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Facts on Working Women

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EARNINGS DIFFERENCES BETWEEN WOMEN AND MEN

What is the earnings gap?

When we talk of comparing women's earnings with men's earnings, we find that no matter how we measure them, women's earnings are below those received by men. Very often men's earnings are used as the "yardstick" to measure women's, and we say women's earnings are a percentage of men's. The earnings gap is the difference between this percentage ratio and 100 percent.

How large are the earnings differences?

In 1992 for those receiving hourly rates, women's median hourly earnings were 79.4 percent of men's; for full-time wage and salary workers, women's median weekly earnings were 75.4 percent of men's; and median annual earnings for women were 70.6 percent of men's annual earnings in 1992, the most recent year for which data are available. Of course, the earnings gap for hourly earnings is 20.6 percent; for weekly earnings, 24.6 percent; and for annual earnings, 29.4 percent. All three measures are developed from Current

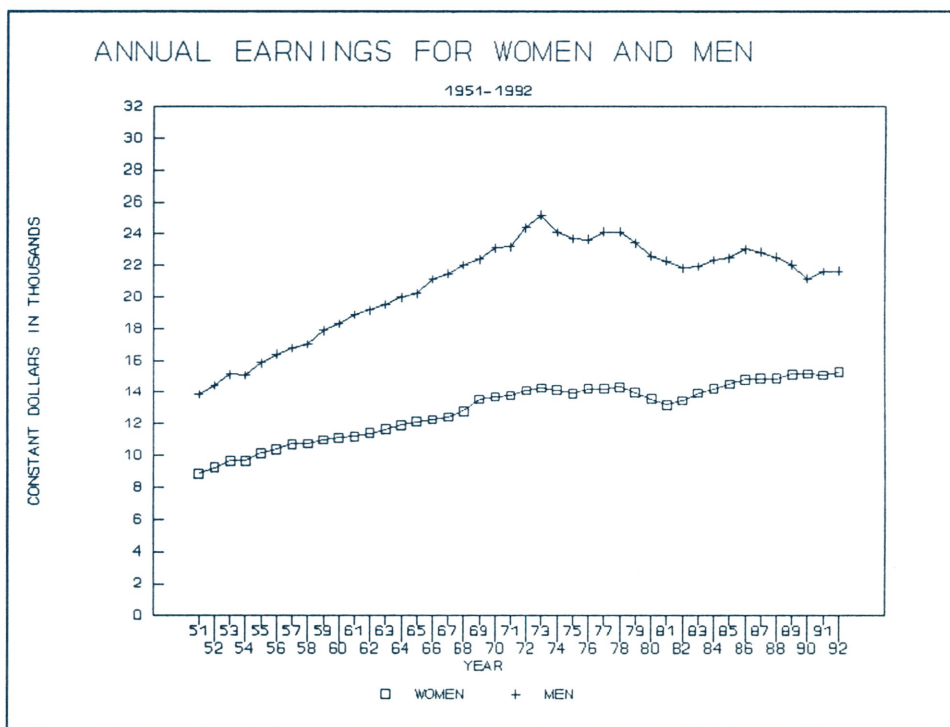


Figure 1

Population Survey (household survey) data and released by the Bureau of Labor Statistics (BLS) and the Bureau of the Census.

Why the difference among measures? We find the three measures which compare women's earnings with men's earnings differ for several reasons. Median weekly earnings and median annual earnings relate to full-time wage and salary workers while hourly earnings are reported for wage and salary

workers who are paid an hourly wage, without regard to whether or not they are full-time or year-round wage and salary workers. About 60 percent of all wage and salary workers are hourly workers; almost 55 percent of all employed American workers are paid hourly wages; and 50 percent of all employees paid hourly wages are women.

When considering the earnings of full-time year-round women and men, it should be noted that women are employed fewer hours in the week and fewer weeks in the year than their male counterparts. Less time on the job contributes to the earnings difference when women's weekly and annual earnings are compared with men's.

Are we closing the earnings gap?

Figure 1 provides perspective on annual earnings adjusted for inflation for women and men working full-time year-round from 1951 through 1992. A gradual closing of the wage gap between women and men since 1973 is apparent in Figure 1. Full-time year-round workers have different characteristics from other workers.

