Life Insurance as an Asset Class:

Managing a Valuable Asset

Ethical Edge Insurance Solutions LLC
Analytical Tools for Life Insurance

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Table of Contents

Introduction

In the authors' last paper, *Life Insurance as an Asset Class: A Value-Added Component of an Asset Allocation,* various types of life insurance - from term to participating whole life to variable universal life - were assessed for their dual asset values of ultimate death benefit and possible underlying cash (or "living") value. Perhaps analogous to dividend-producing common stocks in which there is current income along with a long-term expectation of growth in the stock's market value, permanent forms of life insurance have an increasing current cash value that is accessible to the policy owner while providing long-term cash death benefits regardless of the timing of death. Where dividend-focused stocks have more (certainly short-term) risk and *possibly* more potential for appreciation in the longer term, life insurance has substantial guarantees (undiminished by market timing or market-driven valuation fluctuations) and commensurately more moderate, current "returns."

First addressing how a simple term life insurance premium is calculated (essentially measuring the current year's probability of death), the authors demonstrated that term insurance is a cost-effective means to provide financial resources in the event of the premature death of a bread-winner, key employee, or key benefactor to a charity. At the same time, a common mistake made by buyers of life insurance is to place more importance on an insurable individual's low probability of death (and consequently very low initial term insurance premiums) without considering the *duration* of their need and use of life insurance. Those for whom life insurance death benefits will be desired for their entire lifetimes will find that term insurance is *designed* to be cost effective only for the short-term (less than 20-30 years depending on initial age) and become prohibitively expensive for desired coverage to and beyond life expectancy. In fact, regardless of the initial age at which a very healthy individual might acquire term life insurance, the average lifetime cost for term insurance can be as much as 70% of the *death benefit*, and for those living past average life expectancy to age 100, the cost of term insurance can exceed 400% of the *death benefit.*

After distinguishing the substantial differences between the contract of life insurance (the policy) and the sales material used to make the policy appear as attractive as possible (the sales illustration), the first white paper recasts life insurance policies in the vocabulary of investment management: as an asset class with distinct features that could be explained and optimized via Modern Portfolio Theory, in which each asset class has a place in the overall objective of balance and diversification consistent with an individual's tolerance and management of risk - compared to a desire for growth.

Utilizing common precepts of Modern Portfolio Theory, the authors suggest and offer several case examples of the possibility that the cash value of a participating whole life policy could somewhat increase the yield of the fixed portion of an investment portfolio while at the same time somewhat decrease the total volatility of the investment portfolio. *Life Insurance as an Asset Class* concluded that life insurance should be redefined as a potential core asset within (generally) the fixed side of an investment portfolio, in which case policies so treated should be paid for from portfolio assets - or the income generated from those assets - not from the "life style budget" of the typical insured.

In fact, since first published in early 2008, there has been a substantial and favorable validation of the principles expressed in Life Insurance as an Asset Class, especially the concept of life insurance in the context of living benefits that are uncorrelated to other portfolio assets. The Wall Street Journal, as a recent example, featured an article entitled *Consumers Pile In to Life Insurance With Investment Aims* in which it was acknowledged that as a result of "... seeking safety amid turmoil in the stock market ..." consumers recognized that " ...both whole and universal life delivered positive returns during the 2008 financial crisis even as many other investments sank.[1]"

[1] Wall Street Journal, August 26, 2010

The observation that life insurance is a legitimate component of a broader investment portfolio can logically, in fact, lead to an independent *portfolio of life insurance policies* when total death benefit needs warrant. That is, a portfolio of life insurance policies could be constructed in accordance with a matrix of risk tolerance (Risk Index) and the prioritization of four key attributes of life insurance: 1) price/expense (the amount for which the policy owner will write a check each year); 2) cost/value (the increased amount of cash value created by payment of the current premium); 3) access to cash values; and 4) naturally increasing death benefit. *The resulting policy portfolios had the potential to respond to the customer's specific needs better than any one policy could achieve for substantial amounts of life insurance.*

The final chapter of *Life Insurance as an Asset Class* considers some of the issues a policy owner (and especially trustees of Irrevocable Life Insurance Trusts) must address if a modern life insurance policy - or a portfolio of policies - is to meet the original objectives and expectations and to assure the optimization of benefits intended for Trust beneficiaries while providing protection to the Trustee under various state regulations commonly known as the Uniform Prudent Investor Act (UPIA).

In this new paper *Life Insurance as an Asset Class: Managing a Valuable Asset,* the original authors and new contributors seek to further develop the objectives, processes, and results that derive from actively managing life insurance assets. As with other forms of investments, modern life insurance requires ongoing active management disciplines, separate and distinct from the determination of life insurance needs. This logically follows from the process of product selection, underwriting, and fulfillment activity. The necessity to actively manage and optimize both the cash value and death benefit returns is often overlooked by the advisory and life insurance industry sales communities, and it is the consideration of the process of management that should inform the initial process of acquiring a policy or policies that are appropriate to the resources, circumstances, objectives, and time horizons of the insured. Just as an Investment Policy Statement (IPS) guides the development, management, monitoring, and redeployment of

traditional assets within an investment portfolio, a life insurance IPS (herein referred to as an Insurance Policy Management Statement) performs the same purpose for the life insurance component of an investment portfolio.

Perhaps due to the dynamics underlying the consideration of assessing life insurance needs (death is an unpleasant contemplation), there is much mythology surrounding the topic of life insurance. With such rubrics as "buy term and invest the difference" and "whole life is a poor way of combining death benefit and savings," the authors provide more rational responses in an attempt to guide insurance buyers, advisors, and influencers through and beyond the rhetoric and into a decision-making process that fits their circumstances.

The assumption of the "poor returns" of life insurance (presumably focusing on the growth of cash value over the lifetime of the insured and not the delivery of the death benefit) underlies most of the mythology regarding the different choices amongst policy styles. Addressing this issue in a refinement of the first paper's treatment of "return" is the quantification of premium-to-cash value performance (i.e. long-term internal rate of return) *and* the contextualization of such returns in their appropriate asset class category. A similar analysis is necessary for the premium-to-death benefit performance which is, of course, dependent on the actual timing of death. In both respects, readers will be able to see the "real REAL" return of the living and death benefit values of properly acquired life insurance.

Managing a Valuable Asset provides practical approaches to *Efficient Choices* - and as is true with other asset classes - we demonstrate the concept in which different policy styles are combined to optimize a total satisfaction of considerations of expense, value, access to underlying cash values, and naturally increasing death benefits. Generally building upon a core of participating whole life, the human life value of an insured can be supplemented with additional styles of permanent life insurance that fit within the financial resources and risk

tolerances of the insured and allow for a framework to initially fulfill all protection needs even when resources are limited.

One of the most perplexing issues of policy *management* is the myth that if an in-force policy of life insurance isn't "performing" to original expectations (from which such expectations were derived in an inarticulate and non-predictive policy illustration), it should simply be replaced with a new policy. Dramatic changes in the basis on which insurers measure their mortality exposure (VBT 2008) and calculate their policy reserves (CSO 2001) may be interpreted as sufficient reason to "trade up." However, such technical resources for pricing and reserving do not necessarily result in dramatic savings for consumers, and most often the start-up costs inherent in a replacement or exchange of an old policy for a new one produces far less benefit than the policy illustrations might suggest. The authors promote an improvement upon work begun 20 years ago by the Society of Financial Service Professionals: a *Replacement Questionnaire* (RQ) that agents are encouraged to use (and advisors should request from the proposing agent) as an objective basis on which to consider policy replacement.

Legitimate policy replacement derives from a process of ongoing monitoring and active management of a policy in accordance with the objectives and expectations of the authors' Life Insurance Policy Management Statement. While justifiable replacements are in the minority of total replacement activity, an aversion to perpetuating the "new is better" paradigm should not stand in the way of pursuing a rational process of analysis. Some policy replacements *are* appropriate and in the client's best interest.

Similar to all other forms of tangible property (i.e. cash, stocks, bonds, mutual funds, real estate, oil/gas, timber, precious metals, etc.), modern forms of life insurance (even so-called guaranteed premium products) require ongoing active management disciplines that are separate and distinct from the sales activity. Thus, when considering the financial repercussions of death, it is imperative to consider that life insurance is not a commodity like auto insurance; it is an asset

that should be joined with other diversified assets within a portfolio, and therefore the analytical decision-making process cannot rely on *price* as the primary determination of *value* of the life insurance component. Putting considerations of *price* into appropriate context, then, the portfolio concept should be understood and addressed before considerations of strategies for the acquisition of life insurance.

Once the parameters of the portfolio concept are in place, it is possible to apply concepts of modern portfolio theory to help determine the type or types of policies that will optimize the results (efficient frontier). The payment of premiums is made through the income stream from existing fixed return assets - through the sale and reposition of such assets within the portfolio. The portfolio owns the life insurance (literally or conceptually).

Lastly, this paper addresses compliance issues. In the aftermath of The Great Recession of 2008-2009,[2] there have been attempts too numerous to count to pinpoint the essential cause of the economic crisis that gripped the U.S. and global economies - and that in many ways continues to dominate virtually all discussions of money, markets, economics, and fiscal policy. While stock brokers and registered representatives of retail financial services firms[3] were certainly not at the epicenter of the crisis, much attention and proposed legislation has been focused on whether their standard of care should be elevated from *knowing your client* to putting the client's *best interest* ahead of your own and *disclosing* all conflicts of interest (including compensation).

Compliance is a familiar term within retail financial circles, addressing the adherence to rules and regulations designed to protect the customer. Lately, however, "compliance" has been

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[2] "Did 'Great Recession' Live Up to the Name?" Wall Street Journal, April 8,2010: "Federal Reserve Chairman Ben Bernanke calls it "the worst financial crisis in modern history." His predecessor, Alan Greenspan, says it was "the most virulent global financial crisis ever." The resulting recession was longer and deeper than any the U.S. has suffered since World War II."

[3] Stock brokerage and Broker Dealer firms belong to - and are regulated by - the Financial Regulatory Authority - FINRA (formerly the National Association of Broker Dealers - NASD)

elevated to both a new art and career path as financial institutions have lobbied to head off the call for a "fiduciary standard" while at the same time preparing for the worst. Concern about life insurance commissions has escalated in the last few years, leading to the New York Department of Insurance's version of commission disclosure via its Regulation 194, which becomes effective January 1, 2011 and requires the insurance company to respond to an insured's request for information about "how much does the agent make if I buy this policy?" This may well be taking the concept of policy *management* on a needless and likely unproductive tangent. However, with passage of H.R. 4137 - the Dodd-Frank Wall Street Reform and Consumer Protection Act - Section 913 of the Act requires the SEC to complete a study on the issue of fiduciary standards for registered representatives (including stock brokers) by early January 2011.

Summary

This paper will demonstrate that life insurance *properly acquired and actively managed*[4] can not only be viewed in the same manner as the acquisition and management of the traditional assets of an investment portfolio, but must also be chosen and managed for optimum results (within the constraints of the Life Insurance Policy Management Statement) in a volatile and changing economy. *Life insurance management is a continuum of management - not a one time event.*

[4] "Active" management does not translate to "market timing." Active management suggests a process that ideally adds value above and beyond the results of simply investing in index funds such as the S&P500.℠ Passive management suggests the use of index funds or "ride it out." Active management includes interacting with the client over time, making sure to make appropriate adjustments to asset allocation and/or react to changes in life circumstances, health, family expansion, estate and income tax planning (and the changes in law and regulation). Active management is hands on, not necessarily every day or month, but where there is an expectation by both the client and the advisor that their financial circumstances are being monitored.

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Chapter 1
"Life Insurance Properly Acquired ..."

Life insurance is most often viewed as a *commodity*. The major mistake in purchasing life insurance is reducing the acquisition process to the lowest common denominator, i.e. price. As in most price-driven acquisitions of complex investment vehicles, inefficient and possibly disastrous long term results may unfold. Further, when the focus is on price, it is difficult to perceive underlying value. The appropriate acquisition of life insurance requires much more time, effort, study, and discipline than is customary to the acquisition of commodities. Proper acquisition of life insurance is very much an art *and* science.

Know Your Client - components & considerations of properly acquiring life insurance.

Knowing the client[5] is a basic tenent of a skilled financial advisor's need to determine a client's suitability for any concept, plan, or implementation product. *Knowing the client* includes an appreciation for the client's hopes, dreams, and life objectives. It includes an assessment of the client's skill and experience with planning and investing, as well as knowing the client's time horizon. While the *knowing* most often devolves into a questionnaire with data and "yes" / "no" responses, *knowing* is an element of what we refer to as *financial intimacy.* It is *knowing* at an intuitive as well as cognitive level, and it is a prized skill for professional financial advisors (including investment managers, CPAs, insurance agents, financial planners, attorneys, and trust officers).

When it comes to helping a client make wise decisions about acquiring life insurance, the financially intimate advisor recognizes that her client has 5 essential issues when it comes to life insurance, and these can be expressed in consumer-focused questions: do I *really* "need" it - and if so - how much (how little) do I need to meet my objectives? If I "need" it - what type of life

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[5] The "know your customer" rule of the Financial Regulatory Authority (FINRA) requires a standard of care that considers the client's investment experience, risk tolerance, time horizon, age, and other factors in making suitable recommendations.

insurance will best meet *my* needs? If my investor style suggests a type of life insurance that doesn't have a premium (how could that be?!), what should I expect to pay for my life insurance (given that no one wants to pay more than they have to for *anything* - especially life insurance)? With which life insurance company should I make such an important and long-term commitment? And, finally, from what agent should I buy life insurance?

1. "Do I *need* life insurance, and if so, how much?"

Much has been written about life insurance "needs." We put "needs" in quotes because we have observed in our many years of practice, research, and analysis that while consumers purchase auto insurance because state law says they *need* to, and purchase fire insurance on their homes because their lenders say they *need* to, there are no laws of which we're aware that require a "breadwinner" to buy life insurance for the benefit of her or his family. Yes, certain loan arrangements (including commercial lines of credit) may require life insurance for the period of the outstanding obligation, and divorce decrees often require it, but the purchase of life insurance in general satisfies a deeper need.

Most consumers buy life insurance on behalf of their families because they love and care for those families and want their economic lifestyle to continue even if the income earner's life does not. This is the basis of Human Life Value (HLV), which we referred to in Chapter 1 of Life Insurance as an Asset Class. Proponents of HLV assert that life insurance should be used to fully replace a person's human life value, and that insuring any less than that is like insuring a home for less money than the potential cost of returning it to the condition it was in before a fire. However, unlike a fire which may destroy only a portion of a home, death destroys the entire economic engine of an individual who dies prematurely. To insure one's life for less than its HLV is to force the family into the extraordinary activity of premature liquidation of assets, living in a lifestyle less than that provided (or contributed) by the deceased spouse, and/or forcing the survivor to return to the workplace, even if it is less than ideal emotionally or

financially for the surviving spouse *or* the family. When insured for less than HLV in the face of a premature death, vacations go untaken and the time-honored use or ownership of a car at a teenager's legal driving age may go unfulfilled. High school graduation celebrations are diminished for the absence of the deceased parent, and higher education is often relegated to community colleges. In general, families are reduced to a lower-than-planned lifestyle in the face of the premature death of a breadwinner who is insured for less than his entire economic life value. It was this very fact that compelled the 9/11 Commission to make payments to attack survivors on the basis of the "wealth potential" of the deceased, not on the expenses faced by the family, or the mother, or the brother, or the partner.[6] Similarly, so-called wrongful death lawsuits invariably address the "economic loss" for which survivors seek compensation based on lost consort *and lost benefit of the future economic value of the decedent."*

A 43 year old executive providing a substantial portion of her family's financial support with her current salary of $300,000 (and future stock options, bonuses, and executive health, welfare, and retirement benefits) might result in a HLV calculation of $6 - $10 million to be replaced by appropriately deployed life insurance policies.

The authors believe that Human Life Value is a worthy objective and can provide substantial upside to the total economic picture of a family. This is especially true in light of the conclusions in Life Insurance as an Asset Class in which living values of life insurance (i.e. cash value) were demonstrated to take a respectable and meaningful position in the general investment portfolio. In this regard, we propose eliminating the word "need" from the consumer's first question and re-position the question as " ... given my desire to financially care for my family in the event of premature death in the same manner as we would have enjoyed had I lived to and past life expectancy, how much life insurance should I deploy to meet that objective?" **Appendix A** contains an abbreviated calculation for our 43 year old and her assumed financial future.

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[6] Feinberg, Kenneth. What is Life Worth?: The Unprecedented Effort to Compensate the Victims of 9/11 (2005), Perseus Books Group

2. "What kind of policy would be in my best interest?"

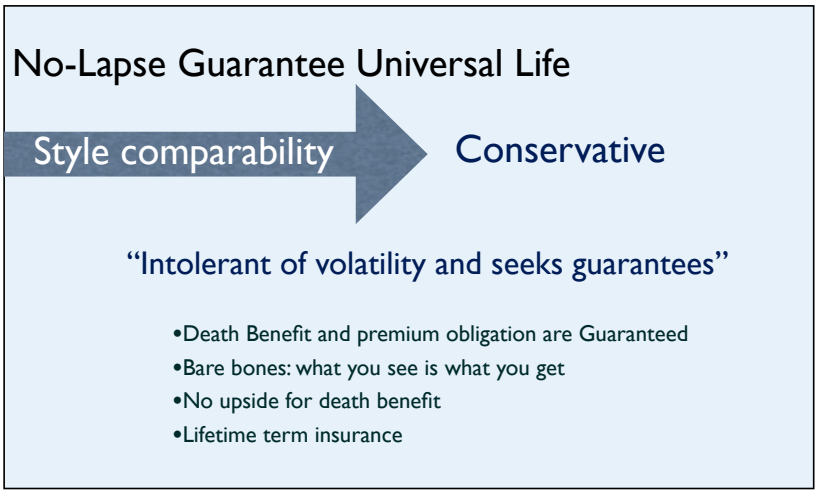
Chapter 3 of Life Insurance as an Asset Class enumerated the various types of life insurance available in the marketplace, ranging from various durations of term insurance for relatively short-term defined uses, to whole life, universal life, variable universal, adjustable life, and equity indexed universal life. All but term generally come in both one and two insured life plans.

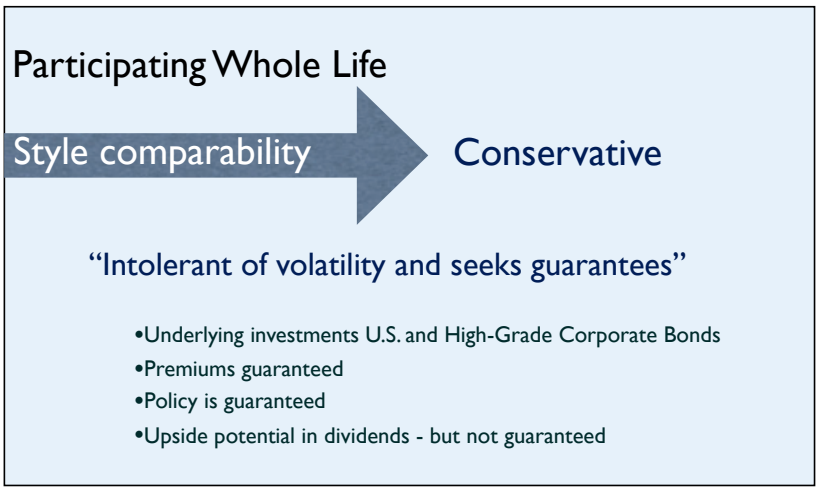
A financially intimate advisor learns his client's risk tolerance and general suitability (or unsuitability) for certain types of risk. We would not expect a financially conservative investor to begin speculating in commodities, nor would we expect an aggressive investor to dabble much in AAA mortgages. Our risk profile - our investment style - usually suggests investment choices that are both financially and emotionally appropriate, and the same is true in the selection of both short-term as well as lifetime life insurance products. **Appendix B** provides a review of life insurance product types and their "best for / not best for" applicability.

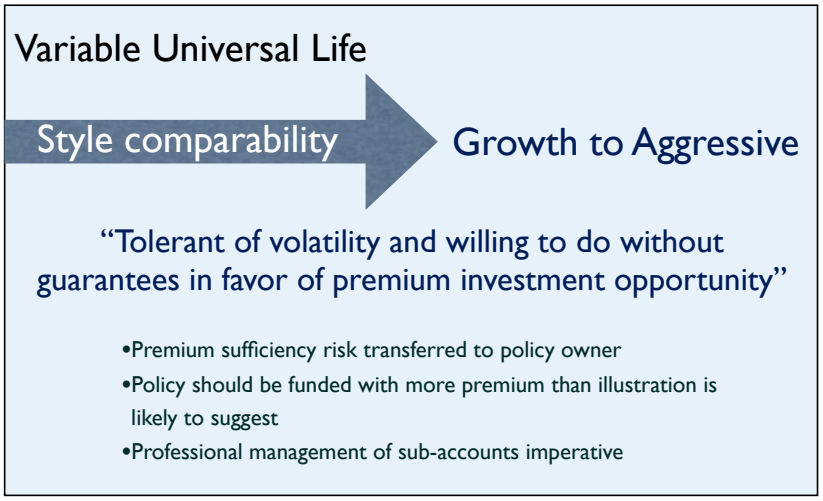
The process of determining the appropriate policy or policies is based on time horizon, investment style, and financial resources, and generally in that order. Short periods of use might include covering the 20 year balance of a home mortgage, the 8 year remaining term on a line of credit, or the 5 years remaining on a speculative investment for which the general partner's continued good health is a key component to the anticipated rewards. Life insurance for short periods of use - almost by definition - has no realistic expectation of lasting for *however long* one might live. Term insurance will admirably and generally inexpensively cover these contingencies as long as the anticipated duration of need doesn't run over the time period for which term premium guarantees have been secured. Term insurance is *designed and priced* for short periods of use (generally ranging from 5 - 10 years for individuals 45 and over and 5 - 30 years for those under 45). Term insurance is specifically designed and priced *not* to be effective for longer periods of time, and, as already indicated in the introduction, term life insurance

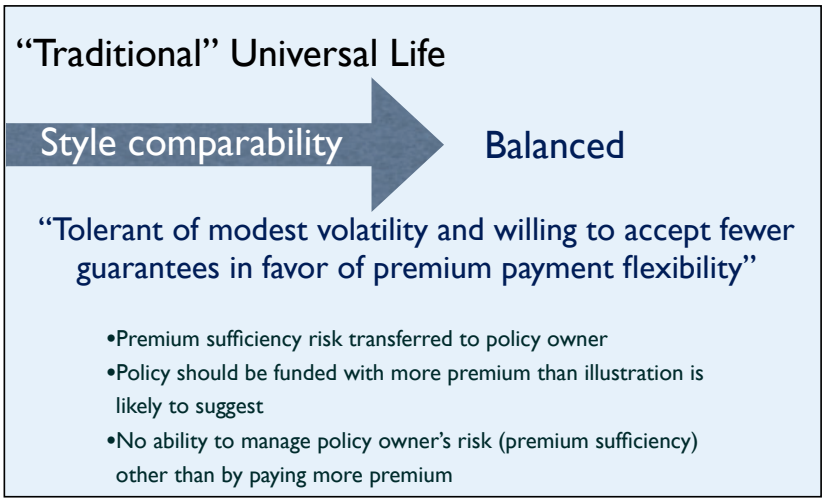
purchased for a shorter period but ultimately held to life expectancy can cost as much as 70% of the insured death benefit in cumulative premiums.

If life insurance is to cover one's Human Life Value, then it must be designed to be used for a lifetime spanning many years. So-called permanent life insurance - again, whole life and its intrinsic guarantees - and universal life and its variations with flexible premium management options *or* guaranteed death benefit features - are the major policy considerations. Generally we "map" the client's investor style ranging from Conservative to Very Aggressive to an appropriate type of policy, and we suggest the following such comparability:









3. "If my investor style suggests a type of life insurance that doesn't have a fixed and guaranteed premium, what should I expect to pay for my life insurance (given that no one wants to pay more than they have to for *anything* - especially life insurance)?"

The problem with this understandable question posed by most consumers and their advisors is that it doesn't fully take into account the potentially higher death benefit at life expectancy for a style of policy in which there are opportunities for natural increases in the death benefit - nor for the very real issue of "… and what is the probability that this result *will* occur?" As will be

reviewed in greater detail in Chapter 3, there is a broad spectrum of premium possibilities and their respective *likelihood to sustain* the policy to age 100. Is a 25 percent probability of successfully sustaining a life insurance policy to age 100 acceptable for *you*? Even those with high risk tolerances will generally require a certainty range of 80–90 percent; funding premiums accordingly must be increased, but the long-term *value* created by higher funding premiums must also be taken into account.

4. "With which life insurance company should I make such an important and long-term commitment?"

Financial strength ratings are an important criteria in choosing a life insurance company, especially if the policy is to last not just for a relatively short duration (as in the appropriate use of term insurance), but may be expected to provide coverage for 40 - 50 - 60 years in the future. When it comes to whole life, it makes sense to acquire from a well-established mutual carrier with decades of experience in the industry *and* which maintains a high credit rating.
The four major mutual insurers are at the very top of the financial rating spectrum. Each has a high rating from at least 4 of the major financial rating agencies, although those ratings come in different nomenclature and scales. "COMDEX" – a fee-based service accessed by many agents and brokers - creates a composite index from the various financial strength ratings an insurance company has currently received. COMDEX is not itself a rating or financial strength judgment, merely an aggregator of rating data that provides a clearer, relative picture of financial strength. The COMDEX " ... gives the company's standing, on a scale of 1 to 100, in relation to other companies that have been rated by the services. It is an objective value based solely on the mathematical distribution of all of the companies that have been rated."[7]

[7] Vital Signs' COMDEX at www. EbixExchange.com

The four major mutual insurers have COMDEX scores of 98 to 100. In our judgment, a composite of 85 is considered "reasonably safe," 90 is "safe," 95 is "extremely safe." One of the reasons the mutual companies are so highly rated is that they invest a high percentage of portfolio assets in "safe-haven" government-guaranteed investments and other high-quality fixed return instruments. In comparison to a stock company's quarterly earnings pressure, mutual companies can take a long-term investment and management view, and that longer horizon generally results in profits that ultimately are incorporated in addition to surplus reserves and the declaration of policy dividends.

When considering amounts of insurance in excess of a range of $3 to $5 million - and not withstanding a high COMDEX reflecting solid financial strength, there will generally be considerations of diversification not just of styles of insurance - but also of the issuing insurance carriers. There are differing opinions as to the necessity to diversify amongst COMDEX 98 - 100 insurance companies, but at some reasonable point, advisors and their clients need to begin to consider carrier diversification, which includes not only issues of financial strength, but also underwriting differences, since there can be substantial differences in a carrier's "view" of financial, avocational, and health issues as it translates to classifying the risk category of an applicant.

An additional criteria for carrier selection should also include a determination of the insurer's current or initial membership in the Insurance Marketplace Standards Association (IMSA). IMSA promotes high ethical standards in the sale of individual life insurance, annuities and long-term care products. IMSA's members[8] adhere to six broad principles of ethical market conduct (**Appendix C**) and are required to establish processes and procedures that assure that the six principles are being actively upheld and monitored for adherence to the carrier's own "rules."

[8] http://imsaethics.org

5. "From what agent should I buy life insurance?"

One obvious answer is that if an agent handed you a copy of this book, she is likely to be exactly the kind of agent with whom you will want to create a long business relationship! Additionally, the natural tendency is to ask for *and follow up on* referrals. While it's unlikely an agent or advisor will offer references from someone who wouldn't say nice things, it would be appropriate to ask the reference about that agent/advisor's ability to listen and reflect on unique concerns, and to otherwise seek to determine if the agent is a good "fit" for the client's style of working with professional advisors. An additional criteria is to determine the agent/advisor's professional credentials. There has been a tendency in the last 10 years for credentials to proliferate, but not all 3-letter initials bear the same weight or expertise. The important credentials for life insurance include (and in relative order of focus on insurance and insurance planning expertise): Chartered Life Underwriter (CLU), Chartered Financial Consultant (ChFC), Accredited Estate Planner (AEP), and Certified Financial Planner (CFP). All require experience, taking and passing courses, and rigorous testing for knowledge. These designations are registered with the U. S. Patent and Trademark Office by the American College (CLU and ChFC), National Association of Estate Planners and Councils (AEP), and CFP Board (CFP).

Terminology around agent and broker can, at times, be confusing. From a regulatory standpoint, anyone licensed in his state of domicile (or holding a reciprocal non-residence license for a state in which the client lives but the agent does not) - and subsequently appointed by an insurance company to represent its products - is legally considered an agent of the insurance company, regardless of whether the licensed individual is a full-time agent and exclusively represents that carrier *or* "brokers" business amongst a range of insurance companies. In all cases, the licensed agent owes a duty to the insurance company to follow its rules and to disclose any facts known to her/him, even if it means the client may not, as a result of disclosure, qualify for the "best" risk class of the carrier.

A further consideration in agent/advisor selection - depending on the insured's health and complications of health - is to work with an agent who has the experience, capacity and capability to deal and advocate on the insured's behalf. It may not be obvious how to pursue these capabilities, and in any case it's largely subjective. If the insured believes she has medical, recreational, or financial issues that could be complicated to evaluate, this should be immediately discussed with prospective agents in an attempt to determine experience and expertise. Referrals and credentials help. In almost all cases, it's important to measure the need for more experience that goes beyond that of a cousin who has just entered the business! (If you need to "do business" with your spouse's cousin who just entered the life insurance business, at least insist that the cousin team up with a more experienced agent … this is *your* life [insurance]!). It's also less likely to find expertise from agents working at a financial institution who's main thrust is something other than life insurance ("thank you for your deposit; and would you like any life insurance today?").

Even above expertise, a long-term professional relationship between agent/advisor and client should be based on integrity and customer focus. Along with the "top-down" standards of ethical market conduct pursued by the Insurance Marketplace Standards Association, we subscribe to a "bottom-up" corollary for agents. (**Appendix C**)

Risk tolerance, Investment Policy Statements & Insurance Policy Management Statements

"When you don't know where you're going, any road will take you there" is a useful aphorism suggesting that having a plan - or a roadmap or a blueprint - is a pretty basic concept to making sure that you get where you're going (or the house doesn't collapse for lack of sufficient engineering and bracing). But how many of us set out to enhance our financial well-being with incongruous, spontaneous investments involving (as it turns out) significantly more risk than was apparent at the outset - all of which was in an attempt to implement a concept (get wealthy) without having put in place the planning process and more refined long-term strategies that could

then better articulate and differentiate investment *implementation*? In the investment world, professional financial advisors almost immediately attempt to determine a new client's risk tolerance so that investment choices are given a context about risk and reward. After first assessing the client's current position and helping the client understand whatever inherent risk she is already taking, the planner will assemble several possible portfolios that reflect optimal asset allocation, addressing both tactical and strategic investing in the context of risk and reward. From there, a blueprint is developed to guide in the current *and future* management of expectations and objectives in light of an uncertain future. That blueprint is called an Investment Policy Statement. Only after the IPS has been created can we begin with implementation of appropriate investments that fulfill the client's objectives, plans, hopes, and dreams. The process just described is then used to monitor and manage the portfolio, with periodic reassessment of risk tolerance, asset allocation, and in fact the IPS itself. It's an ongoing process that lasts the client's lifetime.

Ideally when it comes to life insurance, the very same approach will be taken: the overall risk tolerance determined in the context of investing is used to make recommendations of life insurance policy types or *styles* that conform to that tolerance - or intolerance - for risk associated with life insurance.[9] Of course an *aggressive* investor with respect to a portfolio of stocks and bonds might be *less aggressive* when it comes to a foundation asset such as life insurance, and that would be perfectly understandable. Another type of risk associated with certain policies (notably term and guaranteed death benefit) is that they promise only the amount of death benefit specified in the original policy (if the policy is in force at the time of death), and the further out that death might occur, the more depreciated the purchasing power of that death benefit. Consider that the U. S. inflation rate in mid-2010 is approximately 2%; if that rate were to persist, it will take twice as many dollars 36 years in the future to buy the same as today. On

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[9] It may seem ironic to talk about risk in the context of buying life insurance, since the very idea of insurance is to shift risk to a 3rd party. But certain policies do not have fixed premiums, and there is a substantial risk that the deposit assumed to be sufficient in the early years will be insufficient later on. Policies with fixed premiums but without accessible reserves (guaranteed death benefit policies) essentially rely on the insurance company's underlying financial strength to guarantee the death benefit. The risk of carrier failure can, in part, be inferred from its financial strength ratings.

the other hand, if we measure the inflation rate in the 35 year period from January 1976 through December 2009 (which includes the hyper inflation of the late 1970s into early 1980s), it will take almost 4 times the dollars 35 years from now to buy the same goods and services as today.[10]

Age Female	Life Expectancy	Value of $1Million at Life Expectancy	Needed now with $1M purchasing power at LE
45	90	$264,438	$3,781,596
55	91	$345,032	$2,898,278
65	91	$463,695	$2,156,591
75	92	$605,016	$1,652,848
Age Male	Life Expectancy	Value of $1Million at Life Expectancy	Needed now with $1M purchasing power at LE
45	88	$280,543	$3,564,517
55	88	$377,026	$2,652,335
65	89	$491,934	$2,032,794
75	91	$623,167	$1,604,706
Age Female/Male	Life Expectancy	Value of $1 Million at Life Expectancy	Needed now with $1M purchasing power at LE
45/45	95	$228,107	$4,383,906
55/55	95	$306,557	$3,262,038
65/65	95	$411,987	$2,427,262
75/75	96	$537,549	$1,860,295

Average 3% inflation

[10] http://inflationdata.com

With the various risks accounted for in an assessment of insurance risk tolerance, a Life Insurance Policy Management Statement should be developed in the same manner - and with many of the same considerations - as the investor's Investment Policy Statement. The IPMS should therefore address such issues as:

1. Overall risk tolerance and its influence on policy choices;
2. Whether risk tolerance may be lower with respect to life insurance "because it's life insurance;"
3. Inflation risk (death benefit is worth only half its original value after 24 years @ 3% average inflation);
4. Premiums as expense or asset creation;
5. Access to cash value;
6. Desirability of natural increases in death benefit;
7. Average return on portfolio assets;
8. Tax considerations of funding sources;
9. Annual gifts or premium resources existing outside the estate resources;
10. Carrier risk;
11. Premium adequacy risk;
12. Medical/avocation assessment level.

Both the Life Insurance Policy Management Statement (LIPMS) Questionnaire and Sample Statement can be found in **Appendix F & G.**

Chapter Summary

For an effective process of acquiring appropriate amounts and kinds of life insurance, the 5 fundamental issues described in this chapter must be addressed. Further, once the client has a clearer understanding of how much, what kind, how best to fund, and from which agent and life

insurance company to acquire life insurance, a Life Insurance Policy Management Statement should be completed to make certain the decisions made today are memorialized. Whether one policy or many, it is critical to objectify and focus long term objectives for life insurance at the outset - and manage accordingly thereafter. If there is term insurance, the LIPMS should indicate under what circumstances and timing the term should be dropped or converted. The LIPMS puts in writing the anticipated game plan, and it ideally works in concert with the client's overall financial plan. Even if owned outright (as opposed to trust or other 3rd party ownership), the LIPMS is an important differentiator to *managing* important financial assets.

It is possible to change the purchase paradigm away from price and toward a process that is both more structured and ultimately more valuable - transforming the consideration from commodity to unique asset. (You can go to Walmart for a commodity as basic as paper towels; you have to "think hard" to buy an asset as sophisticated as life insurance.) If you buy an asset as you would buy a commodity - don't feel bad when you lose your money! It's a betrayal of the true value of life insurance in consideration of human life value, that the life insurance industry has allowed its unique products to become like - and purchased as - commodities.

(The authors wish to point out that they have no particular bias about products or carriers - participating/stock, etc. "Properly acquired, actively managed" is the new paradigm, and it is likely that every type of life insurance product from every financially strong insurance company will have a valid place.)

Chapter 2
Myth Busters: Classic Life Insurance Myths and Truths

One cliché suggests that life insurance is bought by those who "*love* someone or *owe* someone." Another cliché considers that you should "buy the cheapest life insurance you can find and invest well until you don't need the life insurance any longer."

Myths have been a powerful force throughout man's evolution, from the days of the Greek Gods to modern time. Financial myths are especially intriguing and perilous at the same time, as it is human nature to be drawn to *the attractive impossibility rather than the less attractive probability*.[11] Myths may have technical validity - such as "... investing in the stock market produces longterm returns in the 10-12% range." But few investors actually achieve such returns because the myth drawing us into an investment scheme often comes from a *look back* from a certain starting point and ending point - inevitably different from where *we* start and end in the real world. There's also a belief that average rates of return are just as acceptable for life insurance and annuity projections as they are for accumulating money; the reality is that average returns used in policy illustrations are generally overstating likely returns.

Myths occupy our psyche and can form powerful but largely invisible effects on our decision making process. When myths devolve into beliefs such as "having a lot of money is a big responsibility" or "I'm not very good in the area of money and finances," the unconscious consequences can divert us from what we truly want and would otherwise be capable of accomplishing.[12] An examination of some of the key myths surrounding life insurance is appropriate so that advisors and their clients can better understand what's real and *not* real about

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[11] A reinterpretation of Aristotle's *Poetics*.

[12] "[this may result from] ... the very wiring of our brains. Studies at the University of Michigan and Yale found that partisans, when confronted with facts that disproved their pre-held beliefs ... actually held on to their misbeliefs more strongly." The Myth of Fact, James Poniewozik, Time Magazine, Aug. 23, 2010

financial decision making issues such as the type of life insurance that is appropriate for one's use, and how to manage that policy or portfolio of policies.

Life insurance is cash money: the lifetime premiums paid for it, the accumulating cash value that accrues as a result of the premiums paid, and especially the death benefit paid to the named beneficiary. Life insurance also involves considering one's death and the financial repercussions of that death. From such conflicts of price, large sums of money, and what for some has been a taboo expressed as: "if I buy life insurance, I will die," it's important to consider the various myths that have evolved over time and to attempt to affirm or deny the stories that may distract those who *should* consider life insurance.

Myth #1: "You only benefit from whole life when you die."

