

2022-2024 Variable Annuity Behavior Study

February 2026

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Study Highlights

The Society of Actuaries (SOA) Research Institute's Individual Annuity Experience Committee (IAEC) and LIMRA have jointly conducted a study of Variable Annuity (VA) contract owner behavior covering calendar years 2022 through 2024. This is an update to the prior study covering calendar years 2019-2021.

Seventeen companies contributed data to the current study, encompassing approximately 45% of industry new premium received during the period of the study. The current study of contracts from 2022 to 2024 contains about 11.5 million surrender exposure by contract count, \$1.5 trillion surrender exposure by contract value, over 620,000 surrenders, and \$56 billion in contract withdrawals. The experience data analyzed for this study includes both single- and flexible-premium products, and contracts are included regardless of whether they have a guaranteed lifetime withdrawal benefit (GLWB) rider or other type of guaranteed living benefit. Only contracts sold inside the U.S. and its territories are included. The experience data excludes all types of fixed indexed annuities and traditional and fixed-rate annuities, as well as any annuities sold within employer-sponsored retirement plans.

The following are some of the more notable observations from the analyses detailed in this report.

Distribution of Contracts Included in the Study

- The average issue age of annuitants included in this study has been trending higher over time as the business matures; the average issue age for non-qualified contracts is approximately 4-5 years higher than the average issue age for qualified contracts.
- On a nominal in-the-money basis where the in-the-moneyness ratio (ITM) is equal to Benefit Base/Contract Value, the percentage of contracts with ratio greater than 100% declined for each observation year across all age groups, although the percentage of nominally in-the-money contracts were higher than in the 2019-2021 study.
- On an Actuarial Present Value (APV) basis using a 4% discount rate, the percentage of contracts with an ITM ratio greater than 100% declined with increasing age and also declined when going from year 2022 to 2023.

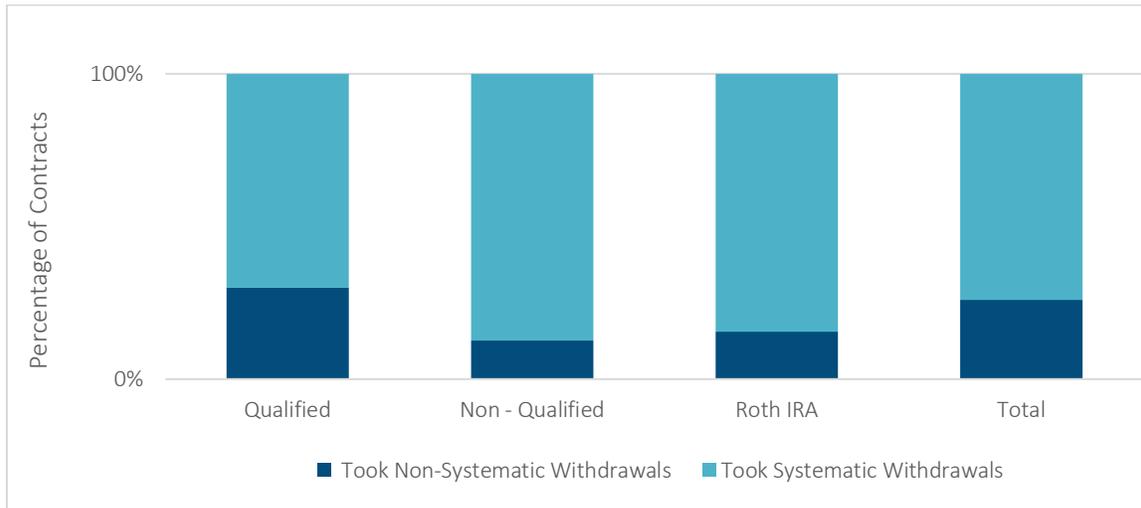
Withdrawal Activity

- For contracts with a GLWB rider, approximately half took withdrawals during the study period. The percentage was greater for qualified contracts than either non-qualified or Roth IRA (Figure 1). For contracts that took withdrawals, approximately three-fourths were taken on a systematic basis (Figure 2).

Figure 1
PERCENTAGE OF CONTRACTS WITH A GLWB RIDER THAT TOOK WITHDRAWALS BY MARKET TYPE



Figure 2
CONTRACTS WITH A GLWB RIDER THAT TOOK WITHDRAWALS BY MARKET TYPE AND METHOD OF WITHDRAWAL



- For contracts without a GLWB rider, approximately one-fourth took withdrawals during the study period (Figure 3). Across all contracts without a GLWB rider that took withdrawals, approximately one-third were taken on a systematic basis (Figure 4).

