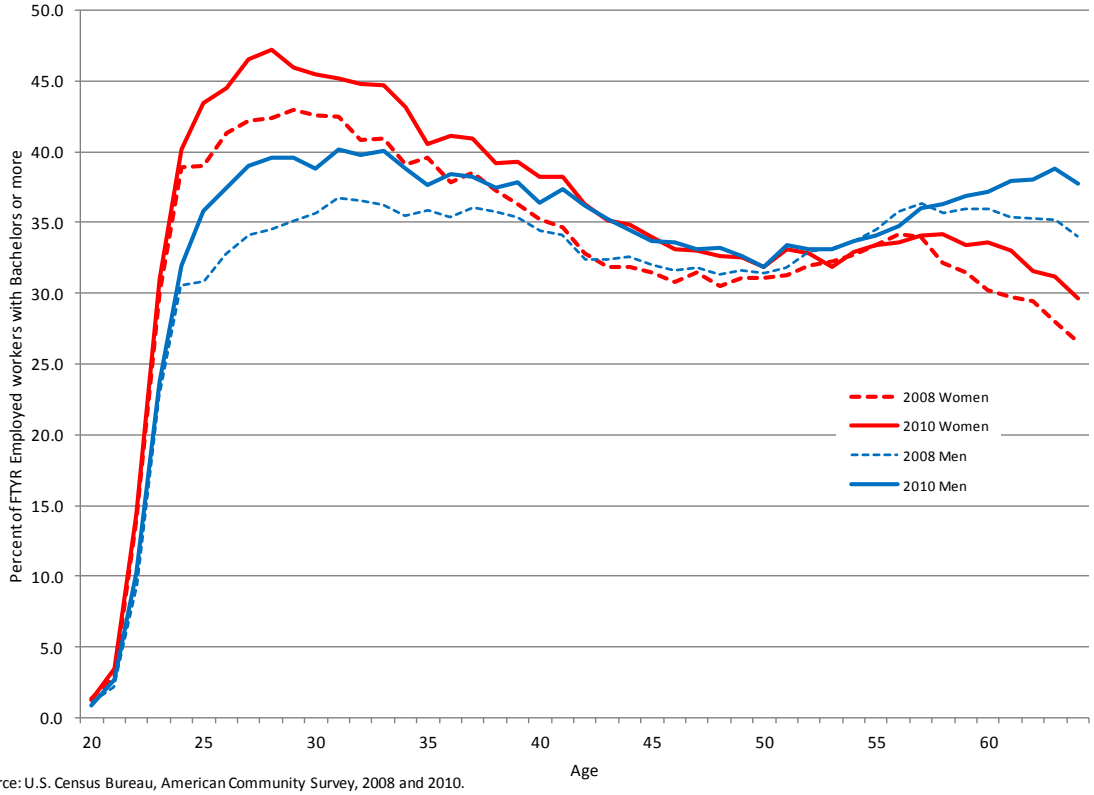
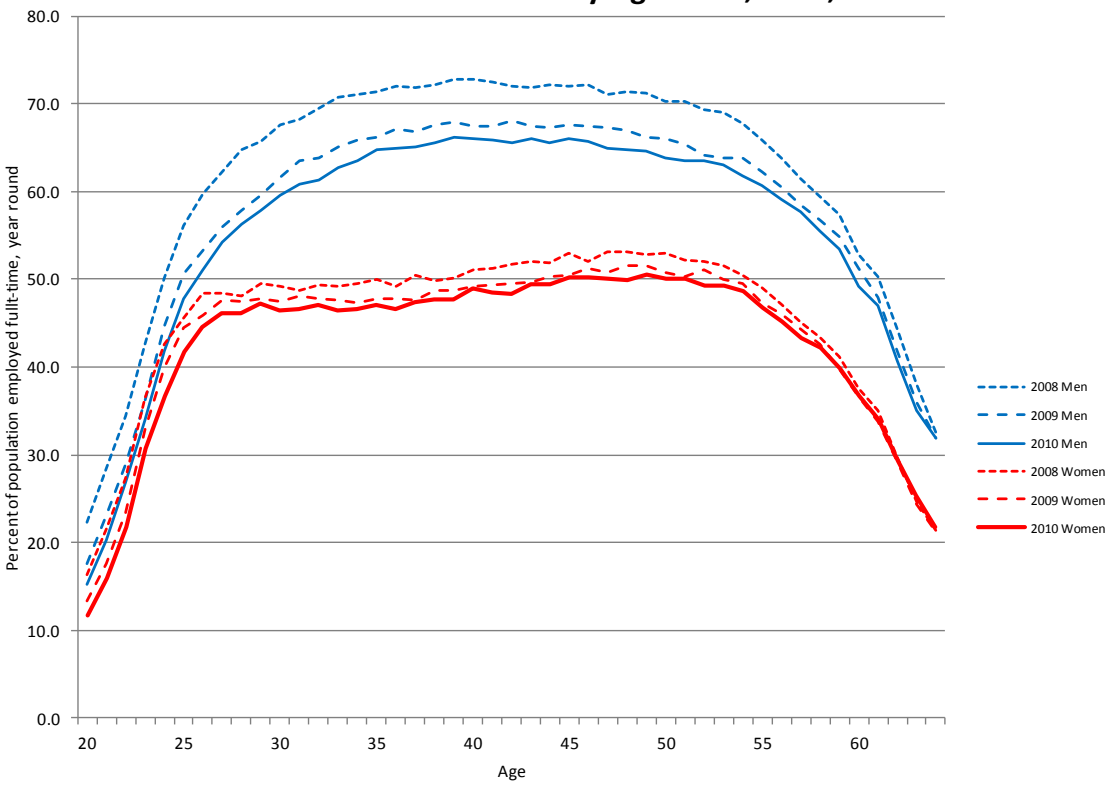
Figure 1. Full-time, Year-round Workers with a Bachelors Degree or More for Men and Women by Age: 2008 and 2010



