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Variable Annuity Guaranteed Living Benefits Utilization

2018 Experience

Guaranteed Minimum Accumulation Benefits (GMAB)

A Joint Study Sponsored by the Society of Actuaries and LIMRA



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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 contracts.
- 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.

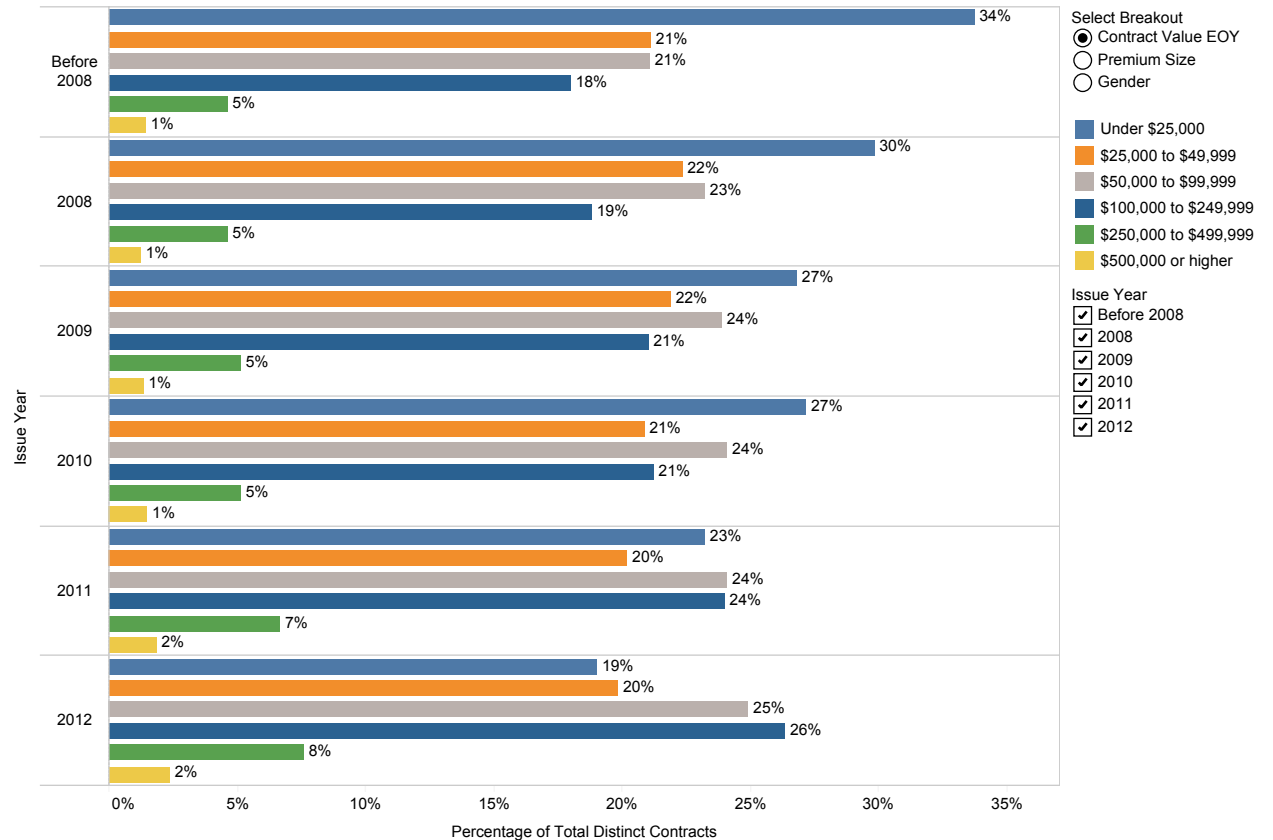
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Buyer Profiles

Guaranteed minimum accumulation benefit (GMAB) riders in variable annuities (VAs) guarantee that the contract owner will receive a minimum amount of the principal after a set period of time or waiting period — either the amount initially invested or the contract value with a locked-in guaranteed rate, or market gains locked in during the waiting period. The rider guarantees protection of the investment's value from a down market. The GMAB typically provides a one-time adjustment to the contract value on the benefit maturity date if the contract value is less than the guaranteed minimum accumulation value as stipulated in the contract. However, if the contract value is equal to or greater than the guaranteed minimum accumulation value, the rider ends without value and the insurance company pays no benefits.

