

Retirement age declines again in 1990s

The average retirement age resumed its long-run decline in the 1990s after having leveled off during the preceding 10 to 15 years; the resumption of the decline is attributed largely to a rise in the labor force participation rate of older men and women between the mid-1980s and 2000

Murray Gendell

Retirement is generally understood to be the time when people stop working and start collecting a pension. A person's age at retirement is important because it is one of the determinants of both the length of one's work life and the duration of retirement. The length of the work life influences how much workers save and how much the government collects in taxes, and the duration of retirement affects expenditures from savings and pension funds (including Social Security). The length of the work life and the duration of retirement also affect the ratio of workers to retirees, which is a key determinant of the viability of pay-as-you-go public pension funds.

Each year, the Social Security Administration calculates the mean age of workers receiving their initial retirement award or disability benefit. The calculation is made from the age data in the Agency's administrative records. Although this time series does not include pensions provided by employers or unions, it covers nearly all workers in the United States and provides valuable information about a major source of earnings: replacement income for elderly men and women who have stopped, or will soon stop, working. Still, the series is limited as an indicator of retirement in that the earliest age of eligibility for the retirement benefit is 62 and many nondisabled workers stop working before that age—some even as young as their early fifties. Also, the disability benefit is provided to qualified workers who are younger than 62 (although the number of

beneficiaries is relatively small), and the Social Security retirement benefit does not require workers to leave the labor force, so that many continue to work while collecting the benefit. Therefore, it would be useful to supplement the Social Security series with one that measures the average age of elderly workers at their exit from the labor force.

Such a series has been developed, and it provides estimates, in 5-year increments since the 1950s, of the median age of men and women 50 years or older who have withdrawn from the labor force. The estimates are derived from labor force data obtained in the Current Population Survey (CPS), which affords complete coverage of the workforce in the United States. It has been shown that these two series have followed similar trajectories.¹ However, the Social Security series was previously limited to the retirement benefit. In this article, the mean age of workers 50 years or older at the initial receipt of the disability benefit has been combined with the mean age at the initial receipt of the retirement benefit in order to make the Social Security series more comparable to the labor force series than heretofore. In addition, the two series are brought up to date through the late 1990s, using the latest data available. Also brought up to date is the measure of the average length of retirement after exit from the labor force.²

The two series show that the average age at retirement declined in the 1990s, after having leveled off during the 1970s (Social Security series)

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and the 1980s (both series). This finding seems inconsistent with the contention made recently that the long-run decline in the age of retirement has reversed.³ In what follows, the apparent inconsistency is dispelled, and it is shown that the reversal in the decline in labor force participation rates of men aged 65 or older and women aged 60 or older that has occurred since the middle of the 1980s has actually contributed to the decline in the average age at exit from the labor force during the 1990s. The analysis presented also indicates what statistical changes have to occur in order for a reversal of the decline in the average age at withdrawal from the labor force to take place. Whether such a reversal would be accompanied by a corresponding reversal in the Social Security series is uncertain. The article concludes with a review of the economic, social, and psychological factors that, together, are likely to determine whether the trend will continue or be reversed.

Methodology

The Social Security Administration publishes separate tables showing the annual mean age of women and men initially awarded the retirement benefit and the disability benefit, along with the number of awardees and a frequency distribution of the ages of the awardees.⁴ The combined mean age of these two types of beneficiaries was obtained by first calculating the mean age of the disability awardees aged 50 or older and then calculating the weighted average of the two means. This was done for every 5th year from 1950 through 1995. Then the weighted average of the means at the beginning and end of each 5-year interval was calculated to obtain the average for the interval. The average for the late 1990s was calculated from the data for 1995–99, the latest year for which data were available when this article was written.

The method of calculating the median age of exit from the labor force has been described elsewhere,⁵ so only a brief account is given here. The basic information used in the calculations is the annual average data on the numbers in the labor force and the labor force participation rates derived from the monthly CPS for every 5th year from 1950 through 2000, arrayed in 5-year age groups from 45 to 49 years through age 75 or older (taken as a proxy for 75 to 79 years).⁶ Estimates of the number of net withdrawals from the labor force for reasons other than death during each 5-year interval are given by the equation

$$W = L_1(1 - R_2/R_1)\sqrt{S} \quad (1)$$

where L_1 is the number in the labor force at the beginning of the interval, R_1 is the labor force participation rate of the same cohort at the beginning of the interval, R_2 is the labor force participation rate of the same cohort at the end of the interval, and S is the survival rate of the cohort during the interval.

The equation applies to each of six cohorts aged 45 to 49 through 70 to 74 at the beginning of the interval and 50 to 54 through 75 to 79 at the end of the interval. An interpolation procedure is needed to convert these estimates for the cohorts (that is, 45–49 becoming 50–54, 50–54 becoming 55–59, and so on) to estimates for age groups (50–54, 55–59, and so forth). The conversion was effected with the use of the Karup-King third-difference formula for osculatory interpolation.⁷

This method of calculating the median age at exit from the labor force is an unusual combination of cohort and period perspectives. The median for a cohort would tell us at what age, on average, the members of the cohort withdrew from the labor force as they passed through their life course from age 45–49 through 75–79. The available data would permit the calculation of such a median for no more than a few cohorts, at this time precluding the development of a substantial time series of median ages of labor force exit for the various cohorts. The method employed in this article, therefore, divides the 30-year life course interval into 5-year periods and, for each of these periods, uses the estimated number of labor force exits in each of six different cohorts to calculate the median age of men and women leaving the labor force in each period. The result is a time series of the median age at exit from the labor force from 1950–55 through 1995–2000, based on estimates of cohort-specific withdrawals.⁸