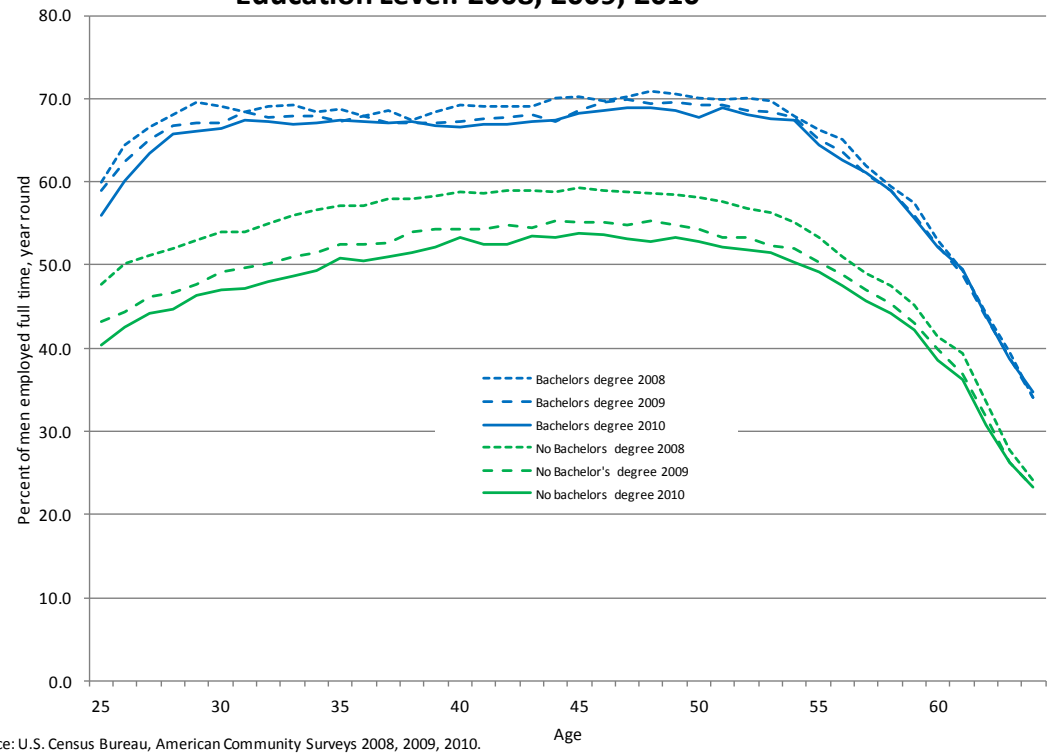
Source: U.S. Census Bureau, American Community Survey, 2008 and 2010.

Figure 2. Population Employed Full-time, Year-round for Men and Women by Age: 2008, 2009, 2010



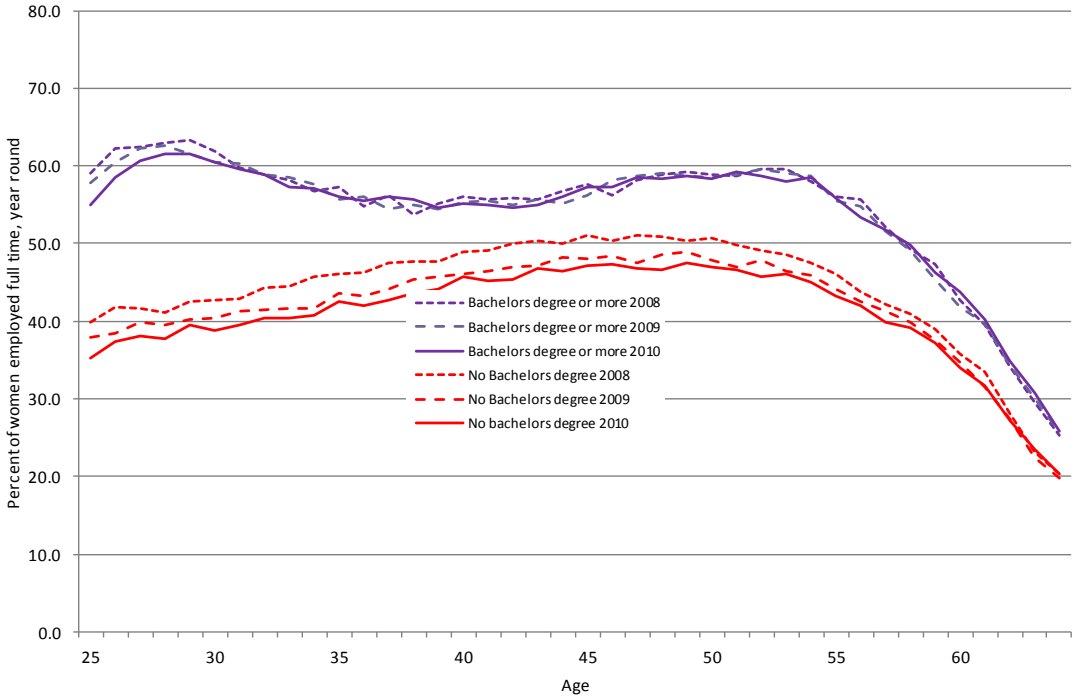
Source: U.S. Census Bureau, American Community Surveys, 2008, 2009, 2010.

