Variable Annuity Guaranteed Living Benefits Utilization

2018 Experience

Guaranteed Minimum Withdrawal Benefits (GMWB)

A Joint Study Sponsored by the
Society of Actuaries and LIMRA

Variable Annuity Guaranteed Living Benefits Utilization

2018 EXPERIENCE

About the Study

Secure Retirement Institute and Society of Actuaries Variable Annuity Guaranteed Living Benefit Utilization Study (VAGLBUS) – 2018 Experience is an update of earlier investigations, conducted since 2006.

The study examines the GLB utilization of over 4.3 million contracts that were either issued during or in force as of 2018. Eighteen insurance companies participated in this study. These 18 companies made up 70 percent of all GLB sales in 2018 and 70 percent of GLB assets at year-end, and thus provide a substantial representation of this business.

Few product innovations have transfigured the variable annuity (VA) industry as much as guaranteed living benefits (GLBs). Evolving from simple income benefits, they are now offered in a variety of forms on the vast majority of VA products sold today.

Knowing more about benefit utilization – as well as the connection with behaviors such as persistency – can assist insurers with assessing and managing the long-term risks of these GLBs.

Companies should use the data provided in this tool as a basis for monitoring the following:

- Customer mix versus the industry
- Risks associated with providing a guarantee to younger buyers – both short- and long-term – including growth in benefit base relative to cash value, customer withdrawal deferral periods, sources of funds used to purchase the annuity, percentage of customers beginning to take withdrawals due to the required minimum distribution (RMD) rule, and the persistency of their contacts.
- Competitiveness of the maximum payout rates that are typically set by age bands.
- Customer behavior in general and how it changes the dynamics of a company's in-force book of business.

CONFIDENTIALITY: For industry results, confidentiality is protected with limits on filtered data. Each data point must have a minimum number of companies reporting. None of the individual companies can represent a majority of market share. Some results may not follow the trend because there is a relatively small number of contracts being reported. Hover over a data point to see how many contracts are being reported.

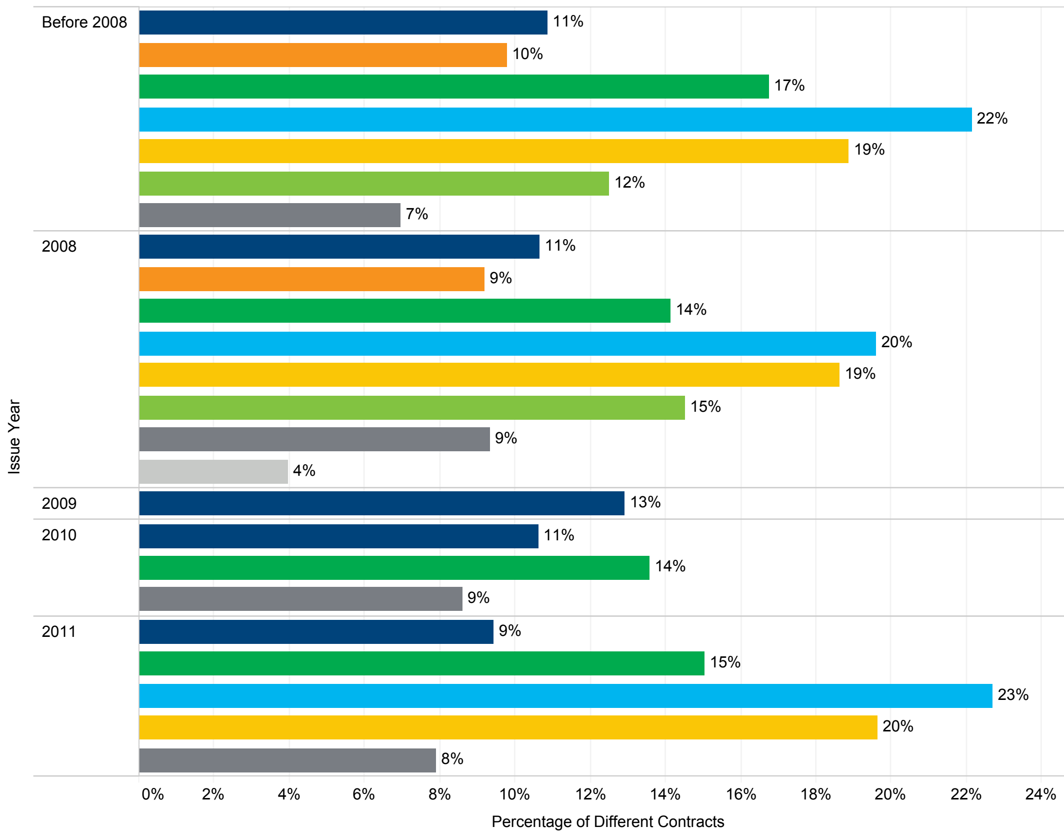
Click on the tabs at the top of the screen to move between pages. The buttons and menus on the right side of each screen allow you to filter results.