The CPS was redesigned substantially in 1994, changing the wording of the questionnaire and data collection methodology. Analysts at the Bureau of Labor Statistics have estimated the magnitude and direction of the effect of the revision on various labor force measures and have provided adjustment factors needed to maintain the comparability of the data collected before and after the revision.⁹ (The Bureau has not revised the pre-1994 data.) The analysts concluded that “the adjustment factors indicate that the unrevised CPS was less in focus for those on the periphery of the labor market—those involved in more casual, intermittent or marginal work activities, individuals who might have tentatively tested the labor market, and older workers.”¹⁰

The multiplicative adjustment factors the BLS analysts recommend for use in comparisons of labor force participation rates over long periods are as follows:¹¹

<i>Age</i>	<i>Men</i>	<i>Women</i>
25–54	0.996	1.010
55–64	0.996	1.043
65 or older	1.084	1.106

These factors are all significant at the 5-percent level, except the one for men aged 55 to 64. Prerevision data can be adjusted to postrevision levels by multiplying by the appropriate factor. Alternatively, postrevision data can be adjusted to prerevision levels by dividing by the appropriate adjustment

factor. In this article, the postrevision labor force participation rates for 1995 and 2000 were adjusted to prerevision levels, except for the rate for men 55 to 64. Two assumptions were made. First, the adjustment factors applied to the rates for the 5-year age groups within each of the three larger age categories for which the factors were presented were assumed to be the same as the factor for the larger age category. For example, the factor 1.084 for men aged 65 or older was used to adjust the labor force participation rates of men 65 to 69 years, 70 to 74 years, and 75 or older. Second, the adjustment factors were assumed to remain constant over time. Thus, the same procedure was used to adjust the labor force participation rate for 2000.

To estimate the adjusted number of net withdrawals during the interval 1995–2000, the adjusted age-specific numbers in the labor force in 1995 were also needed. An adjustment of the labor force participation rate implies an adjustment of the civilian noninstitutional population or the labor force (or both). It was assumed that the published population data required no adjustment; hence, the adjusted labor force data were obtained by multiplying the published population numbers by the adjusted labor force participation rate.

Results

Both the Social Security and the labor force series show rapid declines in the average retirement age from the early 1950s through the early 1970s. (See table 1 and chart 1.) In both series, the data for the 1950s may be less reliable than subsequent data, chiefly because coverage of Social Security was considerably more limited at that time than afterward and the quality of the labor force data was poorer than it was thereafter.¹² Also, the Social Security data for the 1950s are based only on retirement awards. The inclusion of data on disability awards, if such data were available, would probably have produced substantially lower mean ages than those shown in the table. From the 1960s through the early 1990s, the averages in the two series are quite similar. However, the labor force medians for the late 1990s, adjusted to prerevision levels, are considerably lower than the Social Security means, especially for women.

The major finding is that there were definite declines in both series during the 1990s, after a lull in the declines during the preceding 10 to 15 years. That the decline in the Social Security series is considerably smaller than in the labor force series is understandable in that, given the lower age limit (62) of the large majority of the Social Security awardees (namely, retirees), compared with the lower age limit in the labor force series (50), and given an average retirement age of under 63, the potential for further declines is obviously much more limited in the Social Security series than in the labor force series.

By using national life tables to calculate the average remaining life expectancy at the median age of exit from the labor force, the average duration of retirement (defined here as withdrawal from the labor force of men and women aged 50 years or older) has been estimated. As shown in table 2, there have been large increases in the average duration of retirement since the early 1950s. By the late 1990s, this period in the life course of men had increased 6 years, from a duration of 12 years to one of 18 years, a 50-percent gain. Among women, the increase of 8.4 years (data comparable to prerevision levels), from a duration of 13.6 years to 22.0 years, represented a gain of 62 percent. The increases in the duration of retirement exceed the declines in the median age at exit from the labor force because of increases in longevity since the early 1950s.

Because further gains in longevity are likely, the average length of retirement will continue to increase, unless the decline in the median age at exit from the labor force is reversed and whatever increases occur would exceed the rise in longevity. The expansion of the duration of retirement has helped raise the proportion of the adult population living in retirement. As a consequence, the dependency ratio of the Social Security system (Old Age, Survivors, and Disability Insur-

Table 1. Estimated average age at retirement of men and women, 1950–55 through 1995–2000

Interval	Social Security data ¹		Labor force data ²	
	Men	Women	Men	Women
1950–55	³ 68.5	³ 67.9	66.9	67.6
1955–60	³ 67.6	³ 66.4	65.7	66.1
1960–65	65.0	65.0	65.1	64.6
1965–70	63.9	64.3	64.2	64.2
1970–75	62.9	62.9	63.4	62.9
1975–80	62.8	62.7	63.0	63.2
1980–85	62.9	62.8	62.8	62.7
1985–90	62.8	62.8	62.6	62.8
1990–95	62.7	62.6	⁴ 62.4	⁴ 62.3
1995–2000	62.6	⁴ 62.5	⁴ 62.0	⁴ 61.4

¹Mean age at initial award of benefit for disability or retirement, calculated as the weighted average of the mean ages of those receiving awards for retirement and disability. The mean for individuals awarded disability benefits is limited to those 50 to 65 years of age.

²Median age at exit from the labor force of 5-year cohorts aged 50–54 years through 75 or older for reasons other than death.

