

Demographic Change and the Equity Premium

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Policy Abstract

Changing age demographics are reducing the relative size of the working age population as a fraction of the overall population. The increased scarcity of labor, relative to physical capital, would be expected to increase wages and, at the same time, decrease the rate of return on capital. This result has been illustrated in our previous work. The question addressed in this paper is how this will translate into financial market returns and, more specifically, on the relative return on riskier assets like stocks, as compared with safer assets like government bonds. This differential is typically referred to as the equity premium. Will stocks become relatively more attractive investments or relatively less attractive investments during a period of significant population aging worldwide? The paper includes both a theoretical and an empirical component. A central finding of the theoretical analysis is that the equity premium increases when smaller cohorts enter the labor market, as we expect to be the case over the coming decades. Thus riskier investments like stocks would be expected to elicit comparatively higher returns than safer investments like government bonds. We follow up our theoretical analysis with simulations designed to quantify these effects. The simulations indicate that the expected decrease of the risky rate of return to capital until 2030 is in the range of 1.2 percentage points. However, the decrease in the risk-free interest rate on government bonds is slightly higher than that, so that the equity premium increases by about 0.28 percentage points.