

The Paycheck Fairness Act

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My first reaction was disbelief when I heard that a new equal pay bill was moving through Congress called the Paycheck Fairness Act (the PFA). After all, women have been protected from job discrimination by a series of federal laws. The original Equal Pay Act of 1963 made it illegal to pay different wages to women and men if they performed equal work in the same workplace. The broad based Title VII of the 1964 Civil Rights Act outlaws discrimination against women and minorities in all aspects of employment including compensation and made it illegal for an employer to retaliate against employees who file a claim. The 1978 Pregnancy Discrimination Act provided additional protections. The 1991 amendments to Title VII among other things boosted financial rewards by allowing plaintiffs to sue for punitive damages for emotional distress, not just lost pay. The recent Lily Ledbetter Fair Pay Act essentially eliminates the prevailing time limit (180-300 days depending on the state) for filing claims for employer discrimination for those who are slow to realize they were being underpaid. (Ledbetter had waited more than 5 years after discovering that she was paid less than men she regarded as comparable.) And for more than 40 years two major agencies have been dedicated to fighting discrimination –the Office of Federal Contract Compliance Programs (OFCCP) and the Equal Employment Opportunity Commission (EEOC).

Why do we need more legislation? The bill's sponsors see rampant gender pay discrimination despite all the legislation and seek new and intrusive measures that will force employers to raise the pay of women. These measures will increase the cost of doing business and the cost of employing women and will likely reduce women's opportunities for employment. (Although men can be the victim of gender discrimination and have in fact brought cases under Title VII only women are assumed be the beneficiaries of Paycheck Fairness.)

However, the PFA is fighting windmills. The gender pay gap has narrowed over the years, not so much because of the federal laws, but because successive cohorts of

women have increased their lifetime work experience and other work related skills. The most commonly cited measure of the gender pay gap, the female-to-male ratio of median annual earnings of full-time year-round workers, declined from 65% in 1955 to about 59 percent in 1961. And there it remained throughout most of the 1960s and 70's despite the 1963 Pay Act, enactment of Title VII and the establishment of the EEOC and the OFCCP. But starting in the early 1980s the gender pay gap began to narrow and the female-male ratio of median annual earnings of full-time workers climbed to 72 percent in 1990 and reached 78 percent in 2007 (77% in 2009). An alternative measure using the average hourly wage is also shown in the figure. In all years the hourly wage ratio is higher than the ratio based on annual earnings of full-time year-round workers because men who work full-time work about 8-10 percent more hours per week than full-time women and the annual measure does not adjust for differences in hours worked by full-time workers. But the pattern of change is similar—the hourly wage ratio rose from 66 percent in 1979 to 82 percent in 2007 (81% in 2009).

If federal civil rights enforcement was not a major cause of the narrowing in the gender pay gap in the 80's, then what was? Economic research provides a compelling explanation. In brief, a major source of the gender wage gap has always been a gender difference in work related skills, most importantly those skills acquired through years of experience in the labor market. Ironically, as the percentage of women in the labor force grew during the 60's and 70's the average lifetime work experience of women in the labor force declined, because so many women were entering the labor force after their children had grown, and therefore had accumulated few years of work. As a result the differential in experience with men widened and so did the wage gap. But by the 1980's women began to start work and remain longer in the work force. The gender difference in lifetime work experience began to narrow and provided the impetus for the narrowing of the pay gap in the 1980s. As women began spending more and more of their time in the labor force their expectations of a career in the labor market led to changes in women's preparation for a career through educational and occupational investments that enhance earnings and also helped to narrow the wage gap with men. (See table 13 on the increase in women's share of higher degrees and of some important changes in field of degree).

What about the current wage gap?

The most important source of the gender wage gap is the difference in human capital acquired through labor market experience and in job choices, both of which reflect the relative importance of home and market activities in the lives of women and men.

The division of labor in the family is less delineated than it once was. A majority of women with children now work in the market. Nonetheless, women still assume greater responsibility for child rearing than men and that responsibility influences the extent and continuity of market work as well as choice of occupation and preferences for working conditions that facilitate the combination of market and home work. These differences translate into wage differences, partly because they lead to differences in human capital acquired on the job and partly because flexible schedules at work, a less stressful work environment and other working conditions compatible with meeting the demands of home responsibilities are likely to come at a price—namely, lower wages.