Buyer Profiles

Guaranteed minimum withdrawal benefits (GMWBs) were introduced in the early 2000s. Early GMWBs permitted annual withdrawals of a certain percentage of the benefit base balance until the guaranteed payments were exhausted, even if the contract value itself had already fallen to zero. The benefit base was usually the sum of premium payments and there was no lifetime guarantee. Later versions enhanced the benefit base balance to include step-ups or bonuses prior to withdrawals, or optional step-ups to reflect investment growth after withdrawals had commenced.

Although GMWBs do not guarantee income for life, investors can use GMWBs effectively to provide period-certain payments while keeping control of their assets and remaining invested in the market. Also, the maximum annual withdrawal amount (as a percentage of the benefit base balance) for a GMWB is generally higher than that of a GLWB.

During the last few years, there has been little innovation with GMWB riders. New sales for GMWB riders remain low and GMWB election rates, when any GLB was available, remained low, around 1 percent. In 2007, GMWBs enjoyed an election rate around 8 percent.



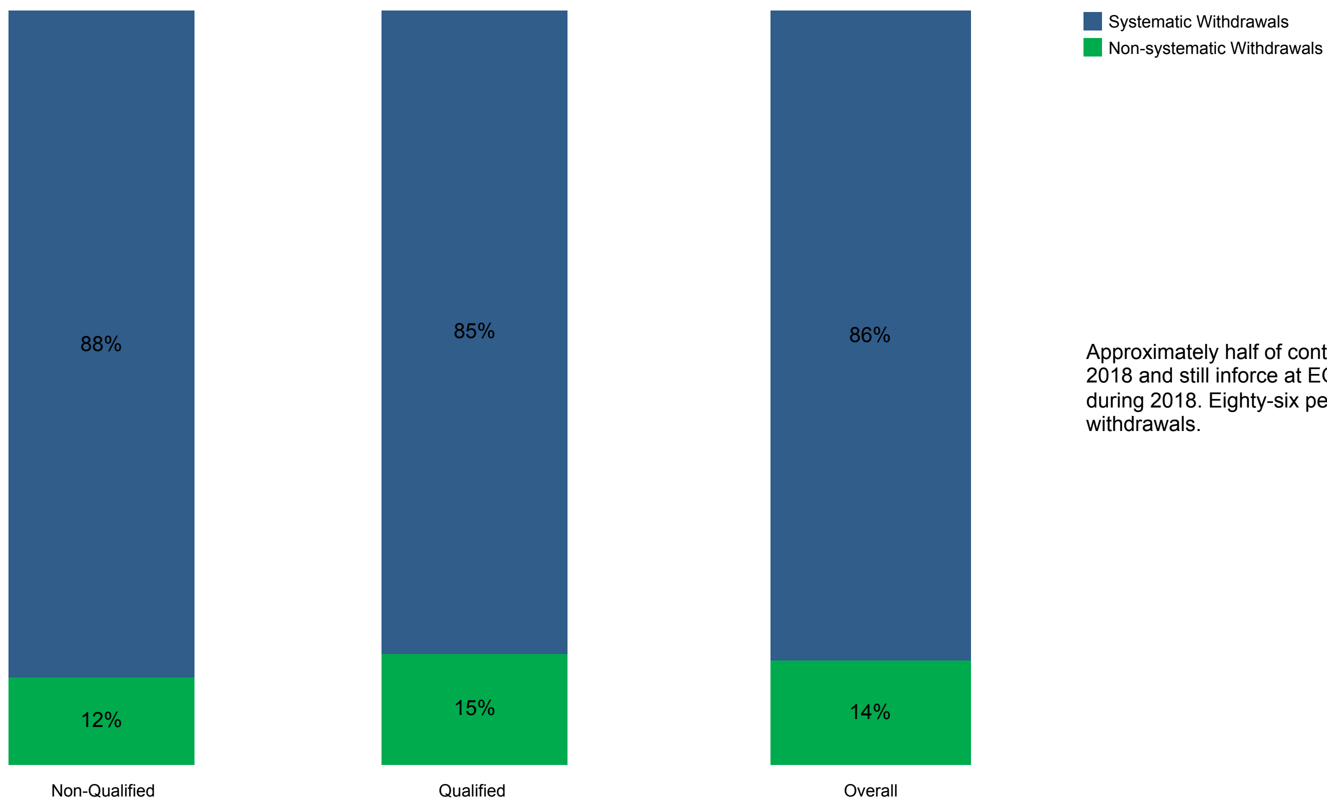
Select Breakout
Age of Buyer
Gender
Premium Size
Contract Value EOY

