

# Fact Sheet

IWPR #C350a Updated April 2010

## The Gender Wage Gap by Occupation

The gender wage gap and occupational segregation – men primarily working in occupations done by other men, and women primarily working with other women – are persistent features of the US labor market. During 2009, median weekly earnings for female full-time workers were \$657, compared with \$819 per week for men, a gender wage ratio of 80.2 percent (or a gender wage gap of 19.8 percent). Women's median earnings are lower than men's in nearly all occupations, whether they work in occupations predominantly done by women, occupations predominantly done by men, or occupations with a more even mix of men and women. Four of ten women (39.7 percent, down from 43.6 percent in 2008) work in traditionally female occupations, and slightly more than four of ten male workers (43.6 percent, down from 46.1 percent in 2008) work in traditionally male occupations. Typically, male dominated occupations pay more than female dominated occupations at similar skill levels. Therefore, tackling occupational segregation is an important part of tackling the gender wage gap.

#### Women Earn Less than Men in (Almost) All Occupations

The US Bureau of Labor Statistics (BLS) collects data on median weekly earnings for 503 different occupations; many of these have too few workers to reliably estimate weekly earnings, or employ too few people of one sex to estimate a female/male earnings ratio.<sup>2</sup> Of the 108 occupations for which sufficient data are available, there are only four in which women's weekly median earnings are higher than men's.<sup>3</sup> With the exception of 'other life, physical, and social science technicians' (median earnings of \$740 for women), these all have median weekly earnings of less than \$500. At the other end of the spectrum, three of the four occupations with the largest gender wage gap have median male earnings above \$1,000 per week.<sup>4</sup>

### Women Earn Less than Men in the Most Common Occupations

The ten most common occupations for women employ 29.2 percent of all female full-time workers (compared with 28.9 percent in 2008). Median weekly earnings range from \$1,037 for 'managers' and \$1,035 for 'registered nurses' to \$430 for 'nursing, psychiatric and home health aides' and \$361 for 'cashiers' (Table 1). Women earn less than men in each of these occupations; the gender wage ratio ranges from 75.8 percent for 'accountants and auditors' to 95.1 percent for 'customer service representatives.'

For men, the ten most common occupations employ 20.7 percent of all male full-time workers (compared with 21.3 percent in 2008). Median weekly earnings for men range from \$2,084 for 'chief executives' and \$1,292 for 'managers' to \$494 for 'janitors and building cleaners' and \$400 for 'cooks' (Table 1). Women earn less than men in each of these occupations (although there are too few women 'construction laborers' to calculate a gender wage ratio there).

Table 1: The Wage Gap in the Ten Most Common Occupations\* for Women and Men (Full-Time Workers Only), 2009

	Median weekly earnings for men (\$)	Median weekly earnings for women (\$)	Women's earnings as percent of men's	Share of female workers in occupation	Share of male workers in occupation as percent of all male workers	Share of female workers in occupation as percent of all female workers
All female workers (44,712,000)	819	657	80.2%	44.8%**	100%	100%
10 most common occupations for women						
Secretaries and administrative assistants	666	619	92.9%	96.9%	0.1%	5.3%
Elementary and middle school teachers	1,040	891	85.7%	81.3%	0.8%	4.4%
Registered nurses	1,090	1,035	95.0%	90.7%	0.4%	4.3%
Nursing, psychiatric, and home health aides	519	430	82.9%	88.0%	0.3%	2.8%
First-line supervisors/managers of retail sales workers	770	597	77.5%	44.4%	2.3%	2.3%
First-line supervisors/managers of office and administrative support workers	837	705	84.2%	68.9%	0.8%	2.2%
Customer service representatives	617	587	95.1%	66.7%	0.9%	2.2%
Cashiers	422	361	85.5%	70.7%	0.7%	2.0%
Accountants and auditors	1,190	902	75.8%	61.1%	1.0%	1.9%
Managers, all other	1,292	1,037	80.3%	38.0%	2.3%	1.8%
Sum					9.7%	29.2%
All male workers (55,108,000)						
10 most common						
occupations for men						
Driver/sales workers and truck drivers	690	512	74.2%	3.7%	4.3%	0.2%
Managers, all other	1,292	1,037	80.3%	38.0%	2.3%	1.8%
First-line supervisors/managers of retail sales workers	770	597	77.5%	44.4%	2.3%	2.3%
Janitors and building cleaners	494	401	81.2%	26.5%	2.0%	0.9%
Retail salespersons	624	443	71.0%	42.8%	1.9%	1.8%
Laborers and freight, stock, and material movers, hand	511	421	82.4%	13.4%	1.8%	0.3%
Construction laborers	595	*	*	2.3%	1.7%	0.0%
Chief executives	2,084	1,553	74.5%	24.3%	1.5%	0.6%
Sales representatives, wholesale and manufacturing	986	736	74.6%	26.8%	1.5%	0.7%
Cooks	400	371	92.8%	36.7%	1.4%	1.0%
Sum					20.7%	9.5%

Note: \* Earnings data are made available only where there are an estimated minimum of 50,000 workers in an occupation. \*\* This refers to women's share of all full-time workers.