The labor force participation of women has greatly increased over the years. Yet even today labor force data show the strong effect of the presence of children, particularly young children. Among parents of children under the age of six, 60% of women were employed in 2007 compared to 93% of men. The employment rate of mothers whose youngest child is 6-17 rises to 74%. Fathers stay about the same (Table 2). Thus many women are out of the labor force during a time in the life cycle when labor market skills would otherwise be acquired.

Once in the labor force, working women with children differ sharply from working men with respect to hours spent at work. In 2007, 28 percent of women with children under the age of six worked part-time compared to 3% of men with same aged children. The percentage of women working part-time is reduced somewhat-- to 22%—when their children reach ages 6-17, while the percent part-time among men remains about the same. Gender differences in hours are also present among full-time workers. Women are less likely than men to work long hours in a week. In 2007, 27% of male full-time workers and 15% of female full-time workers worked 41 hours or more a week.

Are women steered into part-time jobs by prejudiced employers harboring stereotyped views of women? Polls on job preferences indicate that free choice, not employer choice is the reason for the gender difference in part-time work. Results of a recent poll conducted by the Pew Research Center (2007) show that in answer to the question “what would be the ideal situation for you—working full-time, working part-time, or not working at all outside the home?” 50% of all mothers of children under 18 responded that part-time would be ideal, 20% said full-time and 29%, not working at all. In contrast, 72% of fathers prefer full-time work, 12% part-time work and 16% no work (Table 3). Even among mothers who are currently employed full-time, 49% said that their ideal would be part-time work while 80% of mothers working part-time said that part-time was their ideal and only 5% indicated a preference for full-time work. These results are not an anomaly. Over the years periodic polls on job preference have found similar results.

Data collected by the Department of Labor’s American Time Use Survey (ATUS) provide further insight into the trade-offs that women and men make in apportioning their time among market work, work at home and other activities. Table 4 displays my tabulations from the combined 2003-2004 ATUS for employed men and women ages 20-44 who reported their time use on a workday.

The table shows the allocation of hours among child care, housework and market work,. The hours allocations are shown separately according to the age of the youngest child (<1, 1-5, 6-12 and 13-17) as well as for those who have no children under age 18 present in the household. Several distinct patterns of time use stand out. No matter how measured, working mothers devote significantly more time to childcare than fathers. Working mothers of infants spent 3.1 hours on primary child care (time spent exclusively on care of the child) and those hours declined to 2.3 when the youngest child was ages 1-5 and to 1.5 once the child reached school age (6-12), falling to only half an hour when the youngest child was a teenager. Over the same span, fathers of infants devoted 1.1 hours to primary childcare falling to 0.8 hours by the time the youngest child reached

ages 6-12. Primary care understates total time spent with children. Including all waking hours spent with children women spend close to 9 hours with infants and that time declines as children grow older.

Men

Not surprisingly, mothers spend less time on market work than fathers. Comparing mothers and fathers who worked on the diary day we find that men worked 9.5 to 10 hours and those hours did not vary much with age of youngest child. Mothers, however, spent about 7 hours on market work when the youngest child was an infant and increased their work by an hour when the youngest child reached ages 13-17.

Notably, there is little difference in the allocation of time on work days comparing men and women with no children under the age of 18. Men work slightly more; women do slightly more housework.

The time use data demonstrate that women continue to be responsible for a disproportionately large share of household work and childcare after they enter the market. The burden of household responsibilities affects more than desired hours on the job. In an important article, the Nobel economist Gary Becker shows how the energy demands of childcare and housework reduce the energy available for market work. Because childcare and other home work are disproportionately borne by women, even those who work full-time in the market, women have an incentive to choose less demanding and consequently lower paying jobs.

Analyzing the gender pay gap

It is a challenge to estimate the determinants of the gender gap because differences in standard variables such as schooling are not likely to be important sources of the gender gap. I use the National Longitudinal Survey of Youth to analyze the sources of the pay gap because it follows a cohort as it ages and therefore provides detailed

information on lifetime patterns of work participation. Such information is totally absent from standard census data. Another significant source of wage differentials are the “inequalities arising from the nature of the employments themselves”. As Adam Smith observed, the “agreeableness and disagreeableness” of employments give rise to equalizing or compensating wage differences. These non-pecuniary characteristics of employments surely may be evaluated differently by women and men. For example, occupations and individual firms differ in the extent to which they provide part-time work or otherwise accommodate flexible work schedules, characteristics that are likely to be more highly valued by women than by men. To the extent these amenities are costly for employers to provide, jobs with amenities will be paid for with lower wages.