Figure 3
WITHDRAWAL RATES BY CONTRACT COUNT ON CONTRACTS WITH NO GLWB RIDER BY MARKET TYPE

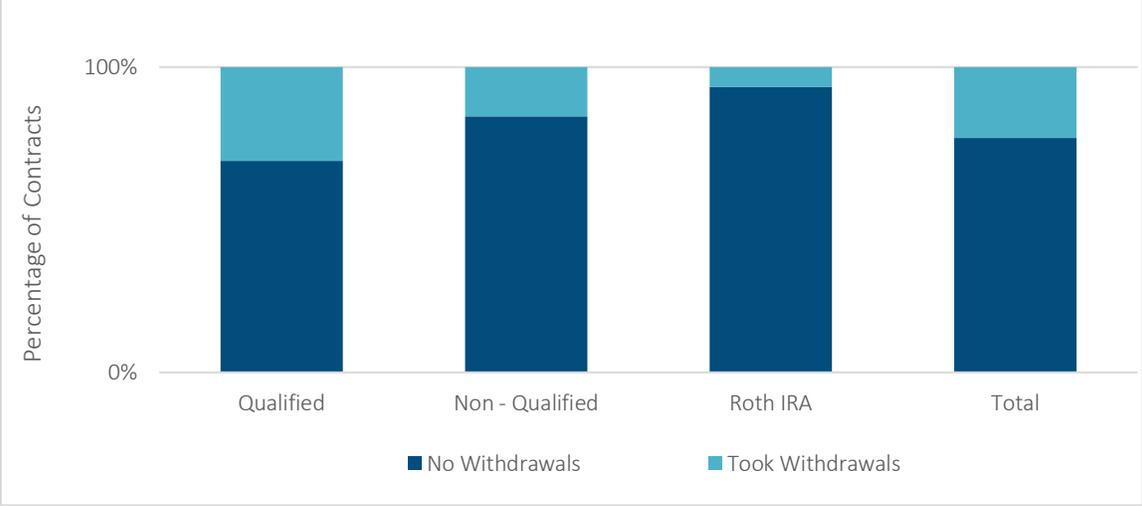
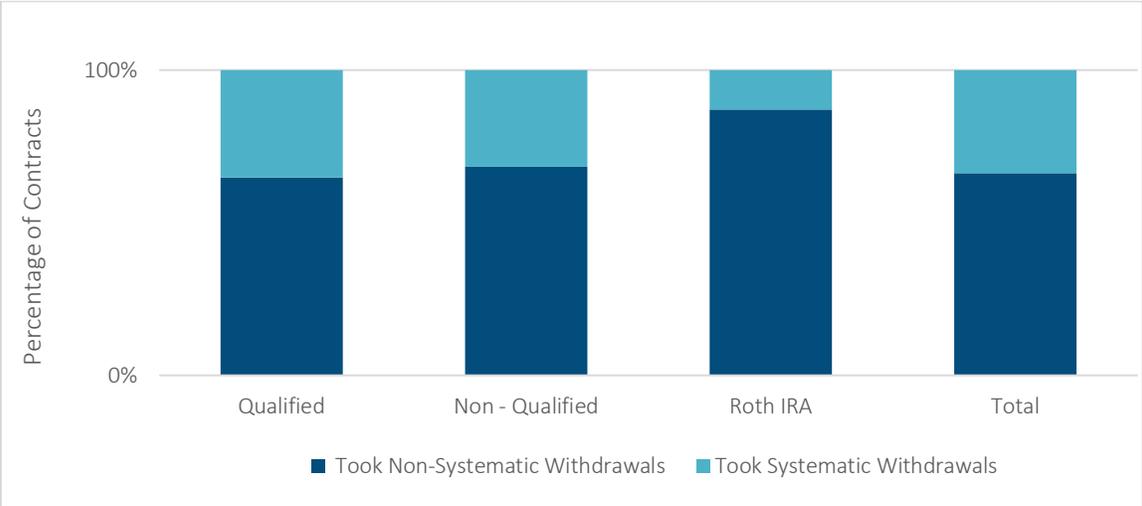
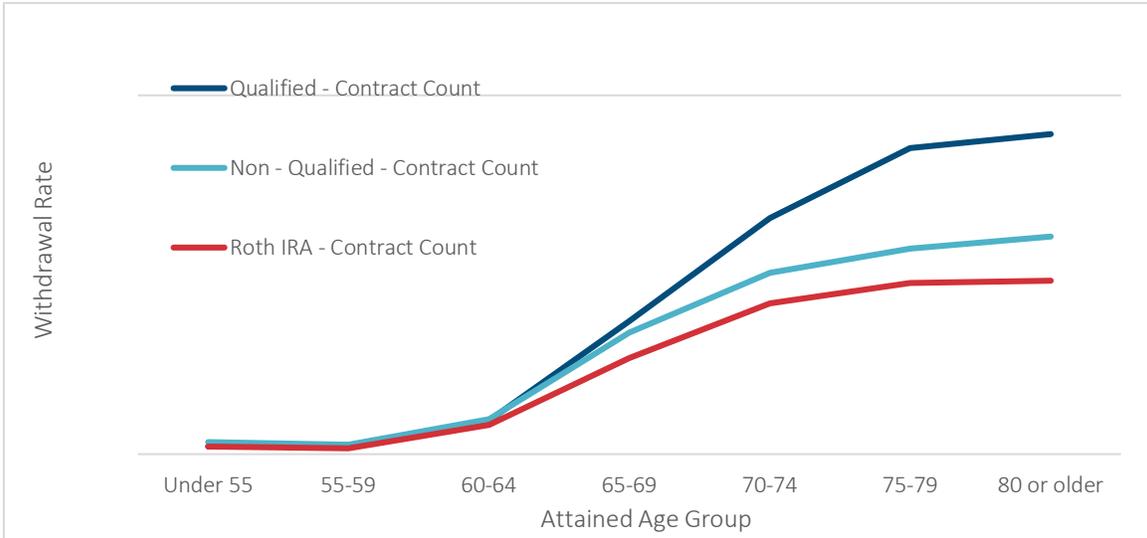


