Commentators constantly cite an increase in labor mobility as a major reason for the shift in the private sector from defined benefit to defined contribution plans. But while most casual observers accept such a phenomenon, economists have been hard pressed to find any significant change over time. Only in recent years have the data indicated that mobility might have increased for some groups. This pattern suggests that the advent of 401(k) plans led to an increase in mobility rather than an increase in mobility leading to the proliferation of 401(k)s. This paper attempts to sort out this “chicken and egg” issue using data from the Current Population Survey (CPS) and the 1984 through 2001 panels of the Survey of Income and Program Participation (SIPP).

Pension Coverage and Mobility

Twenty years ago, most people with pension coverage had a traditional defined benefit plan. Today, most rely on a defined contribution plan – most often a 401(k). Defined benefit plans and 401(k)s would be expected to have a very different effect on worker mobility. Workers with final earnings defined benefit plans who change jobs, even among firms with identical plans and immediate vesting, receive significantly lower benefits than workers with continuous coverage under a single plan.

Defined contribution plans generally – and 401(k) plans in particular – should not deter mobility in any way. Benefits accrue smoothly over the worker’s lifetime, so once vested, workers do not forfeit any benefits when they change employers, and therefore 401(k) plans. Thus, commentators often suggest that increased mobility of U.S. workers is one factor that explains the shift in coverage to 401(k)s.

Shift in Pension Coverage and Tenure

To date the research evidence on mobility and tenure is far from clear, but researchers were not focused on older workers who would likely be most affected by the shift in pension coverage. To identify possible patterns, the authors use the tenure supplements to the CPS and the SIPP to explore tenure trends. Two possibilities exist. First, a significant increase in mobility occurred throughout the workforce, making 401(k)s a much more attractive vehicle – the chicken, then the egg. Alternatively, as much of the earlier literature suggests virtually nothing happened in the 1970s and 1980s and mobility increased only after the spread of 401(k) plans – the egg, then the chicken.

The CPS data on median tenure from 1973 through 2004 are striking in two respects. First, before 1990 the median years of tenure for both males and females is virtually flat for every age group. These data confirm much of the earlier work on mobility that showed very little change during the 1970s and 1980s. Second, beginning in 1990, after a decade of 401(k) plans, the median tenure for men at older ages starts to decline. If the shift in pension coverage were to have an effect, this is where one would expect to find it.
Due to the limitations of the SIPP, data are available only since 1986. But for the period for which the CPS and SIPP data overlap, the story is virtually identical. Beginning around 1990, the median tenure for older male workers declines markedly. For males at younger ages and for females, median tenure remains virtually unchanged.

Retention Rates

The weakness of median tenure data is that they are susceptible to changes in arrival rates – that is, the number of workers beginning new jobs. A way around the problem of new arrivals is to look at the retention rate, which is the probability that a worker will have an additional t years of tenure t years in the future. The results show that the retention rates for older male workers were significantly lower in 1996-2000 than in 1983-1987. Therefore, the retention rates and median tenure data tell the same story – older workers became more mobile in the 1990s as coverage under defined benefit plans declined.

Relationship between Tenure and Pension Type

The final exercise uses 1998 and 2003 SIPP data to estimate the relationship between pension coverage and tenure for older workers (aged 45-64). The analysis proceeds in three steps. The first is to regress each worker’s years of tenure against a year dummy. The second step is to introduce a host of control variables that might explain the decline in tenure between 1998 and 2003, such as age, gender, education, nature of the firm, nature of the job, union coverage etc. The third step is to re-estimate the second equation replacing the pension coverage dummy with a variable for coverage under a defined benefit plan only, a defined contribution plan only, or both. The hypothesis is that the decline in tenure is associated with a continued shift from defined benefit to defined contribution plans, so that once this information is introduced into the equation the year dummy no longer has an explanatory power. The results are consistent with this hypothesis, suggesting that the reduction in tenure between 1998 and 2003 and the shift in coverage from defined benefit to defined contribution plans are related.

Conclusion

Two conclusions emerge from the preceding analysis. First, the labor economists who study mobility in the 1970s and 1980s appear to be correct. Even though the structure of personnel and production systems was changing in the late 1970s and early 1980s, tenure and retention rates were steady during this period. Commentators should delete increased mobility from their list of reasons for the shift to 401(k) plans. Second, after the widespread adoption of 401(k) plans, mobility and tenure patterns changed. And the change occurred among the group that would have been most constrained from moving under a defined benefit regime – namely, older workers with long tenure. It is impossible to prove that the shift in coverage caused the increased mobility, but it appears that the egg came first then the chicken.