Jobs with disamenities, such as exposure to hazards or an unpleasant environment have been found to pay a premium, other things the same. A large and growing literature in psychology, sociology and economics has studied the risk-taking tendencies of men and women in many domains including physical danger and financial risk. The general finding is that women are more risk averse than men. In addition, men and women may differ in their attitudes towards work involving dirty or otherwise unpleasant physical conditions. Another source of differences in financial rewards among occupations is the extent to which skills depreciate during periods of withdrawal from work. The rate of depreciation is expected to vary depending on the rate of technological change and obsolescence of the skills acquired. Because women are more likely than men to expect to take career breaks they are more likely to avoid occupations with a larger financial penalty for withdrawal.

Although women and men are more likely than they once were to work in the same occupation, large differences still prevail in their occupational distributions. In 2007 women were 44% of all full time workers. They were 55% of all professional workers and within that category the percent female differed radically by field. Women were 72% of education and library workers, 63% of psychologists, 50% of biologists-- but 25% of workers in computer and mathematical occupations and 15% of architects and engineers. These percentages are very close to women’s representation in the same fields of college

and graduate degrees (see Table 7).

Women make up a tiny proportion of workers in many blue collar occupations—2% of construction and extraction workers (0.5% of roofers), 1.5% in farming, forestry and fishery, 0.01% in transportation and material moving. I estimate that over the period 1994-2001, among all narrowly defined (3-digit) occupations, 53% of women or men would have had to change their occupation to produce gender equality in occupational distributions.

Turning to my analysis, I show the key variables and their mean values for all men and women in Table 5. Table 6 shows the effect on the gender gap controlling for different sets of explanatory variables from a series of log wage regressions. Results are shown for the full sample of male and female workers and separately for married men and women and for those who never had a child and never married. The latter can be assumed to have in common a similar lack of family responsibilities (an assumption corroborated by our time use data).

The results are displayed as female-male hourly wage ratios. The unadjusted hourly wage ratio for the full sample of men and women is 79.1%. It is essentially unchanged after including education, AFQT and geographic location. The addition of three work experience variables, however, reduces the gender gap by almost half and the wage ratio rises to 88.6% (Model 2). The work experience variables include: weeks worked in civilian jobs since age 18; weeks worked in the military; and the proportion part-time of total weeks worked. On average, women have worked about two years less than men in military and civilian jobs combined. Moreover, close to 14% of the weeks worked by women were part-time compared to 5% for men. As a proxy for commitment to home responsibilities I add in Model 3 a variable indicating whether the worker had ever withdrawn from the labor force citing child-care or family responsibilities as the reason. Such labor force withdrawal is associated with an 8% reduction in the wage rate for men as well as women. However, 55% of women and only 13% of men have ever withdrawn because of family responsibilities. The addition of this variable raises the

wage ratio to 90.3%.

In Model 4 I add two variables indicating whether the person's job was in government employment or in the non-profit sector. Non-profit jobs offer more part-time work and are more likely to allow for flexible schedules and possibly a more relaxed ambience than work in the for-profit sector. Women are twice as likely to work in the non-profit sector as men, and employment in the non-profit sector is associated with lower pay. Government work is also associated lower pay although the effect is weak and insignificant. The addition of these work sector variables raises the hourly wage ratio slightly—to 90.9%.

The final set of variables measures particular characteristics of each person's 3-digit occupation. The occupational characteristics included in our analysis are listed in Table 5 along with the mean values for men and women separately. Measures of most of the occupational characteristics were derived from the Dictionary of Occupational Characteristics and from special supplements to the CPS. A variable measuring the level of transition out of the labor force and another measuring the risk of unemployment in the occupation were estimated using data from the March CPS.

