

# WORKING PAPER

## *Executive Summary*

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AT BOSTON COLLEGE

## THE RISING AGE AT RETIREMENT IN INDUSTRIAL COUNTRIES

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The labor force participation in the population past age 60 has fallen in nearly all rich countries during the past 50 years. Declines in participation were particularly noticeable among men, and the falloff in labor force engagement was evident among men as young as 50. Among 50-54 year-olds, the drop in male participation was more than offset by participation gains among women, so the overall activity rate in this age group typically increased over time. At older ages, however, labor force declines among men in most countries have been larger than the increases among women, implying that overall labor force participation fell in the population age 55 and older.

The declines in participation were much bigger both absolutely and proportionately in older age groups. Between 1950 and 1995, for example, the average participation rate of 60-64 year-old men in 21 rich industrial countries fell by almost half. Female activity rates increased or at least remained roughly constant at older ages, offsetting some of the impact of a lower male participation rate. In one respect, however, the male and female trends were identical. The falloff in participation rates as people grow older was considerably faster after age 55 in 1995 than it was 45 years earlier, and this is true for both men and women. According to International Labour Organization statistics, in 1950 the average activity rate of 60-64 year-old men was 13 percentage points (or 13 percent) lower than that of 50-54 year-olds. By 1995 the participation-rate difference between these two age groups was 42 percentage points (or 50 percent). If activity rates in both 1950 and 1995 are treated as estimates of a stable lifetime participation pattern in the two years, they imply much faster exit rates from the workforce in 1995 than in 1950. A similar change in exit rates occurred among women.

This paper proposes and estimates three simple measures of the speed of exit from the workforce. The “period exit rate” is the measure that imposes the least demanding information requirements. It can be estimated using data on labor supply, by age, for a single period of time. The measure can provide a misleading picture of the retirement process, however, when labor supply behavior is changing from one generation to the next. A second measure, the “cohort exit rate,” estimates labor force exit using a sequence of labor supply data for a single birth cohort. The data reflect the group’s withdrawal from the labor market between an early age (near the peak of lifetime labor supply) and a late age (when retirement is substantially complete). Although this measure provides the most reliable indicator of exit rates, it also imposes heavy data requirements. This means it cannot be estimated for a large number of birth cohorts except in countries with a long history of good labor force surveys. The third measure, the “partial cohort exit rate,” uses cohort data for a number of birth cohorts that have begun or partially completed the retire-

ment process in a given year. This measure is sensitive to business cycle influences, but it offers a less biased estimate of the rate of labor supply reduction than estimates based on information from a single cross-sectional survey. All three exit measures can be used to estimate labor supply reductions during retirement using a variety of indicators of labor supply, including the labor force participation rate, the employment rate, average hours of work, and average weekly earnings.

When estimates of the retirement process are derived using the cohort-based measures of labor force exit, I find that the retirement patterns of men and women are much more similar than they appear when they are estimated with a single year's data. The differences between the cohort-based and period exit rates are especially noticeable in the case of women, who experienced large increases in participation rates and paid work hours during the second half of the twentieth century.

The pattern of labor supply reduction during retirement looks broadly similar whether we use the labor force participation rate, the employment rate, average weekly work hours, or average weekly wages to measure the fall in supply. However, on average labor supply reductions appear to occur faster if labor supply is measured using a more comprehensive indicator, such as average work hours or average weekly earnings. This finding suggests that both the weekly hours of old people who remain employed and the weekly wages of aging workers tend to decline at older ages, pushing down aggregate hours and total earnings faster than the rate of decline in participation rates.

Like earlier researchers I find large and systematic differences across countries in the pattern of retirement. With important exceptions, countries in continental western Europe tend to have faster labor force exit than Japan or the English-speaking countries. Within continental Europe, Portugal, Switzerland, and most Scandinavian countries tend to have below-average exit rates. Within a given country there is a high degree of consistency between the retirement patterns of men and women. If men have high exit rates, it is likely that women in the same country will have above-average exit rates, and *vice versa*. For males, all three measures of the exit rate show a similar cross-national pattern of exit. Countries with a high period exit rate also have a high exit rate measured using either of the two cohort-based measures. For women there is less consistency between the period estimate and the cohort-based estimates. This suggests researchers should use caution in drawing conclusions about the trend in women's retirement based only on measures that are derived using age-group differences observed in a single cross-section survey.

Although there are major differences in the retirement patterns observed in different countries, the time series analysis shows there is one development that is relatively common across industrial countries. With few exceptions the rich countries have seen a recent decline in old-age exit rates compared with the rates that were common in the mid-1990s. The recent drop in exit rates is hardly uniform across countries, but evidence for a decline is reasonably robust in a large proportion of countries. Suppose we define the exit rate as the percentage decline in labor supply between ages 50 and 69 compared with the level that would be observed at those ages if labor supply did not decline below the level among 45-49 year-olds. Between 1995 and 2006 the period exit rate among older men fell an average of 3.6 percentage points in the 21 countries included in the analysis. The period exit rate of older women fell an average of 6.5 percentage points in the same countries. The partial cohort measure shows an even bigger drop in average exit rates between 1995 and 2006. For men in the 21 countries the average decline was 7.3 percentage points; for women it was 9.1 percentage points. Because the partial cohort exit rate is sensitive to changes in the labor market, it is possible that part of the decline is due to tighter labor markets in some of the countries. Much of the past increase in labor force exit rates occurred in an environment of very tight labor markets, however, so it is unclear how important this factor has been in explaining the recent trend toward slower rates of labor force exit.

We can use standard data on labor force participation to see whether lower exit rates have so far had a noticeable impact on participation rates in older age groups. To gauge the relative magnitude of the recent rise in male participation rates, I calculated the reduction that occurred between 1960 and the year between 1960 and 2006 when the participation rate was lowest. Since that low point in participation rate occurred, average participation rates have increased 2.7 percentage points among men 50-55 years old, 5.6 percentage points among men 55-59, 9.1 percentage points among men 60-64, and at least 5.6 percentage points among men between 65 and 69. These estimates represent average increases in male participation rates in 21 industrialized countries. In comparison with the long-term decline in participation rates that occurred after 1960, the recent increases in male participation are not trivial. The 2.7-percentage-point average increase among men between 50 and 54 represents about one-third of the average drop in participation rates that took place between 1960 and the year with the lowest male participation rate. For men between 55 and 59 years old the recent rebound in participation has offset a little less than one-third of the earlier decline. For men between 60 and 64 it has offset a little less than one-quarter of the earlier decline. The recent rise in the participation rates of older men differs widely across countries, and a handful of countries have seen little recent rise. On average, however, recent statistics on male participation tend to confirm that old-age labor force exit rates have begun to drop, reversing a decades-long trend toward earlier retirement.

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