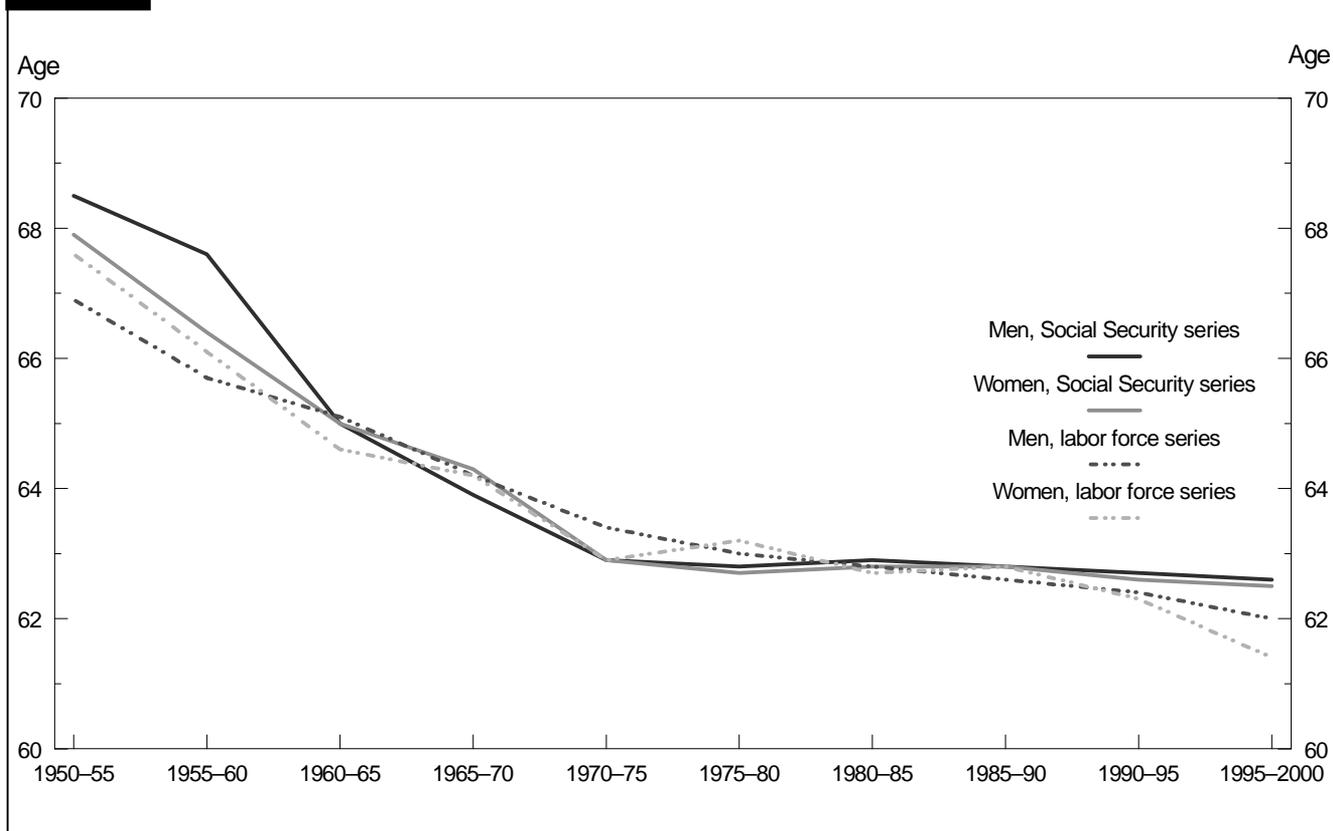
³Age data for disability awards are not available. If they were, the means would be lower.

⁴Calculated from data adjusted to levels prior to the 1994 revision of the Current Population Survey. Median ages computed from the published data are as follows: men 1990–95, 62.1; men 1995–2000, 62.0; women 1990–95, 62.6; women 1995–2000, 61.8.

⁵The mean retirement age for 1997 was 65.4, much higher than the means since the 1960s or in 1998 or 1999. It was, therefore, regarded as an anomaly and disregarded. The data for both women and men are limited to the period 1995–99.

SOURCES: *Social Security Bulletin, Annual Statistical Supplement, 1999* (Social Security Administration, 1999); Bureau of Labor Statistics publications and Web site. See Murray Gendell and Jacob S. Siegel, "Trends in retirement age by sex, 1950–2005," *Monthly Labor Review*, July 1992, pp. 22–29, for more information about the labor force data.

Chart 1. Estimated average age at retirement of men and women, 1950-55 through 1995-2000



ance beneficiaries per 100 covered workers) increased from 6/100 in 1950 to 30/100 in 1985. Between 1985 and 2000, there was no change in the ratio, and no further change is expected until the baby boomers start to retire between 2005 and 2010. Thereafter, the ratio is projected to rise fairly quickly, to about 40/100 in 2020 and 47/100 in 2030. As a result, the system is likely to require some combination of an increase in funding, an increase in the rate of return on assets, and a reduction in benefits.