Figure 3a. Men Employed Full Time, Year Round by Age and Education Level: 2008, 2009, 2010



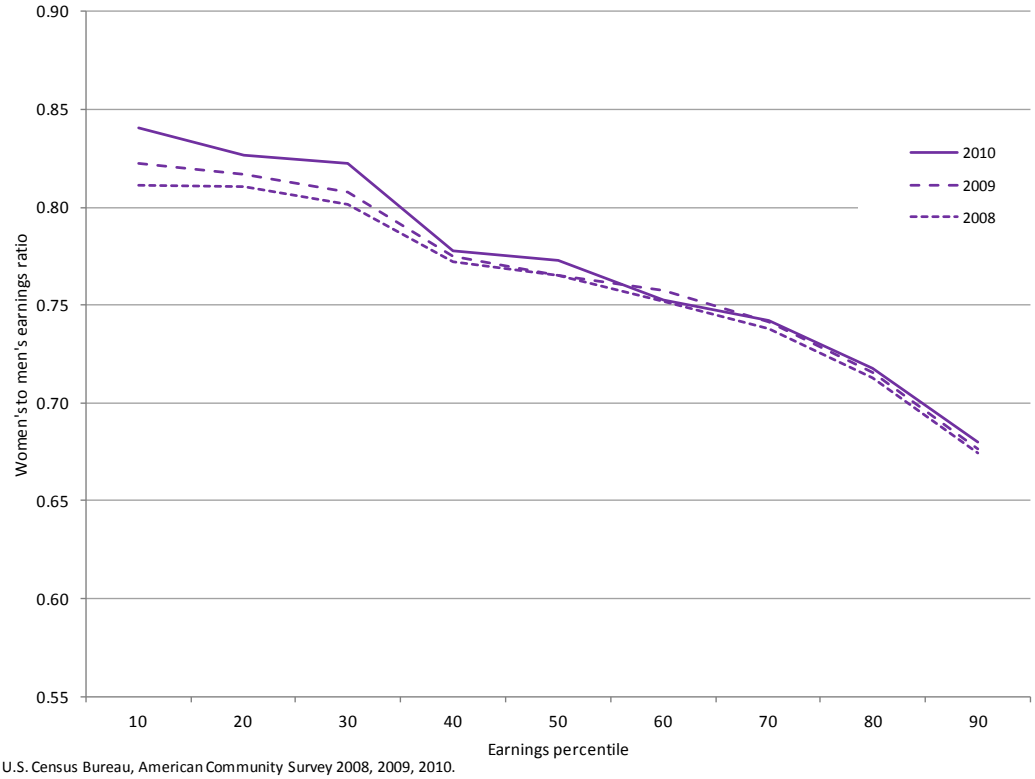
Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Figure 3b. Women Employed Full Time, Year Round by Age and Education Level: 2008, 2009, 2010



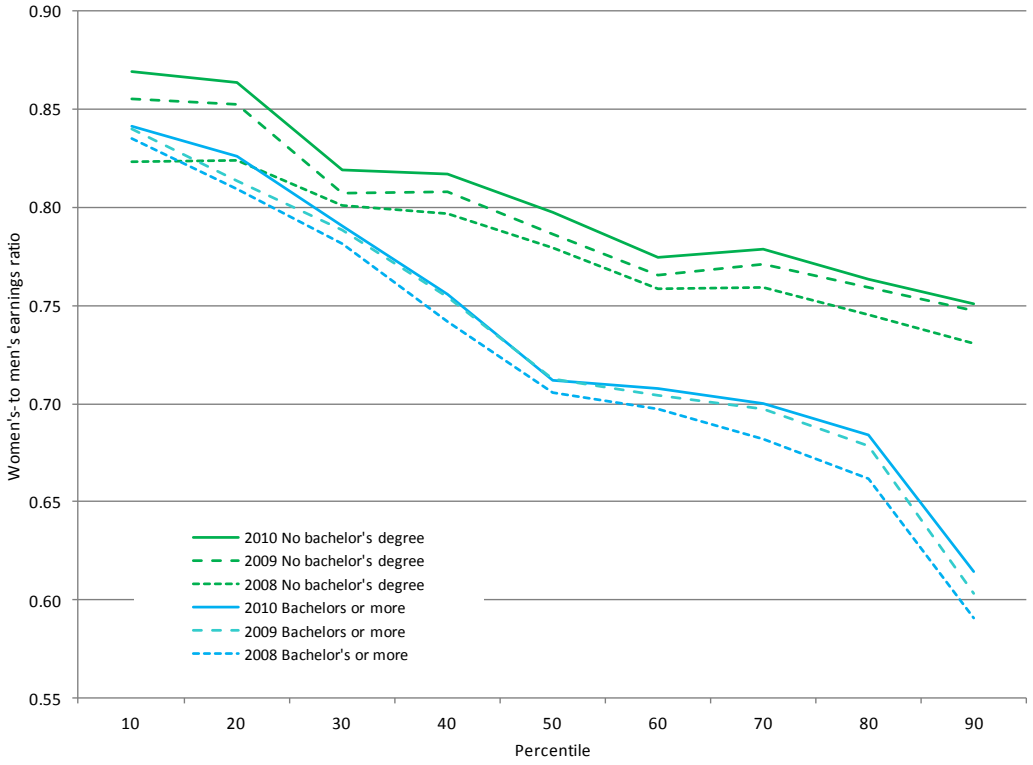
Source: U.S.Census Bureau, American Community Surveys 2008, 2009, 2010.

Figure 4. Women's-to-Men's Earnings Ratio Across Percentile Earnings Distribution: 2008, 2009, 2010



Source: U.S. Census Bureau, American Community Survey 2008, 2009, 2010.

