

Veralytic Report

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Executive Summary



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Executive Summary

Permanent Life Insurance Product

Policy/Illustration Under Evaluation - Minnesota Life Balanced Growth Accumulator II IUL

This Veralytic Report was prepared for a **Minnesota Life** UL policy with a \$100,000 initial policy face amount and is based on the illustration of hypothetical policy values submitted for evaluation. The evaluation is intended to serve as a tool to assist financial advisors in determining the appropriateness of the policy under evaluation for a 44 year old female assumed to qualify for Preferred Non-Tobacco health rates. The policy under evaluation is a Flexible UL policy with illustrated premiums shown to be paid through 10th policy year and calculated to equal the minimum premium necessary to sustain the policy face amount. (i.e., to endow policy cash values equal to initial policy face amount at or prior to policy maturity age 100).

Veralytic Appropriateness Rating - (3 1/2 stars out of 5 stars)

★★★★

The Veralytic Report evaluates policies on five (5) criteria to rate the appropriateness of a given product for a given planning situation using a star rating system. A **full star (★)** indicates the policy under consideration receives the highest comparative rating, a **half star (↕)** indicates a median rating, and an **empty star (☆)** represents the lowest rating compared with benchmarks.

The **Minnesota Life** Balanced Growth Accumulator II IUL is rated (3 1/2 stars out of 5 stars)

★★★★ for appropriateness for the illustrated plan design based on:

1. Financial Strength & Claims-Paying Ability: (1 star)

★

The insurer's financial strength and claims-paying ability ranks in the top decile (i.e., among the top 10%) of all rated insurers. While high ratings for financial strength and claims-paying ability do not necessarily, in and of themselves, render a policy appropriate, high ratings **and** low cost is considered more appropriate than otherwise. (Carrier Strength is reported in "Carrier Due Care" located in the lower left corner of page 2 of the Veralytic Report. This section reports the insurer's ratings and rankings by the four leading ratings services and the insurer's percentile ranking using a composite index. Ratings methods and the significance of these rankings are discussed in detail on pages 2 and 3 of Section 4, *User Guide*, of this report.)

2. Cost Competitiveness: (1/2 star)

↕

The policy under evaluation illustrates an overall cost structure and premium that is roughly comparable to the relevant benchmark representative of an average, but competitively priced product. While an average overall cost structure and average illustrated premiums may appear less appropriate than low premiums/costs, an average premium would be more appropriate than a low premium based on a cost structure that is **not** attributable to some demonstrable operating, underwriting and/or marketing advantage. To evaluate Cost Competitiveness, the Veralytic System considers Funding Strategy and Pricing Style (reported in "Product Profile" located at the top left corner of page 1 of the Veralytic Report), as well as Premium Cost Competitiveness (reported in "Premium Comparison" located at the upper right corner of page 1 of the Veralytic Report). (The significance of Cost Competitiveness is discussed in detail on pages 3-5 of Section 4, *User Guide*, of this report.)

3. Pricing Stability: (1 star)

★

Pricing of all life insurance policies are a function of three (3) variables: 1) cost of insurance (COI) charges, 2) policy expenses, and 3) the illustrated/actual earnings rate on policy cash values. Pricing for the policy under evaluation is adequate and reasonable to the extent that cost of insurance (COI) charges and policy expenses appear to be based on actual claims and operating experience according to disclosures included in the illustration of the policy under evaluation. The insurers retention capacity allows the insurer to exercise substantial control over pricing for the policy under evaluation, and, therefore, pricing for this policy is least vulnerable to changes in the reinsurance market. In addition, the pricing of the policy under evaluation is based on interest assumptions which are in line with historical returns for the asset classes corresponding to the asset types in which policy cash values are invested. While the Veralytic system has no way of predicting whether a policy will perform as illustrated, the Veralytic system does consider whether the values illustrated are consistent with the insurers historical experience, whether this experience has been fully disclosed, and how potential changes in experience might impact future policy performance. (The significance of Pricing Stability is discussed in detail on pages 5 and 6 of Section 4, *User Guide*, of this report.)

4. Relative Policy Value: (1/2 star)



Cash value liquidity for this policy is roughly comparable to representative benchmarks. While liquidity can be less relevant in certain plan designs, policies with higher cash values and greater liquidity than relevant benchmarks are generally considered more appropriate than policies with lower cash values and more limited access to policy cash values. (Relative Cash Value comparisons are summarized in "Hypothetical Policy Cash Value Account Growth" located near the bottom of page 1 of the Veralytic Report. The significance of Relative Cash Value is discussed on pages 6 and 7 of Section 4, *User Guide*, of this report.)

5. Historical Performance: (1/2 star)



The cash value allocation options for the product under evaluation are considered acceptable in that the historical net yield on the insurer's General Account Portfolio supporting illustrated policy cash values is roughly the same as the average historical net yield for all insurers (to the extent that allocating *all* policy cash values to non-equity, fixed-income-type assets is consistent with the risk/return profile of the policy owner). Insurers are required by law to invest cash values for permanent products (other than variable) predominantly in declared-rate investments such as bonds and mortgages. While the illustrated policy crediting rate may be higher or lower than the insurer's net portfolio yield at a given point in time, over time the actual policy crediting rate must correlate with the yield on the insurer's General Account Portfolio. Thus, permanent products (other than variable) whose cash values are invested in a General Account with *higher* historical net yields are generally considered more appropriate than policies whose cash values are invested in a General Account with *lower* historical net yields. (The Veralytic Report compares the illustrated net portfolio yield with average net portfolio yields for all insurers and summarizes comparisons in "Product Profile" located in the upper left corner of page 1 of the Veralytic Report. The significance of Cash Value Allocation Options is discussed on pages 7 and 8 of Section 4, *User Guide*, of this report.)

All five factors contribute to appropriateness, and no single factor is sufficient to determine appropriateness. When all other appropriateness factors are equal, the policy receiving the higher appropriateness rating for any one criteria is considered more appropriate. In other words, if two policies receive similar ratings on four criteria but one is rated higher on the fifth criteria, it is considered more appropriate.

Veralytic Report Analysis



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Minnesota Life Balanced Growth Accumulator II IUL

Product Profile

Product Rating: (3 1/2 stars out of 5 stars) ★★★★★
 Product Type: UL
 Premium Type: Flexible
 Min. Face Amount: \$100,000
 Optimal Funding Strategy: Mixed

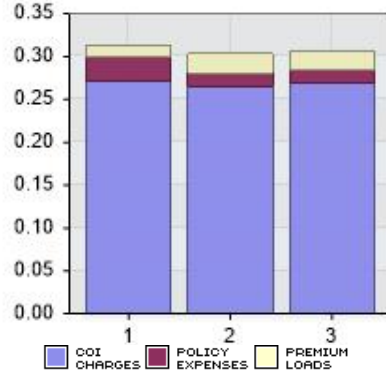
Pricing Style:
 Policy pricing is a function of 3 factors: Cost of Insurance Charges (COIs), Expenses & Earnings. Product suitability is therefore categorized by the structure of and the underlying experience for these pricing components. (See The Pricing Advisor section below or at Veralytic.com for more information.)

	Max. Accum	Mixed	Min. Prem
Retail			
Institutional			
Experience-Rated			

Policy Under Evaluation	3.82%	5-yr Avg. Net Portfolio Yield *	Avg for All Policies	3.60%
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* Source: VitalSigns²

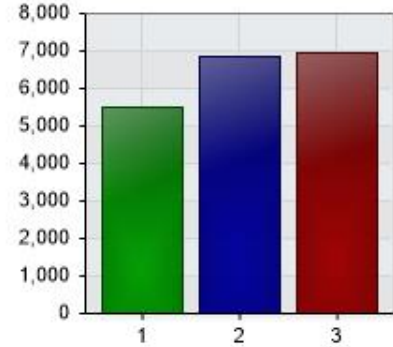
Policy Expense Breakdown



1. Policy Under Evaluation
2. Institutionally Priced Policies
3. Retail Policies

Policy Expense Breakdown measures the present value cost per \$ of Death Benefit and the individual cost components, assuming identical funding amounts and funding patterns for a policy issued to a 44 year old female Non-Smoker Preferred risk.

Premium Comparison - Face Amt: \$100,000



1. Policy Under Evaluation
2. Institutionally Priced Benchmark
3. Benchmark for All Policies

Premium Comparison calculates the minimum level annual premium required over 10 years to maintain the policy for 56 years, assuming a 5.16% average net policy earnings rate and current expense assumptions for a policy issued to a 44 year old female Non-Smoker Preferred risk.

Cost of Insurance (COI) Charges

	Policy Under Evaluation	Institutional Pricing Benchmark	Benchmark for All Policies
Weighted-Average Annual COI	\$2,541	\$2,640	\$2,683

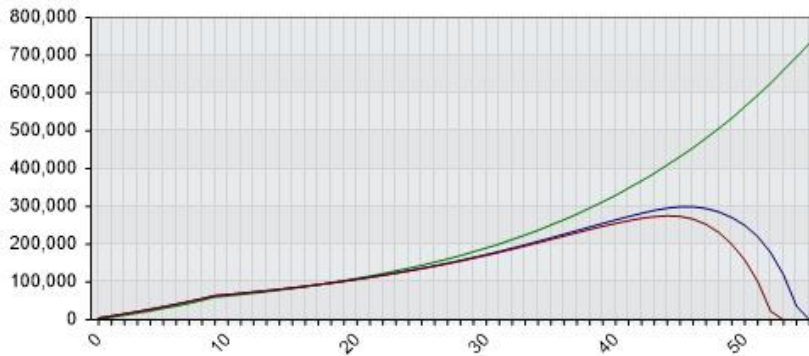
Policy Expenses

	Policy Under Evaluation	Institutional Pricing Benchmark	Benchmark for All Policies
M&E Risk %	0.00	0.00	0.00
Other %	0.00	0.00	0.00
Total %	0.00	0.00	0.00
Loan Spread %	1.00	1.00	2.00
Fixed Charges			
Per Policy Yr	\$245	\$142	\$142

Premium Loads

	Policy Under Evaluation	Institutional Pricing Benchmark	Benchmark for All Policies
State Tax %	2.10	2.35	2.35
Fed DAC Tax %	1.25	1.50	1.50
Carrier % Load(s)	0.00	0.00	0.00
Sales/Service % Load(s)	2.15	3.65	3.65
Total %	5.50	7.50	7.50

Hypothetical Policy Cash Value Account Growth Planned Annual Premium: \$5,483



- Policy Under Evaluation
- Institutional Pricing Benchmark
- Benchmark for All Policies

The purpose of this graph is to show how different policy charges could effect policy value and death benefit. This graph is hypothetical and may not be used to predict or project actual policy performance or tax treatment.

Policy/Benchmark	Est Yr 1 Cash Value / Premium Ratio	Surrender Charge	Yrs Applied	Average Decrease %/Yr	Death Benefit @ Endowment/Maturity	Crediting Rate %	Bonus Rate %	Ultimate Rate %
Policy Under Evaluation	35.18%	59.48%	9	6.61%	\$732,082	5.16	0.00	5.16
Benchmark for Institutionally-Priced Policies	80.00%	0.00%	N/A	N/A	Lapse @ Y56	5.16	0.00	5.16
Benchmark of All Policies	0.00%	88.00%	11	8.00%	Lapse @ Y54	5.16	0.00	5.16

Cost of Insurance (COI) Charges (Cont'd)

Cost of Insurance charges (COIs) are deductions for the payment of claims and are typically the largest single cost factor, accounting for 75% or more of the total premium. However, because COIs vary with age of the insured, policy age, premiums, earnings, and deductions for other policy expenses, they can also be the most difficult to compare. For this reason, a weighted-average annual COI is calculated by averaging the present value of each COI charge using the Net Net Rate of Return (i.e. the rate at which cash values would otherwise have grown but for the deduction of COIs) shown above.

This weighted-average annual COI is then compared to standard industry mortality tables (75-80 S&U Male Age Nearest for current non-guaranteed COIs and 1980 CSO Male Age Nearest for guaranteed maximum COIs) to create a standardized, uniform method of comparison.