Younger than 50
50-54
55-59
60-64
65-69
70-74
75-79
80 or older

Issue Year
Before 2008
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018

* Data past issue year 2013 can't be shown due to confidentiality reasons.

Summary of Withdrawal Activity of Those Taking Withdrawals in 2018

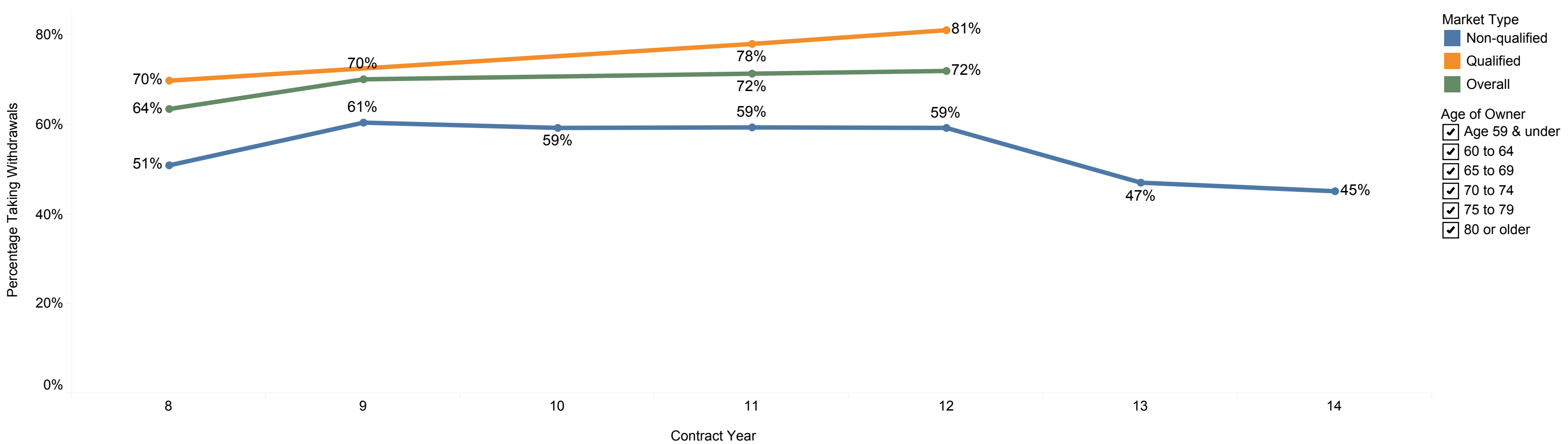


Approximately half of contracts with GMWB riders issued before 2018 and still inforce at EOY had at least some withdrawal activity during 2018. Eighty-six percent of these contracts had systematic withdrawals.

Withdrawal Activity by Contract Year

Contract duration (i.e., how long ago the contract was purchased) is important for determining what proportion of new GMWB buyers or existing GMWB owners take withdrawals from their annuities. Companies can also use contract duration to gauge their company's marketing effectiveness, and value in setting expectations with customers. Immediate utilization of the GMWB is appropriate for certain customers, but there are also circumstances in which delayed withdrawals make sense. By comparing their own withdrawal activity by contract duration to that of the industry, companies can assess the extent to which their customers' usage patterns match both their own expectations and the experience of other VA companies. The comparison could also facilitate internal forecasts by estimating when and how GMWB customers might take withdrawals and the resulting cash flow needed to manage the existing book of business. This chart examines withdrawal activity for contracts issued between 2004 and 2011. As the contract duration increases, withdrawal activity remains within a tight range.

The growth pattern in withdrawal rates for GMWBs differs from GLWBs (where we see a steady increase in the percent of owners taking withdrawals for longer duration contracts). It appears that a significant portion of GMWB owners who take withdrawals are likely to utilize their withdrawal benefits within one to two years of purchase. After that, the incremental growth over the duration is very slow, caused by owners reaching RMD age. However, this generalization assumes that most customers maintain their withdrawal behavior, at least in the short term.

