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Erhan Bayraktar, MI, and S. David Promislow and Virginia R. Young*

(vryoung@umich.edu), 530 Church Street, Department of Mathematics, University of Michigan, Ann Arbor, MI 48109. Purchasing Term Life Insurance to Reach a Bequest while Consuming.

We determine the optimal strategies for purchasing term life insurance and for investing in a risky financial market in order to maximize the probability of reaching a bequest goal. We extend our previous work (Bayraktar et al. (2014a), Purchasing life insurance to reach a bequest goal, to appear, *Insurance: Mathematics and Economics*) in two important ways: (1) we assume that the individual consumes from her investment account, and (2) we add a risky asset to the financial market. We learn that if the rate of consumption is large enough, then the individual will purchase term life insurance at any level of wealth, a surprising result. We also determine when the individual optimally invests more in the risky asset than her current wealth, so-called *leveraging*. (Received January 16, 2015)