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ABSTRACT

In the last 20 years, an increase in the number of working women has been accompanied by changes in the female labor force and in the concentration of women in particular occupations and industries. These changes have a profound effect upon women's earnings. The Current Population Survey (CPS) shows a wide disparity in the median earnings of women and men. More education usually translates to higher annual earnings, but at every level of educational achievement women's median earnings lag far behind men's. The 60-percent ratio in the national aggregate data shows a female-male wage gap or differential of almost 40 percent. Research has indicated that worker characteristics account for 44 percent of the female-male earnings gap and that the gap is reduced as more economic and demographic factors are introduced into the analysis. Working women are concentrated in generally low-paying occupations in low-paying industries where they earn less than male co-workers. Women's median earnings in the high-paying wage and salary occupations are also substantially less. Available data suggest that differences in female-male earnings stem more from differences in occupational employment than from differences in earnings for the same job. (Eight tables are appended.) (YLB)

The Female-Male Earnings Gap: A Review of Employment and Earnings Issues

U.S. Department of Labor
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Bureau of Labor Statistics
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The Female-Male Earnings Gap: A Review of Employment and Earnings Issues

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In the last 20 years, a profound change has occurred in the labor force participation of women. The unprecedented entry of large numbers of women into the Nation's work force and the sustained commitment to gainful employment have brought about a revolution in male-female relationships in the workplace. In 1960, only a little more than 23 million women (38 percent of the population) were in the labor force. Today, that number is more than twice that level and the labor force participation rate has risen to 53 percent (table 1).

Along with this increase in the number of working women have come far-reaching social changes, as well as structural changes in the very nature of work itself. Over the past two decades, the work force has become younger, marital patterns have changed, fertility rates have dropped, and women have increasingly sought higher education. In addition, landmark equal pay and antidiscrimination requirements have been enacted into law, tax legislation has provided for some deductions for child-care expenses, and the employment shift from goods-producing to service-producing industries has accelerated.

It is important to recognize that young women (25 to 34 years old) accounted for almost half (47 percent) of the increase in the number of female workers between 1970 and 1980. Today, 53 percent of the female work force is under age 35, compared with 38 percent in 1960.

Increasingly, women are obtaining the education to qualify them for a broader range of jobs, especially those requiring training past the high school level. In 1970, only 28 percent of working women ages 25 to 34—the most active group in the labor market in the last 10 years—had completed at least 1 year of college. By 1980, that figure had grown to 46 percent.

Family status

The change in marital and family patterns has been an even greater departure from the past, when it was generally expected that young women would marry and devote most of their lives to raising a family. Many young people are postponing marriage, families have become smaller, and many young mothers are continuing to work. Thus a much larger proportion of young women are gaining more years of work experience than in the past, and fewer young women are interrupting their worklives.

Since 1960, the participation of wives in the labor force has increased dramatically. By March of this year, 51 percent of all wives were working or looking for work. This compares to 41 percent in 1970 and 31 percent in 1960 (table 2). Contributing strongly to this trend has been the astounding growth in the labor force activity of mothers with young children. Nearly 8-1/2 million children under age 6 now have working mothers. Altogether, some 32 million children under age 18—55 percent of all children these ages—have mothers in the labor force.

As the number of wives in the labor force has increased, the multiearner family has become a prominent feature of American life. Approximately two-thirds of the wives in these dual-earner families work all or most of the year, and most of them work full time. Median income for families in which both husband and wife were the only earners was $27,969 in 1981, nearly 30 percent greater than the income for families where the husband was the only earner.

In addition to these developments in married-couple families, the number of women maintaining families on their own—with no spouse present—has more than doubled over the past two decades (from 4.5 million in 1960 to 9.7 million in 1982). Today, 1 of every 6 of the 61.4 million families in the Nation is maintained by a woman. In fact, of every 8 women in the labor force, 1 is a woman who maintains her own family (table 3).

Despite their increased labor force participation, the economic status of many families maintained by women falls far below that of other families. Their overall median family income in 1981 ($10,802) was only 43 percent of that for all married couples. And working did not bring their family incomes close to parity with other families. Even when female householders were employed, their families were nearly 4 times as likely as other families with employed householders to have annual incomes below the officially estimated poverty

Janet L. Norwood is the Commissioner of Labor Statistics, U.S. Department of Labor. This statement was presented at The Pay Equity Hearings before the Committee on Post Office and Civil Service, Subcommittees on Human Resources, Civil Service, and Compensation and Employee Benefits, United States House of Representatives, September 16, 1982. Special acknowledgment should be made to Elizabeth Waldman and B. K. Atrostic for their contribution to the preparation of this report.

threshold. Consistently, about one-third of all families maintained by women have incomes below the poverty level.

