# Recessionary impacts on the unemployment of men and women

Both sexes had higher levels of unemployment in 1982 than in 1975, but the interyear difference was far greater for men; changes in the industrial mix of the labor force tending to reduce unemployment were overwhelmed by cyclical increases in unemployment in specific industries and in the number of new jobseekers

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In 1982, the annual average unemployment rate for men was 9.9 percent and the rate for women was 9.4 percent.1 (See table 1.) This was the first time since 1947 that the men's unemployment rate exceeded that for women. This article seeks to explain this reversal by discussing the factors behind the differing impacts of the 1973–75 and 1981–82 recessions, on men and women. The factors contributing to the unemployment change are estimated and their magnitudes compared to determine the source of the sex differences. In addition, sex differences in unemployment change between metropolitan and nonmetropolitan areas<sup>2</sup> are compared because economic opportunities for women in nonmetropolitan areas have historically differed from those of their metropolitan counterparts. Several analyses have attributed these differences to slack labor demand for women in other than metropolitan areas.<sup>3</sup>

The basic hypothesis is that changes in the industry composition of the labor force and differences in the sectors affected by the 1980-82 recessionary period as compared with the 1973-75 recession have contributed to the significant rise in the unemployment rate for men and the reversed relative position of men's and women's unemployment rates. Changes in the industry-specific unemployment rates of women relative to men, reflecting, among other things,

changes in the commitment of women to the labor force, are also expected to have contributed to the reversal of the rates. Finally, it is hypothesized that sex differences in the sources of unemployment change will be similar for metropolitan and nonmetropolitan areas, reflecting a continued convergence in labor force characteristics of the two types of areas. 6

# Unemployment changes of men and women

When comparing the year 1975 to 1982, we find that the women's labor force increased nearly 30 percent and that of men grew by only 12 percent. (See table 2.) The period 1975 to 1982 saw a recovery from the 1973–75 recession and entry into a sustained period of recession beginning in 1980 and ending in 1982. The number of unemployed women in 1982 was 31 percent greater than the 1975 level. This was commensurate with the increase in the women's labor force and resulted in an increase in the unemployment rate for women of only 0.1 percentage point above the 1975 level. During the same period, the unemployment of men increased by 41 percent, more than 3 times their rate of labor force increase. As a result, their unemployment rate in 1982 was a full 2 percentage points above the 1975 level and 0.5 points above the 1982 rate for women.

The trends for women in metropolitan and nonmetropolitan areas were similar; however, those for men were significantly different between the two types of areas. The

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[In percent]						
Residence and sex	1973	1975	1979	1982		
United States, Total	4.9	8.5	5.8	9.7		
	4.1	7.9	5.1	9.9		
	6.0	9.3	6.8	9.4		
Metro areas, Total	5.1	8.7	5.8	9.5		
	4.4	8.3	5.2	9.8		
	6.3	9.2	6.7	9.2		
Nonmetro areas, Total	4.4	8.0	5.7	10.1		
	3.6	6.9	4.8	10.1		
	5.7	9.6	7.0	10.0		

unemployment of nonmetro men increased by 64 percent between 1975 and 1982, while in metro areas the increase was a comparatively modest 32 percent. (See table 2.) Thus, while the rate of growth in unemployment for metro men was about 2-1/2 times the rate of their increase in the labor force, the unemployment of nonmetro men rose at a rate 5 times their rate of labor force growth. The resultant increase in the unemployment rate for men in nonmetropolitan areas contributed to the closing of the gap between the rates of unemployment for men and women. This gap had traditionally been much greater in nonmetropolitan areas compared with metropolitan areas.

During 1973-75, the U.S. male unemployment rate increased by 3.8 percentage points from the 1973 prerecession level. (See table 1.) During the same period, the unemployment rate for women increased by 3.3 points. The female rate peaked at 9.3 percent in 1975, 1.4 points above the male rate. Because the prerecession unemployment rate for women was about 2 points above the rate for men, the greater recessionary effect for men reduced the male-female gap by only 0.5 points.

During the 1980-82 recessionary period, the unemployment rate for men increased by 4.8 percentage points above the 1979 level. For women, the unemployment rate rose by

2.6 points, 2.2 points less than the increase for men. This not only closed the male-female gap in unemployment rates, but pushed the male rate above the female rate for the first time since 1947. Similar trends occurred in both metropolitan and nonmetropolitan areas.