Properly acquired, those who own whole life may enjoy substantial "living" benefits during their lifetime of coverage in addition to the protection provided by the death benefit. Such living benefits include:

- Mutual insurance company policy owners generally receive regular annual dividends reflecting the company's profitability and ability to cover their guaranteed obligations with earnings in excess of surpluses set aside for unforeseen contingencies." These "profits" derive from better than guaranteed investment returns, expenses, and claims. The four largest mutual insurers have consistently paid annual dividends for almost 150 years since their respective beginnings in the 19th century.[13]

- One carrier - and with results largely similar to their 3 large mutual peers - provided a 5.19% historic, pre-tax cash-on-cash 25-year return for a 40 year old male best class

[13] New York Life (1841), Mass Mutual (1851), Northwestern Mutual (1857) and Guardian Life (1860) are the 4 largest mutual insurers by asset size and in 2008 were the 7th, 4th, 9th, and 37th largest respectively by total asset size of 1850 U. S. life insurance companies.

(7.42% pre-tax equivalent in a 30% income tax bracket), along with strong guarantees and low volatility - for a policy begun in 1985 and tracked through the end of 2009.[14]

- Once declared, dividends can be used to help pay current policy premiums, buy more permanent increments of death benefit and cash value, or accumulate with interest.

- Access to a whole life policy's living values is typically available through withdrawals of the cash value of paid-up additions, or by utilizing tax-free loans.[15]

- The cash value of a policy can be pledged as collateral for a tax-free loan.

- Small business owners may borrow against their policies to provide working capital.

- Wealthy individuals use whole life in their estate planning by setting up an insurance trust to pay estate taxes from proceeds of the policy, which are themselves income and estate tax free.

Myth #2: "Whole life is a lousy place to invest your money."

This myth is especially virulent when the stock market is in a bullish mood. Even if whole life cash values are categorized appropriately in the "fixed return" asset class category, 1980's 16%+ U. S. Treasury yields were far more attractive than whole life's 4% reserve rate. More recently however, not only have there been few if any commentaries perpetuating this myth, but with 10-year U. S. Treasuries below 3%, numerous articles in the financial press have stressed the stability and guarantees of permanent - especially whole life - life insurance:

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[14] Dividends are not guaranteed until actually declared and paid. Dividend projections do not predict future results.

[15] Policy benefits are reduced by outstanding policy loans or policy loan interest

- The value of a whole life insurance policy is *uncorrelated* with the stock market and is guaranteed by the insurer, so that death benefits and cash values are not affected by declining markets. As demonstrated in Life Insurance as an Asset Class, a whole life policy can serve as the stable component of an overall financial plan and should not be relegated to the drawer labeled "it's just life insurance."

- Under long-standing tax policy, cash values grow income tax-deferred. Accumulated values on a policy may be withdrawn tax-free, up to the cost basis. Any withdrawal in excess of cost basis is taxed, but policy loans are not taxed as long as the policy remains in force.[16]

Myth #3: "Once you retire, you should cash in your life insurance policy."

Perhaps the most basic tenent of "buy term and invest the difference" is the notion that life insurance is not needed beyond retirement. The presumption is that when one is no longer *earning*, it's no longer necessary to insure those earnings. From a different perspective, however, we must ask: how logical is it that an insured would pay policy premiums throughout the period for which there was a minimal risk of death and then *drop* the policy at just the time when the likelihood of filing a death claim begins its escalating, inexorable climb to 100% ?

- Through loans and withdrawals available to whole life policy owners, an individual can supplement retirement income with tax-free dollars.[17]

- Whole life insurance incorporated into the overall asset strategy of a financial plan can provide an additional level of security, financial freedom and a legacy for loved ones.

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[16] These tax assumptions are based on the policy NOT being classified as a Modified Endowment, which has different tax rules.

[17] These tax assumptions are based on the policy NOT being classified as a Modified Endowment, which has different tax rules.

- Many people have estate liquidity problems that can only be met through the availability of immediate cash - far more often than those who have estates large enough to be subject to estate taxes. For those whose estates are that large, heirs can use the proceeds of a whole life policy to pay taxes and/or defer a forced sale of valuable property at deeply discounted prices.

- Whole life cash values can be a readily accessible source of tax-free funds for big-ticket items that could put a dent in a tight retirement budget – such as assisting with a grandchild's college tuition or paying for a first class 50th wedding anniversary trip. There is no credit application or approval process.

- Some families find it prudent or necessary to establish "special needs" trusts to provide financial care for certain family members. Life insurance is an ideal trust asset for that purpose.

- Families with real estate, closely held businesses, leveraged investments or margined stock portfolios – among just a few categories – often use life insurance to offset the sudden and significant cash liquidity demands on their estates, or to equalize the interest of heirs, some of whom may want to be involved in a family business or real estate venture, and others who would not choose to be involved.

- Two spouses - each 65 in reasonably good health – have a 50/50 chance of at least one spouse living to age 95. Assuming their most active years are in the first third to half of that time span, life insurance can help to replace income and assets that may have been consumed in those early years to check off as many "bucket list" items as possible.

- With today's life expectancies - and an anticipation of medical and genetic breakthroughs making living to age 100 appear to be a relatively easy goal - retirement is no longer the appropriate time to drop life insurance.

Myth #4: "Whole life is too expensive."

... and so is a $1 million home "too expensive." Unless 1) you have the money and 2) you want to live in that home. Owning a $100,000 home may be more expensive than renting it. Unless 1) you have the money and 2) you want to own that home, not just rent it. The persistent rubric of "buy term and invest the difference" has been exhaustively reviewed in the first volume of Life Insurance as an Asset Class. The highlights of the consideration of term versus permanent forms of life insurance can reasonably be put to rest by restating:

- Protection comes first. By all means own term insurance when it is appropriate in terms of resources and affordability relative to the substantial amounts of life insurance most people need *and do not buy.*[18]

- When resources and circumstances allow, begin to assess human life value and convert as much term into permanent forms of life insurance as possible to provide for lifetime coverage.

- Uses of life insurance transform. While focused largely on replacing the economic value of a bread winner in earlier years, life insurance *as an asset class* as to its cash values and ultimate death benefits becomes a stabilizing influence on an investment portfolio, ironically allowing *more* risk to be taken in aggressive areas of the portfolio for the fact

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[18] *Life Insurance Consumer Studies,* 2008, LIMRA International: 22% of families with dependent children expect to have immediate trouble meeting everyday living expenses at the breadwinner's death. 28% of wives – and 15% of husbands – have no life insurance at all. Those who do have insurance own an average of just $235,000 – enough to replace their income for only 4.2 years. The typical married couple would need to double its current coverage to meet expert's minimum recommendations of having enough life insurance to replace income for 7 to 10 years.

that the life insurance is providing substantial living and death benefits without concern for market value adjustments or market volatility.

- For longer periods—an entire lifetime—whole life insurance is substantially less costly than a lifetime payout for term. If the need for life insurance is for fewer than 30 years, a term insurance policy is usually less expensive. But term insurance is prohibitively expensive to maintain even to the broad average U.S. life expectancy of 78.9 years, never mind to age 100. Term insurance kept *beyond its initial duration* can cost a staggering 70% of the death benefit to life expectancy - $700,000 per $1 million of death benefit - and more than 400% of the death benefit - $4,000,000 per $1 million, to age 100.[19]

- And, human nature being what it is, we've never known an advocate of Buy Term and Invest the Difference to actually execute and maintain such a program. In the first volume of *Life Insurance as an Asset Class* we demonstrated that the before tax rates of return necessary over very long periods of time would have to range from almost 8% to almost 11% *per annum* to have the process work at three different levels that would "beat the whole life policy" - a feat requiring serious investment acumen, as well as discipline.[20]

- Finally, for those who have the resources and what we would call the "luxury of choice," whole life insurance provides a disciplined means of accumulating cash values that are guaranteed (with respect to the base policy) and - subject to the declaration and payment of dividends - convey the potential for substantial additional insurance or assistance with future premium payments.

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[19] The first volume of *Life Insurance As An Asset Class*, Chapter 2

[20] The first volume of *Life Insurance As An Asset Class*, Chapter 8

Myth #5: "All life insurance is created equal."

Life insurance is sold by small companies and large companies, stock companies, mutual companies, and fraternal companies. Some companies are relatively new or newly merged, and other companies have been around for 150 or more years - largely unchanged but for life expectancies, management teams and technology. If a death occurs and a policy is in force and the death claim is paid - then all life insurance is created equal as to the beneficiaries. But life insurance properly acquired must be tailored to the resources and needs of the client. Not only is determining the appropriate style of policy a critical part of the *properly acquired* process, but even more fundamental is the credibility of the insurer to pay a death claim decades in the future, as discussed in the preceding chapter.

Permanent life insurance (policies that by design can be maintained for as long as you live) comes in a variety of styles to accommodate the requirements of those owners of life insurance with different risk tolerances. Life insurance policy design generally falls into two broad categories: projection (or illustration) based, and guaranteed.

Myth #6: "Once you buy life insurance you don't have to think about it again."

There may have been a time when a life insurance policy could be bought, placed in a filing cabinet, and forgotten until the fateful day of filing a death claim. That time corresponds with more stable interest rates, simpler tax structures, predictably undulating markets, and the first *Father Knows Best* TV episode. Today, filing and forgetting is anything *but* an appropriate way to treat a valuable asset. Clients are advised to meet with their financial professionals at least on a bi-annual basis to review their situation.

- Economic realities can affect policy cash values. In reviewing other asset classes to check performance, clients should review their policies as well.

- Life changes. Make sure policies are still fulfilling their initial or current needs. New family member? New career? New windfall?

- Positive health changes can sometimes lower previously determined premiums with the removal of a rating or upgrading from a "smoker" to "non-smoker" status after verifiable periods of being nicotine-free. Other issues to monitor include policies with loans and/or withdrawals. Often, repayment of loans (especially in the current environment of extremely low money market and savings rates) can be an effective strategy. Policies held in trusts have the additional consideration of fiduciary standards that need to be met with respect to ongoing management.

- Performing policy maintenance can facilitate linking the client's advisors together, strengthening their relationships on behalf of the client's best interests. Clients should also cross-check ideas between their investment, tax, estate, and insurance advisors.

- Of course, term insurance should be closely monitored. If it was acquired for a specific purpose or timeframe, review the ongoing reality. When the term period runs out, premiums to continue the coverage will increase dramatically.

<u>Projection / Illustration-based policies</u>

Universal and Adjustable policies (also known as flexible premium) transfer the *policy sufficiency* risk to the policy owner in exchange for flexibility of amount and timing of premium payments. In these types of policies, "premium" is often calculated with policy illustrations based on non-guaranteed expense and insurance factors. Such a calculated "premium" should not be confused with the premium for guaranteed policies.

Variable policies (universal and adjustable) not only allow flexibility of amount and timing of premium payments, but *require* that the policy owner designate mutual fund-like sub-accounts to hold and invest those premiums. As with traditional universal policies, "premiums" are calculated and there are *no* underlying guarantees as to investment performance. If the policy's account value falls below $1, the policy will lapse unless more money is paid into the policy within (generally) 60 days.

Variable policies can also be acquired in whole life formats, but are not currently very popular after the market declines of 2008 - 2009.

Equity Indexed policies are often a hybrid of traditional universal life structure (i.e. flexible premium) but whose cash value crediting rates are based on an outside index of equities, such as the S&P500℠. The key feature of equity index policies is that there will be a minimum crediting rate - 1 or 2% is typical - regardless of poor performance in the investment index. Similarly, high performance years will be capped to a certain rate (such as 12%) or to a percentage of returns in excess of a stipulated rate. Also similar to a universal life design is that the sufficiency risk has been transferred to the policy owner, and a "premium" calculated at the historic 9%+ return of the S&P500℠ will almost always fail to carry the policy to life expectancy.

Guaranteed Policies

Death Benefit Guarantee policies are generally of a universal life design but which specifically waives the $1 minimum cash value requirement to maintain the policy. In fact most death benefit guarantee policies (also referred to as "no lapse guaranteed") will have little or no cash surrender value - in exchange for the fact that the death benefit is guaranteed as long as the stipulated (and guaranteed) premium is paid on or before the due date. Death benefit guarantee policies typically have the lowest premium outlay of

all styes of permanent insurance, largely because accessible cash value is minimal or non-existent and the inherently level death benefit will depreciate over time due to purchasing power loss.

Non-participating Whole Life was at one time a popular form of policy with fully guaranteed death benefit, premiums, and cash value and is the original "what you see is what you get" style of policy. In its modern incarnation, insurance carriers generally sell it with "current assumptions" that illustrate the possibility of assessing lower expenses and crediting higher current interest rates, potentially allowing the guaranteed premium to develop more than the guaranteed cash value over time. Notwithstanding company-determined enhancements beyond those guaranteed in the policy, however, the policy owner does not participate in the company's profits.

Participating Whole Life is another classic form of guaranteed policy. Premiums, cash values, and death benefits are guaranteed by the full faith and credit of the issuing life insurance company. Dividends are projected but not guaranteed until paid, and whole life policies have historically been the most stable of all permanent forms of life insurance.

Truths

So here's the real deal, the secret sauce, the Occam's Razor:[21]

> For any given age, gender, medical, avocation, and financial risk profile, there is a level premium that will be fully sufficient and profitable for both the contract holder and the contract issuer to provide life insurance coverage for the life of the insured, providing death benefit proceeds no matter when that life comes to an end. Any attempt to charge or pay an amount that is lower than this fully sufficient and guaranteed cost introduces a level of risk that the typical policy owner doesn't know exists and that cannot be fully quantified until after the insured has died.

With that simple declaration of reality, we hold the following truths to be self-evident about the attempt to "get a better deal" for lifelong life insurance needs:

Truth #1 ***We're drawn to the attractive impossibility rather than the less attractive probability.***[22] Policy illustrations generally portray an *attractively impossible* outcome (low price). The illustration conceals the more likely result that such an attractive price cannot possibly occur when calculated with current expenses and returns projected decades into the future, when the insurer has the right to increase its internal pricing parameters, *and when the interest or investment return factors themselves are assumed to remain constant.* This truth is supported by the generic disclaimer *required* by regulators on every policy illustration:

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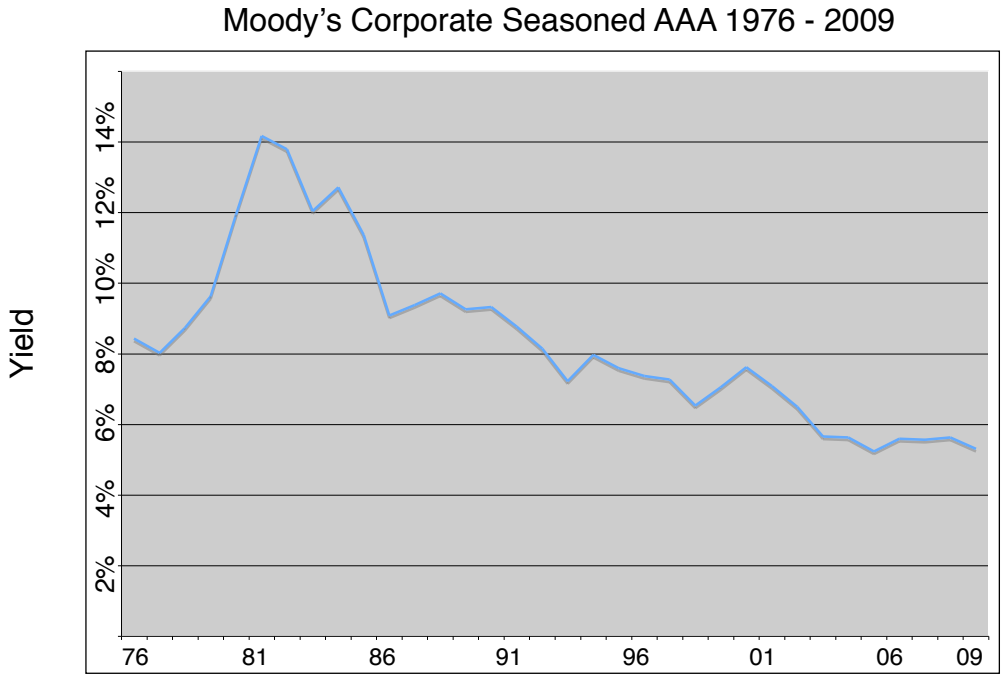
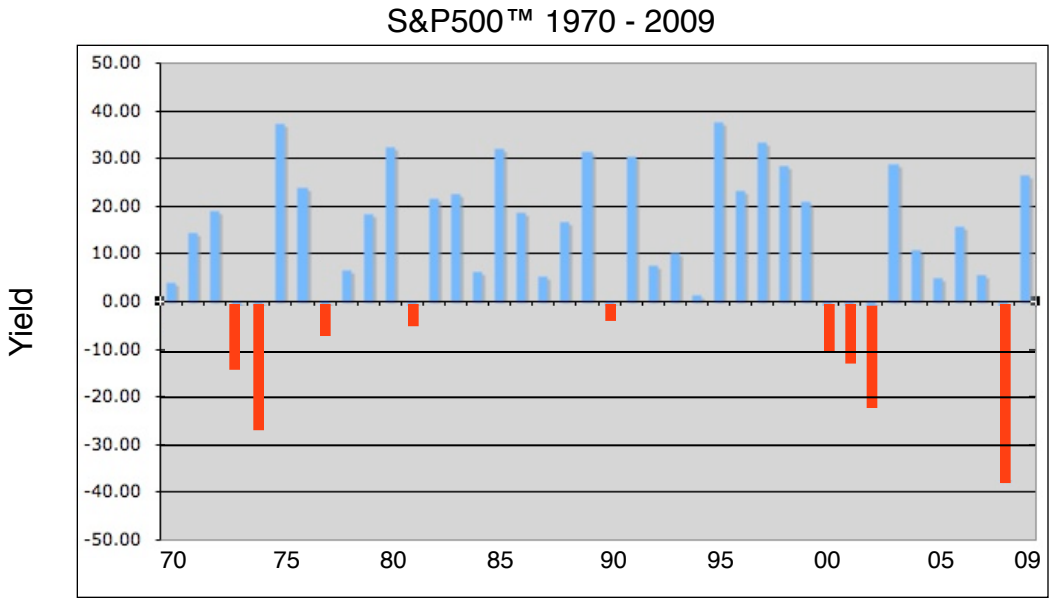
[21] Occam's razor is a logical principle attributed to the medieval philosopher William of Occam (or Ockham). The principle states that one should not make more assumptions than the minimum needed. This principle is often called the principle of parsimony. It underlies all scientific modeling and theory building. It admonishes us to choose the simplest model from a set of otherwise equivalent models of a given phenomenon. In any given model, Occam's razor helps us to "shave off" those concepts, variables, or constructs that are not really needed to explain the phenomenon. Doing that makes developing the model much easier, and it reduces the chances of introducing inconsistencies, ambiguities, and redundancies. F. Heylighen, July 7, 1997, Principia Cybernetica Web site: http://pespmc1.vub.ac.be/OCCAMRAZ.html.

[22] A reinterpretation of Aristotle's *Poetics*.

"Illustration [results] are neither a projection nor a guarantee of future results." Every sufficient level premium for every type of policy has its own *theoretical cash value* curve that must at least be matched by actual policy values for the policy to sustain for all years.

Truth #2 ***Historic policy performance data is of little or no practical use in determining "which policy will perform better?"*** Today's and tomorrow's economic realities are simply too different from yesterday's to encourage any significant reliance. Illustrations calculating Universal Life premiums in 1982 with 14 percent crediting rates—no matter how realistic that might have been *then*—created an unrealizable expectation as interest rates plunged to such low levels today that most of the policies issued in the early 1980s are paying only the rate guaranteed in the policy, itself a rate invariably higher than otherwise warranted by current experience. Similarly, illustrations calculating Variable Universal Life premiums in 1997 with the regulated maximum illustration rate of 12 percent—no matter how realistic that might have been *then*—created an unrealizable expectation as investment returns plunged in early 2000 and again in 2008 - 2009, and left those policies with ballooning *net amounts at risk* and the very real possibility of policy lapse years before life expectancy.





Truth #3 ***There's a cliché that says, "If it's too good to be true, it probably is." A second cliché says, "Promise 'em anything as long as you have the right to change it later." A third (this from a commercial ad for oil filters) says, "Pay me now or pay me later."*** Most life insurance companies are well-run businesses, and most agents are honest and intend to balance their own interests with those of their client's. But insurers and agents *are* in business to sell their products. Too often the potential buyer succumbs to the *attractive impossibility* and a clear understanding of how things work is given inadequate attention. This can be rationalized that it's more important for a client to buy needed coverage than to understand all the moving parts.

Truth #4 ***The only alternative to relying on policy illustration premium sufficiency calculations is to deploy independently derived benchmarks for each major policy type and to use stochastic (probability) analysis to introduce some reality into the otherwise unrealistic use of non-guaranteed constant rate of return projections.*** Interest rates in the U. S. economy have had significant increases, and decreases, in the last 40 years. Interest rates will undoubtedly continue to undulate up and down. Similarly, investment returns have been very volatile in the last 20 years and are likely to remain so. Because lower returns (interest or investment-based) can—all things being equal—cause *net amount at risk* to increase, the effect of this type of

volatility must be taken into account. Rather than assume constancy, then, it's critical to find an economic modeling tool that will give some sense of the *likelihood* that assumptions made today will have validity for the future. As demonstrated in the first volume of Life Insurance As An Asset Class, this can be done with a modeling technique popularly known as Monte Carlo Simulation, a process by which underlying returns are randomized and recalculated for a statistically credible number of cycles so that a *probability of success* can be inferred.

Truth #5 ***There's no free lunch.*** Most of us will acknowledge our attraction to a good deal; it almost seems to be human nature. But we've also purchased enough things that didn't live up to their potential as a "good deal" to suggest another truism: the *appearance* of a bargain is far more frequent than the *experience* of a bargain. There *are* things that can – and should – be pursued on the basis of best price. But current assumption / indeterminate premium life insurance isn't one of those things; as explained in this chapter, these policies need to be explored with a more sophisticated buying paradigm than just an illustrated premium portrayed and projected with the current assumptions of the insurance company.

Chapter Summary

Why do these myths *not* serve us, and in fact perform a real disservice? And why do we ignore the truths when they seem (after the fact) so "self evident?" It is human nature to deploy cognitive dissonance to rationalize those things we would prefer not to face or act on. There's no law or requirement that people own life insurance. Indeed, most buy it because they "love someone or owe someone." Addressing the myths and internalizing the truths will help readers more directly assess their needs and make more objective decisions about "whether they 'need' it - and, if so, how much."

The 2008 - 2009 worldwide economic downturn has forced many Americans to rethink the way they plan for their financial future. In this more fiscally conservative environment, a growing number of consumers are returning to a financial product whose worth was recognized by their grandparents: whole life insurance fully guaranteed by a financially strong insurance company.

Whole life insurance, which provides a broad range of financial benefits, has proved its long-term value over generations. While most financial asset classes have faltered, whole life insurance provided small business owners with a much-needed source of funds and retirees with access to additional income – all the while continuing to pay death benefits to beneficiaries.

For the last two decades, financial pundits and journalists have discounted the benefits of whole life insurance in favor of sexier, equity-oriented vehicles that seemed to offer higher returns at lower costs. Throughout this time, a number of myths about whole life insurance have been perpetuated, with the result being that many Americans are unaware of the flip side of the story – the benefits that make whole life insurance one of the most valuable and flexible financial planning tools available.

Chapter 3
"*Real* real" Returns Compared to Permanent Forms of Life Insurance

In a detailed assessment of the "*real* real" return of various categories of bonds and equities (reducing nominal returns by investment fees, taxes, and inflation), Thornburg Investment Management has made a meaningful contribution to a realistic understanding of the difference between what we think "we're earning" and what in fact is the real return of our portfolios ("A Study of *Real* Real Returns - December 31, 1979 through December 31, 2009"). **Appendix M.** This chapter quantifies the historic return on various styles of life insurance begun in the first volume of *Life Insurance as an Asset Class* and compares those returns with the historic *real* real returns of fixed return investments.

Returns on life insurance

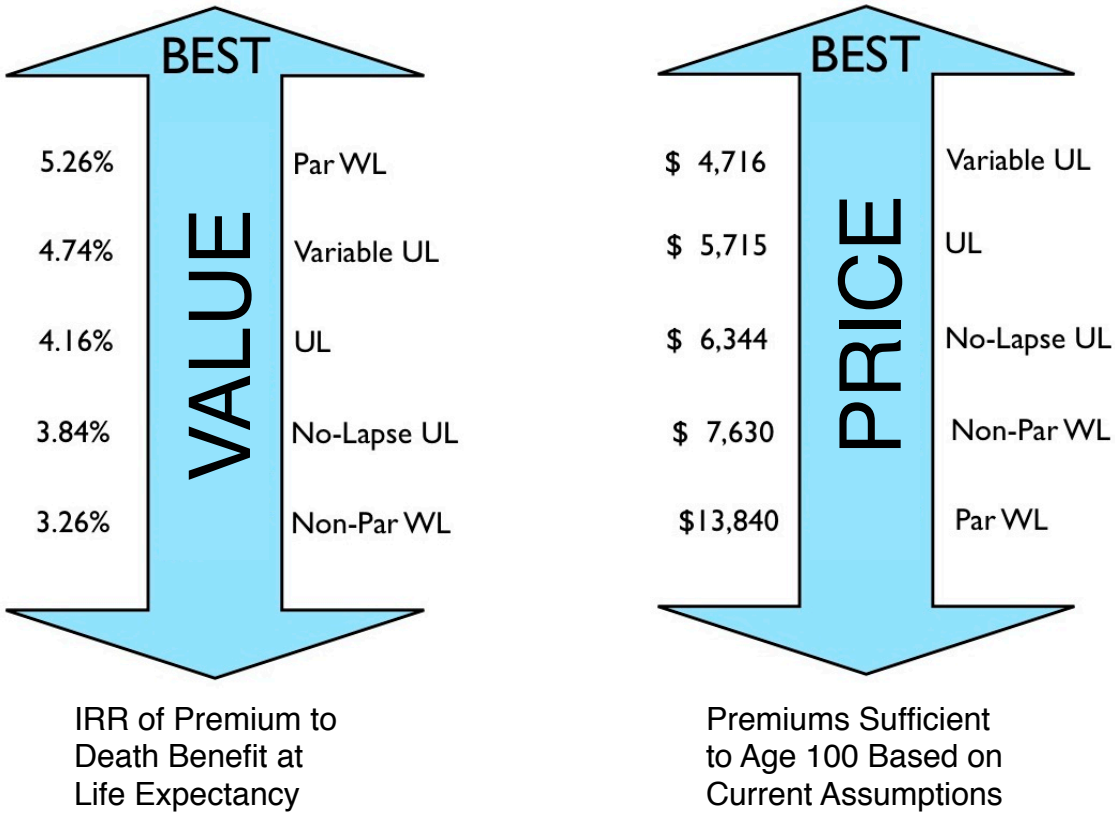
One of the concepts addressed in the first volume of *Life Insurance as an Asset Class* was that *price* is not the sole determiner of *value* when making decisions about acquiring life insurance policies that will be in the consumer's best interest. Since most forms of permanent insurance (i.e. designed and priced for lifetime use) have two specific asset class components - cash value and death benefit - it is important to examine how each component adds value and how each component can *be* valued. In this chapter, we will explore the anticipated "performance" of a $1,000,000 policy - one specific to a male age 38 – (preferred plus nonsmoker risk class) - and the other specific to a female age 52 (also preferred plus nonsmoker risk class). Performance is measured by the elements of policy design: the basis on which interest or investment returns are credited, and the basis on which expenses and charges for *net amount at risk* are assessed.

The following demonstrates a *solved* "best price" premium and the resulting cash value and death benefit for the major forms of permanent life insurance for a 38 year old male in a second-best rate class category. Average life expectancy for a large group of similar health 38 year old

males is 50 years in the future - age 88. A second table - **Appendix** H - enumerates similar information for a 52 year old female in a second-best rate class category. Average life expectancy for a large group of similar health age 52 females is 36 years in the future - also age 88.

38 year old male in a second-best rate class category

All illustrated death benefits are level



IRR of Premium to Death Benefit at Life Expectancy

Premiums Sufficient to Age 100 Based on Current Assumptions

Of course, the above chart cannot truly compare price and/or benefits in a consistent manner across diverse policy design styles. For example, the practical reality of a NLG style is that its "best case" premium/death benefit is also its "worst case," but the variable UL's "worst case" (6% constant returns) is anything but worst in the real world. Nonetheless, and without intending the data to suggest that one policy style is better than another, we must move to the next level of analysis which is to estimate internal rates of return on both LE cash values and LE death benefits in an attempt to get beneath the surface of a "price" mentality.

The first volume of *Life Insurance as an Asset Class* demonstrated a stochastic (probability analysis) methodology of moving away from current assumption policy illustrations (using constant returns) as a means of either calculating/estimating indeterminate policy premiums and brought us to a more modern approach to estimating the future probability of sustaining on the assumption-based projection. Participating whole life, however, has been more problematic with respect to establishing a reasonable expectation for future dividends.

Participating Whole Life - Basic Benefits

A mutual life insurance company – typically beneficially owned by its policyholders rather than outside shareholders – hedges the pricing of a long-term commitment by charging (and guaranteeing) a somewhat higher premium, and returning to its policyholders their pro-rata share of gains through investment returns, mortality experience, and expenses that are more favorable than those incorporated in the pricing of the guaranteed premium. Historically, dividend-paying (also referred to as "participating" or "par") policies have generally provided greater long-term value than those policies that did not pay dividends.[23]

The ***basic*** guarantee underlying a "par" whole life insurance policy is that the beneficiary will receive the death benefit whenever death occurs during the stated duration of the policy, as long as the level premium is paid for the period specified in the policy. Typical periods are "lifetime" or some specified duration such as "paid up at age 90." Neither the premium, the cash value, nor the death benefit is subject to change; these three fundamental elements are guaranteed to the full faith and credit of the issuing life insurance company. Included in the policy's basic benefit is a cash surrender value based on the insured's issue age and gender, driven by the underlying guaranteed interest rate and mortality table stated in the whole life policy. The cash surrender

[23] "Life Insurance as an Asset Class: A Value-added Component of an Asset Allocation"

value grows over the life of the policy, approaching the full face amount at the terminal age – age 121 under all the par whole life policy examples and situations that follow.

While most permanent life insurance policies purchased in 2010 and later will technically mature at age 121, this is not to be confused as the insured's life expectancy. As age 100 was for many decades in the 20th century the assumed "terminal age" beyond which no one would still be alive, age 121 is the terminal age for today's population of insurance purchasers.

Participating Whole Life - Dividends

As described above, in addition to the basic benefit, the insurance company underwriting the par whole life policy may pay an annual dividend that can be received/used in a variety of ways. The dividend is not guaranteed until paid. The dividend can be paid out in cash, applied to reduce or pay the annual premium, left to accumulate in an interest-bearing fund, or used to purchase additional paid up par whole life. Paid-up additions, when acquired by dividend election, creates a paid-up increment of life insurance with its own cash value (the initial cash value is equal to the dividend used to acquire the increment) and its own dividend scale. Over time - as will be seen in the remainder of this chapter - the sum of all increments of paid-up life insurance can add substantially to the total value of the policy's cash value and death benefit.

While access to the basic policy's cash value is accomplished via a policy loan, dividend cash values are generally surrendered when used to pay underlying policy premiums, i.e. Natural Premium Offset examples seen in Chapter 7.

One area of confusion when considering the purchase of a par whole life policy is the extent to which cash values and "performance" of as yet undeclared dividends may influence the financial outcome of the non-guaranteed portion of the policy. Since the underlying reserves of the policy are guaranteed with an assumed accumulation rate of 4%, does that mean the policy is "earning"

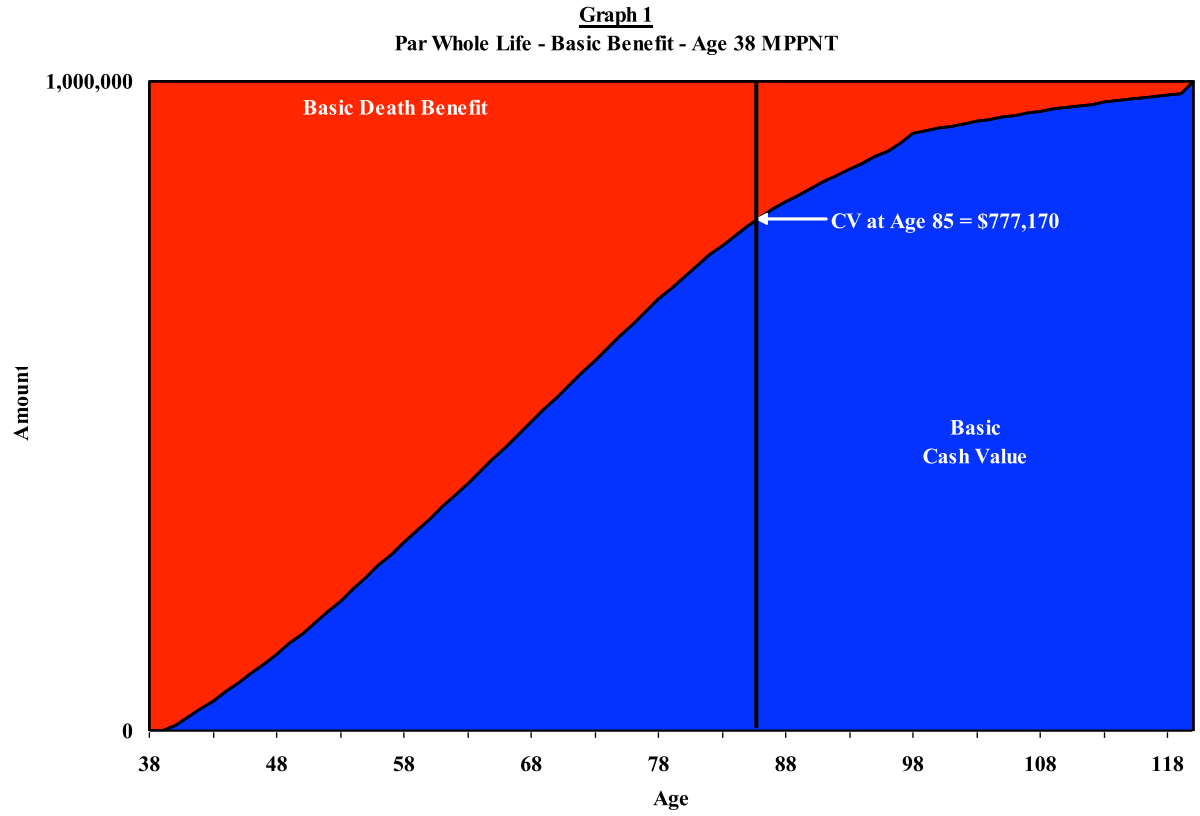
4%? Further, if the dividend is expressed in terms of a "dividend interest rate" assumption for the assets underlying the dividend, does that mean that an insurance company's current 6% "interest component of the dividend scale" means that the policy is reflecting a 6% return? And if the reserves were "earning" 4% and the dividends are "earning" 6% - just exactly what is the "return" on the non-death component of the policy?

Simple Par Whole Life Illustrations

We examined the performance of two distinct $1,000,000 par whole life policies at varying dividend levels. One policy is for a male age 38 – (preferred plus nonsmoker risk class) - and the other policy is for a female age 52 (also preferred plus nonsmoker risk class). All annual dividends are used to purchase paid up additions.

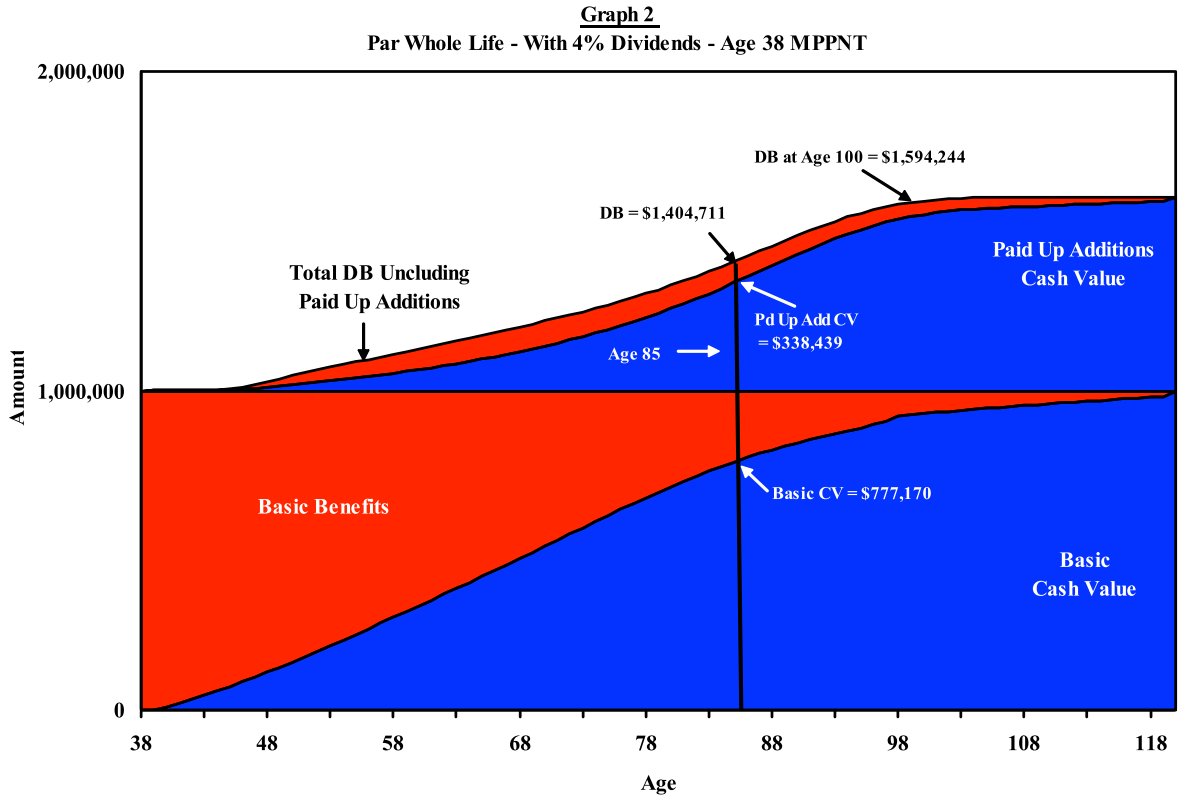
There are five graphs for each insured showing (1) the basic benefits, and (2) benefits deriving from dividends assuming four dividend scales: 4%, 5%, 6%, and 7%.