Figure 4
CONTRACTS WITH NO GLWB RIDER THAT TOOK WITHDRAWALS BY MARKET TYPE AND METHOD OF WITHDRAWAL



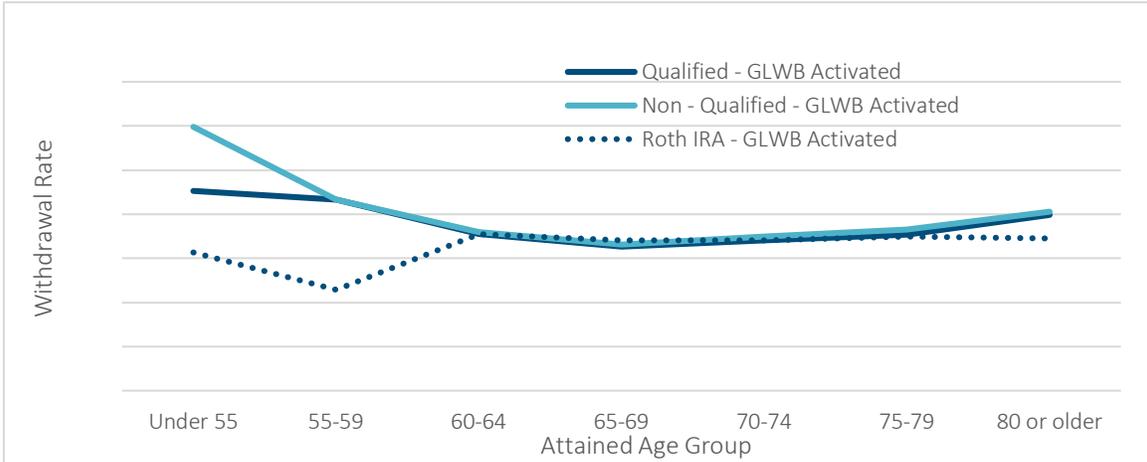
- Withdrawal rates on a contract count basis for qualified contracts either with or without a GLWB rider increased at attained ages 70 and older due to withdrawals taken to satisfy Required Minimum Distributions (RMDs). Withdrawal rates on a contract count basis for non-qualified contracts either with or without a GLWB rider increase by attained age and are significantly lower than withdrawal rates for qualified contracts and higher than that for Roth IRA contracts at attained ages 70 and older (Figure 5).

Figure 5
WITHDRAWAL RATES BY CONTRACT COUNT ON CONTRACTS WITH A GLWB RIDER, BY ATTAINED AGE AND MARKET TYPE



- For contracts with a GLWB rider that has been activated, withdrawal rates as a percentage of contract value diverge by qualified, non-qualified, and Roth status under age 60. From attained ages 60-79, withdrawal rates are nearly identical for these subsets, and only again diverge at ages 80+ (Figure 6).

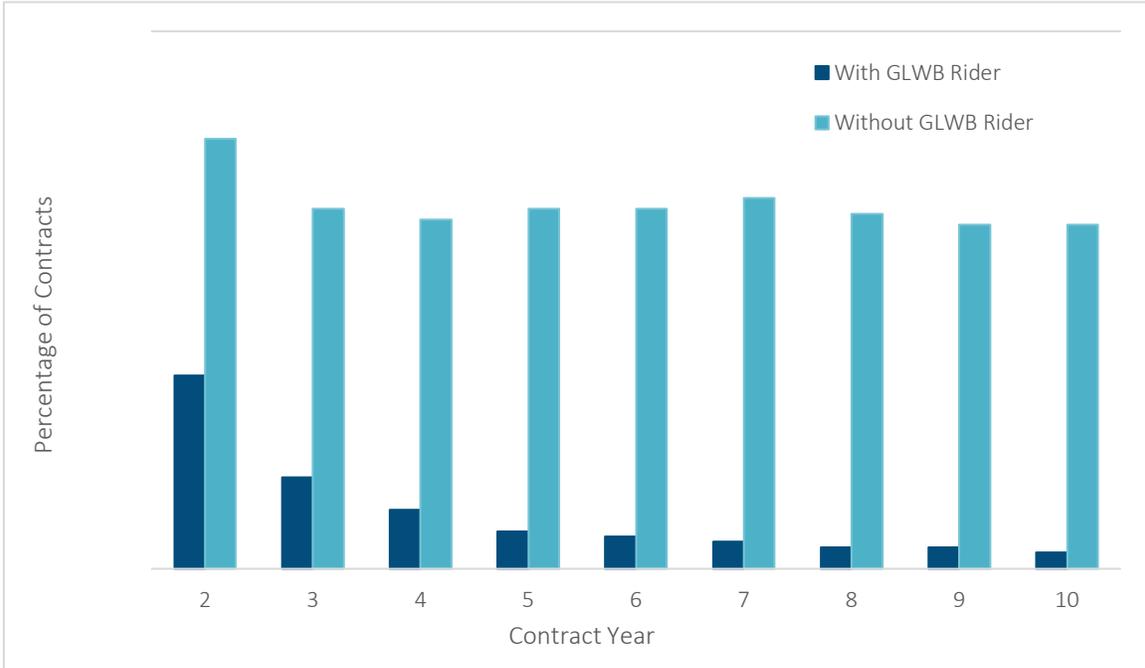
Figure 6
WITHDRAWAL RATES BY CONTRACT VALUE ON CONTRACTS WITH A GLWB RIDER THAT HAVE ACTIVATED THEIR INCOME BY ATTAINED AGE AND MARKET TYPE



Premium Deposits

- For the current study period, contracts without a GLWB made premium deposits in contract years two through 10 that were markedly higher than for contracts with a GLWB rider (Figure 7).