Policy Expenses (Cont'd)

Policy Account Value Charges include Mortality & Expense Risk (M&E) Charges and other account-value-based charges that are independent from the individual separate account funds and are, therefore, deducted from cash values at the policy level. These charges do not include Investment Advisory Fees, Fund Management Fees, nor Fund Operating Expenses that are specific to each particular separate account fund within the policy and are, therefore, deducted at the respective fund level.

Premium Loads (Cont'd)

All policies include deductions for State Premium Taxes, Federal DAC Taxes and charges for policy issue, administration, distribution and general operating expenses of the insurance carrier and/or the sales and servicing organization. While most policies assess charges for these expenses, either in the form of a premium load or as a flat-dollar policy expense, these expenses may be included with other policy charges and, therefore, may not be disclosed separately (shown as "N/A" when undisclosed).

The Pricing Advisor

Despite a confusing variety of products and terminology, insurance pricing is simple when reduced to its fundamental components. For instance, all premiums are based on three components:

- 1) death benefits claims paid, or Cost of Insurance charges (COI);
- 2) carrier and servicing organization expenses associated with policy design and administration (E); and
- 3) investment earnings (i%).

In other words, premiums will always be based on the following simple formula: $\text{Premiums} = \text{COI} + E - i\%$. However, different products place different emphasis on each of these pricing components. This results in products that perform differently under different funding scenarios (e.g. products with low COIs perform best in minimum-funded, defined-death-benefit applications while products with low M&E/cash-value-based expenses perform best in maximum-funded, defined-contribution-type applications).

In addition, because different groups of policyholders have different claims experience and expenses, premiums will also vary depending on the claims experience and expenses for the group being insured. The Pricing Advisor uses this simple formula to help you evaluate your client's new proposals and existing portfolios.

Retail Pricing

Policy pricing is a function of 3 factors: Cost of Insurance Charges (COIs), Expenses & Earnings. Product suitability is therefore categorized by the structure of and the underlying experience for these pricing components. (See The Pricing Advisor section below or at Veralytic.com for more information.)

Institutional Pricing

Large corporations and public companies purchase insurance differently than the average "retail" buyer. Because these large transactions and large groups of policies cost less to sell and administer, carriers typically reduce institutional cost factors to reflect volume discounts and economies of scale. While institutional products are becoming more widely available, threshold financial requirements still limit access to Institutional Pricing that offers lower premiums to only a small percent of insurance buyers. However, access to institutional pricing is becoming more widely available through purchasing groups and/or institutional risk pools.

Experience-Rated Pricing

In addition to the same advantage of lower expenses offered by Institutional Pricing, Experience-Rated Pricing also offers the benefit of lower COI charges. Experience-Rated products are available to only a selective pool of qualified companies and qualified individuals. Experience-Rated products are priced for the superior claims experience of professionals, business executives and owners, and high net worth individuals. Because this group enjoys healthier lifestyles and better health care, they live longer. As a result, this group experiences lower mortality rates, and products priced for this market generally have lower COI charges than products sold to retail and institutional markets.

Carrier Due Care

Financial Strength & Claims-Paying Ability Ratings (alpha order)		Watch List
AM Best	A+ (2 of 15)	n/a
Fitch	AA (3 of 24)	n/a
Moody's	Aa3 (4 of 21)	n/a
Standard & Poor's	AA- (4 of 20)	n/a
Percentile Ranking	96%	
Retention Limit:		
Single Life:	\$5,000,000	

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User Guide



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Veralytic Star Rating

The suitability of permanent life insurance products depends principally upon the following five factors:

- Insurer Financial Strength
- Cost Competitiveness
- Pricing Stability
- Policy Liquidity
- Historical Performance

The Veralytic Research Platform evaluates policies on these five criteria and rates them compared to industry benchmarks (see more on benchmarks at the top of page 4-2 in this section) using a star rating system. A ★ (full star) indicates the policy under consideration receives the highest comparative rating, a ☆ (half star) indicates a median rating, and an ☆ (empty star) represents the lowest rating compared with benchmarks.

All five factors contribute to suitability, and no single factor is sufficient to determine suitability. While cost is clearly important, buying insurance is different than other consumer purchases. With many consumer products, price is often directly related to quality, and the higher the price the better the quality, durability, or service. For instance, the higher the financial strength of a bond issuer, the lower the interest rate (i.e., the lower the price the issuer must pay to attract investors, and the lower the market value of the bond on the open market). However, this direct correlation between policy cost and quality doesn't necessarily exist in life insurance products. For example, higher carrier ratings, which indicate greater financial strength and claims-paying ability, don't necessarily dictate higher costs because a number of other factors influence pricing (discussed further under Cost Competitiveness section below). However, when two policies have the same cost, but one of the insurers has higher carrier strength ratings, the Veralytic Reports consider the product offered by the more highly rated carrier more suitable.

For permanent life insurance, pricing suitability depends upon a number of factors, and the lowest premium may not always offer the best value. Fortunately, despite a confusing variety of products and terminology, insurance pricing is simple when reduced to its three fundamental components:

- Cost of insurance charges (COI) for death benefit claims
- Carrier and servicing organization expenses (E) for policy design, underwriting, and administration
- Investment gains and/or interest income (i%) credited to policy cash values in excess of COIs and E

In other words, premiums are always based on the following formula in minimum-premium defined-death-benefit policy designs, and policy performance is always based on the following formula in maximum-accumulation defined-contribution policy designs:

$$\text{Premiums/Performance} = \text{Cost-of-Insurance Charges (COI)} + \text{Policy Expenses (E)} - \text{Policy Interest/Earnings (i\%)}$$

As such, the Veralytic Research Platform uses this simple formula to evaluate the pricing suitability of either proposed coverages and/or inforce policies, as follows. First, the system separates policy costs into either cost of insurance charges (COIs) shown below left, and policy expenses (E) shown below middle and below right. It then groups expenses by their nature into the only three (3) ways that insurers calculate and collect policy expenses, namely 1) fixed administration charges (FAEs), 2) cash-value-based "wrap fees" (e.g., M&Es), and 3) premium loads. The system then "normalizes" cost of insurance charges and expenses to account for differences in amounts and timing of the different charges in different policies for easy comparison (see discussion of each pricing component in the Pricing Competitiveness section). This "normalizing" of varying policy charges computes a single value for each pricing component by adjusting for differences in timing at the rate of interest/earnings at which the policy cash values would otherwise grow, but for the deduction of the given charge(s). The Veralytic Research Platform then compare these "normalized" values with benchmarks for each pricing component in the tables located in the middle of page 2-1 of the Veralytic Report, an example of which is also shown below.

Cost of Insurance (COI) Charges				Policy Expenses				Premium Loads			
Policy Under Evaluation	Institutional Pricing Benchmark	Benchmark for All Policies	% of Cash Value	Policy Under Evaluation	Institutional Pricing Benchmark	Benchmark for All Policies	% of Premium	Policy Under Evaluation	Institutional Pricing Benchmark	Benchmark for All Policies	
Weighted-Average Annual COI	\$13,166	\$12,940	\$14,734	M&E Risk %	0.05	0.55	0.60	State Tax %	2.35	2.35	2.35
				Other %	0.00	0.00	0.00	Fed DAC Tax %	1.50	1.50	1.50
				Total %	0.05	0.55	0.60	Carrier % Load(s):	0.00	0.00	0.00
				Loan Spread %	0.75	1.00	2.00	Sales/Service % Load(s):	3.15	3.65	3.65
				Fixed Charges				Total %	7.00	7.50	7.50
				Per Policy Yr	\$2,529	\$1,728	\$1,728				

The practice of benchmarking is well-established and quite common in the financial services industry where the performance of a financial instrument is frequently compared to a standard, independent point of reference. For instance, to determine the appropriateness of a given mutual fund selection, the performance of that mutual fund is often compared with the Dow Jones Industrial Average, the S&P 500, the NASDAQ, or the Wilshire 5000. Veralytic Benchmarks are similarly used to compare the pricing and performance of a given life insurance product, and can thus be used to determine appropriateness of a given life insurance policy selection. Veralytic Benchmarks are derived from industry standard mortality tables (see Society of Actuaries 75-80 Basic Select & Ultimate Gender Distinct Mortality Tables at www.soa.org), industry aggregate expense ratios (see Society of Actuaries Generally Recognized Expense Table for 2001 also at www.soa.org), and generally accepted actuarial principals. Like other benchmarks, they do not reflect the mathematical average of all products, but instead illustrate example policy pricing and performance intended as representative of an "average product". In other words, because Veralytic Benchmarks were designed by actuaries to be intentionally average, based on "average" premium loads, "average" policy administration expenses, "average" cost of insurance charges, and "average" cash-value-based "wrap-fees", practitioners can expect to find products which offer lower premium loads, and/or lower policy administration expenses, and/or lower cost of insurance charges and/or lower cash value fees, and therefore will illustrate a lower premium, higher cash values, and higher death benefits, or some combination thereof. Conversely, practitioners can also expect to find other products which offer premium loads, policy administration expenses, cost of insurance charges and/or cash value fees which are higher than Veralytic Benchmarks, and these other products will, therefore, illustrate a higher premium, lower cash values, and lower death benefits, or some combination thereof.

Veralytic Reports use such actuarially determined representative costs and performance levels for products of a specified product type for comparison purposes. Benchmarks for cost of insurance charges (COIs), fixed administration expenses (FAEs), premium loads and cash-value-based "wrap fees" (e.g., M&Es) are the result of both the above-mentioned industry standard mortality tables and expense ratios, generally accepted actuarial principles and actuarial study of representative sample populations of similar type products. Mortality and expense pricing data for policies with face amounts of \$1 million or more are used to generate benchmarks for products priced for institutional markets, and benchmarks for products priced for retail markets are derived from "industry aggregate" mortality and expense pricing data for all policies. These actuarially derived benchmark pricing components are then used to generate a hypothetical policy profile for comparison to the policy under consideration.

After identifying those policies offering the most suitable cost structure that are available from the insurers considered to have the greatest relative financial strength and claims-paying ability, the system then considers the stability of policy pricing as it relates to the ability for a given insurer to deliver actual policy performance that corresponds to illustrated policy pricing. Lastly, the system compares the liquidity of cash value accumulations over time, and evaluates the number, breadth, performance, and cost-effectiveness of underlying cash value allocation options. The results of these comparisons are reported in the Veralytic Report for each individual product. To help you use the Veralytic Report to understand the suitability of the policy under consideration, the five criteria and the significance of the star ratings for each are explained in the following sections.

Financial Strength & Claims-Paying Ability

The financial strength and claims paying ability of an insurer is the first measure of suitability for life insurance products, particularly permanent life insurance products. Veralytic Reports evaluate insurers based on their relative financial strength and claims-paying ability and assign a ★(full star) to insurers ranking in the top decile (top 10% percent), a ☆(half star) to insurers ranking the top quartile (top 25% percent), and an ☆(empty star) to insurers ranking in the lower three quartiles of all insurers. Given that insurance is most simply defined as an agreement for the payment of a premium today in exchange for payment of a claim at some future point, the more time between policy inception and the expected claim date, the more important the durable financial strength and long-range claims-paying ability. However, the insurer's financial strength and claims-paying ability does not in any way affect the performance of the underlying investment accounts and, therefore, cannot be considered a measure of future investment performance.

For the policy under consideration, financial strength and claims-paying ability of the issuing insurer is reported in “Carrier Due Care” (sample shown to the right) located in the lower left corner of page 2-2 of the Veralytic Report for each individual product, and includes ratings prepared and published by nationally recognized ratings services like AM Best, Fitch, Moody’s, and Standard & Poor’s. In addition, because different ratings services use different scales (e.g., one service grades insurers “A” through “F,” others use a “AAA” system similar to a bond rating scale, and still others use “A++.”), and because different rating services define rating categories differently (e.g., an “A+” rating from Best is the second highest possible rating while an “A+” rating from Standard & Poor’s or Fitch represents a relatively less attractive fifth highest rating), Veralytic Reports reconcile these inconsistencies by comparing the relative financial strength and claims-paying ability of a particular insurer to all other insurers, and convert otherwise inconsistent ratings scales are converted to percentile rankings.