Figure 5. Women's- to- Men's Earnings Ratio Across Percentile Earnings Distribution by Education Level: 2008, 2009, 2010



Source: U.S. Census Bureau, American Coimmunity Survey 2008, 2009, 2010

Table 1. Number of Civilian Employed Full-time, Year-round Workers: 2008, 2009, 2010

(Ages 20 to 64 in 265 occupations)

	2008		2009		2010		Percent change between 2008 and 2010	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Total	49,675,310	40,439,940	46,606,940	39,171,730	45,199,070	38,838,540	-9.0 *	-4.0 *
Age								
20-24	3,180,900	2,770,580	2,778,940	2,473,520	2,572,920	2,300,180	-19.1 *	-17.0 *
25-29	5,656,290	4,690,070	5,303,580	4,707,210	4,929,190	4,496,780	-12.9 *	-4.1 *
30-34	5,939,620	4,547,130	5,654,110	4,486,800	5,439,690	4,501,130	-8.4 *	-1.0 *
35-39	6,669,830	5,040,780	6,112,880	4,727,650	5,819,510	4,642,190	-12.7 *	-7.9 *
40-44	6,880,670	5,422,200	6,301,770	5,101,200	6,068,420	4,997,980	-11.8 *	-7.8 *
45-49	7,091,310	5,921,280	6,664,080	5,714,280	6,397,770	5,576,920	-9.8 *	-5.8 *
50-54	6,413,920	5,504,650	6,083,330	5,405,510	6,068,720	5,452,530	-5.4 *	-0.9 *
55-59	4,895,490	4,181,120	4,742,940	4,148,940	4,853,480	4,295,100	-0.9 *	2.7 *
60-64	2,947,300	2,362,120	2,965,310	2,406,620	3,049,370	2,575,730	3.5 *	9.0 *
Education								
Less than HS diploma	4,982,540	2,606,690	4,375,510	2,358,640	4,134,180	2,289,540	-17.0 *	-12.2 *
High school diploma	12,699,810	9,774,220	11,635,770	9,164,230	11,271,250	8,998,590	-11.2 *	-7.9 *
Some college	14,710,750	14,216,130	13,694,140	13,614,400	13,150,890	13,342,230	-10.6 *	-6.1 *
Bachelors	11,091,530	8,987,110	10,800,910	9,007,470	10,597,700	9,060,120	-4.5 *	0.8 *
Masters	3,926,890	3,617,740	3,883,040	3,759,240	3,869,170	3,859,290	-1.5 *	6.7 *
Professional	1,430,690	797,610	1,405,740	806,980	1,349,810	806,440	-5.7 *	1.1
Doctorate	833,100	440,440	811,830	460,760	826,080	482,330	-0.8	9.5 *
Less than Bachelors	32,393,100	26,597,040	29,705,420	25,137,270	28,556,310	24,630,360	-11.8 *	-7.4 *
Bachelors or more	17,282,210	13,842,900	16,901,520	14,034,450	16,642,760	14,208,180	-3.7 *	2.6 *
Occupation								
Management, Business, and Financial	9,822,310	7,085,770	9,445,000	7,058,520	9,198,210	6,972,050	-6.4 *	-1.6 *
Computer, Engineering, and Science	4,478,930	1,386,780	4,311,100	1,379,260	4,194,590	1,374,970	-6.3 *	-0.9
Education, Legal, Community Service, Arts, Media	3,496,800	5,367,230	3,424,180	5,363,180	3,395,500	5,405,200	-2.9 *	0.7
Healthcare practitioners and Technical	1,420,730	3,412,830	1,415,740	3,473,600	1,416,200	3,539,730	-0.3	3.7 *
Service	6,377,750	6,327,490	6,174,940	6,143,710	6,141,060	6,193,000	-3.7 *	-2.1 *
Sales and Related	5,945,770	4,173,430	5,680,670	3,917,300	5,427,040	3,807,560	-8.7 *	-8.8 *
Office and Administrative Support	3,623,210	9,933,980	3,470,060	9,456,190	3,363,430	9,168,730	-7.2 *	-7.7 *
Farming, Fishing, and Forestry	362,950	72,830	351,070	72,710	363,700	72,190	0.2	-0.9
Construction and Extraction	3,827,570	96,520	3,128,030	74,930	2,791,880	73,620	-27.1 *	-23.7 *
Installation, Maintenance, and Repair	1,313,980	84,590	1,242,230	77,860	1,197,160	79,190	-8.9 *	-6.4
Production	4,384,050	1,798,450	3,804,880	1,510,840	3,678,470	1,513,380	-16.1 *	-15.9 *
Transportation and Material Moving	4,621,280	700,050	4,159,050	643,620	4,031,840	638,930	-12.8 *	-8.7 *

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Table 1a. Margin of Error (MOE) for Number of Civilian Employed Full-time, Year-round Workers: 2008, 2009, 2010

(Ages 20 to 64 in 265 occupations)

