Actual Experience, Potential Experience or Age, and Labor Force Participation by Married Women

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In this paper, the limitations of potential experience and age as proxies for market experience are discussed. Results from a conditional logit model estimating the probability of participation by married women are sensitive to the measure of experience used in the empirical specification. Married women usually have noncontinuous labor market histories so age and potential experience will fall short of actual experience. Direct information about a woman's labor market history is necessary in empirical studies of the market behavior of married women. (JEL J22)

I. Introduction

Labor force participation by married women, especially married women with children, has increased over time. This has stimulated research addressing the labor market behavior of married women. Theoretical advances suggest that labor market decisions are made within a life cycle context. Econometric models employed in empirical studies of labor supply have become more sophisticated, especially the wider use of fixed and random effects models to statistically control for latent characteristics. Despite the advances, findings may suffer from data limitations. One common problem encountered in empirical work on labor supply is determining an appropriate variable to represent an individual's accumulation of human capital gained through market activities. Many studies have relied on potential experience [Mincer, 1974], measured as age minus education minus five. Others employ an individual's age. Proxies for time spent in the market may suffer from measurement error and bias coefficient estimates when continuous participation is not evident. Not only might the coefficient on the experience variable be biased, but the coefficient on education might also be affected if education and experience are related.

The limitations of potential experience and age as proxies for human capital obtained by market participation are discussed. Results from a fixed effects model of labor force participation, including the number of years a married woman has worked since age 18 up to 1980, are compared with the results using potential experience and age as regressors. The findings suggest that empirical work addressing the market efforts of married women requires access to a data set that includes direct information about labor market histories.

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II. Labor Force Participation and Experience

Estimating the probability of participation within a life cycle context requires a threshold established by a woman's tastes for leisure or reservation wage. Participation is observed when the offered wage crosses the threshold. Offered wages are unmeasured and observed only if a woman is employed, but related to the amount of human capital acquired through participation and schooling, hence the experience variable is important in studies of labor supply.

Market experience is important to labor force participation decisions for a number of reasons. A common association advanced in the literature is a direct relationship between experience, productivity, and wages. However, internal labor markets and policies that encourage promotions from within the firm recognize longevity. Women who have withdrawn from the labor force may find that employment search is more efficient if they possess skills acquired through prior market experience. Women who have not worked in the market have not obtained market experience and consequently obtaining employment may be difficult or market options limited.

A measure of potential experience assigns the same amount of market experience to women of the same age and educational status even though their labor market histories might differ. The dubious assumption that all time spent out of the labor market can enhance skills is restrictive. Further, rather than capturing experience, age serves as a crude proxy for cohort effects such as educational quality, mores regarding women working outside of the home or reflects fewer market opportunities available to individuals over time due to age discrimination. Potential experience and age will not aptly reflect a woman's desires for labor market association, her commitment to the labor force nor the effect of time spent in market activities on wages when continuous participation is not evident. Reliance on potential experience or age in empirical studies may suggest inappropriate conclusions about women's labor market behavior.

III. A Fixed Effects Model

Important factors unavailable to an investigator such as tastes for market work, quality of education, motivation, and views regarding child care influence labor supply decisions. These factors explain a good deal of the decision to work in the market. A fixed effects model can be relied on to statistically control for latent characteristics that are constant or stable over time.

Since many latent characteristics that influence labor supply are correlated with measured variables (tastes for market work and views about child rearing determine the amount of time a woman spends in market activities), accounting for their effects in the error term of the estimating equation is inappropriate. An omitted variables bias will affect coefficient estimates.

Chamberlain [1982, 1984] suggests maximizing a likelihood function that is conditional on a sufficient statistic summarizing the latent characteristics. He recommends the sum

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