1. Welcome
2. Introduction
3. Buyer Profiles
4. Owner Profiles
5. Equity Market Experience Over the Study Period
5. Equity Market Experience Over the Study Period
5. Equity Market Experience Over the Study Period
6. GLWB - Benefit Base and Contract Value vs. Benefit Base to Contract Value by Issue Quarter
7. GLWB - Contract Value by Issue Quarter
8. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter
9. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter
9. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter
9. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter

Fixed Indexed Annuity Experience Study

Policy Years 2013-2015

A Joint Study Sponsored by the Society of Actuaries and LIMRA





Fixed Indexed Annuity Experience Study

Policy Years 2013-2015

About the Study

This joint study sponsored by LIMRA and the Society of Actuaries examines FIA full surrender, withdrawal, and GLWB utilization for experience years 2013-2015. These factors are studied from the perspective of various owner, rider and product characteristics including "in-the-moneyness" of GLWB guarantees, systematic vs occasional withdrawal activity patterns, and the percentage of maximum GLWB benefit withdrawn. A Project Oversight Group (POG) comprised of actuaries and industry experts provided guidance for the survey design as well as the data analysis and reporting.

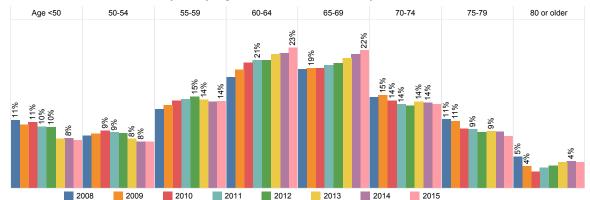
Access to this information is a benefit of LIMRA and SOA membership.

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Buyer Profiles

Buyers Age Analysis by Issue Year					
Issue Year	Average	Lower Quartile	Median	Upper Quartile	
2008	63	57	64	71	
2009	63	57	64	71	
2010	63	56	63	70	
2011	63	57	64	70	
2012	63	57	64	70	
2013	63	58	64	70	
2014	64	58	64	70	
2015	64	58	64	70	

Buyers by Age at Time of Purchase by Issue Year



Guaranteed minimum withdrawal benefits (GMWBs) were introduced in the early 2000s for variable annuity contracts. 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 offered lifetime guarantees and enhancements to 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.

These product designs are now offered with fixed indexed annuity contracts by some carriers. This study represents the first industry data reported by the Society of Actuaries (SOA) and LIMRA regarding fixed indexed annuity surrender and withdrawal activity - both for contracts with and without GLWB benefits. For those contracts with GLWB benefit, the results presented also include information about how contract holders are utilizing their guarantees.

Market Type All

Qualified Non-qualified

Rider Type All

O GLWB

Non-GLWB

Gender All

Male

Female

Distribution Channel

All

O Independent Agent

○ Bank/S&L

Independent Broker Dealer

Premium Size

All

O 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

			3. Buyer Profiles	4. Owner Profiles	Experience Over the					10. Withdrawal Activity - All Contracts	
--	--	--	-------------------	-------------------	---------------------	--	--	--	--	--	--

Owner Age by Gender

This tab provides a summary of the distribution of FIA owners by age for different owner and contract characteristics. Please select a breakout using the radio buttons on the right to review owner distributions.

Some key items of note:

- Across all ages, there is a higher percentage of female contract holders than male for both GLWB and Non-GLWB contracts.
- For ages under 75, a higher percentage of contracts are qualified this pattern reverses at ages 75 and over.
- For both GLWB and Non-GLWB business, most contracts were sold through the independent agent channel.

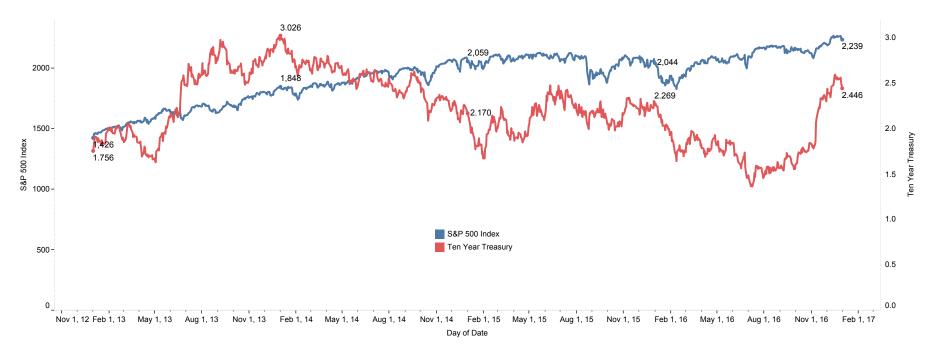
Ö	Gender Market Type Distribution Channe Contract Value EO\
O	er Type All GLWB Non-GLWB
Obs All	ervation Year

Select Breakout

	Female	Male
60 to 64	52.1%	47.9%
65 to 69	51.8%	48.2%
70 to 74	52.5%	47.5%
75 to 79	53.7%	46.3%
80 or older	58.1%	41.9%
Age 59 & under	53.3%	46.7%
Grand Total	53.3%	46.7%

Equity Market Experience Over the Study Period S&P 500 Price Index/10 Year Treasury Rates, 2013-2016

The S&P 500 was up over 30 percent for calendar year 2013, up 11 percent for 2014, down 1 percent for 2015, and up 10 percent for 2016.



Note: Yahoo Finance

1. W elco me	2. Introduction	4. Owner Profiles	Experience Over the	6. GLWB - Benefit Base and Contract Value Summary		9. GLWB - Ratio of Benefit Base to Contract Value by Owner Age	10. Withdrawal Activity - All Contracts	