Source: IWPR compilation of data from the U.S. Department of Labor, Bureau of Labor Statistics. 2009.

<sup>&</sup>quot;Household Data Annual Averages. Table 39." <a href="http://www.bls.gov/cps/cpsaat39.pdf">http://www.bls.gov/cps/cpsaat39.pdf</a>> (retrieved March 2010).

#### **Women Earn Less than Men in the Highest Paying Occupations**

The gender wage gap is evident in both the highest and lowest paying occupations for women. A significant proportion of women (3.7 percent; Table 2) work in the ten highest paying occupations, each with median female earnings significantly above \$1000, yet proportionately almost twice as many men work in these occupations (7.0 percent). With the exception of 'occupational therapists', women are in the minority in nine of these ten occupations, and three of them classify as 'non-traditional' (Table 2). Computing and related occupations figure highly in the top ten list, including 'computing scientists and system analysts' and 'computer programmers' with comparatively low gender wage gaps (Table 2). The female-to-male earnings ratio is lowest for 'physicians and surgeons', where women are a third of the workforce and on average earn only 64.2 percent of men (Table 2).

Six of the highest earning occupations for women are also in the top ten list for men (Table 3). In three of the remaining occupations there are too few women to estimate an earnings ratio. 'Human resource managers' is the only occupation on the list of the highest paying male occupations where women are the majority of the workforce. This occupation was also in the top-ten list for women in 2008 but is no longer so in 2009; median earnings for women fell while they rose for men, leading to a significant increase in the gender wage gap.<sup>5</sup>

#### **Women Earn Less than Men in the Lowest Paying Occupations**

The proportion of women working in the ten occupations with the lowest female earnings (all with median earnings of less than \$400 per week for full-time work) account for 7.7 percent of all women, almost twice as many as work in the highest earning occupations (Table 2). Women are the majority of workers in eight of these occupations, including two occupations in which no earnings data for men are available. Women's weekly median earnings were below those of men, although typically the gender wage gap is smaller than the wage gap for all workers (Table 2).

The ten occupations with the lowest earnings for men include occupations in which the majority of workers are male as well as occupations in which the majority of workers are female. Overall a lower proportion of men work in these occupations than women (4.4 percent compared with 5.2 percent; Table 3). With the exception of 'dining room and cafeteria attendants and bar tender helpers,' women's median earnings are lower than men's.

#### The Gender Wage Gap and Racial/ Ethnic Background

The gender wage gap differs by race and ethnic background. With the exception of white workers, the gender wage gap within each race or ethnic group is narrower than the wage gap for the whole population; the gender wage gap for white workers is larger than the average (Table 4). Hispanic or Latina women have the lowest earnings, at \$509 per week, and only earn 55.2 percent of the median weekly earnings of white men (Table 4).

The sample size in the Current Population Survey is insufficient to provide reliable estimates of the occupational wage gap by gender, race and ethnicity at the same level of detail as for all employees. Data for broad occupational groups suggest that earnings differences by race and ethnic background are both due to the greater likelihood of women of color to work in service occupations, which have the lowest median earnings overall, but also that there are marked differences within occupational groupings, with Latinas and Hispanic women having the lowest

median weekly earnings in each group, be this services or 'management, business and financial occupations' (Table 5).

Table 2: Occupations\* with the Highest and Lowest Median Weekly Earnings for Women (Full-Time Workers Only), 2009