Estimates of median annual earnings in constant dollars, with 1982-1984 used as the base years, were constructed using the BLS CPI-U to adjust for inflation. Figure 1 outlines the relatively steady climb in women's real earnings while men's earnings peaked in 1973 and have drifted downward since. Recessionary dips appear in both women's and men's earnings in the early 1980's, while the recessionary period in 1990-1991 shows an increase in men's earnings compared with women's earnings. This unexpected change occurred because more low-wage earning men lost their jobs in the recession, leaving a larger proportion of men with higher earnings in the work force. With fewer low-wage earners, the estimate of earnings for men rose as employment of men declined. Women did not experience similar employment losses, and

their annual earnings held steady during the recessionary period.

When we look at the 41-year period as a whole, women's earnings have increased by 1.3 percent each year while men's earnings have grown by only 1.1 percent.

Though annual earnings for women and men have been available from the CPS since 1951, hourly and weekly wages by gender have been calculated only since 1979. Table 1 presents the percentage ratios of women's earnings to men's earnings for median hourly and weekly earnings along with median annual earnings for comparison. The hourly and weekly ratios were prepared by BLS, and the annual ratios, by Census.

Table 1. Women's earnings as a percent of men's, 1979-1992

Year	Hourly	Weekly	Annual
1979	64.1	62.5	59.7
1980	64.8	64.4	60.2
1981	65.1	64.6	59.2
1982	67.3	65.4	61.7
1983	69.4	66.7	63.6
1984	69.8	67.8	63.7
1985	70.0	68.2	64.6
1986	70.2	69.2	64.3
1987	72.1	70.0	65.2
1988	73.8	70.2	66.0
1989	75.4	70.1	68.7
1990	76.8	71.8	71.6
1991	77.5	74.0	69.9
1992	79.4	75.4	70.6

Figures 2 through 4 present data in constant dollars, adjusted for inflation for full-time wage and salary workers, by age and race/gender groups from 1979-1992. The graphs show a steady downward trend with a closing together of real earnings for all race/gender groups 16-24 years old. In this

age group, white women's earnings exceeded black men's earnings in 1982 and continued at higher levels through 1992. For those 25-54 years old, white and black men's earnings have gradually moved down while white women's earnings have gradually risen, exceeding black men's earnings in 1991. Black women's earnings have remained relatively stable. Historically, black men had earnings higher than white women, but for workers under 55 their positions were reversed in the decade of the 80's. For those 55 or older, there has been little change in the relative positions of the various race/gender groups in the 13-year period. It appears that older workers, in general, have not experienced the downward pressure on earnings that younger workers have.

In the face of gains made by women in many areas, why is change in the earnings ratio so slow? Researchers have suggested that the wages of all *working* women did not increase relative to those of *working* men between 1920 and 1980 because the skill (as measured by education and experience) of working women did not increase relative to working men over this period (Smith and Ward 1983).¹ The authors