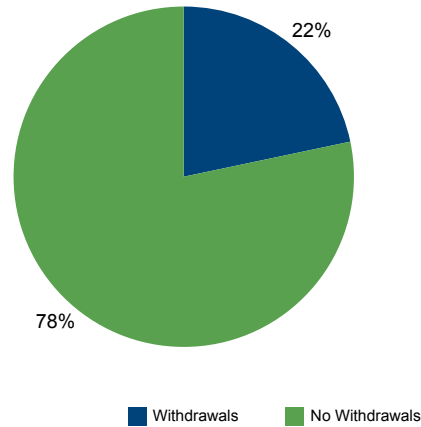
Even though they are one of the simplest living benefits, GMABs differ from other GLB riders in terms of the nature of the guarantee. While GLWBs, GMWBs, and GMIBs offer guaranteed retirement income for life or for a certain period of time (at the owner's discretion), GMABs mainly guarantee protection of investments from market risk. GMABs are also different from other GLBs in terms of the risk posed to the insurer. With GLWBs, GMWBs, and GMIBs, the contract owner must choose to utilize the benefit. With GMABs, insurers are obligated to provide the guaranteed benefit to all GMAB owners where the guaranteed benefit base exceeds the contract value on their maturity date. This makes it even more important for companies to scrutinize the persistency patterns of contracts with these benefits.



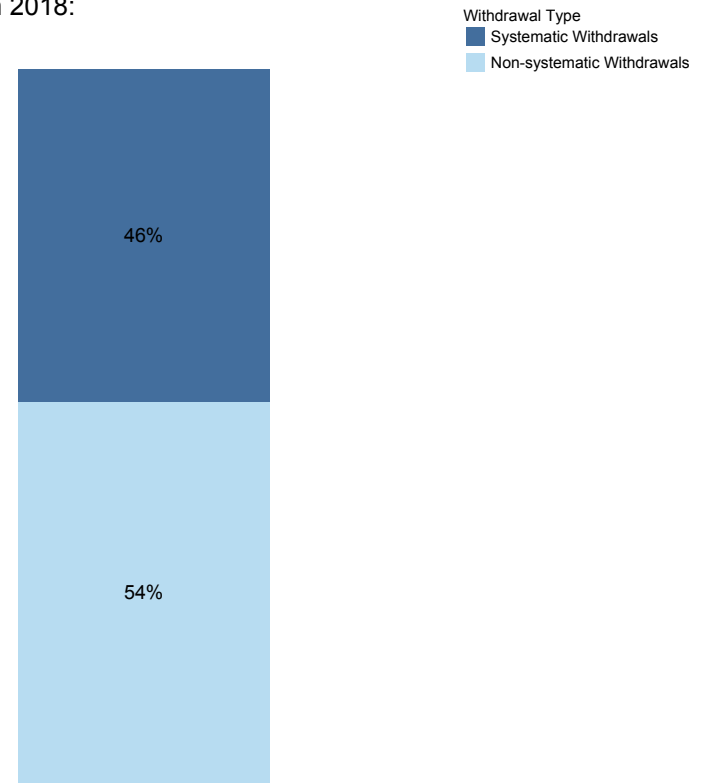
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Summary of Withdrawal Activity

Percentage of owners who have taken withdrawals in 2018:

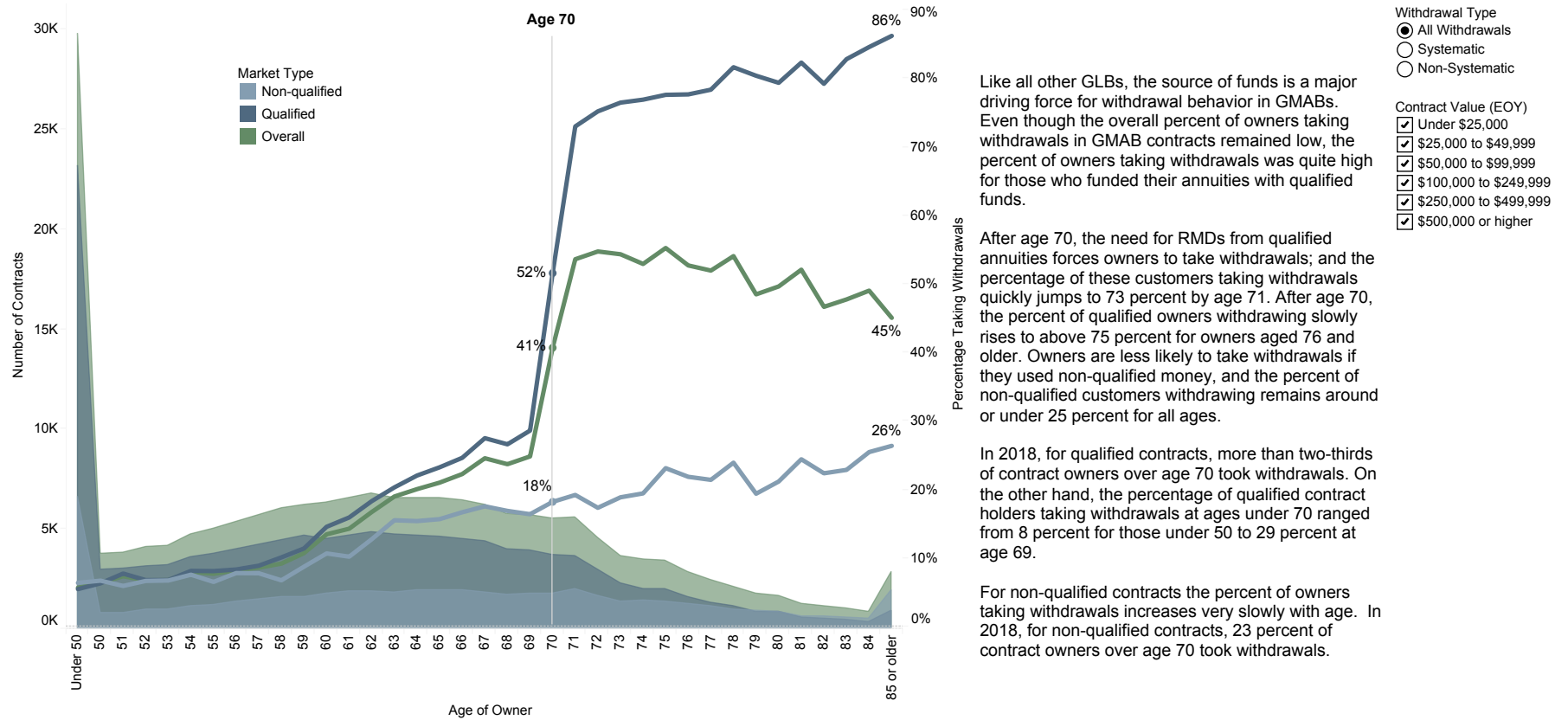


Of those taking withdrawals in 2018:



Despite the fact that GMAB contracts are not designed for owners to take withdrawals, and withdrawals cause the benefit base to be proportionately reduced, annuity customers do take withdrawals to meet financial needs. For example, customers may take withdrawals for emergencies, or to satisfy RMDs. Among GMAB contracts issued before 2018 and still in force at EOY, 22 percent had some withdrawal activity during 2018, very similar to experience in prior years. For 46 percent of contracts, these withdrawals were systematic withdrawals. This percentage is materially lower than other guaranteed living benefits (GLWB, GMWB and GMIB).

Withdrawal Activity by Age of Owner



Like all other GLBs, the source of funds is a major driving force for withdrawal behavior in GMABs. Even though the overall percent of owners taking withdrawals in GMAB contracts remained low, the percent of owners taking withdrawals was quite high for those who funded their annuities with qualified funds.

After age 70, the need for RMDs from qualified annuities forces owners to take withdrawals; and the percentage of these customers taking withdrawals quickly jumps to 73 percent by age 71. After age 70, the percent of qualified owners withdrawing slowly rises to above 75 percent for owners aged 76 and older. Owners are less likely to take withdrawals if they used non-qualified money, and the percent of non-qualified customers withdrawing remains around or under 25 percent for all ages.

In 2018, for qualified contracts, more than two-thirds of contract owners over age 70 took withdrawals. On the other hand, the percentage of qualified contract holders taking withdrawals at ages under 70 ranged from 8 percent for those under 50 to 29 percent at age 69.

For non-qualified contracts the percent of owners taking withdrawals increases very slowly with age. In 2018, for non-qualified contracts, 23 percent of contract owners over age 70 took withdrawals.