Figure 7
CONTRACTS RECEIVING PREMIUM AFTER THE FIRST CONTRACT YEAR



- The largest percentage of contracts with additional premium deposits occurred in the second contract year (Figure 8).

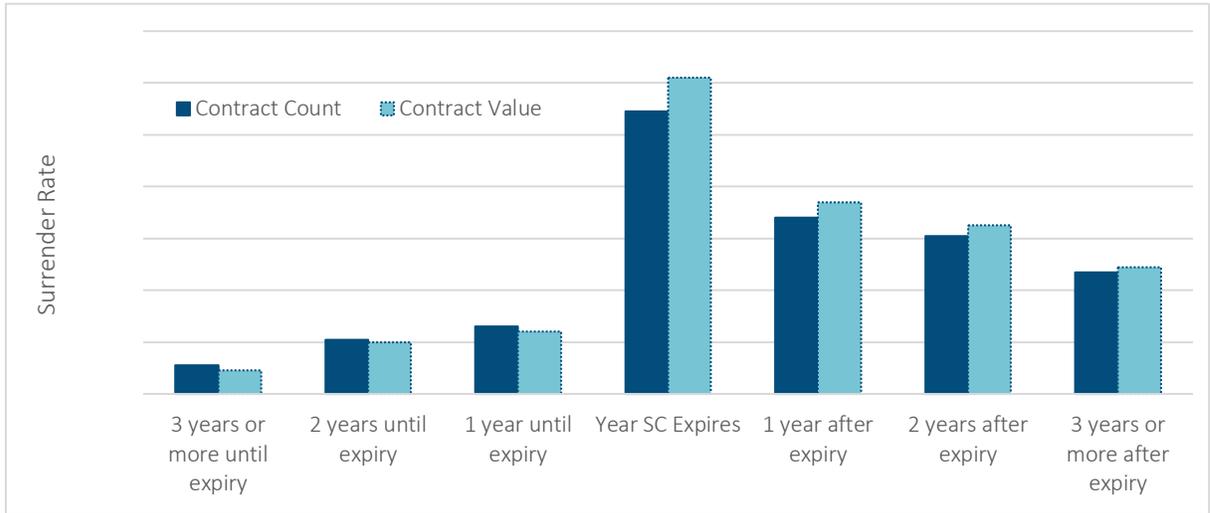
Figure 8
CONTRACTS RECEIVING PREMIUM AS A PERCENTAGE OF FIRST YEAR PREMIUM



Surrender Rates

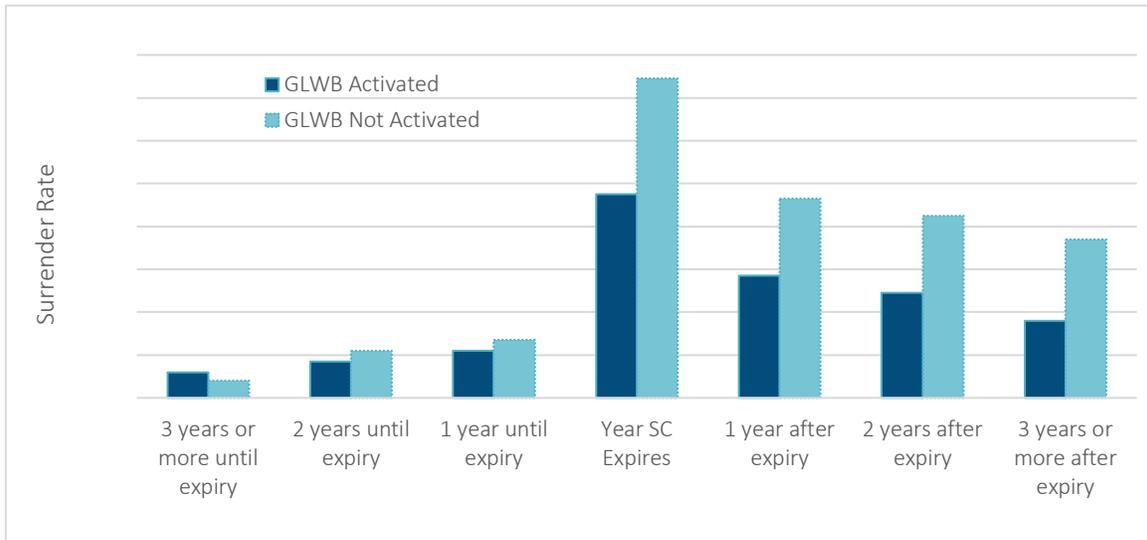
- The surrender rate in the year the surrender charge expired on contracts was substantially higher than in other years in relation to surrender charge expiry. Contracts with a GLWB rider exhibited similar patterns as those without, but at a much reduced rate (Figure 9).