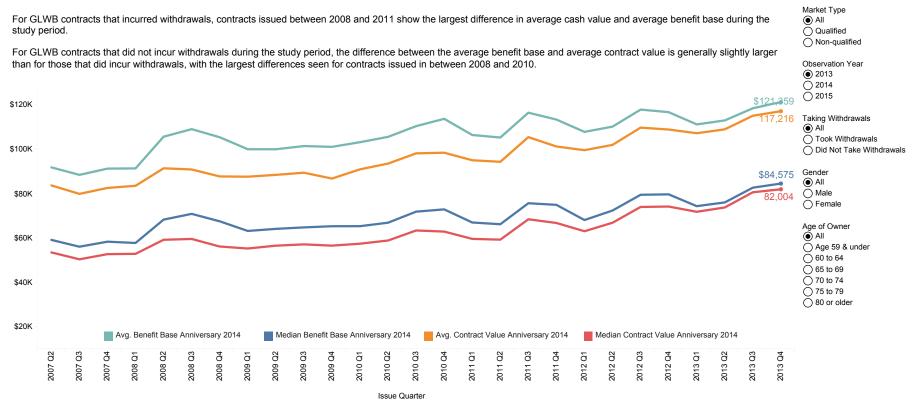
Benefit Base and Contract Value Summary

	Benefit Base (BB)	Contract Value (CV)	CV Capped at BB	CV as % of BB	CV Capped at BB as % of BB	Market Type All Qualified		
Total EOY	\$75,133,045,666	\$68,255,723,720	\$67,867,845,292	90.8%	90.3%	Non-qualified		
Average EOY	\$109,328	\$99,321	\$98,757	90.8%	90.3%	Observation Year 2013 2014		
Median EOY	\$70,988	\$64,172	\$63,717	90.4%	89.8%	O 2015		
	Percent of contracts where benefit base was greater than contract value: 91.9%							
	At end-of-year (EOY) 2013, almost 93 percent of GLWB contracts issued before 2013 had a benefit base balance that exceeded the contract value. By EOY 2014, that number had increased to 95 percent and by EOY 2015 it was at 97.5 percent.							
There was only a 1 to 2 percentage point variance in these results by age group and even less variation by gender, market type or contract size.						Contract Size EOY ● All Under \$100,000 \$100,000 to \$249,999 \$250,000 or more		

5. Equity Market Experience Over the Study Period 6. GLWB - Benefit
Base and Contract
Value Summary

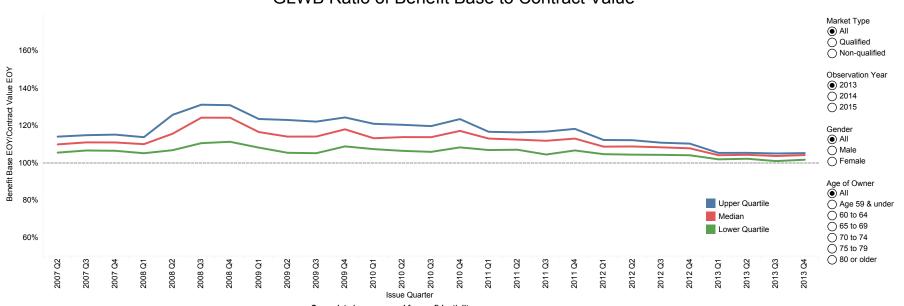
7. GLWB - Contract Value vs. Benefit Base by Issue Quarter 8. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter . GLWB - Ratio of Benefit Base to Contract Value by Dwner Age 0. Withdrawal activity - All contracts 11. Withdrawals by Source of Funds and Age of Owner I2. GL WB - F rst Wi hdraw al ..

GLWB - Contract Value vs. Benefit Base by Issue Quarter



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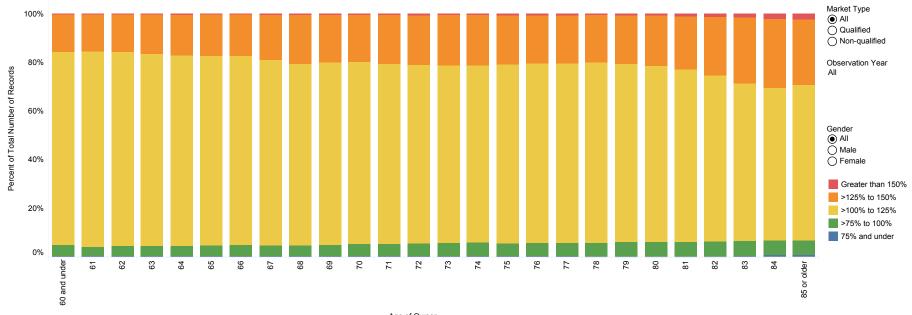
GLWB Ratio of Benefit Base to Contract Value



Some data is suppressed for confidentiality reasons.

This tab shows the interquartile range for BB/CV ratios by issue quarter. The interquartile range generally increased over the observation period, mostly for contracts issued prior to 2012.

Benefit Base to Contract Value Ratios by Age (EOY)



Age of Owner

Ratios of benefit base to cash value are relatively consistent by age, with slighter greater ratios at ages over 80.

7. GLWB - Contract Value vs. Benefit Base by Issue 8. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter 9. GLWB - Ratio of Benefit Base to Contract Value by Owner Age 10. Withdrawal Activity - All Contracts

11. Withdrawals by Source of Funds and Age of Owner

12. GLWB - Firs: Withdrawal by Owner Age and Issue Year

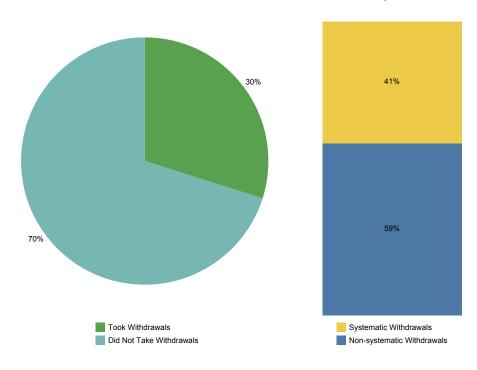
13. GLWB - Taking First Withdrawal from Annuity

14. GLWB - Average Amount Withdrawn 15. Gl WB -Withd awals as a..

Withdrawal Activity

This data includes all withdrawals taken by a contract with or without a GLWB benefit. For contracts with a GLWB benefit it includes withdrawals under the GLWB rider and withdrawals not under the rider.

Percent of owners that have taken withdrawals: Of those taking withdrawals:



Overall, one-third of FIA contracts had at least some withdrawal activity during study observation period. Four in 10 of these contracts took withdrawals on a systematic basis.

Non-qualified contracts had only 18 percent of owners taking withdrawals while qualified contracts had 44 percent. Qualified contracts also had a greater percentage of withdrawals on a systematic basis (nearly half).