Discussion

Contentions that the decline in the retirement age would soon be reversed have been made for many years. Recently, however, it has been asserted that the reversal has finally occurred. Indeed, it was deemed to be such a well-established fact that *The New York Times* reported it in a front-page story.¹³ In addition to citing anecdotal evidence and such presumed influences as the relaxation of the Social Security earnings test, the shift from defined-benefit plans (“traditional pensions”) to defined-contribution plans, and reductions in health benefits for retirees, the story presented data showing a rise in the labor force participa-

tion rate of people aged 65 or older, a reversal of the long-run decline. The story also quoted the economist Joseph F. Quinn, who said “we have entered a new era.” Quinn is well known for his studies of retirement behavior, and he has been tracking the change in the labor force participation rate of the elderly for many years.¹⁴ At a conference in 1999, he contended that “the era of earlier and earlier retirement has come to an end.”¹⁵

In the paper he presented at the conference, Quinn extrapolated the declining trend in the labor force participation rates of men aged 55 to 59, 60 to 64, 65 to 69, and 70 or older and showed that between 1985 and 1998 there were increasing upward deviations from the declining trend lines. There were upward deviations from the mid-1980s on for women also. However, their trend lines are much flatter than those of the older men: slightly up for women aged 55 to 59 and slightly down for women 60 to 64, 65 to 69, and 70 or older. Further analysis revealed that cyclical fluctuations (as indicated by the variation in the unemployment rate) accounted for some, but not much, of the variation in the labor force participation rate of the elderly since 1964. Hence, noncyclical factors, such as those cited in the *Times* story, Quinn argued, were the main reason for the upward deviations from the trend

lines since the mid-1980s.

A significant omission in Quinn’s analysis is an adjustment of the data because one effect of the 1994 revision of the CPS was to increase the labor force participation rates of the elderly. The revision had virtually no effect on the rates of men under age 65, as indicated earlier: their rates remained essentially flat during the 1985–2000 period (at a level slightly below that of 1985). This leveling off of the preceding declining trend is what Quinn observed in the increasing divergence between the extrapolated and the published data—certainly a significant change, but not a reversal.

Among men aged 65 or older, there was indeed a reversal, but it was smaller than that indicated by the published data. As shown earlier, the 1994 revision is estimated to have inflated the labor force participation rate of this cohort by 8.4 percent over prerevision levels. After adjustment, the rates of men aged 65 to 69 and 70 to 74 exceeded the 1985 rates by more than 10 percent only in 2000. Among men aged 75 or older, the rates reached this level only in 1994. The largest of these three increases is 14 percent.

The trends are strikingly different for women. At every age from 50 to 54 through 75 or older, there were relatively large increases in their labor force participation rates between 1985 and 2000, even after adjustment to prerevision levels. How-

ever, because the 1985 rates for women were very low at ages 70 to 74 (7.6 percent) and 75 or older (2.2 percent), the small gain, in adjusted percentage points, by 2000 (1.4 for those 70 to 74 and 1.0 for those 75 or older) meant percentage increases of 18 percent and 45 percent, respectively. At ages 50 to 54 and 55 to 59, the post-1985 increases are a continuation of the trend since at least the early 1950s. For the older women, however, the gains since the mid-1980s are reversals of preceding declines.

A cross-sectional analysis of the trends in women’s labor force participation rates, however, can be misleading. It has long been observed that in the postwar period successive birth cohorts of women, unlike those of men, entered the labor force at higher and higher levels. Yet, at the older ages, the rates within each cohort declined with age, just as they have done among men. (See table 3.) Thus, as older women (as well as men) have aged, they have increasingly withdrawn from the labor force. To date, there is no indication of a change in this pattern.

The question nevertheless arises whether the cross-sectional reversals of the labor force participation rates of men older than 64 and women older than 59 since the mid-1980s are consistent with the finding that the median age at exit from the labor force has resumed falling during the 1990s. To answer this question, it is helpful to look at the change dur-

Table 2. Change in median age at exit from the labor force and expected number of years in retirement, 1950–55 through 1995–2000, in 5-year increments

Period	Men		Women	
	Median age at exit from labor force	Expected years of retirement ¹	Median age at exit from labor force	Expected years of retirement ¹
1950–55	66.9	12.0	67.6	13.6
1985–90	62.6	16.3	62.8	20.3
1990–95	62.4	17.2	62.3	21.3
1995–2000	62.0	18.0	61.4	22.0
1990–95	62.1	17.4	62.6	21.1
1995–2000	62.0	18.0	61.8	21.7
Change from 1950–55				
In years—				
1985–90	–4.3	4.3	–4.8	6.7
1990–95	–4.5	5.2	–5.3	7.7
1995–2000	–4.9	6.0	–6.2	8.4
1990–95	–4.8	5.4	–5.0	7.5
1995–2000	–4.9	6.0	–5.8	8.1
Percent change:				
1985–90	–6.4	35.8	–7.1	49.3
1990–95	–6.7	43.3	–7.8	56.6
1995–2000	–7.3	50.0	–9.2	61.8
1990–95	–7.2	45.0	–7.4	55.1
1995–2000	–7.3	50.0	–8.6	59.6

¹ Average remaining life expectancy at the median age at exit from the labor force.

NOTE: In all instances showing data for 1990–95 and 1995–2000, the first set of data is calculated from data adjusted to levels prior to the 1994 revision of the Current Population Survey, and the second set of data is computed from the Current Population Survey published data.

SOURCES: Median ages at exit from labor force are author’s calculations. (See text for method.)

Average remaining life expectancies at median age of exit from labor force are from life expectancy data from the National Center for Health Statistics life tables for 1952, 1987, 1992, and 1997.

