

# The changing composition of the labor force

by Sharon P. Smith

The persistence of relatively high unemployment rates through good times and bad in recent years raises the question of whether some structural change in labor supply may be adding to the unemployment created by recession. It does appear that the composition of the labor force<sup>1</sup> has changed so that a larger proportion of it now is composed of demographic groups (in particular, women and teenagers) who tend to experience relatively higher rates of unemployment. The old image of a labor force largely composed of adult men has become increasingly inappropriate as differences in labor force participation rates of different demographic groups have narrowed. Thus, the labor force participation rates of females and teenagers have increased, and that of males has decreased. Moreover, this rapid rise of labor force participation among demographic groups traditionally regarded as sources of "secondary" workers has continued during a period in which high levels of cyclical unemployment might be expected to deter entrance into the labor force. The recent and apparently continuing changes in the composition of the labor force seemingly have tended to raise the average level of overall unemployment associated with given cyclical conditions. A corollary appears to be that the level of unemployment associated with a state of "full employment"—whatever that somewhat elusive concept may mean—is now somewhat higher than in the earlier postwar period.

This article focuses on the major changes that have occurred in the composition of labor force participants

and the forces that have brought about these changes during the postwar period. Attention also is directed briefly to the impact of the changing patterns of labor force participation on the size and composition of unemployment.

## **Growth and changing patterns of labor force participation**

The overall labor force participation rate for all demographic groups, 16 years of age and older, remained fairly stable from the late 1940's through the early 1960's, fluctuating between 57.0 percent and 58.3 percent (see Chart 1). Since 1964, however, there has been a persistent rise in the participation rate. In 1969 it reached a record 58.6 percent, and by 1975 it had moved up further to 60.4 percent.

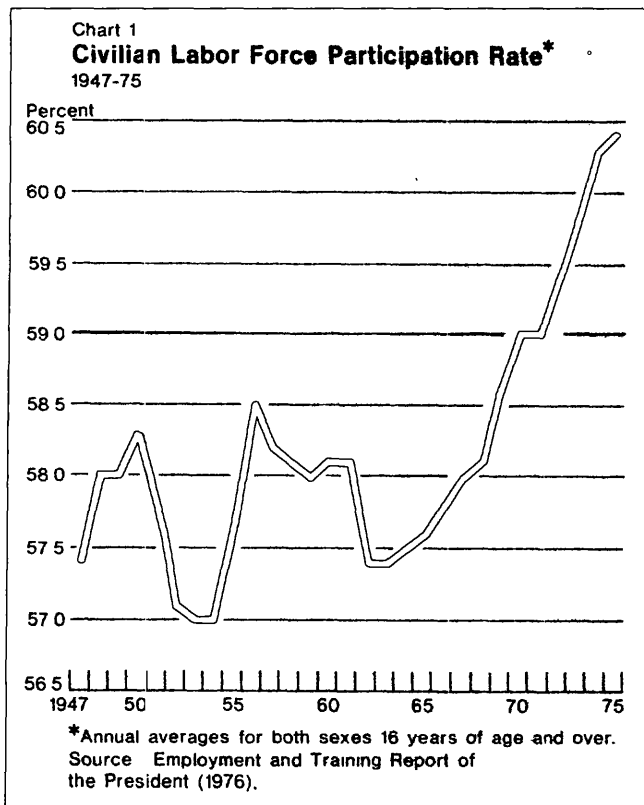
Although these figures do indicate that a steadily rising proportion of the noninstitutional population is counted in the civilian labor force, the overall increase since 1947 has been a modest 3 percentage points.<sup>2</sup> Nevertheless, this small overall increase masks changes of much larger magnitude in the labor force participation patterns of the major component demographic groups. The three groups exhibiting the most important changes are married women living with their husbands ("spouse present" in the language of the Census Bureau), older men, and teenagers.

## **The changing role of women in the labor force**

The participation of women in the labor force has

<sup>1</sup> The current definition of the total labor force is that it refers to all noninstitutionalized individuals 16 years of age and over who are at work, seeking work, or unemployed. The labor force participation rate is the proportion of the noninstitutionalized population that is in the labor force, the participation rate can be determined separately for the population as a whole or for any particular demographic group.