Graph 1 reflects the *basic guarantees* underlying a par whole life policy on a 38-year old "preferred plus" / non-smoking male. Everything reflected in this graph is guaranteed. No dividends are assumed. Note that the **guaranteed cash value** progressively increases over the years and simultaneously reduces the ***net amount at risk*** of the policy. The death benefit paid by the insurance company will consist of the cash value on the date of death plus an amount of *net amount at risk* sufficient to pay the contractually guaranteed death benefit of $1 million. All graphs assume a level premium of $13,840 is paid through age 99.



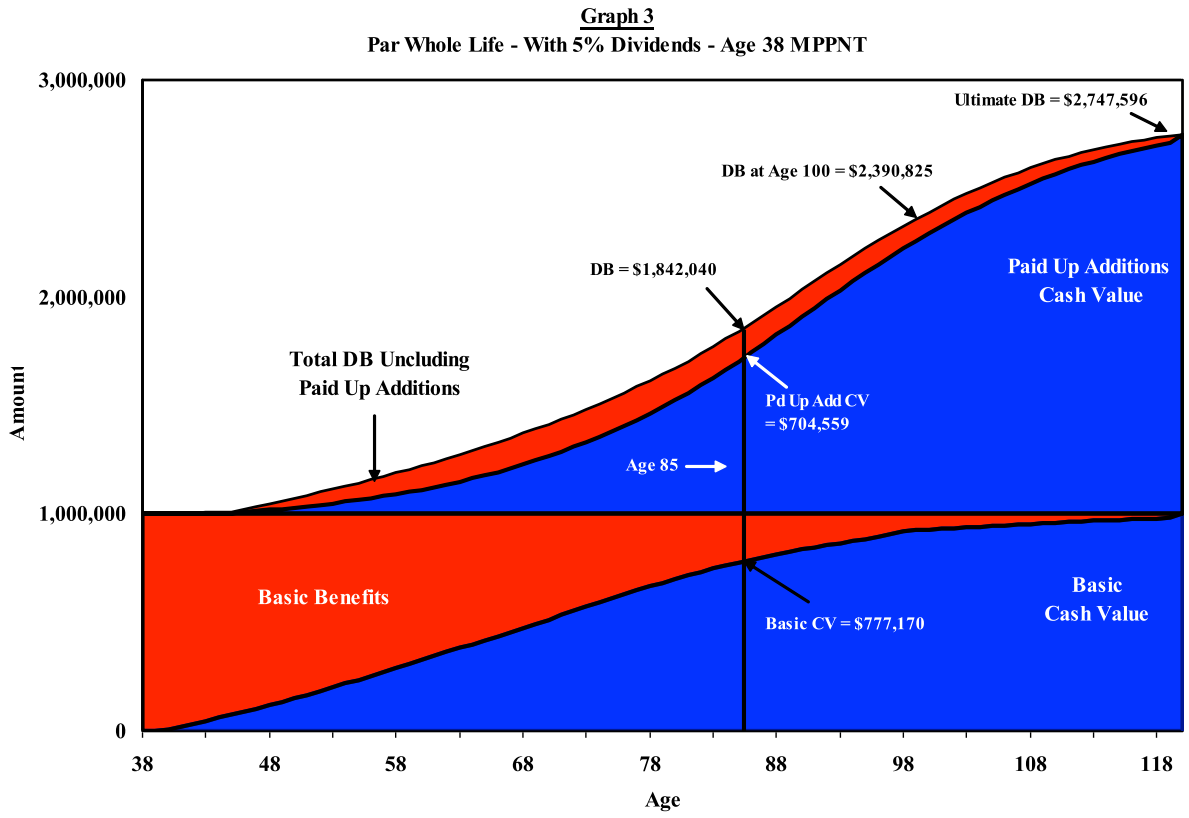
The guaranteed premium of $13,840 paid for 28 years - developing a guaranteed cash value at age 65 of $418,620 - represents a cash-on-cash return of .53% (.75% pre-tax in a 30% tax bracket). This return remains relatively constant, with a cash-on-cash return of .63% at age 85 (.90% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 1.28%.

Graph 2 introduces an assumed policy dividend "scale" that reflects *no* additional return over that of the policy guarantees from the insurance company's assets, but does assume current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "4%" lifetime dividend assumption produces a modest amount of total policy **cash value** and **death benefit**.



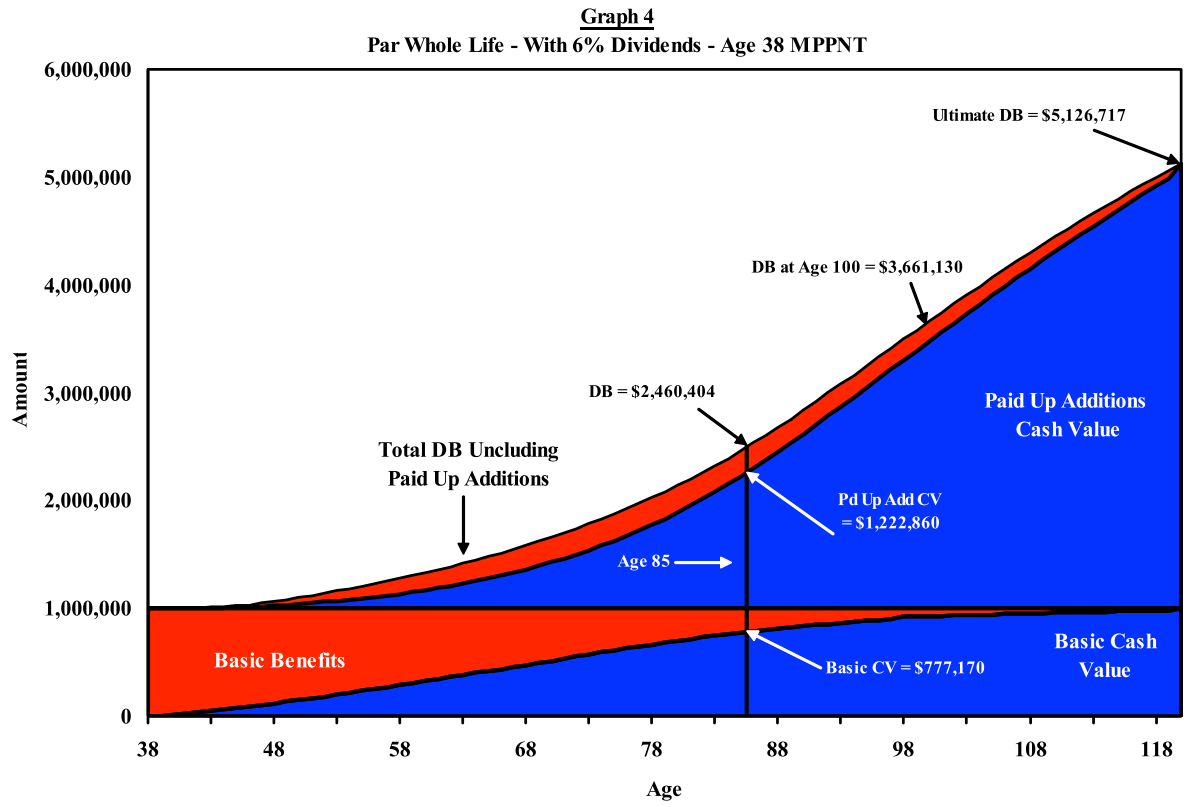
The guaranteed premium of $13,840 paid for 28 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $517,370 - represents a cash-on-cash return of 1.93% (2.76% pre-tax in a 30% tax bracket). The cash-on-cash return at age 85 is 1.99% (2.84% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 2.55%.

Graph 3 introduces an assumed policy dividend "scale" reflecting a "5% interest rate" - a modest additional return over that of the policy guarantees from the insurance company's assets as well as the same current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "5%" lifetime dividend assumption produces a substantial increase in total policy **cash value** and **death benefit** over that of the guaranteed example with no assumed dividend scale.



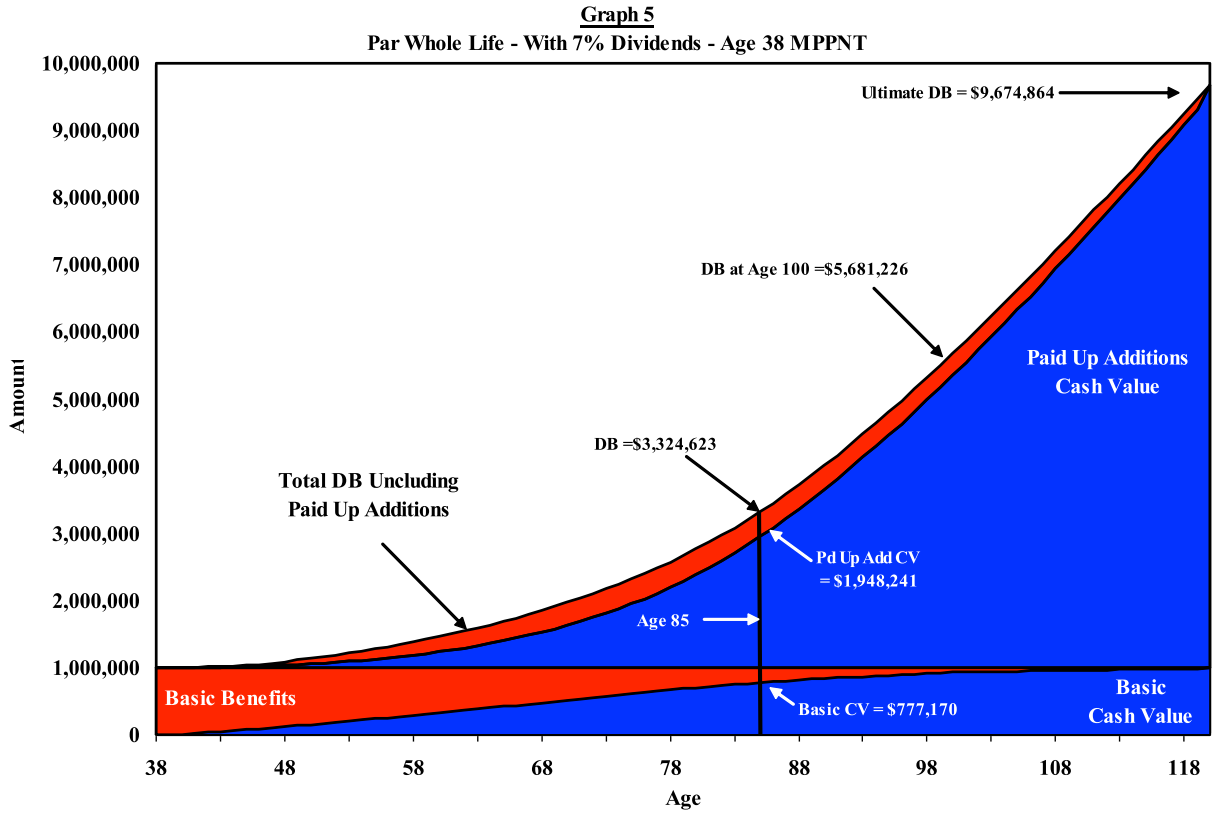
The guaranteed premium of $13,840 paid for 28 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $631,293 (an increase of $212,673 or 50% over the guaranteed graph) - represents a cash-on-cash return of 3.19% (4.56% pre-tax in a 30% tax bracket). The cash-on-cash return at age 85 is 3.11% (4.44% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 3.55%.

Graph 4 introduces an assumed policy dividend "scale" reflecting a "6% interest rate" - a rate typical of current dividend scales in 2010 - reflecting additional returns over that of the policy guarantees from the insurance company's assets as well the same current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "6%" lifetime dividend assumption produces a substantial increase in total policy **cash value** and **death benefit** over that of the guaranteed example with no assumed dividend scale.



The guaranteed premium of $13,840 paid for 28 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $696,106 an increase of $ 277,486 or 66% over the guaranteed graph) - represents a cash-on-cash return of 3.80% (5.43% pre-tax in a 30% tax bracket). The cash-on-cash return at age 85 is 3.99% (5.7% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 4.47%.

Graph 5 introduces an assumed policy dividend "scale" reflecting a "7% interest rate" - a rate somewhat higher than current dividend scales in 2010 - again reflecting additional returns over that of the policy guarantees from the insurance company's assets as well as the same current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "7%" lifetime dividend assumption produces a substantial increase in total policy **cash value** and **death benefit** over that of the guaranteed example with no assumed dividend scale.



The guaranteed premium of $13,840 paid for 28 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $816,617 - an increase of $ 397,997 or 95% over the guaranteed graph) represents a cash-on-cash return of 4.75% (6.79% pre-tax in a 30% tax bracket). The cash-on-cash return at age 85 is 4.99% (7.13% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 5.43%.

Summary of results for $1 million par whole life with an annual premium of $13,840 38M Preferred Plus Non Smoker with various assumed and illustrated dividend scales.

Dividend Scale	Age 65 Cash Value	Total Age 65 IRR on Premium to Cash Value	Age 65 IRR Attributable to Dividend	Age 65 Death Benefit	Age 65 IRR on Premium to Death Benefit
Guarantees Only	$418,620	0.53%	0%	$1,000,000	5.97%
4%	$517,370	1.93%	1.40%	$1,172,680	6.89%
5%	$596,860	2.84%	2.31%	$1,310,244	7.52%
6%	$696,160	3.80%	3.27%	$1,481,707	8.22%
7%	$814,617	4.75%	4.22%	$1,685,819	8.94%

Dividend Scale	Age 85 Cash Value	Total Age 85 IRR on Premium to Cash Value	Age 85 IRR Attributable to Dividend	Age 85 Death Benefit	Age 85 IRR on Premium to Death Benefit
Guarantees Only	$777,170	0.63%	0%	$1,000,000	1.59%
4%	$1,115,609	1.99%	1.36%	$1,404,711	2.80%
5%	$1,481,729	2.98%	2.35%	$1,842,040	3.72%
6%	$2,000,030	3.99%	3.36%	$2,406,404	4.59%
7%	$2,725,371	4.99%	4.36%	$3,324,623	5.62%

Summary of results for $1 million par whole life with an annual premium of $20,430 52F Preferred Plus Non Smoker with various assumed and illustrated dividend scales.

Dividend Scale	Age 65 Cash Value	Total Age 65 IRR on Premium to Cash Value	Age 65 IRR Attributable to Dividend	Age 65 Death Benefit	Age 65 IRR on Premium to Death Benefit
Guarantees Only	$230,360	-2.94%	0%	$1,000,000	15.59%
4%	$264,658	-1.04%	1.90%	$1,063,565	16.32%
5%	$283,694	-0.11%	2.83%	$1,098,910	16.71%
6%	$305,170	0.86%	3.80%	$1,138,792	17.13%
7%	$328,635	1.83%	4.77%	$1,182,257	17.58%

Dividend Scale	Age 85 Cash Value	Total Age 85 IRR on Premium to Cash Value	Age 85 IRR Attributable to Dividend	Age 85 Death Benefit	Age 85 IRR on Premium to Death Benefit
Guarantees Only	$663,500	-0.26%	0%	$1,000,000	1.42%
4%	$897,818	1.42%	1.68%	$1,298,482	2.68%
5%	$1,086,261	2.43%	2.69%	$1,537,895	3.45%
6%	$1,323,561	3.43%	3.69%	$1,838,917	4.26%
7%	$1,621,537	4.43%	4.69%	$2,216,297	5.07%

The above series of graphs show that under varying dividend scale assumptions – where the underlying assumption is a level interest rate for the life of the policy – the cash values and death benefits payable over the life of the policy increase as the dividend interest assumption increases. It also illustrates how valuable the paid up addition dividend option selection can be under varying dividend scales, especially those with higher interest rates.

Cash values and REAL real returns

As indicated in Myth #1 in Chapter 2, a look-back on one mutual insurance company's par whole life acquired in 1985 and for which full premiums were paid for 25 years, revealed a 5.19% historic cash-on-cash return, along with strong guarantees and low volatility. This result was typical for par whole life - at least among the "big 4" mutual companies - in that time frame. When approximating a comparison to Thornburg's REAL real return summary of different asset classes (**Appendix M**), participating whole life faired well among its true peer asset styles of fixed returns[24]:

Erosion of Total Returns Over 30 Years (as of 12/31/2009)

Asset Type	*REAL* Real Return	Nominal Return
Domestic Large Cap	5.21%	11.24%
Domestic Small Cap	4.81%	10.36%
International Stock	4.55%	10.21%
Municipal Bonds	3.33%	7.54%
Long Term Gov. Bonds	1.94%	9.68%
Cash Values	1.68%	5.19%
Corporate Bonds	1.28%	9.20%
Intermediate Gov. Bonds	1.06%	8.40%
Real Estate / Single Fam Home	0.36%	4.49%
T-Bills	-1.00%	5.49%
Commodities	-3.50%	0.46%

[24] Par whole life with annual premiums of $18,365 paid for 25 years produced a total cash value (including cash value of paid-up additions) of $946,676 representing a pre-tax IRR of 5.19%. The cash value accumulation in a par whole life insurance policy is net of expenses and taxes, leaving only inflation to be accounted for.

Thornburg Investment Management publishes an annual "Study of *Real* Real Returns" in which it begins with 30-year historic returns in various categories of assets, from which it subtracts management fees, dividend taxes, capital gains taxes, and inflation. The result is the "*Real* Real Return." Because life insurance cash values are *net* of fees and taxes, the only adjustment made in the above "*Real* Real" return for cash values is inflation, which Thornburg calculates as 3.51% for the 30-year period from 1980 through 2009.[25]

Chapter Summary

Both the living value (cash value) and the death benefit have a return that can be quantified as to "return on investment" as well as distributing values based on the statistical probability that death will occur "this year." The authors expect to demonstrate that by optimizing different styles of life insurance, policy portfolios can provide meaningful and competitive returns compared to the real Real returns of different types of fixed return investments.

[25] Thornburg Investment Management "A Study of Real Real Returns," August 2010

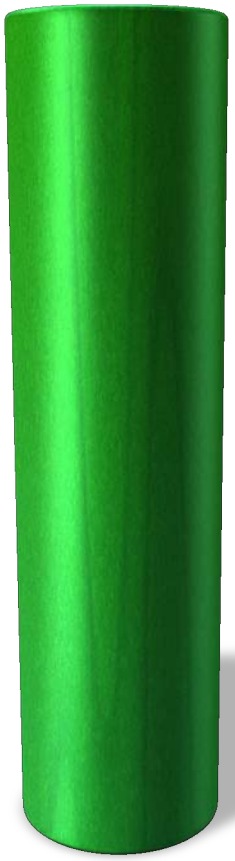
Chapter 4
A Practical Guide to Efficient Choices - Building a Portfolio of Life Insurance

In *Life Insurance as an Asset Class,* the authors introduced Efficient Choices and the use of a Risk Index and policy style matrix that allowed a buyer of life insurance to consider a number of hypothetical portfolio mixes consistent with "price" or "value" *as determined by the buyer.* The authors expand from the theory to a practical process in which a portfolio of life insurance policies can meet the buyer's long term needs and expectations, combining appropriate amounts of participating whole life, no-lapse universal life, and variable universal life styles of life insurance.

Core Values

A portfolio of policies is generally *not* recommended or practical for basic amounts of life insurance. That said, there's no specific formula or point at which one makes the transition from fulfilling human life values with basic protection to a more sophisticated process incorporating asset optimization. Most insurance professionals agree that HLV helps to define the amount and purpose of the total protection needed, and that at the outset, protection is paramount. If the HLV is $3 million and resources will only support the premium for term insurance, then that should be the basis of fulfilling the protection requirements. As careers blossom, incomes begin surpassing expenses, and investment assets grow, consideration should be given to gradual conversion of any term insurance for the fulfillment of what we'll herein refer to as *core values* of participating whole life. For some clients, a range between 50 and 75% of total HLV should be considered *core values*, with due respect to cash flow and resource limitations.

But the real determination of the point at which a client would begin to build upon the *core value* of par whole life and potentially diversify beyond the *core value* into other primary styles of life



insurance isn't so much a percentage as a minimum threshold, which could be as much as $5 - 10 million, depending on the client's circumstances, risk tolerance, and considerations of access to cash value and natural increases in death benefit. This range of $5 - $10 million is mostly subjective, but there are also practical considerations. The incremental efficiency - due to premium break points or bands - of buying large policies diminishes after $1 million. This efficiency level is per policy style - and it may not be a viable exercise if it's not in the range exceeding $10 million total coverage. If the efficient choice discussed in The First Volume Of Life Insurance As An Asset Class resulted in 10% or 20% segments of different policy styles - it really takes a relatively large amount of total death benefit to make the style diversification inherent in Efficient Choices "make sense." Ultimately, the discretion is between the advisor and client as to facts, circumstances, and subjective appeal. Then, once the client's unique level of participating whole life *core values* has been satisfied, we would begin the process of bringing together uncorrelated insurance asset classes of NLG & VUL.

Assuming that the initial acquisition of HLV protection is going to consist of significant amounts of term insurance to temporarily fulfill the protection need, it is important to focus on the quality of the term insurance to enhance the value and quality of term conversions that will occur over time to create the more permanent forms of coverage. Considerations for the term components include convertibility features to the styles of permanent forms of insurance clients are likely to use in the future, while other issues include diversification of term insurance carriers. With carrier financial strength of COMDEX 95 or higher, the authors believe coverage can be focused on one insurance carrier up to a maximum of $10 million. If HLV is anticipated in amounts greater than $10 million - it will be appropriate to start diversifying with term insurance carriers. And what *is* that exact point suggesting carrier diversification - is it $10 million? $25 million?

There's no hard number here - but the underlying issues to be considered between client and financial advisor are issues that relate to risk tolerance, inherent desire for diversification, personal preferences, etc. As will be demonstrated in Chapter 6, it is possible that the next 30 years of investment possibilities may not be as favorable as the last 30 years for all forms of permanent life insurance, which is another potential reason for diversification of policy styles.

Portfolio Options: Refinement and Application of Efficient Choices

Efficient Choices is used to focus on the amounts in excess of *core values* of participating whole life insurance. When the death benefit rises above a certain threshold, diversification is not just about simple financial strength (more than one carrier). It is primarily about portfolio optimization. This lends itself to the utilization of *layers* of diversification. When Efficient Choices is applied in addition to existing participating whole life contained within *core values*, we deploy the Risk Index Matrix introduced in the first volume of *Life Insurance as an Asset Class* (and herein found in **Appendix J)** *in addition to* the existing participating whole life.

Layer #1: Simple diversification may or may not suggest buying life insurance from more than one insurance carrier. This layer does not optimize with respect to different styles of policies. If one has enough risk in their various asset classes - and doesn't want to take risk with life insurance - participating whole life may be a reasonable solution and is certainly suitable as a conservative, reliable, lifetime form of insurance for lower levels of net worth. Layer #1, therefore, is what we've been referring to as *core values*.

Example: 33-year old client's HLV is assessed at $3.0 million as a result of her age, current income, anticipated future earnings potential, and ability to manage her asset and liability resources to substantially grow her net worth over her life expectancy (that is, 55 years from now, half of her age/health group will have died - at the average life expectancy of 88 - and half will still be alive based on current mortality tables.)

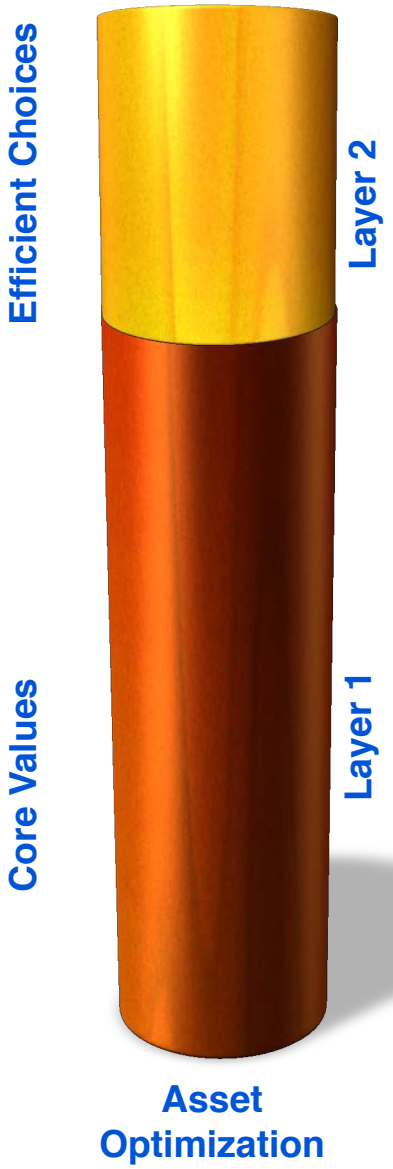
- Since the client and her husband have just had their second child in 3 years and have substantial expenses, all $3.0 million of protection is acquired as high-quality term life insurance, convertible to permanent forms of life insurance within the 15-year duration of the term policy. Monthly auto-pay expenditure: approximately $110 per month including waiver of premium in the event of a disability lasting longer than 90 continuous days.

- Anticipating conversion of at least $500,000 of term to participating whole life in 5 years, the client begins to consider the budget considerations of approximately $2,600 per month for the converted amount of coverage.

- Based on anticipated bonuses, client plans on converting all of her term within the original 15-year period of the $3 million of term.

For the amount of HLV fulfillment with participating whole life within the client's *core values*, we would anticipate that acquisition from one insurance carrier rated COMDEX 95+ or higher will meet reasonable diligence with respect to considerations of diversification. It is also contemplated that the client will *not* utilize an Efficient Choices approach to her life insurance.

Layer #2: Because of size and/or risk tolerance of the insurance representing the total HLV, there are multiple styles of policies in addition to diversifying with respect to insurance carrier financial strength. This is the beginning point for Efficient Choices. Conceptually, policies are considered part of the insured's investment portfolio for policy funding and as an uncorrelated asset, but the focus is to optimize around Price / Cost / Access to Cash Value / and Naturally increasing death benefit (i.e. offset the depreciating value of future death benefits due to inflation).



Example: 42-year old client's HLV *plus* considerations of estate liquidity needs is currently assessed at $15.0 million. This is as much a result of his age, current income, and anticipated future earning potential as *additional considerations* relating to managing a $20 million inherited portfolio of diversified equity and fixed income asset classes. There is a significant concern about the adverse effect of inflation on an average life expectancy of 46 years based on current mortality tables. At this country's historical 3.7% rate of inflation over the last 50 years[26], the initial death benefit of $15 million would depreciate to a purchase value of just $2.65 million at the client's age group life expectancy. (A more moderate inflation expectation of 2.5% still depreciates the value of $15 million to $4.7 million at age group life expectancy).

Along with the consideration of access to cash value, the client would like to have the death benefit grow as much as reasonably possible within his life expectancy.

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[26] www.inflationdata.com reports that which $1 would purchase in 1960 requires $6.43 in 2010 dollars. This equates to an average compounded rate of inflation of 3.7% over this 50 year period of time.

- The client has determined that $10 million of *core values* participating whole life is the starting point for his lifetime insurance portfolio. Resources are available to pay premiums from within the investment portfolio so that there is no need for the temporary use of term life insurance. The whole life annual premium of $163,600 is budgeted from within the investment portfolio's approximate $600,000 of gross annual income.

- Based on responses to the Life Insurance Policy Management Statement, the client's more complete reflection regarding risk tolerance, asset allocation, insurance funding sources, and a prioritization of *price, cost, access to cash value, and naturally increasing death benefit*[27] results in an Efficient Choice Risk Index of 8 (at the cusp of balanced / aggressive asset allocation). After discussing the technical 50/50 value-based allocation for this Risk Index (**Appendix J**), the client further modified the selection to be comprised of the following elements within this Efficient Choices portfolio of policies:

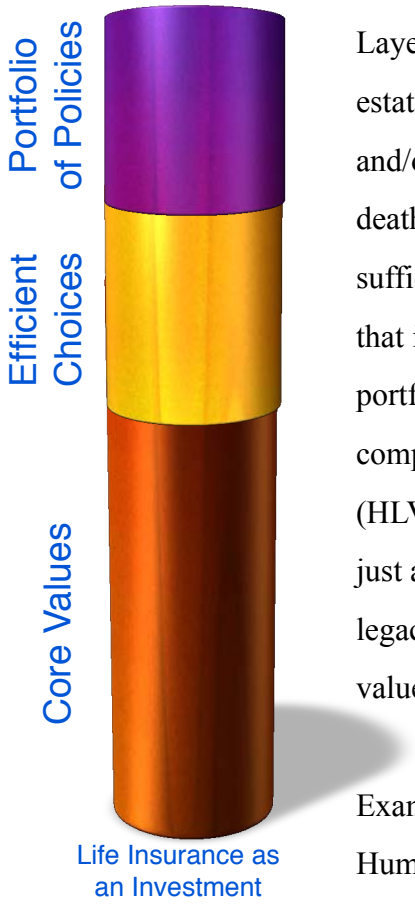
Style	Allocation %	Initial Death Benefit	Annual Premium	50/50 LE (Age 88) DB	Age 100 Death Benefit
WL	66.7%	$10 M	$163,600	$34,273,000	$52,456,000
NLG UL	10%	$1.5 M	$10,742	$1,500,000	$1,500,000
VUL	23.3%	$3.5M	$28,000	$10,276,000	$24,376,000
TOTAL	100%	$15 M	$202,342	$46,049,000	$78,332,000

For the expected amount of HLV + estate liquidity fulfillment of participating whole life within this 2nd example client's *core values*, we would anticipate that acquisition from one insurance carrier rated COMDEX 95+ or higher is at the top end of meeting reasonable diligence with respect to considerations of diversification. Because of the substantial time frames *and* substantial guarantees underlying guaranteed death benefit universal life, due

[27] The first volume of *Life Insurance as an Asset Class*, Chapter 10

diligence compels choosing an insurance company with no less than COMDEX 95 financial ratings. Variable universal life should be chosen on the basis of COMDEX 90, with more weight given to an appropriate range of supporting investment sub-accounts that satisfy the client's professional investment manager's requirements to best coordinate with the larger investment portfolio.

Layer #3: Clients in this layer essentially say: "I am so wealthy that I'm giving assets away," which begins the level at which the client may want the insurance portfolio to take on ***a life of its own,*** separate from other considerations of *core values* or diversification. Layer #3 suggests a dynasty building process, which is incidentally a part of estate planning but much more focused on building multi-generational wealth and/or leveraging and enhancing charitable intentions. In the realm of total death benefits in excess of $20 million, we would ask: "Do you have sufficient risk tolerance and desire for reward to create a *portfolio of policies* that is a reflection of your investment style for this purpose?" It's similar to a portfolio of bonds, not as a substitute but as an "add on." In fact, this is completely compatible with the consideration that one's insurable value (HLV) is an asset - it's part of the human capital that underlies HLV, and is just as deserving to be "passed down through the generations" as any other legacy. The advantage of life insurance is the premium leverage, investment value, and tax efficiency.



Life Insurance as an Investment

Example: 44-year old client (and 49 year old spouse) are not concerned about Human Life Value. As one of the relatively few survivors of the "dot com" bubble of a decade ago, the client's personal resources exceed $1 billion. As is often the case, the couple plan on leaving *most* of their estate to charity upon their deaths. As a result, estate planning may be relatively simple if dynastic resources have already been placed outside the estate through early gifts with low stock valuation, or such devices as

Beneficiary Defective Inheritor's Trust (BTID)[28] wherein the taxable estate can be *diminished* over the grantor's lifetime while substantial assets accumulate outside the estate and therefore avoid diminution from estate taxes. In this case, the couple considered deploying sufficient life insurance within its grantor trusts to establish substantial death benefit increases over their 47 year life expectancy as a supplemental means to replace family dynasty assets otherwise given to charity.

- As a result of completing the Life Insurance Policy Management Statement, the family elected to acquire $50 million of life insurance, diversified with a somewhat more conservative Risk Index indicated in Example 2. The overriding consideration was to offset fixed death benefit life insurance's loss of purchasing power while simultaneously emphasizing substantial accumulation of cash values in the event that other trust investment opportunities should arise in the future.

- There was no *core values* consideration in establishing this portfolio. It became a "by the numbers" approach to the Risk Index Matrix of Efficient Choices, utilizing a relatively modest amount of guaranteed death benefit universal life, and equally significant amounts of participating whole life and variable universal. Further, the VUL was designed with substantial scheduled premiums based on volatility criteria that included the assumption of a 60/40 average asset allocation, and an average of -150 basis points return in the historic allocation as the starting point for this lifetime insurance portfolio of policies. There were ample resources available to pay premiums from within the investment portfolio. In fact, it was the uncorrelated death benefit-as-an-asset-class considerations that made this particular portfolio of policies so useful to the overall return objectives of the grantor's trustees. The portfolio of policies had lifetime annual premiums of $163,600 and were budgeted with a

[28] Beneficiary Defective Inheritor's Trust was developed by Richard A. Oshins, Esq. www.Oshins.com

combination of capital transfers and payments from the investment portfolio's annual income.

- Based on responses to the Life Insurance Policy Management Statement, the client's more complete reflection regarding risk tolerance, asset allocation, insurance funding sources, and a prioritization of *price, cost, access to cash value, and naturally increasing death benefit*[29] results in an Efficient Choice Risk Index of 6.72 (representing a relatively balanced asset allocation) and an allocation of $10 million of the Efficient Choices allocation (20% of $50 million) into guaranteed survivorship death benefit UL (no-lapse guarantee with Return of Premium*) and $20 million each of the allocation (40% + 40% of $50 million) into participating survivorship whole life and appropriately funded survivorship variable universal life. Of course this is just one example of an optimized portfolio of policies:

Style	Allocation %	Initial Death Benefit	Annual Premium	50/50 LE (Age 94) DB	Age 100 Death Benefit
SWL	40%	$20M	$340,000	$72,166,000	$105,560,000
NLG SUL	20%	$10M	$57,069	$12,839,000*	$13,181,779*
SVUL	40%	$20M	$92,000	$60,660,000	$106,182,000
TOTAL	100%	$50M	$489,069	$145,665,000	$224,923,779

For the expected amounts of life insurance in a *portfolio of policies* within this 3rd example of the use of Efficient Choices, we would anticipate that acquiring the participating whole life from one insurance carrier rated COMDEX 98 or higher, or from two carriers with COMDEX of 95 or higher is at the top end of meeting reasonable diligence with respect to considerations of diversification. Because of the substantial time frames *and* substantial guarantees underlying guaranteed death benefit universal life, due diligence compels choosing an insurance company with no less than COMDEX 95 financial ratings. Variable

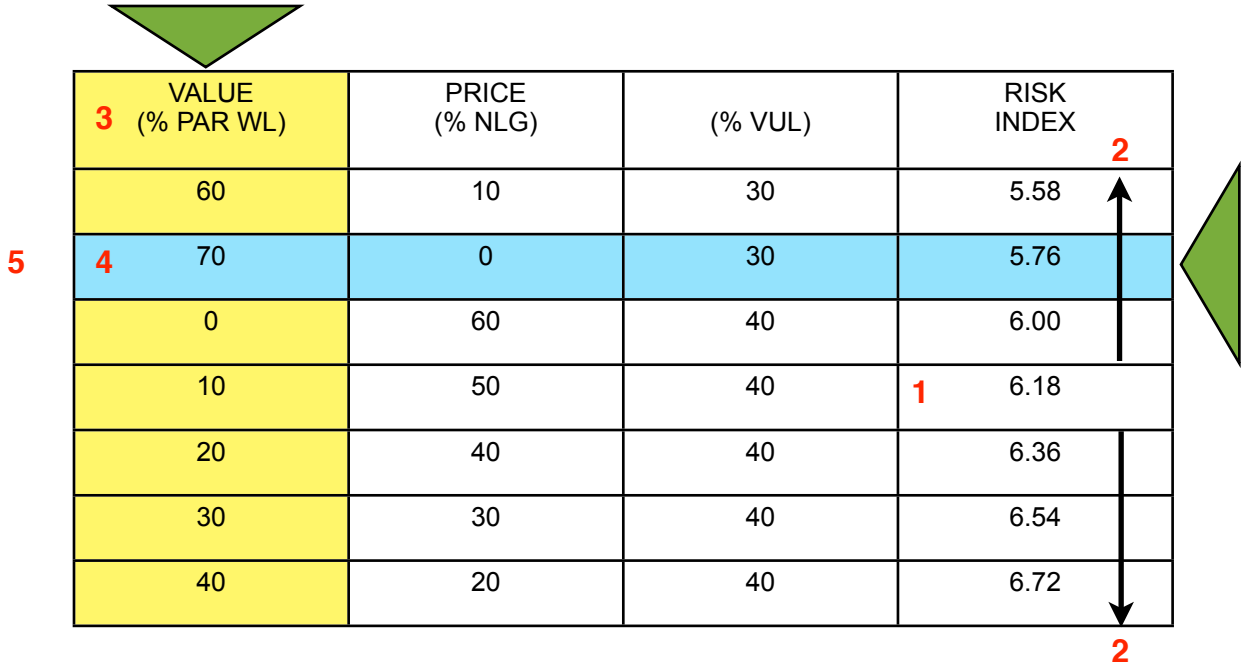
[29] *Life Insurance as an Asset Class* Chapter 10

universal life should be chosen on the basis of COMDEX 90, with more weight given to an appropriate range of supporting investment sub-accounts that satisfy the client's professional investment manager's requirements to best coordinate with the larger investment portfolio.

Prototype Portfolios

From these brief case examples, and after reviewing the responses to the Life Insurance Policy Management Questionnaire, we can extrapolate from the Risk Index Matrix some useful prototype portfolios of life insurance based on both *price* and *value* objectives. These prototypes, then, create a design starting point for *core values* + Efficient Choices. The following is based on a mid-point *balanced* portfolio objective translating to a 6.18 Risk Index; **Appendix J** introduces a simplified approach to using the Risk Index Matrix for conservative, aggressive, and very aggressive approaches.