The hourly wage ratio rises to 92% when the occupational characteristics enumerated in Table 5 are added (Model 5). The addition of a variable that measures the percent female in the respondent's 3-digit occupation barely raises the wage ratio—to 92.4%. The women in our NLSY sample, on average, worked in occupations in which the percent female was 63%; men worked in occupations in which the percent female was 27%. These occupational differences are sometimes viewed as evidence of discrimination. However, the occupations that women choose are strongly predicted by characteristics that are compatible with women's dual careers. The addition of the variable measuring the percent female in an occupation has only a limited additional effect on wages because it is highly correlated with the other occupational and personal characteristics that have already been accounted for in the analysis.

The last two columns of Table 6 highlight the relative importance of family responsibilities by comparing the gender gap for two groups at polar extremes: currently married men and women and men and women who were never married and never had a child. Married men have somewhat higher AFQT scores and education than married women and have significantly more years of work experience and are much less likely to work part-time. They are more likely to be responsible for financial support of the family and as shown in the time use data, men with children spend a much larger proportion of their time at work and have a much lower burden of home responsibilities than women with children. One might expect that married men make job and career choices that assign a higher value to monetary awards than would married women who must balance time with children with financial considerations. Although we control for many variables we have no data on time spent on household tasks and child care in the NLSY data base and no way to incorporate more subtle differences in preferences. The unadjusted wage ratio for married persons is 73.6% and it rises to 87.9 % after adjusting for all of our measured variables (Model 6).

At the opposite pole we compare the earnings of never-married men and never-married women who never had a child. Never-married men do not bear the responsibility for the financial support of a family as would most married men. And never-married women do not have the responsibility for children that mothers bear though they are more likely to be responsible for their own financial support. Never-married women without children have better credentials than never-married men without children with respect to education but only slightly lower AFQT scores and years of work experience. They are more likely to work part-time, however. Not surprisingly, the unadjusted gender gap for this group is actually positive; the women earn about 8% more than their male counterparts. When we control for differences in characteristics, the gender gap in favor of women is eliminated, but the negative coefficient is small and is not statistically significant. This observation lends support to the view that the factors underlying the gender gap in pay primarily reflect choices made by men and women, given their different roles in the family, rather than labor market discrimination against women due to their sex.

A number of recent studies have analyzed gender differences in earnings focusing on those with higher degrees. These studies rely on unusually detailed survey instruments and take account of gender differences in life cycle work experience. Bertrand, Goldin and Katz (2009) focus on male and female MBA's who graduated from a top U.S. business school. Using regression analysis the authors find that including all graduates, the annual earnings ratio unadjusted for any explanatory variables except for cohort and year was 75%. Adjusting for hours worked per week raises the ratio to 84%. The ratio jumps to 91% after adding the effect of MBA grade point average and concentration in finance courses (women have lower grades and are less likely to have taken finance courses). Once account is taken of work experience and career breaks the wage ratio reaches 96% and is no longer statistically or substantively significant.

The results of statistical analysis of the gender gap are clearly dependent on access to information on lifetime work patterns, measures of cognitive skills other than years of school completed, and details of job characteristics that are not available in most data sets. Consequently, it can be highly misleading to use earnings differentials alone to determine the extent of labor market discrimination.

As I read the statistical evidence, the current gender wage gap is essentially explained by factors other than labor market discrimination. Although women and men have become more alike in their market orientation, they still differ significantly in terms of market-based skills and in their job and career choices. The blunderbuss approach of the PFA does not appear to have been informed by the research on the sources of the gender pay gap. The bill seeks to force employers to raise women's pay by sharply reducing the ability of an employer to defend what he or she believes is a justified differential based on merit. Under the existing Equal Pay Act, an employer confronted with evidence of a gender difference in pay can provide in his or her defense evidence that the difference in pay results from "any factor other than sex". Section 3 of the PFA significantly changes that defense by striking the phrase "any factor other than sex" and replacing it with bona fide factors such as education, training or experience. But then

comes a prolix set of conditions before those bona fide factors can apply. I quote:” The bona fide factor defense described in subparagraph (A)(iv) shall apply only if the employer demonstrates that such factor (i) is not based upon or derived from a sex-based differential in compensation; (ii) is job-related with respect to the position in question; and (iii) is consistent with business necessity. Such defense shall not apply where the employee demonstrates that an alternative employment practice exists that would serve the same business purpose without producing such differential and that the employer has refused to adopt such alternative practice.” Lawyers and judges no doubt will ponder the meaning of this cryptic set of conditions which appear to allow the employee and her helpers, carte blanche to redesign the production methods of the firm without regard to costs.