- Withdrawal Type**
- All Withdrawals
 - Systematic
 - Non-Systematic
- Contract Value (EOY)**
- Under \$25,000
 - \$25,000 to \$49,999
 - \$50,000 to \$99,999
 - \$100,000 to \$249,999
 - \$250,000 to \$499,999
 - \$500,000 or higher

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Average Withdrawal Amount by Withdrawal Type

	Systematic		Non-systematic	
	Mean	Median	Mean	Median
Under Age 60	11,701	7,500		
Age 60 to 69	13,193	8,666	31,763	13,500
Age 70 or older	7,230	4,411	17,167	7,006
Grand Total	8,718	5,169	25,608	10,304

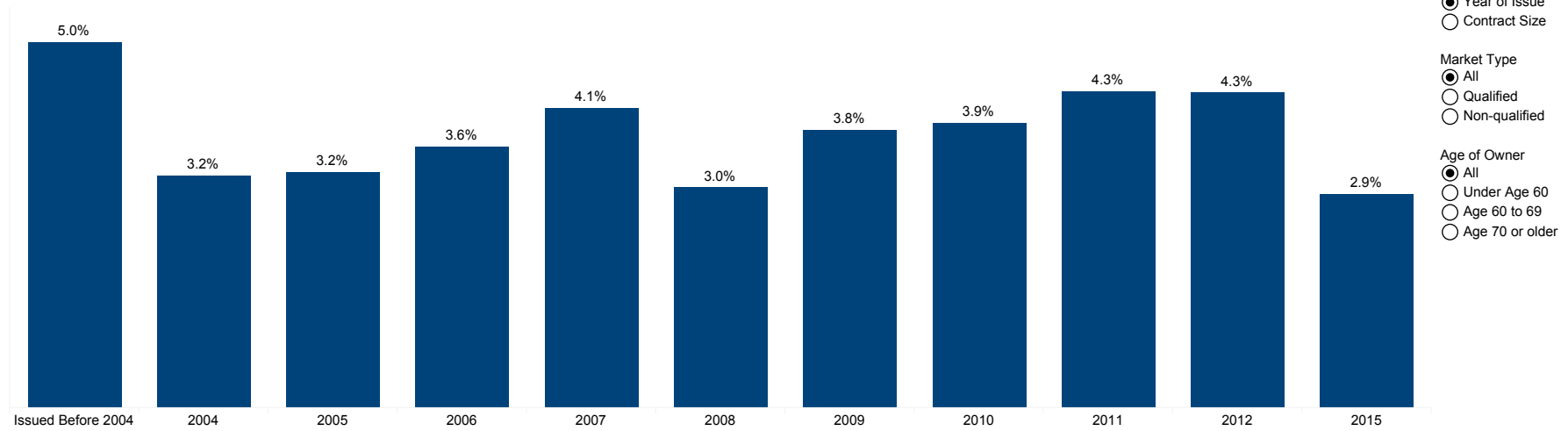
The average amount of withdrawals for GMAB qualified contracts was \$8,314 for those taking systematic withdrawals and \$23,786 for those taking occasional withdrawals. This data is based on contracts issued before 2018 that were in force at EOY 2018. Some owners in their 50s and 60s took average withdrawals of more than \$25,000 from their contracts.

Since these withdrawals by owners under age 70 were not for RMDs, the withdrawals will reduce the benefit amount on a pro-rata basis. Most of these withdrawals were likely partial surrenders of the contracts. A more reasonable withdrawal pattern and average withdrawal amount emerges for owners over age 70, commensurate with RMD needs.