Market Type

All

Qualified
Non-qualified

Rider Type

All

◯ GLWB ○ Non-GLWB

Observation Year

All

Gender

All

Male Female

Under GLWB Election

(All

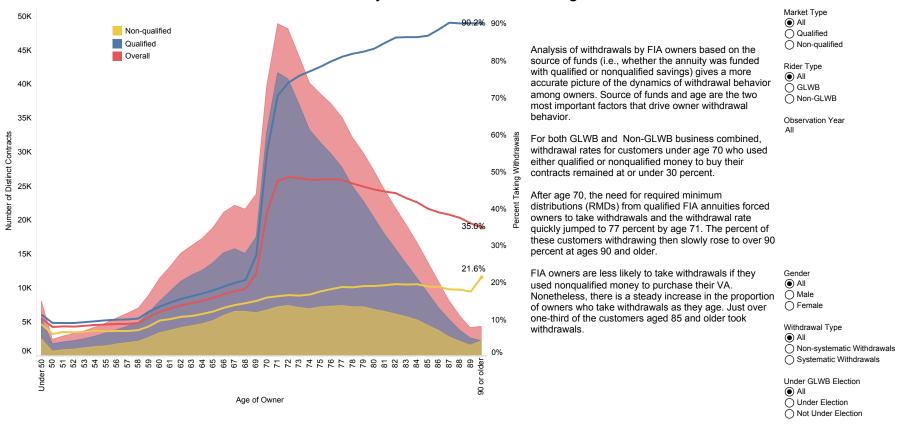
O Under Election

Not Under Election

8. GLWB - Ratio of Benefit Base to Contract Value by Issue Quarter 9. GLWB - Ratio of Benefit Base to Contract Value by Owner Age 10. Withdrawal Activity - All Contracts 11. Withdrawals by Source of Funds and Age of Owner 12. GLWB - Firs Withdrawal by Owner Age and 3. GLWB - Taking First Withdrawal rom Annuity 14. GLWB - Average Amount Withdrawn 15. GLWB -Withdrawals as a Percentage of Annual Benefit Ma

16. GL WB -Withd awals as a..

All Withdrawals by Source of Funds and Age of Owner

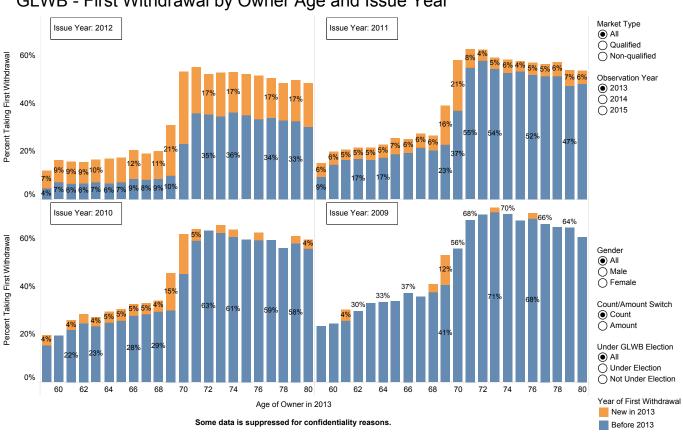


17. G WB ercen of Co tra..

GLWB - First Withdrawal by Owner Age and Issue Year

To better understand owners' inclinations to take withdrawals, we analyzed owner withdrawal behavior by considering at what age or in what year of the annuity ownership the owner is likely to initiate their first withdrawal. Also, once they start taking withdrawals, how many will continue taking withdrawals? Based on that analysis, we might expect to find corollary relationships among other variables like when owners decide to take their first withdrawals, whether their withdrawal amounts remain within or around the prescribed withdrawal maximum amount allowed in the contract, or whether the persistency of these contracts is different from contracts that have not experienced withdrawals or excess withdrawals.

Analysis of when owners are likely to take first withdrawals provides important information about withdrawal risk. These findings can help insurance companies to assess risks more precisely by identifying clusters of owners who are likely to start withdrawals in their first year, second year, etc., after purchase. There are two ways to analyze withdrawal activity: First, we can determine the percentage of owners who have initiated their first withdrawals in the current observation year, by their age and source of money, to provide various trends and relationships. Second, we can analyze the first withdrawal history for owners from a particular issue year, and track how age and source of money influence their first withdrawal activities.



8. G 9. GLWB - Ration
LW Benefit Base to
B - Contract Value
Rati Owner Age

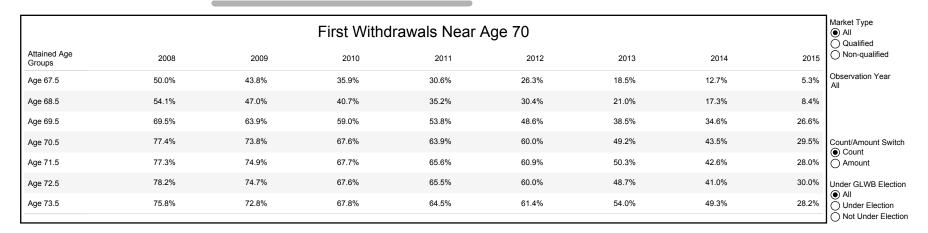
10. Withdrawal Activity - All Contracts 11. Withdrawals by Source of Funds an Age of Owner

12. GLWB - First Withdrawal by Owner Age and Issue Year 13. GLWB - Taking First Withdrawal from Annuity 14. GLWB - Average

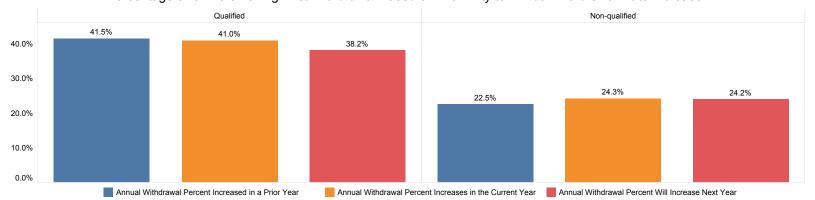
15. GLWB Withdrawals as a
Percentage of
Annual Benefit Max

16. GLWB -Withdrawals as a Percentage of Annual Benefit Maximum by Age 17. GLWB - Percent of Contracts Utilizing Benefits Ineffectively

18. GL WB -Withda awal A



Percentage of Owners Taking First Withdrawal Based on Proximity to Annual Withdrawal Rate Increase



11. Withdrawals by
Source of Funds and
Age of Owner

12. GLWB - First Withdrawal by Owner Age and Issue Year 13. GLWB - Taking First Withdrawal from Annuity 14. GLWB - Average Amount Withdrawn

15. GLWB -Withdrawals as a Percentage of Annual Benefit Max I6. GLWB -Withdrawals as a Percentage of Annual Benefit Waximum by Age 7. GLWB - Percent
of Contracts Utilizing
Genefits Ineffectively