	2008		2009		2010		Percent change between 2008 and 2010	
	Men	Women	Men	Women	Men	Women	Men	Women
	Margin of error	Margin of error	Margin of error	Margin of error	Margin of error	Margin of error	Margin of error	Margin of error
Total	84,109	79,706	81,698	73,187	77,224	80,006	0.2	0.3
Age								
20-24	29,297	32,959	31,488	25,329	27,067	25,694	1.1	1.6
25-29	30,360	32,025	33,989	28,141	28,824	32,038	0.7	0.9
30-34	29,130	24,528	31,557	25,516	28,045	25,921	0.5	0.7
35-39	41,024	36,931	38,495	36,927	34,366	31,799	0.8	1.0
40-44	44,303	32,047	31,166	33,923	37,621	31,541	0.8	0.7
45-49	26,622	30,474	28,653	22,392	25,604	29,409	0.5	0.7
50-54	27,336	26,332	24,914	28,157	27,022	31,941	0.6	0.7
55-59	28,961	31,162	30,365	24,037	22,019	29,113	0.7	0.9
60-64	24,745	26,592	22,153	20,884	25,503	20,352	1.3	1.3
Education								
Less than HS diploma	42,236	25,099	40,307	29,194	34,230	28,147	0.9	1.2
High school diploma	59,968	50,389	62,208	51,998	54,294	50,412	0.6	0.7
Some college	66,951	57,077	66,133	57,318	59,794	47,999	0.6	0.5
Bachelors	55,568	48,503	59,978	52,696	54,045	52,960	0.6	0.8
Masters	30,859	27,802	29,734	30,915	30,418	30,203	1.0	1.2
Professional	17,577	12,707	19,855	14,342	19,403	13,517	1.8	2.4
Doctorate	14,543	8,944	13,932	10,595	16,391	11,676	2.5	3.6
Less than Bachelors	84,854	77,921	80,848	65,408	70,113	68,303	0.3	0.4
Bachelors or more	71,916	55,011	75,458	62,922	70,886	69,745	0.5	0.6
Occupation								
Management, Business, and Financial	48,454	47,125	48,386	39,014	51,939	44,218	0.7	0.9
Computer, Engineering, and Science	35,382	19,134	34,586	18,323	32,462	18,808	1.0	1.9
Education, Legal, Community Service, Arts, Media	32,563	39,441	31,464	37,742	30,051	36,041	1.3	1.0
Healthcare practitioners and Technical	19,899	32,651	18,797	27,451	18,748	29,369	1.9	1.3
Service	38,217	47,361	33,982	47,190	46,260	38,420	1.0	0.7
Sales and Related	39,007	29,518	40,493	32,800	33,985	31,581	0.9	0.9
Office and Administrative Support	34,627	50,485	35,584	51,296	34,530	53,796	1.3	0.7
Farming, Fishing, and Forestry	12,090	4,732	13,226	5,044	12,264	4,741	4.2	9.7
Construction and Extraction	38,662	5,044	34,579	5,186	26,262	5,395	1.0	7.4
Installation, Maintenance, and Repair	18,728	5,082	17,419	4,708	18,679	4,997	2.0	8.3
Production	37,842	25,116	35,297	19,332	30,687	19,054	1.1	1.4
Transportation and Material Moving	37,897	13,642	32,319	12,376	32,227	13,942	0.9	2.9

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Table 2. Median Earnings for Civilian Employed Full-time, Year-round Men and Women and Ratio of Women's-to-Men's Earnings: 2008, 2009, 2010

(Ages 20 to 64 in 265 occupations)

	2008						2009						2010						Difference between 2008 and 2010		
	Men	MOE	Women	MOE	Ratio of women's to men's earnings	MOE	Men	MOE	Women	MOE	Ratio of women's to men's earnings	MOE	Men	MOE	Women	MOE	Ratio of women's to men's earnings	MOE	Men	Women	Ratio of women's to men's earnings
Total	47,111	96	36,041	59	0.765	0.002	47,955	138	36,702	67	0.765	0.002	47,717	164	36,887	68	0.773	0.003	606 *	846 *	0.008 *
Age																					
20-24	24,094	165	21,869	114	0.908	0.008	23,098	244	21,802	105	0.944	0.011	22,201	128	21,437	126	0.966	0.008	-1,893 *	-431 *	0.058 *
25-29	35,498	152	31,751	101	0.894	0.004	35,988	176	32,284	111	0.897	0.005	35,631	169	32,097	107	0.901	0.005	133	346 *	0.006
30-34	42,747	361	36,211	133	0.847	0.008	43,957	314	37,108	161	0.844	0.007	42,849	486	36,990	179	0.863	0.010	102	780 *	0.016 *
35-39	50,719	181	38,492	301	0.759	0.007	51,015	171	39,282	303	0.770	0.007	50,849	164	39,462	296	0.776	0.006	130	970 *	0.017 *
40-44	52,431	169	38,288	287	0.730	0.006	52,691	373	39,492	246	0.750	0.007	52,311	168	39,984	252	0.764	0.005	-120	1,696 *	0.034 *
