Identifying the Heterogeneity in Work-Leisure Tradeoff

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ABSTRACT: Labor force participation is a key determinant of important aggregates in the economy, such as employment and hours worked. Understanding and predicting the behavior of participation in the macroeconomy requires identifying individuals’ trade-off for work and leisure correctly, and the underlying heterogeneity. However, since observed work-leisure choices are influenced by various other determinants such as year, age, and cohort effects, it is difficult to identify the heterogeneity in these preference parameters using existing datasets without imposing some additional assumptions. In addition, observational data suffers from issues such as labor market frictions and unobservables, which may lead to biased inference. We address this challenge by designing a novel survey in which respondents are presented with multiple scenarios, in each of which they are asked to choose between two different job offers. The scenarios vary work hours, wage offers, and the outside option of non-work. These scenarios are individual-specific, and take into account the individual’s household income, consumption, and current and past labor market history. Using the variation in this rich data, we estimate a life-cycle model to recover the unique preference parameters separately for each individual without imposing any parametric assumptions on the underlying distribution of the heterogeneity in preferences. The elasticities implied by the estimated parameters vary systematically across demographic groups (such as gender, education, and income). For example, the wage elasticity with respect to leisure is negative for only part-time hours for younger females (that is, younger females are willing to increase labor supply in response to an increase in wages, but only in the range of part-time hours). On the other hand, the estimated elasticity is negative for younger males for all (except very long) hours. There is also substantial heterogeneity in estimated elasticities within each of the demographic groups. In order to highlight the importance of this heterogeneity, we assess the impact of changes in childcare subsidies on labor supply in a life-cycle labor supply model with and without this heterogeneity.

KEYWORDS: labor supply; gender; household survey.