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Putting Off Retirement: The Rise of the 401(k)

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In the last 20 years, one notable trend in pension structure is that defined benefit (DB) pensions (i.e., plans that offer a predetermined payoff after a certain number of years of employment) have become less common while defined contribution (DC) plans (e.g., 401(k) plans) have become much more common.[1] Economic theory suggests that one reason companies offer DB pensions is to induce workers to retire at a specific age. Does the rise of the 401(k) plan change the retirement incentives of workers?

A standard DB plan is set up to spike in value at a predetermined age. A worker with a DB plan, therefore, has the incentive to stay at his or her job at least until the value of the pension is at its highest. For example, the payoff from a DB pension may leap from 20 percent to 40 percent of pre-retirement income when the worker turns 60. Continuing to work past age 60 leads to little or no additional increases in future benefits, thus giving the worker the incentive to retire at age 60.

A DC plan differs from a DB plan in two important ways: the annuity value of a DC plan does not hit a peak at any certain age and a DC plan is portable between jobs. A worker with a DC plan, then, can change jobs at any age without jeopardizing retirement income. With DC plans, workers retire when the combination of retirement annuity income is sufficiently high and work satisfaction is sufficiently low. The portability of DC plans across employers and the absence of an upper bound on their annuity value should imply later retirement dates, on average. But do employees with 401(k)'s really work longer?

Using data from the Health and Retirement Study, Leora Friedberg and Tony Webb (2000) estimate the likelihood, from one year to the next, that a full-time employee will voluntarily leave his or her job and fully retire.[2] The accompanying Figure shows predicted labor participation of workers with a DB plan. More than 80 percent would retire by age 65. If those same workers had a DC pension, only about 60 percent would retire by age 65. Controlling for earnings, wealth, and Social Security, Friedberg and Webb find that workers with DC pensions are less likely to retire in any given year than workers with DB plans. Overall, they estimate that a worker with a DB plan retires 23 months earlier on average, other things equal. They also predict that the change in pension structure to date will raise the average retirement age of pensioned workers between three and eight months.

Changes in the workplace have afforded workers more flexibility and more mobility. Pension coverage has followed this trend with portable 401(k) plans replacing defined benefit pensions, thereby allowing individuals to choose their own retirement age based on their personal preferences concerning work satisfaction and desired retirement income. ■

[1] The portion of workers with some kind of pension coverage that have a DC plan jumped from 60 percent in 1983 to 79 percent in 1995. At the same time, the number of workers with a DB plan fell from 85 percent in 1983 to 40 percent in 1995 (Friedberg, Leora and Owyang, Michael T. "Not Your Father's Pension Plan: The Rise of 401k and Other Defined Contribution Plans." Federal Reserve Bank of St. Louis *Review*, January/February 2002, *84*(1), pp. 23-34).

[2] Friedberg, Leora and Webb, Anthony. "Retirement and the Evolution of Pension Structure." Working Paper No. 2000-30, University of California at San Diego, January 2000.

Predicted Labor Force Participation of Workers