Balanced Risk Index (6.18)
When VALUE is paramount



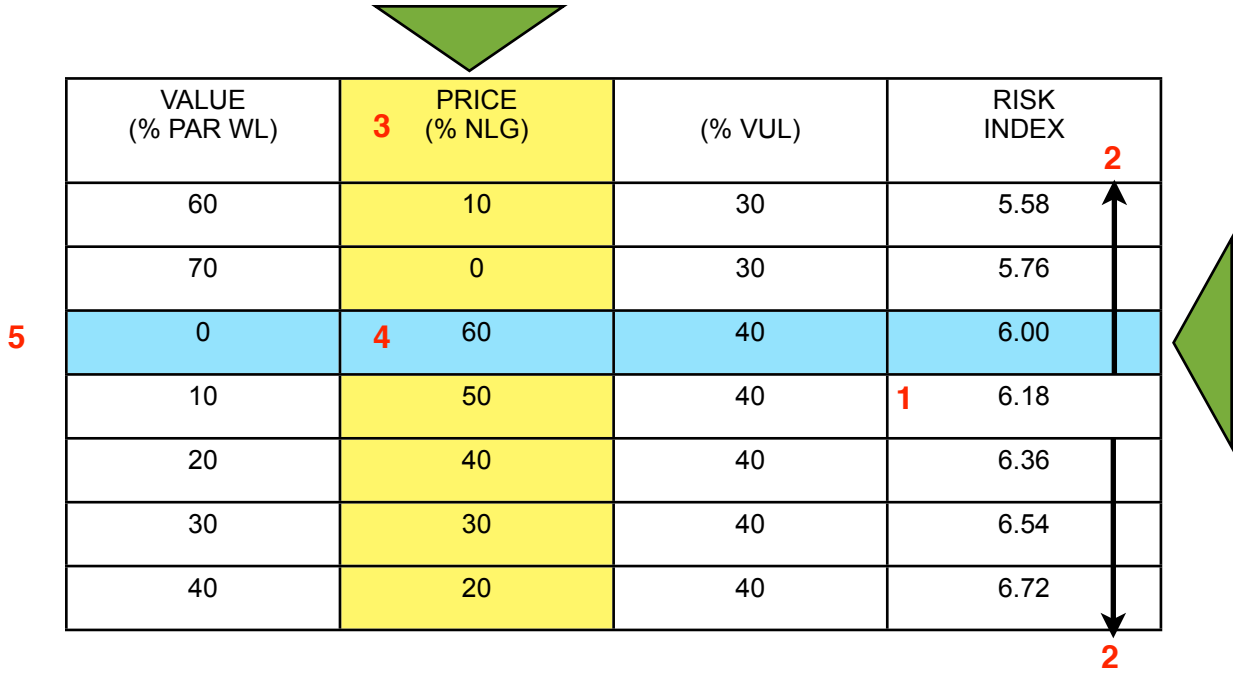
3 VALUE (% PAR WL)	PRICE (% NLG)	(% VUL)	RISK INDEX
60	10	30	5.58
5 4 70	0	30	5.76
0	60	40	6.00
10	50	40	1 6.18
20	40	40	6.36
30	30	40	6.54
40	20	40	6.72

2

2

Instructions for use: 1 From the LIPMS, determine the appropriate Risk Index to match risk tolerance (ranging from 0.0 for very conservative to 15.0 for very aggressive); 2 take into account risk index rows 3 above and 3 below the chosen Risk Index; 3 determine whether the portfolio focus is primarily on PRICE or VALUE; 4 among the 7 rows, choose the highest value in the chosen column (i.e. PRICE); 5 the row in which the highest value appears is the recommended proportions of Par Whole Life (70%), No Lapse UL (0%), and VUL (30%). Note that this process is not intended to lock the client into a particular apportionment of policy styles, but rather to begin with an objective process and then supplement it with any subjective considerations.

Balanced Risk Index (6.18)
When PRICE is paramount



VALUE (% PAR WL)	PRICE (% NLG)	(% VUL)	RISK INDEX
60	10	30	5.58
70	0	30	5.76
0	60	40	6.00
10	50	40	6.18
20	40	40	6.36
30	30	40	6.54
40	20	40	6.72

Instructions for use: 1 From the LIPMS, determine the appropriate Risk Index to match risk tolerance (ranging from 0.0 for very conservative to 15.0 for very aggressive); 2 take into account risk index rows 3 above and 3 below the chosen Risk Index; 3 determine whether the portfolio focus is primarily on PRICE or VALUE; 4 among the 7 rows, choose the highest value in the chosen column (i.e. PRICE); 5 the row in which the highest value appears is the recommended proportions of Par Whole Life (0%), No Lapse UL (60%), and VUL (40%).

Note the dramatic shift in proportions of policy styles, based on a focus of Value versus Price. Again, this process is not intended to lock the client into a particular apportionment of policy styles, but rather to begin with an objective process and then supplement it with any subjective considerations.

Chapter Summary

When it comes to mutual funds and investments, an Investment Policy Statement provides structure for portfolio management, but also must be flexible enough to changing individual risk tolerance (and possible personal or family circumstances) and market conditions over time. A Life Insurance Policy Management Statement must be equally structured and flexible when making decisions about life insurance. Because life insurance has unique asset criteria that go beyond a traditional asset class conversation, attention must be paid to the complexity of the asset, as well as resisting the trend toward commoditization. Once Efficient Choices begins to integrate different types of policies, we increase the complexity of the conversation - but it's worth it!

Most insurance professionals agree that the conversation begins with *protection,* and this should be our paramount consideration. An individual's HLV may start in the range of several million dollars, and yet there may not be sufficient resources (income or assets) to support permanent forms of life insurance. In this case, term insurance can very usefully be deployed for the initial years when resources are tight.

Participating Whole Life may very well be the best product in the longterm for stability and guarantees, but even as income and resources begin to take on the "permanent" task, an insurance portfolio of *only* whole life may not be practical for years to come. Term should be converted as rapidly as is practical, and other forms of permanent insurance may come into play. For example, guaranteed death benefit products provide a useful budgetary function where large amounts of death benefit are required but for which there are only sufficient premium dollars for the style of permanent insurance that has little cash value and no death benefit growth potential. 70 - 85 year old individuals may face this predicament more than those who are 45 - 70. Yet younger individuals with a growing business or asset base may be concerned that even with participating whole life's growing paid-up additions account, the rate of growth on death benefit may not be enough to offset inflation.

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Chapter 5
"New" versus "Old" Policies and "Illustrations and Replacement vs. Remediation"

Life insurance product innovation has produced a number of creative policy styles in the last 30 years: Universal Life achieved significant market share of new permanent life sales just 5 years after it was introduced in 1979. Variable Universal Life gained favor in the early 1990s and Universal Life with Guaranteed Death Benefit (No Lapse Guarantee) and Equity Indexed products have been popular in the first decade of the 21st century. A key impetus to initial sales growth was the use of the "new, improved" product to replace an "old, out of style" policy. While there are no sales activity databases that readily track policy replacement, it is anecdotally believed that in the last 10 years, more than 50% of policy sales reported as "new" are, in fact, derived from the replacement of other policies.

In this chapter we address a number of issues that have been raised by recent actuarial and product enhancements and changes in the marketplace.

Does the change in "CSO" tables – or the general use of more current mortality tables – make a difference in pricing life insurance policies – and does that in turn mean that old policies no longer deliver value?

2001 CSO is the current underlying mortality basis (replacing the much older 1980 CSO tables) for the calculation of life insurance reserves and non-forfeiture values in the United States. The tables were adopted on a state by state basis and companies started to use the table for specified plans starting as early as January 1, 2004. Beginning January 1, 2009, the table has been mandated for use as the minimum standard on all new life insurance products issued.

Generally, the change from 1980 CSO to 2001 CSO meant lower mortality rates and a reduction in statutory reserves, with the size of the reduction varying depending on the issue age, duration,

and smoking status of the insured. The 2001 CSO table was also expanded to allow policies to be designed with a termination age of 121, providing more flexibility in product design.

The 2008 VBT (Valuation Basic Table) was published in March of 2008. It is an interim table that is currently being used in the development of a principles-based reserving methodology. The underlying mortality rates reflect additional improvements in mortality over the last decade. It is likely that a totally new table will be developed and adopted for use as the new minimum standard some time over the next decade.

It doesn't take an actuary to sense that life expectancies have been getting longer in the U.S. over the last 50 years. And it doesn't take a mathematician to know that if an insurance company doesn't have to pay out a death claim for several years longer than it originally expected for a UL/VUL/EIUL-style policy, it will not have to collect quite so much premium in order to make the policy profitable. In the consumer's quest for the cheapest policy (i.e. seeking the attractive impossibility), it is still important to understand the difference between older policies (for example, whole life policies for which the company priced its mortality – and therefore its reserves – on the basis of the 1980 Commissioner's Standard Ordinary - CSO) and a newer style whole life using 2001 CSO. Having based its mortality on more conservative assumptions, the current dividend scale of such an older policy will have a much higher dividend "gain" component as compared to a new whole life. At the same time, baseline mortality rates in the older reserve formulas of the guaranteed portion of the whole life policy provide more margin for unanticipated expenses in an older policy than in the newer policies. For participating whole life policies, then, it would rarely be in the client's best interest to trade in an "old model" for a new; the current dividend will return to longstanding customers the advantage the carrier is currently enjoying for its policyholder's longer life spans.

For so-called current assumption policies, the underlying calculations are not nearly as affected by the reserve factors *except* in consideration of policies with protection periods – via newer

mortality tables – that now extend to ages well beyond 100, such as 114, 121, and even 125. While the premium paying period and policy maturity timing is longer, life expectancies are still in the high 80s for healthy individuals in their mid to late 40s. Longer reserve and maturity periods allow somewhat lower premiums *and* lower accumulating cash values. Also, with guaranteed credited reserve rates as low as 2 ½ % on many new products, there may be less difference between 4% / age 95 or 100 policies and today's longer duration but lower rates of guarantees.

For any assessment that suggests replacement of an older policy for a new, it is far less likely that a new policy will provide better value if the original policy was acquired within an articulated set of objectives and a thoughtfully applied process. On the other hand, if the original policy was acquired simply on the basis of "who's got the best price (in turn based on who's representing the best policy illustration *today*?), it's entirely possible that a new policy may be in order – not because today's "are better," but because no UL/VUL/EIUL policy could possibly successfully sustain to life expectancy and beyond with a minimum premium and an expectation of lifetime crediting rates of 10% or better.

Nonetheless, policy design and pricing may be the biggest factor that changing tables impacts. Lower reserves can result in lower premiums. Assuming lower mortality for each duration from issue date may allow for lower COI charges for UL plans. Extending the tables to age 121 allows for longer premium paying periods and later endowment ages on traditional whole life plans. Participating products will still have the same flexibility as before, with even more options because of the expansion to age 121.

In theory, a case could be made suggesting – in isolation of any other consideration - improvements in mortality can lead to lower COI charges in UL/VUL/EIUL products. However, when considering a replacement in which new acquisition costs are incurred by the carrier, new surrender charges and periods are imposed on the policy owner, and a new 2-year contestability

period is imposed on the replacement policy, it's imperative that agents, advisors, and consumers make a careful assessment of the cost/benefit of replacement, which will be unique in each situation and thus defies making generalities or suggesting rules of thumb. Need, objective, cost, duration of coverage, current health of insured, and funding source are just a few of the issues that can complicate any potential replacement discussion. In the end, the independent advisor must be involved with the insurance professional to respond to this complex issue.

Finally, while in general new products might appear better for a new acquisition of permanent life insurance, that same conclusion may not necessarily be true in a replacement situation for all the reasons just enumerated. The Replacement Questionnaire, referenced later in this chapter, is designed to allow advisors to assess, analyze, recommend, and manage each unique situation.

Is the focus on longevity the only variable to consider in the ultimate price of a policy?

Since it is life insurance, certainly the fact that life spans have been increasing is an important factor in the pricing of a life insurance policy. Yet, if we focused on industry rhetoric for the last 20 years, the industry has been telling agents and brokers (and in turn the public) "… people are living longer and mortality costs are coming down, therefore newer products are better than old ones." Even if true, this insurance mantra addresses only *one* of the *three* variables in the pricing of a life insurance policy – *longevity, investment return, and expenses.*

When compared to policy illustrations 30 years ago, at the dawn of universal life's first introduction to the marketplace, underlying product pricing was the *1958 CSO* and the *1975 Basic* mortality tables. And yet a policy illustration for a 39-M Preferred Non-Smoker suggested that $1 million of coverage was as much as 50% less expensive than it is today. How is that possible? Compared to 1980, the vast majority of life insurance products in reality have been (and perhaps are getting) more expensive because it's not just mortality experience driving price.

Investment return (general account or segregated account) and expenses must also be considered, and the life insurance industry's return trends have been much lower than originally projected.

While mortality has improved over the last few decades, the impact on profit depends on the expected mortality used by the actuary when the product was priced, compared to the actual experience as it emerges. Most company actuaries built in mortality improvement based on historical improvement shown in the industry or in their own unique company mortality studies. If mortality improvements are not as great as projected, the mortality profit component will be lower than expected.

Insurance company expenses also depend on a comparison between the expected expenses – including inflation – and actual expenses as they emerge. Again, if actual expenses are worse than expected, the expense profit component will be lower than expected.

Actually, the most sensitive component in profitability has likely been investment returns for most companies in the last decade and especially the last three years. If one only looks at Treasury rates over the last twenty years, it is clear that rates have steadily declined to points that are at or near historical lows. Obviously, if life insurance actuaries did not correctly predict the lower investment incomes (and the authors believe the majority of companies did not), results cannot turn out as good as expected.

One type of policy has had a particularly negative effect on the industry's expectation of investment income and resulting profits. No-lapse (guaranteed death benefit) products have been hugely popular in the last 10 years as replacement policies, appealing to those who had been disappointed with lower UL interest crediting rates and then plunging VUL investment returns. Yet during this same period of popularity, U. S. 10-year Bond interest rates have dropped from a

general level of 6.03% to 2.5%[30] (and Moody's yield on seasoned corporate bonds - all industries – AAA, yielded 7.62% in 2000 and 4.37% in late summer 2010), while the life insurance industry was attempting to target "shadow account" net returns of 6 – 7.5% necessary to profit from the sale of such low premium, guaranteed products. The losses associated with selling fixed premium products in which neither crediting rates nor expenses can be altered for the lifetime of this class of policy has caused several major life insurers to withdraw from that marketplace entirely, yet it will still have to honor those guarantees for many years in the future. Thus, rebuilding surplus and profitability, as well as overall returns, will be the weight on the other side of the scale of mortality gains, and could well be the more formidable obstacle for the foreseeable future.

Today, most of the companies still selling no-lapse policies have dramatically re-priced their new policies in reconsideration of the basis of product pricing in the face of low profits, the financial markets crash of 2008 - 2009, *as well as* life settlement growth. As of mid-2010, frequent changes in product pricing (higher, not lower) are the result of these dynamics.

What else can affect policy pricing?

If the standard pricing of a life insurance policy - intended to stand the test of 40 – 60 years of future, unpredictable financial circumstances – is based on assumptions regarding *longevity, investment return, and expenses* – it is important to name a category of expense that often rises to the ranking of a fourth major criteria: policy lapses.

Policy lapses give rise, simply enough, to a policy owner failing to pay (or choosing not to pay) a renewal premium, or surrendering the policy for its cash value. In the highly volatile pricing environment of life insurance policies in the late 1980s, it was at one time projected that there

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[30] The U.S. 10-Year Treasury Bond yielded 6.03% in 2000 but by late summer 2010 was yielding approximately 2.5. In the same period Moody's YIELD ON SEASONED CORPORATE BONDS - ALL INDUSTRIES, AAA yielded 7.62 in 2000 and 4.37% by late summer 2010. www.federalreserve.gov.

were fewer than 5% of policies *persisting* 20 years after purchase.[31] Policies "priced" for the expectation that many buyers would later drop their policies gave rise in the early 1990s to a pricing and policy illustration paradigm that for some insurers suggested significant gains into the policy illustration based on a high expectation of lapses (and as a result, those lapsing their policies would leave gains to be shared by those "staying.") Of course, if the policy really were that good, owners would *keep* rather than drop those policies, creating a convoluted and self-defeating expectation. Lapse-based pricing was one of the issues the National Association of Insurance Commissioner's Policy Illustration Reform project attempted to address, which was completed in 1996 and adopted into state insurance regulation in the several years following Model Act adoption by the NAIC.[32]

Until recently, lapse rates - even at older ages - have remained low, in part due to the opportunity to sell a policy into the *life settlement* secondary market for a price greater than its surrender value. As more policies persist beyond that which was anticipated under initial pricing assumptions, those policies can become *unprofitable* to the issuing carrier. In order to address this unforeseen development, insurance companies have responded with adjustments to their pricing methodologies. One approach is to institute expense charges for longer periods of time (15 years or longer), resulting in an increasing ratio of premium to death benefit, which in turn, makes valuations across a wide range of discount rates lower. The result – and the point of this exercise in the first place – is to diminish the attractiveness of stranger-owned life settlements (so-called STOLI) as well as premium finance arrangements to potential buyers and sellers. If only to continue to maintain favorable tax treatment of life insurance as a matter of public policy (for the benefit of "widows and orphans"), the need for life insurance will revert to the original uses and purposes for which it is designed and away from the investment orientation that emerged with the introduction of Viatical and Life Settlements.

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[31] John Bragg & Associates, Atlanta, GA. A substantial number of the policies included in Bragg's study were term policies which were also undergoing a high level of re-pricing and market competition.

[32] Policy Illustration Model Reform was adopted by the NAIC at its national meeting in Seattle WA, December 1996.

What is the best way to evaluate the need and appropriateness of replacing one policy with another?

In 1992, The Society of Financial Service Professionals created and introduced to its members a Replacement Questionnaire (RQ) in an attempt to address just such questions. In conjunction with the Life Insurance Policy Management Statement, advisors and agents can use these objective tools to test policy assumptions against the needs, considerations, and expectations of the policy owner. We offer herein an updated Replacement Questionnaire (RQ) with the permission of SFSP in which we incorporate questions and issues that should be addressed before a replacement recommendation is put to the client. The RQ is located in **Appendix K.**

Additional tools and considerations for replacement of one policy for another

- As will be discussed in Chapter 8, obtaining life expectancy projections based on current medical information at older ages can be important in consideration of whether or not to pursue a policy replacement. This will be true whether medical, financial, and lifestyle underwriting suggests an improvement or decline in these three aspects of underwriting.

- For older participating whole life policies (for which it may be tempting to "lower your payments" with a new no-lapse policy), it will be important to recognize the degree to which dividends may be able to reduce or offset future premiums while still contributing to increases in coverage through paid-up additions of life insurance.

- Assessment of a participating whole life should also consider re-paying a policy loan for which the policy's dividend scale may be diminished because it is subject to "direct recognition" of loans.

- "The illustration is not the policy!" Far too often the illustration is "sold" as if it were the policy, to demonstrate that new is better than old. The "RQ" will be especially helpful in reminding all concerned the difference between that which is guaranteed and that which can be changed by the insurance company.

Chapter Summary

Newer is not necessarily better. The very first consideration is whether the insured is healthy enough to qualify for a new policy that *could* produce a better result. Then the new policy must be assessed for the difference between projection and a reasonable expectation of future, unpredictable performance, and of course assessed in the context of the policy owner's Life Insurance Policy Management Statement. The objective of this chapter is to address "know when to hold 'em, and know when to fold 'em." It should be emphasized that replacing a policy should almost always be based on risk tolerance-driven style shifts - not illustrated results, and as always, considerations for replacement should consider the current health of the insured.

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Chapter 6
Active Management

Life insurance *properly acquired* and *actively managed* produces an asset that is possibly the most valuable, self-fulfilling long-term asset used for the creation and transfer of wealth that an individual can own. Yet - once again anecdotally - a significant number of *indeterminate premium* life insurance policies owned in the U. S. (universal life, variable universal, adjustable, and equity index) are unlikely to sustain even to the insured's age group life expectancy (when 50% of the original group is still alive). This does not necessarily mean that there's anything wrong with the policies; the policies simply haven't been managed for the actual returns and expenses versus the hypothetical, non-guaranteed results projected at the time of sale.

1. The case for active management

Active management ideally follows from a good acquisition strategy - flowing from the Life Insurance Policy Management Statement that establishes risk tolerance / needs / concerns / considerations of the client - and brings forward a policy or collection of policies (Efficient Choices) that lends itself to optimization and management over the life of the insured. It is important to understand what the client is trying to achieve: defining the ultimate death benefit and paying the appropriate premium for it over one's lifetime (taking into account the naturally depreciating value of the fixed, future payment due to inflation), or defining the resources available to support a policy - and optimizing the ultimate death benefit. This process is a good deal more complex than "it used to be," and entails utilizing trained advisors who are skilled in balancing the assessment of current resources and ultimate uses/needs for insurance over the client's lifetime - and then matching those considerations with a policy or policies currently available in the marketplace. The most common error is to acquire the product "du jour" - illustrating the lowest premium for the highest death benefit - without any analysis or determination of the credibility of the "promise." When the promise doesn't occur, it's not

uncommon for the client to be attracted to a replacement or "exchange" into the *next* "du jour" product offering that appears to offer a solution … and so continues the process until the client runs out of money or becomes uninsurable. The underlying products along the way weren't necessarily bad or wrong - but the expectations placed on those products through over-utilization of the policy illustration have caused enormous financial disruption of the long-term expectation.

Management is required with respect to *any* policy style (or components of a policy style such as the dividend portion of a whole life policy) with pricing elements that can - and therefore will - change over the insured's lifetime.

2. Management issues

If an indeterminate premium policy is acquired - presumably it is for the major property right attributed to this policy style design: the flexibility to pay *what* you want and *when* you want. This property right provides extreme flexibility in times of economic uncertainty, but given human nature, is easily abused even in the best of times (why would anyone want to pay more for their life insurance than they *had* to?!). The decision to purchase such a policy style creates an *obligation* to manage the policy. The cost of such management should be budgeted - and taken into account in "pricing" - or the client will have done herself a disservice (thereby increasing the probability to a near certainty that the policy will not achieve its life expectancy death benefit purpose). If this is a problem - the client needs a guaranteed structure policy - either NLG or whole life.

Issues requiring special management attention include an understanding of:

Transparency - when UL policies were first introduced, one of the most appealing aspects of this new policy style was the *transparency* of policy expenses and credits. Unlike whole life policies, UL had discrete elements of expenses, cost of insurance charges, and current interest

credits. Consumers believed that each major expense/credit element "stood on its own." Unfortunately, the reality of independently setting crediting rates and expense and scales of COI quickly succumbed to market competition, and it was easier to illustrate the "best" product by currently paying a somewhat higher interest crediting rate than the competition (and compensating by somewhat increasing expenses and/or COI). Today there is virtually no comparability of interest crediting rates or expenses between seemingly comparable policy styles.

Deviation - with the loss of transparency, the only practical way to infer an insurance company's overall pricing of an indeterminate premium (UL/VUL/EI) policy is to establish an actuarially credible product standard - introduced in Chapter 7 of the first volume of *Life Insurance as an Asset Class* - and compare specific illustrated results for a given policy style to that standard. For example, a client's UL policy's in-force illustration might suggest that the current premium, scales of expenses and COI, and current crediting rate will sustain the policy to the insured's age 87. Is that a reasonable expectation? Only by comparing to an actuarially determined standard can credibility be inferred. If the *policy standards* suggest that a similar style policy could sustain to only age 80 with the same premium and death benefit, the inferred deviation from the standard is 25%, which is beyond the reasonable range of ± 10% to which the authors subscribe.

Crediting rates in 2010 - due to extremely low interest rates in the economy, today's UL illustrations are calculated at the opposite end of the spectrum from the product's introduction in the early 1980s when crediting rates were 12 - 14%. Policy attractiveness today is probably not going to benefit as much from apparent crediting rates as was the case in the early 80's. Rather, focus should be on the more non-transparent assumptions about current and future costs of insurance which may be more aggressive in projection than for which future boards of directors will be comfortable. Another consideration is that when interest rates in the economy begin to rise again in their inexorable undulation, in-force

policy crediting rates may lag much longer than otherwise expected in order to add more profitability to the block of business.[33] It does appear likely that insurers with current blocks of UL more than 10 years old today will not likely increase their current crediting rates above the current floor of (generally) 4% - *ever*! This is at least partially due to the losses some carriers have experienced in their no-lapse guarantee blocks of business for which the carrier cannot make interim pricing adjustments.

Participating whole life policies have guaranteed premiums, but a new methodology is required for projecting possible dividend *scale* possibilities in the future. Later in this paper, the authors will introduce just such a methodology based on the *undulation of interest rate* process addressed in the first volume of *Life Insurance as an Asset Class*.

Introducing Personalized Life Expectancy

Throughout our adult lives we make important decisions about how we live and how we manage our resources. As we get older, these decisions tend to be influenced - consciously or subconsciously - by an expectation of how much longer we think we will live *and* how healthy and active we expect to be in those remaining years. The problem is that most of us are using standards of measurement that are by definition subjective and too generalized to be personally applicable. Applying generalized beliefs ("Grandma died young; so will I") may cause us to make serious and costly mistakes about both lifestyle and property based on inappropriate or inapplicable assumptions about life expectancy.

Just what do we mean in referring to life expectancy (sometimes referred to as "LE")? The most basic definition is for that of *average* life expectancy. This is the age at which 50% of an original large group of similar age / gender / health / lifestyle individuals have died - and for

[33] The inherent sales philosophy of premium financing schemes implies that when borrowed funds interest rates move, there is a 2-year lag in policy crediting rates. The authors do not believe the lag will be nearly that short - if it occurs at all.

which half of the original group are still alive. The first volume of *Life Insurance as an Asset Class* provides a substantial explanation of life expectancy in Chapter 2.

Issues of life expectancy and the relevance to managing life insurance include:

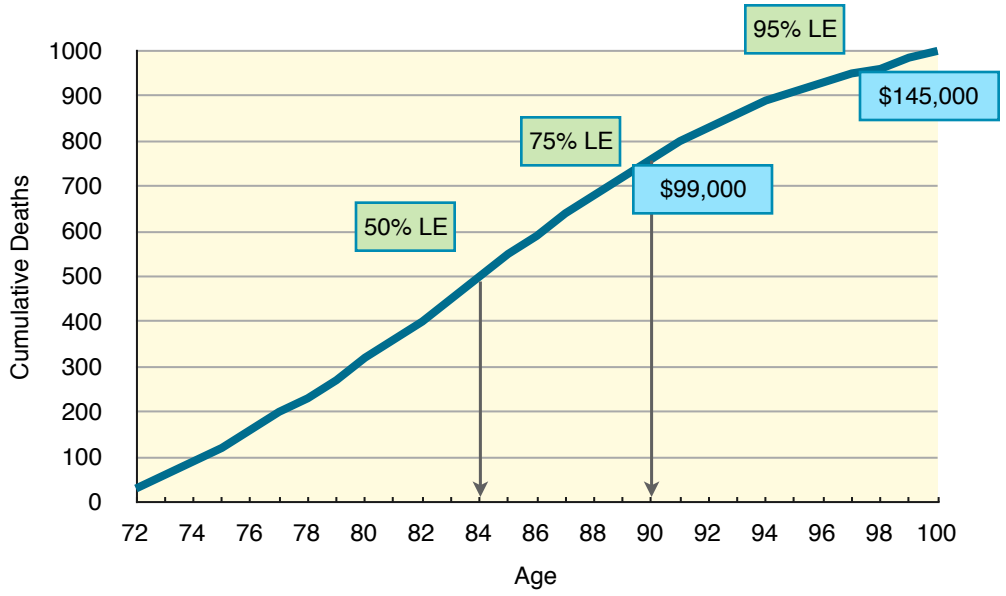
- If we learned that we were part of a group with an average life expectancy of another 20 years - would you make any serious decisions about your life based on a 50/50 chance of living *less* than that? Empirical data suggest most people expect to live longer than their group's life expectancy - which is a little like *Lake Woebegone* where "... all the children are above average!"

- Every year you live, the average life expectancy changes (and in fact moves somewhat forward). The longer you live, *the longer you live.*

- Life expectancy tables still in use are based on the experiences of too many people with too many dissimilar characteristics to be of use to most people in managing their own lives and finances. For example, the US Table 2001 published by the Bureau of National Vital Statistics can only be sorted by sex (male vs. female) and race (black vs. white) and does not address other significant factors such as wealth, access to health care, smoker vs. non-smoker status, family history and most importantly the actual health experience of a measured individual.

Here's a classic example of the difference: A 72 year old healthy male seeks to optimize his life insurance program. He has been given his "life expectancy" from one of his advisors, derived from this US Table 2001. As can be seen on the graphed results of a declining population of same age/gender/race individuals, *average* life expectancy would appear to be age 84. Assuming that it would not be sufficient to count on the average, his advisors recommend funding his life insurance with an expectation of a 75th percentile survival - age 90 in this

example - and more than a standard deviation from the mean. While his level of affluence and lack of smoking history would seem to be in his favor, a history of heart ailments (largely discounted by the client: "I feel great and everyone tells me I look 10 years younger than I am!") was not in his favor. Funding his $5 million life insurance policy was going to require $145,000 per year to sustain to age 100 (the standard recommendation by insurance companies and their policy illustrations). Funding to "only" age 90 (75th percentile) was still going to require at least $99,000 per year.

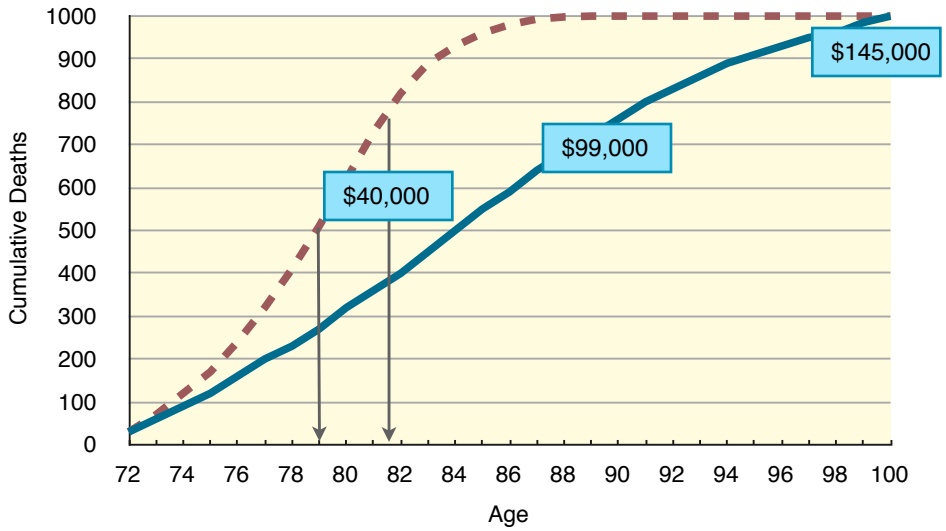


The frustration is that with very little personalized information, the trustee of the client's insurance trust was on the one hand concerned that "... he may be the 9% that make it to age 94."

Largely made possible by the life settlement industry, personalized life expectancy data can be inferred from current medical records to develop a statistical basis on which to manage life insurance policies and their premiums. When the client's prior heart ailments were taken into account, along with other personalized factors, a different statistical data set became available. In this instance, the likely *average* life expectancy and 75th percentile expectancy had a dramatic shift to the left, allowing the trustee to manage the premium flow with more personalized

information. In this case, the trustee chose to fund the policy with $40,000 rather than the $145,000 otherwise indicated in the policy illustration.

The trustee will henceforth manage the policy with annual reviews of policy sufficiency based on the currently paid premium, and will obtain a new, personalized LE report every three years.



Personalized LE data beyond life insurance

Obtaining personalized life expectancy data can be useful for purposes other than estimating remaining premium flows to optimize life insurance death benefits. Consider:

- **Social Security.** Many clients ask: "should benefits be taken right away or deferred as long as possible?" Social Security benefits begun at age 62 are 25% lower than for normal retirement age (66 for today's leading edge Baby Boomers)[34]. Delaying benefits to age 70 can add another 25% to normal retirement age benefits. Assuming that there are otherwise sufficient income resources on which to live, optimizing Social Security is a function of *how long will I live?*

[34] www.SSA.gov

- **Retirement income distribution.** Perhaps the #1 concern of those within 10 years of retirement is "will I outlive my money?"[35] While the primary concern is sufficient capital, how long that capital will last is largely dependent on annual living expense needs and whether this will cause an intrusion into capital that will fulfill the prophecy of outliving retirement resources. Financial planners often use age 95 as a "safe" benchmark for which to test income sufficiency, using elaborate Monte Carlo programs to determine the probability that a certain amount of monthly income can be achieved to that age. On the one hand, it's ironic that a healthy wife and husband both age 65 today have a *couple's* life expectancy to age 95 (meaning that in half of the original couples, at least one spouse is still alive at age 95) - and this is just the *average.* On the other hand, if periodic personalized life expectancy assessments are conducted (typically beyond age 70 - 75), it may be revealed that there's a substantial statistical likelihood that neither spouse will be alive past age 85. Knowing - and managing - this information can make a substantial difference in the amount of income a couple can take to enjoy their retirement years before infirmity and death.

- **Long Term Care decisions.** A married couple approaching retirement and medicare decisions have an almost 50% likelihood that at least one of them will need some kind of care in their lifetimes. "Care" translates as the inability to perform two or more Activities of Daily Living [36] resulting in the need for care by others. The statistical chance that someone reaching age 65 will become cognitively impaired is 72% for women and 44% for men.[37] This likelihood of needing care increases with age. With the emerging database suggesting personalized timeframes for independence and dependence (not just alive / deceased), personalized information could be very helpful in *planning* our

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[35] MetLife American Dream Study, 2007 - 2010

[36] The standard for determining the need for care is the inability to independently perform two or more of the following activities: eating, bathing, dressing, toileting, continence, and mobility/transfer. In addition, cognitive disfunction will - without any ADL deficiencies - trigger a long-term care situation. From www.MickeyBatsel.com

[37] *Ibid.*

remaining years. This could allow us to purposefully deploy more of our retirement resources to enjoying the active years, acknowledging there will be a following period of relative inactivity. Of course, allocating financial resources in this way can be more safely arranged by acquiring appropriate long term care insurance coverage.

- **Reverse mortgages.** For many, our homes are our most significant asset. Unfortunately, this asset is also *non-performing* - at least from a financial standpoint. While reverse mortgages are not highly regarded in 2010 as a result of high fees and low property valuations, they may well have a future roll to play in financial planning as today's Baby Boomers reach the midpoint of their retirement years. Having a statistical basis on which to measure husband and wife life expectancies (and even health expectancies) will likely be an important factor in deciding whether to deploy a reverse mortgage.

- **Immediate annuities.** Income annuities are generally sold without regard to the annuitant's health; there is no medical exam and no health questions on the application for an income annuity. It is assumed that only healthy individuals will seek such a financial arrangement with an insurance company - trading a lump sum for a monthly income regardless of how long the annuitant lives. Obviously, having a statistical sense of a *greater*-than-average likelihood - or conversely a *less*-than-average likelihood - of longevity can be extremely useful in making a decision to deploy a portion of retirement capital resources to the acquisition of an income annuity. It should also be noted that underwritten and rated annuities *are* available - for which a shortened expectation of longevity is taken into account and monthly benefits will be commensurately *higher* (the opposite of the effect of ratings placed on life insurance policies).

Life insurance optimization

Many policies have not been appropriately acquired based upon the resources, risk tolerance and asset allocation considerations of the policyholder - or because those considerations have since changed - and/or because the policies have not previously been managed. As a result, the policies need to be rehabilitated to optimize their potential for financial return, with due consideration to the current needs, concerns, resources, and health of the client. This requires the advisor performing this work to maintain a high level of knowledge, sophistication, and financial tools. It is the step usually left out of the "du jour" merry-go-round.

The steps necessary to optimize life insurance policies include:

1. Create or update the Life Insurance Policy Management Statement. This incorporates an appreciation for funding resources (existing funds or annual gifts), risk tolerance, asset allocation, and priorities regarding a price vs. cost orientation to funding the life insurance, access to cash values, and naturally increasing death benefits.

2. Assess the life insurance policy *independent* of insurer's non-guaranteed in-force illustration results. For indeterminate premium (UL, VUL, EI) policies, this includes actuarially-derived expectations of future policy expenses (including cost of insurance) as well as an appropriate stochastic analysis of likely interest credits or investment returns and losses.

3. Utilize personalized *or* generic probability analysis for longevity - as appropriate to the client's age and general health - since the death benefit Internal Rate of Return calculations at death are specifically optimized by establishing a baseline life expectancy expectation and *managing* to that expectation over time.

4. As appropriate, examine the remediation options generally available:

    - Increase the funding premium where possible or practical;

    - Decrease the policy death benefit in order to bring into balance the policy's future expenses and likely returns. For policies initially set up with an "increasing death benefit" option (also referred to as an Option B death benefit), remediation should explore the effect of freezing the policy at its current death benefit or stepping back to the original death benefit, to determine if this action would put the policy back into balance with current premiums versus future expenses and credits;

    - If the current policy style becomes inappropriate (more than situational to today's S&P500™ performance), the client who is no longer tolerant of the risks associated with policies incorporating substantial (and changeable) current assumptions may choose to *shift* (i.e. replace the policy, generally through a tax-deferred IRC 1035 exchange) to a guarantees-based policy such as NLG or whole life);

    - The policy is no longer affordable on any basis, and the policy is lapsed or surrendered *or* may be eligible for resale into the secondary market referred to as *life settlements*;

    - The policy is no longer "needed" - but should be assessed as if it *could be* sold into the life settlement market with the question: "If a life settlement funder is willing to offer me (hypothetically) 20% of the death benefit to assume the obligations and benefits of this policy until my death - and knowing that the funder assumes at least a 12% internal rate of return in calculating what it will offer for my policy - why wouldn't I keep this policy strictly for its comparable investment value?" This last option, of course, assumes that the resources are available to maintain the policy until

death; it is just a question of understanding its *value* within the totality of the client's assets and resources.