<sup>2</sup> It should be noted that during this period there were some changes in definition so that the series are not always strictly comparable. Prior to 1967 the percentage of the population in the labor force was reported for those 14 years of age and over, but beginning in 1967 this was reported for persons 16 years of age and over, beginning in 1972, data refer to the noninstitutional population.



grown in recent years for all major groups regardless of marital status and the ages of their children. As might be expected, participation rates for married women tend to be lower than those of unmarried women, with rates for women who are married but not living with their husbands falling in between. Interestingly, however, while the participation rates of all three groups have risen, the differences have narrowed (see Chart 2). Thus, by far the largest increase has occurred for married women living with their husbands. Their participation rate rose from 20 percent in early 1947 to 44.4 percent in early 1975.

Just as important as marital status in influencing the probability of a woman's participation in the labor force are the number and ages of her children. In particular, the presence of small children is obviously an important deterrent to participation in the labor force. Chart 3 shows labor force participation rates for married women living with their husbands by the ages of their children. The most important distinction here is between those women with children under 6 years of age and those with children over 6 years of age. As with the breakdown by marital status, there has been an increase in participation rates for all categories, and again the distinctions among the major categories generally have tended to shrink over the years. Thus, the observed rise in labor force participation is not concentrated among those who are childless. Nor has it occurred only for women with children over age 6. Rather, it appears that labor force participation of all married women living with their husbands has increased.

One possible explanation for this major rise in labor force participation among married women is that the younger generation has a significantly different outlook toward market work (in contrast to housework) than earlier generations. However, an examination of changes in labor force participation rates by sex and age, shown in Chart 4, indicates that these patterns are consistent across the two younger age groups and are not the result of unusual behavior of a particular group as it ages

Among females, labor force participation rates increased enormously for each age category except those 65 and over. The largest increase occurred among women between 25 and 34 years old. Although females between the ages of 20 and 24 remain the group with the highest labor force participation rate, the differences between the age groups generally have narrowed between 1955 and 1976.<sup>3</sup> Therefore, it appears that the increase in female labor force participation is

<sup>3</sup> The only exception is the widened difference between the labor force participation rate for the 55 to 64 age group and that for the 65 and over age group

Table 1

**Median Age at First Marriage**

Year	Female	Male
1940 .....	21.5	24.3
1950 .....	20.3	22.8
1960 .....	20.3	22.8
1965 .....	20.6	22.8
1970 .....	20.8	23.2
1972 .....	20.9	23.3
1973 .....	21.0	23.2
1974 .....	21.1	23.1

Source United States Department of Commerce, *Statistical Abstract of the United States 1975*.

a consequence of factors that affect all age groups and not just one particular generation or one particular age group.

Before considering some of the factors that have brought about these changes in the participation of women in the labor force, it is worthwhile to look at the equally striking but quite different changes in the labor force participation of men. First, there has been a decrease between 1955 and 1975 in the participation rates of all age categories of adult men—i.e., other than male teenagers. While the amount of the decrease for those categories under age 55 has been fairly slight, the decreases in the two oldest categories have been quite large. The total labor force participation rate for men 55 to 64 years old fell from 87.9 percent in 1955 to 75.8 percent in 1975, while that for men 65 and over fell from 39.6 percent in 1955 to 21.7 percent in 1975.

### Why female labor force participation has increased

Several factors have been influential in the rise in female labor force participation. The increased willingness of married women (with spouse present) to continue working can be attributed in part to a trend toward later marriages and a decrease in the birth