45-49	54,450	294	39,237	244	0.721	0.006	55,073	289	40,207	157	0.730	0.004	54,791	464	40,253	134	0.735	0.007	341	1,016 *	0.014 *
50-54	55,348	296	40,063	160	0.724	0.005	55,530	334	40,689	152	0.733	0.005	55,219	265	40,525	141	0.734	0.004	-130	462 *	0.010 *
55-59	55,454	345	39,896	282	0.719	0.007	54,921	342	40,508	175	0.738	0.005	55,007	388	40,799	142	0.742	0.006	-447	903 *	0.022 *
60-64	54,250	408	37,564	266	0.692	0.007	54,364	430	38,578	349	0.710	0.008	54,839	586	40,006	332	0.730	0.009	590	2,442 *	0.037 *
Education																					
Less than HS diploma	26,741	141	20,186	139	0.755	0.006	26,415	129	20,407	95	0.773	0.005	26,087	128	20,391	109	0.782	0.005	-654 *	205 *	0.027 *
High school diploma	36,665	87	27,367	62	0.746	0.002	36,583	103	27,475	87	0.751	0.003	36,213	99	27,454	84	0.758	0.003	-451 *	88	0.012 *
Some college	45,461	142	33,796	120	0.743	0.004	45,175	147	33,897	135	0.750	0.004	45,297	132	33,899	178	0.748	0.005	-164	103	0.005
Bachelors	65,328	239	47,135	138	0.722	0.003	65,506	195	47,946	195	0.732	0.004	65,749	191	48,043	208	0.731	0.004	422 *	908 *	0.009 *
Masters	83,055	445	59,078	364	0.711	0.006	82,405	354	60,127	184	0.730	0.004	82,338	345	60,236	157	0.732	0.003	-717 *	1,158 *	0.020 *
Professional	123,641	1,207	81,220	903	0.657	0.010	121,778	587	81,659	702	0.671	0.006	121,283	667	81,550	872	0.672	0.008	-2,359 *	330	0.016 *
Doctorate	98,097	1,339	75,129	1,183	0.766	0.015	95,955	1,214	75,205	1,113	0.784	0.014	97,184	1,144	76,605	1,076	0.788	0.015	-914	1,476	0.022 *
Less than Bachelors	38,680	117	30,140	52	0.779	0.003	38,600	130	30,348	45	0.786	0.003	38,153	170	30,423	48	0.797	0.004	-527 *	283 *	0.018 *
Bachelors or more	73,696	209	51,980	97	0.705	0.002	73,628	301	52,489	115	0.713	0.003	73,578	418	52,375	85	0.712	0.004	-118	395 *	0.006 *
Occupation																					
Management, Business, and Financial	73,243	279	51,907	140	0.709	0.003	72,510	385	52,545	249	0.725	0.005	72,321	188	52,324	129	0.723	0.003	-922 *	416 *	0.015 *
Computer, Engineering, and Science	73,467	283	61,211	366	0.833	0.006	73,421	490	61,378	332	0.836	0.008	74,875	491	61,904	326	0.827	0.007	1,408 *	693 *	-0.006
Education, Legal, Community Service, Arts, Media	54,187	360	43,675	164	0.806	0.005	55,512	374	44,722	148	0.806	0.006	55,476	394	45,454	136	0.819	0.006	1,289 *	1,779 *	0.013 *
Healthcare practitioners and Technical	77,035	944	52,581	316	0.683	0.009	77,021	820	53,429	367	0.694	0.009	76,919	683	54,770	525	0.712	0.009	-116	2,189 *	0.029 *
Service	31,039	144	22,283	80	0.718	0.004	31,035	131	22,177	75	0.715	0.004	30,843	137	22,325	65	0.724	0.004	-197	42	0.006 *
Sales and Related	49,895	407	31,476	159	0.631	0.006	48,335	359	31,447	158	0.651	0.006	47,885	510	31,045	152	0.648	0.007	-2,010 *	-431 *	0.017 *
Office and Administrative Support	37,405	195	31,997	67	0.855	0.005	37,769	314	32,235	71	0.853	0.007	37,593	396	32,241	61	0.858	0.009	188	245 *	0.002
Farming, Fishing, and Forestry	22,650	427	17,962	620	0.793	0.031	22,479	395	17,394	396	0.774	0.022	22,727	443	17,349	482	0.763	0.025	78	-613	-0.030
Construction and Extraction	37,459	309	32,672	1,421	0.872	0.039	39,324	455	34,288	2,175	0.872	0.057	38,908	519	35,226	1,744	0.905	0.046	1,449 *	2,554 *	0.033
Installation, Maintenance, and Repair	46,334	362	43,478	1,573	0.938	0.035	46,722	373	41,810	1,428	0.895	0.032	46,386	315	41,623	909	0.897	0.021	52	-1,855 *	-0.041 *
Production	37,394	163	25,391	150	0.679	0.005	37,578	309	25,483	177	0.678	0.007	37,188	169	25,573	148	0.688	0.005	-206	183	0.009 *
Transportation and Material Moving	35,121	186	24,437	332	0.696	0.010	34,557	308	24,711	481	0.715	0.014	34,148	335	25,117	308	0.736	0.011	-974 *	680 *	0.040 *