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Additional Premium

Percentage of Contracts Receiving Additional Premium in 2018

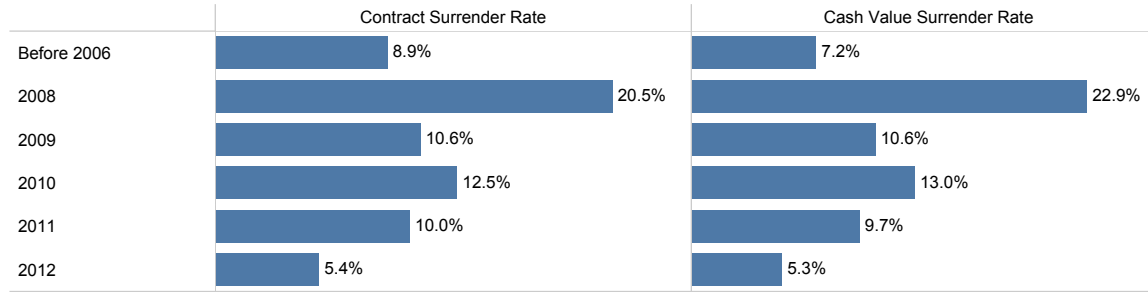


Contracts with GMAB riders typically do not allow owners to add premium to the guaranteed portion after the first anniversary. Many contracts have strict provisions to allow additional premium only during the first 90 to 180 days after issue. Therefore we see most additional premium coming in the year of issue.

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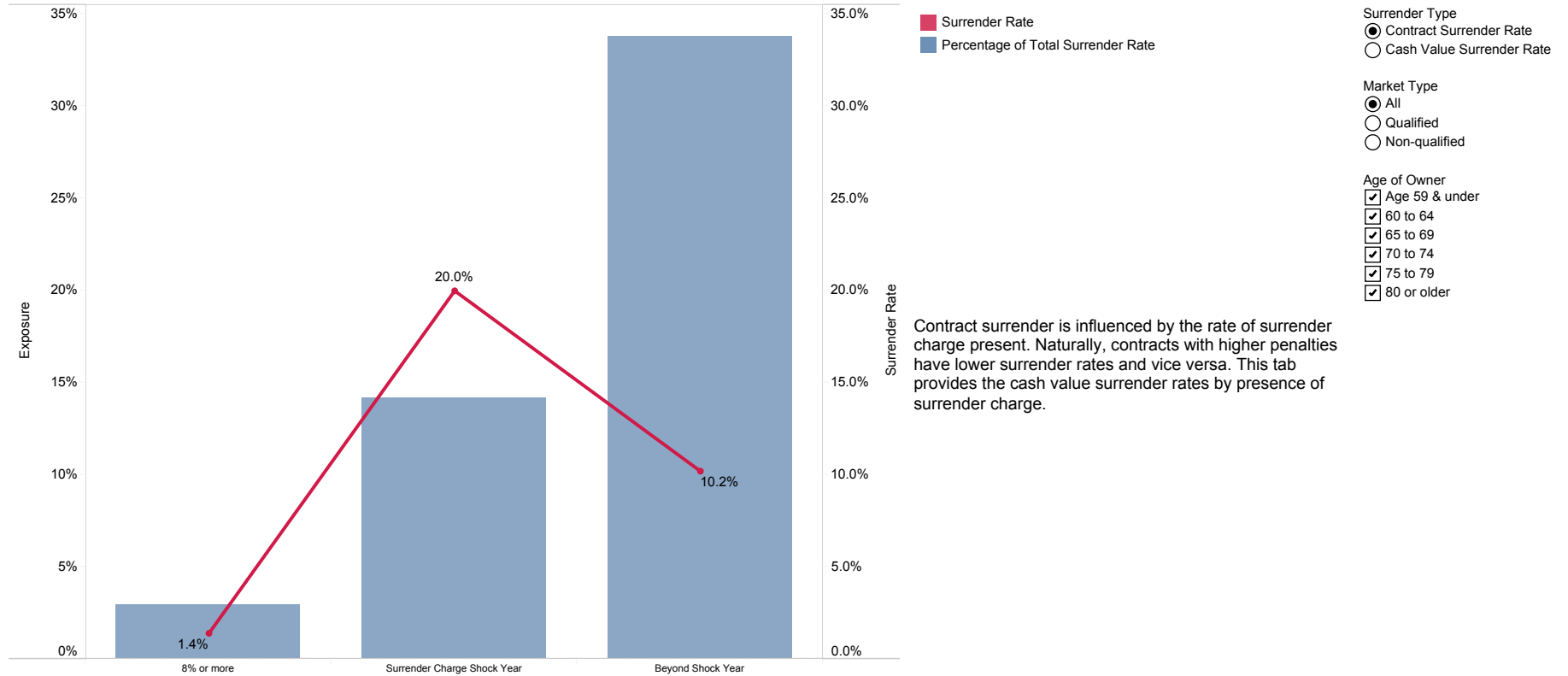
Surrender Rates by Selected Owner and Product Characteristics