Section 3 also gives wiggle room to define an establishment as broader than the standard “workplace in the same county or similar political subdivision of a State” by suggesting that establishment can be redefined by the EEOC. That would be convenient assistance should a class action suit be on the agenda. The PFA spurs more class action suits by changing the conditions of inclusion in a class action from the current stipulation that workers can only be included if they opt in to join a suit to the provision that workers are automatically members of the action unless they opt out.

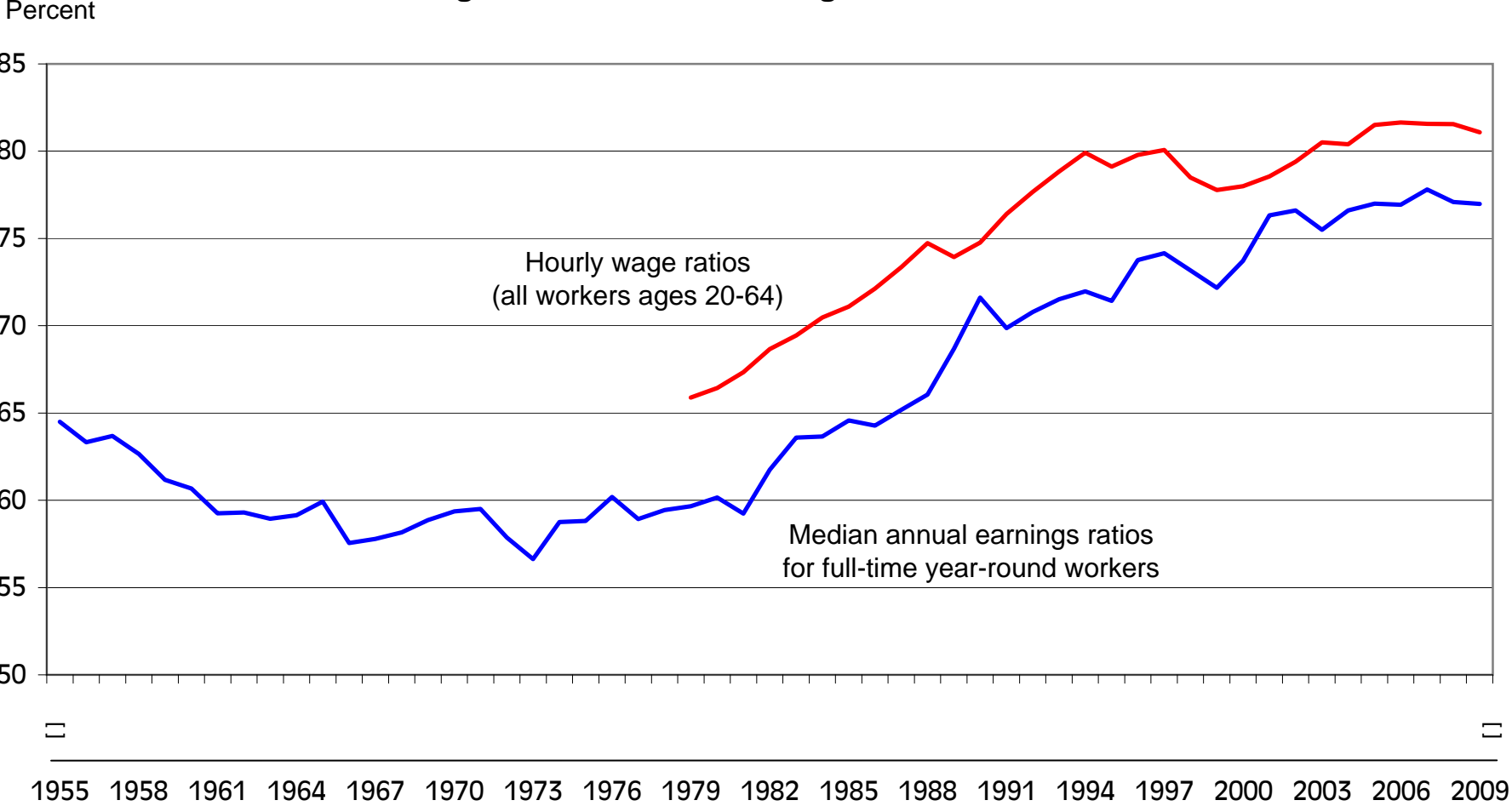
Penalties to employers are heavily boosted. The PFA makes employers who violate sex discrimination prohibitions liable in a civil suit for punitive damages. Retaliation for employee complaints is prohibited and presumably would enhance the size of prospective penalties. Moreover it authorizes the Secretary of labor to seek additional compensatory or punitive damages in a sex discrimination action.