	Median weekly earnings of male workers	Median weekly earnings of female workers	Women's earnings as % of men's	Share of female workers in occupation	Share of male workers in occupation as percent of all male workers	Share of female workers in occupation as percent of all female workers
10 highest paying occupations for women						
Chief executives	2,084	1,553	74.5%	24.3%	1.5%	0.6%
Pharmacists	1,954	1,475	75.5%	43.0%	0.2%	0.2%
Lawyers	1,934	1,449	74.9%	36.6%	0.8%	0.5%
Computer and information systems managers	1,788	1,411	78.9%	27.7%	0.6%	0.3%
Computer software engineers	1,550	1,311	84.6%	21.3%	1.3%	0.4%
Physicians and surgeons	1,914	1,228	64.2%	34.3%	0.7%	0.5%
Computer programmers	1,267	1,182	93.3%	21.1%	0.6%	0.2%
Management analysts	1,371	1,177	85.8%	47.4%	0.4%	0.4%
Computer scientists and systems analysts	1,268	1,167	92.0%	27.8%	0.9%	0.4%
Occupational therapists	*	1,155	*	81.7%	0.0%	0.1%
Sum					7.0%	3.7%
10 lowest paying occupations for women Miscellaneous agricultural workers	405	346	85.4%	15.0%	0.8%	0.2%
Combined food preparation and serving workers, including fast food	357	347	97.2%	64.3%	0.1%	0.2%
Cashiers	422	361	85.5%	70.7%	0.7%	2.0%
Laundry and dry-cleaning workers	493	362	73.4%	60.4%	0.1%	0.2%
Waiters and waitresses	419	363	86.6%	65.5%	0.5%	1.1%
Child care workers	*	364	*	95.6%	0.0%	0.9%
Food preparation workers	385	367	95.3%	51.8%	0.3%	0.4%
Cooks	400	371	92.8%	36.7%	1.4%	1.0%
Maids and housekeeping cleaners	444	371	83.6%	87.1%	0.2%	1.5%
Sewing machine operators	*	383	*	70.1%	0.1%	0.2%
Sum					4.1%	7.7%

Note: \* Data are made available only where there are an estimated minimum of 50,000 workers in an occupation. Source: IWPR compilation of data from the U.S. Department of Labor, Bureau of Labor Statistics. 2009. *Household Data Annual Averages. Table 39*. <a href="http://www.bls.gov/cps/cpsaat39.pdf">http://www.bls.gov/cps/cpsaat39.pdf</a> (retrieved March 2010).

Table 3: Occupations\* with the highest and lowest median weekly earnings for men (Full-Time Workers Only), 2009

	Median weekly earnings of male workers	Median weekly earnings of female workers	Women's earnings as % of men's	Share of male workers in occupation	Share of male workers in occupation as percent of all male workers	Share of female workers in occupation as percent of all female workers
10 highest paying occupations for men	0.53				4.50	
Chief executives	2,084	1,553	74.5%	75.7%	1.5%	0.6%
Pharmacists	1,954	1,475	75.5%	57.0%	0.2%	0.2%
Lawyers	1,934	1,449	74.9%	63.4%	0.8%	0.5%
Physicians and surgeons	1,914	1,228	64.2%	65.7%	0.7%	0.5%
Engineering managers	1,855	*	*	91.2%	0.2%	0.0%
Computer and information systems managers Aircraft pilots and flight	1,788	1,411	78.9%	72.3%	0.6%	0.3%
engineers	1,652	*	*	100.0%	0.2%	*
Physical scientists, all other	1,587	*	*	66.7%	0.1%	0.1%
Computer software engineers	1,550	1,311	84.6%	78.7%	1.3%	0.4%
Human resources managers	1,548	1,072	69.3%	35.5%	0.2%	0.4%
Sum					5.8%	3.0%
10 lowest paying occupations for men		*				
Dishwashers	339	*	*	83.6%	0.2%	0.0%
Combined food preparation and serving workers, including fast food	357	347	97.2%	35.1%	0.1%	0.2%
Dining room and cafeteria attendants and bartender helpers	360	400	111.1%	48.4%	0.1%	0.1%
Food preparation workers	385	367	95.3%	48.2%	0.3%	0.4%
Cooks	400	371	92.8%	63.3%	1.4%	1.0%
Miscellaneous agricultural workers	405	346	85.4%	85.0%	0.8%	0.2%
Parking lot attendants	415	*	*	87.7%	0.1%	0.0%
Waiters and waitresses	419	363	86.6%	34.5%	0.5%	1.1%
Cashiers	422	361	85.5%	29.3%	0.7%	2.0%
Cleaners of vehicles and equipment	423	*	*	88.8%	0.3%	0.1%
Sum					4.4%	5.2%

Note: \* Data are made available only where there are an estimated minimum of 50,000 workers in an occupation. Source: IWPR compilation of data from the U.S. Department of Labor, Bureau of Labor Statistics. 2009. "Household Data Annual Averages. Table 39." <a href="http://www.bls.gov/cps/cpsaat39.pdf">http://www.bls.gov/cps/cpsaat39.pdf</a> (retrieved March 2010).