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Table 3. 90/10th Percentile Earnings for Civilian Employed Full-time, Year-round Men and Women: 2008, 2009, 2010

(Ages 20 to 64 in 265 occupations)

	2008				2009				2010				Difference between 2008 and 2010	
	Men	MOE	Women	MOE	Men	MOE	Women	MOE	Men	MOE	Women	MOE	Men	Women
Total	6.01	0.04	4.99	0.02	6.07	0.03	5.00	0.01	6.18	0.03	5.00	0.01	0.17 *	0.00
Age														
20-24	3.87	0.05	3.70	0.04	3.96	0.04	3.71	0.04	3.92	0.08	3.74	0.03	0.06	0.04
25-29	4.09	0.05	3.77	0.04	4.18	0.04	3.84	0.03	4.25	0.04	3.87	0.04	0.17 *	0.09 *
30-34	4.84	0.05	4.53	0.04	4.87	0.06	4.50	0.04	4.81	0.09	4.51	0.05	-0.03	-0.02
35-39	5.63	0.06	5.07	0.05	5.66	0.05	5.08	0.06	5.60	0.08	5.03	0.06	-0.03	-0.04
40-44	5.86	0.05	5.14	0.06	5.96	0.05	5.21	0.08	5.83	0.07	5.19	0.10	-0.03	0.05
45-49	6.03	0.08	5.04	0.05	6.20	0.12	5.25	0.05	6.18	0.13	5.20	0.04	0.15	0.16 *
50-54	6.10	0.10	4.96	0.05	6.27	0.06	5.03	0.06	6.32	0.05	5.08	0.06	0.22 *	0.12 *
55-59	6.27	0.08	4.88	0.06	6.34	0.07	4.94	0.08	6.33	0.09	4.94	0.08	0.06	0.07
60-64	6.86	0.13	4.86	0.06	6.83	0.16	4.87	0.10	6.91	0.15	4.91	0.07	0.06	0.06
Education														
Less than HS diploma	4.14	0.05	3.57	0.05	4.22	0.07	3.59	0.06	4.22	0.08	3.64	0.06	0.07	0.07
High school diploma	4.29	0.03	3.78	0.02	4.32	0.04	3.75	0.03	4.33	0.02	3.74	0.03	0.04 *	-0.04 *
Some college	4.48	0.02	3.99	0.02	4.47	0.02	4.03	0.02	4.49	0.02	4.01	0.02	0.02	0.02
Bachelors	5.17	0.05	4.02	0.04	5.02	0.06	4.03	0.04	5.15	0.07	4.12	0.04	-0.02	0.10 *
Masters	4.91	0.07	3.39	0.04	4.80	0.08	3.30	0.04	4.75	0.10	3.40	0.03	-0.16 *	0.01
Professional	5.71	0.12	5.62	0.11	5.53	0.08	5.43	0.17	5.63	0.16	5.42	0.13	-0.08	-0.20 *
Doctorate	4.90	0.10	4.08	0.17	4.97	0.24	3.82	0.17	4.86	0.18	3.84	0.18	-0.04	-0.24
Less than Bachelors	4.71	0.02	4.18	0.02	4.78	0.02	4.18	0.02	4.81	0.02	4.16	0.02	0.10 *	-0.03
Bachelors or more	5.76	0.04	4.08	0.02	5.65	0.03	4.06	0.03	5.63	0.06	4.11	0.03	-0.13 *	0.03
Occupation														
Management, Business, and Financial	5.85	0.04	4.25	0.03	5.79	0.05	4.21	0.03	5.59	0.03	4.24	0.03	-0.26 *	-0.01
Computer, Engineering, and Science	3.40	0.03	3.36	0.04	3.37	0.04	3.35	0.06	3.40	0.02	3.39	0.04	-0.01	0.04
Education, Legal, Community Service, Arts, Media	5.54	0.10	3.82	0.03	5.52	0.10	3.83	0.03	5.48	0.07	3.81	0.03	-0.07	-0.01
Healthcare practitioners and Technical	7.84	0.11	3.88	0.04	7.84	0.11	3.91	0.03	7.86	0.08	3.79	0.03	0.02	-0.09 *
Service	5.10	0.06	3.97	0.04	5.14	0.06	3.99	0.03	5.12	0.06	4.01	0.04	0.03	0.04
Sales and Related	6.56	0.07	6.11	0.08	6.52	0.11	6.11	0.07	6.55	0.10	5.97	0.14	-0.02	-0.14
Office and Administrative Support	3.92	0.05	3.00	0.02	3.95	0.06	2.98	0.02	4.01	0.05	2.98	0.02	0.09 *	-0.02
Farming, Fishing, and Forestry	3.57	0.10	3.10	0.21	3.57	0.13	3.50	0.45	3.61	0.10	3.49	0.32	0.04	0.39 *
Construction and Extraction	4.58	0.06	5.14	0.44	4.68	0.07	4.83	0.54	4.80	0.07	5.22	0.65	0.21 *	0.08
Installation, Maintenance, and Repair	3.26	0.06	3.57	0.19	3.26	0.07	3.66	0.22	3.41	0.07	3.86	0.21	0.15 *	0.29 *
Production	3.78	0.04	3.49	0.07	3.80	0.05	3.64	0.07	3.79	0.04	3.53	0.05	0.01	0.04
Transportation and Material Moving	3.87	0.04	3.66	0.09	3.88	0.05	3.73	0.13	3.84	0.04	3.77	0.11	-0.03	0.11

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Table 4. Age-Standardized Earnings Ratio of Women's-to-Men's Earnings for Civilian Employed Full-time, Year-round Workers: 2008, 2009, 2010

(Ages 20 to 64 in 265 occupations)

	2008		2009		2010			Difference between 2008 and 2010
	Ratio of women's to men's earnings	MOE	Ratio of women's to men's earnings	MOE	Ratio of women's to men's earnings	MOE	Difference from 2010 crude ratio	
Total	0.774	0.002	0.779	0.002	0.788	0.002	0.015 *	0.014 *
Education								
Less than HS diploma	0.746	0.006	0.767	0.005	0.774	0.005	-0.007 *	0.029 *
High school diploma	0.738	0.003	0.745	0.003	0.754	0.003	-0.004 *	0.016 *
Some college	0.747	0.004	0.754	0.004	0.759	0.005	0.010 *	0.012 *
Bachelors	0.755	0.002	0.767	0.003	0.765	0.002	0.034 *	0.010 *
Masters	0.746	0.007	0.756	0.008	0.761	0.012	0.029 *	0.015 *
Professional	0.717	0.013	0.743	0.018	0.736	0.023	0.063 *	0.019
Doctorate	0.839	0.038	0.827	0.046	0.869	0.055	0.080 *	0.030
No Bachelors degree	0.778	0.003	0.792	0.002	0.801	0.003	0.004	0.023 *
With Bachelors or more	0.759	0.002	0.766	0.002	0.764	0.002	0.052 *	0.005 *
Occupation								
Management, Business, and Financial	0.761	0.005	0.772	0.003	0.773	0.003	0.050 *	0.012 *
Computer, Engineering, and Science	0.839	0.010	0.845	0.008	0.847	0.005	0.020 *	0.008
Education, Legal, Community Service, Arts, Media	0.826	0.004	0.836	0.004	0.846	0.005	0.027 *	0.020 *
Healthcare practitioners and Technical	0.748	0.015	0.737	0.008	0.744	0.011	0.032 *	-0.004
Service	0.719	0.004	0.715	0.004	0.723	0.004	-0.001	0.004
Sales and Related	0.665	0.004	0.674	0.005	0.673	0.004	0.025 *	0.008 *
Office and Administrative Support	0.837	0.006	0.836	0.007	0.847	0.005	-0.011 *	0.010 *
Farming, Fishing, and Forestry	0.788	0.031	0.754	0.024	0.752	0.027	-0.011	-0.036
Construction and Extraction	0.842	0.026	0.842	0.052	0.891	0.073	-0.014	0.050
Installation, Maintenance, and Repair	0.922	0.030	0.873	0.044	0.929	0.041	0.031	0.006
Production	0.673	0.006	0.671	0.008	0.683	0.007	-0.005	0.011 *
Transportation and Material Moving	0.698	0.012	0.716	0.017	0.749	0.013	0.013	0.051 *

Note: Age standardized to Census 2010 total population distribution of 20 to 64 years olds, Table DP-1.