Table 2

### Birth Rate 1940-73

Per 1,000 population

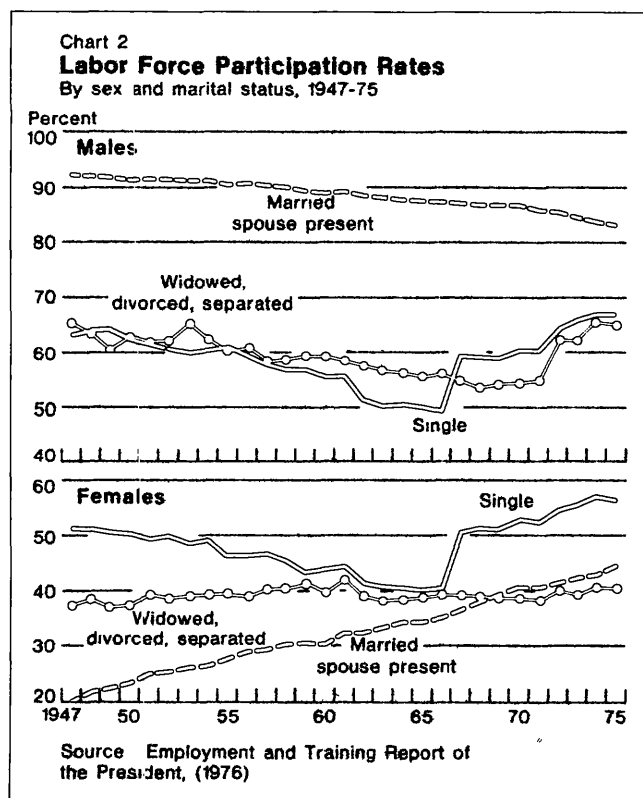
Year	Birth rate
1940	19.4
1950	24.1
1960	23.7
1965	19.4
1970	18.4
1971	17.2
1972	15.6
1973	14.9

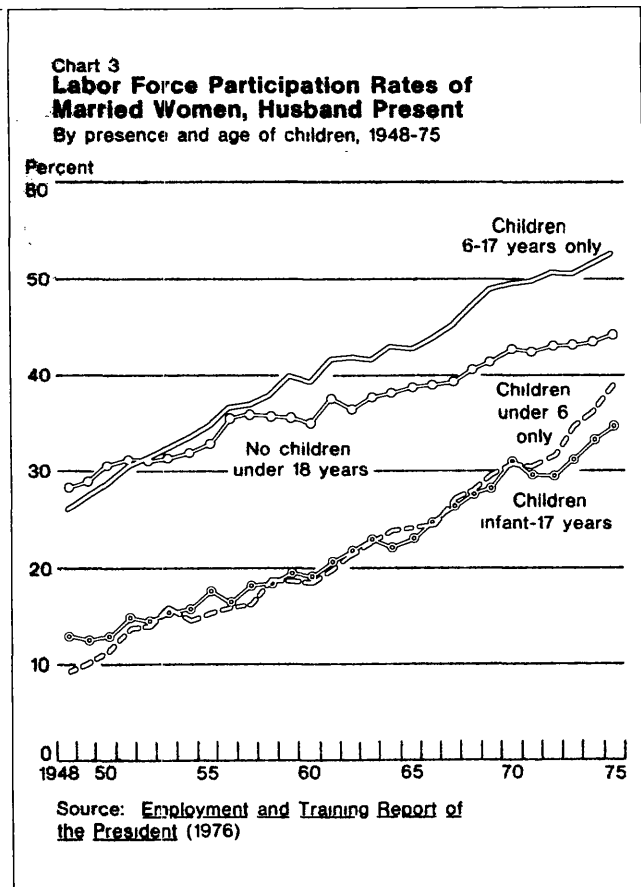
Source: United States Department of Commerce, *Statistical Abstract of the United States 1975*

rate (see Tables 1 and 2). With later marriages, it is more likely that women will have obtained skills and training that increase their expected wage and thus the attractiveness of having a job. Similarly, the decrease in the birth rate reduces the probability of the presence of young children to act as a deterrent to married women's labor force participation. Although the median age of 21.5 at first marriage was quite high in 1940, this was probably a consequence of the depression. In 1950 the median age had dropped to 20.3 and remained at that level in 1960. The median marriage age began to rise again in the 1960's and by 1974 had reached 21.1. Meanwhile, the birth rate was declining from a high of 24.1 (per 1,000 population) in 1950 to 14.9 in 1973.