Figure 9
SURRENDER RATES BY CONTRACT COUNT AND CONTRACT VALUE ON CONTRACTS WITH A GLWB RIDER BY TIME TO SURRENDER CHARGE EXPIRY



- Surrender rates for contracts with a GLWB rider that has been activated are significantly lower than where the rider has not been activated, during and after surrender charge expiry (Figure 10).

Figure 10
SURRENDER RATES BY CONTRACT VALUE ON CONTRACTS WITH A GLWB RIDER BY TIME TO SURRENDER CHARGE EXPIRY AND GLWB ACTIVATION



- Surrender rates with GLWB riders taking systematic withdrawals tend to exhibit the lowest surrender rates versus the alternatives (Figures 11 and 12).

Figure 11

SURRENDER RATES BY WITHDRAWAL METHOD ON CONTRACTS HAVING GLWB RIDER

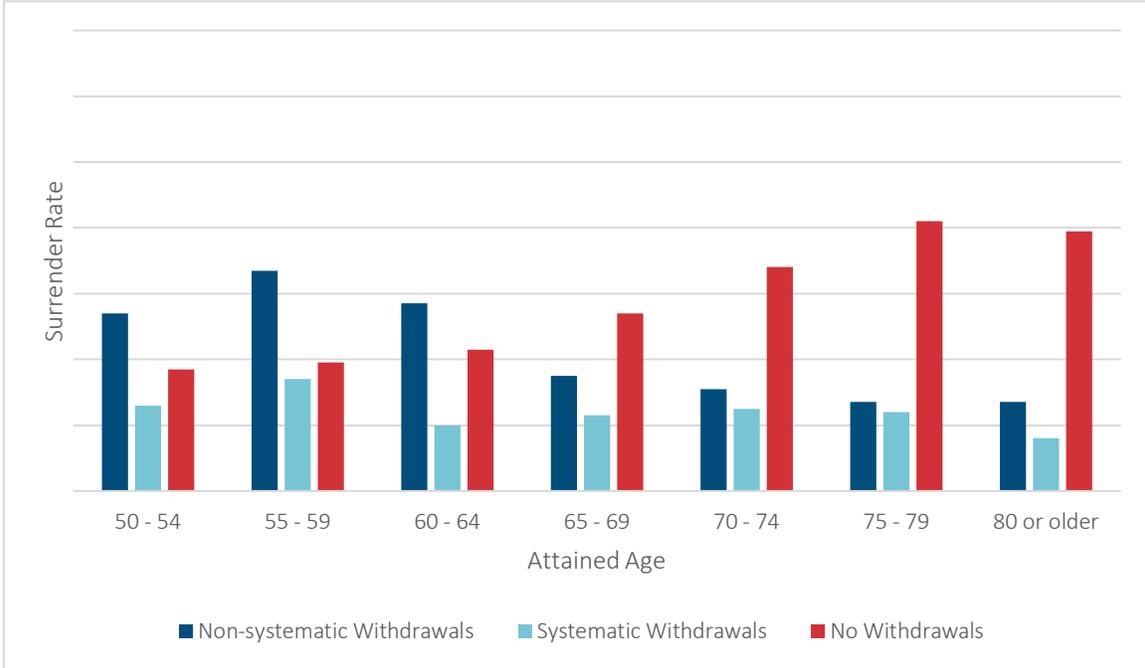
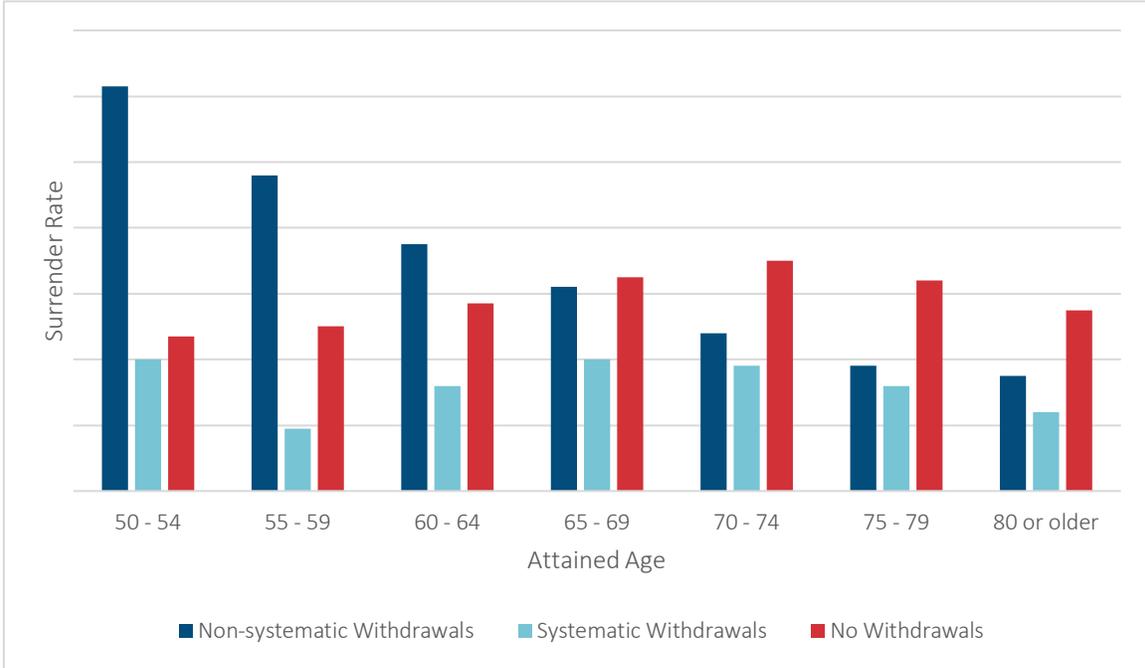