- Select Breakout
- Year of Issue
 - Age of Owner
 - Contract Value BOY
 - Gender
 - Market Type



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Surrender Rates by Surrender Charge Level

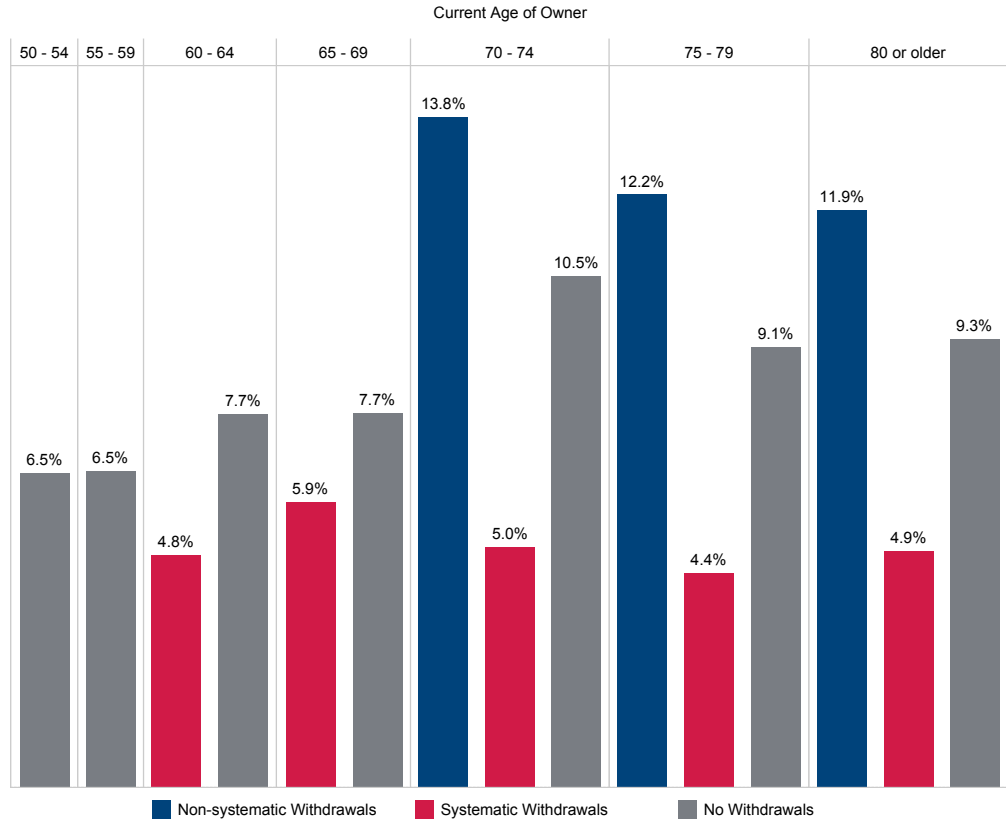


Contract surrender is influenced by the rate of surrender charge present. Naturally, contracts with higher penalties have lower surrender rates and vice versa. This tab provides the cash value surrender rates by presence of surrender charge.

Some data are suppressed for confidentiality reasons.

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Surrender Rates by Withdrawal Method