Carrier Due Care ²			
Financial Strength & Claims-Paying Ability Ratings (alpha order)			Watch List
AM Best	A++	(1 of 15)	n/a
Fitch	AA	(3 of 24)	n/a
Moody's	Aa3	(4 of 21)	n/a
Standard & Poor's	AA	(3 of 20)	n/a
Percentile Ranking		94%	
Retention Limit:			
Single Life:		\$10,000,000	

VitalSigns, a service offered by EbixExchange (which must be separately licensed for use in Veralytic Reports), compares carrier ratings from the five leading rating services, determines relative rankings, and converts rankings to percentiles. VitalSigns prepares and publishes a composite index (Comdex) derived by averaging insurers' percentile rankings. That is, Comdex is not a rating itself but rather is a composite of all the ratings an insurer has received converted to percentiles. Comdex reports an insurer's standing on a scale from 1 to 100 relative to all other insurers that have been rated by the leading ratings services with 100 being the strongest ranking and 1 being the weakest ranking. Veralytic Reports use the inverse of the Comdex in assigning a star value for the product under evaluation (i.e., a Comdex of 100 ranks that insurer in the top-1% of all insurers for financial strength and claims-paying ability).

While the insurer's financial strength and claims-paying ability does not affect investment performance, it is particularly important for the following three reasons:

- **Lengthy Period of Risk Exposure:** The duration of time between the policy effective date and the ultimate date of claim is typically longer than that for any other form of insurance. Consequently, the opportunity for change adversely impacting the insurer of a given permanent life insurance product is greater than that for any other form of insurance. With this greater exposure to uncertainty, the importance of durable financial strength and long-range claims-paying ability is greatest for permanent life insurance products.
- **Front-End/Back-End Fees/Charges:** Permanent life insurance products often include up-front “set-up” fees (commonly referred to as “Policy Issue Fees”) and/or back-end cancellation fees (commonly referred to as surrender charges). Changing products or insurers in response to an unacceptable deterioration in financial strength and claims-paying ability can be uneconomical due to these previously-paid up-front fees and may be difficult or costly due to these back-end surrender charges.
- **Continued Health & Insurability:** The ability to change life insurance products or insurers is conditioned on continued health and insurability. While the probability of death is small at the time a policy is issued, the likelihood of a change in health that would adversely impact the pricing of a policy is considerably greater. While insurers can *not* change the pricing of an existing policy in response to a change in health, such a change in health will impact the ability to change policies/insurers in response to an unacceptable deterioration in financial strength and claims-paying ability.

Thus, while a product underwritten by an insurer considered to have greater financial strength and claims-paying ability is not, in and of itself, a more suitable product, products issued by insurers with superior anticipated ability to meet future claims obligations are considered more suitable than otherwise. While no rating method is guaranteed to predict which insurers will best meet future claims, ratings of current financial strength and claims-paying ability are the accepted best gauge of insurer strength. As such, Veralytic Reports use the mathematical distribution of all rated insurers as an objective measure to support accurate comparisons among insurers, and assign either a ★(full star), a ☆(half star), or an ☆(empty star) for the suitability of an insurer's financial strength and claims-paying ability.

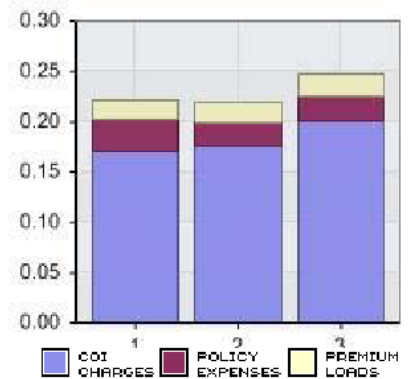
Cost Competitiveness

The cost competitiveness of a given policy is an obvious determinant of suitability. In addition, the appropriateness of a given policy's pricing makeup to a given situation can have substantial influence over the cost competitiveness, and, therefore, is also a determinant of suitability. Thus, Veralytic Reports consider both policy costs as to cost of insurance charges (COIs), fixed administration expenses (FAEs), cash-value-based "wrap fees" (e.g., M&Es) and premium loads, as well as the construction of those to determine the policy's pricing style and optimal funding strategy (see Pricing Style in this section below). Veralytic Reports show the policy's cost competitiveness by comparing both individual and aggregate policy costs with industry benchmarks representative of average costs for all other policies in the peer group (see more on benchmarks at the top of page 4-2 in this section), and assign a ★ (full star) for policies whose cost competitiveness is better than average, a ★ (half star) for policies whose cost competitiveness is roughly the same as the average, and an ☆ (empty star) for policies whose pricing is less competitive than average and/or whose pricing makeup is inappropriate to the given situation.

The Veralytic Research Platform measures policy costs by calculating the present value policy of all policy costs per \$1.00 of death benefit over the illustrated policy holding period, and graphically displays the composition of policy costs in the Policy Expense Breakdown located at the top center of page 2-1 of the Veralytic Report for each individual product, an example of which is shown below right. As such, the Policy Expense Breakdown provides the practitioner with an understanding of both how each pricing component compares to industry benchmarks, as well as the relative impact on overall policy pricing of the individual pricing components as to cost of insurance charges (COIs), fixed administration expenses (FAEs), premium loads and cash-value-based "wrap fees" (e.g., M&Es) for the policy under evaluation, each of which are discussed in greater detail below:

Cost of Insurance Charges (COIs) – Whether disclosed or not, all policy issues are priced for expected cost of insurance charges or COIs. COIs are deductions from permanent life insurance policies to cover anticipated payments by the insurer for death claims. As with most types of insurance, claims are, and arguably should be, the largest single cost factor of any insurance policy (If claims are not the largest single cost factor, then is the product really insurance against the risk of death, or something else?). With life insurance, COIs typically account for about 75% of total cost, and, as expected, the higher the claims, the higher the COIs and the higher the premiums. COI charges are calculated year-by-year as the result of the policy death benefit (see net amount at risk below) multiplied times a COI rate provided by the insurance company for each age corresponding to each policy year for each product. These deductions are much like term life insurance premiums in that they are predominantly for claims paid during a given period (typically 1 year). For this reason, COIs are frequently referred to as the pure "risk" portion of the premium, reimbursing the insurance company for the risk associated with paying the death benefit. Because the risk of death increases with age, so do the COIs.

Policy Expense Breakdown



1. Policy Under Evaluation
2. Institutionally Priced Policies
3. Retail Policies

COIS

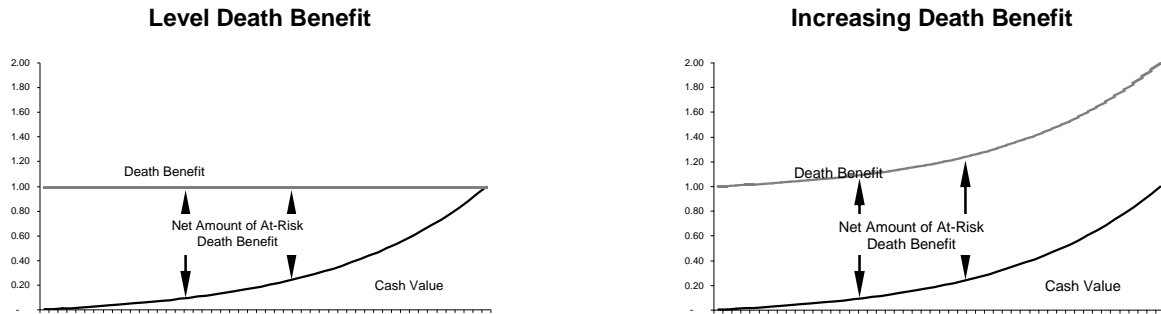
For example, assume an insurance company provides permanent life insurance for a group of 1,000 policyholders whom all are insured for \$100,000 and three (3) insureds out of the group of 1,000 die in a given year. The insurance company pays \$300,000 to the beneficiaries of those three insureds. The insurance company must therefore collect \$300 from each policy owner over the course of the period in order to pay this \$300,000 in claims (i.e. 1,000 policyholders times \$300=\$300,000 in death claims paid). In this case, the COI Rate would equal \$3.00 per \$1,000 of death benefit (i.e. each insured paid \$3.00 multiplied times 100 for each \$1,000 of death benefit). Of course, as the average age of the population of 1,000 in the group ages, then the risk of more deaths increases. For example, the next year, all insureds are a year older, and because the probability of death increases with age, we assume that four (4) insureds out of population of 1,000 die in this next year (for the sake of simplicity, we will assume that the insurance company sold three (3) new \$100,000 policies to replace the three \$100,000 policies removed from our pool by the three deaths in the prior year). The insurance company will pay \$400,000 to the beneficiaries of those four insureds. The insurance company must collect \$400 from each policy owner over the course of the period in order to pay this \$400,000 in claims (i.e. 1,000 policyholders times \$400=\$400,000 in death claims paid/to be paid). In this case, the COI Rate would equal \$4.00 per \$1,000 of death benefit (i.e. each insured paid \$4.00 multiplied times 100 for each \$1,000 of death benefit).

This example also assumes the insurance company collects only the exact amount necessary to pay these claims. However, in reality, the insurance company must also collect a profit to remain in business. Actual COIs in this example would, therefore, be slightly higher to cover anticipated claims, but then also to provide a profit to the insurance company providing the insurance and bearing the risk. In addition, some insurers "load" the COIs to cover other policy expenses that are not disclosed elsewhere. For instance, some policies are marketed as "no-load" or "low-load" policies, and as such do not disclose certain policy expenses or loads. The expenses or loads that are typically "hidden" are sales loads, and other premium based loads. However, because certain premium based loads must be paid (e.g. state premium taxes, federal deferred acquisition costs (DAC) taxes, and the cost to distribute the policies), some insurers "hide" these costs inside "loaded" COIs.

COIS

As mentioned above, in all cases, these COIs are calculated each policy year as the result of the policy "net at risk" death benefit multiplied times a COI Rate provided by the insurance company for each age corresponding to each policy year for each product. This "net at risk" death benefit is that portion of the total death benefit in excess of any policy cash value and is thus the inverse of the cash value (e.g., the higher the cash value of the policy, the lower the net at risk amount of death benefit to the insurer).

For example, to the extent policy cash values increase over time, this net-at-risk death benefit will decline from year to year in a level-death-benefit policy design, or will remain level in an increasing-death-benefit policy design, as shown below:



While different policies can calculate the "net at risk" death benefit differently, this Net Amount at Risk (NAR) in any given year can be generally calculated as follows:

$$\text{Net Amount at Risk} = \text{Policy Death Benefit} - \text{Policy Cash Value}$$

Because COIs are calculated on the NAR, and because COIs increase geometrically with age as discussed above, the NAR is a significant factor for the pricing and performance of any policy holding. For instance, COI costs are minimized when cash values are nearly equal to the policy death benefit even at the older ages when COI rates are at their highest. However, because policy cash values are "confiscated" by the insurer upon death, any COI cost savings associated with high cash values and a corresponding low NAR must be measured against the present value "cost" of forfeiting future policy cash values upon death. Either way, COIs are characteristically the largest policy expense, and are always a function of the COI rate provided by the insurance company for each year of a given policy holding, the net amount at risk in each of those years of that policy holding, and the design of the policy death benefit (i.e. level death benefit or increasing death benefit) for that policy holding.

Fixed Administration Expense (FAE) – FAEs are typically charged for expenses related to actuarial design, underwriting and new business processing, and service and administration, and are calculated as some fixed amount set at the time of policy issued either as a flat monthly charge (e.g. \$10.00 a month), or in relation to the originally issued policy face amount (e.g. \$1.00 per \$1,000 of policy face amount). While this charge is fixed in amount at the time of policy issued, it can vary from year to year by a predetermined schedule (e.g. \$10.00 a month and \$1.00 per \$1,000 of policy face amount during the first 10 policy years, and \$5.00 a month and \$0.00 per \$1,000 of policy face amount thereafter).