Table 3. Labor force participation rates for selected birth cohorts, ages 45–49 through 75–79

Age group	Year of birth							
	1906–10	1911–15	1916–20	1921–25	1926–30	1931–35	1936–40	1941–45
Men								
45–49	97.1	96.6	96.1	95.3	94.1	93.2	93.3	92.3
50–54	94.7	95.0	93.0	90.1	89.2	88.6	88.8	86.7
55–59	90.2	89.5	84.4	81.7	79.6	79.8	77.4	77.1
60–64	75.0	65.5	60.8	55.6	55.5	53.2	54.8	...
65–69	31.7	28.5	24.5	26.0	24.9	27.8	...	...
70–74	17.9	14.9	15.4	15.5	16.5	...	...	...
75–79 ¹	7.0	7.1	7.0	7.4	...	...	...	...
Women								
45–49	45.8	50.7	51.7	55.0	55.9	62.1	67.8	74.8
50–54	48.7	50.1	53.8	53.3	57.8	60.8	66.9	70.0
55–59	47.1	49.0	47.9	48.5	50.3	55.3	57.0	58.7
60–64	36.1	33.2	33.2	33.4	35.5	36.4	38.5	...
65–69	14.5	15.1	13.5	17.0	15.8	17.5	...	...
70–74	7.5	7.6	8.2	8.4	9.0	...	...	...
75–79 ¹	2.2	2.7	2.6	3.2	...	...	...	...
Men and women								
	Years rates were observed							
45–49	1955	1960	1965	1970	1975	1980	1985	1990
50–54	1960	1965	1970	1975	1980	1985	1990	1995
55–59	1965	1970	1975	1980	1985	1990	1995	2000
60–64	1970	1975	1980	1985	1990	1995	2000	...
65–69	1975	1980	1985	1990	1995	2000	...	...
70–74	1980	1985	1990	1995	2000	...	...	...
75–79 ¹	1985	1990	1995	2000	...	...	...	...

¹Rates for age 75–79 were not available, so those for age 75 or older were used as an approximation.

NOTE: The rates for 1995 and 2000 have been adjusted to make them

comparable to the earlier rates because of the 1994 revision of the Current Population Survey.

ing the 15-year period between the early 1980s and the late 1990s in the two main components of the equation used to estimate the age-specific number of withdrawals for reasons other than death, from which the median age is calculated. These two components are (1) the age-specific numbers in the labor force in 1980 and 1995, the beginning points of the two 5-year intervals being compared, and (2) the age-specific cohort net withdrawal rates for reasons other than death, which, in equation (1), are represented by $(1 - R_2/R_1) \sqrt{S}$.

Table 4 shows that from 1980 to 1995, the percentage of those 45 to 54 years increased by 9 to 10 percentage points, with a corresponding decline among older workers. Given that the estimated number of withdrawals is the product of the numbers in the labor force and their net withdrawal rates, the pronounced increase in the relative number of those 45 to 54 obviously tended to increase the relative number of estimated exits in the youngest age categories, thereby lowering the median age.

This “younging” of the elderly labor force, however, had a much smaller effect on the decline in the median age than did the changes in the net withdrawal rates. (See table 5.) Allowing the net withdrawal rates to change between 1980–85 and 1995–2000, while keeping the 1980 age distribution of the labor force constant, reduced the median age of men and women six-tenths of a year, but when only the age distribu-

tion was allowed to change, the median was reduced a mere one-tenth of a year. After adjusting the 1995 and 2000 data to prerevision levels, the differential effect of the two factors was narrowed a little, from 0.5 (0.6 – 0.1) to 0.3 (0.5 – 0.2), among men only.

As for the net withdrawal rates, the pattern of change is quite clear: the rates declined more among the three older cohorts than the three younger cohorts. (See table 6.) The pattern was much more pronounced for women, which is why their median age dropped considerably more than that of men. In fact, women’s labor force participation rates increased among the three younger cohorts, while decreasing among the three older cohorts. Adjusting the 1995 and 2000 rates to prerevision levels scarcely alters the pattern of differential change between the younger and older cohorts. Thus, there is no inconsistency between (1) the reversal since the mid-1980s of the declining cross-sectional labor force participation rates of men older than 64 years and women older than 59 and (2) the resumption during the 1990s of the postwar decline in the median age at exit from the labor force of those aged 50 or older. This is because the cross-sectional reversal reduced the net withdrawal rates of the older cohorts more than those of the younger cohorts, and that pattern of change was a major reason for the decline in the cohort median age at exit from the labor force.

Table 4. Change in age distribution of the labor force aged 45–74 years, 1980–95

Age group	Percent distribution			Difference, in percentage points	
	1980	1995	Adjusted, 1995	1995 minus 1980	Adjusted, 1995, minus 1980
Men					
Total	100.1	100.0	100.0	...	...
45–54	52.8	61.7	62.2	8.9	9.4
55–64	38.7	29.9	30.0	-8.8	-8.7
65–74	8.6	8.4	7.8	-2	-8
Women					
Total	99.9	100.0	100.0	...	...
45–54	54.8	63.7	64.7	8.9	9.9
55–64	37.1	28.9	28.4	-8.2	-8.7
65–74	8.0	7.4	6.9	-6	-1.1

¹Differs from 100.0 due to rounding of summands.
SOURCE: Calculated by the author.

Will the reversal of the declines in the labor force participation rates of older men and women and the resumption of the fall in the median age at exit from the labor force continue? There is no unequivocal answer. Nonetheless, it is possible to indicate statistically how at least the latter might or might not happen, as well as to review the economic, social, and psychological forces that, it is argued, are likely to motivate older workers to leave the labor force at an older age than in the past, on the one hand, or to keep them as desirous of early retirement as they have been, on the other.