18. GLWB -Withdrawal Activity by Duration 19. GL WB -Withdr awal A ctivi..

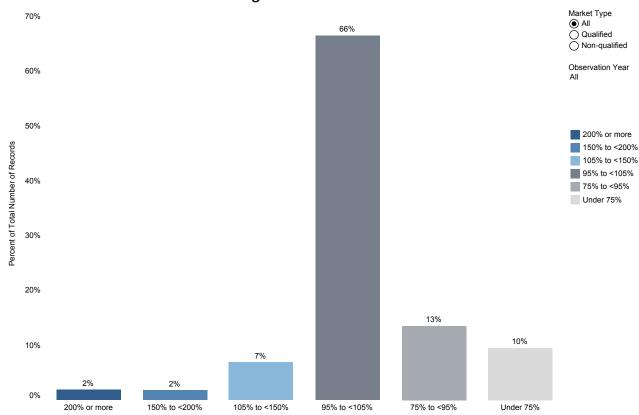
GLWB - Average Withdrawal Amount by Withdrawal Type

		<u>/ithdrawals</u>		Non-systematic Withdrawals				Observation Year All	
	Average		Median		Average		Median		
	Non-qualified	Qualified	Non-qualified	Qualified	Non-qualified	Qualified	Non-qualified	Qualified	
Age 59 & under	14,219	14,137	6,595	7,839	21,916	18,715	10,326	10,000	Under GLWB Election
60 to 64	10,294	11,703	5,766	7,624	16,150	16,410	8,362	10,359	All Under Election
65 to 69	9,832	9,747	6,082	6,544	14,703	14,525	8,314	9,200	Not Under Election
70 to 74	9,219	6,710	6,170	4,385	14,043	7,955	8,000	4,625	
75 to 79	9,380	7,069	6,669	4,614	13,951	7,659	8,651	4,600	
80 or older	9,441	7,423	6,638	4,530	13,658	8,150	7,776	4,883	
Grand Total	9,598	7,852	6,300	5,000	15,965	12,930	8,649	7,193	

The table shows the mean and median withdrawal amount for non-systematic (or occasional) and systematic (SWP) withdrawals for both qualified and nonqualified contracts.

Based on the average withdrawal amounts at younger ages, many of these GLWB owners may be partially surrendering their contracts.

GLWB - Withdrawals as a Percentage of Annual Benefit Maximum



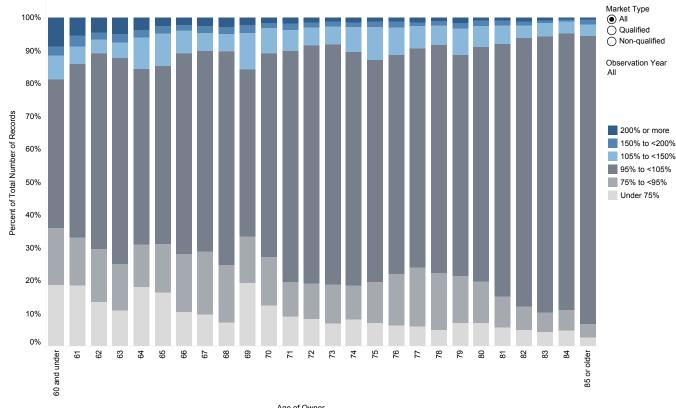
GLWB - Withdrawals as a Percentage of Annual Benefit Maximum by Age

Looking at the age of owners and their withdrawal amount in relation to maximum withdrawal amount allowed, we see that most FIA GLWB owners' withdrawal amounts remained within 105 percent or less of the amount allowed.

Just over twenty percent of owners took less than 75 percent of the maximum withdrawal amount allowed in the contract and only 10 percent of owners withdrew more than 105 percent of the maximal allowed.

Other items of note:

- The majority of owners taking withdrawals are aged 65 or older and 67 percent or these older owners are taking less than maximum annual benefit.
- Younger owners, particularly under age 60, are more likely to take 200 percent or more of the benefit maximum allowed in the contract.
- For qualified contracts, there is a slight jump in the percentage of contracts taking less than 95 percent of the benefit maximum. At these ages, contract owners tend to be taking distributions related to RMDs and therefore there may be lower amounts taken.

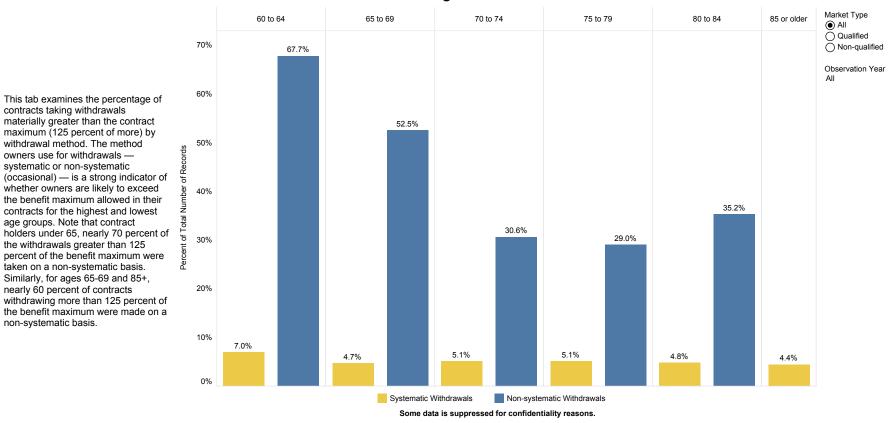


Age of Owner

19. GLWB tivity Withdrawal Activity
by Contract Year an

20. Average Withdrawal Amounts by Owners' Current Age 21. GLWB - Average and Median Ratios: Withdrawals to Contract Value and Benefit Base GLWE
- Ratio

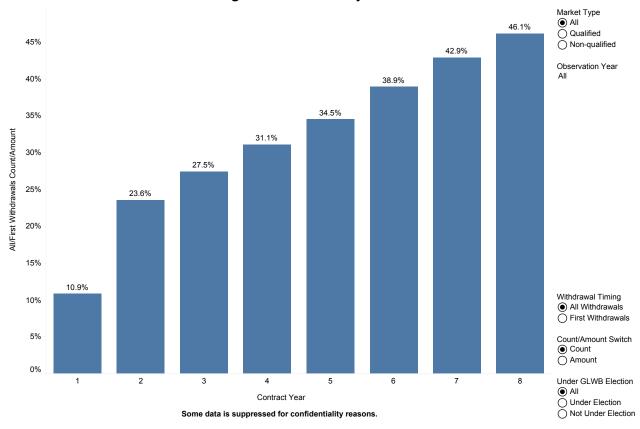
Percent of GLWB Owners Taking Withdrawals > 125% of Ben Max



GLWB - Percent of Contracts Taking Withdrawals by Duration

Contract duration (i.e., how long ago the contract was purchased) is important for determining what proportion of new FIA GLWB buyers or existing FIA GLWB 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 GLWB 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 FIA companies. The comparison could also facilitate internal forecasts by estimating when and how GLWB customers might take withdrawals and the resulting cash flow needed to manage the existing book of business.



by age.