Industry and occupation

During the period of women's rapid labor force growth, the rising number of jobs in the service-producing sector has become increasingly important. By 1980, service-producing industries accounted for 7 out of 10 jobs in the American economy. Most of the job gains have occurred in retail trade, State and local governments, and such other service industries as health, business, legal, social, protective, educational, and recreational services. These are, of course, the very industries which women have entered in large numbers. Of the 11.9-million increase in the number of women on nonagricultural payrolls between 1970 and 1980, three-quarters occurred in these industries.

While women have made some inroads into the semiskilled and skilled blue-collar jobs of the goods-producing industries, their employment in this sector has grown very slowly—by only 10 percent since 1970. And employment of women—as well as men—in many of these industries has been sharply reduced by the current economic recession. Since the prerecession employment peak in July of last year, the overall unemployment rates of both adult men and adult women have risen sharply—to 8.9 and 8.2 percent, respectively.

Most women continue to work in the country's lowest paying industries. A broad list of industries, ranked from high to low by the percentage of female employees, shows a high inverse relationship with a similar ranking of the same industries by level of average hourly earnings; that is, those industries with a high percentage of female employees tend to have low average hourly earnings.

A ranking of 52 industries from the July data in the BLS monthly establishment survey (table 4) shows that the apparel and other textile products industry has the highest percentage of women employees (81.9 percent). It ranks 1st in female employment but 50th in average hourly earnings. The bituminous coal and lignite mining industry, on the other hand, ranks 52nd in percentage of women employees (only 5.1 percent) but is 1st in average hourly earnings.

These data show the concentration of working women in particular industries. And women today, in spite of some changes in occupational distribution, continue to be concentrated in certain occupations. For example, over the last decade, the largest number of job increases in the professional occupations occurred among nurses, accountants, engineers, and computer specialists (table 5). In 1981, women accounted for almost 97 percent of all registered nurses, little changed from 1970; 39 percent of all accountants, up from 25 percent; close to 5 percent of all engineers, up from 2 percent; and 27 percent of all computer specialists, up from 20 percent.

The nonprofessional occupations with the greatest job gains were white-collar secretaries and cashiers; service workers who were cooks; and, in the operative field, truckdrivers. Nearly all secretaries were women in 1981 (99 percent) just as they had been in 1970, and 86 percent of all cashiers were women, little different from 1970. The proportion of women who were cooks, however, declined from 63 percent in 1970 to 52 percent in 1981, while the proportion who were truckdrivers rose to 3 percent, almost double the 1970 figure.

Earnings

Some of the major changes just mentioned in the female labor force and in the concentration of women in particular occupations and industries have a profound effect upon the earnings they receive.

The most comprehensive data on earnings by sex comes from the Current Population Survey (CPS)—the monthly household survey. The CPS provides a rich body of data which can be used to evaluate overall pay equity. The CPS data today—as they have for many years—show a wide disparity in the median earnings of women and men, and a basic ratio of women's to men's earnings that has not changed much. In 1939, median earnings for women who worked year round, full time in the experienced labor force were 58 percent of the median earnings for men. Similar figures for 1981, the latest period for which earnings over an entire year are available, show women's earnings at 59 percent of the median for men (table 6). Over the long term, the ratio has remained relatively unchanged.

The CPS data on weekly earnings show a similar ratio. The most recent figures for the second quarter of this year show median weekly earnings for full-time wage and salary workers were $370 for men and $240 for women, or 65 percent of men's earnings. Comparable figures 10 years ago were $168 for men and $106 for women, a 63-percent ratio (table 7).

These aggregate data can be examined in more detail. For example, for women as well as men, more years of schooling usually translate to higher annual earnings. Median earnings for women college graduates who worked all year at full-time jobs were 45 percent more than for women whose formal education terminated with high school graduation and 80 percent more than for those who had not completed high school. For men, the proportions were similar. However, at every level of educational achievement, women's median earnings continued to lag far behind men's earnings. The $15,325 which women college graduates earned was only about 63 percent of the amount earned by male graduates. On average, therefore, whether college graduates or high school dropouts, women earned about 60 cents for every dollar their male counterparts were paid.