Without attempting to identify the various changes that could produce either a continuation, a leveling, or a reversal of the decline in the median age at exit from the labor force, we can readily distinguish one pair of alternatives. If the aforesaid pattern of change in the net withdrawal rates between 1980–85 and 1995–2000 were to persist, the median age at exit from the labor force would continue to fall, unless the relative numbers of men and women aged 45 to 54 years (within the age range from 45 to 74 years) in the labor force would decline substantially. By contrast, if the pattern were to reverse, then the median age at exit from the labor force would rise rather than fall. The latter possibility is illustrated by the results obtained for the period 2000–2005, using the data for 2005 given in the 1999 BLS projection of the labor force. (There is no comparison with pre-1994 data in this case; hence, there is no need to adjust the 2005 data because of the 1994 revision of the CPS.) Whereas the net withdrawal rates of the three older cohorts declined more than the rates of the three younger cohorts between 1980–85 and 1995–2000 (see table 6), the net withdrawal rates of the three younger cohorts are projected to fall more than those of the three older cohorts in 2000–05, compared with 1995–2000. (See table 7.) As a result, the median age at exit from the labor force would increase between 1995–2000 and 2000–05 (again, based on unadjusted

data), from 62.0 to 62.4 for men and from 61.8 to 62.2 for women.

Note that there also was a further increase in the relative numbers of men and women aged 45–54 between 1995 and 2000. As we saw, between 1980 and 1995, the percentage of men and women of this age increased by 9 to 10 points. Between 1995 and 2000, however, the point gain was merely 0.8 for men and 1.2 for women, a marked deceleration of the rate of increase between 1980 and 1995. This further “younging” of the elderly labor force during the late 1990s tended to lower the median age at exit from the labor force, but the effect was quite small and was easily countered by the projected reversal of the cohort pattern of change in the net withdrawal rates.

Note, too, that the relative number of those aged 45–54 in 2005 is projected to be 2.6 percentage points lower than that in 2000 for men and 2.8 for women. This is a considerably larger change than that just noted between 1995 and 2000. If the projection is borne out, such a change would tend to raise the median age at exit from the labor force more than negligibly. With the further aging of the baby-boom cohorts, the elderly labor force is likely to continue to get older, adding further upward pressure on the median age. Whether the future pattern of changes in net withdrawal rates will oppose or reinforce such pressure and whether this factor will continue to have a considerably stronger effect on the median age at exit from the labor force than the age structure of the elderly labor force remains to be seen.

An important reason for the reversal of the pattern of change in net withdrawal rates between 1995–2000 and 2000–05 compared with the pattern of change between 1980–85 and 1995–2000 is that the labor force participation rates of those aged 65 or older are projected to decline by 2005 from

Table 5. Actual and hypothetical change in the median age of men and women 50 years or older at exit from the labor force between 1980–85 and 1995–2000

Category of change	Men	Women
Actual change		
1980–85	62.8	62.7
1995–2000	62.0 (62.0)	61.8 (61.4)
Change	-8 (-8)	-9 (-1.3)
Hypothetical change		
If the age distribution of the 1980 labor force had remained constant	-6 (-5)	-6 (-8)
If the 1980–85 cohort net withdrawal rates had remained constant	-1 (-2)	-1 (-3)

NOTE: The numbers in parentheses show the results of adjusting the 1995 and 2000 data for consistency with those prior to the 1994 revision of the Current Population Survey.

SOURCE: Calculated by the author.

Table 6. Change in 5-year cohort net withdrawal rates for reasons other than death, 1980–85 to 1995–2000¹

Cohort	1980–85	1995–2000		Ratio, 1995–2000/1980–85	
		Unadjusted ²	Adjusted ³	Unadjusted ²	Adjusted ³
Men					
45–49 to 50–54	0.0485	0.0424	0.0423	0.87	0.87
50–54 to 55–59 .....	.1046	.1054	.1089	1.01	1.04
55–59 to 60–64 .....	.3059	.2823	.2823	.92	.92
60–64 to 65–69 .....	.5585	.4121	.4537	.74	.81
65–69 to 70–74 .....	.4318	.3111	.3113	.72	.72
70–74 to 75–79 ⁴ .....	.5248	.4642	.4643	.88	.88
Women					
45–49 to 50–54 .....	.0207	.0399	.0399	1.93	1.93
50–54 to 55–59 .....	.1279	.1327	.1597	1.04	1.25
55–59 to 60–64 .....	.3043	.3195	.3179	1.05	1.04
60–64 to 65–69 .....	.5733	.4744	.5025	.83	.88
65–69 to 70–74 .....	.4714	.4138	.4138	.88	.88
70–74 to 75–79 ⁴ .....	.6513	.5781	.5787	.89	.89

¹ $(1 - R_2/R_1) \sqrt{S}$. See equation (1) in text.

² Calculated from published data.

³ Calculated from adjusted data. The 1995 and 2000 data were adjusted for consistency with those prior to the 1994 revision of the Current Population

Survey.

⁴ Data for age 75–79 were not available, so those for age 75 years or older were used as an approximation.

SOURCE: Calculated by the author.

the levels recorded for 2000, in contrast to the substantial increases recorded between 1995 and 2000. Such a decline, though, may not in fact occur, as Quinn would no doubt contend. However, Quinn's view of the prospects for a continued rise in the labor force participation rates of the elderly were opposed at the 1999 conference by the economist Dora Costa, who has written a book on the evolution of retirement in the United States between 1880 and 1990.¹⁶ To help judge the future trend in retirement age, it is useful to present their opposing arguments.