In addition, FAEs can also include contingent or back-end policy surrender charges that are deducted from the policy cash account value upon surrender or cancellation/termination of the policy. These surrender charges are calculated in relation to the initially issued policy face amount and can be as much as 100% or more of the planned annual premium for policy issues available to the general public at large (i.e. policies commonly referred to as "Retail Policies"), or can be less or even 0% for policies purchased in larger volumes (i.e. frequently referred to as "Institutionally Priced Policies"). In either case, this surrender charge typically remains level for an initial period of years (e.g. 5 years), then reduces to \$0 over a following period of years (e.g. policy years 6 through 10 or 6 through 15).

FAES

Premium Loads – Premium loads are calculated as a percent of premiums paid in a given year and typically range between 0% and 35%. Premium-based charges customarily cover state premium taxes that average 2.50%, DAC taxes averaging 1.5%, and Sales Loads/Expenses ranging between 0% and 30%. In addition, while state premium taxes and DAC taxes are generally calculated by the respective government agencies as a percent of premium, and while insurance companies must certainly pay these taxes, insurance companies are not required to assess the charge as a percent of premium. As such, some insurance companies charge no (i.e. 0%) premium charges, and collect state and federal taxes from other charges within the policy (usually COIs).

Premium-based charges can also vary depending on either the policy year in which a premium is paid or the level of the premium paid into a given policy. For instance, a higher premium load may be assessed in the early policy years to recover up-front expenses related to underwriting, issue and distribution of a given policy. After these up-front expenses have been amortized (frequently over a period of ten policy years), premium loads are then often reduced to cover the relatively lower policy owner service and policy administration expenses. In addition, a higher premium load may be charged on actual premiums paid up to a "Base Policy Premium" or "Target Premium" level, while a lower premium load may be charged on actual premiums paid in excess of this "Base Policy Premium" or "Target Premium" amount. This "Base Policy Premium" or "Target Premium" is calculated by actuaries to mature the death benefit as permanent regardless of the age of death of the insured and based on expectation COIs, expenses and interest/earnings. As such, this "Base Policy Premium" or "Target Premium" is analogous to the "insurance premium" (i.e. that premium typically paid to maintain insurance coverage).

Premium amounts paid into the policy in excess of this "Base Policy Premium" or "Target Premium" can, therefore, be viewed as "excess premium" above and beyond that which required to support a given insurance death benefit. "Excess premiums" are typically paid to either create a cash value reserve which can be used to pre-pay future premiums, COIs and policy expenses (i.e., the minimum planned premium paid for a limited duration to support a defined death benefit), and/or to accumulate wealth in the form of policy cash values that benefit from preferred federal income tax treatment and special protection from the claims of creditors under state law (i.e., under a defined-contribution maximum-accumulation plan design). As such, premiums paid up to the "insurance premium" are typically subjected to "insurance loads" to cover policy expenses unique to the insurance component of the policy, while "excess premiums" are typically subjected to a lower "investment-like loads" on those monies contributed toward cash values accumulations. In either case, Veralytic Reports calculate the blended premium load for easy comparison to industry benchmarks and/or peer group products.

Cash-Value-Based "Wrap Fees" – Cash-value-based "wrap fees" are insurance fees charged as a percent of policy account values (e.g., like M&Es found in variable products) similar to Fund Management Fees (FMEs) that are also charged as a percent of assets under management. However, these cash-value-based *insurance fees* are specific to the policy, and separate from and in addition to *investment fees*. The most common policy specific cash-value-based fee is the M&E charge intended to cover the risks assumed by the insurance company that actual cost of insurance charges and/or actual expense charges will be greater than expected. Some products can also include policy specific cash-value-based fees in addition to the M&E, both of which can vary depending on the year of the policy (e.g. 1.00% of cash values during the first 10 policy years, and 0.5% of cash values thereafter), and/or the amount of the cash value (e.g. 1.00% of cash values up to \$25,000, and 0.5% of cash values above \$25,000), and in either case typically range from 0% to 100 bps (1.00%).

Because these cash-value-based charges are specific to the policy, without regard to the underlying general account investment portfolio or mutual-fund-like separate account funds, Veralytic Reports consider such cash-value-based *insurance fees* when reporting on the suitability of the policy under evaluation (PUE). This treatment is in contrast to fund-specific *investment fees*, which are a function of the underlying investment portfolio or separate account funds, which may or may not be disclosed, which are different for different separate accounts funds within the same product, and which usually change within the same policy over time with changes in asset allocations of invested assets underlying policy cash values. As such, Veralytic Reports do not consider fund specific investment fees as a policy cost, and instead consider such fund specific investment expenses as part of the evaluation of cash value investment performance (see further discussion of fund specific investment expenses under Historical Performance section).

Because some products deduct cash-value-based insurance expenses at the policy level and thus disclose both the dollar amount as well as the percentage rate of the charges, while other products deduct cash-value-based insurance expenses at the separate account level only disclosing the percentage rate of the charges and *not* generally disclosing the dollar amount of the policy expense, Veralytic Reports account for cash-value-based insurance charges by deducting the cash-value-based "wrap fee" percentage rate from the policy interest/earnings rate. In other words, Veralytic Reports account for all policy expenses in the manner in which they are disclosed by first calculating the rate by which cash values would otherwise grown but for the deduction of this and all other policy expense, and then use this rate as the present value rate to calculate the present value of all other policy costs (see discussion of policy interest/earnings in the Pricing Stability section).

Pricing Style – The manner in which cost of insurance charges (COIs), fixed administration expenses (FAEs), premium loads and cash-value-based “wrap fees” are constructed and calculated in a given policy and the market for which a given policy is priced determine the suitability of a given product to a given situation. The Veralytic Report Pricing Style Box, therefore, provides practitioners with both the optimal funding strategy (i.e., minimum premium/defined-death-benefit, maximum accumulation/defined- contribution, or some combination of the two) and the target market (i.e., retail, institutional, or experience-rated) for which the policy under evaluation (PUE) is priced, located at the top left corner of page 2-1 of the Veralytic Report for each individual product (sample shown below right).

The optimal funding strategy for the product under evaluation is determined by comparing the relative impact on overall policy pricing of the individual pricing components to assist practitioners in identifying the highest-and-best use for a given product and/or to explain why a product from an insurer with a good reputation may appear more costly than other products. As such, the Pricing Style Box does not indicate the relative competitiveness of policy pricing, but instead indicates the planning circumstances in which the construction of policy costs will perform optimally, as described below:

Funding Strategy

Minimum Premium/Defined-Death-Benefit – In defined-death-benefit planning designs (i.e., minimum premium), the desired amount of policy death benefit is specified with the premium as the variable that is calculated in a fashion to determine the minimum premium needed to fund the policy for the planned duration of coverage. Policies with low cost of insurance (COI) charges and low fixed expenses (i.e., low fixed dollar expenses) perform optimally in defined-death-benefit plan designs and minimum premium funding strategies even when premium loads and cash-value-based fees (i.e., percentage rate expenses) are relatively high. As with other forms of insurance, death claims (COIs) are the largest cost factor, and are fixed for the defined death benefit (i.e., remain materially the same for a given amount of insurance without regard to the amount of the premium). In addition, because premiums and cash values are, by definition, relatively low under defined-death-benefit, minimum premium plan designs, even relatively high percentage rate expenses applied to the relatively low premium result in a relatively low dollar amount, and thus have less influence on policy performance. As such, policies with low COIs and other fixed charges are most suitable where the planning objective is to achieve the lowest possible premium. It is important to also note that a minimum premium plan design may require more premium than the originally illustrated “minimum premium” in response to negative policy performance and/or increased policy costs and to prevent the policy from lapsing (see policy interest/earnings discussion under Pricing Stability).

Maximum Accumulation/Defined-Contribution – On the other hand, in defined- contribution designs (i.e., maximum accumulation), the desired premium or contribution to the policy is specified with the policy death benefit as the variable that is calculated in a fashion to determine the minimum policy face amount required under prescribed guidelines. Because permanent life insurance policies are granted certain tax benefits, the Federal Government prescribes a relationship between premium contributions and policy death benefits that is required to qualify for and limits these tax benefits under the Definition of Life Insurance (DOLI) and Modified Endowment Contract (MEC) rules. Reducing policy death benefits to the minimum allowable amount needed to accommodate the desired premium over the planned premium payment period under these rules has the effect of reducing the Net Amount at Risk (see discussion of Net Amount at Risk in the Cost of Insurance Section above), thereby also reducing COIs and/or FAEs (i.e., fixed dollar expenses), and their influence on overall pricing. As such policies with low premium loads and low cash-value-based “wrap fees” (i.e., low percentage rate expenses) perform optimally in maximum accumulation funding strategies and defined-contribution plan designs where higher percentage rate expense levels would otherwise consume a disproportionately greater share of the larger premiums and greater cash value accumulations.

Mixed Funding Strategy – Veralytic Reports consider products in which the composition of policy costs is not disclosed (e.g., whole life products) and/or where cost of insurance charges (COIs), fixed administration expenses (FAEs), premium loads, and cash-value-based “wrap fees” (M&Es) are balanced between fixed dollar expenses and percentage rate expenses to offer a mixed funding strategy. Products offering a mixed funding strategy are most suitable in planning situations where the policy is to serve multiple planning objectives (e.g., a policy holding intended to both provide a death benefit for family protection/income replacement which is also used as a supplemental wealth accumulation vehicle).

	Max. Accum	Mixed	Min. Prem
Retail			
Institutional			
Experience-Rated			

Insurers also price different products for different markets. Veralytic Reports identify the target market for which the product is priced as either “Retail”, “Institutional” or “Experience-Rated” as determined by the level and construction of policy expenses, and risk characteristics associated with the pool of policyholders for which the policy is designed, as follows:

Target Market

Retail: Retail products are generally available to the broadest segment of the market, and are characterized as products with low or no minimum face amount, low or no minimum premium requirement, and higher policy expenses and/or higher up front policy loads and/or higher back-end cancellation fees/surrender charges.

Institutional: Institutionally priced products are not generally available to the market as a whole, and are characterized as products that often impose a minimum face amount, a minimum premium requirement, and/or minimum case size (for multi-life cases). Because larger transactions and larger groups of policies cost less to sell, service and administer, insurers typically reduce and/or amortize policy expenses over time for these large transactions to reflect volume discounts and economies of scale. As such, institutionally priced products typically have low or no back-end cancellation fees/surrender charges, and/or no or low up-front policy loads, and/or a generally lower expense structure that is the natural result of greater economies of scale.

Experience-Rated: In contrast to the “pooled” pricing of most life insurance policies, experience-rated policies are characterized by the nature of the underlying cost of insurance (COI) charges and/or expenses corresponding to the claims and/or operating experience of a segregated pool of insureds. Insurers pool policies to make risks more predictable. In fact, the larger the pool, the more predictable the risk. Pooling combines large and small policies and low and high risk segments of the pool, and in so doing averages the variables that contribute to premium prices. In effect, this averaging cross-subsidizes smaller transactions and higher-risk segments with excess “profits” from the larger transactions and lower-risk segments in the pool.

	Max. Accum.	Mixed	Min. Prem
Retail			
Institutional			
Experience-Rated			

Because different pools have different claims experience, premiums vary depending on the claims experience for the pool being insured. Historically, pools of individual policies with smaller face amounts have the highest claims experience. On the other hand, selective pools of individuals who enjoy healthier lifestyles and better health care live longer, and products priced for this market segment can offer lower COI charges and lower premiums. Of course, products priced for a segregated risk pool that does not actually realize the promised benefits of superior claims experience and/or operating efficiencies from a given market segment will ultimately have to charge higher COI charges and/or higher expenses, resulting in higher premiums.