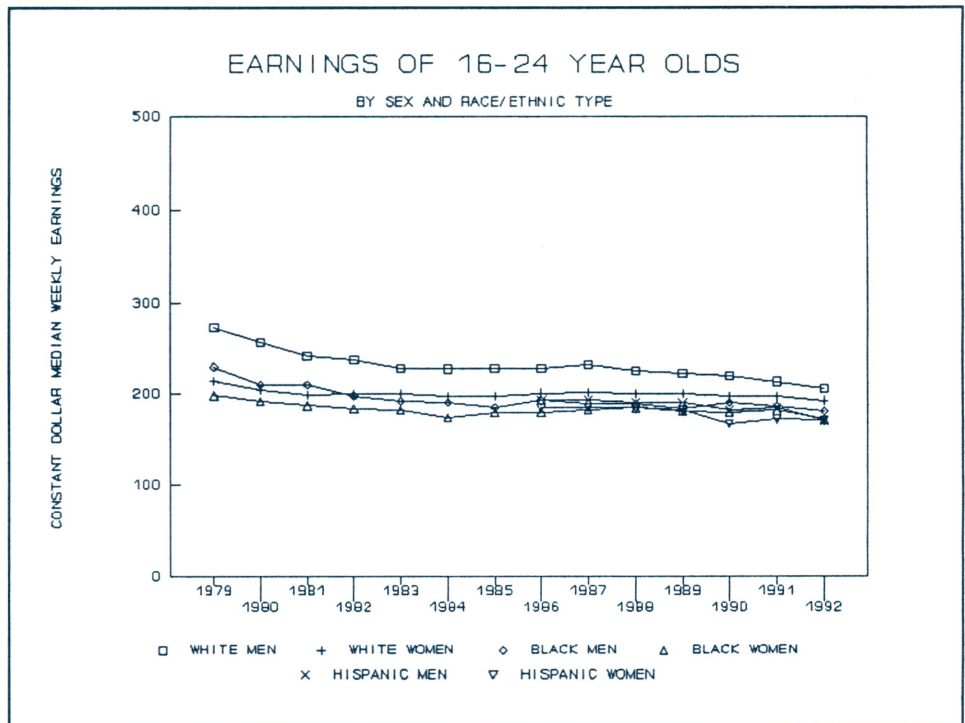


Figure 2

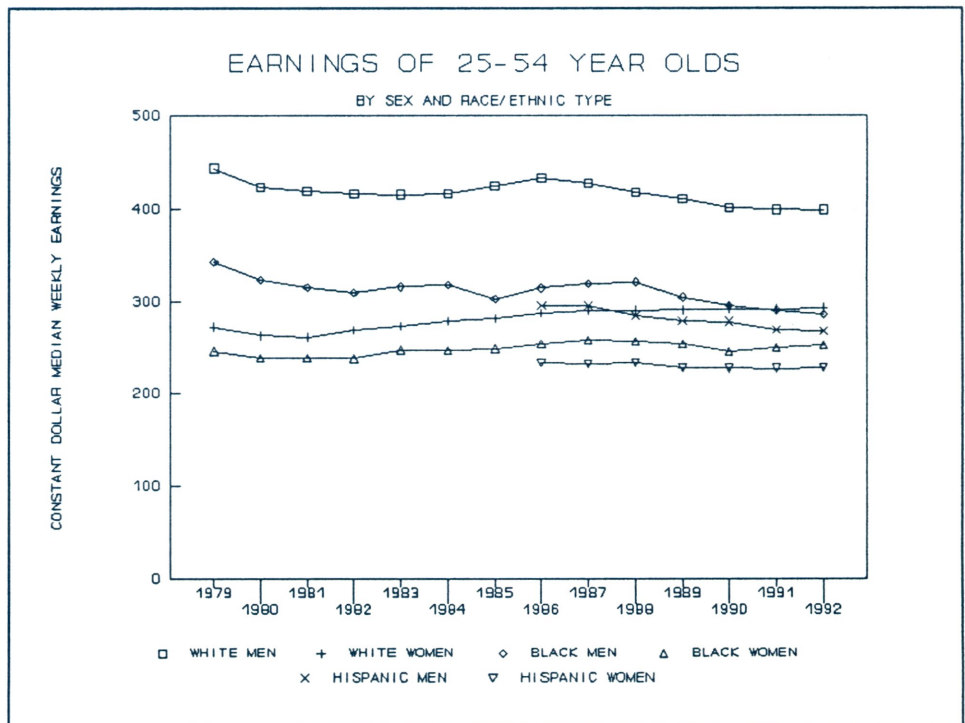


Figure 3

prepared estimates for the time period 1920 through 1980 of the amount all women would earn, based on their education and work experience, without regard to whether or not they were actually in the labor force. These estimates were then used to compare the estimated wages of the *whole population* of women with the *whole population* of men. The researchers pointed out that the average wages of the entire population of women, have increased much more rapidly than the entire population of men over the 60 years. The researchers estimated that "women's wages grew 20 percent faster than men's wages" as women's work experience increased. Smith and Ward concluded that the rise in women's real wages between 1950 and 1980 accounted for almost 60 percent in the growth of women's labor force during the period. Incentives to work are higher when wages are high; higher wages also tend to discourage larger families so that women have more time for paid work.

Much of the discussion on earnings in the 1980's focused on the widening differences in earnings; this disparity occurred among both women and men. But because women's hourly earnings grew faster than men's and because their annual average hours of work increased, while men's hours of work did not, a larger segment of all working women had annual earnings of \$20,000 or more at the end of the decade than at the beginning even when measured in constant dollars (Levi and Murnane, 1992).²