# Decomposing the change in unemployment

The change in unemployment for men and women from 1975 to 1982 was decomposed into four components to determine why male unemployment increased more than female unemployment during 1980–82.<sup>7</sup>

Conceptually, the procedure used to determine the sources of unemployment change begins by taking the 1975 employment conditions and labor force characteristics as given. These conditions include the size of the labor force, the number of unemployed persons, and the industry distribution of the labor force and of the unemployed. Then, one at a time, in a sequential manner, the changes which have occurred in the labor force are updated to the 1982 conditions. At each stage, the change in joblessness is estimated. This procedure provides an estimate of the impact on the number unemployed of each type of change in the labor force.

Four sources of unemployment change are identified. They are changes in: (1) the size of the labor force, (2) the industry distribution of the labor force, (3) the sex-specific industry unemployment rates, and (4) the number of unemployed new labor force entrants. The first factor is a control for the change in the size of the labor force. The second factor reflects the effect on the number unemployed of structural changes in the industry composition of the labor force. The third and fourth factors are intended to gauge cyclical impacts on unemployment change. A change in one factor estimates an independent effect when the remaining factors are held constant at 1975 levels. By estimating these effects separately by sex, it is possible to determine if men and women have been affected differently by these changes at the national level, then for metropolitan and nonmetropolitan areas.8

	Labor force				Unemployment			
Residence and sex	1975	1982	Change		1975	1982	Change	
			Number	Percent	1310	1902	Number	Percent
United States, Total	92.613	110,204	17,591	19.0	7,830	10,678	2,848	36.4
Men	55.615	62,450	6,835	12.3	4,385	6,180	1,795	40.9
Women	36,997	47,754	10,757	29.1	3,445	4,498	1,053	30.6
Metro, Total	64,227	76,465	12,238	19.1	5,570	7,273	1,703	30.6
Men	38,212	42,995	4,783	12.5	3,180	4,208	1,028	32.3
Women	26,014	33,469	7,455	28.7	2,390	3,065	675	28.2
Nonmetro, Total	28,386	33,740	5,354	18.9	2,260	3,405	1,145	50.7
Men	17,403	19,455	2,053	11.8	1,205	1,972	767	63.7
Women	10,983	14,285	3,302	30.1	1,055	1,433	378	35.8

# Sources of unemployment change

Almost 1.8 million more men and 1 million more women were unemployed in 1982 than in 1975. If no structural change had occurred in the labor force between the 2 years, and the impact of the 1980-82 period was similar to that of 1973-75, (that is, industries were affected by the downturn to the same degree) then the only change to occur in the labor force would have been the increase in its size, and the increase in unemployment would have been approximately 1.5 million persons. This describes the factor 1 effect presented in table 3—the difference in unemployment resulting from a change in the size of the labor force. For men, the rise in unemployment because of factor 1 is 539,000, barely 30 percent of the total increase in male unemployment. For women, the unemployment increase is more than 1 million, which is 95 percent of their total increase in unemployment. What this means is that more than 70 percent of the total increase in the unemployment of men in 1982 above 1975 is because of other factors—changes in: the distribution of the labor force among industries, industry unemployment rates, and the ability of new labor force entrants to obtain work. For women, these factors contribute only 5 percent to the total increase in unemployment in 1982 above the 1975 level.

The increase in unemployment caused by factor 1 was greater for women than for men for two reasons. First, the women's labor force growth was both proportionately and absolutely greater than men's (an increase of 10.6 million for women compared with 6.8 million for men). Second, the unemployment rates used in step 1 are the 1975 rates. In that year, the rate for women was 9.3 percent, 1.4 points greater than that for men. Use of these rates in the calculations results in a much greater increase in the number of unemployed women.

The distribution of the labor force among industries changed as a result of developments in the economy as a whole, in the structure of the demand for goods and services, and in the competitive position of domestically produced goods relative to foreign goods. The manufacturing sector experienced a substantial loss in its share of the labor force, and was characterized by high unemployment rates, particularly during recessions. The "other services" industries have been the largest gainers in their share of the labor force and tend to have low unemployment rates, even during recessions.

Thus, factor 2, changes in unemployment resulting from changes in the industry composition of the labor force, had a net negative effect on unemployment over the period. That is, its effect was to reduce joblessness as the structure of the economy continued to shift from manufacturing to a services orientation.