All of these options must be considered to truly serve the client's best interests.

5. Assuming that the policy or its replacement will be maintained until death - establish an ongoing management schedule (annually, bi-annually, etc) within the Life Insurance Policy Management Statement.

Major issues of policy management

All of the following issues should be addressed in the Life Insurance Policy Management Statement:

1. Carrier financial integrity. There are 4 major rating agencies that are paid by the life insurance company to assess and issue a financial strength rating. Since these ratings are generally constructed in dissimilar scales, services such as COMDEX can be used to provide a coherent sense of financial strength of an insurance company relative to its peers.

2. Actuarial integrity of pricing beyond the individual carrier. The "law of large numbers[38]" largely dictates the big picture of how much life insurance "costs." While not determinable at an individual level until the insured dies, the law of large numbers applies to peer companies wherein they have similar financial strength ratings and risk-based capital ratios (in turn indicating similar conservatism or aggressiveness with respect to the reserves it maintains to meet all current and future obligations), a similar distribution

[38] The first volume of Life Insurance as an Asset Class - Chapter 7

system, and insure a broad sampling of the insurable population. As explained in Chapter 2 of the first volume of *Life Insurance as an Asset Class*, the ultimate cost to insure a given individual to her death is no different for one peer company than another. Non-guaranteed pricing of policies - especially as depicted in a policy illustration - may vary significantly, but since the assumptions are subject to change, the lifetime cost of insurance *cannot* be inferred from a policy illustration.[39]

3. As a result of the difference between illustrated expectations driven by current (and mostly constant) assumptions projected far into the future - and the "law of large numbers" actuarial expectation - ongoing policy management has to be actuarially-based and independent of the policy's current in-force illustration.

4. Test the assumptions: if the only assessment tools available are the carrier's in-force illustration, then the advisor must request a number of variations assuming stipulated *lower* levels of carrier interest crediting rates (or investment returns in the case of VUL and EI policies), as well as less-than-illustrated levels of expenses and cost of insurance charges. Better: test the *real* crediting rate or investment return likelihood - through appropriate methodologies of interest undulation and investment return volatility.

5. The illustration *can* be used to determine the extent of variance between the carrier's current assumptions and the "law of large numbers" expectation.

6. As appropriate to the age of the insured(s) - typically beginning at ages 70-75 - obtain a personalized assessment of longevity.

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[39] *Final Report of the Task Force for Research on Life Insurance Sales Illustrations under the Auspices of the Committee for Research on Social Concerns*, Society of Actuaries, 1992

7. Trustees have additional considerations of management since their duties are largely defined by law (state Uniform Prudent Investor Acts) and they are generally considered to be acting under a *fiduciary* standard of care. **Appendix E** is a Trustee Decision Matrix relating duties and appropriate product styles.

NOTE: A small number of independent vendors provide information and policy management services. but it is also an evolving area of study. It is unlikely that any one vendor can provide all necessary services for the entire management process. Ideally, one advisor specializing in life insurance policy management will utilize an appropriate range of vendors.

Chapter Summary

When going through the process of designing and allocating an investment portfolio across a diversified selection of equities and fixed returns, we generally anticipate that the task isn't finished after the first allocation meeting. Risk tolerance changes, personal and business circumstances change. Life happens. What we are generally *not* accustomed to doing is managing a life insurance policy (or portfolio of policies). We expect that a life insurance policy is self-sufficient. And while arguably this might be assumed about a participating whole life insurance policy issued by a highly rated carrier and for which premiums will be regularly paid throughout the life of the insured, all modern life insurance - property in the best sense of the word - must be managed. As with the example of an investment portfolio, the client should begin with a Life Insurance Policy Management Statement so that the various "life happens" perils can be anticipated and a plan put in place as to how to deal with those perils. Actuarial integrity of policy projections needs to be periodically tested, separate and apart from an in-force policy illustration.

Consideration should be given to managing premium sufficiency and, at an appropriate time in the insured's later life, policy managers should measure premium funding against updated life

expectancy statistics. Potential funding insufficiency should be anticipated as far in advance as possible and decisions made for how best to optimize policy cash flow requirements with the ultimate death benefit. In particular, indeterminate premium life insurance policies should be reviewed against the Life Insurance Policy Management Statement approximately as often as an investment portfolio undergoes strategic review utilizing the client's Investment Policy Statement.

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Chapter 7
Establishing Reasonable Expectations for Dividends

Which dividend outcomes are most likely?

Dividends are not guaranteed until declared and paid. There is no guarantee that dividends will be paid. This cautionary statement must be the context for this chapter. We are not attempting to override appropriate precautions about relying on over-optimistic expectations, but at the same time the challenge is to determine how par whole life might perform in the real world, where the insurer's portfolio returns (in large part driving the dividend scale) reflect interest rates prevailing in the economy - and which are certainly not level over the life of the policy. Actual results will vary as real outcomes dictate the underlying insurance company investment performance and expenses - including policy persistency and mortality - that are used by insurance company actuaries to determine the actual payment of dividends. The real world results – if an insured elects to take all their dividends in paid up additions - will look like one of the graphs in Chapter 3, but which one? Or, which outcome is most likely if future results follow predictable historical patterns?

Note that in our analysis we will not attempt to make expenses or mortality a variable. Our focus will be on the underlying projected dividend scales paid each year, based on random projections of the interest component used to determine dividend pay-outs each year. An explanation of the methods used to project interest rates is shown below.

We will examine the performance of three premium payment/dividend approaches:

1. Full Pay – The payment of the level premium through age 99, with dividends used to purchase paid up additions in all years. We will calculate the death benefit at age 100, the cash surrender value at age 100, and the average interest rates assumed from the date of

issue until age 100, using "real world" variable interest rate conditions as explained below.

2. Natural Premium Offset (NPO) – The payment of the level premium until paid up addition cash values are sufficient to take over future premium payments. In this scenario we will calculate the number of years the insured is required to pay premiums out-of-pocket, and the average interest rates assumed from the date of issue until age 100, under "real world" variable interest rate conditions as explained below.

3. Natural Premium Offset 85 (NPO 85) – The payment of the level premium through age 84, after which - if the insured is still alive – paid-up addition cash values and policy loans are used to pay premiums and provide annual income payments through age 100. In this scenario we will calculate the amount of the annual cash flow payments to the insured and the average interest rates assumed from the date of issue until attained age 100, under "real world" variable interest rate conditions as explained below.

Random Interest Rate Generator - Assuming that insurance company investments are in 20 year corporate bonds with a dividend interest spread over 20-Year Treasury rates of 1.25%, we generated 1,000 sets of random interest rates for all three policy options starting at the issue age and running through age 100. We also assumed that we are looking at a mature company with an established block of in-force and ongoing generations of new business – resulting in a liability/asset base that is fairly uniform in relation to the duration of the bonds held. For this purpose, the 20 year bond duration seemed like a good fit. Our random interest rate generator capped a randomly generated maximum dividend interest rate of 10% since rates in excess of that amount are well beyond two standards of deviation. Finally, to determine the derived dividend scale used for any given year, an average of the random rates over the latest twenty year period plus a spread of 1.25% was used.

Once again, we feel it is necessary to emphasize that we are not trying to predict the future, nor are we suggesting this is the only set of methods and assumptions that are reasonable. We do believe we have created dividend scenarios that are indicative of what may happen in the future, but we must emphasize that the future will look different! In all cases our intention is to provide a reasonable basis from which to manage expectations for a policy going forward into an unknown future – with the key word being – *management*!

Full Pay Approach

Under this first scenario of applying dividends to enhance future policy values, we assumed that a level premium would be paid through age 99, and that all dividends would be used to purchase paid up additions.

We generated random interest rates from the issue date until age 100 under 1,000 interest scenarios, and determined the dividend amounts that would be paid each year – using dividend scales at interest rates from 4% to 10%. Where dividends were needed between dividend scales, an appropriate interpolation was performed. Dividend scales for 8%, 9% and 10% were estimated using the relationship between actual dividend scales at 6% and 7%.[40]

We calculated values for our 38 year-old male and our 52 year-old female. For each insured, and for each of the 1,000 scenarios, we calculated the death benefit at age 100, the cash value at age 100 and the average of the credited interest rates used each year to determine the dividend scales. We also calculated the statistical standard deviation of the resultant data.

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[40] We deploy the 20 Yr T-Bill rates from the last 20 years and calculate an average. That *average* T-Bill rate history is applied to the random interest rate generator. Historical 20 Yr T-Bill rates are used as one assumption in the generation of the random rate. The average of the year-end 20 Yr T-Bill rates over the last 20 years is 5.8%.

The random interest rate generator determines (or randomly selects) a rate in the first year of any of the 1,000 scenarios. However, to get the rate that is used to determine the dividend table, the program takes the average of the first random rate and the previous 19 historical 20 year T-Bill rates (19 real years and one projected year). In the second year, the first two random rates and the last 18 historical T-Bill rates are used. By the twentieth duration of each of the 1,000 cases, we are using the average of the previous 20 random rates.

In a *normal distribution,* plus or minus one standard deviation represents the probability that the result is within 68.2% of the mean, and plus or minus two standard deviations represents the probability that the result is within 95.4% of the mean).

Full Pay - Insured #1

Policy issue data:

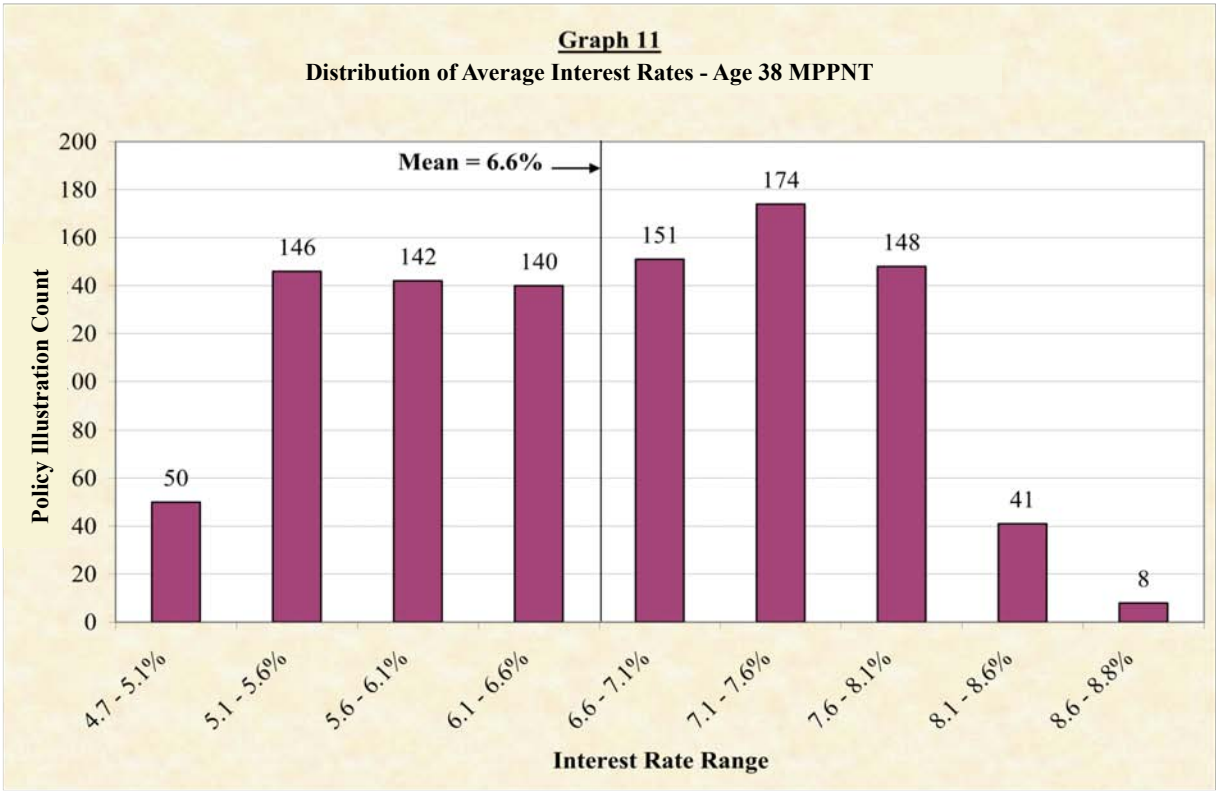
1. Age 38 – Male Preferred Plus Non-Tobacco
2. $1,000,000 face amount
3. Level premium - $13,840 per year
4. Dividend option – purchase paid-up additions each year

Table 1

Result of 1,000 Interest/Dividend Paying Scenarios
Full Pay - Age 38 Male - Preferred "Plus"- Non Tobacco

	Mean Value at Age 100	Lowest Value at Age 100	Highest Value at Age 100	Standard Deviation
Cash Value	4,850,000	1,700,000	12,485,000	2,339,000
Death Benefit	5,021,000	1,784,000	13,452,000	2,530,000
Interest Rate	6.6%	4.7%	8.7%	1%
CV IRR	4.62%	1.92%	6.63%	
DB IRR	4.71%	2.05%	6.79%	

For each of the 1,000 random scenarios, we tabulated (1) the frequency of the average interest rates used to determine dividends each year, and (2) the frequency of the death benefits at age 100, into the bar graphs below.



What does the interest rate bar graph indicate?

1. Observation of the spread of average rates on either side of the mean does appear similar to a *normal distribution* (i.e., most observations are around the mean, and there is a tail on both sides indicating likelihoods are lower as you move to either extreme - away from the mean). However, there is not the familiar "heaping" of results around the mean; this distribution is somewhat "flatter" than a standard normal.

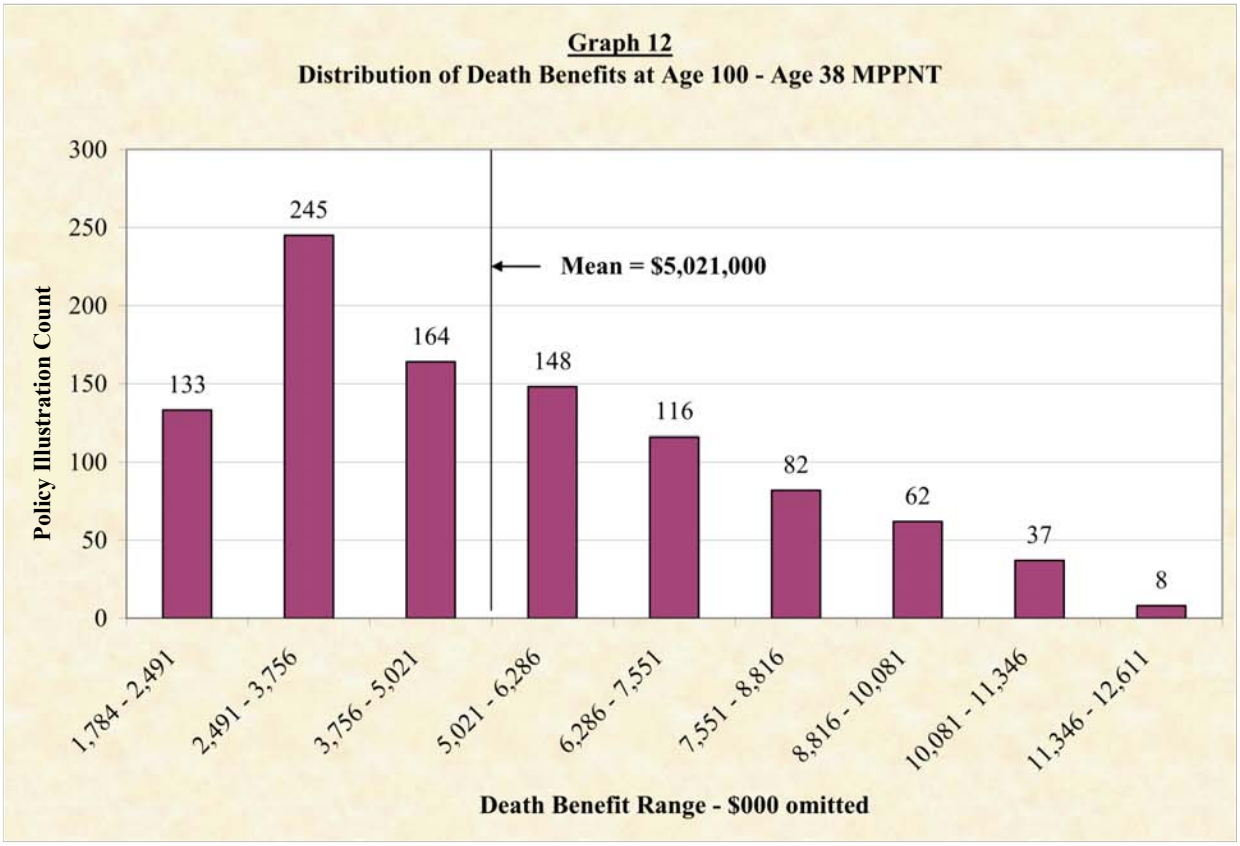
2. We observe from this set of trials that there is an 81.4% likelihood that the average interest rate used to determine the dividend scale is 5.6% or above.

3. There is a 52.2% likelihood the average rate is 6.6% or above.

4. There is a 19.7% likelihood the average rate is 7.6% or above.

5. Observation: these percentages are still similar to a standard distribution relative to the distance from the mean.

6. Observation: there is a high probability that the long-term "floor" dividend scale (in a 4% reserve guarantee policy structure) is 4.7% and the reasonable average expectation is 5.6% with an 84% probability - and 6.6% or better with a 50% probability.



What does the death benefit bar graph show?

1. There is a definite skew - to the left of the mean - in the death benefit results. This tells us that the likelihood of variance on the low end is narrower, which is a direct result of combining the guaranteed $1,000,000 basic benefit with a dividend scale that rarely falls below 5% in our random scenarios.

2. The tail values on the high end tell us that, although the probabilities are low, there are chances of reaching very high face amounts at age 100 with the level premium purchasing paid up additions dividend option.

3. Remembering that each bar segment is one half of a standard deviation, we know we have the following likelihoods:

    - There is an 86.7% likelihood that the age 100 death benefit will be approximately $2.5 million or above;

    - There is a 45.8% likelihood that the age 100 death benefit will be approximately $5.0 million or above;

    - There is a 18.9% likelihood that the age 100 death benefit will be approximately $7.6 million or above.

4. Observation: This analysis demonstrates that the total death benefit (on a 4% reserve guarantee policy structure) - driven by a relatively low dividend assumption - will be at least $1.784 million (2.1% IRR) - with an 84% probability of at least $2.5 million (3 % IRR).

Note: The cash value bar graph is very similar to the death benefit graph above (i.e., cash values are slightly lower than the death benefits at age 100, but patterns are basically identical) and will not be shown.

Full Pay – Insured #2

Policy issue data:

1. Age 52 – Female Preferred Plus Non-Tobacco
2. $1,000,000 face amount
3. Level premium - $20,430 per year
4. Dividend option – purchase paid-up additions each year

Table 2
Result of 1,000 Interest/Dividend Paying Scenarios
Full Pay - Age 52 FPPNT

	Mean Value at Age 100	Lowest Value at Age 100	Highest Value at Age 100	Standard Deviation
Cash Value	2,966,000	1,443,000	5,831,000	1,092,000
Death Benefit	3,104,000	1,561,000	6,406,000	1,206,000
Interest Rate	6.6%	4.7%	8.6%	1.0%
CV IRR	3.86%	1.40%	5.96%	
DB IRR	4.01%	1.68%	6.24%	

For each of the 1,000 random scenarios, we tabulated (1) the frequency of the average interest rates and (2) the frequency of the death benefits at age 100, into the bar graphs found in **Appendix L**.

Natural Premium Offset Approach

Under this approach we assumed that a level premium would be paid long enough to build a paid-up addition cash value fund large enough to make all future premium payments to age 99. Again, all dividends are used to purchase paid up additions.

We generated random interest rates from the issue date until age 100 under 1,000 policy scenarios, and determined the dividend amounts that would be paid each year – using dividend scales at interest rates from 4% to 10%. Where dividends were needed between dividend scales, an appropriate interpolation was performed. Dividend scales for 8%, 9% and 10% were estimated using the relationship between actual dividend scales at 6% and 7%.

We calculated values for our 38 year-old male and our 52 year-old female. For each insured, and for each of the 1,000 scenarios, we calculated the number of payments needed and the average of the credited interest rates used each year to determine the dividend scales. We also calculated the statistical standard deviation of the resultant data.

(Remember that plus or minus one standard deviation represents the probability that the result is within 68.2% of the mean, and plus or minus two standard deviations represents the probability that the result is within 95.4% of the mean).

Natural Premium Offset - Insured #1

Policy issue data:

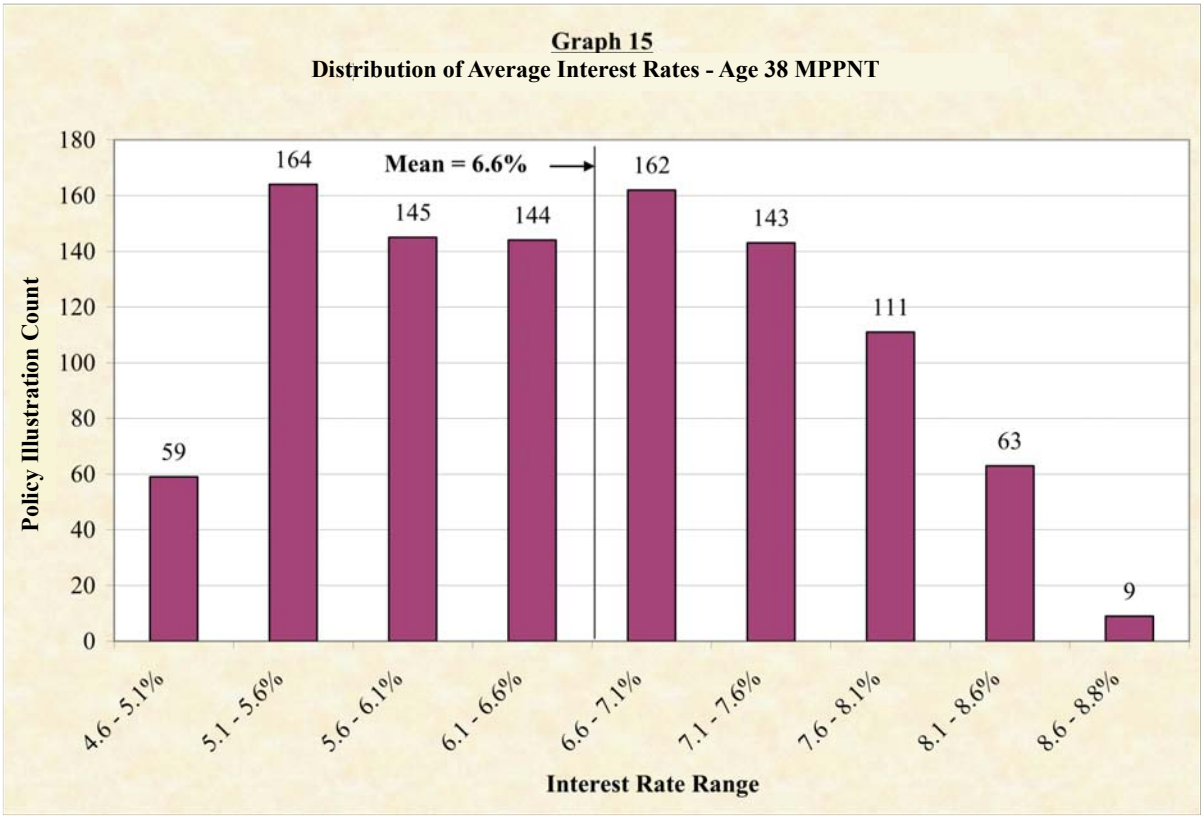
1. Age 38 – Male Preferred Plus Non-Tobacco
2. $1,000,000 face amount
3. Level premium - $13,840 per year
4. Dividend option – purchase paid-up additions each year

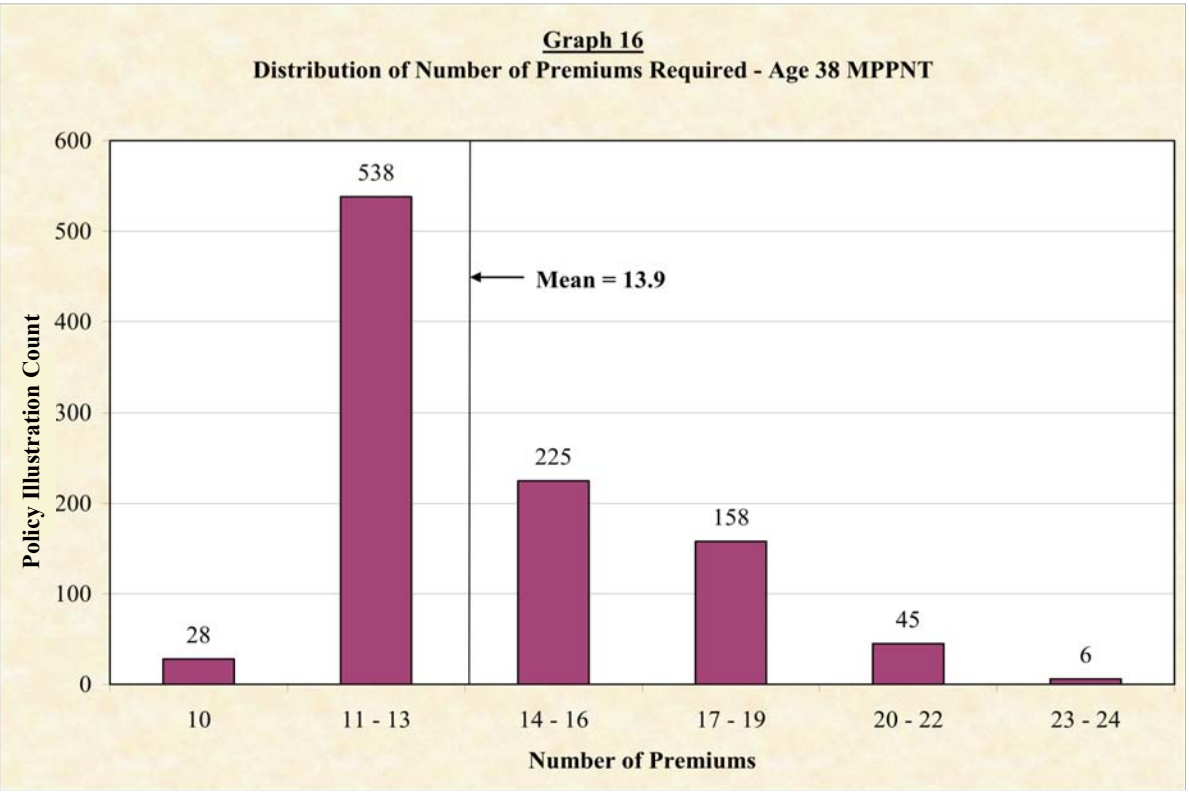
Table 3

Result of 1,000 Interest/Dividend Paying Scenarios
Natural Premium Offset - Age 38 MPPNT

	Mean	Lowest Value	Highest Value	Standard Deviation
# of annual premiums needed to sustain policy	13.9	10.0	24.0	2.9
Underlying interest rate	6.6%	8.8%	4.8%	1.0%

For each of the 1,000 random scenarios, we tabulated (1) the frequency of the average interest rates and (2) the frequency of the number of premium payment needed, into the bar graphs below.





What does the interest rate bar graph indicate?

1. If you compare this graph to the previous interest rate graph you will notice that the mean and the standard deviation in each case is the same, especially when you round to the level of accuracy we are using. Closer observation shows there are differences, but in each case we end up in pretty much the same place, with the underlying treasury rates over the last 20 years (and the methods employed to generate randomness) being the key components in determining future rates.

2. Using our standard deviation calculation and statistical theory, and given that each bar segment is one half of a standard deviation, we know that there is a 77.7% likelihood that the average interest rate used to determine the dividend scale will be 5.6% or above, a 48.8% likelihood the rate will be 6.6% or above, and a 18.3% likelihood the rate will be 7.6% or above.

Note: Bar Graph 16 above has been summarized so that each bar is within one standard deviation of the mean. All other bar graphs (unless noted) are in one-half standard deviation increments. What does the premium payment bar graph indicate?

1. Again there is a skew to the left of the mean, but this is different from the death benefit graph we saw in the full pay scenarios. Values to the left of the mean in this graph are those where the highest dividends are paid, and those to the right are the lower dividend scenarios.

2. The absence of a pronounced tail to the left is first a result of using fewer bars to display the results.

3. The graph also shows us there is an absolute minimum number of premiums needed (10), and that it doesn't matter how high your dividends are – it still takes a minimum number of years (10 to 13) before paid-up addition cash values are high enough to sustain this par whole life policy.

4. The tail to the right of the mean tells us that although the probabilities are low, there are future interest rate scenarios that require a significant number of additional premium payments – a result that is not surprising. The encouraging point is that those probabilities get quite small as you move to the right.

5. Based on this set of trials we observed there is:

   - A 97.2% likelihood that at least 11 payments will be needed;
   - A 43.4% likelihood (about even odds) that at least 14 payments will be needed;
   - A 20.9% likelihood that at least 17 payments will be needed; and

- Only a 5.1% likelihood that 20 or more payments will be needed.

Natural Premium Offset – Insured #2

Policy issue data:

1. Age 52 – Female Preferred Plus Non-Tobacco
2. $1,000,000 face amount
3. Level premium - $20,430 per year
4. Dividend option – purchase paid-up additions each year

Table 4

Result of 1,000 Interest/Dividend Paying Scenarios
Natural Premium Offset - Age 52 FPPNT

	Mean	Lowest Value	Highest Value	Standard Deviation
# of annual premiums needed to sustain policy	10.2	8.0	17.0	1.6
Underlying interest rate	6.6%	8.8%	4.8%	1.0%

For each of the 1,000 random scenarios, we tabulated (1) the frequency of the average interest rates and (2) the frequency of the death benefits at age 100, into the bar graphs found in **Appendix L**.

Natural Premium Offset 85 Approach

In an era where Baby Boomers are more concerned than anything else about having sufficient resources so that they won't outlive their money, one intriguing approach is to combine retirement assets intended to produce an income with the long-term, tax advantaged resources of a life insurance policy.

In this approach, and recognizing that a typical 65-year old has a 20-year life expectancy, the client takes 80-85% of his current $1 million portfolio and invests according to his risk tolerance for maximum income, living on investment return *and principal* over those 20 years. The following charts provide an example of the exact distribution formula on the basis of an assumed

Year	BOY Balance	EOY Balance	Income Distrib.	Rate of Return
1	$850,000	$892,500	$44,625	5
2	$847,875	$890,269	$46,856	5
3	$843,413	$885,583	$49,199	5
4	$836,384	$878,203	$51,659	5
5	$826,544	$867,871	$54,242	5
6	$813,629	$854,311	$56,954	5
7	$797,357	$837,225	$59,802	5
8	$777,423	$816,294	$62,792	5
9	$753,502	$791,177	$65,931	5
10	$725,246	$761,508	$69,228	5
11	$692,280	$726,894	$72,689	5
12	$654,205	$686,915	$76,324	5
13	$610,591	$641,121	$80,140	5
14	$560,981	$589,030	$84,147	5
15	$504,883	$530,127	$88,354	5
16	$441,772	$463,861	$92,772	5
17	$371,089	$389,643	$97,411	5
18	$292,232	$306,844	$102,281	5
19	$204,563	$214,791	$107,395	5
20	$107,395	$112,765	$112,765	5

Year	BOY Balance	EOY Balance	Income Distrib.	Rate of Return
1	$850,000	$772,650	$38,633	-9.1
2	$734,018	$646,816	$34,043	-11.88
3	$612,773	$477,289	$26,516	-22.11
4	$450,773	$580,050	$34,121	28.68
5	$545,930	$605,272	$37,830	10.87
6	$567,443	$595,304	$39,687	4.91
7	$555,617	$643,405	$45,957	15.8
8	$597,447	$630,247	$48,481	5.49
9	$581,767	$366,513	$30,543	-37.0
10	$335,970	$503,955	$45,814	50.0
11	$458,141	$481,048	$48,105	5
12	$432,943	$389,649	$43,294	-10
13	$346,355	$380,990	$47,624	10
14	$333,366	$333,366	$47,624	0
15	$285,743	$314,317	$52,386	10
16	$261,931	$301,220	$60,244	15
17	$240,976	$289,172	$72,293	20
18	$216,879	$173,503	$57,834	-20
19	$115,669	$127,235	$63,618	10
20	$63,618	$69,980	$69,980	10

5% constant return expectation, and, since equity returns aren't constant, a simple example of actual S&P500 Index returns from 2000 - 2009 and a simple "up and down" scenario for the balance of the 20 year hypothetical example.

The remaining 15-20% portion not already allocated is used to pay premiums on an existing par whole life policy from age 65 to age 84. Any additional resources are invested with a 20-year time horizon, presumably with greater risk tolerance than that which will be applied to the larger segment of the $1 million portfolio.

At age 85, only two conditions prevail: either the client has succumbed to life expectancy statistics, or has survived them. If the client is still alive - as suggested by the formula below - and has completely exhausted his 20-year income portfolio, he can now look to his life insurance policy to provide substantial tax-free withdrawals and loans from the policy to make up for the depleted portion of the original portfolio. Of course there may also be resources available in the "I beat my life expectancy" portfolio to further supplement income needs for the rest of his/her or their life.

As with the previous two approaches, setting an expectation about the amount of cash flow that can be extracted from a par whole life policy many years in the future will depend upon the dividend assumptions portrayed in a policy illustration. Here we assumed that a level premium would be paid through age 84 and that dividends would be used to purchase paid-up additions in all years. Starting at age 85, the insured uses paid-up addition cash values and policy loans to make premium payments and provide the largest 15 year annual income benefit stream possible given the dividends paid over the life of the policy. Paid-up addition cash values are used first until the basis in the policy has been reached. Then loans are used for the remainder of the 15 year period until all cash values in the policy have been used up. At age 100 the policy expires with a very small cash value.

We generated random interest rates from the issue date until age 100 under 1,000 policy scenarios, and determined the dividend amounts that would be paid each year – using dividend scales at interest rates from 4% to 10%. Where dividends were needed between dividend scales, an appropriate interpolation was performed. Dividend scales for 8%, 9% and 10% were estimated using the relationship between actual dividend scales at 6% and 7%.

We calculated values for our 38 year-old male and our 52 year-old female. For each insured, and for each of the 1,000 scenarios, we calculated the maximum annual outlay and the average of the

credited interest rates used each year to determine the dividend scales. We also calculated the statistical standard deviation of the resultant data.

Remember that plus or minus one standard deviation represents the probability that the result is within 68.2% of the mean, and plus or minus two standard deviations represents the probability that the result is within 95.4% of the mean.

Natural Premium Offset 85 - Insured #1

Policy issue data:

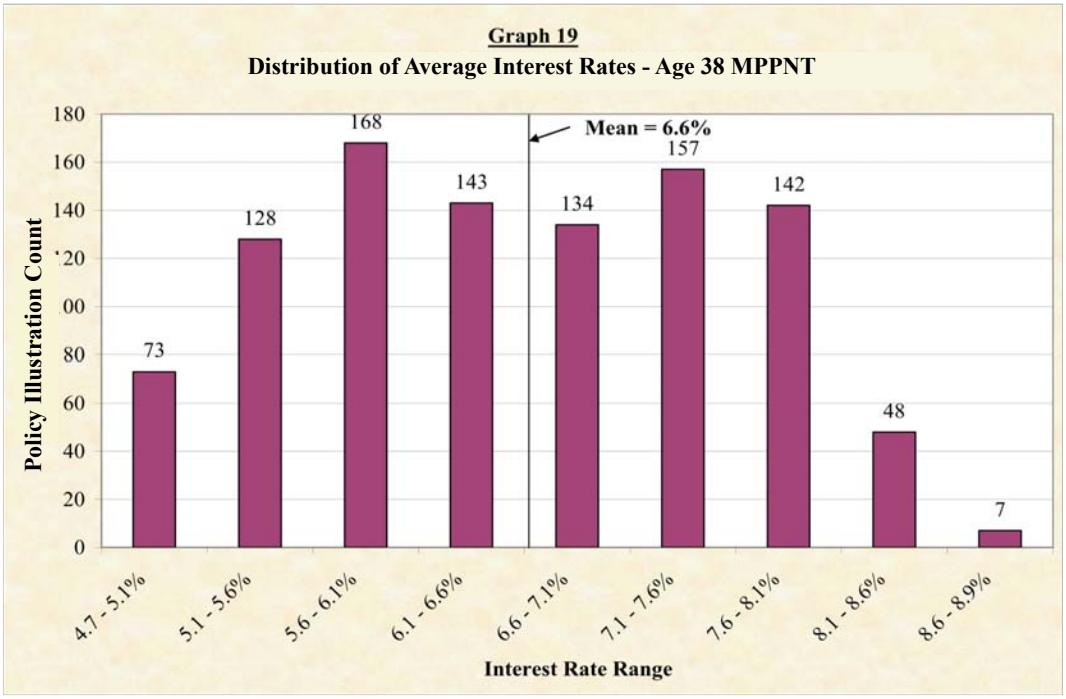
1. Age 38 – Male Preferred Plus Non-Tobacco
2. $1,000,000 face amount
3. Level premium - $13,840 per year
4. Dividend option – purchase paid-up additions each year

Table 5

Result of 1,000 Interest/Dividend Paying Scenarios
Natural Premium Offset 85 - Age 38 MPPNT

	Average	Low Value	High Value	Standard Deviation
Annual Outlay	166,700	90,000	336,000	59,000
Interest Rate	6.6%	4.7%	8.9%	1.0%

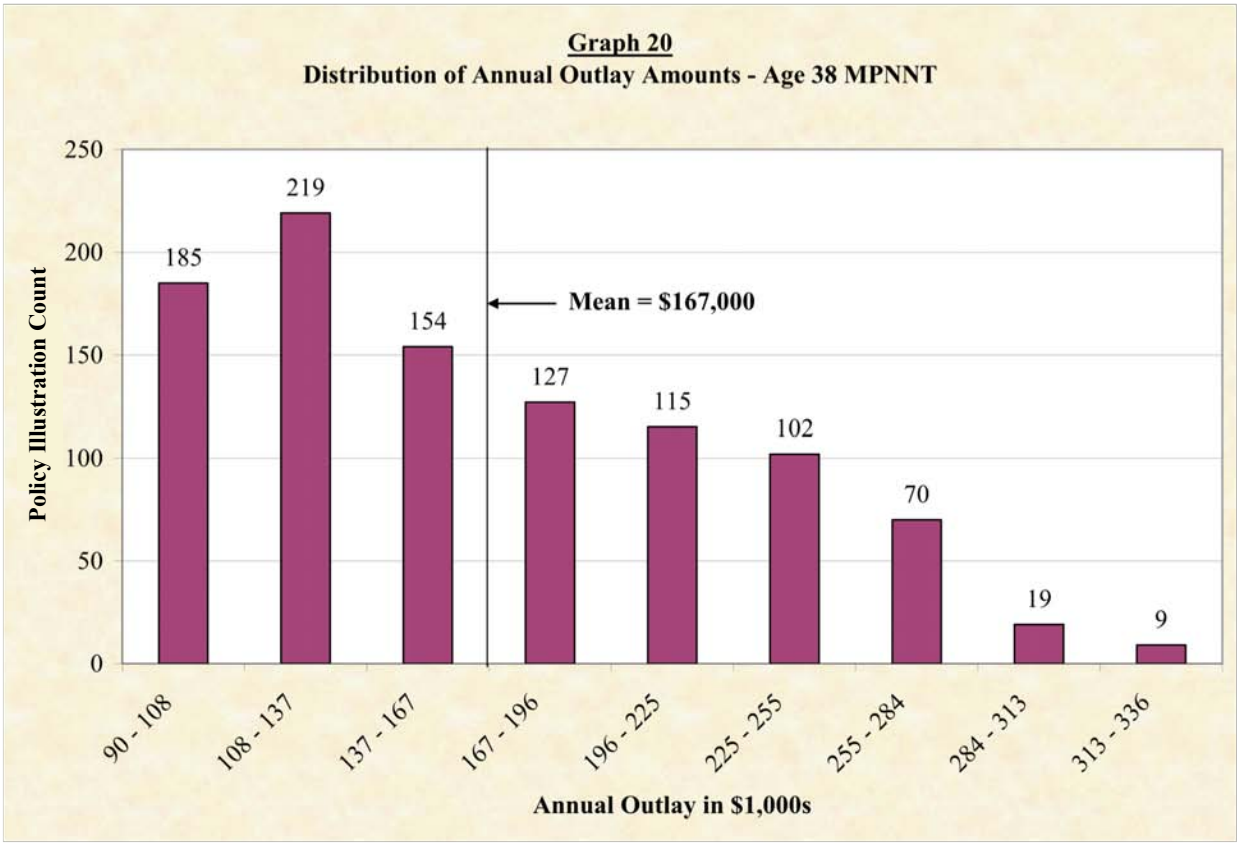
For each of the 1,000 random scenarios, we tabulated (1) the frequency of the average interest rates and (2) the frequency of the annual outlays calculated, into the bar graphs below.