When viewing the earnings of women

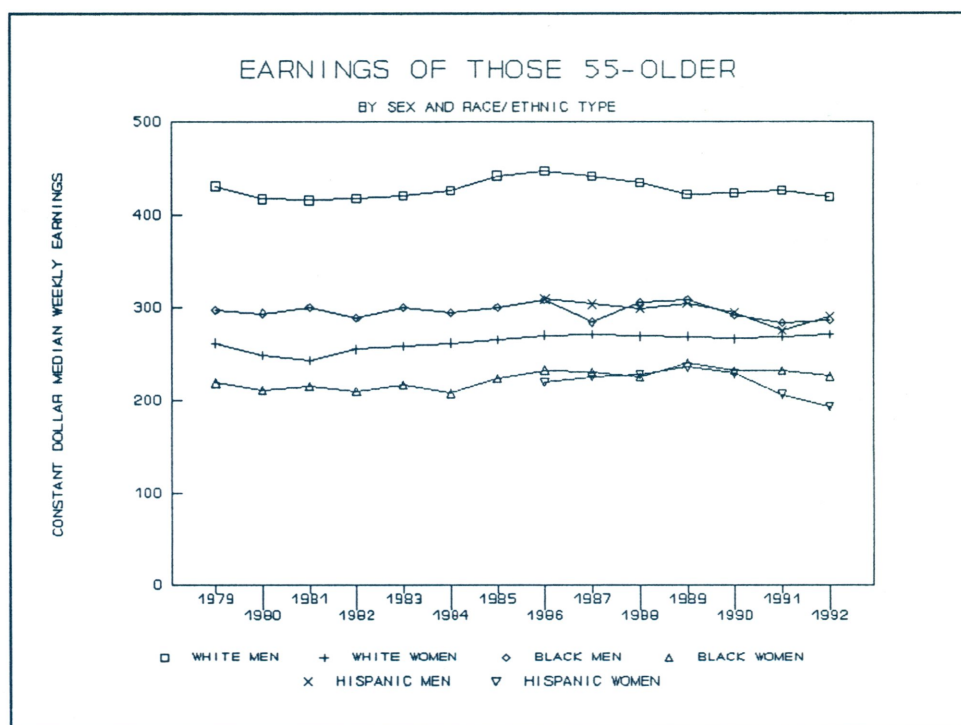


Figure 4

compared with the earnings of men between 1980 and 1991, structural changes occurred which caused women's earnings to rise steeply. Sorensen conducted research into the differences in earnings ratios during the 1980's between women and men and between black and white workers.³ She identified two divergent trends. "Women made tremendous gains in their wages relative to those of men" while "The pay disparity between blacks and whites increased for both women and men." Her research suggested that the human capital characteristics of women (education and work experience) compared to men of the same race increased over the decade. Increases in work experience was more important in raising women's earnings than changes in education, however. The occupational distribution of women and men also tended to converge. The wider gap in earnings between black and white men was related to changes in industrial attachment and a change in the wage structure during the 1980's which increased the returns to education for white men.

Another researcher (Bamezai 1989) in discussing structural change in the 1980's suggested that the widening disparity resulted from both demand and supply changes in the economy. ⁴ He indicated that technological change required increasing skills in the U.S. job market with education and vocational training becoming more important. "The recent experience of technological change has been qualitatively different from the historical experience because of the central role played by microprocessor-based information technologies within and across industries." He suggests that "The most important change in the structure of wages has been the dramatic rise in the price of skill (that is, schooling and work experience) between 1973 and 1988...growth in the demand for highly skilled labor has outstripped growth in its supply resulting in an increase in the wage rate of skilled workers; meanwhile, the demand for relatively unskilled labor has fallen relative to its supply, resulting in a decrease in the wage rate of relatively unskilled workers."

When looking for explanations of falling wages for lower skilled workers, changes in the characteristics in the work force brought about by immigration in the last 20 years become significant. Levi and Murnane (see footnote 2) referred to the 1990 study by Borjas, Freeman and Katz when they pointed out that "Patterns of immigration also contribute to a supply related explanation for the increase in the earnings (associated with education)...because immigrants have less formal education, on average, than do native born Americans. For example, as of 1980, 46.5 percent...of immigrants in the U.S had less than a high school education, compared to 30 percent of native born Americans."