By requiring the EEOC to collect from employers pay information along with other demographic data the PFA adds considerable burden on employers, not to speak about violation of privacy.

One curious provision is the authorization of grants to “eligible entities” for negotiation skills training programs for girls and women. Males presumably are excluded. But if the underlying assumption is that women are the equal of men, why do women need such training and not men. If women cannot negotiate how can they be managers who must negotiate pay or fill an array of jobs equally with men?

In sum, the Paycheck Fairness Act is neither fair nor sensible. It will also impose unjustifiable costs on employers. It is also unnecessary. Individual employers undoubtedly exist who discriminate against women. But their numbers are not large and offenses are being handled by the current anti-discrimination apparatus of the federal government.

Figure 1: Female-Male Wage Ratios: 1955-2009



Source: ORG series are annual average of CPS monthly Outgoing Rotation Groups (ORG). The historical series are from U.S. Bureau of the Census, Current Population Survey (CPS), Historical Income Tables. The data for 1955-1959 refer to median annual income of full-time, year-round workers instead of median annual earnings.

Table 2

**Employment Status of Men and Women with Children
by Age of Children, 2007**

	<u>Percent of population employed</u>	
	With children under 6	With children ages 6-17
Men	93%	91%
Women	60%	74%

	<u>Percent worked part-time of those employed</u>	
	With children under 6	With children ages 6-17
Men	3.3%	3.3%
Women	28%	22%

Source: U.S. Bureau of Labor Statistics.

Table 3
What Working Situation Would Be Ideal for You?
(Results of 2007 Pew Research Center Survey)

Considering everything, what would be the ideal situation for you—working full-time, working part-time, or not working at all outside the home?

	Ideal Situation Would Be			N
	Not working	Part-time work	Full-time work	
	%	%	%	
Have children under 18				
Fathers	16	12	72	343
Mothers	29	50	20	414
Mothers with children under 18				
Employed full-time	21	49	29	187
Employed part-time	15	80	5	75
Not employed	48	33	16	153

Source: From "Fewer Mothers Prefer Full-time Work" in A Social and Demographic Trend Report of Pew Research Center, p.3, July 12, 2007.

Table 4

How much time do working mothers and fathers spend on childcare, house work and market work? The table shows average hours spent per day on these activities by age of youngest child for employed women and men ages 20-44

(American Time Use Survey, annual averages 2003-2004)

Age of youngest child:	Currently employed and worked on diary day				
	<1	1-5	6-12	13-17	No Child
WOMEN					
<i>Household work</i>	2.4	1.6	1.9	1.8	1.4
<i>Primary child care</i>	3.1	2.3	1.5	0.5	0.1
<i>Market work</i>	7.2	7.6	7.7	8.4	8.2
<i>Total hours with children in respondent's care **</i>	8.7	6.9	6.2	NC	NA
MEN					
<i>Household work</i>	1.0	0.9	1.0	0.9	1.0
<i>Primary child care</i>	1.1	1.1	0.8	0.3	0.0
<i>Market work</i>	9.9	9.5	9.5	9.8	8.9
<i>Total hours with children in respondent's care **</i>	3.7	4.1	3.7	NC	NA

Note: Means are weighted. NC: Data not collected for children over 12 years of age. NA: Not applicable. Primary childcare is time spent exclusively with children.

** Total waking hours in a day spent with children in a primary or a secondary capacity.

Source: Pooled 2003 and 2004 data from the American Time Use Survey (ATUS).

