

Choosing an Earnings Assumption on Life Insurance Products



One of the key assumptions in designing a permanent life insurance product is the assumed earnings rate. If a policy earns less than assumed, there may be unfavorable ramifications such as higher required premiums, a shortened coverage period, lower cash value, or lower death benefit. This document is designed to help you choose a reasonable earnings assumption based upon three items: 1) the underlying asset types that will determine the policy cash value, 2) the product type, and 3) the likelihood of achieving a rate based upon historical asset class 30 year rolling period returns dating back to 1926.

How to Use the Tables

- 1 Select a product type.
- 2 Choose a targeted reliability which is the historical likelihood of achieving a given earnings assumption.
For WL, UL, and GUL, cross reference the reliability with the Carrier Portfolio
- 3 For IUL, cross reference reliability with the carrier cap rate.
For VUL, cross reference it with your expected investment allocation to equities and fixed income assets.

Note: For a description of product types, refer to the separate Life Insurance Product Overview document.

Whole Life (WL), Universal Life (UL), Guaranteed Universal Life (GUL) Products

Underlying Asset Type: Carrier portfolio primarily consisting of fixed income instruments

Earnings Determination: Carrier discretion for a declared earnings rate or formula.

Historical Returns Based Upon Targeted Reliability and Sample Carrier Portfolio

Targeted Reliability	Carrier Portfolio
100%	2.91%
90%	3.45%
80%	3.71%
70%	4.22%
60%	4.63%
50%	6.30%

Note: These products are supported by a carrier's investment portfolio ("General Account") which is comprised mostly of bonds. Over the long run these policies tend to have returns similar to fixed income securities. Earnings over a product guaranteed rate (1-2% on today's products) are paid at the sole discretion of the carrier.

Indexed Universal Life (IUL) Products

Underlying Asset Type: Carrier General Account portfolio primarily consisting of fixed income instruments

Earnings Determination: Change in a reference market index limited by carrier discretion

Optional Adjustment: 0.5%-1.0% additional reduction for inherent product earnings volatility

Historical Returns Based Upon Targeted Reliability, 100% Participation Rate, 0% Floor, and Specified Cap Rate

Targeted Reliability	Cap Rate Assumption			
	12%	10%	8%	6%
100%	5.87%	4.97%	4.01%	3.04%
90%	6.30%	5.49%	4.54%	3.45%
80%	6.48%	5.58%	4.58%	3.49%
70%	6.69%	5.80%	4.78%	3.65%
60%	6.74%	5.82%	4.81%	3.67%
50%	6.81%	5.89%	4.85%	3.69%

Note: IUL policies do not directly purchase any securities. Although the product is supported by fixed income instruments, the change in a market index (excluding any dividends) is used as a reference point for determining the earnings credited to the policy subject to various carrier declared discretionary elements that will limit upside. Carrier discretion is critical to the earnings as cap rates may be reduced to 3% or even lower in some contracts.

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Variable Universal Life (VUL) Products

Underlying Asset Type: Policy owner selected allocation to equity and/or fixed income sub-accounts

Earnings Determination: Market performance

Optional Adjustment: 0.5%-1.0% additional reduction for inherent product earnings volatility

Historical Returns Based Upon Targeted Reliability and Specified Allocation

Targeted Reliability	Equities/Fixed Income Allocation Assumption					
	100%/0%	90%/10%	80%/20%	70%/30%	60%/40%	50%/50%
100%	8.47%	8.26%	8.00%	7.68%	7.31%	6.79%
90%	9.85%	9.48%	8.91%	8.33%	7.87%	7.32%
80%	10.17%	9.81%	9.36%	8.88%	8.28%	7.67%
70%	10.33%	10.07%	9.61%	9.14%	8.64%	7.94%
60%	10.70%	10.26%	9.93%	9.51%	9.03%	8.38%
50%	10.86%	10.63%	10.36%	9.88%	9.40%	8.85%

Note: Policy owner may invest in stocks and bonds via product sub-accounts in the carrier's Separate Account (which isn't subject to the claims of the carrier's general creditors). Policy owner may change the allocation in the future.

About the Analysis

The analysis looks at 30 year period rolling returns of various investment portfolios described below. Returns from 1926 through the end of the most recent calendar year are examined. The market indices below are used to calculate the minimum return that could have been achieved for a specified reliability target. For example, returns in the tables showing for a targeted reliability of 80% means that 80% of historical 30 year rolling period returns achieved that level of return or greater.

Assumed Asset Class Allocation for Historical Rolling Period Analysis

Asset Class	General Account Portfolio (WL, UL, GUL)	Indexed Universal Life (IUL)	VUL Equity Allocation	VUL Fixed Income Allocation
S&P 500 Total Return	2%		100%	
S&P 500 Price Return*		100%		
BofA Merrill Lynch 15+ Year U.S. Corporate Bond Index	56%			57%
BofA Merrill Lynch 15+ Year U.S. Treasury Index	14%			14%
BofA Merrill Lynch U.S. High Yield Index	25%			26%
30-Day U.S. Treasury Bill	3%			3%

**S&P Price Return excludes dividends.*

VUL Equity Allocation refers to the portion of assets allocated to equities while VUL Fixed Income Allocation refers to the portion allocated to fixed income instruments. For example in a 70% equity/30% fixed income allocation on a VUL, 70% of the assets would be allocated into the S&P 500 Total Return while the remaining 30% would be allocated proportionately to the allocations shown under VUL Fixed Income Allocation.

Cap/Floor Assumption refers to adjustable limits on indexed returns which restrict the maximum potential earnings to the cap rate. Floor (which is usually a fixed rate specified in the contract) refers to the minimum return level experienced under an index product. For example, in a 12%/0% cap/floor product, a return of 18% would be limited to 12% while a return of -18% would be limited to 0%. Carriers have significant discretion to adjust cap rates, and cap rates on new policies may differ than cap rates on existing policies. Cap rates will be influenced by the carrier's general account yield, carrier options budget, and the pricing of options instruments purchased by the carrier.

Historical period returns are shown for informational purposes only and does not reference any specific client experience. Past performance is not a guarantee or indicative of future results. Performance of an index is not illustrative of any specific investment. Indices are unmanaged and do not incur fees; one cannot invest directly in an index. Returns are geometric means of the rolling period returns. Data Source: Bloomberg. Sample Carrier General Account portfolio is based upon statutory carrier filings from 2000-2016 for 20 life insurance carriers showing carrier General Account asset allocations as well as industry aggregated allocations. Data Source: S&P Global Market Intelligence.