Table 4: Median Weekly Earnings for Male and Female Workers, by Race and Ethnic Background (Full-Time Workers Only), 2009

			Women's as % of Male Earnings in	Women's as % of
Race and Ethnicity	Male (\$)	Female (\$)	Same Race/ Ethnic Group	White Male Earnings
All Races	819	657	80.2	n.a.
White (Non-Hispanic)	922	704	76.4	76.4
Black or African American*	621	582	93.7	63.1
Asian*	952	779	81.8	84.5
Hispanic or Latino (any race)	569	509	89.5	55.2

Note: \* Data for Black or Africans American may include Black Hispanics/ Latinas.

Source: IWPR compilation of data based on US Bureau of Labor Statistics. *Table A-2. Usual weekly earnings of employed full-time wage and salary workers by intermediate occupation, sex, race, and Hispanic or Latino ethnicity and Non-Hispanic ethnicity, Annual Average 2009.* 

#### Occupational Gender Segregation is a Strong Feature of the U.S. Labor Market

Four of ten women (39.7 percent, down from 43.6 percent in 2008) work in occupations where at least 75 percent of the workers are female; these occupations employ only 4.5 percent of men. An even higher proportion of men work in predominantly male occupations (43.6 percent, down from 46.1 percent in 2008), which employ only 5.5 percent of women. As a result of the recession the share of men and women in traditional sex-typed occupations fell during 2009 because job losses were particularly severe in male dominated sectors such as construction. Yet occupational segregation remains a significant feature of the US labor market.

A more comprehensive analysis of trends in gender segregation is provided by the 'Index of Dissimilarity.' The Index of Dissimilarity, based on all workers, not just those working full-time, shows a small increase in segregation during 2009 (Figure 1). It also suggests that after falling considerably in the 1980s, it has remained virtually unchanged since the mid 1990s. Looking at trends separately by level of education suggests that, overall, jobs requiring four years of college and more are more integrated than jobs requiring less education. Occupations which have seen a significant increase in the share of women workers include lawyers and accountants, as well as bus drivers and mail carriers, all providing good earnings (data not shown). Yet women have made virtually no in-roads into other male dominated occupations such as carpenters or mechanical engineers (data not shown).

Table 5: Median Weekly Earnings for Male and Female Workers, by broad occupational classification and Race and Ethnic Background (Full-Time Workers Only), 2009

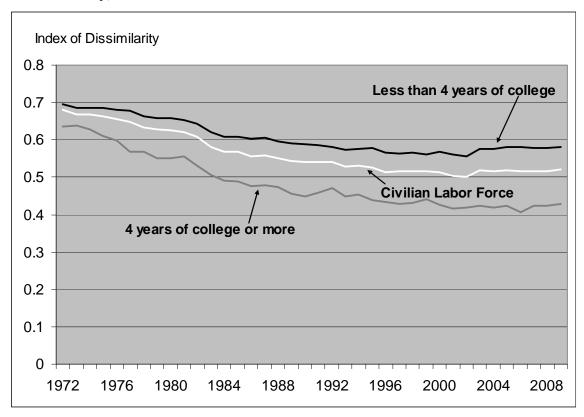
Women	White women (non-Hispanic only)		Black or African American women		Asian women		Latino or Hispa	anic women Latino
	Median weekly earnings (\$)	White women in occupation as % of all female white workers	Median weekly earnings (\$)	Black women in occupation as % of all female black workers	Median weekly earnings (\$)	Asian women in occupation as % of all female Asian workers	Median weekly earnings (\$)	women in occupation as % of all female Latino workers
Management, business, and financial operations occupations	975	18.0%	882	12.1%	1,083	16.3%	807	10.8%
Professional and related occupations Natural resources.	897	31.4%	763	25.3%	1,101	36.6%	760	16.5%
construction, and maintenance occupations Office and administrative	622	0.75%	557	0.95%	491	0.50%	385	2.0%
support occupations	608	23.7%	591	21.9%	693	15.17%	572	22.7%
Sales and related occupations	574	9.6%	436	8.6%	528	7.8%	456	10.0%
Production, transportation, and material moving occupations	523	4.2%	453	6.7%	481	7.0%	374	11.6%
Service occupations	436	12.3%	418	24.5%	450	16.85%	378	26.4%