Table 5
Selected Characteristics of NLSY MEN and WOMEN
at Ages 35-43 in 2000

	<i>Female</i>	<i>Male</i>
% Hispanic	18.2	19.3
% Black	31.6	28.2
Education (%)		
< high school	13.4	17.6
HS grad (diploma)	30.0	32.6
HS grad (GED)	4.5	5.6
Some college	30.8	23.2
BA or equiv. degree	15.3	15.5
MA or equiv. degree	5.3	4.1
Ph.D or prof. Degree	0.7	1.5
AFQT score (wgted.)	47.9	51.0
% ever out of labor force due to family responsibilities	54.9	13.0
Avg. years worked in civilian job since age 18 ¹⁾	15.56	17.17
Avg. years worked in military since 1978 ¹⁾	0.06	0.57
Proportion of total weeks worked PT since age 22 (%)	0.14	0.05
% in Gov't job	21.5	14.4
% in non-profit job	10.0	4.9
OCC. Characteristics of Person's 3-digit OCC.		
Specific Vocation Preparation (SVP) required in occup. (months)	27.0	28.8
% in OCC. involving:		
Hazards (0,1)	1.3	8.4
Fumes (0,1)	0.4	4.3
Noise (0,1)	8.0	30.7
Strength (0,1)	9.2	21.5
Weather extreme (0,1)	3.3	18.8
% using computers	55.7	41.5
% using computer for analysis	14.3	13.9
% using computer for word proc.	34.5	23.6
Risk of unemployment	0.8	1.1
Rate of transition to out of labor force	1.0	0.8
% female in OCC.	63.5	27.0
Sample size	2704	2694

¹⁾ Year equivalents are total weeks of work divided by 52.

Note: Characteristics above are for wage and salary workers included in the regression analysis. Model also controls for age, central city, MSA, region and occupation missing.

Source: National Longitudinal Survey of Youth (NLSY79) merged with measures of occupational characteristics (3-digit level) from the September 2001 CPS, the March CPS, the CPS ORG, and the Dictionary of Occupational Titles (1991).

Table 6

**Gender Wage Gap: Female-Male Hourly Wage Ratios Among the NLSY Cohort
at Ages 35-43 Controlling for Different Sets of Explanatory Variables**

	<i>All</i>	<i>By Children/Marital Status</i>	
		<i>Currently married (with or w/o children)</i>	<i>Never had a child and never married</i>
Unadjusted hourly wage ratio (in %)	79.0	73.6	107.9 ^{ns}
Hourly wage ratio controlling for:			
1). Age, SMSA, region and race, schooling, AFQT	79.4	74.1	98.1 ^{ns}
2). Variables in 1) plus life time work experience	88.6	82.7	93.7 ^{ns}
3). Variables in 2) plus L.F. withdrawal due to family responsibilities	90.3	84.7	94.7 ^{ns}
4). Variables in 3) plus type of employer (non-profit, gov't)	90.9	85.6	95.9 ^{ns}
5). Variables in 4) plus occupational characteristics	92.0	87.7	98.7 ^{ns}
6). Variables in 5) plus percent female in occupation	92.4	87.9	97.3 ^{ns}

Note: The ratios shown were derived from pooled multiple regressions of the individual's log wage rate on different sets of explanatory variables as shown in lines 1-6. Each regression contains a "dummy indicator" variable (1 for females 0 for males). The anti-log of the partial regression coefficient of these dummy variables yields the wage ratios. Separate regressions were conducted for each population group shown.

All ratios are significant at the 1% level except for those with "ns" (not significant at the 10% level).

Source: National Longitudinal Survey of Youth (NLSY79) merged with measures of occupational characteristics (3-digit level) from the September 2001 CPS, the CPS March, and the Dictionary of Occupational Titles (1991).

Table 7
Women's Share of Bachelor's, Master's, and Doctor's Degrees in Selected Field of Study: 1978, 2005