This 60-percent ratio in the national aggregate data shows a female-male wage gap or differential of about 40 percent. A more detailed analysis of the CPS underlying microdata can, however, provide greater insight into the reasons for this disparity. We can compare the contributions to the female-male gap made by a number of economic and demographic characteristics. We can use such other characteristics as occupation, marital status, education, work experience, family size, weekly hours worked—factors which affect productivity and wage determination—to get a better understanding of the earnings of women. This "human-capital" approach estimates the importance of each personal factor in explaining female-male wage differentials. For example, we know that the distribution of men and women differs among occupations, and that male and female workers frequently differ in education and job experience. Using the CPS microdata (appropriately masked so as to retain our pledge of confidentiality regarding survey responses), we can compare the female-male earnings differential based on aggregate data with differentials derived from the microdata for which many (although not usually all) of the important variables can be held constant.

A large body of "human-capital" research is available. Many of these studies focus on characteristics of individual workers such as age, years of schooling, labor force experience, etc. A review of this research by a recent National Academy of Sciences panel shows that in the studies reviewed, worker characteristics account for at most 44 percent of the female-male earnings gap.[1]

These estimates are somewhat sensitive, of course, to the accuracy with which the characteristics are measured. In particular, years of labor force experience are usually approximated by calculating experience as the number of years since the completion of schooling. For persons with interruptions in their work experience—which includes more women than men—experience estimated in this way will be overstated. The measurement of this factor alone has been the subject of a number of studies (not all of which agree with each other) in the past 10 years.

My purpose here is not to resolve a research debate, but rather to demonstrate the complexity of the analytical task before us. For example, two BLS economists, Wesley Mellow and B. K. Atrostic, have found that, when a different measure more nearly approximating actual work experience is used while holding unchanged other characteristics, the estimated female-male wage gap is reduced by about 7 percentage points.

A fairly consistent finding from many studies of microdata is that the estimated female wage gap is reduced—but not eliminated—as more economic and demographic factors are introduced into the analysis. Another recent study, by Mellow,[2] for example, estimates the female-male wage gap at 27 percent when the following variables are held constant: Area, occupation, industry, union, part-time status, and estimated labor force experience.

In addition to the "human capital" that individual workers bring to their job situations, it is quite evident that earnings are highly correlated with the occupation and the industry in which a worker is employed. And we know that working women are far more concentrated in generally low-paying occupations in low-paying industries. Here again, we can start with aggregate data on earnings by occupation from the household survey and then gain more insight by looking at some limited samples of data from BLS establishment surveys.

Recent CPS median earnings data (for the second quarter of 1982) show that in the female-intensive clerical field, women working full time earned $236 a week, compared with $337 for men. At 70 percent, the current ratio of women's to men's median earnings was practically the same as it was 10 years ago. But women clerical workers are far more likely to be in lower paying groups of the occupations, such as secretaries, typists, cashiers, and bookkeepers.

The same sort of pattern emerges when we look at both ends of the pay spectrum for men and women. A recent study by BLS demographer Nancy Rytina examines wage and salary earnings in 250 occupations.[3] Seven of the twenty lowest paying occupation groups were the same for both men and women: Farm laborers, food service workers, cashiers, waiters and waitresses, cooks, nurses' aides and orderlies, and bartenders. The female-male earnings ratios in these occupations ranged from a low of 72 percent for waiters and waitresses to a high of 92 percent for cashiers. With the exception of farm laborers and bartenders, all of these occupations were both female intensive and relatively low paying. For example, 85 percent of cashiers were women, as were 85 percent of the waiters and waitresses. Even among bartenders, nearly half (45 percent) were women.

When we compare median earnings for the high-paying wage and salary occupations which men and women hold in common, we find that median earnings of women are substantially less than for men. There are eight of these occupations: Lawyers, computer systems analysts, health administrators, engineers, physicians

[1] *Women, Work, and Wages. Equal Pay for Jobs of Equal Value* (National Academy of Sciences, 1981).

[2] Wesley Mellow, "Employer Size, Unionism, and Wages" in *Research in Labor Economics* (JAI Press, forthcoming).

[3] Nancy F. Rytina, "Earnings of Men and Women. A Look at Specific Occupations," *Monthly Labor Review*, April 1982.

and dentists, elementary and secondary school administrators, personnel and labor relations workers, and operations and systems analysts. Unlike the low-paying occupations, however, these jobs are male intensive. Only about 22 percent of the wage and salary lawyers are women, as are 32 percent of elementary and secondary school administrators and only 5 percent of engineers.