Another factor tending to raise female participation rates was the rise in education levels. Actually, education rates rose for both men and women during the period and the increase was greater for men (see Table 3). There is good reason to expect increased education to result in rising labor force participation. The reason is simply that education tends to increase attainable earnings levels and therefore increases the attractiveness of holding a job relative to homemaking and other nonmarket activities.

These three factors—an increase in age at first marriage, a decline in the birth rate, and increased educational attainment—alone would have increased female labor force participation. In addition, however, clearly there has been a marked change in social attitudes and expectations toward women working. Thus, for any given set of circumstances (particular marital status, number and age of children, education level), the probability that a woman is in the labor force is greater today than it was twenty, or even ten, years ago.



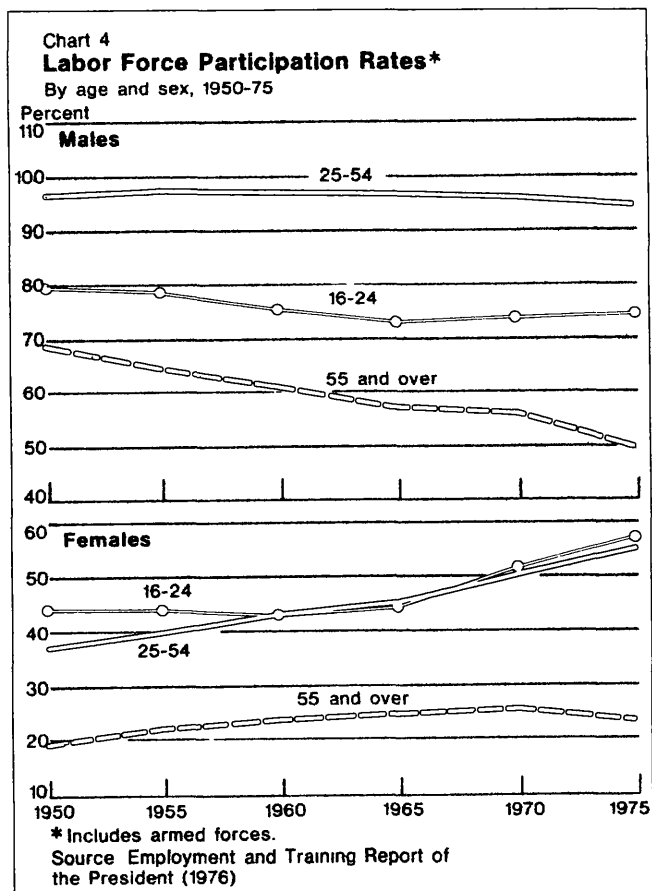


### Adult males and teenagers

The decline in the male labor force participation rate already mentioned reflects a rise in age at first marriage, an increasing trend to earlier retirements, and an increase in disability. The last two factors are important in explaining why the fall in male labor force participation rates has been concentrated in the older age categories. Years in retirement appear to be increasing in part because of a rise in longevity. In addition, there has been a decrease in male labor force participation due to better pension plans, to more liberal social security payments and other Government benefits, and to the increase in working wives. It has been estimated that, between 1960 and 1970, male life expectancy rose from 66.8 to 67.1 years while "work expectancy" fell from 41.1 to 40.1 years.<sup>4</sup>

It is not clear to what extent the rise in disability might reflect an increase in debilitating illnesses and to what extent it has resulted from the liberalization of Government benefits. Amendments to the social

<sup>4</sup> See Fullerton and Byrne [4, page 32]



security law in 1956 and 1960 extended disability benefits to individuals under 50 years of age. Moreover, the definition of disability was changed in a 1965 amendment from an anticipated "permanent" or "long-term" disability to a disability with "expected duration of at least 12 months". As many as 78.3 percent of the newly eligible recipients of disability benefits between the ages of 25 and 50 may be in this category because of these revisions in disability benefits (and not because of an increase in the incidence of disability).<sup>5</sup>

A third major change in the pattern of labor force participation has been the rapid rise in teenager participation. Participation rates have risen for both sexes, though the increase has been sharper for females. The total labor force participation rate for males aged 16 to 19 actually fell between 1960 and 1970 (from 58.6 percent to 57.5 percent) but then rose to 60.9 percent in 1975. The labor force participation rate for teenage females, on the other hand, grew irregularly from 39.1 percent in 1960 to 49.3 percent in 1975. This overall

