# Running Lapse around Variable Annuities

By Kerry Pechter *Wed, Dec 7, 2011*

*As the living benefits of variable annuities became more valuable during the financial crisis, contract owners astutely held on to them, according to a presentation by Ruark Consulting at a recent Society of Actuaries meeting in Chicago.*

Judging by their low lapse rates during the financial crisis, variable annuity contract owners knew when their living benefits were "in the money"—that is, when the account value fell below the benefit base—and consequently held onto them even tighter than they normally would.

That's one finding of a recent study by Ruark Consulting, the Simsbury, Conn.-based actuarial and reinsurance consulting firm. Based on seven million policy years of data from eight VA issuers over the period from 2007 to 2010, the results were presented at the Society of Actuaries' Equity-Based Insurance Guarantees meeting in Chicago in November.

At a time when some VA issuers are growing ambivalent about that business— especially after a quarter when stock indices and interest rates fell and some issuers posted hundreds of millions of dollars in new reserves against those blocks of business—policy lapse rates are under scrutiny.

The timing of contract lapses is important. When values of the funds underlying the VA guarantee fall, assets under management fall and fee income falls, hurting the recovery of commissions paid to intermediaries (deferred acquisition costs, or DAC).

Low interest rates also hurt the yield that helps support the guarantees. Low lapse rates preserve fee income, but also may keep the insurer on the hook for guarantees that are, at least temporarily, underfunded.

Lapse rates therefore can make a big difference not only in the issuers' long-term exposure to the risks and rewards of a VA with a guaranteed payout rate, but also in their short-term profits, via reserve requirements. If they are publicly held, the price of their shares may also be affected.

**Emerging trends**

It's premature to draw conclusions about lapse behavior, Ruark actuary Peter Gourley told *RIJ*, because the VA living benefit business is relatively new, with many contracts still in the period when surrenders may be penalized. But he has observed certain trends.

Perhaps the most significant—though not necessarily surprising—observation was that lapse rates for guaranteed lifetime withdrawal benefits (GLWB) sank dramatically at the depth of the financial crisis. Lapse rates for all contracts with living benefits were reduced, but surrenders of GLWB contracts were downright rare.

"Prior to the financial crisis, the surrender rate for contracts with GMIB or GMWB living benefits was 60%

of the rate for contracts without a living benefit," Gourley told RIJ.

"If you look just at the contracts with GLWBs, the lapse rates were only about 30% of those without any living benefits. So it is a 40-70% reduction, depending on the type of living benefit. If the overall lapse rate for Year Five of the surrender period was 10%, for example, then the lapse rate for Year Five of a GLWB contract was only three percent."

At the nadir of the financial crisis, lapse rates fell even farther, he said. "As the benefits got deep in the money, all else being equal, the lapse rates for GLWBs went down an additional 80%," Gourley said.

"The mere presence of a living benefit reduces the baseline rate by 40% to 70%. In-the-moneyness can reduce it by as much as another 80%. So, for example, if the baseline rate is 10%, and the GLWB takes you down to 3%, and you drop another 80%, you're now down to a 0.6% lapse rate" on deep-in-the-money GLWBs.

The Ruark data indicated that other drivers of contract owner behavior were the number of years remaining in the surrender period and whether or not the intermediary who sold the contract was receiving trail commissions from the manufacturer.

"For the typical VA product, we saw low surrender rates in the early years, then a spike in lapse rates right after the end of the surrender period, and then less thereafter," Gourley said, adding, "This being an intermediated sale, the fact that the advisor gets paid a trail commission for keeping the assets with the insurance company provides some incentive to keep the money there. Higher levels of trail commission are correlated with lower surrender rates, which makes sense."

Their low lapse behavior notwithstanding, some GLWB owners were taking partial withdrawals from their contracts. They fell into three groups of about equal size: those taking partial withdrawals close to the allowed limit under the terms of the contract, those taking much less than the limit and those taking a lot more than the limit.

"About a third of those who made withdrawals made the full withdrawal amount each year, or within 95 to 105%. But one third was way under, averaging less than 70%. The other third was taking more than double the full withdrawal amount," Gourley said.

**Jury still out**

One still-open question is this: Do VA owners intend to rely on their contracts as a source of guaranteed income in retirement? That is, will they exercise their riders or simply pay the rider fee and ignore the rider unless it's in-the-money. For the moment, the presence of deferral incentives makes it hard to tell.

"We as a company think the jury is still out," Gourley said. "This is because so many living benefits have deferral incentives. Some of them pay out 10% per year if you delay withdrawals to year 10.

"So if we only look at the first five to seven years of behavior, and see that only 20% of the people are making withdrawals, it’s possible that the rational thing to do is to defer the withdrawals, assuming that the deferral incentives are fairly priced.  It depends on the particular product design.”

There were rumors during the financial crisis that some advisors would urge VA/GLWB contract owners to withdraw as much money as possible from their contracts without forfeiting the guarantee and invest the withdrawals in the depressed stock market. Ruark found no evidence of that.

“During the crisis, the behavior didn’t bear out that,” Gourley told RIJ. “As the benefit got more valuable, the withdrawal behavior remained fairly stable. It’s a retirement income product, and contract owners seem to be using it that way.”

So far, Ruark has the most seasoned lapse behavior data on contracts with Guaranteed Minimum Income Benefits, or GMIBs, where the balances are designed to be annuitized after a waiting period.  “The overall 60% decline in GMIB spike lapse rates during the financial crisis was driven by GMIB contracts that were deep in the money,” Gourley said.  Many of those contracts are approaching the ends of their waiting periods. During the financial crisis, owners hung on to their contracts, but it will remains to be seen whether they will exercise the rider at their earliest opportunity.

Going forward, Ruark will be parsing the data as it becomes available from insurers. “We want to know if these low lapse levels will persist or if they will go back up in the future? Another question is, will the added fee income offset the cost of the guarantees?

“At the moment, there are many of policies with living benefits and death benefits that are in the money,” Gourley said. “If that continues, it is a big exposure for the industry. But these are long-term guarantee features, and the products are fairly new, so it may take decades before the true cost of these guarantees will be known.”