Consistent with other analyses, rates of

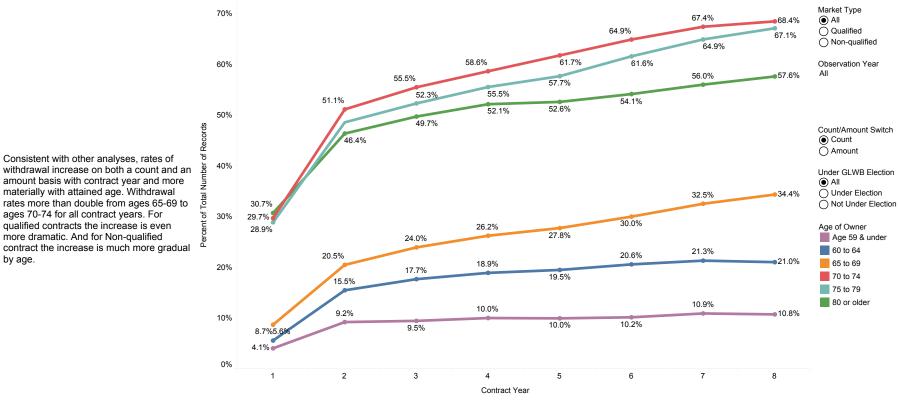
materially with attained age. Withdrawal

ages 70-74 for all contract years. For

more dramatic. And for Non-qualified

qualified contracts the increase is even

GLWB - Percent of Contracts Taking Withdrawals by Contract Year



Some data is suppressed for confidentiality reasons.

17. GLWB - Percent of Contracts Utilizing Benefits Ineffectively

18. GLWB Withdrawal Activity
by Duration

19. GLWB Withdrawal Activity
by Contract Year and
Age

20. Average
Withdrawal Amounts
by Owners' Current
Age

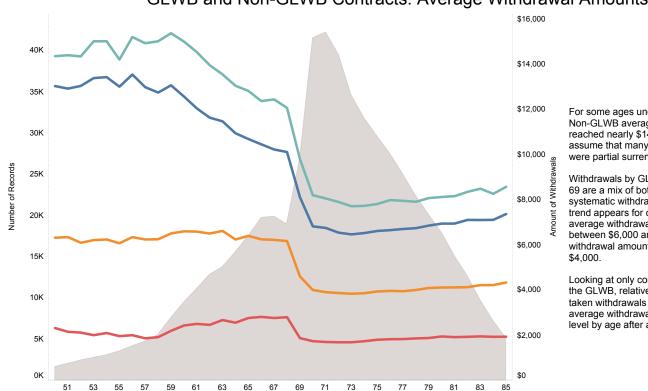
21. GLWB - Average and Median Ratios Withdrawals to Contract Value and Benefit Base

2. GLWB - Ratio of otal Withdrawals to contract Value and denefit Base

23. GLWB -Withdrawal Rates for Contracts In-the-Money vs. Not In-the-Money

4. Total Withdrawal Activity by Distribution Channel and Age 25. All Contra cts - W thdra v..

GLWB and Non-GLWB Contracts: Average Withdrawal Amounts by Owner Age



Current Age of Owner

For some ages under 60, GLWB and Non-GLWB average withdrawal amounts reached nearly \$14,000. It is safe to assume that many of these withdrawals were partial surrenders of the contracts.

Withdrawals by GLWB owners aged 60 to 69 are a mix of both occasional and systematic withdrawals. A relatively level trend appears for owners over age 70, with average withdrawal amounts around between \$6,000 and \$7,000 and median withdrawal amounts of approximately \$4,000

Looking at only contracts under election of the GLWB, relatively few contracts have taken withdrawals at ages below 60 and average withdrawal amounts are relatively level by age after age 60 at near \$7,000.



- Qualified
 Non-qualified
- Rider Type

 GLWB
- Non-GLWB
- Observation Year

Under GLWB Election

- All
- Under ElectionNot Under Election
- Average Withdrawals
- Median Withdrawals
- Lower Quartile of Withdrawals

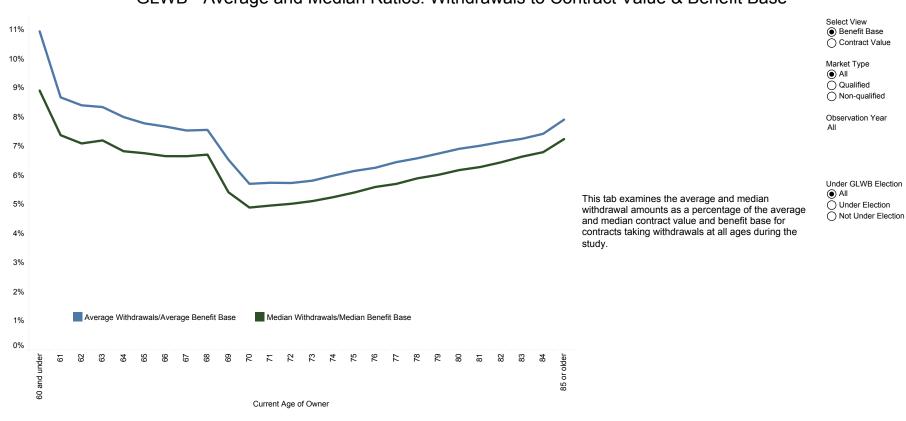
 Upper Quartile of Withdrawals
- Number of Contracts