For men, the decrease in unemployment attributable to factor 2 is 13,000, compared with 42,000 for women. (See table 3.) While women accounted for only 43 percent of

Factor	Total United States		Metro		Nonmetro	
	Men	Women	Men	Women	Men	Women
Total	1,794	1,054	1.028	675	767	378
labor force	539	1,002	398	685	142	317
distribution	- 13	- 42	- 3	- 33	- 9	- 25
unemployment rates 4—Change in unemployed	1,119	44	548	- 6	572	64
new entrants	149	50	85	29	62	22

the labor force in 1982, their reduction in unemployment because of shifts in the industry composition of the labor force was three times that for men. The disproportionately large decrease for women did not result from a greater shift away from the manufacturing sector for women than for men. (See table 4.) Rather, it was due to the much greater difference in female unemployment rates between the manufacturing sector and the "other services" industries as compared with the difference in male unemployment rates. In 1975, the unemployment rate for women in manufacturing was 15.2 percent, while the corresponding rate in other services was only 7.4 percent. Therefore, a net reduction in the unemployment rate of 7.8 points resulted from the shift. For men, the reduction was only 2.2 points because their rate of unemployment in manufacturing was only 9.1 percent, compared with 6.9 percent in other services

Changes in industry unemployment rates between 1975 and 1982 reflect differences in the industries affected by the recessions. The differences by sex reflect differences in the distribution of the industry effects between men and women. This effect is measured by factor 3. For men, these changes meant more than 1.1 million additional unemployed, the largest single contribution to the increase in the unemployment of men. For women, barely 44,000 were added to the unemployed because of changes in industry unemployment rates. (See table 3.)

The difference in the magnitude of the factor 3 effect between men and women demonstrates an important peculiarity of the 1980–82 recessionary period. While unemployment rates increased from the 1979 prerecessionary levels for both sexes, the increases for women above the 1975 recession levels were relatively small, while those for men were substantial. The data in table 5 indicate that the unemployment rates for women in industries which account for significant portions of the female labor force are still greater than the unemployment rates for men in these industries. However, the differences between the unemployment rates for men and women were much smaller in 1982 than in 1975. Thus, while the effect of the 1980–82 downturns on women was only slightly more severe than that of 1973–75, the effect on men was significantly greater.

Why this occurred is a topic for speculation. While the data used here do not permit causal analysis, several hypotheses are consistent with the findings. Data on the increases in labor force participation rates for women indicate that they no longer leave the labor market as they once did during childbearing and child rearing years. 11 Labor force participation rates for women who are married with their spouses present have risen faster than such rates for any other group of workers. Therefore, women are less likely to lose job seniority by interrupting their careers. In some heavily unionized industries, such as manufacturing, this could be particularly significant. Thus, while women still have higher unemployment rates in most industries, the male-female differential has declined.

Factor 4, the change in the number of unemployed new labor force entrants, brought about increases in unemployment of 149,000 for men and 50,000 for women. (See table 3.) This is an indication that the 1980-82 recessionary period was more severe than that of 1973-75 for both sexes. If conditions had been the same in 1982 as in 1975, the number of unemployed new labor force entrants would have increased in proportion to the growth of the labor force, the factor 1 effect. But, because the factor 4 effect is positive, the number of unemployed new labor force entrants must have risen as a proportion of the labor force. The higher level for men of this factor is partially a function of the larger size of their labor force and the very high unemployment rates in some traditionally male-dominated industries such as construction, mining, and durable goods manufacturing.

# Metro-nonmetro comparison

The patterns for metropolitan and nonmetropolitan areas followed patterns of sex differences in the sources of unemployment change similar to those of the nation as a whole. (See table 3.) For women, the trends and relative magnitudes

Table 4. Percentage point difference in the distribution of the labor force by industry and sex for metro and nonmetro areas, 1982 compared with 1975

Industry		otal d States	N	letro	Nor	metro
	Men	Women	Men	Women	Men	Women
Agriculture Mining Construction Manufacturing Durable Nondurable Transportation Wholesale and retail trade	.1 .4 .2 -2.7 -1.9 8 0	.1 .2 .3 -1.7 3 -1.4 .2	.1 .3 .2 -2.4 -1.8 7 3	.1 .3 .3 -1.3 .0 -1.3 .3 .3	.3 .7 .0 -3.5 -2.3 -1.3	.1 .3 -2.5 8 -1.8 .0
Finance, insurance, and and real estate Private household Other services Government	.2 0 2.7 -1.6	1.1 -1.2 3.0 -2.2	.3 .0 3.0 –1.8	1.2 1.0 3.0 2.5	.0 .1 2.0 –1.0	1.1 -1.8 3.1 -1.3

Note: A positive number indicates that a sector had a greater share of the labor force in 1982 than in 1975.