<sup>5</sup> See Gastwirth [5, page 45]

growth in teenage labor force participation rates between 1960 and 1975 probably reflects, in part, the recent drop in college enrollments

Beyond this, part of the very recent rise in the labor force participation of both married women and teenagers (of both sexes) may be due to the fact that unemployment in the most recent recession has been concentrated in the predominately male industries (principally manufacturing) while the predominately female industries (principally service) continue to experience employment growth. The entrance of secondary workers into the labor force under these circumstances may reflect an effort to maintain the household's customary standard of living when the household head has become unemployed.<sup>6</sup>

Overall, the changing rates of labor force participation for adult females, adult males, and teenagers have occurred in the wake of higher market wage rates, later marriages, lower birth rates, increased pension and disability benefits, and the other changes discussed earlier. In addition, however, the fact that the largest increases in labor force participation have occurred for the secondary workers (married women living with their husbands and teenagers) suggests the possibility of increased household preference for the pecuniary rewards of market work (in place of the nonpecuniary rewards to such activities as work in the home or leisure) Such a shift in preferences would be very difficult to document, however.

#### Changing composition of the labor force and unemployment

The result of these different patterns of labor force participation of older men, married women, and teenagers has been continuing change in the composition of the civilian labor force during the last twenty-five years. Males, 16 years and older, constitute a steadily decreasing proportion of the civilian labor force, falling from 70.4 percent in 1950 to 60.1 percent in 1975, and females, 16 years and older, a correspondingly increasing proportion, rising from 29.6 percent in 1950 to 39.9 percent in 1975 (see Table 4). Teenagers of both sexes, of course, have become a larger proportion of the labor force over this period. Moreover, the Bureau of Labor Statistics projects a continuation of

<sup>6</sup> The income earned by working wives constitutes a significant proportion of total family income, so that "secondary worker" may be a somewhat misleading label. The exact percentage varies with the wife's work experience and status (full or part-time worker). It has been estimated that in 1974 when the wife worked full time for fifty to fifty-two weeks during the year, the median family income was \$17,500, and the median proportion the wife contributed to that income was 38 percent. Even where the wife worked part time or full time for one to twenty-six weeks during the year, she contributed 12 percent to a median family income of \$13,500. See Haythe [6, page 17]

Table 3

#### Median Years of School Completed

Year*	Female	Male
1952	12.0	10.4
1957	12.1	11.1
1959	12.2	11.5
1962	12.2	12.0
1964	12.3	12.1
1965	12.3	12.2
1966	12.3	12.2
1967	12.3	12.2
1968	12.4	12.3
1969	12.4	12.3
1970	12.4	12.4
1971	12.5	12.4
1972†	12.4	12.4
1973	12.5	12.4
1974	12.5	12.5

\* October survey for 1952 and March surveys for all other years

† Beginning 1972, data refer to persons 16 years of age and over, other years are aged 18 and over

Source: United States Department of Labor, *Handbook of Labor Statistics 1975—Reference Edition*

Table 4

#### Composition of the Civilian Labor Force

Actual percentage distribution

Sex and age group	1950	1960	1970	1975
Total men, 16 years and over	70.4	66.6	61.9	60.1
16 to 24 years	11.5	9.9	11.7	13.1
16 to 19 years	4.0	4.0	4.8	5.1
20 to 24 years	7.4	5.9	6.9	8.0
25 to 54 years	45.7	44.2	38.9	37.3
55 years and over	13.3	12.5	11.2	9.6
55 to 64 years	9.3	9.2	8.6	7.5
65 years and over	3.9	3.3	2.6	2.1
Total women, 16 years and over	29.6	33.4	38.1	39.9
16 to 24 years	7.1	6.7	9.8	10.9
16 to 19 years	2.8	3.0	3.9	4.4
20 to 24 years	4.3	3.7	5.9	6.6
25 to 54 years	18.6	21.1	22.0	23.3
55 years and over	3.9	5.6	6.3	5.7
55 to 64 years	3.0	4.3	5.0	4.6
64 years and over	0.9	1.3	1.3	1.1

Source: United States Department of Labor, *Employment and Training Report of the President (1976)*

many of these patterns to 1990, although the projected rates of change are slower than have occurred over the past quarter century.