18. GLWB -Withdrawal Activity by Duration 19. GLWB Withdrawal Activity
by Contract Year and

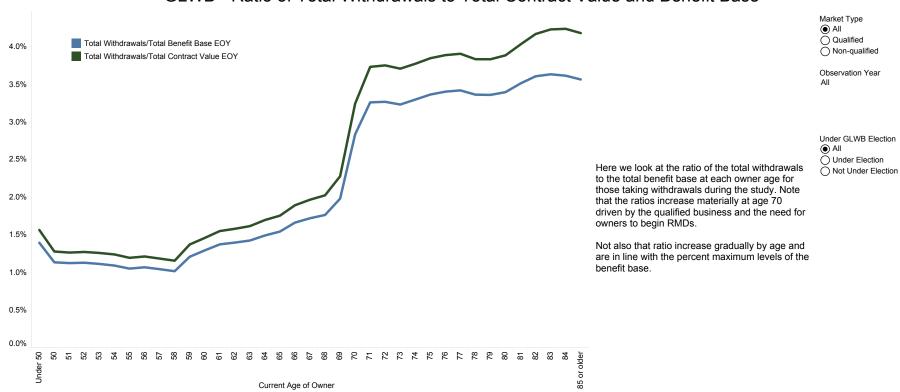
Average
ndrawal Amounts
Owners' Current
Withdrawals to
Contract Value and
Benefit Base

22. GLWB - Ratio of Total Withdrawals to Contract Value and Benefit Base 23. GLWB -Withdrawal Rates for Contracts n-the-Money vs. Not n-the-Money 4. Total Withdrawal Activity by Distribution Channel Ind Age 25. All Contracts -Withdrawal Rates by Selected Characteristics 26. GL WB - A verage Actua ial..

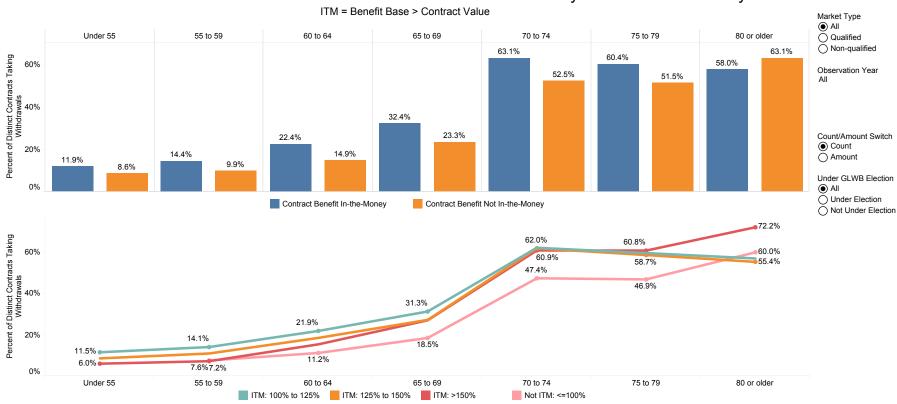
GLWB - Average and Median Ratios: Withdrawals to Contract Value & Benefit Base



GLWB - Ratio of Total Withdrawals to Total Contract Value and Benefit Base



GLWB - Withdrawal Rates for Contracts In-the-Money vs. Not In-the-Money



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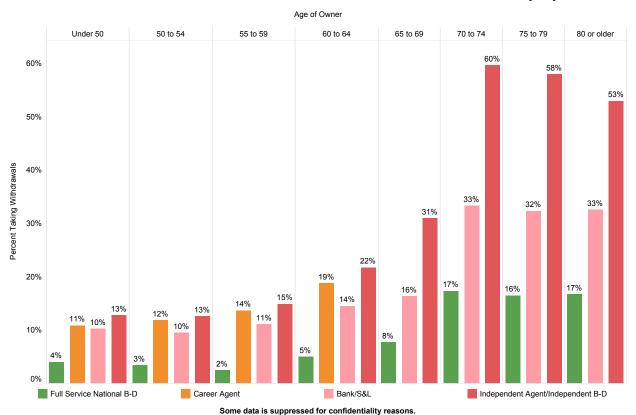
21. GLWB - Average and Median Ratios: Withdrawals to Contract Value and Benefit Base

22. GLWB - Ratio of Total Withdrawals to Contract Value and Benefit Base 23. GLWB -Withdrawal Rates for Contracts In-the-Money vs. Not In-the-Money 24. Total Withdrawal Activity by Distribution Channel and Age 25. All Contracts -Withdrawal Rates b Selected Characteristics 26. GLWB - Averag Actuarial Present /alue vs. Average Contract Value by Age 27. GLWB -Comparison of n-the-Moneyness Definitions 8. Additiona

Market Type

9. Ne

GLWB and Non-GLWB: Withdrawal Activity by Distribution Channel



Overall, the independent agent channel has the highest rates of withdrawal - it is by far the largest channel represented by data underlying the current study. Full service national broker dealers have the lowest withdrawals rates regardless of age group.

Under GLWB Election

Not Under Election

O Under Election

All

22. GLWB - Ratio of Total Withdrawals to Contract Value and Benefit Base 23. GLWB -Withdrawal Rates for Contracts In-the-Money vs. Not In-the-Money 24. Total Withdrawal Activity by Distribution Channel and Age

25. All Contracts -Withdrawal Rates by Selected Characteristics 26. GLWB - Average Actuarial Present Value vs. Average Contract Value by Age

7. GLWB comparison of n-the-Moneyness definitions 28. Additional

let Flows

30. St rende Rates by Co ntr..

Withdrawals Rates by Age of Owner

	By Co	<u>unt</u>	By Amount (0	Contract Value)	Select Breakout Age of Owner
	Percent of Owners Taking Withdrawals	Percent of Owners Taking Withdrawals Through SWP's	Percent of Contract Value Being Withdrawn	Percent of Contract Value Being Withdrawn Through SWP's	Gender Distribution Channel
Under 50	8%	1%	2%	0%	Contract Value BOY
50 to 54	9%	1%	2%	0%	Market Type All Qualified
55 to 59	10%	1%	2%	0%	○ Non-qualifiedRider Type
60 to 64	16%	2%	2%	0%	All GLWB Non-GLWB
65 to 69	23%	4%	3%	0%	Observation Year
70 to 74	54%	14%	4%	1%	
75 to 79	53%	14%	4%	1%	
80 or older	46%	12%	4%	1%	
Grand Total	30%	7%	3%	1%	

25. All Contracts -Withdrawal Rates by Selected Characteristics 26. GLWB - Average Actuarial Present Value vs. Average Contract Value by Age 27. GLWB -Comparison of In-the-Moneyness Definitions 28. Additiona