Industry groups of Manufacturing, Wholesale and retail trade, Other services, and Government, combined, accounted for 83 percent of the female labor force in 1982. Of these, no single industry group represented less than 15 percent of the total female labor force.

Table 5. Percentage point differences in rates and areas of unemployment between men and women by industry, 1975 and 1982

Industry		otal i States	Metro		Nonmetro	
	1975	1982	1975	1982	1975	1982
Total Wage and salary Agriculture Mining Construction Manufacturing Durable Nondurable Transportation Wholesale and retail trade	1.4 .7 2.1 6 -10.3 6.1 6.7 6.6 .1 2.7	5 -1.2 4.2 -9.7 -6.7 2.7 2.0 4.6 -1.8 1.6	.9 .3 1 -3.0 -11.2 5.2 5.2 5.7 3 2.2	6 -1.2 1.9 -8.5 -6.2 2.3 1.2 4.5 -2.2	2.7 1.8 2.9 .7 -8.5 8.2 10.0 8.1 1.6 4.1	1 -1.1 6.3 -7.1 -7.7 3.3 3.9 4.9 0.0 2.9
Finance, insurance, and real estate	1.4 -1.8 .5	.5 -1.9 -1.1 .4	1.3 -2.3 .3 1.1	.4 2.3 -1.0 .4	1.7 -1.5 2.4 1.0	.8 5 - 1.4 .2

NOTE: A positive number indicates that the rate for women exceeds the rate for men, a negative number means that the rate for men exceeds that for women.

of each of the sources of unemployment change were nearly identical for metro and nonmetro areas. In contrast, for men, although the trends were similar, the relative effect of the cyclical factors was much greater for nonmetro areas.

Joblessness among metro men increased by about 1 million, of which 635,000 resulted from the combined effect of the two cyclical factors, changes in industry unemployment rates and the change in the number of unemployed new labor force entrants. In nonmetro areas, of the 767,000 additional jobless men, 634,000 resulted from the effect of the two cyclical factors. This greater relative cyclical impact indicates that nonmetro men were more adversely affected by the 1980–82 recessionary period than were metro men. In addition, the recessionary effect was significantly greater for nonmetro men during the 1980–82 period than it was during the 1973–75 recession.

# **Summary and implications**

Both sexes had higher levels of unemployment in 1982 than in 1975, but the difference between the 2 years was much greater for men than for women. This article has presented a procedure for decomposing the change in the number unemployed between the two dates into its component parts, so that structural and cyclical factors could be separated from effects of changes in the size of the labor force. By comparing the differences in the importance of the various factors by sex, it was possible to determine why unemployment for men was much more adversely affected than that for women during the 1980–82 downturns.

Once the increase in unemployment due to growth in the labor force was controlled for, about 1.25 million more men were jobless in 1982 than in 1975, compared with only 52,000 more women. The year-to-year difference for men was largely because of an increase in industry-specific unemployment rates. For women, the 1980–82 recessionary period was only slightly more severe than the earlier period.

However, comparison of the numbers of unemployed new labor force entrants suggests that the 1980-82 recessionary period was more severe than the earlier one for workers of both sexes.

Going one step further and looking at the distribution of the effects of the 1980–82 recessionary period between metro and nonmetro areas provides an indication of whether the effects were equally distributed geographically. It was shown that nonmetropolitan areas experienced a disproportionately large share of the unemployment increase. Of the net increase in the unemployment of men, nonmetro areas accounted for 50 percent more than their representative share. For women, although the increase in unemployment was relatively small, it was confined to nonmetro areas. Metropolitan women showed a slight decrease in unemployment.

The structural factor, reflecting the effect of the changes in the industry structure of the labor force, acted to reduce joblessness in 1982. However, the cyclical effects—changes in industry unemployment rates and the change in the number of unemployed new entrants—contributed to significant increases in the unemployment of both sexes. The high unemployment of men in 1982 relative to 1975 results from two factors. First, the industries where men predominate were hit particularly hard during the 1980–82 recessionary period, and second, the distribution of effects between men and women was more evenly spread during 1980–82 than in 1973–75. However, in most industry groups, women's unemployment rates still exceed those of men.