Thus, an increasing proportion of the labor force is composed of those demographic groups that historically have experienced relatively higher rates of unemployment than adult males. Table 5 shows that despite changes in the composition of the labor force, the general structure of unemployment—i.e., the relative unemployment rates for different age and sex groups—has remained fairly stable over time. Thus, in all years the highest unemployment rates have occurred for teenagers of either sex. However, while the male teenage unemployment rate was the higher of the two through the 1950's and 1960's, the rate for females now appears somewhat greater. These higher unemployment rates for teenagers reflect in part their relatively lower levels of skill and experience; teenagers are more likely to be laid off. They also are more likely to be moving into and out of the labor force because of discouragement with respect to job prospects and because of more probable movement into and out of school. Moreover, they may move among jobs as they search for a satisfactory position.

In the adult categories, a consistent pattern appears.

In the youngest age group, 20 to 24 years, and in the oldest age group, 55 and over, male unemployment rates are generally higher than female rates while in the middle ages, 25 to 54 years, female unemployment rates are higher. This pattern probably reflects the typical discontinuous labor force participation of women who periodically withdraw from the labor force to engage in child care or because they have become discouraged about finding a job. They then experience additional difficulties in finding a job as reentrants whose job skills may have depreciated during their period of withdrawal from the labor force. In fact, it has been estimated that the "high rate at which employed women leave the labor force... is the main factor in the higher unemployment rates they experience".<sup>7</sup>

Because of these changes in the composition of the labor force, it appears that "full employment"—however this is interpreted—for the American economy is likely to imply a higher level of total unemployment today than it would have some years ago.<sup>8</sup> This does

<sup>7</sup> See Marston [8, pages 179-82]

<sup>8</sup> It is important to note that this discussion abstracts from the effect that liberal unemployment compensation may have in increasing the level and duration of unemployment. Consideration of this factor is beyond the scope of this analysis