Experience-rated products are customarily either available on a private placement basis for qualifying transactions, and/or products with high minimum face amounts and/or products only available through proprietary distribution channels that cater to a specific and clearly defined market segment (e.g., high net worth individuals, corporate executives, etc.). In addition, products underwritten by smaller insurers whose distribution systems cater predominantly to market segments with favorable claims and/or operating experience may participate in the pricing advantages of experience-rated products. Lastly, products designed for a particular market segment with favorable claims and/or operating experience (e.g., Joint and Last Survivor policies) may also include pricing advantages of experience-rated products.

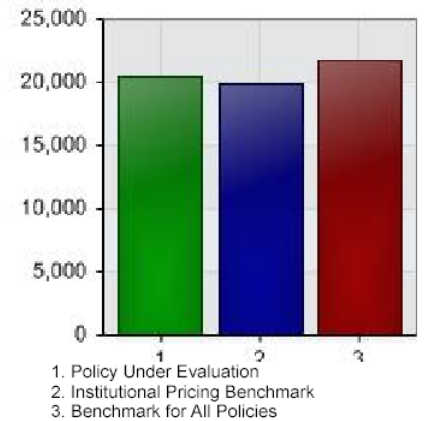
Veralytic Reports, therefore, consider both policy costs as to cost of insurance charges (COIs), fixed administration expenses (FAEs), premium loads and cash-value-based “wrap fees” (e.g., M&Es) as compared to benchmarks, as well as the construction of those costs to determine the policy’s optimal funding strategy as shown in the Pricing Style Box, and assign a ★(full star) for policies whose cost competitiveness is better than average (measured as those products ranking in the top 1/3rd of all products), a ☆(half star) for policies whose cost competitiveness is roughly the same as the average (measured as those products ranking in the middle 1/3rd of all products), and an ☆(empty star) for policies whose pricing is less competitive than average (measured as those products ranking in the bottom 1/3rd of all products) and/or whose pricing makeup is inappropriate to the given situation.

Pricing Stability

Pricing stability also influences the suitability of a permanent life insurance product. While the premium is often considered the price/cost of a life insurance policy, the premium is *not* the price/cost of the life insurance policy in the same way that a contribution to an Individual Retirement Account (IRA) is *not* the price/cost of the IRA. In both cases, the price/cost is the sum of the expenses deducted from the premium/contribution. As such, the stability of the planned premium payments in a minimum premium defined-death-benefit policy designs, and/or the reliability of projected benefits in a maximum accumulation defined-contribution policy is always a function of the following formula: **Premiums/Benefits = COIs + E – i%**. To be considered suitable, policy pricing must be adequate to meet the insurer’s future claims obligations based on historical mortality experience, as well as the insurer’s and the servicing organization’s future expenses for service and administration based on historical operating experience, and be based on expected policy interest/earnings that is consistent with historical performance of invested assets underlying policy cash values. The Veralytic Reports assign a ★(full star) for policies whose pricing is based on historical mortality, operating and investment experience, a ☆(half star) for policies whose pricing is either inconsistent with historical experience or where the insurer may lack capacity to control future policy pricing, and an ☆(empty star) where policy pricing is based on mortality improvements, and/or operating gains, and/or investment performance that is unrealistic when compared to the historical performance of the asset classes corresponding to invested assets underlying policy cash values.

In the Premium Comparison graph at the top right of page 2-1 of the Veralytic Report for each product, the Veralytic Report compares the planned premium for the policy under evaluation (PUE) to benchmark premiums based on benchmark cost of insurance charges (COIs), benchmark fixed administration expenses (FAEs), benchmark premium loads, benchmark cash-value-based “wrap fees” (e.g., M&Es) and the same policy interest/earnings assumption as that assumed in the PUE, as shown in the Premium Comparison graph shown to the right (see more on benchmarks at the top of page 4-2 in this section). In addition, Veralytic Reports assess the pricing stability reflected in the illustration of hypothetical policy values by investigating whether expected cost of insurance charges are consistent with actual mortality experience, whether expected policy expenses are consistent with on actual operating experience, and whether expected policy interest/earnings is consistent with the historical performance for the asset classes corresponding to invested assets underlying policy cash values, as follows:

Premium Comparison - Face Amt: \$1,000,000



Are illustrated/expected COIs adequate to fund the insurer’s future claims?

In other words, are the illustrated COIs sufficient to cover future claims based on reasonable mortality assumptions? To help answer this question, the Veralytic Research Platform investigates if underlying mortality assumptions differ from recent historic experience, if improvements in mortality or earnings rates are necessary to achieve the illustrated results, and if the mortality rates or illustrated COI charges include some expense charge. The answers to these questions help establish reasonableness and stability of the product’s illustrated COI charges.

In addition, the degree to which an insurer can insure a particular risk on their own paper can influence an insurer’s ability to meet future cost projections. Insurer’s that reinsure a substantial portion of a given risk may be confronted with the need to increase COIs at some point in the future in the event of the dissolution of the reinsurance treaty between the primary insurer and the reinsurer that governs the terms of conditions of the reinsurance arrangement, including the reinsurance rates, and/or the failure of the reinsurer. While a product underwritten by an insurer with lower retention is not in and of itself an unsuitable product, products available from insurers with higher retention are considered to have the greatest control over future pricing/costs, and as such, will be considered more suitable than otherwise, all other things being equal.

Are illustrated/expected policy expenses adequate to meet future administrative and service requirements?

Veralytic Reports also consider whether the policy pricing structure is appropriate for the level of service required by the policy type and policy buyer’s needs. All policies require routine administration and service, and these basic costs are usually insurer expenses. The Veralytic Research Platform investigates whether illustrated expenses are consistent with historical experience and how changes in experience might impact future policy performance. In addition to basic services, wealth accumulation and estate planning products typically require advanced design, due care, and policy implementation services usually provided by the servicing organization. These advanced services include Insurance Banking® services to manage underwriting markets; enrollment processing and management; financial modeling; preparation of annual reports to satisfy tax reporting requirements; plan and policy reconciliation; annual policy benefit statements; policy-related trust accounting; annual reviews of insurer and product performance; audits of funding adequacy; compliance and phantom income testing; and ongoing consulting services to monitor policy assets, tax law changes, and regulatory considerations. The costs for these services are often met by sales and service loads allocated to servicing organizations.

While there is no guarantee of good service just because a policy may include sales/service loads, the absence of sales/service loads virtually guarantees that there are little or no value-added administration services included. Veralytic Reports make no attempt to ascertain an appropriate level of service for a given situation as service requirements will vary from client to client. For instance, a product with lower sales/service loads than that for the respective benchmarks may be perfectly suitable for retail products and/or policies purchased for simple, traditional death-protection-only needs. In addition, policies purchased by financially-sophisticated, self-sufficient investors may also be comfortable dealing directly with the insurer on required service issues. On the other hand, larger policies purchased to finance the more advanced insurance needs like business insurance needs, business continuity financing, non-qualified deferred

compensation funding, supplemental benefits funding, and/or wealth transfer financing will likely require more service and administration than the insurance company is prepared to provide. For policies in which sales/services loads prove to be inadequate over time, there could be additional costs and/or fees necessary to meet the service, administration and/or reporting requirements not shown in the initial illustration of hypothetical policy values.

For minimum premium, defined death benefit plan designs, the figure “Premium Comparison” (sample shown on the previous page) in the upper right corner of page 2-1 of the Veralytic Report for an individual product compares premium cost competitiveness (for maximum accumulation, defined contribution plan designs, this chart illustrates the benefit comparison for policy distributions). This “Premium Comparison” illustrates the minimum level annual premium required to endow the policy, assuming the illustrated policy earnings rate and expenses and the policy buyer’s illustrated age and health profile. (See “Assumptions” on page 2-2 of the Veralytic Report for the individual product and/or the bottom of a summary report for all products for a statement of assumptions underlying product specifications, pricing information, and analysis.) This “minimum premium” is generally based on non-guaranteed pricing assumptions, and as such, it is possible that the policy owner may need to pay more than the originally illustrated minimum premium in response to negative policy performance and/or increased policy costs and to prevent the policy from lapsing. Premiums for the policy under consideration are compared with two benchmarks actuarially determined to be representative of the premium for an average but competitively-priced product for each respective market segment (see more on benchmarks at the top of page 4-2 in this section).

Are illustrated/expected policy earnings consistent with historical performance?

Premiums paid in excess of deductions for cost of insurance charges and policy expenses are credited with some form of policy interest or earnings based on product type and the allocation of invested assets underlying policy cash values. For instance, “fixed products” (i.e., universal life and whole life) are required by regulation to invest assets underlying policy cash values predominantly in high-grade corporate bonds and government backed mortgages. As such, the policy interest crediting rate for universal life products and the dividend interest crediting rate for whole life products will generally correlate with the 6.0% historical rate of return on high-grade corporate bonds and government backed mortgages over time (higher for insurers with superior investment performance and/or whose general account portfolio may be comprised of fixed income securities with longer-term maturities, and lower for insurers with inferior investment performance and/or whose general account portfolio may be comprised of shorter-term fixed income maturities).

Likewise, “variable products” (i.e., variable universal life and variable life) generally invest policy cash values in a wide variety of mutual-fund-like separate accounts, and thus the policy earnings rate for variable products will generally correlate with rate of return for the assets classes into which cash values are allocated. For instance, where cash values are allocated to a conservative portfolio comprised of predominantly fixed income securities, the policy earnings rate can be expected to generally correlate with the 6.0% historical rate of return on fixed income securities. Similarly, where cash values are allocated to a moderate portfolio comprised of a balance of fixed income and equity investments, the policy earnings rate can be expected to generally correlate with an 8.0% historical rate of return from balanced portfolios. And to the extent cash values are allocated to an aggressive portfolio comprised of predominantly equity securities, the policy earnings rate can be expected to generally correlate with the 10.0%+ historical rate of return on equity investments (higher for separate accounts with superior investment performance and lower for separate accounts with inferior investment performance).

While life insurance policy pricing and performance projection systems often allow for a wide range of interest and investment earnings assumptions in calculating hypothetical policy values, actual policy performance will ultimately be a function of the actual performance of invested assets underlying policy cash values as described above. In other words, while a particular illustration of hypothetical policy values may reflect a current interest rate declared by the insurer, or an assumed earnings rate chosen by the agent/broker, actual policy earnings will ultimately be the result of actual performance of the invested assets underlying policy cash values (unless artificially subsidized by the insurer). For instance, in periods of low interest rates, it is common for insurers to declare policy interest crediting rates on fixed products that are commensurate with low prevailing interest rates (in much the same way as how banks declare an interest rate on Certificates of Deposit that are generally consistent with prevailing interest rates). Similarly, in periods of high interest rates, insurers have declared policy interest crediting rates that are commensurate with high prevailing interest rates, without regard to the historical rate of return for the invested assets underlying policy cash values.

In addition, some insurers declare higher interest crediting rates for new policy issues than that which is credited to renewing policy issues (e.g., 5.5% interest for new policy issues while inforce policy issues are credited with 5.0%), while others declare a market interest rate at issue with a “bonus interest crediting rate” after some period of time (e.g., 5.0% interest at issue with a 0.5% bonus beginning in the 11th policy year). Either way, because these declared rates are generally guaranteed for 1-year or less (considerably less than the expected holding period for permanent policies), and because insurers routinely change declared interest rates both to follow movements in prevailing interest rates and to correlate declared rates with the interest earnings in their portfolio of invested assets underlying policy cash values, The Veralytic Research Platform looks beneath the current policy crediting rate in determining pricing stability to instead consider both historical rates of return for the asset classes underlying policy cash values and the historical investment performance the insurers general account portfolio (see Historical Performance section for more discussion).