What does the interest rate bar graph tell us?

1. Again, the mean and standard deviation is the same as previous examples, but there are subtle differences in each distribution.

2. Using our standard deviation calculation and statistical theory, and given that each bar segment is one half of a standard deviation, we know that there is a 79.9% likelihood that the interest rate used to determine the dividend scale will be 5.6% or above, a 48.8% likelihood the rate will be 6.6% or above, and a 19.7% likelihood the rate will be 7.6% or above.



What does the annual outlay bar graph tell us?

1. The lowest outlay is $90,000 per year – a total of $1.35 million over the 15 year period. This is, in itself, a substantial result when you realize the total out-of-pocket for the policyholder before age 85 was only $650,480. Of course, this quick comparison ignores the time value of money, but it is remarkable nonetheless.

2. There is an observed 81.5% likelihood the annual outlay will be $108,000 or higher.

3. There is a 44.2% likelihood the annual outlay will be $167,000 or higher.

4. There is a 21% likelihood the annual outlay will be $225,000 or higher.

5. In all cases, this feels like a "good news – good news" result!

Natural Premium Offset 85 – Insured #2

Policy issue data:

1. Age 52 – Female Preferred Plus Non-Tobacco
2. $1,000,000 face amount
3. Level premium - $20,430 per year
4. Dividend option – purchase paid-up additions each year

Table 6

Result of 1,000 Interest/Dividend Paying Scenarios
Natural Premium Offset 85 - Age 52 FPPNT

	Mean	Lowest Value	Highest Value	Standard Deviation
Annual Outlay	95,000	64,000	164,000	29,000
Interest Rate	6.6%	4.7%	8.9%	1.0%

For each of the 1,000 random scenarios, we tabulated (1) the frequency of the average interest rates and (2) the frequency of the annual outlays calculated, into the bar graphs in **Appendix L**.

Chapter Summary

As elaborated in other sections of this paper as well as the first volume of *Life Insurance as an Asset Class*, the authors have discussed stochastic versus deterministic methods of projecting non-guaranteed values when only current assumptions are known. Policy sales illustrations (as well as in-force illustrations) utilize a deterministic approach wherein "numbers are crunched" as if they have inherent credibility regardless of the real world economics that ultimately affects those numbers. Stochastic processes suggest a probability of success under a series of randomly generated possibilities, which at least softens expectations of outcome, by deploying undulation of interest rates and volatility studies for policies with underlying sub-accounts invested in equities and fixed returns.

Until now, there have been no known processes for generating a stochastic model for setting expectations regarding participating whole life. This is primarily due to state regulations that prohibit insurance companies from projecting rates (crediting rates *or* dividend scales) that exceed the current rate or current scale. We reiterate that within this Chapter's presentation of methodology and derived projected values, our estimates are not meant to represent those of any specific insurance carrier, nor is the narrative or charts displayed herein an attempt to illustrate or predict future dividend scales or results for any specific insurance carrier.

Chapter 8
Most Life Insurance Policies Should Be Remediated and Not Replaced[41]

We believe the era of replacing everything in sight with No-lapse Guarantee UL is about to come to an end. It's going to be an interesting next few years!

Drawn from the authors' own experience of policy assessment and remediation over the last two decades, most proposals for replacement are not in the consumer's best interest. Independent analysis and appropriate stochastic projections can be used to confirm whether replacement or remediation is most likely consistent with the consumer's expectations. Life Insurance Policy Management Statements and the Replacement Questionnaire ("RQ") are essential tools to assist in the objective analysis of best options - given that we're still dealing with an uncertain future for non-guaranteed "performance" policies and a likely long-term depreciating value of death benefit in NLG. Of course, replacement should not be considered if the insured's health has deteriorated or if the policy has a loan that cannot be repaid before the replacement.

In our experience, most performance/illustrated *and* many guaranteed policies have been underfunded for the last 30 years. Additional premiums are going to need to be paid and should be expected to be paid since it is not possible to live in a lower interest rate / investment return environment and expect the same results we enjoyed 15 and 20 years ago! This goes back to Occam's Razor: there is a single "price" (almost always paid out over a lifetime) that defines the cost of the insurance you buy - regardless from whom you buy it. Most policy funding in the last 30 years has paid less than the net present value of that cost! Looking to buy a "cheaper" alternative when the current policy runs out of gas … is seeking the *attractive impossibility*!

We further have observed and believe that *most* non-guaranteed policies will not survive even the insured's age/health group's average life expectancy if 1) the policy was purchased utilizing

[41] This premise is the opinion and experience of the authors in 20+ years of managing life insurance policies.

illustration software to calculate a "premium" for such policies as UL / VUL / EI, and 2) whole life policies are loaned out or there is too much blended term.

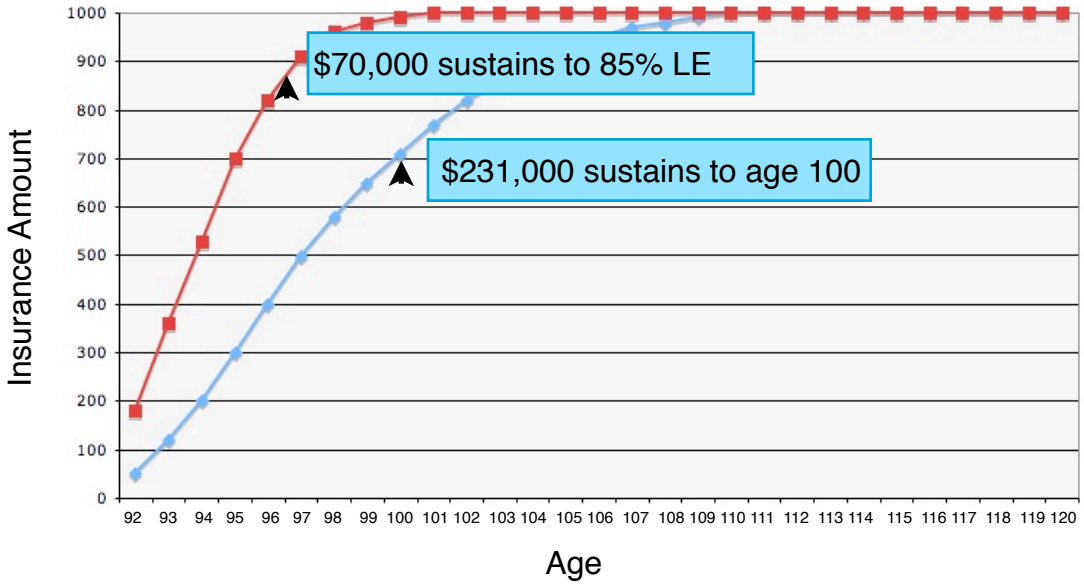
Most replacement is inappropriate because of the tendency to view illustrations as if they are accurate depictions of a problem now or in the future - and then use another illustration with one feature or benefit that is better, applying the rubric (in the case of replacing with no-lapse UL policies with disappointing results) that *on the face of* it, we need to replace anything that isn't guaranteed with something that is. The missing step is where the hard work takes place. Dealing with policies as concerned insurance professionals requires the creation of an optimization of the current policy's performance given the current constraints and parameters. The new rubric is: fully utilize the total property rights and features of the current policy before considering comparisons to other policy types and moving toward replacement. Of course this will take considerable work and experience to do well, and most agents have not been given the tools with which to perform this level of analysis. Coming full circle as a result, the easiest solution to a "problem" policy is a new policy (with a new commission), especially (until recently) with NLG policies.

Remediation case studies

1. **"Nursing Home lady"** - overfunding recommendation from agent and insurance company:

The well-meaning agent called the trustee of his client's insurance trust with a recommendation that the Trustee *add* $90,000 to the existing $141,000 premium - on an ongoing basis - to make sure the policy would "work" (i.e. sustain to age 100) in the face of lower interest rates on the $2 million universal life policy. The dilemma was that the agent had no knowledge of the health of the client. In fact, she was in a nursing home and in poor health. The "red line / blue line" graphic assessment suggested that the Trustee could manage premiums at *half* the level of the current $141,000 premium to the new statistical probability - possibly reserving but not paying -

both the unused portion of the current premium *and* the additional $90,000 recommended funding. This was the case even when the trustee opted to fund to the 85th percentile Life Expectancy (LE). Of course, pursuing such a strategy requires ongoing, annual review. As it turned out, the client died 16 months after the assessment. While this was a favorable financial outcome, advisors and trustees have to be extremely careful with calculations, making sure the trustee understands the process and that the trustee reserves premiums against the statistical unlikelihood of the insured living *longer* than estimated.



2. **"Superwoman"** - super on the outside, not the inside!

Everyone described her as "Superwoman" because she was a senior olympics cyclist at the age of 77. Vibrant and active, she worked out hard every day. Friends and family were in agreement: she would live forever. Her son originally co-owned a successful business with his mother, and had acquired a 20-year level term policy to support their buy-sell agreement. Having recently completed a full buyout of the business, and with 10 years to go on the original duration of the term insurance, the son asks: "Do I need to maintain this life insurance any longer?" If she truly were "Superwoman" - then it would be necessary to fund the policy for a

long period of time - likely far longer than the remaining 10 years remaining on the policy. The average LE for a healthy 77 year old female is 14.78 yaers. If new underwriting were initiated and she had been assessed as "preferred" - her LE would have been closer to 17 years. In either case, the remaining 10 years of the UL/Term created a dilemma of how to handle the policy.

As an interim step to determining whether to keep or replace the term life insurance, a personalized LE was performed to establish a baseline from which to make decisions about her life insurance. Everyone was surprised to learn that the LE was 9.45 years.

As it turned out, in spite of the outward appearance of good health and strength, "Superwoman" had osteoporosis with fractures (in the spine), no doubt as a result of her active lifestyle. There were no sudden death issues - the biggest concern for a woman her age - but rather structural issues.

The son decided to keep the existing life insurance policy; it was suddenly a good investment with respect to the financial aspects of his mother's life expectancy. She died before the term policy expired.

This case represents an example of morbidity issues more than immediate mortality. And with respect to both "Nursing Home lady" and "Superwoman," advisors and policy owners must remember that in both general and personalized assessments, LE is about the *group* - not the individual! We then manage the group statistics to optimize an individual result.

3. **"She's going to die soon"** - (because everyone said you couldn't buy life insurance on her):

In this next case, the client was an 83 year old female with $10 million of life insurance. The agent had tried to underwrite replacement coverage in conjunction with a life settlement "chaser"

(attempting to settle the old policy as if she had a limited life expectancy and then to qualify for a standard or better rate class on a *new* policy). The agent was told by her brokerage General Agent that several insurance company senior underwriters had concluded "she's going to die soon," based on her exam and medical records.

The client did, in fact, have cardiovascular impairments. "Sudden Death" issues for elderly individuals are of great concern when underwriting new insurance and is one of the reasons applicants over the age of 80 rarely qualify for better than a standard rate class. But the medical records didn't suggest that her LE was necessarily that low. In fact, the personalized LE came back at 9.9 years. "She's going to die soon" had an LE better - relative to her age - than "Superwoman's" yet she couldn't qualify to acquire a new policy.

The agent was understandably frustrated: he couldn't acquire new coverage for his client, but the family was "managing" premium flows on the existing policy with a "die soon" expectation. As a result, the policy was seriously underfunded with a likely lapse within 3 or 4 years in spite of the 50/50 chance of still being alive almost 10 years from now.

This case is again a good reminder that while micro-managing premium funding can be a very effective way to optimize a policy's ultimate value, belief versus objective information can be in conflict, and families may not be inclined to follow the advice they receive about the necessity to fund a policy for a longer duration. Exacerbating this particular situation was that the insured's 75 percentile LE took her to age 95, and the subject policy was due to mature at that age. This meant that if the insured did manage to live past the duration of the policy, the death benefit would only be equal to the cash value - subject to income tax in excess of premiums paid - creating a "triple whammy" of risk. Should the family try and fund to sustain the policy to age 95 when there is still a 1 in 4 chance that the premium dollars have been wasted because they were funding the policy to a cash value of $0 at age 95?!

People don't necessarily die earlier than expected; they also live longer (and in the future, likely *much* longer).

4. **"67-year old couple"** - a classic case of underfunding a variable UL policy - facing a substantial premium remediation versus switching to NLG:

In the final case, this wealthy couple owned a substantial manufacturing company. They had three adult children, only one of whom was in the business. One of several policies was owned by an Irrevocable Life Insurance Trust. Their son in the business was co-trustee of the ILIT, along with the CFO of the corporation (a very common but very risky approach), and all concerned had a substantial interest in making sure that the various life insurance policies worked to facilitate the estate-equalization plan of the parents. Their variable universal life coverage (owned by the ILIT) had been acquired 10 years prior with great ("dot com") optimism for the future of the stock market. They had no hesitation in assuming a 12% hypothetical illustration for the VUL - nor were they wary about the relatively high crediting rates of the 2 UL policies that rounded out their portfolio. By 2010, however, the son was concerned about substantially lower equity values *and* lower interest rates, and wanted affirmation that the policies were still "working."

While personalized LEs are not typically conducted prior to age 70 - 75 unless there are known adverse health conditions[42], LEs were prepared because of the amount of insurance dollars "at risk," and the parents did have *some* impairments. It turned out that because of deteriorated health determined from the medical review, a new NLG policy was going to cost $105,000 versus the modified $128,000 annual current funding of the VUL.

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[42] For the Life Expectancy and Health Expectancy information to have significant and meaningful accuracy, the candidate should have a life expectancy of less than 20 years. The shorter the life expectancy the more accurate the results will be. Generally speaking, individuals over 70 and younger people who have experienced significant life-shortening illnesses are good candidates.

In this case a deteriorating LE expectation would produce better ultimate coverage in the existing policy when appropriately funded. Replacement made no sense. The bottom line: the couple had an extremely valuable piece of property due to their decline in health. The $23,000 difference in premium between appropriate re-funding of the VUL versus the premium for the NLG exchange acquired a substantial average increase in ultimate death benefit at life expectancy, as can be seen in the following chart:

	Premium	Average Death Benefit @ Life Expectancy
New NLG	$105,000	$5,000,000
Re-Fund Existing Policy	$128,000	$13,350,000
Equivalent IRR on premium difference	$23,000	18.3% IRR to generate additional death benefit

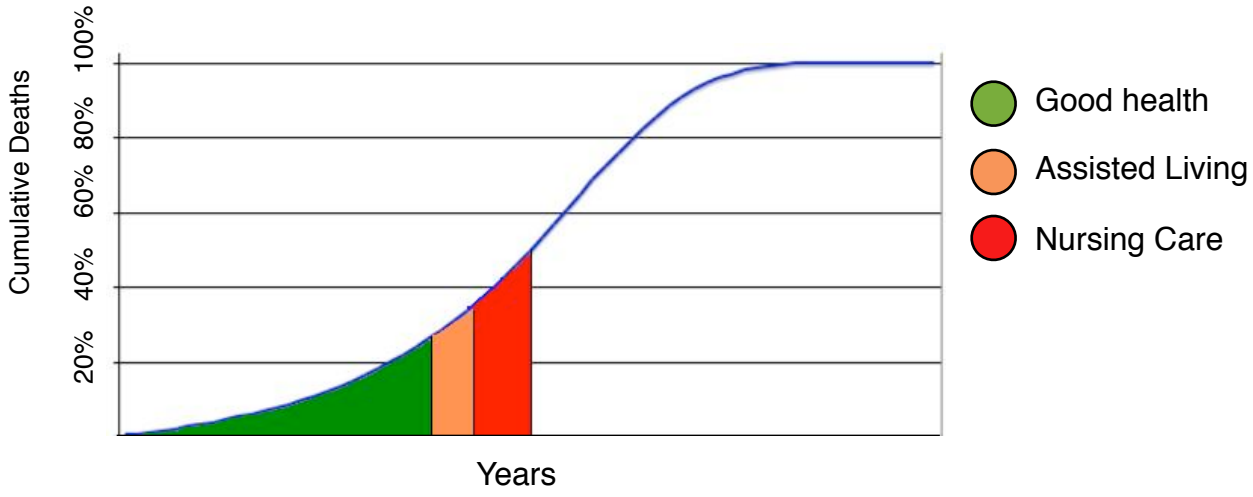
The Health Expectancy

Not only do life expectancies follow a unique pattern based on personal history, but the way we decline in vitality also follows a pattern. The following story will help explain the usefulness of this tool.

The average period of decline from healthy living until death can range from just a few months through many years, depending on the nature of underlying medical conditions. Once physical and/or cognitive decline impacts daily functioning, there will likely be a period for which we might need assisted living arrangements, home health care, and/or skilled nursing care until inevitable death.

Recall "Superwoman." Rather than being the picture of vibrant and athletic health who would "live forever," her LE and HE (Life Expectancy / Health Expectancy) report indicated she

already had "osteoporosis with fractures," which is a debilitating disease. To use an automobile analogy, her motor and parts were in great shape but her chassis was falling apart without the possibility of repair. Not only did this substantially reduce her life expectancy, it gave her a probable prognosis of a much longer than normal period of decline prior to death. In her case, - it was estimated by the two actuarial firms consulted regarding her medical records that she had 1.3 years (vs 9.5) of good health followed by an expectation of 4.1 (vs. 2.58) years of assisted living, and finally followed with an expectation of 4.06 (vs 2.7) years of nursing home care. This suggested a period of decline that was almost 4 times the normal period - over 8 ½ years of projected assisted living and home health care needs based on statistical data available to the analysis of "Superwoman's" medical conditions.



What could she do with this information? She could cut back on competitive cycling and join or teach spin classes to avoid future falls. She could move into a one-story house since she had been considering down sizing from her old 2-story house. In doing this she could move closer to her children and grandchildren to enjoy her remaining years with them. If necessary she would have loved ones around to assist with her future care needs. She could begin investigating various care giving options and facilities on her own so her family would not be burdened with that chore. Most importantly she could enter into various discussions about what to do in the

event of future health declines. And as we learned, there were valuable financial decisions she and her advisors could make about her life insurance and other financial planning issues based on this new information.

Chapter Summary

In 1992 The Society of Actuaries published an extensive examination of illustrations and illustration practices associated with the purchase of life insurance. Its conclusion: " ... (when) illustrations are used to show the client how the policy works; (it is) a valid purpose of policy illustrations. Illustrations which are typically used, however, to portray the numbers based on certain fixed assumptions - and/or are likely to be used to compare one policy to another - are an improper use of the policy illustration." Furthermore, the Executive Summary of the Society's report concluded: " ... How credible are any non-guaranteed numbers projected twenty years in the future, even if constructed with integrity? How does the consumer evaluate the credibility of two illustrations if they are from different companies? Or even if they are from the same company if different products with different guarantees are being considered? Most illustration problems arise because the illustrations create the illusion that the insurance company knows what will happen in the future and that this knowledge has been used to create the illustration."

In-force illustrations, however, *can* be informative when more sophisticated assessment tools are deployed in conjunction with those illustrations, such as overlaying the results of personalized life expectancy as part of the process of policy management.

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Chapter 9
Precepts of Fiduciary Standards of Care

There exists an extensive patchwork of regulations affecting the financial services industry. It starts with a network of state and federal agencies - and includes the backdrop of Insurance Commissioner "Model Regulations," FINRA suitability and supervisory regulations affecting *some* insurance agents, and congressional mandates (i.e. The Securities and Exchange Acts of 1934 and 1940). The end result is to leave an uneven landscape of guidance for insurance agents and protection for the consumer. The Dodd-Frank Wall Street Reform and Consumer Protection Act – specifically Section 913 of the Act - requires the SEC to complete a study on the issue of standards of care for registered representatives (which includes stock brokers) by early January 2011. The intention of this section was to "level the playing field" by making all those licensed to sell financial products subject to the precepts of *fiduciary.*

With a near certainty that Registered Representatives will be required to operate under a standard of care much more like fiduciary than the prior "know your client" standard (and the possibility that agents and brokers will have similar rules imposed at some point in the future), just exactly what does *fiduciary* mean at a practical level for financial service professionals interacting with their prospects and clients?

The critical definition of *fiduciary* can be reduced to three broad standards, and might be considered the three legs of a stool. Without sturdy and equal-length legs, the stool will topple. We seek balance in the relationship with a client, and the fiduciary standard as defined below goes a long way to that objective.

- "A fiduciary places his or her client's interest before their own." It's not that advisors acting under a fiduciary obligation can't have an economic benefit from working with a client, although there are some commentators who come very close to suggesting just

such a notion. The emphasis here is a commitment to subjugate *our* best interests to those of our client, and making certain that the client understands this perspective.

- "A fiduciary makes *appropriate* disclosure of all *relevant* facts needed by the client to make a decision that they determine is in their best interest." There's an enormous amount of *data* surrounding planning, whether the nature of the plan is financial, insurance, business, retirement, estate, or charitable. It's important to differentiate between data and information - the latter of which is much more difficult to come by than the former! In fact, the lack of *information* and *advice* is precisely the realm of service and opportunity for the professional advisor. Yet taken literally, disclosure requirements could be met by simply delivering volumes of prospectuses and other written material - the receipt of which adds absolutely no real value and in no way facilitates client understanding and willingness to proceed with a plan or a financial product. The fiduciary standard focuses on providing the level and type of information necessary to allow clients to feel able to make a decision that is in their best interest with the help of the advisor.

- "A fiduciary discloses any conflicts of interest that could be interpreted as bringing bias to the recommendation *but for the disclosure.*" The conflict of interest that is paramount in the regulatory "mind" in late 2010 is that registered representatives and life insurance agents receive commissions as a result of selling a financial product. New York Department of Insurance Regulation 194 requires disclosure of compensation - when asked for by the buyer - effective January 1, 2011, and other states are looking at similar disclosure requirements. While it can reasonably be argued that there are few goods or services we buy in our daily lives for which there is regulation requiring disclosure of compensation (would that be revenue or net income after expenses?), it is a reality of specific legislation such as New York's *and* it is a reality for anyone for whom a fiduciary standard is imposed.

Hence, *fiduciary* as a standard of care is going to completely change the landscape of financial planning and product transactions. But *fiduciary* doesn't need to be an insurmountable problem for advisors for whom product placement is part of the process:

1. Receiving commissions is *not* contrary to a fiduciary standard. They simply have to be disclosed. If this were in doubt, the Dodd-Frank legislation specifically states that the fiduciary standard cannot prevent brokers from charging commissions or offering a limited menu of investment choices.

2. There is an underlying concern that the client wouldn't complete the transaction if it were known at the time of sale that the agent's commission and other compensation could be as much as the entire first premium paid for a new life insurance policy, even though the commission doesn't come out of policy values *per se*. But jewelry typically has a markup of three to ten times its "cost," and that doesn't seem to inhibit the purchase of engagement rings and diamond bracelets. In the recent past, it was not uncommon to buy real estate knowing that the seller - as the previous buyer - had paid less than half the price being paid now; if you like the house, you pay the price. The issue, then, is a matter of perceived value, and life insurance has always suffered from the fact that it is an intangible product that doesn't provide immediate gratification other than the peace of mind of knowing that the family (or business or charity) is "protected."

3. As financial professionals begin to figure out how to run their businesses and serve their clients in the new - seemingly hostile - regulatory environment, those selling financial products will need to consider how to imbed a clear sense of value into their selling processes.

4. "When they're running you out of town, get at the head of the line and make it look like a parade!" Professionals who make at least a portion of their income from the sale of

financial products may find it in their best interest to be more proactive and *embrace* the fiduciary standard of care as trade organizations fight - perhaps in vain in the long term - to stave off the inevitable. An example of such a proactive statement of practice can be found in "An Agent's 6 Principles of Ethical Market Behavior" (**Appendix D)** reflecting an agent's commitment to uphold the ethical standards of the Insurance Marketplace Standards Association (IMSA).

Intriguingly, fiduciary standards are not entirely new to the sale of investment and insurance products. While the 1940 Securities and Exchange Act exempted registered representatives (i.e stock brokers) and sales agents are typically considered agents of the insurance company and therefore not *able* to represent the client in a fiduciary capacity, there are notable exceptions. For one, the Employee Retirement Income Security Act (ERISA) and subsequent rulings from the Department of Labor (designated under ERISA to carry out the Act's provisions) make it clear that those who sell investments to - or advise on investments for - an employee benefit or retirement plan, are considered fiduciaries to those plans. Further examples in case law have held that investment or insurance agents holding themselves out as having specific expertise - or of whom it would be reasonable that the client inferred such expertise - have potentially entered into a fiduciary relationship with that client. Finally, designation "heavy" advisors may, by the very achievement and display of designations indicating higher levels of expertise and focus, be held to a higher standard when faced with an arbitration or law suit for negligence in their activities or duties on behalf of a former client.

Financial planners who have passed the appropriate exams and other qualifications to use the CFP Board's CFP® "mark" have been under a fiduciary-like practice standard since July 2008. Stock brokers, registered representatives, and insurance agents who use that "mark" have accepted those practice standards, and applicable examples can be downloaded at www.CFP.net.

While higher standards - or duties - of care may in large part derive from anger over the Madoff ponzi scheme and the enormous risk undertaken by AIG for which taxpayers provided extraordinary financial rescue, fiduciary standards are not in and of themselves onerous or contrary to good business practice. In the author's observations, good stock brokers and good insurance agents operate out of a "what's good for the client is good for me" philosophy, and that's a practical outcome of applying fiduciary standards to one's business practices.

Fiduciary myths

There are some common misperceptions about what *fiduciary* means in the context of product sales. Acting under a fiduciary standard of care:

- A *fiduciary* is *not* expected to recommend only the "best" product. This is not possible under *any* standard since there are too many alternatives and "best" includes subjective qualification. The objective, therefore, is to provide information about products that are *suitable* for the needs, risk tolerances, and reasonable expectations of the client. If there are alternatives that could meet the suitability standard, a fiduciary would discuss the broad options consistent with appropriate disclosure of information and potential conflicts of interest.

- A *fiduciary* is *not* expected to only recommend "no load" products. The existence of a sales commission does not, per se, make it inappropriate for the client as sales commissions are only one of numerous elements of expense within a much broader consideration of what will "perform" and otherwise serve the client's needs. Further, so-called "no load" products often do not out-perform their commissionable cousins. One significant factor in the profitability of any financial product is to spread unit expenses across a large enough base so that those expenses will not unduly and adversely affect the "manufacturing" profit of the insurance company or other developer of financial

products. A number of so-called "no load" product lines have failed to produce sufficient placement, ironically causing the issuing insurance company to raise its expenses or sell off the block of policies to stem their losses.[43]

- A *fiduciary* is *not* expected to have access to every product in the marketplace. However, if the agent is restricted in his or her access (for example, an employee or agent for an insurance company that does not generally allow the sale of products outside its own manufacturing), this must be disclosed and discussed with the client.

- A *fiduciary* considers suitability and individual facts and circumstances, and finds an appropriate product(s) or policy(s) that will meet the client's needs, not just the seller's needs.

- A *fiduciary* creates an objective process *that you follow consistently*. The Society of Financial Service Professionals (SFSP) and the CFP Board have produced Codes of Ethics, Rules of Conduct, and Disciplinary Rules and Procedures. The CFP Board has also produced detailed Financial Planning Practice Standards that can be used by any financial professional - not just those qualifying to use the CFP® "mark" - seeking to "get at the head of the parade."

Chapter Summary

Consumers can't be expected to appreciate which "hat" the Registered Representative or licensed insurance agent / stock broker / financial planner is wearing, and this fact alone may accelerate the drive to elevate standards of care within the broad financial services industry. While "fiduciary" is troublesome to many professional and honest vendors of financial products -

[43] USAA sold its VUL block of policies to Ameritas in 2000 when it failed to sell a sufficient number of policies to reasonably amortize its manufacturing and administration expenses. Low sales volume resulted in significantly higher unit expenses than had been anticipated, and the VUL line had begun to negatively affect other product lines.

including life insurance - accepting a universal standard of care may ultimately be in the best interest of all constituents. "When they're running you out of town, get at the head of the line and make it look like a parade."

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Glossary of Insurance Terminology

1. **Whole life insurance**

Whole Life policies have guaranteed premiums, cash values, and death benefits. If the policy pays a "dividend" - it is the only component that is not guaranteed in the contract.

a. Level vs. increasing/modified premium

Most whole life policies have a level-for-life guaranteed premium. Some insurers have offered policies with initially lower premiums that increase over a period of 5 - 15 years to a level-for-life premium that is ultimately higher than a straight forward level premium policy.

b. Death benefit

Death benefits are guaranteed as long as the policy is "in force." If premiums are paid when invoiced, the policy and its death benefit are guaranteed.

c. Dividends

Some insurance companies are "mutual" - meaning that they are beneficially owned by their policyholders rather than outside stockholders. Mutual insurers charge a somewhat higher (guaranteed) premium for their whole life policies as a way of creating additional reserves. As their investments perform better - and as their expenses are lower - than those assumed in the guarantees, surplus reserves are created. The Board of Directors annually determines how much of that surplus can be re-distributed to the policyholders (to the extent that policies have contributed to those reserves) and the result is the payment of a tax-free dividend. Once the dividend is paid, the policyholder can use it to reduce his premium or use it to buy additional increments of PAID-UP insurance - known as "paid up additions."

d. Cash value

The cash value is the major part of the insurers reserve on which it relies for its guarantees. The cash value of a typical whole life policy will be relatively insignificant in the first few years, and gradually increase to the point where it equals the death benefit at age 100 - 121 depending on the design of the policy. The cash value is an asset of the policy owner. There is no "surrender charge" in whole life (as there is in universal life); the cash value *is* the surrender *value*.

2. **Universal life** (and its components) = (1) term insurance; (2) crediting interest rate; (3) death benefit; and (4) cash contribution/calculating amount.

   Universal life is a fluctuating amount of term insurance that - when added to the underlying account value of the policy - equals the death benefit due the beneficiary whenever the insured dies (as long as the policy is still "in force."). Conceptually, a Universal Life policy is a "savings account" paying no less than a certain amount of interest (once typically 4% and more recently 2½ to 3%), which is authorized to pay the monthly charges for the "term insurance" portion of the policy and other policy expenses.

   The carrier periodically declares a crediting interest rate that cannot be less than specified in the policy. The crediting rate can be changed as often as the carrier chooses, subject to any self-imposed limitations specified in the policy. While a carrier will want to show as high a crediting rate as possible on the sales illustration (but can not show any more than it is actually currently paying), the carrier typically does not tie the crediting rate to an index or other external reference point. Therefore, it is free to lower its rate, subject to the policy guarantee. Universal Life policies "in force" for more than the last 10 years will typically be paying *only* the guaranteed crediting interest rate due to the much lower rates prevailing on insurer investments (typically 10-year U. S. Treasury Bonds). Nothing compels the carrier to increase rates based on improving earnings in its bond portfolio.

   The death benefit of the policy is detailed on the "Specifications Page" of the policy. If it is a level death benefit, then the amount paid to the beneficiary is the stipulated death benefit, consisting of the account value + net amount at risk (term insurance) necessary to equal the stipulated death benefit. The policy owner could also have elected that the policy pay an increasing death benefit, which would be equal to the account value at the time of death plus the full stipulated death benefit. In this latter case, the net amount at risk is always the stipulated death benefit and the amount paid to the beneficiary is that death benefit plus the account value. Of course, the cost for this feature is greater than for the level death benefit.

   The cash value of the policy (also called the account value) is the result of monthly accounting for the following:

   Cash value at the end of the last "period" (always a month-to-month accounting)

   PLUS

   any amounts paid into the policy by the policy owner (technically called a "premium")

PLUS

a month's portion of the crediting interest rate

MINUS

Cost of Insurance (COI) - which is an age-based, scheduled charge per $1000 of average net amount at risk

MINUS

Other charges including sales charges and policy fees enumerated in the policy

EQUALS Ending cash value

If the policy is to be "cashed in" - the policy will be subject to a surrender charge if the policy is still in the "surrender period."

Indeterminate premium (and what that means to the client)

The least understood aspect of universal life is the "premium." The main feature of a universal life policy is that its premium is indeterminate, meaning that there isn't a set, guaranteed premium. The state Departments of Insurance all dictate that the word "premium" is used (so that agents won't call it an "investment"), but the term can be misleading to people who are used to whole life-style policies. It is a "cash contribution" - but consistent with the requirements of the regulators - a better term of art is "funding premium." The funding premium can and most likely will need to change over the life of the client, especially if the initial objective was to pay as little as possible for the coverage.

An important role of the agent is to translate this technical calculation process into a "premium" recommendation that is not merely designed to look really "cheap" compared to other comparable policies, when in fact it is unlikely current crediting rates will be able to support the policy with that "cheap" premium in the long-run. The policy illustration can be used as a calculator for such a premium - but a policy currently paying 6% for which the resulting premium is $1000 - cannot sustain the policy if interest rates fall to 4% and the $1000 isn't increased appropriately. For example: the premium for a $1 million policy on a 45-male quoted at 6% will need to be increased by 35% if the policy's interest crediting rate soon falls to 4% and doesn't increase again.

Surrender charges

It costs the insurance company 150-250% of the first year "target" premium to underwrite the policy the first year (most of this is commissions and various allocated overhead and expenses including state and federal premium taxes). In order to recover its costs if the policy is surrendered before the carrier can make itself financially whole, it imposes a surrender charge. The charge is typically imposed for as little as 5 years or as many as 20 yeas, and is specified in the policy. The charge will typically decline over time. A surrender charge is also typically assessed if the policy death benefit is reduced during the surrender period.

3. **Underwriting rating procedures (super preferred, preferred, standard, table and letter "ratings") and impact on policies**

In the "good 'ole days," there was "standard" and then there were various levels of surcharges (sub-standard ratings) that compensated for health that was less than "standard." In the late 1960s and early 1970s carriers added the distinction of "smoker" and "non-smoker" - and as competition heated up, carriers began making sub-categories of "standard" to include those whose health was similar to that expected of marathon runners and/or those with extremely favorable family history. Some carriers have 3 - 5 such gradations *above* standard, literally making "standard" comparable to yesterday's sub-standard ratings. There is little comparability of these classifications from one carrier to another. It is possible for one carrier's "preferred" (the lowest in a range of 3 super-preferred categories) to be little better than "standard" with a company that has only one "preferred" category.

A rated policy will typically be indicated on a "table" basis. Each table (for example, Table A through L or Table 1 - 12) represents a 25% incremental surcharge on the standard scale of cost of insurance, which consists of age-based rates per $1000 of net amount at risk. The cost of insurance – with its table rating - goes up on each policy anniversary consistent with the increase in the insured's year-by-year age.

FOR EXAMPLE: A $1 million universal life policy on a "preferred non-smoker" 45-year old might have an annual $11,215 "premium" with an (unrealistic) expectation of a constant 5% crediting rate. A "standard" 45-year old similarly calculated "premium" is $12,783, and a "standard smoker premium" would be $17,010. A "Table D" non-smoker's premium is $19,187 and a "Table D" smoker's premium is $26,627. All of these "premiums" are calculated using the described rating classification and the target of "endowing" the policy at age 100 with annual premium payments.