The 1989 Statistical Yearbook of the U.S. Immigration and Naturalization Service data used by Meisenheimer in 1992 reports increases of more than 10 million immigrants who were granted permanent legal residence

in the U.S. during the decades of the 1970's and 1980's. ⁵ Meisenheimer also indicates that nearly one-fourth of immigrants age 25-64 had completed fewer than nine years of school compared with only 3 percent of native born women and 4 percent of native born men. As further evidence of the impact of immigration, the Census Bureau reported that "Nearly one-fourth of the United States' nearly 20 million foreign-born residents entered the country between 1985 and 1990 according to tabulations from the 1990 Census". ⁶

Meisenheimer (see footnote 5) points out that "Among employed men, immigrants who moved to this country during the 1982-1989 period were much more likely than natives to work in occupations that are generally low paying...19 percent of immigrants versus 9 percent of U.S. natives worked in service occupations which included such jobs as food preparation, child care, and janitorial services." Thus, at the lower end of the skill spectrum, significant numbers of poorly educated recent immigrants may be competing with native born black workers and other minorities for jobs.

Which occupations have shown strong growth in women's earnings relative to men's?

The earnings ratio data are not uniform among all occupations. In some occupations women receive approximately equal, or even greater, compensation than their male coworkers in the same occupation. Occupations with higher earning for women than men are both nontraditional (mechanics/repairers) and traditional (nurses) occupations for women. Table 2 presents women's median weekly earnings as a proportion of men's for selected occupational groups. The groups included in this table are those in which national totals for women's earnings were at least 90 percent of men's earnings in 1992. Ratios are also presented for 1983 to show the recent trend in relative earnings for women and men. Table 2 also

Table 2. Ratio of median weekly earnings for full-time working women to men and ratio of women's employment to total employment, selected occupations, 1992 and 1983

Occupational class	Women's earnings as a percent of men's		Women as a percent of total employment	
	1992	1983	1992	1983
Total	75.4	66.7	43.1	40.4
Registered nurses	104.7	99.5	93.5	94.4
Pharmacists	90.1	N.A.	42.7	27.8
Therapists	95.8	N.A.	76.0	75.1
Teachers, secondary school	90.3	88.6	53.9	49.1
Cashiers	94.8	84.3	75.7	80.9
Scheduling supervisors/clerks	92.9	N.A.	30.7	20.1
Secretaries, stenographers, typists	91.6	76.7	98.5	98.5
Records processing, except financial	90.4	76.2	79.7	82.0
Postal clerks, except mail carriers	94.6	93.4	42.9	32.2
Mail carriers, postal service	97.0	N.A.	25.2	14.3
Mail clerks, except postal service	93.2	89.0	48.5	48.9
Data-entry keyers	95.0	N.A.	86.6	93.5
Guards/police, except public service	94.2	91.2	14.8	11.1
Waiters/waitresses assistants	97.2	N.A.	38.3	36.9
Miscellaneous food occupations	105.6	102.5	39.9	48.8
Nurses aids, orderlies, attendants	96.0	81.0	87.9	86.8
Mechanics/repairers	105.4	89.4	3.3	3.4
Textile sewing machine operators	91.9	N.A.	87.2	94.0
Packaging/filling machine operators	90.0	78.5	61.5	64.2
Stock handlers, baggers	97.4	91.9	24.5	19.0
Hand packers/packagegers	94.6	91.6	63.3	66.4

N.A. = Not available. Earnings data are not developed for occupations with fewer than 50,000 employees.

presents the proportion of women's employment to total employment for each occupation. In this context, individual occupations which seem to fare well when women's earnings are compared with men's are not located in only "women's" work (those occupations which have high proportions of women's employment to total employment) or "men's" jobs (those with high proportions of

employed men). Instead, these occupations appear to occur throughout the whole spectrum of jobs.

Historically, women have "crowded" into a few occupations. In 1992 the six most prevalent occupations for women were, in order of magnitude, secretaries, school teachers (excluding those teaching in colleges