The pay differences between men and women in these occupations tend to be somewhat greater than among men and women in the low-paying jobs. The median earnings ratios ranged from 64 percent for those who were personnel and labor relations workers (the greatest difference) to 82 percent among operations and systems analysts (the smallest difference).

Obiviously, many factors may influence the female-male pay ratios within a specific occupation group. Seniority, level of responsibility, quality of performance, and geographic location are only a few of such factors. While it is true that some of these factors can be isolated at the microdata level, it is difficult to use household survey data to obtain a complete picture of pay situations in specific occupations and specific types of firms within specific industries.

Information from the BLS establishment wage surveys provides more area and industry detail than the CPS data discussed previously. On the other hand, the data are limited to only a few occupations and industries and, therefore, may not be representative of the total. In addition, the data are averages which include firms with different employment and pay structures. The averages, therefore, mask female-male differences in individual firms.

A sample of wage data for a limited number of occupations from BLS Area Wage Surveys for 1981 shows that women working as computer programmers, a relatively new and high-paying occupation, earn almost as much as men in that occupation. Data from recent Industry Wage Surveys show that in the men's footwear industry, the female-male wage gap is 15 percent for cement process sole attachers and 6 percent for fancy stitchers using automatic machines. In woodworking mills, the differential ranges from 31 percent for mortising-machine operators to 2 percent for hand sanders.

Although wage and employment data for men and women are available for only some occupations and industries, detailed information from Industry Wage Surveys shows that even those women employed as production workers in high-paying manufacturing industries typically receive wages below the average for that industry. For example, the glass container, motor vehicle parts, and prepared meat products industries all paid average earnings for production workers that exceed the all-manufacturing average earnings rate. In only one of these industries did as many as 30 percent of the women employed have earnings above the industry average, while in all three industries at least 48 percent of the men received earnings above the industry average.

The available data suggest that these differences in female-male earnings stem more from differences in occupational employment than from differences in earnings for the same job. Consider one of these high-paying manufacturing industries, motor vehicle parts, and two production occupations within it, assemblers (classes A-C) and machine-tool operators (classes A-C). Within each class, female earnings are 74 to 92 percent of male earnings. However, women constitute only 4 percent of employment of class A assemblers (the highest paid) but 70 percent of employment of class C assemblers (the lowest paid). The respective numbers for machine-tool operators, 2 and 35 percent, are in the same vein (table 8).

The Bureau of Labor Statistics is the national statistical agency with responsibility for the development and analysis of wage and earnings data. We have seen that aggregate as well as detailed data are available from BLS to study—in many different ways—the existence and the size of the earnings gap. It would, of course, be useful to have more industry and occupational detail covering all sectors of the economy and for individual jobs in individual establishments. But development of such data could result in increased respondent burden.

For more than half a century, the Bureau has conducted wage surveys by occupation with separate detail for men and women. The surveys—based on data gathered from establishment payrolls—rely heavily on voluntary cooperation from the Nation's business community. I am extremely pleased at the cooperation BLS receives from the business community—response rates on these wage surveys typically exceed 90 percent.

We have noticed, however, that in recent years it has become more difficult to collect separate wage information by sex. Increasingly, identification of the sex of employees has been eliminated from payroll records—perhaps as a result of interpretation of regulations under equal pay laws or because employers now believe such information is not pertinent to pay-setting decisions. Since BLS wage surveys depend on company payroll records, the task of collecting pay data by sex has become much more difficult.

Conclusion

This review of the earnings gap provides some evidence of the complexity of the Nation's wage structure, and I hope sheds some light on the issue of pay equity by sex. Use of median earnings data demonstrates that a sizable gap exists between the earnings of men and women. The use of "human-capital"

variables helps to explain only a portion of the earnings gap. Even when detailed occupational and industry wage survey data are used, the differential is reduced but not eliminated. In short, every approach to analyzing differences in the earnings of men and women with which I am familiar agrees on the same basic fact. Earnings of women are generally lower than earnings of men.

Some elements of structural change in the American economy have begun which, over the long run, could have some effect on the earnings gap. Several of the Nation's important high-wage, durable manufacturing industries which have "male-dominated" work forces have been going through an extensive period of dislocation. Some of the people previously employed in industries like steel and auto manufacturing may not be employed in these industries again even when recovery from the current recession is vigorously underway. At the same time, some of today's jobs requiring little training and skill at the low end of the pay scale are being displaced by new technology. The combination of these two developments at opposite ends of the pay scale could result in some reduction of the overall pay gap.