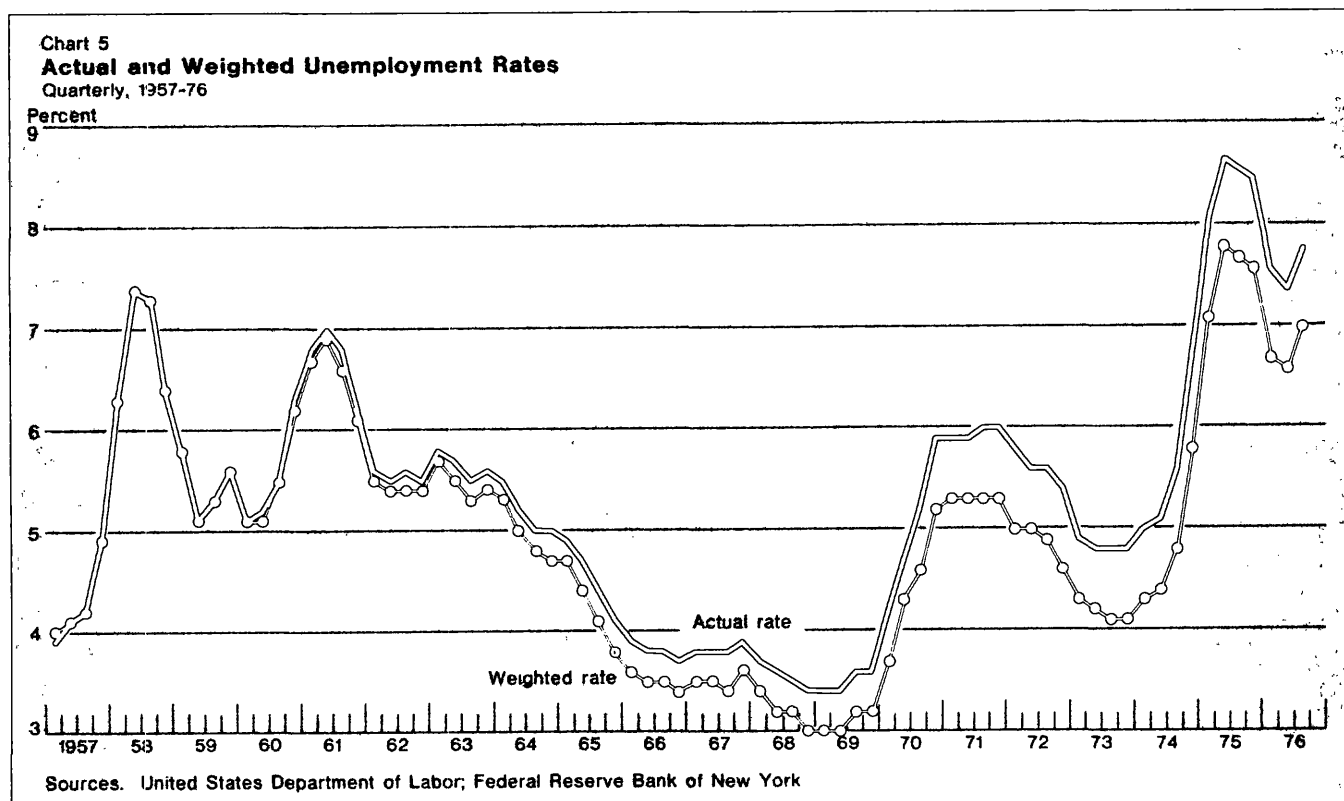


Table 5

**Unemployment Rates by Sex and Age**

Sex and age group	1950	1955	1960	1965	1970	1975
<b>Total men,</b>						
16 years and over ...	5.1	4.2	5.4	4.0	4.4	7.9
<b>Total women,</b>						
16 years and over ...	5.7	4.9	5.9	5.5	5.9	9.3
16 to 17 years . . . . .	13.3	12.5	15.5	16.1	16.9	21.6
18 to 19 years . . . . .	12.3	10.8	15.0	12.4	13.4	19.0
20 to 24 years . . . . .	8.1	7.7	8.9	6.3	8.4	14.3
25 to 34 years . . . . .	4.4	3.3	4.8	3.0	3.4	7.0
35 to 44 years . . . . .	3.6	3.1	3.8	2.6	2.4	4.9
45 to 54 years . . . . .	4.0	3.2	4.1	2.5	2.4	4.8
55 to 64 years . . . . .	4.9	4.3	4.6	3.3	2.8	4.3
65 years and over ...	4.8	4.0	4.2	3.5	3.3	5.4
<b>Total men,</b>						
16 to 17 years . . . . .	14.2	12.0	15.4	17.2	17.4	21.2
18 to 19 years . . . . .	9.8	9.1	13.0	14.8	14.4	18.7
20 to 24 years . . . . .	6.9	6.1	8.3	7.3	7.9	12.7
25 to 34 years . . . . .	5.7	5.3	6.3	5.5	5.7	9.1
35 to 44 years . . . . .	4.4	4.0	4.8	4.6	4.4	6.9
45 to 54 years . . . . .	4.5	3.6	4.2	3.2	3.5	5.9
55 to 64 years . . . . .	4.5	3.8	3.4	2.8	2.7	5.1
65 years and over ...	3.4	2.3	2.8	2.8	3.1	5.1

Source: United States Department of Labor, *Employment and Training Report of the President* (1976)

not mean that presently high rates of unemployment are solely or even largely attributable to changing labor force participation. However, it is clear from Chart 5 (which shows actual unemployment rates and weighted unemployment rates for constant labor force composition quarterly from 1957 through the third quarter of 1976) that an increasing proportion of the unemployment rate is due to the changing composition of the labor force. The difference between the two measures of unemployment was rather small until the late 1960's. It has now grown to almost 1 percentage point. In the third quarter of this year the weighted unemployment rate was 0.8 percentage point below the actual unemployment rate. Further changes in the composition

of the labor force in the same direction may be expected to have similar effects on the average level of the overall unemployment rate under given economic conditions.

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