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# Nonmonetary Job Characteristics and Employment Transitions at Older Ages

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Besides compensation and financial incentives, several other work-related factors may affect retirement decisions and individual employment transitions at older ages. Job characteristics such as physical and cognitive demands, use of technologies, responsibility, difficulty, stress, peer pressure, and relations with co-workers play a crucial role in determining commitment to work, especially for individuals on the verge of retirement. Determining how these job attributes influence retirement decisions can help in identifying drivers, other than monetary incentives, that may prolong workers' attachment to the labor force.

We study employment transitions and retirement plans of older workers using data from the Health and Retirement Study (HRS) and the Occupation Information Network (O\*NET) database. Because of its longitudinal dimension and richness of information, the HRS constitutes an ideal data set to analyze changes in labor-force status in relation to the numerous economic, social, and health factors, as well as to specific individuals' traits and preferences that may shape them. A key feature of the HRS for the purposes of our study is the elicitation of individuals' assessments of several aspects of their own jobs beyond monetary compensation. At the same time, the availability of occupation codes allows us to link the HRS to the O\*NET database and to obtain a broad range of representative job characteristics for each occupation.

Self-reported measures of job attributes may better reflect heterogeneity within occupational categories. Moreover, individuals' labor-supply decisions may be more strongly related to their subjective perceptions of job conditions than to objective characteristics of their work environment. On the other hand, the way respondents report information about their jobs and workplaces may be a function of their ability, personality, and other traits. If so, the effect of self-reported job conditions on labor-supply decisions may be confounded with individual heterogeneity shaping the perception of the work environment. In order to investigate the relationship between nonmonetary job characteristics and labor-force status transitions, as well as retirement plans, we run separate analyses using both "subjective" (from the HRS) and "objective" (from the O\*NET) measures of job attributes. By comparing the results of these two parallel analyses, we gauge the relative importance of individuals' perceptions about their work environments and objective job characteristics in driving labor-supply decisions at older ages.

We use data over the period 2002-2012 and restrict our sample to individuals ages 51-79, excluding self-employed and disabled. Our first outcome of interest is the probability that a full-time employee in a given wave is observed in full-time

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employment, part-time employment, retirement, or unemployment/out of the labor force in the next wave. Our second outcome is the distance (in years) between planned retirement age and current age; our third and fourth are the subjective probabilities of working full-time after ages 62 and 65, respectively.

To disentangle the effect of nonmonetary job characteristics on labor-supply decisions and retirement expectations from other potential determinants, in our empirical analysis we control for basic demographics and, as much as data allow us, for other factors that are bound to affect one's proclivity to work. These range from compensation, pension arrangements and health insurance coverage to family circumstances, work ability, and individual-specific traits (e.g., personality and risk aversion).

We find strong and statistically significant relationships between labor-force transitions and job characteristics. These relationships are more pronounced and more precisely estimated when we use objective job attributes taken from the O\*NET than when we use self-reported job characteristics taken from the HRS. Also, objective measures are more powerful determinants of retirement, while self-reported ones are more important drivers of the decision to move from full-time to part-time.

An increase of one standard deviation in the level of "objective" physical demand decreases the probability of remaining in full-time employment by two percentage points (pp). It has no effect on the likelihood of moving to part-time, but it increases the probability of retirement by 1.5–1.8 pp. This represents a 13 percent change with respect to the observed transition probability of retirement in the sample of 12 percent. An increase of one standard deviation in the level of perceived on-the-job physical effort decreases the probability of remaining in full-time employment by 1.2 pp, has no significant effect on the transition to retirement, and increases the probability of part-time work by 0.8 pp. The latter is a 10 percent change with respect to the observed transition probability of moving to part-time of 8 percent.

A one standard deviation increase in the "objective" level of social interactions on the job decreases the likelihood of retirement by nearly 1 pp, while increasing the likelihood of moving to part-time by 0.6 pp and the probability of remaining in full-time employment by 0.4 pp. Its self-reported counterpart elicited by the HRS does not exhibit a significant relationship with labor force transitions. Perceived task difficulty and job-related stress make individuals less likely to continue in full-time and more likely to retire altogether. The "objective" degree of on-the-job responsibility, instead, increases the probability of moving to part-time, but does not affect the transition into complete retirement.

The results of the analysis using distance from planned retirement age and subjective probabilities of working full-time at older ages are in line with those focusing on actual labor force transitions. The objective level of physical demands decreases distance from planned retirement and the subjective probability of working full-time after age 62 and 65. Perceived physical effort decreases distance from planned retirement, but has no significant effect on the probabilities of working at older ages. Perceived and objective social skills requirements are associated with greater distance from planned retirement age, as well as with higher likelihood of working past age 65.

Our findings suggest that nonmonetary job characteristics are important determinants of labor supply decisions at older ages. While we have robust evidence that job demands and work conditions influence retirement paths and plans, our analysis is still preliminary in its attempt to uncover causal relationships: Unobservable individual characteristics responsible for sorting into specific occupations may also shape retirement decisions, an issue we will address in future research.

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