There are, of course, many alternative approaches to the pay equity issue that are important in understanding the female-male earnings disparity. We have seen from the data that are available that a substantial part of the earnings gap results from an employment distribution that is highly different by sex. We do not know exactly why women continue to work more in jobs that have traditionally been female intensive rather than in other jobs. We do not know how much of their occupational choice may result from the demands of family responsibilities; how much may still reflect discrimination in promotion, hiring, or recruiting practices; or how much may reflect other factors.

What we do know is that a great many factors, often interrelated, play different roles in occupational choice at different periods in women's lives, as well as in the history of our country. And we also know that women in general earn less than men today and that much of the difference is because the jobs that women hold are generally paid at lower rates than the jobs held by men.

Table 1. Women in the population and labor force, annual averages, selected years, 1960-82
(Numbers in thousands)

Year	Civilian noninstitutional population	Labor force	
		Number	As percent of population (rate)
1960	61 582	23.240	37.7
1965	66.731	26.200	39 3
1970	72.782	31.543	43 3
1975	80.860	37.475	46 3
1980	88.348	45.487	51 5
1981	89.618	46.696	52 1
1982 (second quarter)	90.621	47.707	52 6

Table 2. Labor force participation rates of married women, husband present, by presence and age of own children, 1960-82

Year[1]	Participation rate (percent of population in labor force)				
	Total	With no children under 18 years	With children under 18 years		
			Total	6 to 17 years, none younger	Under 6 years
1960	30.5	34.7	27.6	39.0	18.6
1961	32.7	37.3	29.6	41.2	20.0
1962	32.7	38.1	30.3	41.8	21.3
1963	33.7	37.4	31.2	41.5	22.5
1964	34.4	37.8	32.0	43.0	22.7
1965	34.7	38.3	32.2	42.7	23.3
1966	35.4	38.4	33.2	43.7	24.2
1967	36.8	36.9	35.3	45.0	26.5
1968	38.3	40.1	36.9	46.9	27.6
1969	39.6	41.0	38.6	48.6	28.5
1970	40.8	42.2	39.7	49.2	30.3
1971	40.8	42.1	39.7	49.4	29.6
1972	41.5	42.7	40.5	50.2	30.1
1973	42.2	42.8	41.7	50.1	32.7
1974	43.0	43.0	43.1	51.2	34.4
1975	44.4	43.9	44.9	52.3	36.6
1976	45.0	43.8	46.1	53.7	37.4
1977	46.6	44.9	48.2	55.6	39.3
1978	47.6	44.7	50.2	57.2	41.6
1979	49.4	46.7	51.9	59.1	43.2
1980	50.1	46.0	54.1	61.7	45.1
1981	51.0	46.3	55.7	62.5	47.8
1982	51.2	46.2	56.3	63.2	48.7

[1] Data were collected in March of each year.

NOTE Children are defined as "own" children of the women and include never-married sons and daughters, step children, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, and cousins, and unrelated children

Table 3. Families by type, selected years, 1940-82

(Numbers in thousands)

Year[1]	All families	Married-couple families[2]	Other families[3]		
			Maintained by men[2]	Maintained by women	
				Total	As percent of all families
1940	32,166	26,971	1,579	3,616	11.2
1947	35,794	31,211	1,186	3,397	9.5
1950	39,303	34,440	1,184	3,679	9.4
1955	41,951	36,378	1,339	4,234	10.1
1960	45,062	39,293	1,275	4,494	10.0
1965	47,836	41,649	1,181	5,006	10.5
1970	51,227	44,415	1,239	5,573	10.9
1971	51,947	44,735	1,262	5,950	11.5
1972	53,280	45,743	1,353	6,184	11.6
1973	54,361	46,308	1,453	6,600	12.1
1974	55,041	46,810	1,433	6,798	12.4
1975	55,699	47,069	1,400	7,230	13.0
1976	56,244	47,318	1,444	7,482	13.3
1977	56,709	47,497	1,499	7,713	13.6
1978	57,215	47,385	1,594	8,236	14.4
1979	57,804	47,692	1,654	8,458	14.6
1980	58,729	48,169	1,740	8,819	15.0
1981	80,702	49,316	1,969	9,416	15.5
1982	61,391	49,669	2,009	9,712	15.8

[1] Data were collected in April of 1940, 1947, and 1955 and March of all other years.

[2] Includes men in Armed Forces living off post or with their families on post.

[3] Never-married, widowed, divorced, or separated persons.