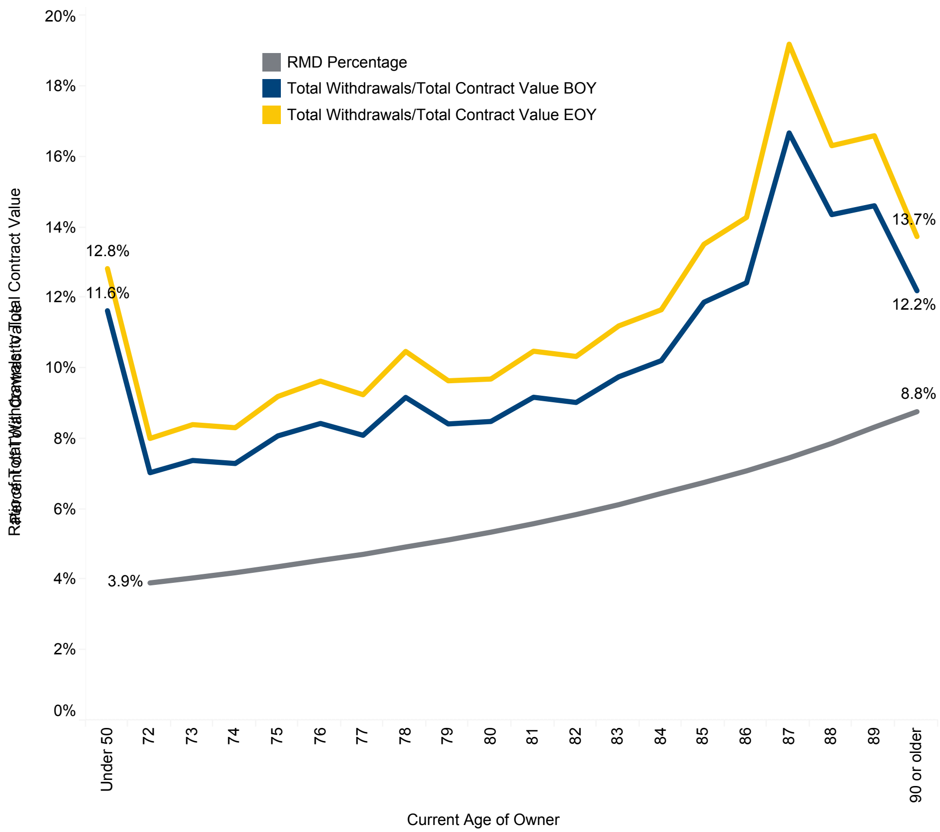


Some data are suppressed for confidentiality reasons.

Ratio of Total Withdrawals to Total Contract Value

Comparing the ratio of withdrawal amounts to BOY contract values and the ratio of withdrawal amounts to EOY contract values is another measure of GMWB risk originating in customer behavior. This measure can be calculated at two levels. First, the risk associated with all contracts in the book can be ascertained by analyzing the ratio of total withdrawals in 2018 to total contract values at BOY and EOY, for all contracts inforce. Second, the same ratios can be computed for only the subset of contracts that experienced withdrawals in 2018. The first measure provides a view of risk from total withdrawals in terms of the total book of business and how total withdrawals (cash outflow) impact the overall risk.

The graph of Required Minimum Distribution (RMD) Percentage shows the mandatory minimum withdrawal percentages from age 70 to age 90. On average, GMWB owners in the RMD phase of their contracts took withdrawals about twice the size of the required minimum.



Some data are suppressed for confidentiality reasons.