Men	White men (no only)  Median weekly earnings	white men in occupation as % of all male white workers	Black or Africa men  Median weekly earnings	Black men in occupation as % of all male black workers	Asian men  Median weekly earnings	Asian men in occupation as % of all male Asian workers	Latino or Hispa Median weekly earnings	anic men Latino men in occupation as % of all male Latino workers
Management, business,	(\$)	workers	(\$)	WOIKEIS	(\$)	WOIKEIS	(\$)	workers
and financial operations occupations Professional and related	1,386	18.55%	940	9.6%	1,429	15.9%	1,035	7.7%
occupations	1,232	20.6%	910	14.5%	1,338	37.0%	1,000	7.8%
Sales and related occupations	869	10.7%	591	7.8%	716	8.6%	601	6.6%
Natural resources, construction, and maintenance occupations Production, transportation,	804	17.2%	617	12.25%	803	7.4%	563	26.7%
and material moving occupations	718	16.7%	582	25.25%	617	11.4%	516	24.0%
Office and administrative support occupations	711	6.2%	613	10.7%	678	7.0%	554	7.00%
Service occupations	616	10.1%	499	19.9%	533	12.7%	442	20.2%

Note: \* Data for Black or Africans American may include Black Hispanics/ Latinas.

Source: IWPR compilation of data based on US Bureau of Labor Statistics. *Table A-2. Usual weekly earnings of employed full-time wage and salary workers by intermediate occupation, sex, race, and Hispanic or Latino ethnicity and Non-Hispanic ethnicity, Annual Average 2009.* 

Figure 1: Trends in Occupational Segregation of Men and Women Aged 25-64: The Index of Dissimilarity, 1972-2009



Source: IWPR compilation based on the Current Population Survey, March/Annual Supplement/ASEC, as provided by Miriam King, Steven Ruggles, Trent Alexander, Donna Leicach, and Matthew Sobek. 2009. *Integrated Public Use Microdata Series, Current Population Survey: Version 2.0.*. Minneapolis, MN: Minnesota Population Center; <a href="http://cps.ipums.org">http://cps.ipums.org</a> (retrieved March 22, 2010). Occupations are classified according to the 1990 Census occupational classification.

#### **Notes**

The weekly earnings data in this factsheet are based on the Current Populations Survey (CPS) and refer to full-time (working 35 hours or more per week) wage and salary workers age 16 and older (excluding the self-employed); please note that 2009 median annual earnings data (which include workers 15 years and older as well as the self-employed, but exclude workers who do not have earnings for at least 50 weeks of the year) are not available until the Fall 2010; the gender wage gap based on annual earnings typically is slightly larger than the weekly earnings wage gap.

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<sup>&</sup>lt;sup>1</sup> The definition of traditional/non-traditional occupations as having at least 75% of the workers of one gender is provided in the Carl D. Perkins Vocational and Technical Education Act of 1998 S.250-6. Data include part-time and full-time workers.

<sup>&</sup>lt;sup>2</sup> For the BLS to publish estimated earnings, there must be at least 50,000 people in a category. Because so few women work in construction for example, once we look at detailed occupations, published data do not allow us to estimate the gender earnings ratio. Conversely, because they are very female dominated, there are no reliable estimates for male earnings in many health care and personal service occupations.

<sup>&</sup>lt;sup>3</sup> Occupations with higher median earnings for women than men (female/male earnings ratios in brackets) are: 'Other life, physical, and social science technicians' (102.4%), 'bakers' (104.0%), 'teacher assistants' (104.6%), and 'dining room and cafeteria attendants and bartender helpers' (111.1%).

<sup>&</sup>lt;sup>4</sup> The four occupations with the largest gender wage gap are (female/male earnings ratio in brackets): 'Physicians and surgeons' (64.2%); 'securities, commodities and financial services sales agents' (64.5%); financial managers' (66.6%); and 'other business operations specialists' (66.9%).

<sup>&</sup>lt;sup>5</sup> For 2008 data see IWPR "The Gender Wage Gap by Occupation" Factsheet; April 2009; available at <a href="http://www.iwpr.org/pdf/C350a2009.pdf">http://www.iwpr.org/pdf/C350a2009.pdf</a>.

The Index of Dissimilarity measures how many women or men would have to change occupations to have in each occupation the same gender balance or occupational integration as in the civilian workforce overall (Duncan and Duncan, 1955). Occupations are classified according to the 1990 Census occupational classification (see Peter Meyer and Anastasiya Osborne.2005. 'Proposed Category System for 1960-2000 Census Occupations.' US Department of Labor BLS; *BLS Working Paper* 383). The analysis is restricted to the civilian labor force. The index is defined in such a way that each person has equal weight, i.e. larger occupations count more than smaller ones. The index ranges from 0 (complete integration) to 1 (maximal segregation). Further calculations around the index of dissimilarity are provided by Cotter, David A., Joan M. Hermsen, and Reeve Vanneman. 2007. <a href="http://www.bsos.umd.edu/socy/vanneman/endofgr/default.html">http://www.bsos.umd.edu/socy/vanneman/endofgr/default.html</a> (accessed March 2010).