EARNINGS AND EDUCATION

BY SEX/RACE/ETHNIC TYPE, 1992

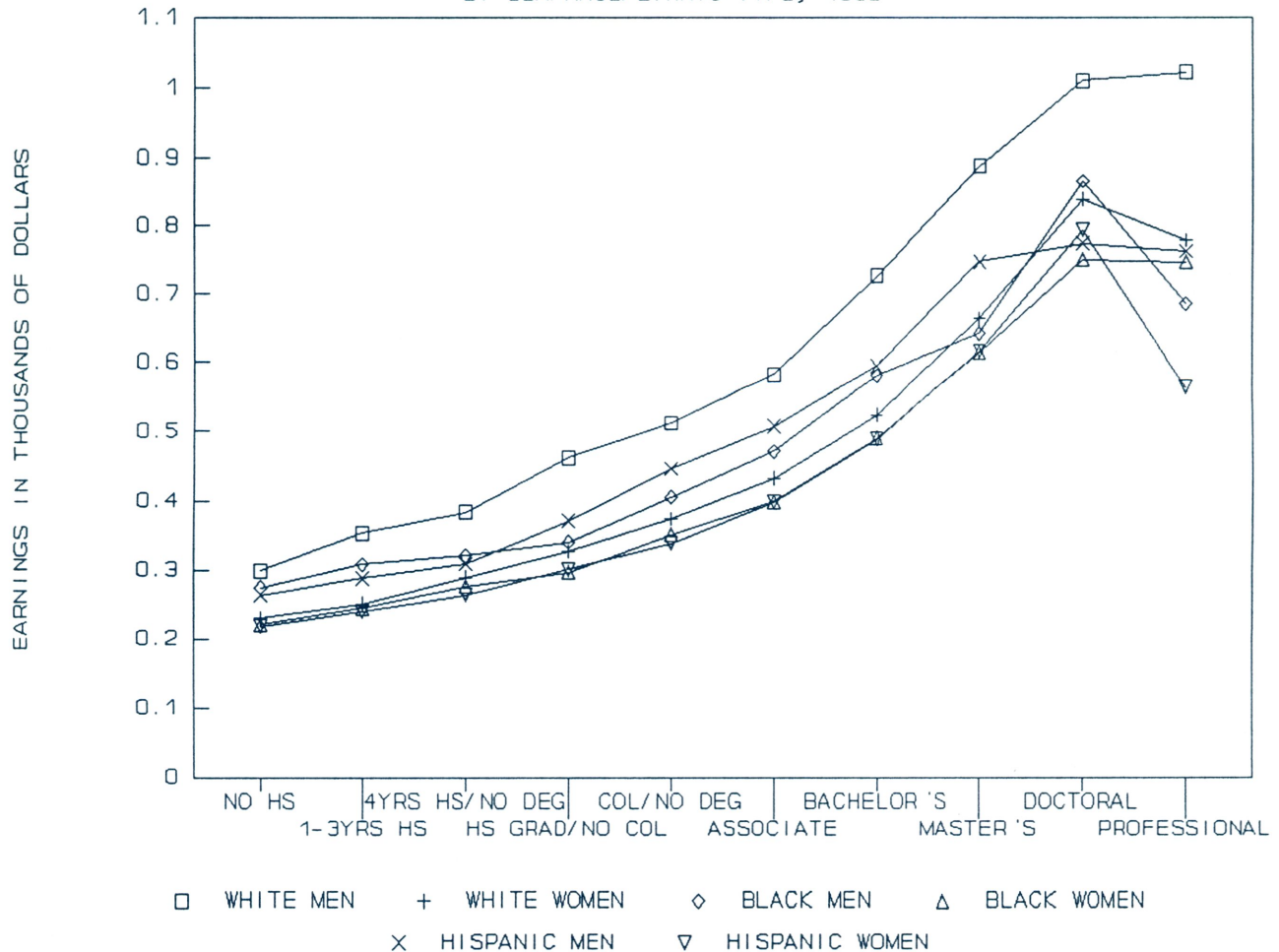


Figure 5

and universities and those teaching in preschool and kindergarten), cashiers, managers and administrators, registered nurses, and bookkeepers and accounting clerks. In 1992 more than one-third of all full-time women workers were employed in these occupations. It has been argued that women choose these occupations because there tends to be less skill obsolescence for workers who leave and reenter the labor force. It has also been argued that the educational commitment for employment in these fields is

less than in some others, and workers can have more time at home for other responsibilities.

There may be other factors which are difficult to measure that also affect women's career decisions. To what extent have women been denied the opportunity to find employment in other occupations? Have they been fearful of entering occupations where few women are employed because of lack of knowledge about the field, or fear that sexual harassment may

be a factor? These are aspects which are difficult to quantify. However, Gupta reported that "(research) results indicate that sex differences in occupations are due both to differences in preferences and to differences in employer selection." ⁷

It should be remembered that occupational segregation has been diminishing; there are far fewer "women's" jobs and fewer "men's" jobs than in earlier periods.

