Experience-biased Technical Change

CFM-DP2015-17
Francesco Caselli
Centre For Macroeconomics and London School of Economics and Political Science

The baby-boom cycle has caused very large swings in the relative supply of experienced workers (first a large decline, and then a large increase). Yet, the experience premium has failed to decline markedly in the period where the supply of experience has increased. I develop a methodology to estimate the increase in the relative demand for experience that is required to reconcile the behavior of prices and quantities, and show this to have been large - a phenomenon I dub experience-biased technical change. I conjecture that one of the drivers of experience-biased technical change is a decline in the relative demand for physical strength. In support of this conjecture, I show that occupations requiring high or moderate physical strength have accounted for a declining share of weeks worked in the economy, with sedentary occupations experiencing a corresponding increase. I also confirm that older workers have a comparative disadvantage in occupations requiring physical strength.