

## Imagining the Future of Longevity Bonds

By Editor Test      *Wed, Jun 9, 2010*

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If Americans begin to live longer than expected—that is, if miracle drugs overwhelm the effects of the obesity epidemic—then annuity manufacturers and the Social Security Administration would risk facing much higher payouts than expected.

Offsetting that risk by increasing reserves would force insurers to raise prices for life annuities. That would hurt demand annuities. Another solution that academics propose involves the use of so-called longevity bonds.

A new brief from the Center for Retirement Research at Boston College, [The Case for Longevity Bonds](#), highlights the benefits of these long-duration, coupon-only bonds, which governments alone would have the capacity to issue. (The brief is based on a longer paper, [Sharing Longevity Risk: Why Governments Should Issue Longevity Bonds](#), from the Pensions Institute, Cass Business School, City University, London.)

Governments would initially sell the bonds, earning a modest premium, to insurance companies. The bonds would pay coupons that would be higher when the more people outlived expectations and lower when fewer people did. No repayment of principal would be involved. As the brief explains:

- The bond coupons payable each year depend on the proportion of a given cohort that is alive in that year—for example, the percent of men born in 1945, and who were age 65 in 2010, that survives to 2011, 2012, and so on.
- Coupon payments are not made for ages for which longevity risk is low—for example, the first coupon might not be paid until the cohort reaches age 75 (such a bond would be called a deferred longevity bond).
- The coupon payments continue until the maturity date of the bond, which might be, for example, 40 years after the issue date, when the cohort of males reaches age 105.
- The bond pays coupons only and has no principal repayment.

It's not a simple solution. The bonds would not make a perfect hedge for every insurer, since each insurer's annuitant base would be different from the people on whose lives the bond's coupons were calculated. Sub-populations with widely different longevity—African-American men from the southeast U.S. versus Hawaiian women of Asian descent, for instance—might need different longevity bonds.

The paper envisions a longevity bond market where, after a transition period, the government-sponsored bonds would cover only the risk from age 90 forward, thus relieving capital markets of the tail longevity risk that could eventually make life annuities prohibitively expensive.