29. Net Flows

30. Surrender Rate

Market Type

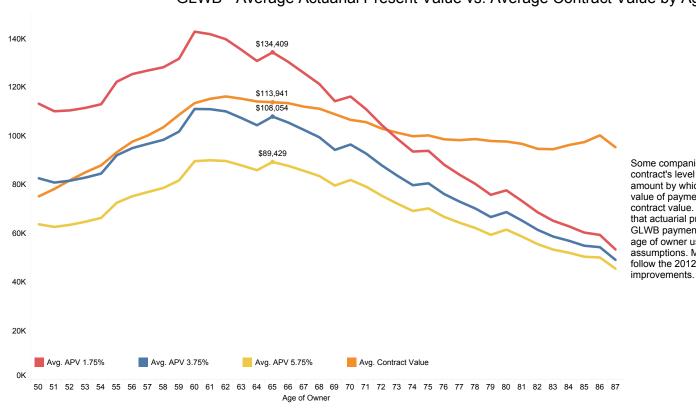
All

Qualified

Non-qualified
Observation Year

31. Gl WB - S urrender Rates es b..

GLWB - Average Actuarial Present Value vs. Average Contract Value by Age



Some companies prefer to measure a contract's level of in-the-moneyness as the amount by which the actuarial present value of payments exceeds the current contract value. For this tab, we compare that actuarial present value of future GLWB payments at the maximum level by age of owner using different interest rate assumptions. Mortality is expected to follow the 2012 IAM table with period

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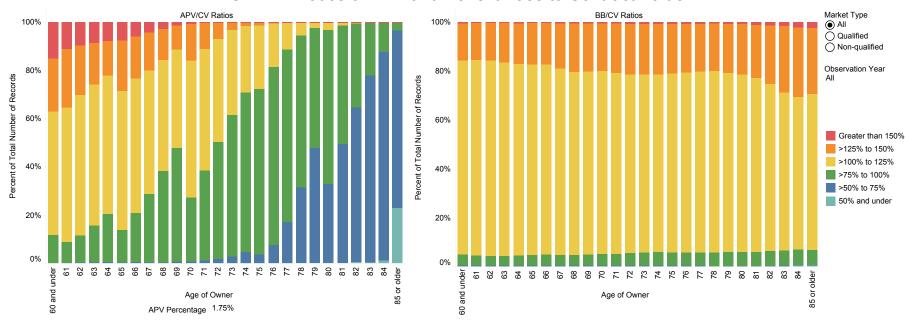
24. Total Withdrawal Activity by Distribution Channel and Age

25. All Contracts -Withdrawal Rates by Selected Characteristics 26. GLWB - Average Actuarial Present Value vs. Average Contract Value by Age 27. GLWB -Comparison of In-the-Moneyness Definitions 28. Additional

et Flows 30. Surrender F

31. GLWB -Surrender Rates by Percent of Annual Benefit Maximum Withdrawn 32. Su render Rates by Wit hd..

GLWB - Ratios of APV and Benefit Base to Contract Value



These charts compare the two approaches to ITM:

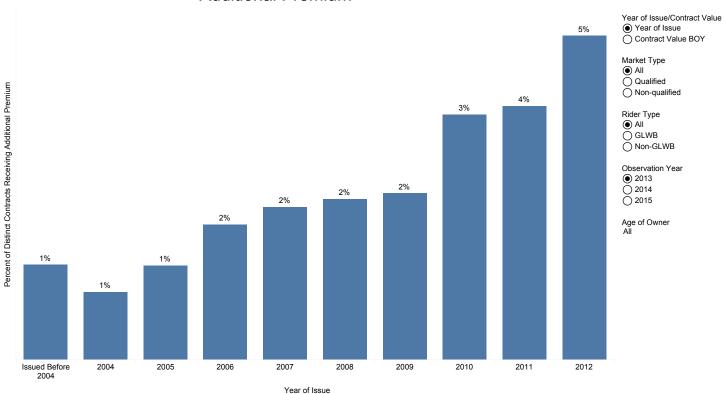
- 1) Ratio of Actuarial Present Value to Contract Value (APV/CV)
- 2) Ratio of Benefit Base to Contract Values (BB/CV)

23. 24. Total Withdrawa GL Activity by WB Distribution Chann - Wi and Age 25. All Contracts -Withdrawal Rates by Selected Characteristics 26. GLWB - Average Actuarial Present Value vs. Average Contract Value by Age 27. GLWB -Comparison of In-the-Moneyness Definitions 28. Additional Premium Flows 30. Surrender Ra

tes 31. GLWB -Surrender Rates by Percent of Annual Benefit Maximum 32. Surrender Rates by Withdrawal Type

render Rates by Diff e..

Additional Premium



Many retail FIAs allow owners to add premium after issue, though in practice most contracts do not receive ongoing deposits. Among contracts included in the current study:

- Overall, only 2 percent received additional premium.
- Younger owners were more likely to add premium than older owners.
- Overall, Non-qualified contracts were slightly more likely to receive additional premium than qualified contracts.

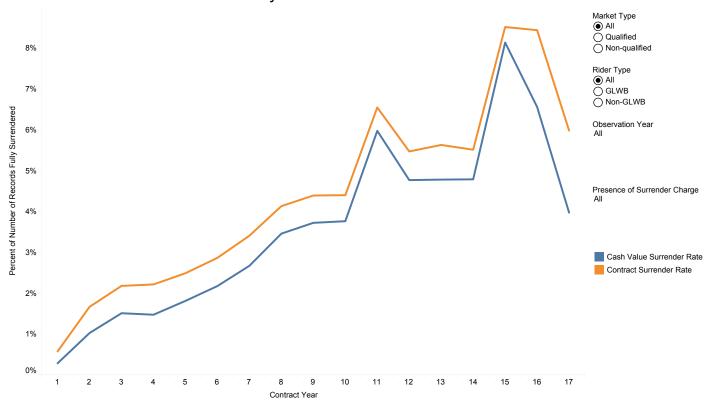
24. Tot al W ithd ra	25. All Contracts - Withdrawal Rates by Selected Characteristics		27. GLWB - Comparison of In-the-Moneyness Definitions	28. Additional Premium	29. Net Flows				33. Surrender Rates by Different Contract Characteristics	
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Net Flows

In-Force BOY	Number of Contracts 1,556,101	Total Contract Value \$120.00B	Average Contract Value** \$77,106 Market Type All Qualified Non-qualified
Premium Received			\$12.678 Rider Type
Existing Contracts	41,424	\$0.53B	\$12,070 All
Newly Issued Contracts	256,432	\$24.06B	\$93,844 GLWB
Benefits Paid			Observation Year
Full Surrenders	58,754	\$3.60B	\$61,880 (a) 2013
Death/Disability	23,090	\$1.73B	\$76,120 2014
Annuitizations	2,293	\$0.19B	\$82,607
*Partial Withdrawals		\$3.88B	\$7,907
Other Changes in Contract Value		\$7.31B	\$145,499
In-Force EOY	1,728,428	\$141.38B	\$81,799

^{*} Partial Withdrawals for one company are excluded.
** Average Contract Value includes contracts that had zero net flows.