Table 4. Employment and average hourly earnings by industry, ranked by proportion of women workers from highest to lowest, July 1982

1972 SIC Code	Industry	All employees (in thousands)	Women workers (in thousands)	Percent of women workers	Rank of proportion of women workers	Average hourly earnings[1]	Rank of average hourly earnings
23	Apparel and other textile products	1,095.9	897.9	81.9	1	$5.18	50
80	Health services	5,820.8	4,732.9	81.3	2	7.01	36
60	Banking	1,667.8	1,180.6	70.8	3	5.80	46
56	Apparel and accessory stores	948.9	664.1	70.0	4	4.85	51
61	Credit agencies other than banks	587.7	409.7	69.7	5	5.99	43
81	Legal services	583.6	404.7	69.3	6	8.75	21
53	General merchandise stores	2,193.8	1,447.9	66.0	7	5.40	47
63	Insurance carriers	1,230.5	745.9	60.6	8	7.70	30
31	Leather and leather products	195.7	117.8	60.2	9	5.31	49
58	Eating and drinking places	4,883.2	2,746.9	56.3	10	4.06	52
59	Miscellaneous retail	1,950.1	1,058.6	54.3	11	5.36	48
22	Textile mill products	727.0	349.0	48.0	12	5.81	45
39	Miscellaneous manufacturing industries	378.4	171.4	45.3	13	6.40	38
48	Communication	1,397.8	627.8	44.9	14	10.01	14
54	Food stores	2,463.2	1,072.7	43.5	15	7.25	34
73	Business services	3,304.1	1,436.7	43.5	16	7.03	35
36	Electric and electronic equipment	2,004.7	852.3	42.5	17	8.18	25
38	Instruments and related products	708.3	299.8	42.3	18	8.30	23
79	Amusement and recreation services	976.3	402.1	41.2	19	5.87	44
78	Motion pictures	227.6	92.5	40.6	20	8.22	24
27	Printing and publishing	1,262.4	511.2	40.5	21	8.72	22
21	Tobacco manufacturing	60.8	22.0	38.2	22	10.32	11
30	Rubber and miscellaneous plastics products	669.8	240.5	34.9	23	7.67	31
57	Furniture and home furnishings stores	586.5	200.3	34.2	24	6.20	41
89	Miscellaneous services	1,069.0	363.0	34.0	25	10.22	13
25	Furniture and fixtures	429.1	129.1	30.1	26	6.33	39
20	Food and kindred products	1,672.9	492.0	29.4	27	7.87	29
51	Wholesale trade—nondurable goods	2,188.0	625.0	28.6	28	8.17	26
28	Chemicals and allied products	1,075.0	280.7	26.1	29	10.01	15
52	Building materials and garden supplies	598.6	155.0	25.9	30	6.02	42
41	Local and interurban passenger transit	230.0	57.4	25.0	31	7.43	33
50	Wholesale trade—durable goods	3,126.0	766.0	24.5	32	7.99	28
26	Paper and allied products	659.4	149.1	22.6	33	9.40	16
35	Machinery, except electrical	2,262.3	476.0	21.0	34	9.31	17
34	Fabricated metal products	1,426.9	299.8	21.0	35	8.85	20
49	Electric, gas, and sanitary services	881.3	174.7	19.8	36	10.70	8
76	Miscellaneous repair services	296.3	58.7	19.8	37	8.00	27
32	Stone, clay, and glass products	598.1	114.1	19.4	38	8.93	19
55	Automotive dealers and service stations	1,659.8	319.8	19.3	39	6.28	40
75	Auto repair, services, and garages	582.0	100.6	17.3	40	6.68	37
37	Transportation equipment	1,738.6	285.5	16.4	41	11.26	7
13	Oil and gas extraction	710.6	112.7	15.9	42	10.43	9
29	Petroleum and coal products	209.3	32.0	15.3	43	12.40	2
24	Lumber and wood products	630.8	91.3	14.5	44	7.63	32
42	Trucking and warehousing	1,209.6	153.8	12.7	45	10.26	12
15	General building contractors	1,039.5	122.1	11.7	46	10.41	10
33	Primary metal industries	909.1	105.8	11.6	47	11.38	6
10	Metal mining	64.8	6.3	9.7	48	12.24	3
17	Special trade contractors	2,195.4	199.0	9.1	49	12.08	4
14	Nonmetallic minerals, except fuels	118.1	9.5	8.0	50	8.94	18
16	Heavy construction contracting	913.8	66.2	7.2	51	11.47	5
12	Bituminous coal and lignite mining	229.5	11.7	5.1	52	13.05	1

[1] Average hourly earnings are for all production and nonsupervisory workers.