According to Quinn, a number of changes in public policy and in the private sector have made working later in life more feasible or more attractive than it was in the past. With regard to public policy, mandatory retirement is no longer permitted, the amount of money that Social Security beneficiaries can earn without loss of benefit has been repeatedly increased, and the delayed retirement credit for working past age 65 will have risen from 3 percent per year of delay in 1986 to a maximum of 8 percent by 2005. The latter figure "will be close to actuarially fair for the average worker. Instead of penalizing work beyond age 65, which it used to do, Social Security is becoming more age-neutral."¹⁷

In the private sector, there has been a big shift away from defined-benefit pension plans to defined-contribution plans, to the point where the latter now constitute the majority of plans. "Most [defined-contribution] plans are age neutral by design and do not contain the work disincentives that [defined-benefit] plans often have. As [defined-benefit] plans decline in relative importance, so does their ability to discourage work and to encourage workers to leave a job at a particular age."¹⁸ Moreover, says Quinn, the shift from manufacturing to service work, which is generally less arduous, probably facilitates the continued employment of older workers.

In contrast, Costa contends that it is "premature" to interpret the reversal of the decline in the labor force participation rates of the elderly since the mid-1980s as a reversal of the trend toward early retirement. She points out that in the past the rates of elderly men also have gone up temporarily, counter to the long-term decline. A *permanent* upswing would require a basic change in motivation. Her research on trends in retirement age in the United States and some European countries has led her to conclude that the "specific institutional details of private pension plans and of social security systems are not the primary forces driving the long-run trend."¹⁹ Furthermore, there is evidence that neither improvements in health nor sectoral shifts are significant determinants of the trend: Retirement rates have increased even as the health of the elderly has improved, and the shift from agriculture to manufacturing "had no effect on retirement trends."²⁰

What accounts for "much of the long-term increase in retirement rates," said Costa, is the rise in income of the elderly. Other contributing factors are that "retirement has become a social norm" and that retirement has become more attractive. For example, the development of "mass tourism and mass entertainment," the growth of affordable retirement communities in locales with favorable climate (reducing the dependence of an elderly person on his or her kin), a reduction in the "price of transport and communication with family members," and the expansion of social support services all have enhanced the attractiveness of retirement.²¹ Costa concludes that "future generations, generations with much higher average levels of education and with much better average health than past generations, may redefine the retirement lifestyle. But, provided that retirement continues to be attractive and that income levels do not fall dramatically (and permanently),

Table 7. Ratios of 5-year cohort net withdrawal rates for reasons other than death, 1995–2000 divided by 1980–85 and 2000–05 divided by 1995–2000

Cohort	1995–2000 divided by 1980–85 ¹	2000–05 divided by 1995–2000 ²
Men		
45–49 to 50–54	0.87	0.75
50–54 to 55–59	1.04	.93
55–59 to 60–64 .....	.92	.89
60–64 to 65–69 .....	.81	1.03
65–69 to 70–74 .....	.72	1.28
70–74 to 75–79 .....	.88	1.12
Women		
45–49 to 50–54	1.93	0.85
50–54 to 55–59	1.25	.79
55–59 to 60–64	1.04	.92
60–64 to 65–69 .....	.88	1.11
65–69 to 70–74 .....	.88	1.18
70–74 to 75–79 .....	.89	1.12

¹Adjusted data. See table 6.

²Calculated from published data.

SOURCE: Calculated by the author.

the trend toward early retirement is unlikely to reverse.”²²

In sum, Quinn argues that the aforementioned relatively recent changes in public policy and the private sector have begun to reverse the trend to early retirement. Costa, however, is not convinced that these changes are strong enough to counter the strength of the longer run growth in the income of the elderly and the development of conditions making retirement more attractive. This disagreement can be resolved by measuring the relative impact of these factors on future changes in workers’ retirement age. To do that successfully, however, requires that a number of decisions be made as to how to measure the “retirement age.” In addition to deciding on the appropriate indicator or indicators of retirement—for example, the end of a career job, exit from the labor force, the receipt of a pension—it is necessary to decide whether a single measure, such as the average age at the onset of retirement, is preferable to tracking a number of indi-

cators, such as the age- or cohort-specific labor force participation rates. Moreover, the issue of either choosing between or finding a way to reconcile cross-sectional and cohort perspectives should not be overlooked. Finally, the specification of the appropriate lower bound of the age range in which it is deemed retirement can occur should not be neglected.

There have been, and probably will continue to be, disagreements about the resolution of these issues, but there can be little dispute about several points. First, retirement is not limited to people aged 65 or older, as the *Times* story implies. Second, the widespread use of averages indicates their great utility, including the opportunity the average age at retirement provides to estimate the average duration of retirement. Third, to ascertain when people decide to leave the labor force or a career job or receive a pension, it is more realistic and accurate to use cohort rather than cross-sectional data, as the changes in women’s labor force participation rates illustrate. (See table 3.) The fourth and final point is one that was demonstrated 25 years ago, but that has repeatedly been ignored or overlooked since then. Perhaps calling it “Reimers’ rule” would help keep the press and scholars from continuing to make that same mistake. Reimers demonstrated that “there is no necessary connection between the movement over time in age-specific labor force participation rates and in the average age at retirement.”²³ Thus, declines in the labor force participation rate do not necessarily indicate declines in the average age at exit from the labor force, and, similarly, increases in the labor force participation rate do not always imply a rise in the average age of withdrawal from the workforce. The finding that the reversal in the decline of the labor force participation rates of men older than 64 and women older than 59 between the mid-1980s and 2000 is not inconsistent with the decline in the median age at exit from the labor force during the 1990s, and in fact was an important determinant of the decline, is a good illustration of Reimers’ rule. □

Notes

¹ See Murray Gendell and Jacob S. Siegel, “Trends in retirement age by sex, 1950–2005,” *Monthly Labor Review*, July 1992, pp. 22–29; and “Trends in retirement age in the United States, 1955–1993, by sex and race,” *Journal of Gerontology: Social Sciences*, May 1996, pp. S132–39.