Surrender Rates by Contract Year



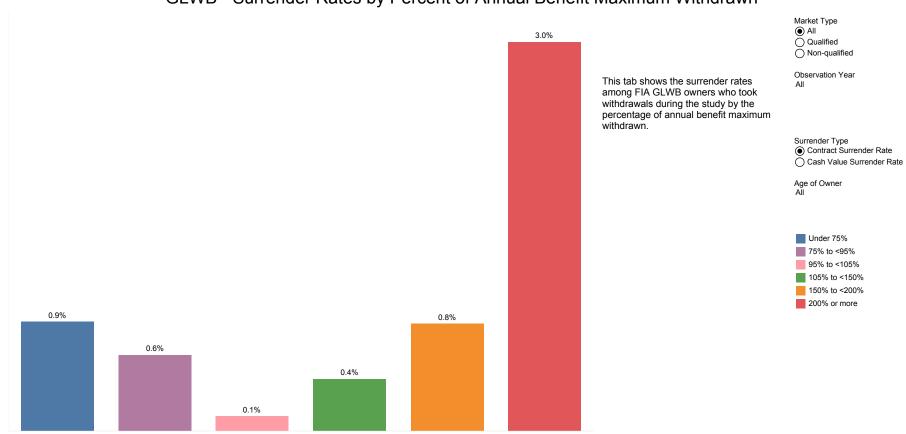
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Surrender Rates
 Different Contract
 haracteristics

34. GLWB - Product and Benefit Characteristics by

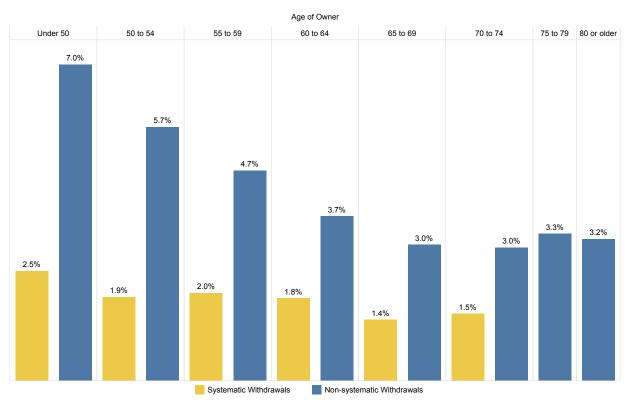
35. Participant List

GLWB - Surrender Rates by Percent of Annual Benefit Maximum Withdrawn



32. Surrender Rates by Withdrawal Type

GLWB and Non-GLWB: Surrender Rates by Withdrawal Type



Some data is suppressed for confidentiality reasons.

Market Type All

Qualified O Non-qualified

Rider Type

All

O GLWB O Non-GLWB

Observation Year

Surrender Type

Ontract Surrender Rate

O Cash Value Surrender Rate

27. GLWB -Comparison of In-the-Moneyness Definitions 28. Additional

29. Net Flow

30. Surrender Rate

31. GLWB -Surrender Rates by Percent of Annual Benefit Maximum Withdrawn 2. Surrender Rates
y Withdrawal Type

33. Surrender Rates by Different Contract Characteristics

34. GLWB - Product and Benefit Characteristics by

Market Type

All

Qualified
Non-qualified

Rider Type

All

GLWB

Non-GLWB

Observation Year

Presence of Surrender Charge

35. Participant List

Surrender Rates by Different Contract Characteristics

This tab provides a summary of surrender rates by various product and owner characteristics.

Year of Issue Age of Owner Contract Value BOY Gender Distribution Channel Years Until Surrender Charge Ex Current Surrender Charge Premium Bonus Expiry Benefit Base to Cash Value Patin	
Benefit Base to Cash Value Ratio)

	Contract Surrender Rate	Cash Value Surrender Rate
Issued Before 2004	6.3%	5.5%
2004	5.3%	4.7%
2005	4.8%	4.3%
2006	4.6%	4.0%
2007	4.5%	3.9%
2008	3.4%	2.7%
2009	2.6%	2.0%
2010	2.3%	1.6%
2011	2.4%	1.6%
2012	2.1%	1.3%
2013	1.4%	1.0%
2014	1.0%	0.6%
2015	0.6%	0.3%

26. GLWB - Average Actuarial Present Value vs. A	27. GLWB - Comparison of In-the-Moneyness Definitions	28. Additional Premium	29. Net Flows	30. Surrender Rates by Contract Year	31. GLWB - Surrender Rates by Percent of Annual Benefit Maximum Withdrawn		by Different Contract Characteristics	34. GLWB - Product and Benefit Characteristics by Issue Year	35. Participant List
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GLWB - Product and Benefit Characteristics by Issue Year

Average Rider Charges (in basis points)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Average Standard Charge	95.0	95.0	78.0	79.8	87.9	92.9	94.5	83.8	81.3	90.3	95.4
Average Standard Charge, Max Charge > 0	95.0	95.0	78.0	79.8	88.0	93.7	95.7	84.5	82.8	92.8	97.0
Average Max Charge, Max Charge > 0	150.0	150.0	102.1	118.8	141.8	158.0	149.5	116.9	118.8	149.0	140.3

Product Features

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Has Benefit Base Cap Benefit Fee Basis
Yes			0%	0%	13%	22%	15%	20%	24%	23%	39%	Benefit Base Increase Design Maximum Annual Withdrawal Percent
No	100%	100%	100%	100%	87%	78%	85%	80%	76%	77%	61%	Impact on Benefit Base if Excess Withdrawals are Taken After Eligible

This tab provides information on average charges and fees as well as other product features for GLWB contracts included in the study.

26. GLWB - Average Actuarial Present Value vs. A	27. GLWB - Comparison of In-the-Moneyness Definitions	28. Additional Premium	29. Net Flows			32. Surrender Rates by Withdrawal Type			35. Participant List
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Participants

<u> </u>	
AIG	
American Equity	
Athene	
Bankers Life	
Equitrust	
Genworth	
Great American	
Horace Mann	
Lincoln National	
National Western	
Nationwide	
Oxford Life	
Pacific Life	
Sammons	
Securian/Minnesota Life	
Security Benefit	
Symetra	
Voya	
Western and Southern	