Annuities are financial products that provide a stream of lifelong income to the purchaser in exchange for an upfront payment. Therefore, they provide insurance against outliving one’s income and are potentially attractive to older retired individuals, who are no longer earning substantial labor income and are beginning to consume their retirement wealth. However, private annuity markets are relatively small compared to the potential demand from older individuals. Numerous researchers have considered this rather modest level of private annuity activity to be puzzling.

One important consideration in examining individuals’ decisions about purchasing annuities on their own is the amount of annuity income they have coming automatically from programs like Social Security and defined benefit pension plans. Previous research has considered this “pre-annuitized” wealth to be 50 percent of total wealth for a household entering retirement, which leaves the remaining half of wealth in an unannuitized form.

Our research examines the extent to which annuitization makes sense for couples and for single women using mathematical simulations under a variety of assumptions. One significant difference between our work and previous research is that we allow households to annuitize any amount of their unannuitized wealth at any age. Previous research has relied on a much more limited comparison of complete annuitization at age 65 to no annuitization.

When we use the assumption that 50 percent of total wealth is pre-annuitized, we conclude that couples with plausible levels of risk aversion and average mortality should delay annuitizing any of their wealth until they are aged 74 to 89 and, in some cases, should never annuitize. Those couples that do annuitize should generally do so with only a portion of their wealth. If the actuarial unfairness of an available annuity increases, households will delay annuitization and reduce the amount annuitized. If a household is more risk averse, it will annuitize a larger amount and do it sooner. In contrast to married couples, it is usually optimal for single women to annuitize at substantially younger ages, at around 65 and 70 respectively.

However, these findings actually overstate the level of annuitization that is desirable because we find that, using the Health and Retirement Study, the level of pre-annuitized wealth is greater than 50 percent for nearly all households. Using a higher level of pre-annuitized wealth in our simulations changes the picture considerably. Our resulting simulations indicate that the median married couple has no need to annuitize at any age. For the median single woman, some annuitization may still make sense depending on her degree of risk aversion.
While most people have high levels of pre-annuitized wealth today, the picture could change in the future because of the shift in private pensions from defined benefit plans (which automatically pay an annuity) to 401(k)-style defined contribution plans (which do not). In short, households will have less of their wealth pre-annuitized in the future. Taking this shift into consideration, our simulations show that annuitization becomes somewhat more attractive to both married couples and single women, but couples will only annuitize when both the expected value of annuities and their level of risk aversion are high. Even then, they will delay annuitizing until age 78.

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