Variable products allow for an even wider range of interest and investment earnings assumptions in calculating policy pricing and projected performance where policy earnings expectations are not generally set by the insurer, are instead chosen by the agent/broker, and generally not necessarily correlated with the actual rates of return for invested assets underlying policy cash value allocations. For instance, current policy pricing and performance projections systems generally allow for the use of any policy earnings assumption between 0.0% and 12.0% without regard to the actual asset allocation of the mutual-fund-like separate accounts underlying policy cash values. In other words, even though a given client risk profile may dictate a moderate asset allocation where invested assets underlying policy cash values would be balanced between fixed income and equity-type separate accounts, and where such a moderate asset

allocation would be expected to produce an 8.0% expected rate of return, current policy pricing and projection systems allow for projected earnings rates as high as 12.0%.

Because the Veralytic Research Platform does not know the policyowner's risk profile, Veralytic Reports do not consider the illustrated/expected rate of return for variable products in its pricing stability assessment as it would otherwise relate to the asset allocation appropriate to the policyowner's risk profile. However, Veralytic Reports do comment on the asset allocation which would generally correspond to the illustrated/expected rate of return so the practitioner can either change/confirm actual policy asset allocations are consistent with the illustrated/expected rate of return, or change the illustrated/expected rate of return to be consistent with the actual asset allocation. The Veralytic Research Platform does also look beneath the assumed policy earnings rate to again consider the historical performance of the actual mutual-fund-like separate accounts within the policy (see Historical Performance section for more discussion).

All together, Veralytic Reports consider policy pricing to be stable when pricing appears adequate to meet both the insurer's future claims obligations based on historical mortality experience, as well as the insurer's and the servicing organization's future expenses for service and administration based on historical operating experience, and when expected policy interest/earnings is consistent with historical performance of invested assets underlying policy cash values. The Veralytic Reports assign a ★(full star) for policies whose pricing is based on historical mortality, operating and investment experience, a ☆(half star) for policies whose pricing is either inconsistent with historical experience or where the insurer may lack capacity to control future policy pricing, and an ☆(empty star) where policy pricing is based on mortality improvements, and/or operating gains, and/or investment performance that is unrealistic when compared to the historical performance of the asset classes corresponding to invested assets underlying policy cash values.

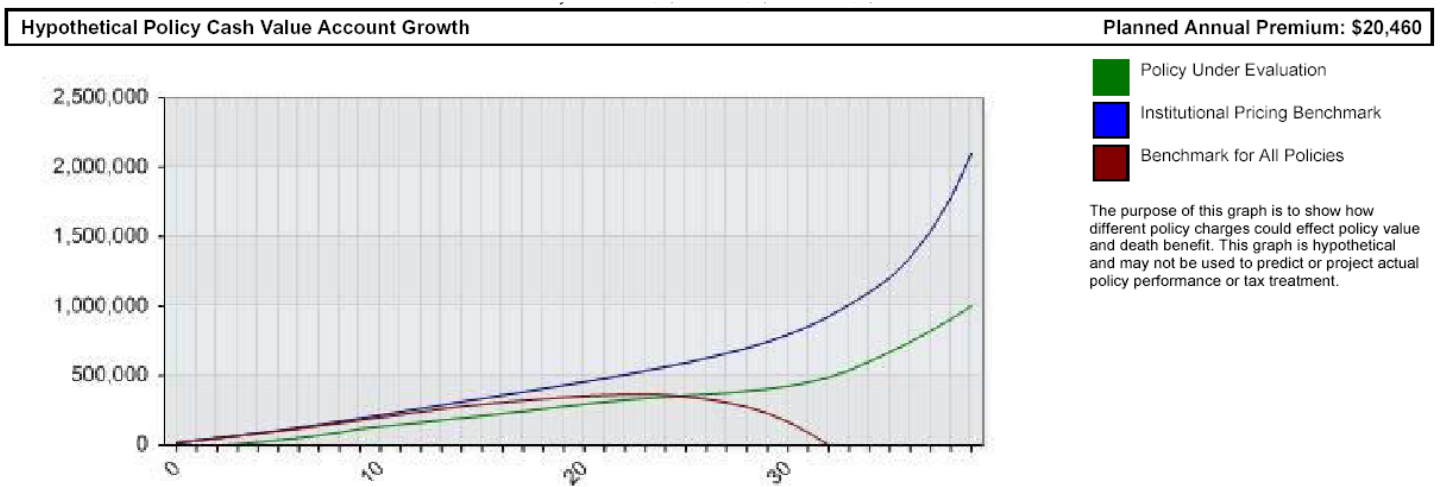
While the Veralytic Research platform has no way of predicting whether a policy will perform as illustrated, Veralytic Reports can consider whether the values illustrated are consistent with the insurer's historical experience, whether the basis of that experience has been fully disclosed, and how potential changes in experience might impact future policy performance. However, a favorable suitability rating for pricing stability does not guarantee future policy performance. In the event that illustrated/expected COI charges are insufficient to fund future death claims, or if illustrated/expected policy expenses are not adequate to cover anticipated expenses and services, or should the actual policy interest/earnings rate be less than the illustrated/expected policy interest/earnings rate, then higher premiums than originally calculated may be required to maintain policy benefits, or benefits may need to be reduced in order to be maintained, or the policy can lapse without value and without paying a death benefit.

Relative Policy Value

The suitability of a permanent life insurance product is also influenced by the degree of cash value liquidity throughout the life of the policy. All other factors being equal, the higher the liquid cash value after deduction of cost of insurance charges and policy expenses (including contingent surrender charges), the more suitable the policy. As such, the Veralytic Research Platform measures cash value liquidity for the product under evaluation (PUE) in relation to the Veralytic Benchmarks (see more on benchmarks at the top of page 4-2 in this section) based on the following formula: **Premiums - COIs - E + i% = Cash Value**, and then measures relative policy value over the short term (as measured by the illustrated cash surrender value at the end of the 1st policy year), the midterm value (as measured by the illustrated cash surrender value at the end of the 10th policy year), and the long term value (as measured by the illustrated cash surrender value at the end of the 20th policy year). Veralytic Reports also place more weight on higher liquidity and policy value over the short term, and to a lesser degree over the midterm and long term measurement periods. Veralytic Reports then assign a ★ (full star) to policies whose relative liquidity and policy value is higher than average in all three (3) short, mid, and long-term measurement periods, a ★ (half star) to policies whose relative liquidity and policy value is higher than average in any two (2) of the three measurement periods, and an ☆ (empty star) to policies whose relative liquidity and policy value is higher than average in only one (1) or none (0) of the three measurement periods.

Cash value, or cash surrender value (CSV), is a defining characteristic of permanent life insurance. In simple terms, CSV is the value available to the policyholder if the policy is surrendered (i.e., cash value minus surrender charges). But since CSVs do not account for paid-in premiums, they offer no basis for direct comparisons of policy values. On the other hand, liquidity ratios can be used to compare relative policy values and account for paid premiums. A policy's liquidity ratio equals CSV at the end of a given policy year divided by the cumulative premiums paid through the end of that policy year. The Veralytic Reports measure short-term (i.e., 1st year), mid-term (i.e., years 1 through 10), and long-term (i.e., over the life of the policy) liquidity ratios for the policy under consideration and compares ratios with established benchmarks.

The figure "Hypothetical Policy Cash Value Account Growth" located near the bottom of page 2-1 of the Veralytic Report for each product summarizes comparison data for cash value accumulations, duration of coverage, liquidity ratios (i.e., value/premium ratios), and surrender charges for the policy under consideration.



This figure illustrates the effects of various policy charges and the timing of those charges on policy value and death benefits. Assuming the illustrated premium, policy cash values for the policy under consideration are compared with actuarially determined representative cash values for policies priced for institutional markets and with actuarially determined representative cash values for a competitive product of the same product type.

In general, higher CSVs and higher liquidity ratios give policy holders more planning options, greater flexibility, and better exit strategies in the event of changes in facts and circumstances or changes in tax law or other regulations. If all other suitability factors are equal, the Veralytic Reports consider higher CSVs, higher liquidity ratios, and lower or leveled surrender charges more suitable.

Policy/Benchmark	Est Yr 1 Cash Value / Premium Ratio	Surrender Charge	Yrs Applied	Average Decrease %/Yr	Death Benefit @ Endowment/Maturity	Gross % Return	Net % Return	Net Net % Return
Policy Under Evaluation	0.00%	100.00%	9	11.11%	\$1,000,880	8.87	8.00	7.95
Benchmark for Institutionally-Priced Policies	80.00%	0.00%	N/A	N/A	\$1,000,880	8.86	8.00	7.45
Benchmark for All Policies	0.00%	88.00%	11	8.00%	Lapse @ Y33	8.86	8.00	7.40

While a policy does not necessarily need to endow, the Veralytic Research platform generally measures policies under the presumption that the policy will endow. Funding the policy to endow offers policyholders benefits. First, if a policy does not endow, the policyholder can potentially lose the entire investment in the insurance contract as well as the death benefit. Also, if the policy is funded to endow, some insurers will extend maturity beyond the original endowment/maturity age. In that case, if the policyholder survives beyond the original maturity date, the CSV is paid at maturity but is taxable to the extent the CSV exceeds the premium “investment.” Similarly, no deduction is allowed for any loss (i.e., CSV minus premiums) realized on the policy. However, because policy cash values are “confiscated” upon the death of the insured, any benefits of endowing the policy cash value in an amount to equal to the face amount must be weighted against the added premium required to endow.

Finally, persistency (i.e., the percentage of policies that remain in force from one year to the next) can also influence relative policy value. When a policy terminates with no value or is voluntarily surrendered, it is considered to have lapsed. Since premature surrender may indicate the policyholder’s dissatisfaction with service, low lapse rates, (i.e., the rate at which a particular insurers’ policies have lapsed), may suggest greater customer satisfaction. Also, all other factors being equal, insurers with low lapse rates can often price policies more competitively because they have more margin available from the greater renewal premiums. In any case, low lapse rates and high persistency may tend to suggest greater relative value.

All things considered, the Veralytic Research Platform places more weight on higher liquidity and policy value over the short term, and to a lesser degree over the midterm and long term measurement periods, and assigns a ★(full star) to policies whose relative liquidity and policy value is higher than average in all three (3) short, mid, and long-term measurement periods, a ★(half star) to policies whose relative liquidity and policy value is higher than average in any two (2) of the three measurement periods, and an ☆(empty star) to policies whose relative liquidity and policy value is higher than average in only one (1) or none (0) of the three measurement periods.

Historical Performance

The suitability of any permanent life insurance policy is generally influenced by the number of cash value investment options, the historical performance of such cash value investment options, and cost-effectiveness of the various cash value allocation options. Cash values of traditional products are invested in the insurer’s general account managed by the insurer and required by regulation to invest predominantly in fixed income securities like high-grade corporate bonds and government backed mortgages. Cash values in variable products are directed by the policyowner among a family of mutual-fund-like separate accounts offering a wide range of asset classes typically including an assortment of domestic and foreign stock funds, an array of domestic and foreign bond funds, a money market account, and usually a fixed account (typically the same as the insurer’s general account). In either case, the Veralytic Reports assign a ★(full star) to policies whose performance of invested assets underlying policy cash values are superior to peer group products, a ☆ (half star) to policies whose performance of invested assets underlying cash values are roughly the same as peer group products, and an ☆(empty star) to policies whose performance of invested assets underlying policy cash values is inferior to peer group products.