Market Type
- (●) All
- ( ) Qualified
- ( ) Non-qualified

Withdrawals
- (●) All Contracts
- ( ) Contracts With Withdrawals

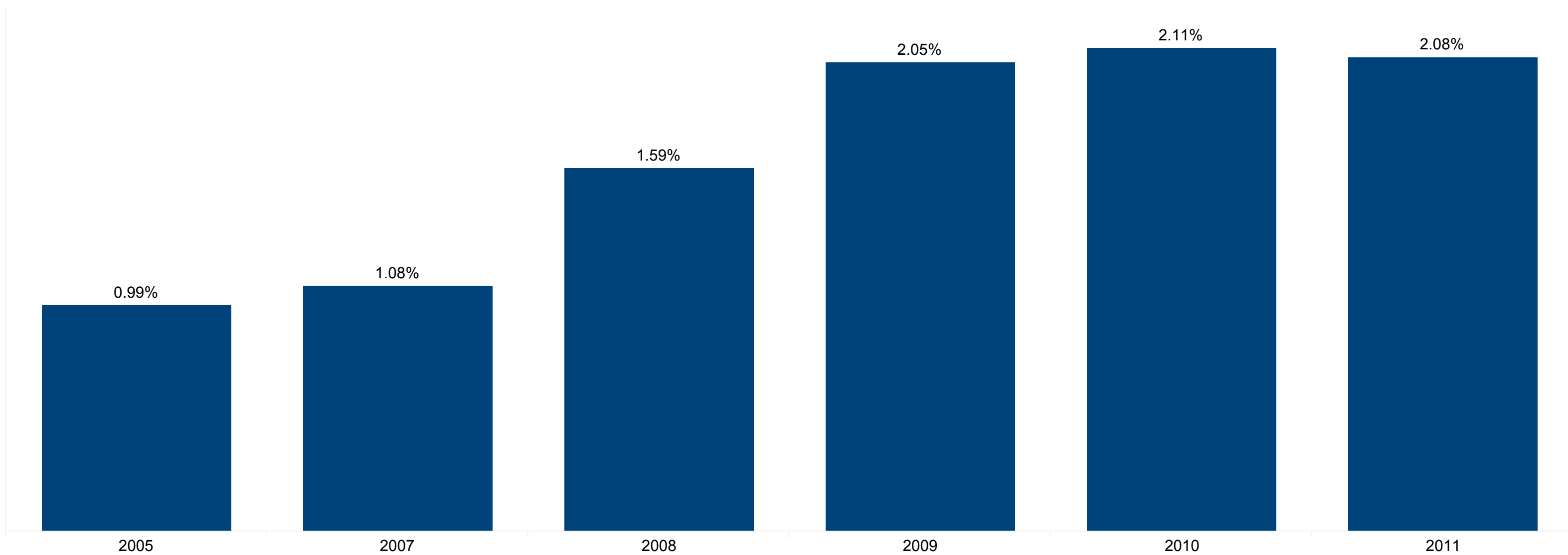
In-the-Moneyness
- ☑ ITM <= 75%
- ☑ ITM >75% TO 90%
- ☑ ITM >90% TO 110%
- ☑ ITM >110% TO 125%
- ☑ ITM >125%

ITM definition= Benefit Base/Contract Value so larger ratios indicate a greater degree of in-the-moneyness

Issue Year
- ☑ Before 2008
- ☑ 2008
- ☑ 2009
- ☑ 2010
- ☑ 2011
- ☑ 2012
- ☑ 2013
- ☑ 2014
- ☑ 2015
- ☑ 2016
- ☑ 2017
- ☑ 2018

Additional Premium

Percentage of Contracts Receiving Additional Premium in 2018

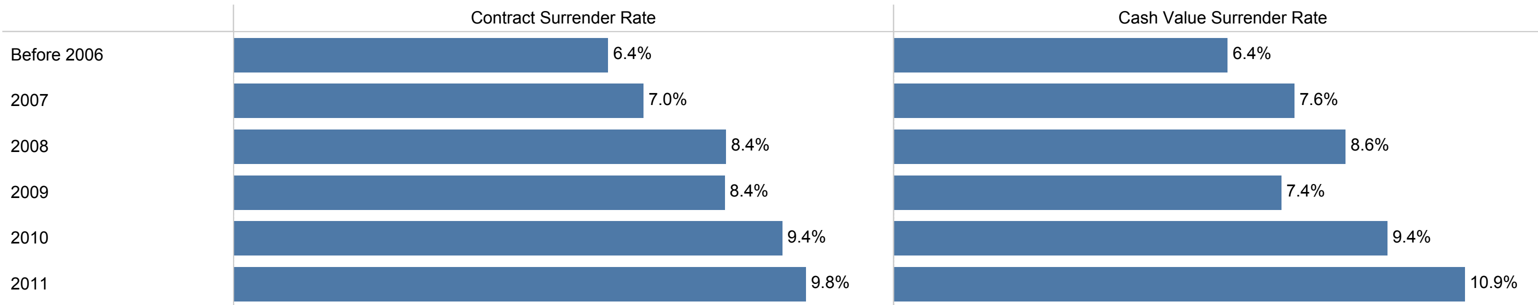


Select Breakout
- (●) Year of Issue
- ( ) Contract Size
- ( ) Market Type
- ( ) In-the-Moneyness

Some data are suppressed for confidentiality reasons.