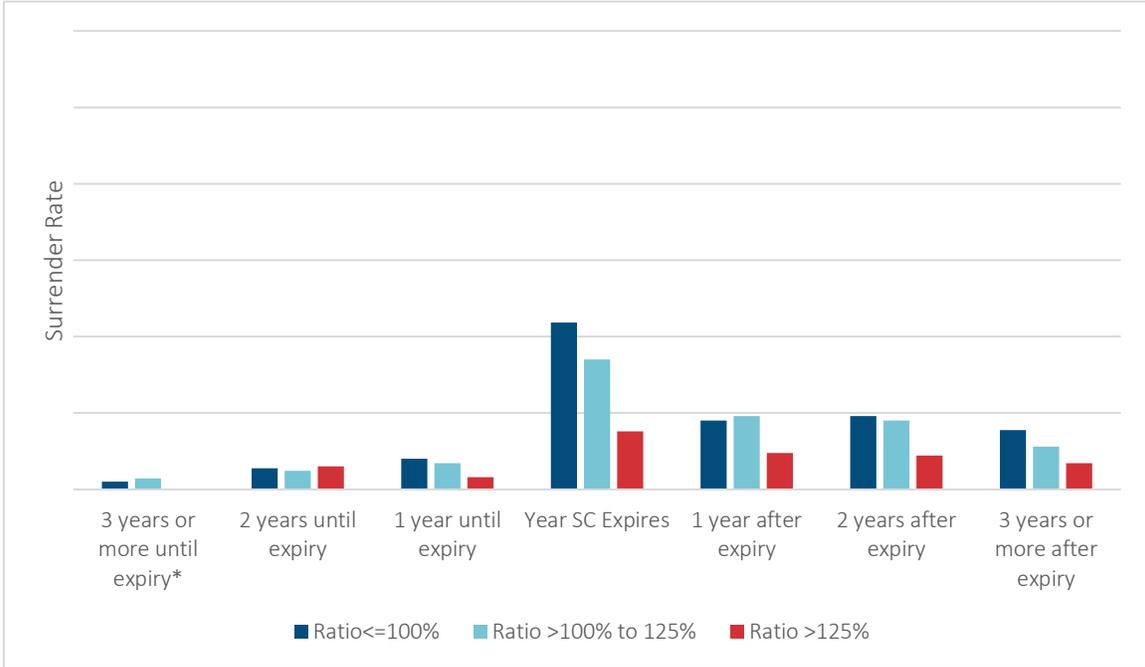
Figure 12
SURRENDER RATES BY WITHDRAWAL METHOD ON CONTRACTS NOT HAVING GLWB RIDER



- Surrender rates prior to expiry of the surrender charge tended to remain low (less than 2%) in 2022 and then spiked with and after the expiry of the surrender charge to 4-5x higher (Figure 13). In each of 2023 and 2024, there were substantial year-over-year increases in surrender rates once the surrender charge expired, especially for out-of-the-money contracts (Figures 14 and 15). In these figures, the asterisk on labels in the x-axis indicates that confidentiality rules have caused data to be omitted.

Figure 13

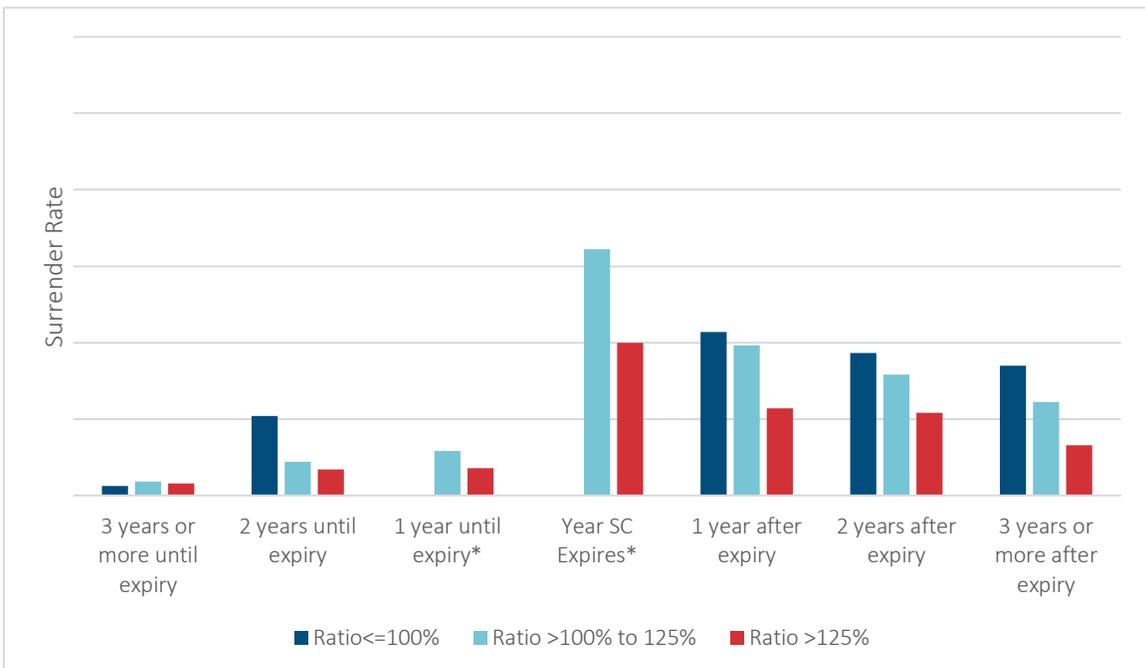
SURRENDER RATES BY NOMINAL IN-THE-MONEYNESS RATIO AND SURRENDER CHARGE HORIZON IN YEAR 2022