4. **Mutual vs. publicly traded or privately held insurers**

Mutual insurers have no outside shareholders. Their policyholder's "own" the company in approximate proportion to the amount of their policy's cash value to the total reserves of the insurer. Excess "profits" (from a combination of claims and expenses less than the "worst case" actuarial assumptions contained in their guarantees and portfolio returns more favorable than guaranteed assumptions) are paid back to the policy owner in the form of a tax-free return of premium called a "dividend." The Board of Directors owes its allegiance and attention to the best interest of the policyholders.

Publicly held or privately owned insurers are owned by shareholder(s), whose stock may or may not be traded on a public exchange. The Board of Directors owes its *first* allegiance and attention to its stockholders.

5. **Commission schedules** (how they work)

The typical policy will pay a commission of 55% - 100% or more of the first year "premium" to the licensed agent/broker. If the insurer contributes Social Security taxes on the agent's commissions, other employee-style benefits may increase the total compensation well above 100% of "premium." Brokers may also receive expense allowances and other concessions that take the total compensation above 100% in the first year.

Universal life policies - since they can take in large "rollover" payments - will typically have a maximum "premium" on which such high percentages of commissions are paid. This is referred to as a "target" premium.

Commissions paid in excess of the "target" - and commissions paid after the first year - are typically paid at 5% of the paid premium. There are many variations of "renewal commission" arrangements that could pay, in total, as much as another 50% or more of the "target" premium from years 2 - 10. There are often "service" fees paid beyond the 10th year.

Commissions on universal life policies are generally paid only when the policyholder pays a premium. Service fees beyond the 10th year may be paid on “net asset value” regardless of whether premiums are paid.

a. How commissions are handled when policy is surrendered and cash value transferred

Most insurance companies pay little or no new commission for a policy that is exchanged into another *within the same company* unless the death benefit has been increased; then, a commission will be paid on the increase.

However, if a policy is surrendered in favor of a new policy with another company, it is customary to pay a full commission to the agent. It is here that the "target" premium will define the premium base on which the commission will be paid.

b. Repayment of commissions if the policy is cancelled within first two years

Many insurance companies will "charge back" commissions if the policy is lapsed within the first 1 - 3 years of policy initiation.

c. Agent vs. broker

State Departments of Insurance typically define anyone licensed to sell life insurance as an *agent*, regardless of the type of compensation relationship he or she has with the company.

From the company's standpoint, it views agents as having a primary relationship in which the agent will sell *their* policies unless there's a very good reason not to. A broker is licensed to sell for this and many other insurance companies, and is seen as one who "shops around for the best deal."

But regardless of the business relationship - "agent" or "broker" between insurance company and licensed individual - the life insurance license creates an agency relationship, meaning that the "agent" legally represents the company and has classic "agency" duties to the insurance company.

6. **Insurance illustrations** and their proper use

A life insurance policy *illustration* is not the life insurance *policy*. This is a primary principle and caveat of the life insurance industry, but consumers (and some agents) continue to believe the policy illustration and its very tangible "view" of a complex financial instrument has predictive value.

- Policy illustrations must be based on no more than "current scale" and indeed must be annually certified to the various Departments of Insurance by the carrier's illustration actuary. "Current scale" incorporates those elements of the policy (premium charges, cost of insurance, crediting rates, etc.) that are more favorable than those same elements at their contractually guaranteed levels.

- Policy illustrations are problematic in part because they are incapable of conveying the information a consumer would need in order to make meaningful policy decisions, since

future credits and debits to the policy – especially those relating to actual investment returns and/or actual claims experience of the carrier – will be based on actual experience which will inevitably vary in ways that cannot be predicted.

- There is a general tendency among agents to depend on the illustration to establish a "premium" or "price" for the indeterminate premium policies they're selling. "This is a completely inappropriate use of the illustration" states The Society of Actuaries, "Final Report of the Task Force for Research on Life Insurance Sales Illustrations under the auspices of the Committee for Research on Social Concerns."

- Illustration regulations adopted by the 50 state Departments of Insurance all stipulate some variation on the theme that "…illustrated values are neither projections nor predictions, and actual results will likely be more or less than shown." This warning is not dissimilar to the "sticker" of a new automobile proclaiming the EPA gas mileage to be "22 / 28 (but actual use will vary)."

- The Society of Financial Service Professionals (the organization serving those holding professional designations such as CLU, CPA, JD, CFP, CIMA,ChFC and CPCU - in turn offering professional collaboration, continuing education, and ethical guidance), states in its Illustration Questionnaire "…sales illustrations are usually designed to present potential benefits and costs under a set of non-guaranteed assumptions more optimistic than the guarantees. The insurance company generally limits its responsibility to the guarantees. So the risks associated with the possible inability of a product to achieve the higher illustrated benefits … than those generated by the guarantees are borne by the policyholder." - Society of Financial Service Professionals, Newtown Square, PA, "Illustration Questionnaire."

7. **Replacement of life insurance** - standards and abuses

Policy replacement is deemed inappropriate on its face by almost all Departments of Insurance unless certain procedures are followed to fully present the advantages and disadvantages of dropping one policy in favor of another. Regulation is necessary since, according to the Society of Financial Service Professionals in its Replacement Questionnaire "…Replacing an existing life insurance policy with a new one generally is not in the policyholder's best interest. New sales loads and other expenses, the new company's right to challenge a death claim during the suicide and contestability periods, changes in age or health, and the loss of important grandfathered rights are some of the obvious reasons that most replacements cannot be justified." (Society of Financial Service Professionals, Newtown Square, PA, "Replacement Questionnaire"). The RQ can be found in **Appendix Q**.

Because of the financial damage that can be created by an inappropriate replacement, policy replacements are regulated by the states. Concerns about replacement of one policy for another should include whether the consumer has been informed as to:

The potential adverse consequences of changes in the grantor's age and health in purchasing new insurance;

Surrender charges levied on the old policy;

New sales loads and other expenses incurred with the new policy;

The insurance company's right to challenge a death claim generally within two years from the date of issue;

Whether the existing policy(ies) could be modified to meet current needs;

Received and *understood* the new insurer's brochure - generally required by the regulators - on the topic of "Before You Think About Replacing Your Life Insurance."

About the Authors

Richard M. Weber, MBA, CLU, AEP® (Distinguished) is Managing Member of Ethical Edge Insurance Solutions, LLC. With Dick's 43 years of experience in sales, training, product design, senior management, and compliance, the firm provides training and consulting services that help empower life insurance agents, financial planners, advisors, and their clients to explore and view life insurance in the broader context of financial planning. With co-author Chris Hause, Dick is co-inventor of a process of applying Monte Carlo probability analysis to anticipate realistic premiums and financial outcomes for universal and variable life insurance.

Dick holds an M.B.A. from the University of California at Berkeley with a specialty in Insurance and Finance and was designated a Chartered Life Underwriter in 1974 by the American College. He has served as President of both the local Life Underwriter and the local CLU Chapters in the San Francisco Bay Area, for many years was a member of the Association for Advanced Life Underwriting, and most recently has been elected the 2010-2011 Secretary and member of the Society of Financial Service Professionals' Executive Committee.

Dick has given presentations to virtually all the financial services educational venues, including: SFSP Arizona Institute, the Million Dollar Round Table, the Top of the Table, the Society of Financial Service Professionals, the Association for Advanced Life Underwriting, Trusts & Estates Educational Forum, LIMRA, the International Association of Financial Planners, the Society of Actuaries, the American Bar Association, FPA Annual Conference, and the College for Financial Planning.

Dick's insurance expertise is reflected in the more than 200 articles he's written for a number of industry publications. His recent book - published by Marketplace Books - is entitled "Revealing Life Insurance Secrets: How the pros pick, design, and evaluate their own policies. and is directed at advisors and financial service professionals. Dick's and Chris' first research collaboration - *Life Insurance as an Asset Class - A Value-added Component of an Asset Allocation* - was honored with a 2008 Best Paper Award from the Academy of Financial Services.

Dick Weber was the Society of Financial Service Professional's Kenneth Black, Jr. Leadership Award recipient for 2008 in recognition of his "... exemplary leadership qualities and significant contributions to the fulfillment of the Society's core values of ethics, education, and relationships." In 2009, Dick was elected to the NAEPC Estate Planning Hall of Fame and selected to receive the Distinguished Accredited Estate Planner award and designation for "… significant and outstanding lifetime achievements and contributions to the practice and profession of estate planning."

Christopher H. Hause, FSA, MAAA, CLU is Chief Actuary and a principal in Ethical Edge Insurance Solutions, LLC. and has also formed the firm Hause Actuarial Solutions, Inc. after serving as Managing Partner for William M. Buchanan & Associates. Chris has been a Fellow of the Society of Actuaries since 1986, and has been a Member of the Academy since 1980.

He earned a Bachelor's degree in Mathematics at the University of Wyoming in 1975.

Chris brings a unique blend of actuarial and management skills, having worked for insurance companies most of his career. His top-to-bottom knowledge of all functions of the insurance business brings quality and usability to all the projects undertaken by his firm. Hause Actuarial's primary areas of practice are Ordinary life and annuity, Credit, and Health insurance.

Prior to forming Hause Actuarial Solutions, Inc., Chris was Senior Vice President and Actuary for Individual Assurance Company in Kansas City, Missouri for over 12 years. He served on the Board of Directors and the Investment Committee. He was the Chairman of the Long Range Planning Committee. IAC 's primary products are credit life and disability, group mortgage life and disability, and term life sold through its client banks in the Midwest.

Chris' past work experience includes exposure to a broad range of products and distribution systems. Prior to IAC, Chris worked at Pyramid Life in Mission, Kansas, Allianz Life (NALAC), and ITT Life in Minneapolis.

Chris is a member of several special interest sections of the Society of Actuaries and has served on the Council of the Marketing and Distribution Section and the Smaller Insurance Companies Section. He is a frequent speaker at SOA events and is a past President of the Kansas City Actuaries Club.

Appendices

Appendix A

HUMAN LIFE VALUE

43 year old highly paid Executive - narrative for calculating Human Life Value (HLV):

1. A 43 year old executive providing a substantial portion of her family's financial support with her current salary of $300,000 (and taking into account inflation) might result in a HLV calculation of $4,500,000* million to be replaced by appropriately deployed life insurance policies.

Assuming future stock options, bonuses, and executive health, welfare, and retirement benefits kicking in at various times in the future, her insurance needs should be recalculated at each substantial life event since her coverage requirements could change.

The 43 year old Business Owner - narrative for HLV plus Insurable Business Interest:**

A 43 year old business owner providing a substantial portion of her family's financial support with her current salary of $300,000 (and taking into account inflation) would, of course, result in a HLV calculation of the same $4,500,000 million to be replaced by appropriately deployed life insurance policies.

Although the two individuals have similar age and income variables, the business owner's "value" can end up being substantially more. This is caused by the fact that the business may introduce other factors for which we must take account. These additional needs are tied to such factors as:

1)Key Person (standard guidelines can raise insurability limits by up to 7.5 times salary)
2) Mortgage and Loans (up to total business full value of loans)
3) Keep/Sell (up to her portion of the value of the company)
4) Estate Tax Impact (up to potential impact of her portion of company as it pertains to Estate Taxes due at her death.

* Death Benefit based on typical industry guidelines for age / death benefit as a multiple of income.

**The purpose of this business insurability example shows the total potential insurability of the owner. It enables us to educate the business owner to what her total potential liabilities may be and assist in prioritizing in what order to deal with them.

Appendix B

Insurance Product Matrix

Policy Type:	Yearly Renewable Term	Level Premium Term	Universal LIfe	Variable Universal Life	No Lapse Guarantee Universal Life	Participating Whole Life
Best For:	Very short-term needs such as securing a 1-year term loan	Longer-term needs that are clearly not lifetime needs	Lifetime coverage with considerations of budgetary restrictions or the need for flexible payments	Lifetime coverage with little or no budgetary restrictions *and* a high tolerance for short-term volatility	Lifetime coverage at the lowest possible cost - with no need for flexible premium arrangements or the possibility of an increasing death benefit	Lifetime coverage in which cost is less of a factor than long-term benefits including increasing death benefit and access to cash value
Not Best For:	Any uncertainty as to how long coverage will be needed	Any uncertainty as to how long coverage will be needed.	When flexible payment opportunity may lead to failure to pay needed premiums	Those with anxiety over volatile market activity	Need for cash value and/or death benefit growth	Need for large amounts of coverage and limited resources to pay premiums. High initial premiums may restrict death benefits in Trusts with few Crummey beneficiaries.
Issues:	Presumably a conversion option will not be needed; can be "shopped" on the basis of premium; A M Best rating no less than "A"	Pay for a conversion option in the event the need later becomes lifetime. Can be "shopped" on the basis of premium; A M Best rating no less than "A"	Dilemma: carrier has transferred all the sufficiency risk but retains all the control to make the in-force block of policies "profitable." Do NOT shop on basis of premium; A M Best rating no less than "A"	Illustrations do not reflect effects of volatility. First determine asset allocation and historic rates of return, and then ask for a "Monte Carlo" estimate of a premium that will sustain the policy at least to age 100.	Make certain to understand the conditions under which the guarantee can be lost - and reinstated. A M Best rating no less than "A++"	Purchase from mutual insurance company; consider "paid up additions" for dividend election. A M Best rating no less than "A"
Risk Index:	0	0	3	15	0	1.8
Sample Premium 33 M Preferred	$385 first year	$590 level - 20 years	$6,034/year	$4,824/year	$4,478/year	$13,895/year
Death Benefit at Life Expectancy	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$3,665,327
NPV @ 5% of all cash flows	-$21,729	-$21,761	-$27,332	-$442	$5,844	$67,176

Appendix C

The IMSA Principles of Ethical Market Conduct

Each life insurance company subscribing to these principles commits itself in all matters affecting the sale of individually-sold life and annuity products:

1. To conduct business according to high standards of honest and fairness and to render that service to its customers which, in the same circumstances, it would apply to or demand for itself.

2. To provide competent and customer-focused sales and service.

3. To engage in active and fair competition.

4. To provide advertising and sales materials that are clear as to purpose and honest and fair as to content.

5. To provide for fair and expeditious handling of customer complaints and disputes.

6. To maintain a system of supervision and review that is reasonably designed to achieve compliance with these Principles.

Appendix D

Agents' and Brokers' Principles of Ethical Market Conduct*

Each insurance agent and broker subscribing to these principles commits her and himself in all matters affecting the sale of individually-sold life and annuity products:

1. I will conduct business according to high standards of honesty and fairness and render that service to my clients which, in the same circumstances, I would apply to or demand for myself.

2. I will provide competent and customer-focused sales and service, and will maintain a level of professional competence through a lifetime commitment to professional growth and continuing education.

3. I acknowledge the different constituents whom I serve: insurance companies and the wider insurance industry, my clients, my client's advisers, my community, and my family - and I will resolve ethically any conflicts that might arise between those relationships.

4. I will communicate fully and effectively so that clients receive appropriate recommendations that balance the natural inclination to maximize benefits, tempered by their unique tolerance - or lack of tolerance - for risk.

5. I will deliver to my client a statement of business processes, methods of compensation, and other disclosures appropriate to an open and professional business relationship.

* These Principles are not sponsored by IMSA. They are offered as an extension of the personal principles of the authors. Agents' and Brokers' Principles of Ethical Market Conduct is copyrighted, but permission is granted to any licensed life insurance agent, securities representative, or financial advisor who wishes to use these Principles on the condition that they be used intact and as printed above.

Appendix E

Trustee matrix

Trustee Acceptance Considerations Policy Management Features	Guaranteed Products				Non-Guaranteed Products			
	Whole Life	No Lapse Guarantee Universal Life	Level Premium Term	Yearly Renewable Term	Adjustable Life	Universal Life	Variable Universal Life	Variable Life
Premium Schedule	Fixed	Fixed	Fixed Period	Increasing	Flexible	Flexible	Flexible	Fixed
Specified Death Amount	Fixed	Fixed	Fixed	Fixed	Flexible	Flexible	Flexible	Fixed
Account Value Management	Carrier	Carrier	None	None	Trustee	Trustee	Trustee	Trustee
Asset Allocation Required	N/A	N/A	N/A	N/A	No	No	Yes	Yes
Illustration Credibility	Yes	Yes	Yes	Yes	No	No	No	No
Actuarial Evaluation	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes
Volatility Simulation	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes

Trustee Management Requirements	Guaranteed Products				Non-Guaranteed Products			
	Whole Life	No Lapse Guarantee Universal Life	Level Premium Term	Yearly Renewable Term	Adjustable Life	Universal Life	Variable Universal Life	Variable Life
Investment Policy Statement	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TOLI-Specific Procedures	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product Suitability	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Premium Adequacy Risk	No	No	No	No	Yes	Yes	Yes	Yes
Monitoring Cycle	N/A	N/A	N/A	N/A	Annual	Annual	Annual	Annual
Carrier Solvency Risk	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring Cycle	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Asset Allocation Review	N/A	N/A	N/A	N/A	N/A	N/A	Annual	Annual
Conversion Review	N/A	N/A	As Directed	As Directed	N/A	N/A	N/A	N/A
Rating and Rider Review	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
Regulatory Review (Institutional)	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual

Professional Advisor Annual Verification	Guaranteed Products				Non-Guaranteed Products			
	Whole Life	No Lapse Guarantee Universal Life	Level Premium Term	Yearly Renewable Term	Adjustable Life	Universal Life	Variable Universal Life	Variable Life
Product Suitability	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Premium Adequacy	N/A	N/A	N/A	N/A	100%	100%	100%	100%
Death Benefit Adequacy	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes
Carrier Solvency	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Investment Performance Rebalancing	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes

Appendix F

Life Insurance Policy Management Questionnaire

Trust Name:

Fed EIN

Dated:

Grantor(s):

Trust Beneficiary(ies):

Trust Funding:

Annual Gifts:

Current non-insurance assets:

Insureds:

Name	DOB	Insurance Age	Attained Age	Class-based LE	Personal LE

1. What is motivating the assessment of existing policies / possible exploration of new coverage?

2. What is your Risk Tolerance with respect to assets managed for the life of this Trust? Our "Risk Index" derives from your Investment Policy Statement and then is possibly reduced "because it's life insurance"

IPS Risk Tolerance and Asset Allocation:

Policy Portfolio Risk Index

CONSERVATIVE	0	1	2	3
BALANCED	4	5	6	7
AGGRESSIVE	8	9	10	11
VERY AGGRESSIVE	12	13	14	15

3. When asked "How important is it to deliver *current purchasing power protected dollars* vs *absolute dollars*?" we find most people answer "absolute" when what they REALLY wanted was current purchasing value dollars once the "fall off" is calculated:

Note that at a historic average 3% inflation, the value of a dollar is reduced by 25% in just 10 years and by 50% in 23 years.

So: How important is it to deliver *current purchasing power protected dollars* vs *absolute dollars*?

Considerations:

Translates to:

MOST SOMEWHAT LOW PRIORITY

4. Policy premiums can be considered an absolute Trust expense (and categorized as EXPENSE-focused) - or as a balance sheet item in which cash values generally offset premium expense in the first few years (and categorized as VALUE-focused).

How important is it to treat this premium as an absolute expense - or as a balance sheet item?

Considerations:

Translates to:

EXPENSE VALUE

5. Value-focused policies typically have cash values that appear on the balance sheet. How important is it to have ***access*** to the balance sheet value?

Considerations:

Translates to:

MOST SOMEWHAT LOW PRIORITY

6. Rank:

Expense

Asset

Access to CV

Naturally Increasing DB

7. Tax considerations of funding sources

8. If you take appropriate “risk” in the investment portfolio - what are your considerations about taking appropriate risk in the life insurance portfolio - if it gave you upside potential on the DB?

9. If, on the other hand, you chose not to take such risk - then the task is simpler: to the extent your response in #2 above is price/no access = mostly no lapse. To extend cost / access / upside = mostly par whole life. Your choice to direct the policy portfolio to the guaranteed side of your investment asset allocation is about divesting your FIXED investments allocating income/principal into FIXED-BASED insurance products.

Appendix G

The Smith Family Irrevocable Trust
Life Insurance Policy Management Statement

This Life Insurance Policy Management Statement (herein *IPMS*) sets forth guidelines and procedures for systematic review and long-term management of the trust's assets. Its purpose is to:

- Clarify the trust's objectives and the grantor's expectations;
- Specify the grantor's risk tolerance level pursuant to the trust's objectives;
- Set forth the trustee's risk management criteria to achieve the trust's objectives; and
- Establish a procedure for timely monitoring and systematic review of performance results.

This *IPMS* evidences the careful consideration given by both the grantor and the trustee to the formulation and implementation of a prudent asset acquisition and subsequent management strategy. It will serve as a guide to the trustee, outline procedures for prudent administration of trust assets invested in the sole interest of the beneficiaries, and set out the responsibilities of outside advisors and/or providers engaged in the trust operation. This statement will be revised and modified as appropriate on a periodic basis to reflect such factors as changes in the trust objectives, asset performance and suitability, trustee risk management procedures, beneficiary objectives, and tax laws.

Purpose of the Trust: The Smith Family Irrevocable Trust, dated March 29, 2001 is for the benefit of the survivor of the Grantors, and at the second death, for the benefit of the Grantors' children and grandchildren. The principal asset of the Trust is a joint lives life insurance policy, payable at the second death of the Grantors, issued by John Hancock Life Insurance Company.

Trust Time Horizon: The trust was created on March 29, 2001 and the insureds were ages 75 and 70 at the time of initial policy issue. The insureds are attained age 84 and 79 and have a joint life expectancy of 85 months based on personalized mortality tables. The trust-owned policy was originally designed to sustain coverage to contract maturity.

Contributions to the Trust: The grantor intends to annually transfer funds to the trust as annual exclusion gifts to the trust beneficiaries. Pursuant to the trust's terms, the trustee receives the transfers and sends notice to the beneficiaries of their temporary right to withdraw their respective pro rata shares of these gifts. To the extent these withdrawal rights lapse, the trustee may use the funds remaining to pay the annual life insurance premiums. These transfers from the grantor are voluntary and are not required under the trust or under the contract between the grantor and the trustee. There is no guarantee that the grantor or anyone else will contribute additional funds to the trust in future years.
Trust Distribution Provisions and Beneficiaries: The trust names the grantor's beneficiaries and the Trust shall be the sole resource used to determine the beneficiaries, their rights, and any percentages of distributions.

Investment Risk: N/A

Diversification: The trust limits the assets to insurance and investment products that can best accomplish the grantor's intent. The trustee shall diversify unless it is prudent not to do so. The Grantor intends that the Trustee maintain a long-term mix of equity and fixed in the proportion appropriate to maintaining the policy and meeting the risk tolerance of the beneficiaries.

Product Suitability and Risk Management Guide: This Guide outlines the risk/return expectations and asset management strategies to be employed by the trustee during the term of insurance policy administration. Exhibit #1 summarizes the different guaranteed and non-guaranteed policy types available to the trustee and the scope of periodic monitoring appropriate for each requiring the assistance of the Investment Advisor/Life Insurance Analyst. Selection of a policy type with non-guaranteed features should be based on an actuarially certified Benchmark Model Report's policy design parameters. Ongoing premium adequacy and policy performance monitoring should be actuarially certified.

- **Carrier Risk**: Unless constrained by health difficulties or other underwriting considerations, the trustee shall select among life insurance companies ranked among the largest 150 based on admitted assets, and shall be guided primarily by ratings issued by independent evaluation agencies including: A.M. Best, Fitch Credit Rating Company, Moody's, and Standard & Poor's. Preference shall be given to carriers with more favorable ratings from no less than three of these agencies. In the event of a ratings downgrade of the issuer, the trustee shall review the magnitude of the downgrade as well as its cause and shall determine what portfolio modifications, if any, are warranted.

- **Premium Adequacy and Contract Underperformance Risk**: The trustee shall make a policy suitability determination based on the trust's objectives and the grantor's risk tolerance. Selection and acceptance of a non-guaranteed death benefit contract requires annual actuarially-certified evaluation that scheduled premiums are adequate to sustain the policy to contract maturity or a time period approved by the grantor but no less than the insured's life expectancy as calculated by an independent life expectancy firm or set out in the 2001 CSO table. In the event that the contract is underperforming its acceptance benchmark evaluation, the trustee will communicate this underperformance to trust beneficiaries and policy management options to achieve the trust's objectives and grantor's expectations.

  Carrier illustrations shall be obtained for informational purposes only. In 1994, the National Association of Insurance Commissioners stated, "Illustrations are not and cannot be predictions or estimates of future performance."
- **Underwriting Risk**: If new or additional insurance is deemed prudent, the trustee shall employ a Request for Proposal (RFP) process to solicit preliminary pricing inquiries from underwriting departments. The RFP will set out policy design parameters based on an actuarially-certified Benchmark Model Report, and evaluate proposals by comparison to the Benchmark Model. *(Note: The RFP process is especially important for the purchase of larger policies that involve reinsurance companies.)*

Delegation of Responsibilities: The trustee may delegate trust administration and operation responsibilities to various parties as described below:

Trustee: The trustee shall be responsible for the safe custody and investment of trust assets. The trustee's responsibilities include:

- Ongoing consultation with the grantor-insured to verify objectives, health status, and beneficiary needs;
- Determining an appropriate investment strategy to achieve the grantor's objectives;
- Monitoring investment performance to assure that performance results meet the guidelines set forth in this statement;
- Receiving all contributions and paying all benefits under the terms of the trust documents; and
- Performing administrative functions and fiduciary duties required of a trustee under applicable law and regulations.

Attorney: The attorney shall be responsible for performance of all tasks required under the terms of the engagement with his or her client in a manner which complies with the standards of practice prevailing in the community at the time such services are performed. The attorney's responsibilities include:

- Drafting and review of trust documents to determine that they are suitable and appropriate to the needs and objectives of the grantor-insured;

- Review of ownership and beneficiary designations of all trust-owned assets to determine that they confirm with the planning objectives of the grantor-insured; and

- Review of any transfers of existing assets to the trust to determine the tax and legal consequences thereof. This review encompasses any policy exchange that seeks to comply with the rules and IRC §1035.

- The attorney shall not be responsible for rendering opinions that may be deemed to be investment or insurance advisory opinions.

Investment Advisor/Insurance Analyst: The advisor/analyst shall assist the trustee with the development and implementation of the Insurance Policy Management Statement. The advisor/analyst shall be responsible for performance of all tasks required under the terms of the engagement with the trustee, including:

- Determining the amount of insurance required to meet the goals and objectives of the trust;

- Recommending suitable insurance carriers; ! Evaluating the risk/reward tradeoffs of selected insurance carriers;

- Determining appropriate policy types, designs, and funding levels;

- Supervising the life insurance agent to facilitate underwriting and policy implementation; and

- Monitoring and evaluation of the insurance portfolio's performance.

Life Insurance Agent: In addition to complying with the duties imposed by applicable insurance licensing regulation, the life insurance agent shall assist the trustee and advisor/ analyst to apply for, underwrite, implement and service appropriate insurance contracts. The agent shall be responsible for performance of all tasks under the terms of the engagement with the trustee, including:

- Disclosure of any employment contract constraints, compensation schedules and other provisions that may materially influence the information and advice provided to the trustee, grantor, or other members of the estate planning team. The investment advisor/life insurance analyst shall provide a disclosure checklist for agent completion and retention in the attorney's and trustee's files;

- Provision of financial data and independent rating-company evaluations of selected carriers, contract illustrations, and other data necessary for the trustee to evidence " the exercise of reasonable care, skill and caution" required by law. The advisor/ analyst shall consult with the agent regarding the scope of such materials and shall evaluate these materials.

- Investigation into health, avocation, and financial factors which may have significant affect on the pricing of insurance contracts so that the trustee can determine that coverage is available and is appropriately priced. The agent will consult with the advisor/analyst in the performance of these tasks;

- Completion of applications or pricing inquiry forms to selected insurance carriers, subject to advisor/analyst pre-submission review;

- Delivery of insurance contracts and collection of the premium amounts necessary to implement and sustain coverage;

- Preparation of annual in-force policy illustrations. The advisor/analyst will direct the agent regarding the required information and review such information as part of the ongoing systematic monitoring program; and

- Assistance in all policyholder service activities such as changes in premium schedules, processing of policy loans and distributions, beneficiary changes and so forth.

Policy Monitoring: The trustee intends to prepare/obtain annual reports that will reasonably conform to the standards of performance accounting enumerated in the Fiduciary Accounting Guide promulgated by the American Law Institute – American Bar Association. *("Performance accounting, as applied in the trusts and estates area, has the twin objectives of promoting full and useful disclosure and fair representation of investment results on client assets and of instilling and maintaining client confidence in the corporate or individual's fiduciary investment abilities. These objectives may be best achieved when the fiduciary includes easily understood performance indicators in the client's periodic fiduciary statements.")* This annual report will compare the policy values reported by the carrier to the policy acceptance benchmark values, and review the carrier's independent ratings. Additionally, the trustee will provide an annual policy

monitoring report to beneficiaries that identifies unfavorable trends and establishes a 'watch' period during which the concern will be assessed and, if necessary, corrected to achieve the trust's objectives.

Policy Modification: If continued retention of a policy appears imprudent because of contract underperformance, the trustee shall consider among the following options:

- Increased premium funding for under-performing contracts or decreased premium funding for over-performing contracts;

- Replacement of the coverage and acquisition of a new policy either by IRS § 1035 policy exchange or by other suitable means;

- Election of an appropriate non-forfeiture provision with the option to devote premiums allocated to the policy to acquisition of supplemental coverage of a type and amount suitable to the trust; or

- Disposition of the life insurance benefit either through policy sale, annuity income elections or surrender of the contract for its cash surrender value.

If continued retention of a policy appears imprudent because of a high likelihood that the grantor's gifting program underlying the premium funding will be discontinued, the trustee shall consider among the following options:

- Election of an appropriate non-forfeiture provision; or

- Disposition of the life insurance benefit either through policy sale, annuity income elections, or surrender of the contract for its cash surrender value.

If continued retention of a policy appears imprudent because of carrier downgrades by independent rating agencies, the trustee shall consider among the following options:

- Replacement of the coverage and acquisition of a new policy either by IRS § 1035 policy exchange or by other suitable means;

- Election of an appropriate non-forfeiture provision with the option to devote premiums allocated to the policy to acquisition of supplemental coverage of a type and amount suitable to the trust; or

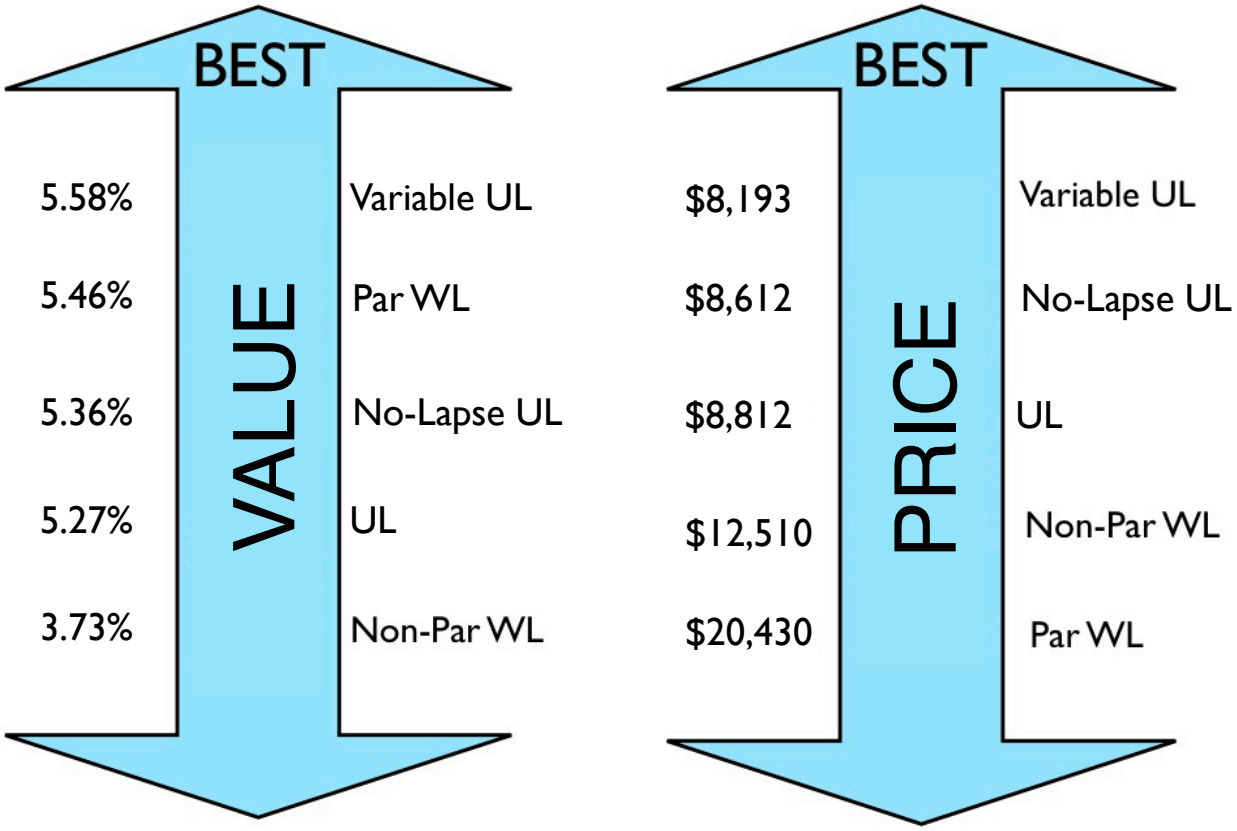
- Disposition of the life insurance benefit either through policy sale, annuity income elections or surrender of the contract for its cash surrender value.

Review of this Investment Policy Statement: Each time the life insurance policies or other trust assets are reviewed for performance and suitability, the trustee may also review the Investment Policy Statement. If changes are needed, the trustee should revise the Statement and communicate these changes to the trust beneficiaries.

_____	_____
Date	Trustee
_____	_____
Date	Trustee
_____	_____
Date	Trustee

Appendix H

52 Female - Second-Best Class
Policy Choices - Value versus Price
All illustrated death benefits are level



IRR of Premium to Death Benefit at Life Expectancy

Premiums Sufficient to Age 100 Based on Current Assumptions

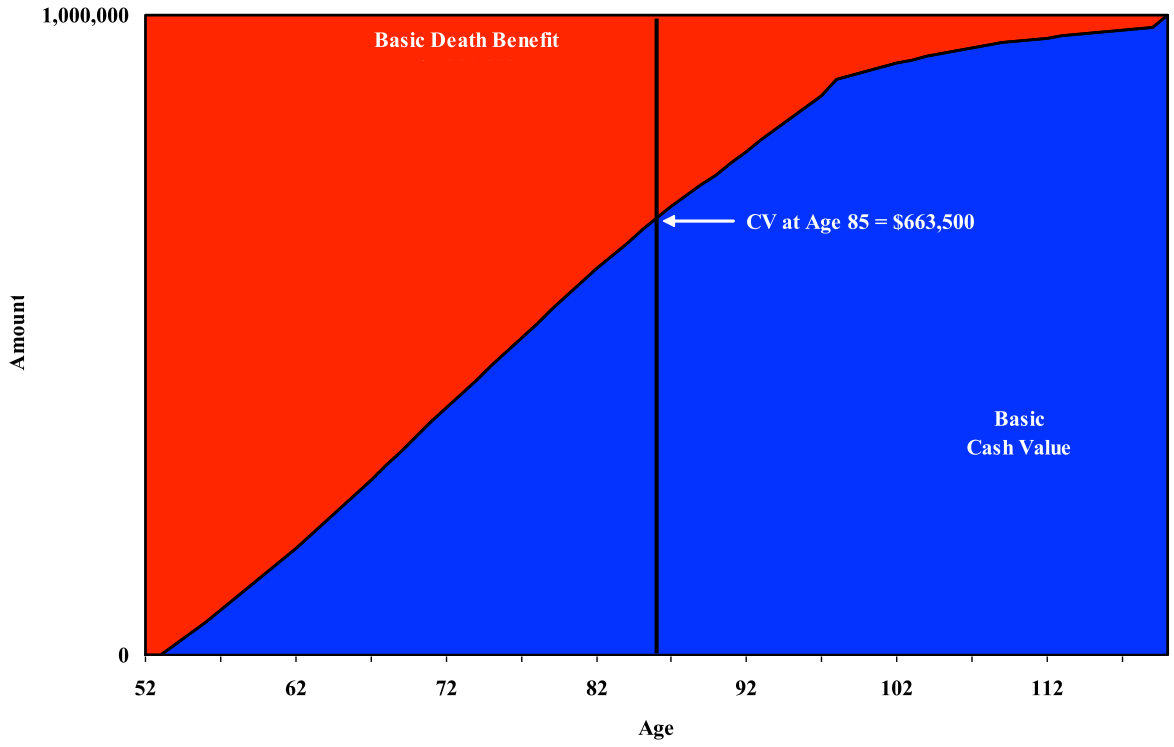
Appendix I

52 F - Best Class - Value of Dividends

As in the first series, Graph 6 reflects the *basic guarantees* underlying a par whole life policy on a 52-year old "preferred plus" / non-smoking female. Everything reflected in this graph is guaranteed. No dividends are assumed. Note that the **guaranteed cash value** progressively increases over the years and simultaneously reduces the ***net amount at risk*** of the policy. The death benefit paid by the insurance company will consist of the cash value on the date of death plus an amount of *net amount at risk* sufficient to pay the contractually guaranteed death benefit of $1 million. All graphs assume a level premium of $20,430 is paid through age 99.