When comparing the recessionary periods, one finds that the effects of the most recent downturns were more evenly distributed between men and women. However, this more equal distribution of effects meant that men were much more severely affected by the 1980–82 episodes than by the earlier recession.

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<sup>1</sup>Annual average data obtained from the Current Population Survey are used throughout this analysis. Annual averages are used because no seasonally adjusted data series exists with a metropolitan, nonmetropolitan breakdown.

<sup>2</sup>Metropolitan counties are Standard Metropolitan Statistical Areas (SMSA's) as designated by the Office of Management and Budget in 1973, after the 1970 census data had become available. Except in New England, an SMSA is a county or group of contiguous counties that contains at least one city of 50,000 inhabitants or more, or twin cities with a combined population of at least 50,000. In addition, contiguous counties are included in an SMSA if, according to certain criteria, they are socially and economically integrated with the central city. The population living outside of SMSA's constitutes the nonmetro population.

<sup>3</sup>David L. Brown and Jeanne M. O'Leary, Labor Force Activity of Women in Metropolitan and Nonmetropolitan America, Rural Development Research Report 15 (Washington, U.S. Department of Agriculture, September 1979); Lillian Chenoweth and Elizabeth Maret-Havens, "Women's labor force participation—a look at some residential patterns," Monthly Labor Review, March 1978, pp. 38–41.

<sup>4</sup>Norman Bowers, "Have employment patterns in recessions changed?" *Monthly Labor Review*, February 1981, pp. 15–28, suggests that changes in the industry mix of the labor force has moderated recessionary impacts in the post World War II period.

<sup>5</sup>Karl E. Taeuber, "Demographic Trends Affecting the Future Labor Force," *Demographic Trends and Full Employment*, Special Report 12 (National Commission for Manpower Policy, December 1976), discusses some of the changes in women's labor force behavior and the impact on employment trends. Also Valerie Kincade Oppenheimer, *Work and the Family: A Study in Social Demography* (New York, Academic Press, 1982), concludes that women's employment patterns are becoming more continuous, rather than a stable pattern of intermittent labor force participation.

<sup>6</sup>James D. Schaub, *The Nonmetro Labor Force in the Seventies*, Rural Development Research Report 33 (Washington, U.S. Department of Agriculture, November 1981).

<sup>7</sup>The years 1975 and 1982 were selected for comparison because they represent similar points on an economic cycle. Both years contain the official trough of a recession. The 1975 trough occurred in March following the peak of November 1973. The 1982 trough occurred in November. The beginning of that cycle was in July 1981; however, another cycle immediately preceded it. The earlier cycle began in January 1980 and hit bottom in July 1980. These two cycles have been combined and are referred to as the 1980–82 recessionary period because no recovery from the first recession was evident, particularly in employment, before the latter cycle began.

<sup>8</sup>The sum of the four factors will equal the total change in unemployment.

9. Other services industries includes business and repair services, personal services, entertainment and recreation services, and professional and related services.

Michael A. Urquhart, "The service industry: is it recession proof?" Monthly Labor Review, October 1981, pp. 12–18, discusses why the services are less affected by recessions and; Michael A. Urquhart and Marillyn A. Hewson, "Unemployment continued to rise in 1982 as recession deepened," Monthly Labor Review, February 1983, pp. 3–12, presents a new view of the effect of the 1980–82 period on the manufacturing sector.

<sup>10</sup>The other services sector is the only industry with a significant proportion of the female labor force where the unemployment rate for women was less than the rate for men in 1982.

<sup>11</sup>Howard N Fullerton, "How accurate were projections of the 1980 labor force?" *Monthly Labor Review*, July 1982, pp. 15-21, Allyson Sherman Grossman, "More than half of all children have working mothers," *Monthly Labor Review*, February 1982, pp. 41-43; and Taeuber, "Demographic Trends," present findings on different aspects of the changed behavior of women in the labor market and the implications of these changes for the rate of increase of the women's labor force.

In addition, it should be noted that although the rate of increase in the labor force participation rate for women has slowed, the rate is still increasing, while the labor force participation rate for men is continuing a decline which began around 1950.