* Confidentiality rules have caused data to be omitted

Figure 14

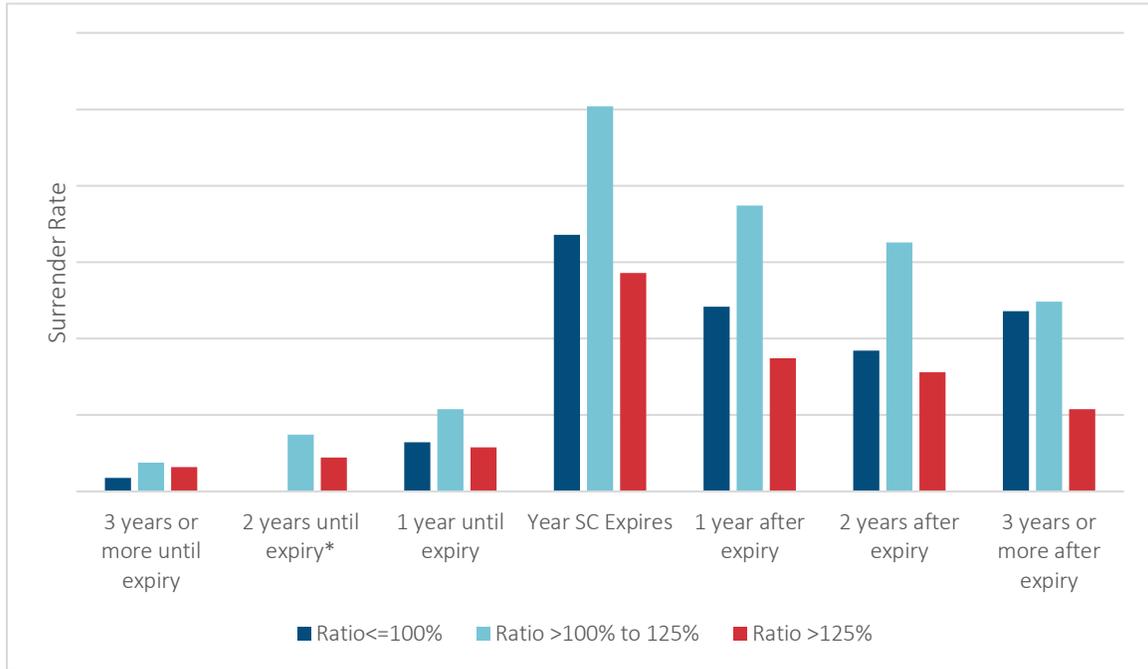
SURRENDER RATES BY NOMINAL IN-THE-MONEYNESS RATIO AND SURRENDER CHARGE HORIZON IN YEAR 2023



* Confidentiality rules have caused data to be omitted

Figure 15

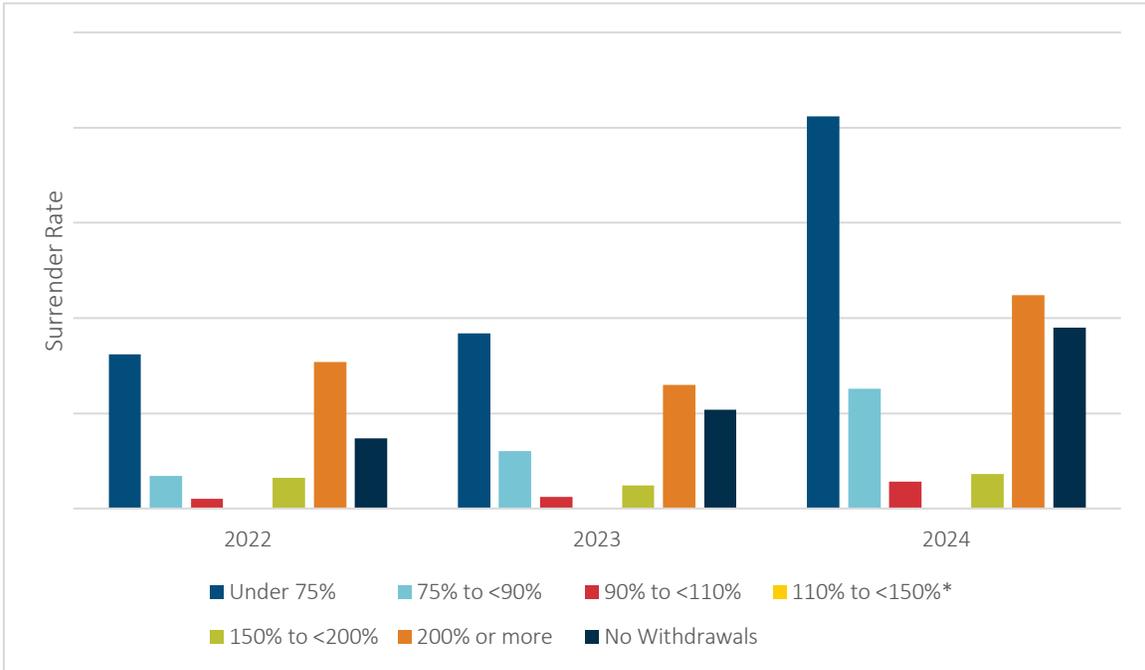
SURRENDER RATES BY NOMINAL IN-THE-MONEYNESS RATIO AND SURRENDER CHARGE HORIZON IN YEAR 2024