In both cases, Veralytic Reports include the historical performance of invested assets underlying policy cash values in the “Product Profile” located at the top left of the page 2-1 of the Veralytic Report for each product, examples of which are shown below:

<u>Traditional Products</u> (Universal Life & Whole Life General Account)			<u>Variable Products</u> (Self-Directed Separate Accounts)		
<u>Policy Under Evaluation</u>		<u>Avg for All Policies</u>	<u>Policy Under Evaluation</u>		<u>Avg for All Policies</u>
6.89%	5-yr Avg. Net Portfolio Yield*	6.53%	38	# of Funds	37
			28	# of Top Performers	24
			0.87%	Avg Inv Mgmt Fee	0.86%

To evaluate the suitability of the cash value investment options for the policy under evaluation (PUE), the Veralytic Research Platform reviews the performance of invested assets underlying policy cash values, the number and diversity of cash value investment options, and the expense ratios for invested assets underlying policy cash values, as follows:

Superior Historical Performance is More Suitable – Better historical performance also contributes to suitability. While past performance does not guarantee future performance, the historical performance of invested assets underlying policy cash values is the best available gauge of performance suitability. As such, Veralytic Reports measure the historical performance of invested assets underlying universal life and whole life cash values by comparing the 5-year average net portfolio yield on the insurer’s general account, as reported by VitalSigns (a service offered by EbixExchange that collects and compiles general account net portfolio yield data for all insurers and which must be separately licensed for use in Veralytic Reports) against the average 5-year net portfolio yield on the general accounts for all other insurers. Similarly, Veralytic Reports measure the historical performance of invested assets underlying variable life cash values by comparing the star ratings published in Morningstar (a service offered by Morningstar Inc. that collects and compiles Separate Account performance data and which must be separately licensed for use in Veralytic Reports) to the star ratings of separate accounts found in all other variable life products. Although VitalSigns and Morningstar data and ratings are objective in the sense that they are not influenced by economic forecasts or subjective opinions about fund management strategies, these rating methods like all ratings methods produces certain biases. For instance, because the Veralytic Research Platform cannot consider the policyowner’s risk profile and corresponding asset allocation, products with superior historical performance are rewarded equally, without regard to volatility. As such, Veralytic Reports tend to favor traditional products which report high 5-year net portfolio yields without regard to the volatility of that performance, and tends to favor variable products which report a high number of separate account funds rated 3-stars or higher by Morningstar.

Greater Diversity Improves Suitability – It is generally accepted under the principles of Modern Portfolio Theory that diversification improves the overall return expected from a given portfolio and reduces volatility expected within a given portfolio. As such, since cash values of a variable life policy are invested in a given family of funds, the greater the diversity among separate accounts, the more favorable the cash value allocation options. In other words, the greater the number of separate accounts and the greater the number of different types of funds, the more opportunity for diversification and broad asset allocation and the more suitable the cash value allocation options. For the variable life products, Veralytic Reports compare the total number of underlying separate accounts with the average number of underlying separate accounts for all policies of the same product type. In general, the greater the number of underlying separate accounts, and the broader the coverage of the different types of styles of funds, the more suitable the cash value allocation options. However, because traditional universal life and whole life products must be invested by regulation predominantly in fixed income securities like high-grade corporate bonds and government backed mortgages, and because such fixed income investments are managed by the insurer and generally not disclosed, Veralytic Reports do not penalize traditional products for lack of diversity.

Lower Expense Ratios are More Suitable – Since investment expenses are paid before returns are passed through to cash values, the Veralytic Report also considers expense ratios in determining the suitability of underlying cash value allocation options. Typically, investment expenses include investment management fees, investment advisory fees, and fund operating expenses, which are together commonly referred to as fund management fees or FMEs. To assess relative cost-effectiveness of cash value investment options, Veralytic Reports compare these investment expense ratios (i.e., the ratio of investment expenses to investment values) for the policy under consideration with the average expense ratio for all policies of the same product type. In general, lower expense-to-value ratios are considered more suitable. However, because traditional universal life and whole life products generally do not disclose such investment expenses, Veralytic Reports cannot consider investment expenses incurred within the general account of traditional products. Also, because neither cash-value-based investment expenses, cash-value-based insurance expenses (e.g., M&Es discussed in the Cost Competitiveness section above), nor life insurance policy earnings are generally reported in a standardized manner, Veralytic Reports measure cash value performance and cash-value-based expenses, as follows:

- **Gross Rate** – The *gross* policy interest/earnings rate is that rate of return credited to policy cash values reported *before* deduction of *investment*-related fund management expenses (FMEs) and *before* deduction of cash-value-based *insurance* expenses. The gross rate is typically disclosed in variable life products but not typically disclosed in traditional universal life and whole life products, and either way is directly related to the rate of return on invested assets underlying policy cash values (e.g., 6.0% for a conservative allocation of predominantly fixed income investments, 8.0% for a moderate allocation of a balance of fixed income and equity investments, and 10.0%+ for an aggressive allocation predominantly equity investments), and thus is more of a general “**asset class rate of return**” than a policy specific rate of return. The reporting of the gross policy earnings rate is also somewhat unique to life insurance products as rates of returns for investment products are most often reported net of FMEs. As such, while the Gross Rate may be an interesting piece of information at is relates to benchmark performance of the respective asset classes underlying policy cash values, because it does not reflect the earnings actually credited to policy cash values, it is most useful as a starting point in setting reasonable expectations as to the investment performance of policy cash values.
- **Net Rate** – The *net* policy interest/earnings rate is that rate of return credited to policy cash values reported *after* deduction of *investment*-related FMEs, but before deduction of cash-value-based *insurance* expenses. In other words, this “Net Rate” is equal to the Gross Rate minus FMEs, and as such is most closely analogous to the “**investment rate of return**” on policy cash values (e.g., universal life policy interest crediting rates and whole life dividend interest crediting rates are generally reported *after* corresponding investment expenses in the same way as bank certificates of deposit report interest *after* deduction of related investment expenses and variable life separate account earnings rates are reported *after* corresponding investment expenses in the same manner as how mutual funds report earnings *after* deduction of related investment expenses). As such, because the Net Rate is derived directly from the Gross Rate for the given asset allocation, and because FMEs are a function of that asset allocation (i.e., FMEs are lower for conservative fixed income cash value allocations than for aggressive equity allocations that may include higher cost international and/or emerging market asset classes), the Net Rate is most useful in comparing hypothetical policy performance between different products, and is thus used to compare the performance of the policy under evaluation to the hypothetical performance of the Veralytic benchmarks. For reasons explained further immediately below, this Net Rate can also be referred to as the “Single Net Rate”.
- **Net-Net Rate** – The *net-net* policy interest/earnings rate is that rate of return credited to policy cash values reported *after* deduction of *both investment* FMEs *and* cash-value-based *insurance* “wrap fees” (e.g., M&Es). In other words, this “Net-Net Rate” is equal to the Net Rate minus M&Es, and because this Net-Net Rate reflects the rate of return reported on policy cash values *after all* cash-value-based fees, it can also be referred to as the “**policy rate of return**” or the “Double Net Rate” (i.e., the rate of return on policy cash values after deduction of both investment *and* insurance “wrap fees”, but not considering COIs, FAEs nor premium loads). Because this Net-Net Rate is a function of the individual policy holding, and is not a function of the policy asset allocation, nor the expected Gross Rate corresponding to that asset allocation, nor the corresponding investment expenses for that asset allocation, the Net-Net Rate is most useful in measuring the appropriateness of policy expenses (e.g., because the Net-Net Rate is the rate of return at which cash values would otherwise grow but for the deduction of all other policy expenses, the Net-Net Rate is also useful in accounting for differences in the timing and amount of COIs, FAEs and premium loads between one policy holding and another).

Because certain policy holdings may or may not disclose all of the "Gross Rate", the "Net Rate", and the "Net-Net Rate", and because certain policy holdings may not clearly distinguish between the "Gross Rate", the "Net Rate" and the "Net-Net Rate", the Veralytic Research Platform performs all performance and expense computations based on a consistent Net Rate, as shown below:

Policy/Benchmark	Est Yr 1 Cash Value / Premium Ratio	Surrender Charge	Yrs Applied	Average Decrease %/Yr	Death Benefit @ Endowment/Maturity	Gross % Return	Net % Return	Net Net % Return
Policy Under Evaluation	0.00%	100.00%	9	11.11%	\$1,000,880	8.87	8.00	7.95
Benchmark for Institutionally-Priced Policies	80.00%	0.00%	N/A	N/A	\$1,000,880	8.86	8.00	7.45
Benchmark for All Policies	0.00%	88.00%	11	8.00%	Lapse @ Y33	8.86	8.00	7.40

While certain practitioners may disagree with the use of a consistent Net Rate for comparison of hypothetical performance and corresponding expenses, and instead suggest that using a consistent Gross Rate produces a more accurate means of policy comparison, the use of a consistent Gross Rate for the purposes of such comparisons is only valid when the appropriate cash value allocation is known and also made consistent in all products under evaluation. For instance, consider a comparison of performance and costs between two products based on a consistent 8.0% Gross Rate but where the cash value allocation is assumed to be balanced among both fixed income and equity asset classes with an average FME of 100 bps in Product A, while Product B is assumed to allocate 100% off cash values to a stable value account with low FMEs of only 25 bps, as shown below:

	Product A	Product B
Gross Rate	8.00%	8.00%
Less Investment Wrap-Fees (FMEs)	1.00%	0.25%
Net Rate	7.00%	7.75%
Less Insurance Wrap-Fees (e.g., M&Es)	0.75%	0.75%
Net-Net Rate	6.25%	7.00%

As shown above, comparing policy holdings based on a consistent Gross Rate, but without knowing and also making consistent the cash value asset allocation, can result in understated investment expenses and overstated policy performance. Because the Veralytic Research Platform has no way of knowing the proper asset allocation for the policy under evaluation, Veralytic cannot ensure consistent comparison of policy performance and costs based on the Gross Rate. In addition, because the asset allocation can and typically does change over the life of a given policy, which in turn also changes investment expenses for that policy, and because Separate Account funds are frequently added to and deleted from a given product, which in turn again changes investment expenses for that policy, comparing policy holdings based on a consistent Gross Rate produces inconsistent results over time (e.g., a product considered by Veralytic Reports to offer low costs based on one illustrated asset allocation could be assigned a different rating based on a different cash value allocation). On the other hand, because cash-value-based insurance expenses (e.g., M&Es) are set at the time of policy issue, and do not change from that pre-set schedule, comparing policy holdings based on a consistent Net Rate will produce consistent results over time.

As such, the Veralytic Research Platform performs all performance and cost evaluations based on a consistent Net Rate, assign a ★ (full star) to policies whose performance of invested assets underlying policy cash values net of investment expenses are superior to peer group products, a ★ (half star) to policies whose performance of invested assets underlying cash values after considering investment expenses are roughly the same as peer group products, and an ☆ (empty star) to policies whose performance of invested assets underlying policy cash values is inferior to and/or where investment expenses are high when compare to peer group products.

Glossary



Nothing contained in this Veralytic Report is to be considered as a rendering of legal, tax or investment advice for specific cases, and readers are responsible for obtaining such advice from their own legal, tax and investment counsel. Accordingly, no representations or warranties are made by anyone, including, without limitation, Veralytic and anyone engaged in the preparation and distribution of this report, as to the validity or effectiveness of the legal or tax conclusions, analysis, opinions, and planning ideas expressed in this Veralytic Report. Any and all liability whatsoever that may arise in connection with anything contained herein is hereby disclaimed. This Veralytic Report is intended for educational and informational purposes only.

This Veralytic Report is based on carrier illustration and product information available at the time of preparation. It represents Veralytic's best judgment and analysis of the due care process. Due care is a complex field, and many of the areas covered are still evolving. Veralytic does not warrant the completeness of this treatment and recognizes that there is room for a difference of opinion in some areas. Furthermore, there is no definitive guidance on the tax implications of some of the specific product features found in today's life insurance policies. A qualified tax advisor should always be consulted before implementing a program in which the buying decision is based in part on anticipated tax consequences.

Account value: The value of the cash value account before deduction of early termination penalties. The account value is calculated by starting with the account value at the beginning of the policy year, adding premiums paid, subtracting monthly deductions for cost of insurance charges (COIs) and policy expenses, and adding investment interest/earnings to result with the end of year account value.

Benchmarks: The practice of benchmarking is well-established and quite common in the financial services industry where the performance of a financial instrument is frequently compared to a standard, independent point of reference (e.g., the Dow Jones Industrial Average, the S&P 500, the NASDAQ, and the Wilshire 5000). Since comparable benchmarks are not available for comparing permanent life insurance products, the Veralytic Report uses actuarially determined representative costs and performance levels for competitive products of a specified product type.

Cash surrender value (CSV) or cash value: The value available to the policy holder if the policy is surrendered. If no loans are outstanding, this amount is generally available in cash. If loans have been made, the amount available on surrender is equal to the total cash value less the outstanding loan.

