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Feature Articles

Life Insurance Lapse Behavior

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appear to more directly affect the decision to lapse for younger households, while they are generally unrelated to the lapse decision for older households.

Notes

Following Kuo et al. (2003), we use the term lapse to encompass both life insurance surrender activity (i.e., electing to receive the cash surrender value that has accumulated in a cash value (whole) life insurance policy in return for the life insurance coverage) and life insurance lapse activity (i.e., canceling the policy by failing to pay the premium).

Carson and Dumm (1999) show that insurer lapse rates are also inversely related to the overall performance of life insurance policies. Similarly, Gatzert et al. (2009) provide evidence that secondary market purchases of life insurance impacts expected lapse and surrender rates that can negatively affect insurer profits.

Smith (1982) and Walden (1985) discuss the value of various options contained within life insurance policies, including the option to surrender a life insurance policy.

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Due to the nature of the data, we are unable to test the interest rate hypothesis (IRH). Such a test would generally require the use of either (1) macroeconomic factors and/or (2) additional information regarding the specific characteristics of the life insurance policy. Since the HRS data only provides limited information regarding the policies held by the respondents and because we are interested in evaluating the household-level factors, we exclude the IRH from the analysis.

In addition to using the original HRS data from the University of Michigan, we also supplement that data with publicly available RAND HRS data to ensure consistency across each of the variables included in our models.

We exclude 1992 and 1994 because the HRS survey did not ask lapse-specific questions in those years.

We remove all households that did not have life insurance in the previous survey so as to limit our focus only on those households that have the ability to lapse a life insurance policy. Each of the models presented below were reestimated when including households that did not report having life insurance in the prior survey. The results of the reestimated models were generally qualitatively similar to those presented in this study, with the primary difference being that the coefficient on the NegNW1 variable is positive and significant for the full sample when including households that did not previous

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We calculate net worth as household assets minus household liabilities. Household assets include (1) the net value of stocks, mutual funds, and investment funds, (2) the value of checking, savings, or money market accounts, (3) the value of CDs, government savings bonds, and Treasury bills, (4) the net value of vehicles, (5) the net value of businesses, (6) the net value of real estate, (7) the net value of bonds and bond funds, (8) the net value of IRAs and Keogh accounts, (9) the value of the primary residence, and (10) the value of all other savings. Liabilities are calculated as the sum of (1) the value of the mortgage on the primary residence, (2) value of other loans on the home, and (3) the value of all other debt.

It should be noted that the decision to lapse a policy following a reduction of income could be attributed to either (1) the household needing funds contained within the policy to cover expenses or (2) the household being unable to pay the premium or unwilling to allocate a portion of current household funds to continue paying premiums. Unfortunately, the data do not allow us to distinguish between the two aforementioned reasons.

Individuals are identified as having purchased a new life insurance policy since the previous HRS survey based on the following survey question: “In the last two years, have you obtained any new life insurance policies?”

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In additi d the inclusion ving question t are the chances nce totaling $50, portion of the tota f the sample. quest proxies a he decision to lapse we do not report th

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government savings bonds, and Treasury bills, and (4) the net value of bonds and bond funds.

Post-estimation, we test to determine if the coefficient on NegInc1 and the coefficient on NegInc2 statistically differ both for Model 1 and Model 2. We fail to reject the null hypothesis that the coefficients on NegInc1 and NegInc2 differ significantly. We also test to determine if the coefficients on NegInc1 and NegInc2 differ from the coefficient on NegInc3. We reject the null hypothesis that NegInc1 and NegInc2 have coefficients that are statistically equivalent to the coefficient on NegInc3.

TABLE 3 Household-Specific Factors and the Decision to Lapse

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Additional variations of the models were estimated when including (1) involuntary lapse observations as “nonlapse” events and (2) involuntary lapses and classifying them as lapse events. The (unreported) results are qualitatively similar for all independent variables except the unemployment variable (NewUnemploy). When classifying involuntary lapses as voluntary lapses, the coefficient on the unemployment variable is positive and statistically significant. This result is not surprising, as involuntary lapses are ofte as an employe

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Related Research Data

An International Analysis of Life Insurance Demand
Source: Journal of Risk & Insurance
Liquidity, Estate Liquidation, Charitable Motives, and Life Insurance Demand by Retired Singles
Source: Journal of Risk & Insurance
The Demand for Life Insurance in Mexico and the United States: A Comparative Study
Source: Journal of Risk & Insurance
An Approximate Distribution of Estimates of Variance Components
Source: Biometrics Bulletin
Modeling Surrender and Lapse Rates With Economic Variables
Source: North American Actuarial Journal
Examining Life Insurance Ownership through Demographic and Psychographic Characteristics
Source: Journal of Risk & Insurance

Whole-life insurance lapse rates and the emergency fund hypothesis
Source: Insurance Mathematics and Economics
Main Determinants of Lapse in the German Life Insurance Industry
Source: North American Actuarial Journal
Household Life Cycle Protection: Life Insurance Holdings, Financial Vulnerability, and Portfolio Implications
Source: Journal of Risk & Insurance
Disintermediation Through Policy Loans at Life Insurance Companies
Source: The Journal of Finance
The Demand for Life Insurance in OECD Countries
Source: Journal of Risk & Insurance
A Dynamic Analysis of the Demand for Life Insurance
Source: Journal of Risk & Insurance
An Empirical Study on the Lapse Rate: The Cointegration Approach
Source: Journal of Risk & Insurance
Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches
Source: Review of Financial Studies
The Demand for Life Insurance Policy Loans
Source: Journal of Risk & Insurance