What other factors besides occupation affect the earnings gap? It has been suggested also, that seniority within the firm and in the job has much to do with earnings of American workers. If this is the case, then the work experience of the two groups will have an impact on the earnings ratio of women to men. In 1990 Topel stated that his "estimates imply a very strong connection between job seniority and wages in the typical employment relationship: other things held constant, 10 years of job seniority raises the wage of the typical worker by over 25 percent." ⁸

Data from the Survey of Income and Program Participation (SIPP) showed that for all men, only 1.6 percent of all potential work-years were spent away from work while for women workers, 14.7 percent of all potential work-years were spent away from paid work. ⁹ Thus, women spend significantly more time away from work and are apparently unable to build the seniority that men achieve.

However, there has been a significant change in women's labor force participation since World War II, particularly for women between the ages of 25 and 54. Most women work today, including mothers of small children. As recently as 1975 BLS found sharp differences in participation rates among women classified by marital status and the presence and age of children. This greater participation is reflected in an increase in

women's earnings as a proportion of men's earnings, particularly for younger women. ¹⁰ The SIPP provides data for women and men with no work interruptions (defined as 6 months or more without a job or business) by age and educational attainment. For young women, those 21 through 29 in 1984, the earnings ratio of women to men was 80 percent or more, no matter how many years of school had been completed. However, for young women who have completed 4 years or more of college, hourly earnings are 86 percent of the hourly earnings of their male coworkers. The relationship between education and earnings, particularly for young women, deserves further attention.

A new BLS series which provides 1992 data on the average weekly earnings of full-time wage and salary workers by the level of education received for different gender and race groups is presented in Figure 5. It is apparent from the graph that as education increases, earnings also rise dramatically, at least through the doctoral degree.

Turnover data for women and men have shown higher rates for women than for men. The recent change in women's labor force participation tends to narrow the differences in turnover rates between women and men with a concurrent increase in women's earnings. It was pointed out earlier that length of time on the job, and the resulting seniority, increases earnings; fewer turnovers tend to lengthen the duration on the job. Additionally, the growing tendency of employers to provide child care benefits, flexitime, and family leave policies can further strengthen women's opportunity to meet family responsibilities with fewer work interruptions.

What about sex discrimination? Sex discrimination still exists in the American workplace, but the magnitude of its effect on the earnings gap is hard to measure. Statistical studies have successfully attempted to measure

the effects on the male-female earnings differential of several factors. Employee characteristics, such as occupation, education, and experience, have been examined using statistical techniques to assess the impact each has on women's and men's earnings. Most often the effects of discrimination in these studies are included in an "all other" category and are not measured separately. However, individuals and Federal agencies responsible for enforcement of civil rights legislation continue to win cases in which women have been discriminated against in the workplace, thus demonstrating that sex discrimination persists. As an example, in 1992 sex discrimination was proved in one of the largest of these cases ever settled.¹¹

What can we conclude? It appears that women's earnings are slowly climbing when compared with men's earnings, as women's participation in the labor force continues to move closer and closer to the pattern shown by men, and as their educational investment and occupational choices also become more similar to men's. Employers' continuing efforts to provide more training and promotion opportunities for women will help to diminish the difference between women's and men's earnings. Employers also appear to recognize the need to help families balance conflicting needs. The earnings gap should continue to narrow as women work more hours in the week, spend more years at paid work in their lifetimes, continue to increase their educational investment, widen their occupational choices, and equal opportunity becomes a reality.

FOOTNOTES:

¹ James P. Smith and Michael P. Ward, "Women's Wages and Work in the Twentieth Century," RAND Corporation, October 1984.

² Frank Levi and Richard J. Murnane, "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations," *Journal of Economic Literature*, Vol. XXX (September 1992), pp. 1333-1381.

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⁶ U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, "Monthly News From the U.S. Bureau of the Census, Census and You", Vol.28, No.2, February 1993.

⁷ Nabanita Datta Gupta, "Probabilities of Job Choice and Employer Selection and Male-Female Occupational Differences", *American Economic Review*, Vol. 83, No. 2, May 1993.

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⁹ U.S. Bureau of the Census, *Current Population Reports, Series P-70, No. 10, Male-Female Differences in Work Experience, Occupation, and Earnings: 1984*, U.S. Government Printing Office, Washington, D.C., 1987.

¹⁰ Susan E. Shank, "Women and the labor market: the link grows stronger," *Monthly Labor Review*, March 1988, pp. 3-8.

¹¹ *Kraszewski v. State Farm*, DC No Calif. No. C79-1261TEH, April 28, 1992.

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