Table 5. Women employed in selected occupations, 1970 and 1981

(Numbers in thousands)

Occupation	Number		Women as percent of all workers in occupation	
	1970	1981	1970	1981
Professional-technical	4,576	7,173	40.0	44.7
Accountants	180	422	25.3	38.5
Computer specialists	52	170	19.6	27.1
Engineers	20	65	1.6	4.3
Lawyers-judges	13	80	4.7	14.0
Physicians-osteopaths	25	60	8.9	13.8
Registered nurses	814	1,271	97.4	96.8
Teachers, except college and university	1,937	2,219	70.4	70.6
Teachers, college and university	139	202	28.3	35.3
Managerial-administrative, except farm	1,061	3,098	16.6	27.4
Bank officials-financial managers	55	254	17.6	37.4
Buyers-purchasing agents	75	164	20.8	35.0
Food service workers	109	286	33.7	40.5
Sales managers-department heads; retail trade	51	136	24.1	40.4
Sales workers	2,143	2,856	39.4	45.4
Sales clerks, retail	1,465	1,696	64 8	71.3
Clerical	10,150	14,645	73.6	80.5
Bank tellers	216	523	86.1	93.7
Bookkeepers	1,274	1,752	82.1	91.2
Cashiers	692	1,400	84.0	86.4
Office machine operators	414	696	73.5	73.7
Secretaries-typists	3,686	4,788	96.6	96.6
Shipping-receiving clerks	59	116	14.3	22.5
Craft	518	786	4.9	6.3
Carpenters	11	20	1.3	1.9
Mechanics, including automotive	49	62	2.0	1.9
Printing	58	99	14.8	25.0
Operatives, except transport	4,036	4,101	38.4	39.8
Assemblers	459	599	48.7	52.3
Laundry and dry cleaning operatives	105	125	62.9	66.1
Sewers and stitchers	816	749	93 8	96.0
Transport equipment operatives	134	304	4.5	8.9
Bus drivers	68	168	28.5	47.3
Truckdrivers	22	51	1.5	2.7
Service workers	5,944	8,184	60.5	62.2
Private household	1,132	988	96.9	96.5
Food service	1,913	3,044	68.8	66.5
Cooks	546	723	62.5	51.9
Health service	1,047	1,752	88.0	89.3
Personal service	778	1,314	66.5	76.1
Protective service	59	145	6 2	10.1

Table 6. Median annual earnings of year-round full-time workers 14 years and over by sex, 1960-81

Year	Annual earnings		Women's earnings as percent of men's
	Women	Men	
1960	$3,293	$5,417	60.8
1961	3,351	5,644	59.4
1962	3,446	5,794	59.5
1963	3,561	5,978	59.6
1964	3,690	6,195	59.6
1965	3,823	6,375	60.0
1966	3,973	6,848	58.0
1967	4,150	7,182	57.8
1968	4,457	7,664	58.2
1969	4,977	8,227	60.5
1970	5,323	8,966	59.4
1971	5,593	9,399	59.5
1972	5,903	10,202	57.9
1973	6,335	11,186	56.6
1974	6,970	11,889	58.6
1975	7,504	12,758	58.8
1976	8,099	13,455	60.2
1977	8,618	14,626	58.9
1978	9,350	15,730	59.4
1979	10,151	17,014	59.7
1980	11,197	18,612	60.2
1981	12,001	20,260	59.2

NOTE. Data for 1960 to 1966 are for wage and salary workers only and exclude self-employed workers. Data for 1979 to 1981 are for persons 15 years and over.

Table 7. Median usual weekly earnings of full-time wage and salary workers by sex, May, 1967-78, and second quarter, 1979-82

Year	Usual weekly earnings (current dollars)		Women's earnings as percent of men's
	Women	Men	
May of:			
1967	$ 78	$125	62
1969	86	142	61
1970	94	151	62
1971	100	162	62
1972	106	168	63
1973	116	188	62
1974	124	204	61
1975	137	221	62
1976	145	234	62
1977	156	253	62
1978	166	272	61
Second quarter:[1]			
1979	183	295	62
1980	200	317	63
1981	221	343	64
1982	240	370	65

[1] Data not strictly comparable with previous years

Table 8. Female-male earnings ratios and females and percentage of employment for selected occupations in the motor vehicle parts industry, 1973-74

Occupation	Total employment	Percent of females in the occupation	Female-male earnings ratio
Assemblers:			
Class A	[1]1,626	4.4	0.77
Class B	[1]15,992	49.5	.74
Class C	23,134	70.0	.83
Machine-tool operators, production:			
Class A	10,424	1.6	.92
Class B	[1]14,575	4.1	.84
Class C	[1]12,212	34.7	.86

[1] Employment by sex was not reported by all establishments in the survey.