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Table 5. Education-Standardized Earnings Ratio of Women's-to-Men's Earnings for Civilian Employed Full-time, Year-round Workers: 2008, 2009, 2010

	2008		2009		2010			Difference between 2008 and 2010
	Ratio of women's to men's earnings	MOE	Ratio of women's to men's earnings	MOE	Ratio of women's to men's earnings	MOE	Difference from 2010 crude ratio	
Total	0.752	0.002	0.764	0.002	0.770	0.002	-0.003 *	0.018 *
Age								
20-24	0.909	0.027	0.881	0.038	0.956	0.049	-0.010	0.046
25-29	0.835	0.007	0.830	0.009	0.855	0.006	-0.046 *	0.020 *
30-34	0.798	0.005	0.798	0.005	0.803	0.005	-0.060 *	0.006
35-39	0.765	0.006	0.772	0.006	0.775	0.004	-0.001	0.010 *
40-44	0.726	0.004	0.741	0.005	0.738	0.005	-0.027 *	0.011 *
45-49	0.704	0.005	0.712	0.005	0.704	0.005	-0.031 *	0.000
50-54	0.712	0.006	0.720	0.005	0.711	0.007	-0.023 *	-0.001
55-59	0.742	0.006	0.757	0.006	0.753	0.006	0.011 *	0.010 *
60-64	0.753	0.006	0.768	0.007	0.778	0.009	0.048 *	0.025 *
Occupation								
Management, Business, and Financial	0.733	0.006	0.754	0.008	0.756	0.006	0.033 *	0.023
Computer, Engineering, and Science	0.821	0.013	0.821	0.018	0.830	0.015	0.003	0.009
Education, Legal, Community Service, Arts, Media	0.824	0.013	0.817	0.013	0.840	0.014	0.021 *	0.017
Healthcare practitioners and Technical	0.918	0.024	0.888	0.027	0.904	0.018	0.192 *	-0.013
Service	0.704	0.011	0.705	0.011	0.718	0.011	-0.006	0.014
Sales and Related	0.698	0.009	0.695	0.014	0.678	0.017	0.030 *	-0.020 *
Office and Administrative Support	0.825	0.010	0.838	0.012	0.840	0.014	-0.018 *	0.014
Farming, Fishing, and Forestry	0.851	0.095	0.732	0.063	0.791	0.072	0.028	-0.060
Construction and Extraction	0.787	0.048	1.025	0.065	0.965	0.043	0.059	0.177 *
Installation, Maintenance, and Repair	1.001	0.073	0.879	0.082	0.843	0.066	-0.054	-0.158 *
Production	0.714	0.021	0.713	0.021	0.720	0.030	0.032 *	0.006
Transportation and Material Moving	0.756	0.046	0.759	0.042	0.781	0.058	0.046	0.025

Note: Education standardized to 2010 ACS total full-time, year-round employed educational distribution of 20 to 64 years olds.

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.

Table 6. Occupation-Standardized Earnings Ratio of Women's-to-Men's Earnings for Civilian Employed Full-time, Year-round Workers: 2008, 2009, 2010

	2008		2009		2010			Difference between 2008 and 2010
	Ratio of women's to men's earnings	MOE	Ratio of women's to men's earnings	MOE	Ratio of women's to men's earnings	MOE	Difference from 2010 crude ratio	
Total	0.756	0.002	0.756	0.003	0.761	0.003	-0.013 *	0.004 *
Age								
20-24	0.894	0.012	0.927	0.015	0.937	0.020	-0.028 *	0.044 *
25-29	0.868	0.005	0.871	0.006	0.871	0.006	-0.030 *	0.003
30-34	0.816	0.007	0.806	0.007	0.834	0.011	-0.030 *	0.018 *
35-39	0.741	0.006	0.750	0.008	0.740	0.008	-0.036 *	-0.001
40-44	0.731	0.007	0.746	0.008	0.749	0.008	-0.016 *	0.018 *
45-49	0.725	0.007	0.727	0.008	0.733	0.007	-0.002	0.008
50-54	0.722	0.006	0.730	0.006	0.735	0.006	0.001	0.014 *
55-59	0.728	0.008	0.737	0.009	0.751	0.006	0.009 *	0.023 *
60-64	0.713	0.007	0.726	0.010	0.764	0.009	0.035 *	0.051 *
Education								
Less than HS diploma	0.779	0.015	0.795	0.019	0.784	0.015	0.002	0.004
High school diploma	0.780	0.006	0.785	0.007	0.797	0.009	0.039 *	0.017 *
Some college	0.756	0.004	0.762	0.005	0.760	0.006	0.011 *	0.004
Bachelors	0.786	0.006	0.791	0.007	0.790	0.008	0.059 *	0.004
Masters	0.770	0.015	0.774	0.019	0.778	0.015	0.047 *	0.009
Professional	0.740	0.044	0.725	0.052	0.783	0.045	0.111 *	0.043
Doctorate	0.772	0.066	0.871	0.070	0.831	0.099	0.043	0.059
Less than Bachelors	0.767	0.002	0.769	0.002	0.771	0.002	-0.027 *	0.004 *
Bachelors or more	0.760	0.005	0.772	0.006	0.769	0.005	0.058 *	0.009 *

Note: Occupation standardized to 2010 ACS total full-time, year-round employed occupational distribution of 20 to 64 years olds.

* Statistically different from zero at the 90 percent confidence level.

A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval. For further information on the accuracy of the estimates, including standard errors and margins of error, please see the ACS "Accuracy of the Data" for 2008, 2009, and 2010 at <www.census.gov/acs/www/data_documentation/documentation_main/>.

Source: U.S. Census Bureau, American Community Surveys 2008, 2009, 2010.