* Confidentiality rules have caused data to be omitted

- Surrender rates increased across all benefit utilization strata from 2022 to 2024. Surrender rates from 2022-2024 were the lowest for the most efficient utilizers (those whose utilization level is within 10% of the maximum annual benefit amount) (Figure 16). In Figure 16, the asterisk on the label in the legend indicates that confidentiality rules have caused data to be omitted.

Figure 16
SURRENDER RATES BY UTILIZATION AND OBSERVATION YEAR



* Confidentiality rules have caused data to be omitted

Detailed Study Results

Detailed results from the 2022-2024 Variable Annuity Behavior Study are available with a 2025 subscription to Experience Studies Pro. The subscriber data package for this study includes a report with analysis and insights, and a data visualization dashboard where the user can drill down into the results and obtain select views of the data. Various distributions of contracts included in the study are reviewed in the detailed results along with the behavioral experience on the contracts in the study. Analysis and results are provided by various subsegments of the data, including Sex, Attained Age Group, Contract Year, Calendar Year, Years to Surrender Charge Expiry, Market Type, Contract Value, Distribution Channel, and Issue Year. For more information about this study or how to secure a 2025 subscription to Experience Studies Pro, contact StudyPro@soa.org.

Study Methodology, Reliances, and Limitations

Actual study experience was determined on an age-nearest birthday basis. Exposure was determined using a calendar year methodology with an annual exposure assumption and a Balducci adjustment. The contract year that a surrender is assigned to is based on the actual date of surrender.

No assessment has been made concerning the applicability of this experience for other purposes. In developing this report, the SOA Research Institute and LIMRA relied upon data and information supplied by the participating company contributors. For each contributor, this information includes, but is not limited to, the data submission for behavioral experience and the responses to follow-up questions. The results in the Experience Studies Pro Standard Data Package and this report are technical in nature and dependent on certain assumptions and methods. No party should rely upon these results without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals.

List of Participating Companies

The Society of Actuaries Research Institute and LIMRA would like to thank the following 17 companies who contributed data to this study:

- Allianz
- Ameriprise
- Ameritas
- Brighthouse Financial
- Global Atlantic Financial Group
- Nassau Life
- Nationwide Life
- New York Life
- Northwestern Mutual
- Pacific Life
- Principal Financial
- Protective Life
- Prudential
- Sammons Financial Companies
- Securian
- Thrivent Financial for Lutherans
- Transamerica

About LIMRA

Established in 1916, LIMRA is a research and professional development not-for-profit trade association for the financial services industry. More than 600 insurance and financial services organizations around the world rely on LIMRA's research and educational solutions to help them make bottom-line decisions with greater confidence. Companies look to LIMRA for its unique ability to help them understand their customers, markets, distribution channels and competitors and leverage that knowledge to develop realistic business solutions.

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Serving as the research arm of the Society of Actuaries (SOA), the SOA Research Institute provides objective, data-driven research bringing together tried and true practices and future-focused approaches to address societal challenges and your business needs. The Institute provides trusted knowledge, extensive experience and new technologies to help effectively identify, predict and manage risks.

Representing the thousands of actuaries who help conduct critical research, the SOA Research Institute provides clarity and solutions on risks and societal challenges. The Institute connects actuaries, academics, employers, the insurance industry, regulators, research partners, foundations and research institutions, sponsors and non-governmental organizations, building an effective network which provides support, knowledge and expertise regarding the management of risk to benefit the industry and the public.

Managed by experienced actuaries and research experts from a broad range of industries, the SOA Research Institute creates, funds, develops and distributes research to elevate actuaries as leaders in measuring and managing risk. These efforts include studies, essay collections, webcasts, research papers, survey reports, and original research on topics impacting society.

Harnessing its peer-reviewed research, leading-edge technologies, new data tools and innovative practices, the Institute seeks to understand the underlying causes of risk and the possible outcomes. The Institute develops objective research spanning a variety of topics with its [strategic research programs](#): aging and retirement; actuarial innovation and technology; mortality and longevity; diversity, equity and inclusion; health care cost trends; and catastrophe and climate risk. The Institute has a large volume of [topical research available](#), including an expanding collection of international and market-specific research, experience studies, models and timely research.

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