Cash-value-based "wrap fees": Cash-value-based "wrap-fees" are calculated as a percentage of either the policy account value or the policy cash surrender value. While these percentages are generally disclosed in either the policy prospectus, product guide and/or in the footnotes of the illustration, these percentages can and often do vary from year-to-year.

Cost of insurance charges (COI): Charges to cover the insurer's cost of paying death benefits. Current or expected COI charges are based on current or expected mortality experience, often including a margin for expenses or adverse deviations. These COI charges are analogous to current term insurance premiums for the amount at risk. Contracts also specify guaranteed maximum COI charges.

Death benefit: The total amount payable to the beneficiary upon the death of the insured. If loans are outstanding at the time of death, the actual cash payment is equal to the death benefit less the amount of the outstanding loan. The death benefit may include amounts in addition to the initial face amount of the policy such as accumulated dividends, the accumulation value of universal life policies, or increases forced by the death benefits corridor.

Death benefit option: Universal life and variable life policies generally offer two (2) types of death benefits: 1) Option A or 1 where death benefits are level and equal to the original face amount in all years, and 2) Option B or 2 where death benefits are equal to the original face amount plus the account value of the policy, and thus are generally increasing (but also can be decreasing if/when policy account values are declining but usually not less than the original face amount). Whole Life policy death benefits are similarly either level (when mixed with a term insurance) or increasing during premium payment years (and then decreasing after premium payments have stopped, but again usually not less than the original face amount).

Endowment: The point at which a policy's cash value equals its face amount. For policies satisfying the definition of life insurance under IRC §7702, endowment/maturity can occur no sooner than age 95. [Also see maturity.]

Expense charges: Charges made on accumulation-type policies to reimburse the insurer for a portion of its costs of issuing and maintaining the policy. Some expense charges are deducted from the gross premiums paid. Others are monthly charges deducted from the accumulation value.

Experience-rated pricing: A pricing method that bases prices for insurance products on the actual expenses and claims experience for the pool being insured. Because selective pools that enjoy healthier lifestyles and better health care tend to live longer, products priced for these pools have lower COI costs and lower premiums.

Face amount: The death benefit provided by a life insurance policy. This term most often applies to the amount of insurance specified on the "face" of the policy at the time of issue. In this case, "face amount" does not include post-issue changes in total death benefits such as those arising from paid-up additions or death benefit increases caused by growth in account values. However, some illustrations use "face amount" to apply to the total policy death benefit at any given time.

Fixed administration expenses: Fixed administration expenses are generally calculated as either a fixed rate per period (e.g., \$100 per month) or a fixed rate per \$1,000 of policy face amount (e.g., \$1.00 per \$1,000 of policy face amount), or some combination of the two. While these rates are generally disclosed in either the policy prospectus, product guide and/or in the footnotes of the illustration, these rates can vary with either the policy face amount and/or the amount of total death benefit if different.

Fixed premium: Payments of a fixed, equal amount paid to an insurance company for insurance or an annuity.

Flexible premium: For universal life policies, non-fixed payments designed to adapt premiums to the policy holder's changing needs and financial conditions. [See universal life.]

General account: All the assets of a life insurance company other than those held in separate accounts. Separate accounts, or sub-accounts, are typically used for variable products, which pass actual investment experience including all capital gains and losses through to policy cash values. The assets backing all other products are held in the general account. The general account may be “segmented” to allocate certain investments to certain blocks of business for the purpose of setting current crediting rates. However, whether or not the general account is segmented, all general account assets are available when any line of business needs additional cash to pay current benefits. Thus, the safety of any general account product depends on the financial strength of all the company’s product lines.

Health profile: The collection of health indicators insurers use to rate a policy buyer’s mortality risks. [Also see preferred, preferred plus, standard, substandard, and uninsurable.]

Institutional pricing: The pricing style that reflects the volume discounts and economies of scale available from large transactions and large groups of policies. Qualifying transactions typically require face amounts in excess of \$1 million, policies with reduced or leveled load/expense structures, or policies with low or no surrender charges or cancellations fees.

Insurance Banking®: The practice of assembling and managing portfolios of insurance, typically with policies of larger than average face amounts, often in excess of a single insurer’s retention limits. The ability to provide high quality Insurance Banking® services depends upon negotiating and placing large blocks of insurance and requires lead underwriting experience and established relationships with many insurers.

Investment management fee: A charge made as a percentage of a variable policy separate account fund value to pay the investment advisor for the selection and management of investments. These fees are set in advance and typically vary by fund. Although no comparable explicit charge is made with fixed-interest products, insurers deduct the expenses of investment management for these general account products before setting their declared interest or dividend rates.

Lapse rate: The percentage of policies that terminate with no value or are voluntarily surrendered each year. Because insurers typically lose money on a statutory basis in the first year a policy is in force (i.e., their mortality, reserve, expense, sales compensation, and underwriting costs are greater than the premiums they receive), they rely on renewal premiums to repay these initial costs. In most cases, if lapse rates are greater than expected, the insurer will either not recoup or delay the recoupment of its initial excess expenses. An insurer with a low lapse rate, everything else being equal, can price its policies more competitively because it will have more margins available from the greater renewal premiums.

Life expectancy: The actuarially projected period of time a person is expected to live. Life expectancies are averages based on factors such as the gender and current age of an individual. Although illustrations may sometimes be provided for durations only up to “life expectancy,” roughly half the population would be expected to live beyond life expectancy.

Liquidity ratio: The cash surrender value for a given policy year divided by the cumulative premiums paid through the end of that policy year.

Maturity: The point at which a policy’s cash value equals its face amount. For policies satisfying the definition of life insurance under IRC §7702, endowment/maturity can occur no sooner than age 95. [Also see endowment.]

Maximum accumulation: An insurance funding strategy where the policy buyer specifies the contribution amount and the insurer determines the value that will be accumulated; often referred to as a defined contribution design.

Minimum premium: An insurance funding strategy where the policy buyer specifies the amount of the death benefit desired and the insurer determines the minimum premium needed to fund the policy, referred to as defined benefit design. Depending on whether or not this minimum premium is guaranteed by the insurer, it is possible that the policy owner may need to pay more than the originally illustrated minimum premium in response to negative policy performance and/or increased policy costs and to prevent the policy from lapsing.

Mortality and expense (M&E) risk charges: A separate charge made on variable products as a percentage of the account value to cover the insurer’s potential deficiencies in the explicit cost of insurance and expense charges. In the absence of poor experience, the M&E risk charge contributes to insurer profits. No comparable explicit charge is made with general account products; on those products, similar loads are part of the undisclosed spread between credited and earned interest rates.

Mortality cost: The cost imposed on the policyholder by the insurance company to cover the amount of pure insurance protection for which the insurance company is at risk. With term insurance, the insurance company is generally exposed to risk of loss for the entire face amount of the policy. With permanent insurance, the net amount at risk for the insurance company is the difference between the policy’s death benefit and the cash value.

Mortality table: A table that presents expected death rates by individual age. The death rates vary from one mortality table to another depending upon the type of experience on which the data is based. Large insurance companies will often develop their own mortality tables based on experience under their own policies.

Never smoked: A health profile designation for policy buyers who have never used tobacco products. [Also see tobacco use.]

Nonsmoker: A health profile designation for policy buyers who have not used tobacco products for at least two years and can be as long as ten years. [Also see tobacco use.]

Paid to age X: A policy funding strategy where premiums are paid until the policy holder attains a pre-determined age.

Paid for X years: A policy funding strategy where premiums are paid for a pre-determined number of years.

Paid over the life of the policy: A policy funding strategy where premiums are paid throughout the life of the policy.

Permanent life insurance: Insurance intended to provide life insurance protection for the entire life of the insured. Permanent insurance differs from term insurance in that its premium structure includes a savings component. Permanent insurance policy premiums have two components, the insurance cost (mortality cost, administrative fees, sales loads, etc.) and the savings component. The savings component typically is referred to as cash value. The policyholder may use the cash value to make the minimum premium payments necessary to maintain the death benefit protection, may access the cash value by taking out loans or making partial surrenders, or may use any combination of these techniques. If permanent insurance is surrendered before death, a surrender charge may be assessed against the cash value. Generally, surrender charges are assessed if the policy is surrendered within the first 10 or 20 years. The amount of money a policyholder will receive upon surrendering a policy is referred to as the cash surrender value (CSV).

Planned annual premium: Payments to the insurance company to buy a policy and to keep it in force.

Preferred: A risk class designation for nonsmokers whose health profiles are likely to result in better than average mortality risks. [Also see risk class and health profile.]

Preferred plus: A risk class designation for policy buyers whose superior health profiles are likely to result in lower than average mortality risks. [Also see risk class and health profile.]

Premium duration: The period during which premiums are paid.

Retail pricing: The pricing style used for large, non-selective pools of individual policy holders that relies on the "Law of Large Numbers" and averages costs for high- and low-risk segments of the pool.

Risk class: The level of cost of insurance charges assessed against the policy or the gross premium rate. Based on the information submitted with the application, the policy is categorized into a preferred, standard, or substandard (impaired) risk class. Policies can also be issued in preferred plus classifications. These generally mean that the insured demonstrates superior health characteristics in addition to being a nonsmoker, such as frequent exercise or having a family history of longevity.

Separate accounts: Insurance company assets that support only cash values of specific policy forms and are completely separated from the general account investments that back the rest of the company's products. Separate accounts are typically used for variable products, which pass actual investment experience including all capital gains and losses through to policy cash values. [Also see general account.]

Smoker: A health profile designation for policy buyers who have used tobacco products within the last two years. [Also see tobacco use.]

Standard: A risk class designation for policy buyers whose health profiles are likely to result in average mortality risks. [Also see risk class and health profile.]

Substandard: A risk class designation for policy buyers whose impaired health profiles are likely to result in higher than average mortality risks. [Also see risk class and health profile.]

Surrender charge: An amount deducted from the accumulation value to yield its cash surrender value. These charges, typically found in the first 10 to 20 policy years, enable the insurer to cover a portion of unrecovered issue costs on policies that surrender early.

Target premium: The amount of premium on flexible premium policies on which full commissions are paid. Policies that allow flexible premiums often achieve much of their competitive posture in high-premium scenarios by having lower commission rates apply to the excess premiums paid above the target premium.

Temporary life insurance: Various forms of term life insurance that provide life insurance protection for a specified time period. [Also see term life insurance.]

Term life insurance: Temporary insurance that provides life insurance protection for a specified time period. Death benefits are payable only if the insured dies during the specified period. If a loss does not occur during the specified term, the policy lapses and provides no further protection. All premiums are retained by the insurance company. Typically, term insurance premiums do not have a savings component; thus, term insurance does not usually create cash value.

Tobacco use: A health indicator insurers use to describe a policy buyer's use of tobacco products. [Also see nonsmoker, never smoked, and smoker.]

Uninsurable: A risk class designation for policy buyers whose health profiles render them unsuitable for individual life insurance. The policy buyer could be eligible for joint life insurance with a second insurable policy buyer. [Also see risk class and health profile.]

Universal life: A form of permanent insurance designed to provide flexibility in premium payments and death benefit protection. The policyholder can pay maximum premiums and maintain a very high cash value. Alternatively, the policyholder can make minimal payments in an amount just large enough to cover mortality and other expense charges.

Variable life/Variable Universal Life: A whole life or universal life insurance policy for which cash values are invested in separate account funds that provides a death benefit dependent on market value of the policy's underlying investments at the time of death. The policy owner chooses among various funds offered by the insurer, permitting investments concentrating in common stock and other assets that are more volatile, but may provide higher long-term returns, than an insurer's general account. Actual investment fund performance, both net investment income and capital gains and losses, pass directly through to policy cash values after reduction for investment expenses and fund operating costs.

Whole life: A traditional form of permanent insurance that guarantees a continued death benefit for the insured's entire life upon payment of fixed annual premiums, which are usually level for life, based on the insured's age at issue.

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