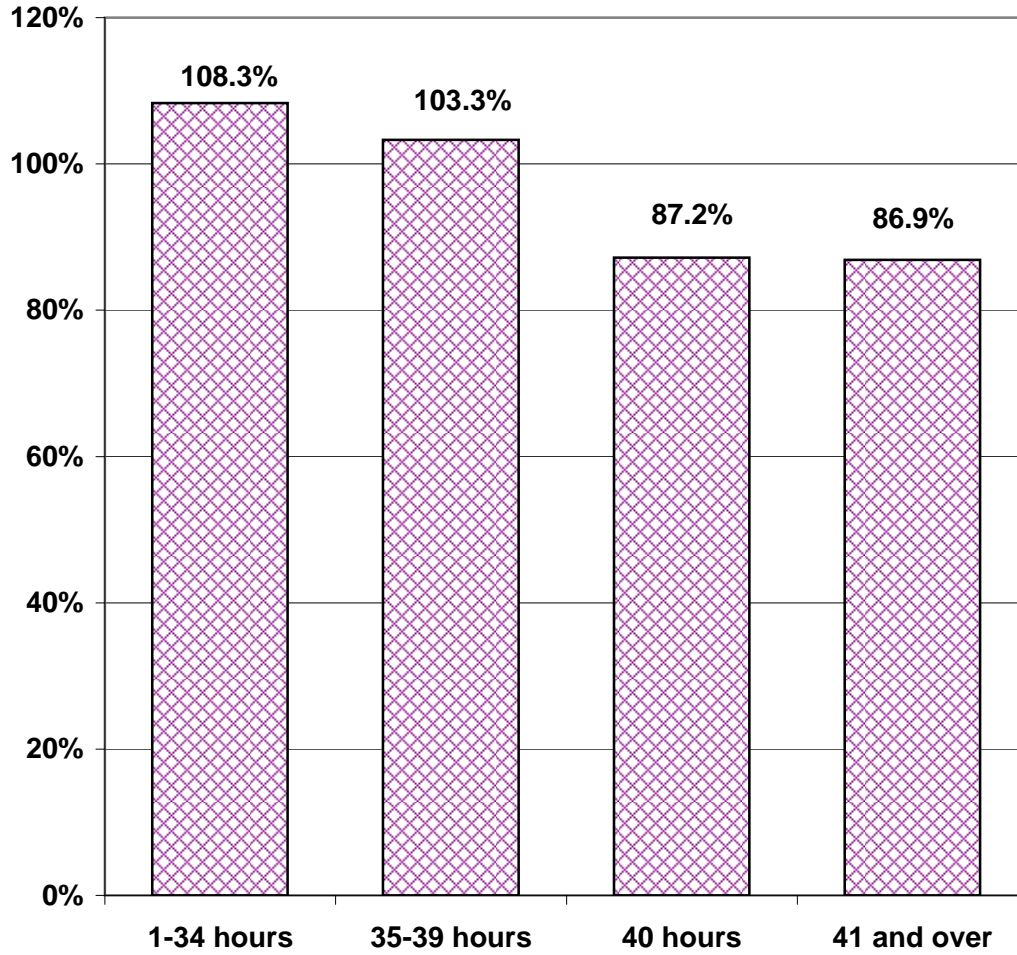
	Bachelor's degrees		Master's degrees		Doctor's degrees	
	% female		% female		% female	
	1978	2005	1978	2005	1978	2005
All Fields	47.1	57.4	48.3	59.3	26.4	48.8
Business fields	27.1	50.0	16.9	42.4	8.3	39.9
Finance, Banking and fin. supp. serv.	18.7	35.4	16.8	31.3	3.1	11.6
Education	72.5	78.7	67.7	76.8	39.1	66.7
Library science	88.5	80.3	80.0	80.0	35.8	66.7
Computer/information sciences	25.7	22.2	18.7	28.7	7.7	19.1
Engineering	6.7	18.3	5.3	22.7	2.3	18.7
English language and literature	57.1	68.5	61.7	69.1	39.1	59.2
Social sciences and history	40.5	50.5	33.1	51.3	24.3	42.8
Economics	24.9	31.9	19.8	36.6	11.3	30.4
Sociology	63.4	70.5	45.5	68.2	37.2	61.7
Psychology	58.8	77.8	52.0	79.3	37.3	71.3
Physical sciences	21.3	42.2	16.9	39.1	10.0	27.9
Biological and biomedical sciences	38.4	61.9	35.4	59.5	24.1	49.0

Note: Aggregations by field of study derived from the Classification of Instructional Programs developed by the National Center for Education Statistics.

Source: For 1977-78 and 2004-05: Digest of Education Statistics 1980 and 2006 editions, U.S. Department of Education, National Center for Education Statistics.

Table 8

Women's Usual Weekly Earnings As a Percent of Men's in 2007 by Hours Worked per Week, 2007



Source: U.S. Bureau of Labor Statistics.