Many retail VAs allow owners to add premium after issue, though in practice most contracts do not receive ongoing deposits. For some GMWBs, the calculation of the benefit base balance will incorporate premium that is received within a certain time period after the issue of contract. Among contracts sold in 2011 or earlier, only 1.2 percent received additional premium during 2018.

Surrender Rates by Issue Year

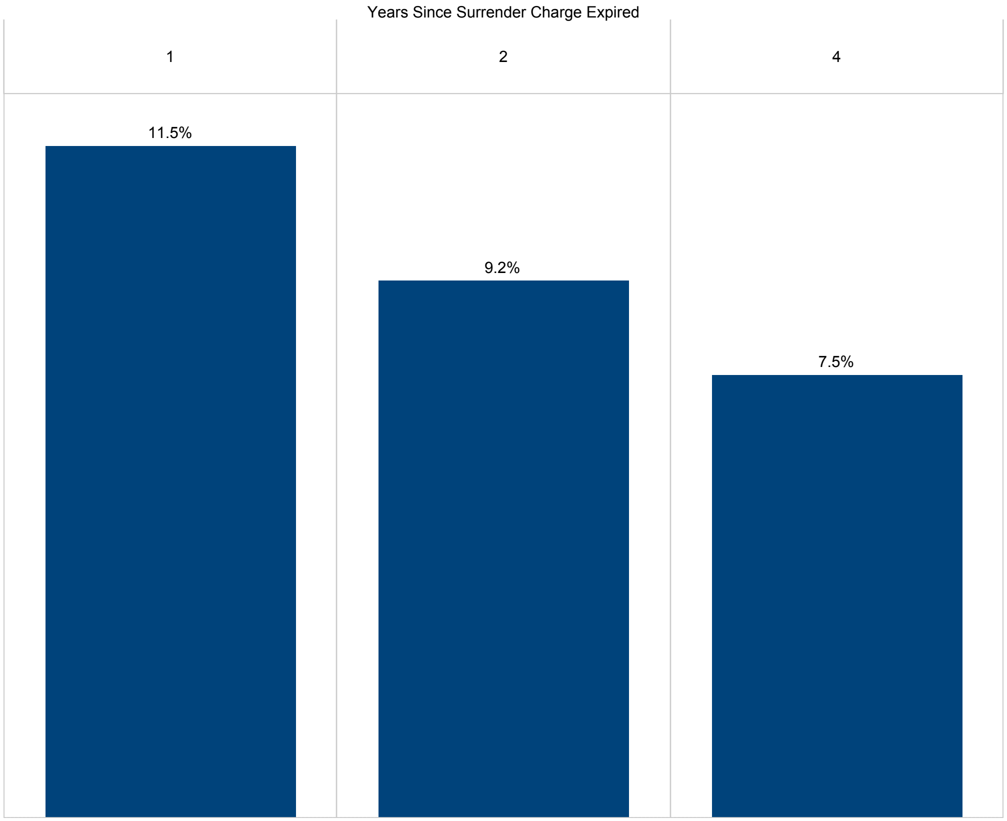


Some data are suppressed for confidentiality reasons.

This tab provides a summary of surrender rates by various product and owner characteristics. Contract surrender rates refer to the number of contracts that surrendered out of the entire population. Cash value surrender rates refer to the dollar amounts that those contracts represented.

Surrender Rates by Years since Surrender Charge Expiration

Surrender rates are highest just after the surrender charge expires. Surrender rates stay relatively high for two years after the surrender charge is gone, but trend downwards to around six or seven percent after three years.



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Surrender Type
- (●) Contract Surrender Rate
- ( ) Cash Value Surrender Rate

Market Type
- (●) All
- ( ) Qualified
- ( ) Non-qualified

Product & Benefit Characteristics

Average Charges and Number of Subaccounts by Issue Year

	Before 2006	2007	2008	2009	2010	2011
Avg. Mortality and Expense Charge	1.31%	1.39%	1.38%	1.37%	1.35%	1.28%
Avg. Benefit Fee	0.50%	0.40%	0.43%	0.61%	0.75%	0.75%
Avg. Num Subaccts	73	70	71	75	73	67
Avg. Maximum Age at Election	82.9	83.7	84.2	85.0	85.0	85.0

Some data are suppressed for confidentiality reasons.

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