NOTE: The motor vehicle parts industry, last surveyed in 1973-74, is scheduled to be resurveyed in 1983.

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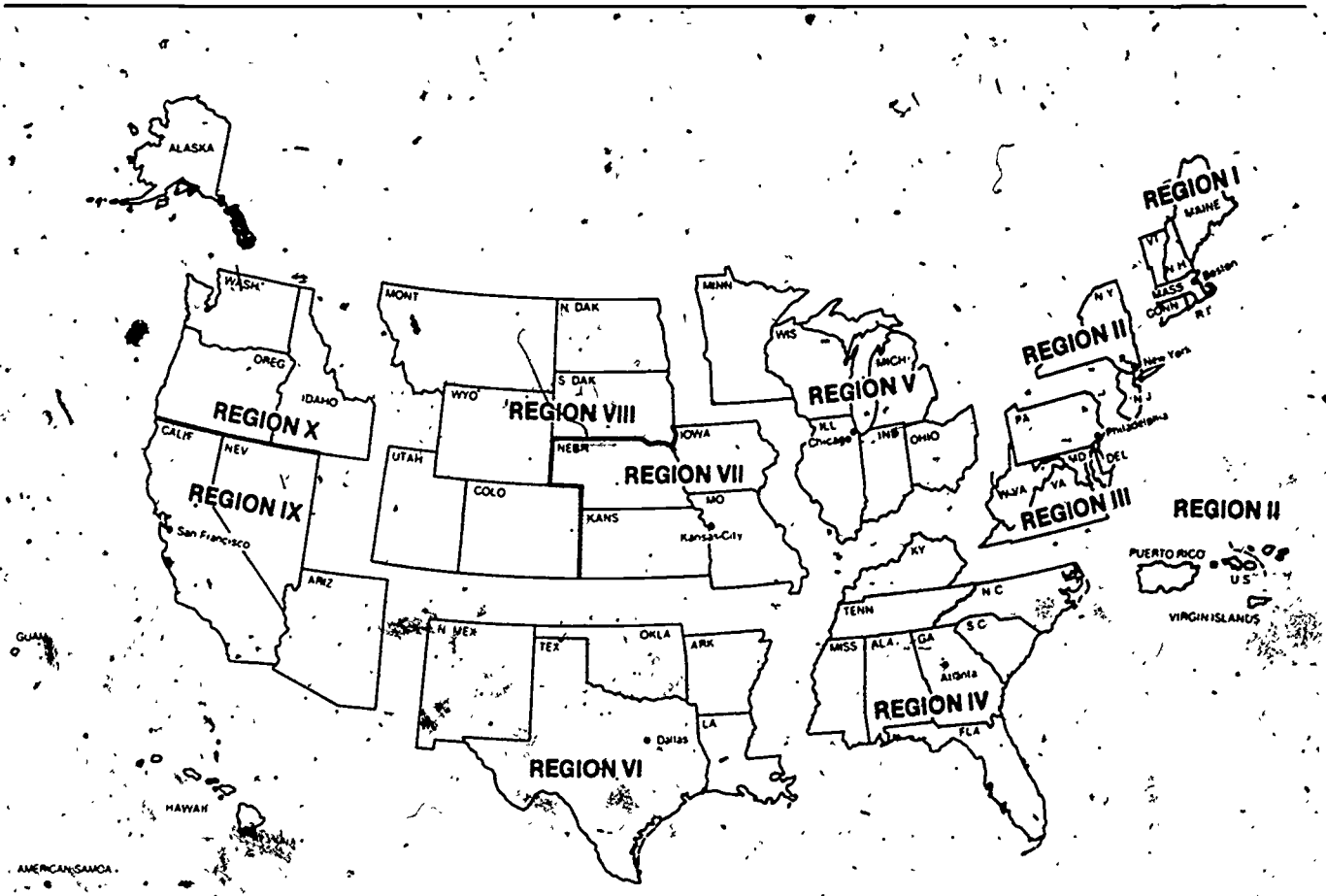

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