An Explanation for the Puzzling Decline of Female Labor Supply in India

Neha Agarwal*
University of California, Riverside
January 29, 2017

Abstract

In India, despite economic growth, decrease in fertility, and increase in female education, female labor force participation (FLFP) rate is on the decline. This paper analyzes one mechanism that explains this puzzling change—male household incomes. I use data from 1999 to 2012 of the National Sample Survey and perform a district-level analysis to estimate the effect of married male earnings on the FLFP rate of married females. I also use two rounds of the Indian Human Development Survey individual panel to estimate the effect of husband’s earnings on wife’s labor supply. My analyses from both sources of variation in male earnings show a robust negative effect of married male earnings on the married FLFP rates in India. I find that a 10 percent increase in male earnings reduces married women’s labor force participation by approximately 0.6 percentage points. I also find a negative impact of married male household income on labor supply of the elderly and teenagers, and do not find it for females who have never been married. Additionally, in my third empirical strategy, I show that a negative economic shock in the household leads to an increase in the probability of a married female participating in the labor force between 2005 and 2012. These findings are consistent with the framework described in Goldin (1994) where economic development may result in declining FLFP during the initial phase of economic development. Results in this paper contribute to the empirical evidence of added worker hypothesis in developing economies, and indicate a strong economic mechanism—income effect—behind the puzzling trend of FLFP in India.

Keywords: Female Labor Force Participation, Income Effect, India, Gender

JEL Codes: J 160, J 210, J 220, J 010

*I am deeply thankful to Mindy Marks, Joseph Cummins and Anil Deolalikar for their invaluable guidance and support. This paper has also benefited from discussions with Michael Bates, Robert Kaestner, and seminar participants at the Applied Economics brown bag at UCR. Contact details: nagar002@ucr.edu. Department of Economics, University of California, Riverside. All errors are my responsibility.