² Earlier results regarding the duration of retirement were presented in Murray Gendell and Jacob S. Siegel, “Retirement quandary: more retirees at younger ages, living longer,” *Population Today*, March 1993, pp. 6–7, 9; and Murray Gendell, “Trends in retirement age in four countries, 1965–95,” *Monthly Labor Review*, August 1998, pp. 20–30.

³ Mary Williams Walsh, “Reversing decades-long trend, Americans retiring later in life,” *The New York Times*, Feb. 26, 2001, p. 1.

⁴ *Social Security Bulletin, Annual Statistical Supplement* (Social Security Administration, published annually).

⁵ Gendell and Siegel, “Trends by sex,” “Trends by sex and race,”

and “Retirement quandary”; and Gendell, “Trends in four countries.” The second article has the most thorough discussion of the method and its background and limitations.

⁶ Gendell and Siegel, “Trends by sex,” affords a detailed description of the sources of the data from 1950 through 1985. Subsequent data were obtained from the January issue of *Employment and Earnings* in the year following that in which the data were collected (for example, January 1991 for the 1990 data) or from the BLS website, www.bls.gov.

⁷ See Henry S. Shryock, Jacob S. Siegel, and associates, in Edward G. Stockwell, *The Methods and Materials of Demography*, condensed edition (New York, Academic Press, 1976), pp. 534–35.

⁸ Other studies that have used a cohort method to analyze labor force trends are cited in Gendell and Siegel, “Trends by sex,” “Trends by sex and race,” and “Retirement quandary”; and Gendell, “Trends in four countries.” Another relevant paper is Denis Latulippe, “Effective

retirement age and duration of retirement in industrial countries between 1950 and 1990,” *Issues in Social Protection*, Discussion Paper 2 (Geneva, Social Security Department, International Labor Office, 1996). The method used to calculate the average retirement age in that study is similar to the one used in the current article. An important exception is Latulippe’s use of cross-sectional, rather than cohort, data. Latulippe’s paper is available at the International Labor Organization’s website, www.ilo.org/public/english/protection/socsec/publ/dispp2.htm.

⁹ Anne E. Polivka and Stephen M. Miller, “The CPS after the redesign: refocusing the economic lens,” in John Haltiwanger, Marilyn E. Manser, and Robert Topel, eds., *Labor Statistics Measurement Issues* (Chicago, University of Chicago Press, 1998).

¹⁰ *Ibid.*, p. 281.

¹¹ *Ibid.*, p. 280. (More detailed age classes were not provided.)

¹² See Gendell and Siegel, “Trends by sex,” for a description of the limitations of the early labor force data and how the data were adjusted to obtain the requisite estimates.

¹³ Walsh, “Americans retiring later.”

¹⁴ See, for example, Joseph F. Quinn, “Discussion of Phillip B. Levine and Olivia S. Mitchell, ‘Expected changes in the workforce and implications for labor markets,’” in Anna M. Rappaport and Sylvester J. Schieber, eds., *Demography and Retirement: The Twenty-First Century* (Westport, CT, Praeger, 1993); Jill Quadagno and Joseph Quinn, “Does Social Security discourage work?” in Eric R. Kingson and James H. Schulz, eds., *Social Security in the 21st Century* (New York and Oxford, Oxford University Press, 1997); and Joseph F.

Quinn, “New paths to retirement” in Olivia S. Mitchell, P. Brett Hammond, and Anna M. Rappaport, eds., *Forecasting Retirement Needs and Retirement Wealth* (Philadelphia, University of Pennsylvania Press, 2000).

¹⁵ Joseph F. Quinn, “Has the early retirement trend reversed?” paper presented at the First Annual Joint Conference for the Retirement Research Consortium, “New Developments in Retirement Research,” May 20–21, 1999. The paper is available at the website of the Center for Retirement Research at Boston College, www.bc.edu/crr.

¹⁶ Dora Costa, “Has the trend toward early retirement reversed?” paper presented at the First Annual Joint Conference for the Retirement Research Consortium, “New Developments in Retirement Research,” May 20–21, 1999. The paper is available at the website of the Center for Retirement Research at Boston College, www.bc.edu/crr. (See also Dora L. Costa, *The Evolution of Retirement: An American Economic History, 1880–1990* (Chicago, University of Chicago Press, 1998).)

¹⁷ Quinn, “Early retirement trend,” p. 5.

¹⁸ *Ibid.*, p. 6.

¹⁹ Costa, “Trend toward early retirement,” p. 4.

²⁰ *Ibid.*

²¹ *Ibid.*, p. 6.

²² *Ibid.*, p. 7.

²³ Cordelia Reimers, “Is the average age at retirement declining?” *Journal of the American Statistical Association*, September 1976, pp. 552–58; quote from p. 552.