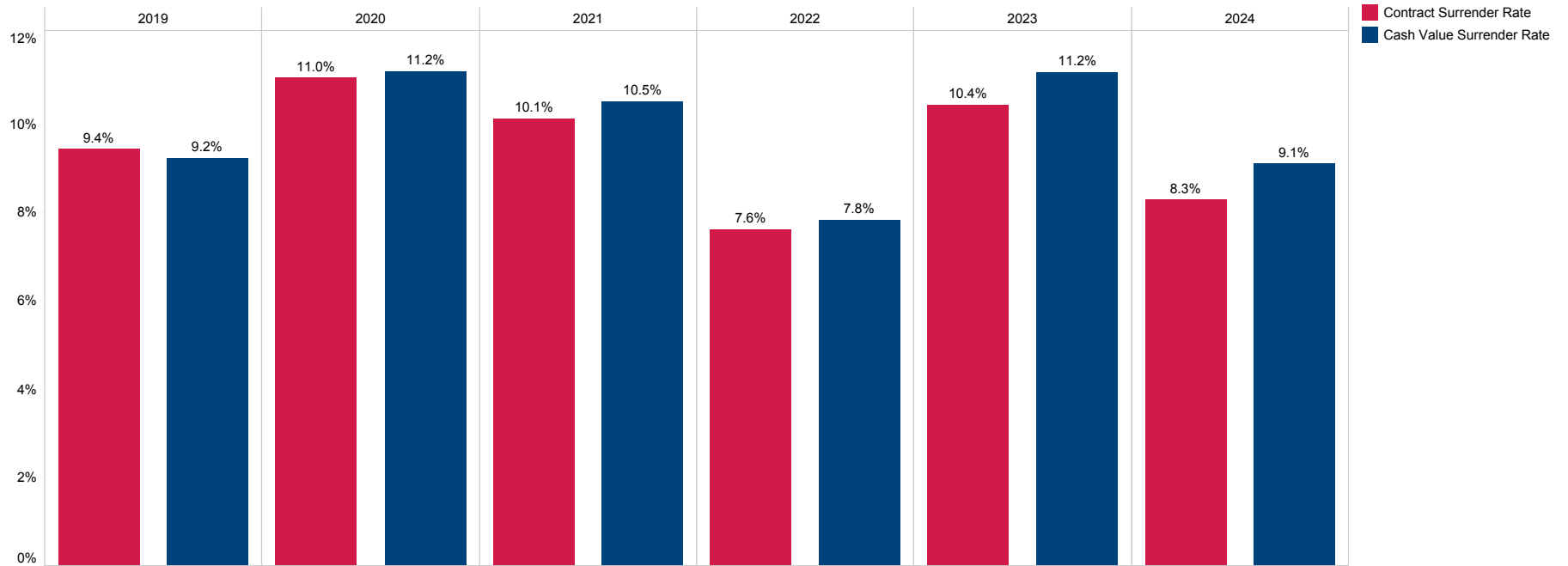
Some data are suppressed for confidentiality reasons.

- Surrender Type
 - Contract Surrender Rate
 - Cash Value Surrender Rate
- Market Type
 - All
 - Qualified
 - Non-qualified
- Contract Size
 - All
 - Under \$100,000
 - \$100,000 to \$249,999
 - \$250,000 or more
- Presence of Surrender Charge
 - All

Surrender rates tend to be materially lower for those taking withdrawals on a systematic basis across contracts by age, source of funds and size of contract.

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Surrender Rates by Benefit Maturity Year



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Many of these GMAB owners may have surrendered the contracts because the contract benefit matured. Benefit maturity may be the driving force for high surrender rates, and this tab provides contract and cash value surrender rates in 2018 by year of benefit maturity.

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Benefit Base and Contract Value Summary

	Benefit Base (BB) BOY	BB EOY	Contract Value (CV) BOY	CV EOY	CV/BB BOY	CV/BB EOY
Total	\$15,432,617,814	\$14,988,667,117	\$17,583,357,611	\$15,862,301,148	113.9%	105.8%
Average	\$101,879	\$98,948	\$116,077	\$104,715	113.9%	105.8%
Median	\$57,909	\$56,202	\$67,786	\$61,200	117.1%	108.9%

* For CV/BB ratios, Cash Value is not capped at Benefit Base.

Percentage of contracts where benefit base was greater than contract value:

Beginning of Year **4.6%**

End of Year **46.2%**

Market Type
 All
 Qualified
 Non-qualified

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

Withdrawal Activity
 All

At beginning-of-year (BOY) 2018, around five percent of contracts had a benefit base greater than the current contract value. The average GMAB contract value exceeded the average benefit base by 13.9 percent in total - nearly the same for qualified and non-qualified business.

In 2018, the S&P 500 fell six percent as a result of a bear market late in the year. In aggregate, contract values fell ten percent, and benefit bases fell three percent. Since contract values dipped more than benefit bases, nearly half of contracts had benefit bases larger than their contract values at the end of 2018.

Age of Owner
 Age 59 & under
 60 to 64
 65 to 69
 70 to 74
 75 to 79
 80 or older

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Participants

AIG
Brighthouse
CUNA Mutual
Equitable Financial
Lincoln National
MetLife
Nassau Re
Nationwide
New York Life
Pacific Life
Principal Financial
Protective
Prudential
RiverSource Annuities
Securian/Minnesota Life
Security Benefit
Thrivent
Transamerica