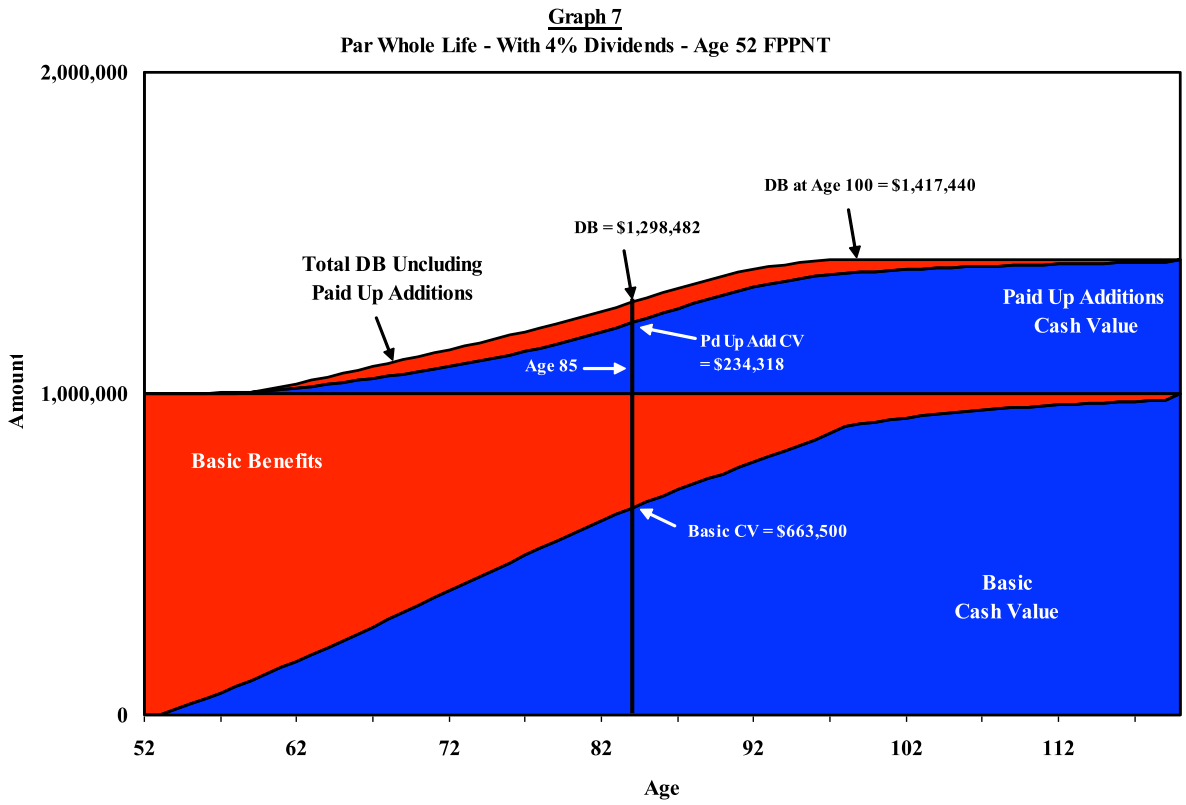
Graph 6

Par Whole Life - Basic Benefit - Age 52 FPPNT



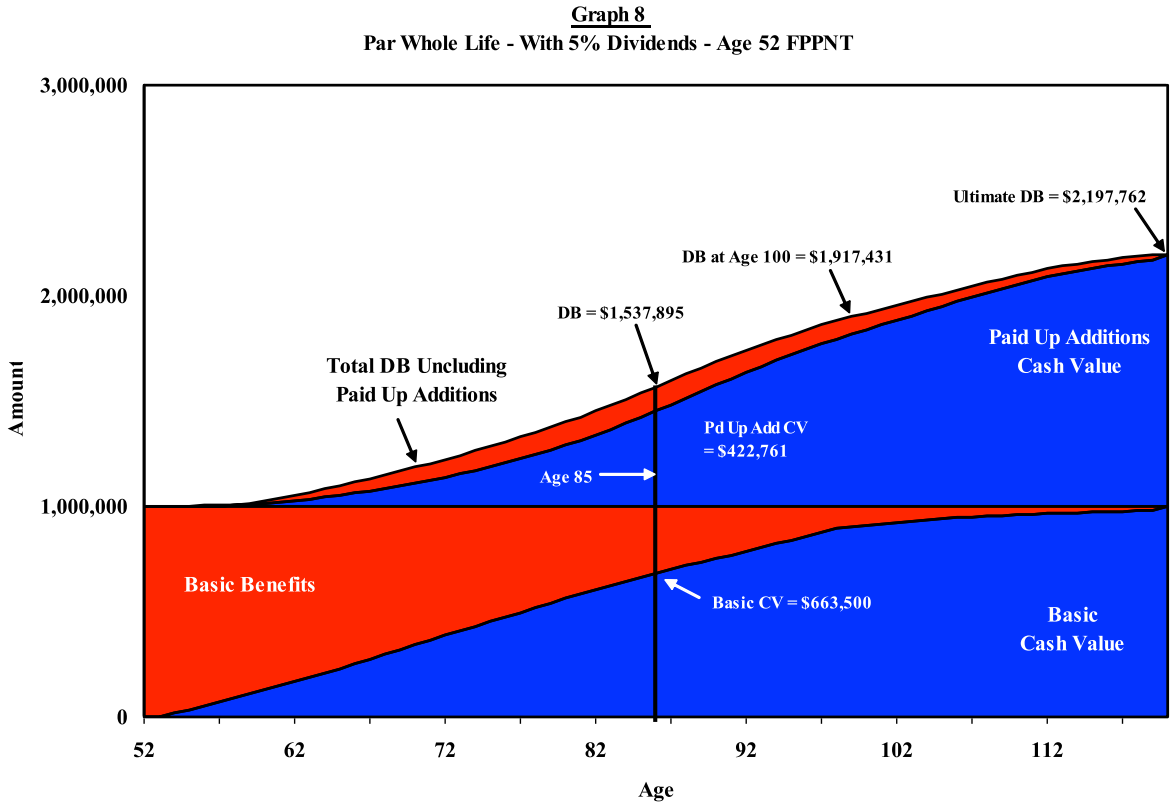
The guaranteed premium of $20,430 paid for 14 years - developing a guaranteed cash value at age 65 of $230,360 - represents a cash-on-cash return of -2.94%. This return rises to still slightly negative, with a cash-on-cash return of -.26% at age 85. While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 1.42%.

Graph 7 again introduces an assumed policy dividend "scale" that reflects *no* additional return over that of the policy guarantees from the insurance company's assets, but does assume current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "4%" lifetime dividend assumption produces a modest amount of total policy **cash value** and **death benefit**.



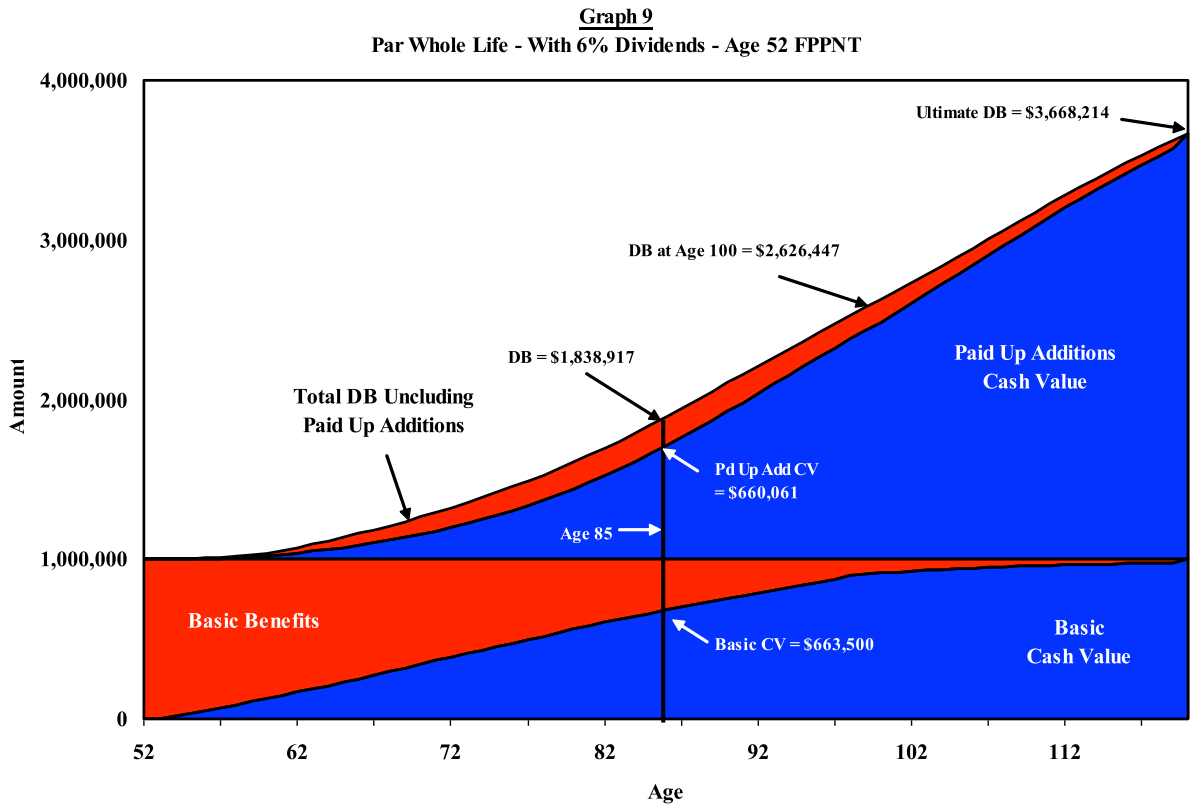
The guaranteed premium of $20,430 paid for 14 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $264,658 - represents a cash-on-cash return of -1.04%. The cash-on-cash return at age 85 is 1.42% (2.03% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 2.83%.

Graph 8 again introduces an assumed policy dividend "scale" reflecting a "5% interest rate" - a modest additional return over that of the policy guarantees from the insurance company's assets as well as the same current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "5%" lifetime dividend assumption produces a substantial increase in total policy **cash value** and **death benefit** over that of the 4% dividend scale.



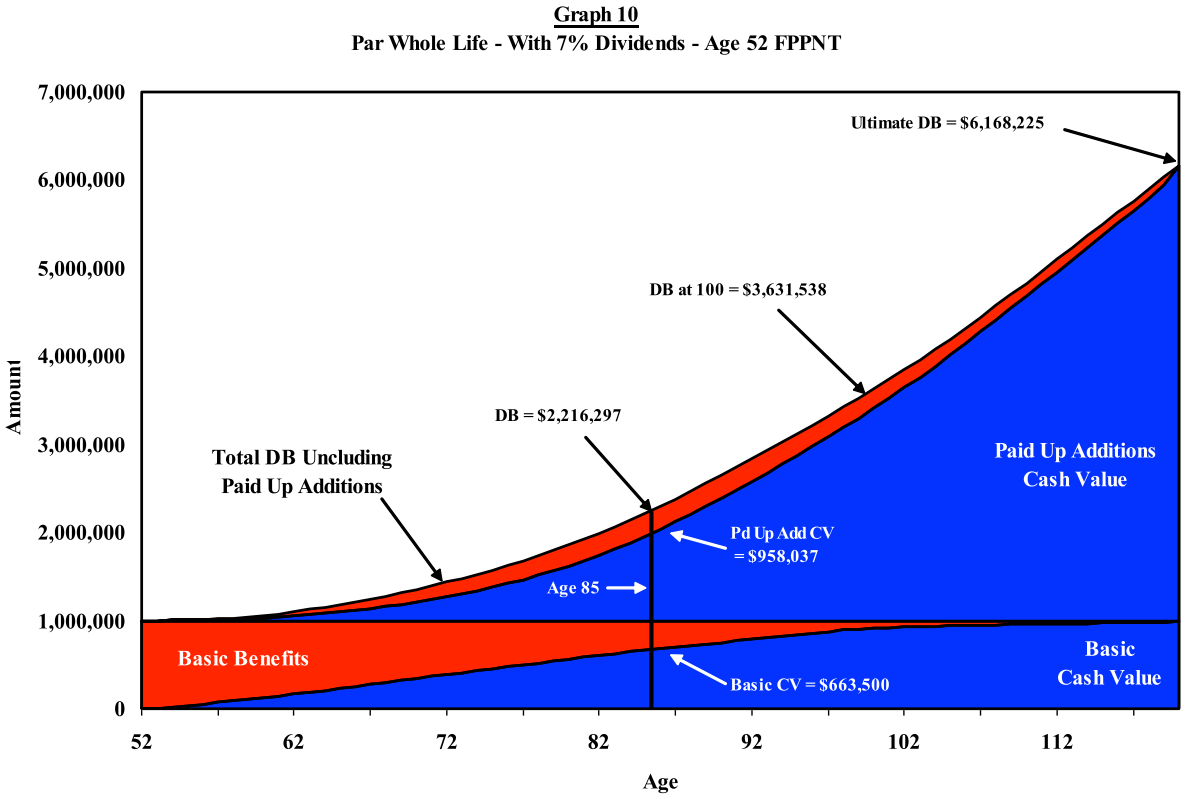
The guaranteed premium of $20,430 paid for 14 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $283,694 - an increase of $53,264 or 23% over the guaranteed graph) represents a cash-on-cash return of -.11%. The cash-on-cash return at age 85 is 2.43% (3.47% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 3.71%.

Graph 9 again introduces an assumed policy dividend "scale" reflecting a "6% interest rate" - a rate typical of current dividend scales in 2010 - reflecting additional return over that of the policy guarantees from the insurance company's assets as well as the same current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "6%" lifetime dividend assumption produces a substantial increase in total policy **cash value** and **death benefit** over that of the 4% dividend scale.



The guaranteed premium of $20,430 paid for 14 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $305,170 - an increase of $74,740 or 32% over the guaranteed graph) represents a cash-on-cash return of .86% (1.23% pre-tax in a 30% tax bracket). The cash-on-cash return at age 85 is 3.43% (4.90% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 4.62%.

Graph 10 again introduces an assumed policy dividend "scale" reflecting a "7% interest rate" - a rate somewhat higher than current dividend scales in 2010 - again reflecting additional return over that of the policy guarantees from the insurance company's assets as well as the same current improvements over guaranteed expenses and guaranteed assumptions for death claims. Over time, this "7%" lifetime dividend assumption produces a substantial increase in total policy **cash value** and **death benefit** over that of the 4% dividend scale.



The guaranteed premium of $20,430 paid for 18 years - developing a guaranteed cash value PLUS cash value of paid up additions at age 65 of $328,635 - an increase of $98,205 or 43% over the guaranteed graph) represents a cash-on-cash return of 1.83% (2.62% pre-tax in a 30% tax bracket). The cash-on-cash return at age 85 is 4.43% (6.33% pre-tax in a 30% tax bracket). While policy purchasing decisions today may focus as much on cash value as death benefit, the main purpose of life insurance is for its *financial protection* at the time of death. The Internal Rate of Return (IRR) of premium to death benefit at life expectancy is 5.53%.

Appendix J
Efficient Choices "Launchpad"

Deriving from the Risk Index Matrix in the first volume of *Life Insurance as an Asset Class*, the following chart offers specific initial proportions of policy styles based on the 0 through 15 range of risk tolerance for both VALUE and PRICE considerations.

Conservative (RI = 0 to 3)

RI = 0	Par WL	NLG - UL	VUL
Value	100%	0%	0%
Price	0%	100%	0%
RI = 1	**Par WL**	**NLG - UL**	**VUL**
Value	100%	0%	0%
Price	0%	90%	10%
RI = 2	**Par WL**	**NLG - UL**	**VUL**
Value	90%	0%	10%
Price	10%	70%	20%
RI = 3	**Par WL**	**NLG - UL**	**VUL**
Value	80%	0%	20%
Price	0%	70%	30%

Balanced (RI = 4 to 7)

RI = 4	Par WL	NLG - UL	VUL
Value	40%	30%	30%
Price	10%	60%	30%
RI = 5	**Par WL**	**NLG - UL**	**VUL**
Value	70%	0%	30%
Price	0%	60%	40%
RI = 6	**Par WL**	**NLG - UL**	**VUL**
Value	40%	20%	40%
Price	10%	50%	40%
RI = 7	**Par WL**	**NLG - UL**	**VUL**
Value	60%	0%	40%
Price	0%	50%	50%

Aggressive (RI = 8 to 11)

RI = 8	Par WL	NLG - UL	VUL
Value	50%	0%	50%
Price	30%	20%	50%
RI = 9	**Par WL**	**NLG - UL**	**VUL**
Value	30%	10%	60%
Price	10%	30%	60%
RI = 10	**Par WL**	**NLG - UL**	**VUL**
Value	40%	0%	60%
Price	0%	30%	70%

RI = 11	Par WL	NLG - UL	VUL
Value	30%	0%	70%
Price	20%	10%	70%

Very Aggressive (RI = 12 to 15)

RI = 12	Par WL	NLG - UL	VUL
Value	10%	10%	80%
Price	0%	20%	80%
RI = 13	**Par WL**	**NLG - UL**	**VUL**
Value	20%	0%	80%
Price	0%	10%	90%
RI = 14	**Par WL**	**NLG - UL**	**VUL**
Value	10%	0%	90%
Price	0%	10%	90%
RI = 15	**Par WL**	**NLG - UL**	**VUL**
Value	0%	0%	100%
Price	0%	0%	100%

Appendix K

Replacement Questionnaire (RQ)*

A Policy Replacement Evaluation Form

Replacing an existing life insurance policy with a new one generally is not in the policyholder's best interest. New sales loads and other expenses, the new company's right to challenge a death claim during the suicide and contestability periods, changes in age or health and the loss of important grandfathered rights are some of the obvious reasons that **most replacements cannot be justified.** On the other hand, there may be circumstances where a replacement is in your client's best interest. The ethical agent will provide his or her client with the impartial information needed to make an informed decision, including reasons the client should not replace the current policy and/or how to modify the existing policy to accomplish their goals. The need for additional coverage is not, by itself, a justification for replacement.

This Form is designed to assist you in evaluating some of the facts and circumstances that a policyholder should take into consideration when addressing the possibility of replacing a life insurance policy. It can be used for both internal and external replacements. **The definition of "replacement" is much broader than the cancellation of one policy and the issuance of another.** The legal meaning of the word "replacement" is determined by state law and varies substantially by state. You should be familiar with your own state's definition of the word. However, for purposes of simplifying the definition, we may think of "replacement" in general terms as an action which eliminates the original policy or diminishes its benefits or values. Examples of this are policy loans, taking reduced paid-up insurance or withdrawing dividends. Since no form can cover every possible situation, you may need additional material to enable your client to make a truly informed decision.

Please note that "illustrated" results in this Form are always non-guaranteed. Also, keep in mind that different companies use different assumptions in preparing illustrations and that illustrations alone should never be used to compare policies. However, current in-force illustrations for the existing policy and current illustrations for the proposed policy must be provided to the client, showing the effects of applicable surrender charges. In situations where the current policy will be changed, but not terminated, comparisons should include in-force ledgers of the policy before and after the change, if available. Reduced scale illustrations (or illustrations with lower yield assumptions) should be provided on both existing and proposed policies to demonstrate volatility in the performance of non-guaranteed policy elements under different circumstances. The reduced scale illustrations should be consistent with those required by the NAIC model illustration regulations, when effective.

This Form is intended for evaluation purposes. It is not a substitute for state replacement requirements. This Form is not specifically designed for direct use with clients. Further, if either the existing or proposed policy is variable life insurance, use of this Form with the client must be approved by the registered representative's broker-dealer.

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* Adapted from the Replacement Questionnaire, developed and published by the Society of Financial Service Professional in 1992. It is reproduced here with permission.

Replacement Questionnaire (RQ)

A Policy Replacement Evaluation Form

A. 1. What does the policyholder want to achieve that the existing policy cannot provide?

_____

_____

_____

2. Has the current carrier been contacted to see if the policy can be modified to meet the policyholder's objectives?

_____

B. 1. Recognizing that the replacement of an existing policy generally results in the reduction of cash surrender value as a result of new acquisition costs, what is the cash surrender value of:

a. The original policy **immediately** before replacement _____
b. The original policy **immediately** after the replacement _____
c. The proposed policy **immediately** after the replacement _____

These cash surrender values should be obtained directly from the insurance carrier's policy owner service department and not from an illustration, since illustrations typically reflect end of year values.

2. Illustrations should **never** be the sole criteria for evaluating a replacement. Additionally, Illustrated Cash Values and Illustrated Death Benefits are **never** reliable predictions of future results. If these non-guaranteed values and benefits are the basis for considering a replacement, the agent should attempt to know and understand the underlying assumptions in both the inforce illustration for the current policy, as well as the sales illustration for the proposed policy. In addition to reviewing illustrations, the agent should attempt to obtain an Illustration Questionnaire (IQ), which may be available directly from the companies or may be requested through the client. The agent and the client should be aware that there may be differences in the assumptions used by each company which may render a comparison based upon such illustrations invalid.

How many years from now before the proposed policy's cash surrender values and death benefits exceed those benefits in the current policy?

a. Guaranteed Cash Surrender Values _____ years and subsequent.
b. Guaranteed Death Benefits _____ years and subsequent.
c. Illustrated Cash Surrender Values _____ years and subsequent.
d. Illustrated Death Benefits _____ years and subsequent.

3. If the proposed policy is a variable life policy, what gross yield rate is being assumed? _____ %

   What is your justification for that rate? _____

C. 1. Describe the differences in the plans of insurance. _____

   _____

2. Describe any term riders or term elements (above the base policy). Include the ratio of the initial term amount to the total death benefit and any term rate guarantees which may or may not be included.

   Current policy: _____

   Proposed policy:

   _____

3. Other than term riders, what riders do the policies include?

   Current policy: _____

   Proposed policy: _____

4. How long is the initial death benefit **guaranteed** to be in force at the **illustrated** premium?

   Current policy: _____ years. Proposed policy: _____ years.

5. What premium is necessary to **guarantee** coverage at initial/current levels for life?

   Current policy: $_____. Proposed policy: $_____.

D. 1. Is there a potential taxable gain if the current policy is replaced?

   ❑ YES ❑ NO If yes, how is it to be managed?

   _____

2. If there is a taxable gain, **and if there is a loan,** how is the loan to be managed?

   ❑ The new policy will assume the existing loan.

   ❑ The loan will be repaid.

   ❑ The policy owner will recognize taxable income.

E. Is an IRC Sec. 1035 exchange planned to preserve basis? ❑ YES ❑ NO

F. If a replacement is under consideration because a more favorable rate classification is available, has a reduction or removal of the rating on the existing policy been requested? If so, what was the result. If not, explain why such a request has not been made.

   _____

G. Does the proposed policy qualify as life insurance under IRC Section 7702?

❑ YES ❑ NO

H. What is the issue date of the current policy? _____

The following "grandfathered" features will be lost if the policy is replaced.
(See Appendix for explanation of items 3-9.)

1. The current policy is incontestable by the insurance company. ❑ YES ❑ NO
2. The period has expired during which the insurance company can deny policy benefits in the event of the insured's suicide. ❑ YES ❑ NO

The current *life insurance policy* was issued on or before:	YES	NO	The current *annuity policy* was issued before:	YES	NO	The current *second to die policy* was issued before:	YES	NO
3. 8/06/63	❑	❑	6. 10/21/79	❑	❑	9. 9/14/89	❑	❑
4. 6/20/86	❑	❑	7. 8/14/82	❑	❑			
5. 6/20/88	❑	❑	8. 2/28/86	❑	❑			

I. If the current policy is term, is a conversion to permanent insurance available?

❑ YES❑ NO

If so, other than the suicide and incontestable provisions would a conversion to permanent insurance be more advantageous?

❑ YES ❑ NO Explanation: _____

_____

J. Financial Strength Ratings. Much has been made of ratings in the last few years; financial strength is important, but it is not the sole determining factor in selecting a life insurance company. A drop in ratings alone generally is not a sufficient reason to replace a policy. It is also important to know that there can be differences of opinion among rating agencies and that small differences in ratings generally are not significant. Furthermore, financial strength ratings are not necessarily indicative of policy performance. If reviewed with the client, a detailed explanation of the ratings must be provided in accordance with state regulations.

	Current Company Rating (Rank)*	Proposed Company Rating (Rank)	Date & Source of Answer
A. M. Best (15 ranks)	_____	_____	_____
Fitch (18 ranks)	_____	_____	_____
Moody's (19 ranks)	_____	_____	_____
S&P (18 ranks)	_____	_____	_____

* For example, an AA rating from S & P is the third highest **rank** out of 18 possible ratings.

COMDEX Rating (composite): _____

"COMDEX" – a fee-based service accessed by many agents and brokers - creates a composite index from the various financial strength ratings an insurance company has currently received. COMDEX is not itself a rating or financial strength judgment, merely an aggregator of rating data that provides a clearer, relative picture of financial strength.

The COMDEX " ... gives the company's standing, on a scale of 1 to 100, in relation to other companies that have been rated by the services. It is an objective value based solely on the mathematical distribution of all of the companies that have been rated."

K. Policy loans:	Current Policy	Proposed Policy
1. Gross rate	_____	_____
2. Fixed or Variable?	_____	_____
3. Permanent policies: Direct Recognition?	_____	_____
4. Universal life, etc. a. Current spread?	_____	_____
b. Is spread guaranteed?	❑ YES ❑ NO	❑ YES ❑ NO

L. Additional remarks:

_____

_____

_____

Appendix to the RQ
Grandfathered Features Explanation
(See question H.)

3. The current policy was purchased on or before 8/6/63, so IRC Section 264(a)(3) which limits deductions for interest indebtedness does not apply. If the current policy has met the "four out of seven" test of IRC Section 264(c)(1), interest on indebtedness is deductible to the extent otherwise allowed by law. Personal interest deductions are generally denied for tax years beginning after 1990, irrespective of when the policy was purchased. IRC Sec. 163(h)(1).

4. The current policy was purchased on or before June 20, 1986. Certain policies purchased for business purposes after this date have a $50,000 ceiling on the aggregate amount of indebtedness for which an interest deduction is allowed. IRC Sec. 264(a)(4).

5. Policy was issued on or before 6/20/88 and is not subject to Modified Endowment Contract rules. IRC Sec. 7702A. Substantial increases in the death benefits of grandfathered contracts after 10/20/88 may cause the imposition of the MEC rules. H.R. Conf. Rep. No. 1104, 100th Cong., 2d Sess. (TAMRA '88) reprinted in 1988-3 CB 595 - 596.

6. Variable annuity contracts purchased before 10/21/79 are eligible for a step-up in basis if the owner dies before the annuity starting date. IRC Sec. 72; Rev. Rul. 79-335, 1979-2 CB 292.

7. An annuity issued prior to 8/14/82 is subject to more favorable (basis out first) cost recovery rules for withdrawals. IRC Sec. 72(e). Such policies are not subject to the 10% penalty on withdrawals made prior to age 59 1/2. IRC Sec. 72(q)(2).

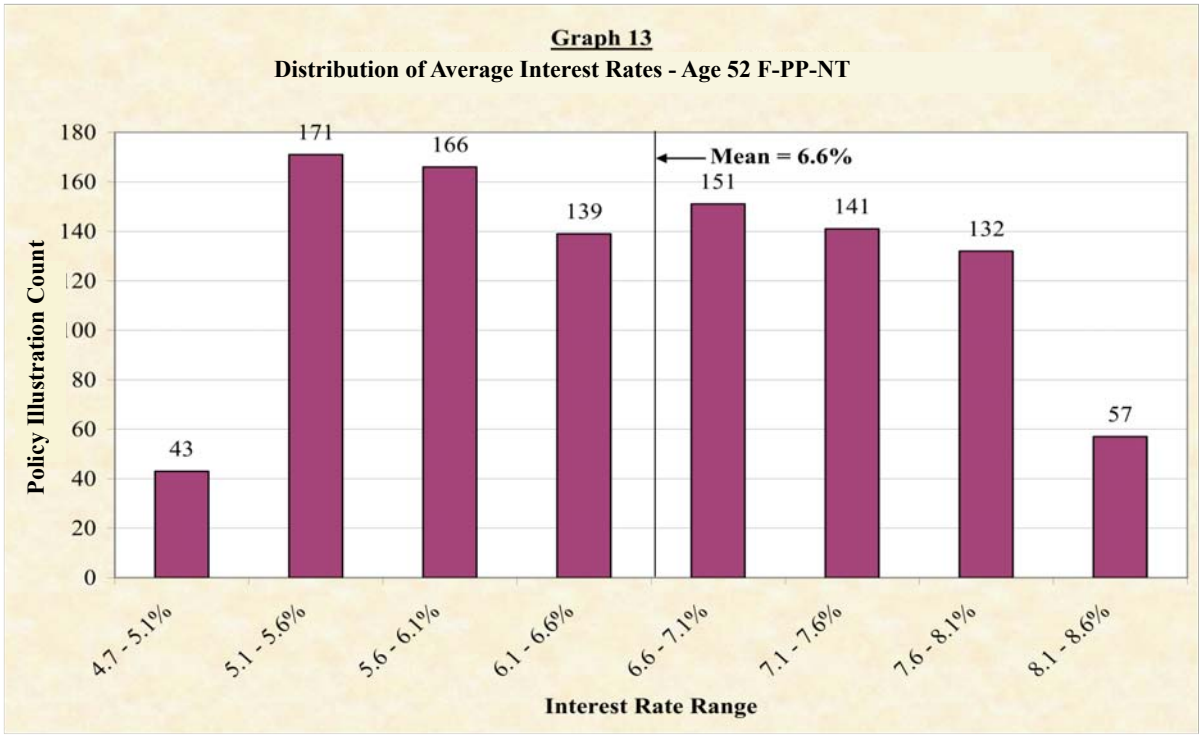
8. To the extent contributions are made after 2/28/86 to a deferred annuity held by a non-natural person (such as a business entity), the contract will not be entitled to tax treatment as an annuity. IRC Sec. 72(u).

9. A survivorship life policy issued prior to 9/14/89 is not subject to the 7-pay MEC test if there is a reduction in benefits. IRC Sec. 7702A(c)(6).

This Appendix is provided for educational purposes only.
You should seek competent legal counsel before
applying this to any specific situation.

Appendix L

Full Pay - 52 Female - Preferred



What does the interest rate bar graph indicate?

1. Observation of the spread of average rates on either side of the mean does appear similar to a *normal distribution* (i.e., most observations are around the mean, and there is a tail on both sides indicating likelihoods are lower as you move to either extreme - away from the mean). However, there is not the familiar "heaping" of results around the mean; this distribution is somewhat "flatter" than a standard normal.

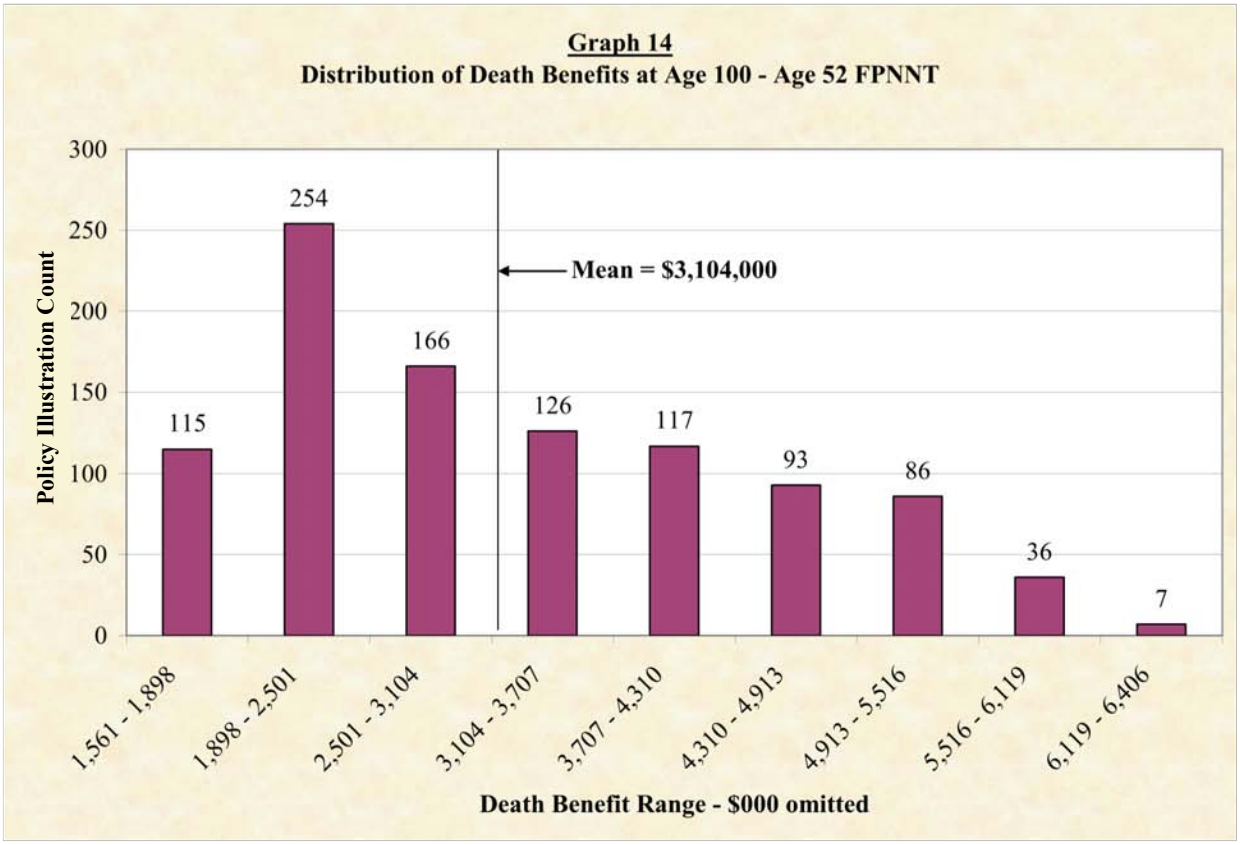
2. We observe from this set of trials that there is a 78.6% likelihood the average interest rate used to determine the dividend scale is 5.6% or above.

3. There is a 48.1% likelihood the average rate is 6.6% or above.

4. There is a 18.9% likelihood the average rate is 7.6% or above.

5. Observe that these percentages are still similar to a standard distribution relative to the distance from the mean.

6. Observation: there is a high probability the long-term "floor" dividend scale (in a 4% reserve guarantee policy structure) is 4.7% and the reasonable upper end expectation is 5.6% with a 78.6% probability - and a 6.6% or better with a 48.1% probability.



What does the death benefit bar graph indicate?

1. There is a definite skew - to the left of the mean - in the death benefit results. This tells us that the likelihood of variance on the low end is narrower, which is a direct result of combining the guaranteed $1,000,000 basic benefit with a dividend scale that rarely falls below 5% in our random scenarios.

2. The tail values on the high end tell us that, although the probabilities are low, there are chances of reaching very high face amounts at age 100 with the level premium purchasing paid up additions dividend option.

3. Remembering that each bar segment is one half of a standard deviation, we know we have the following likelihoods:

    - There is an 88.5% likelihood that the age 100 death benefit is approximately $1.9 million or above.

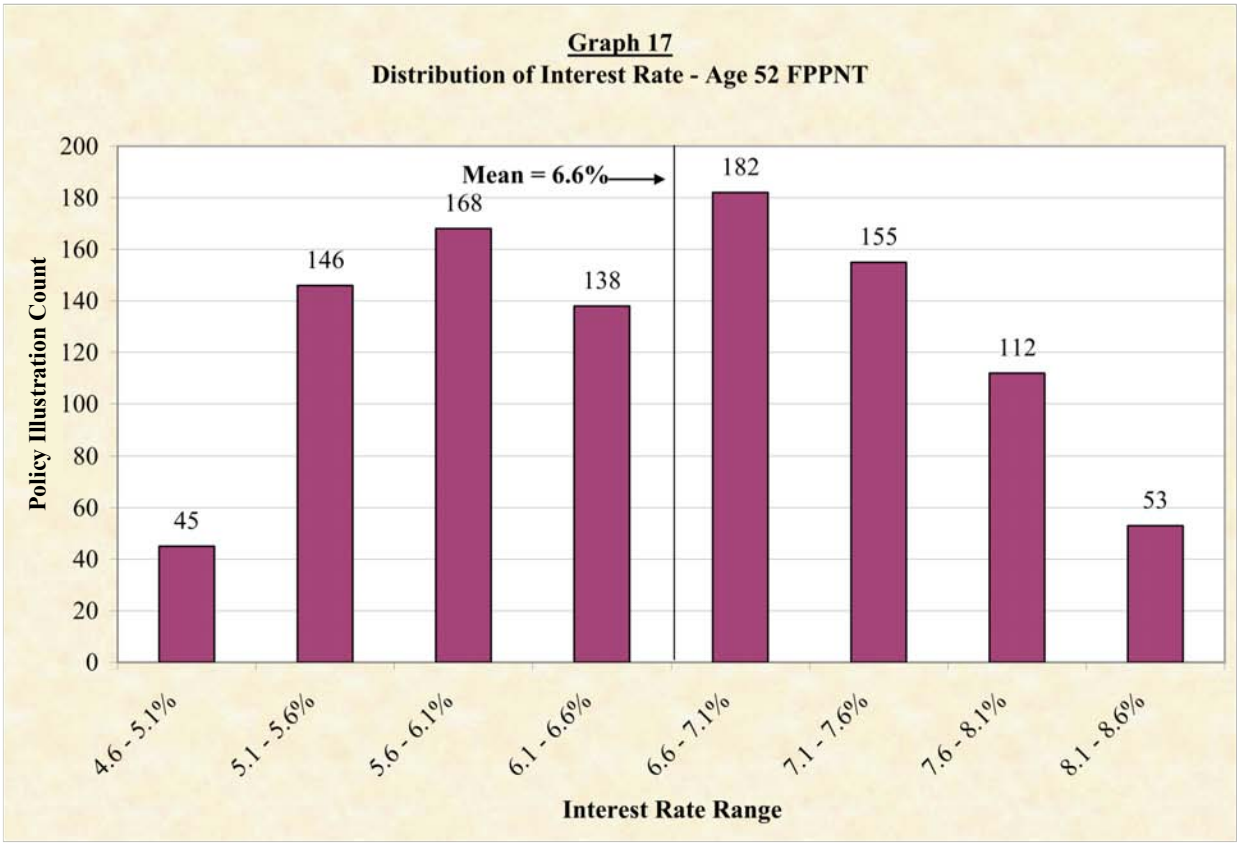
    - There is a 46.5% likelihood that the age 100 death benefit is approximately $3.1 million or above.

    - There is a 22.2% likelihood that the age 100 death benefit is approximately $4.3 million or above.

4. Observation: This analysis demonstrates that the total death benefit (on a 4% reserve guarantee policy structure) - driven by a relatively low dividend assumption - will be at least $1.561 million (4.25% IRR) - with an 88.5% probability of at least $1.9 million (5.2% IRR).

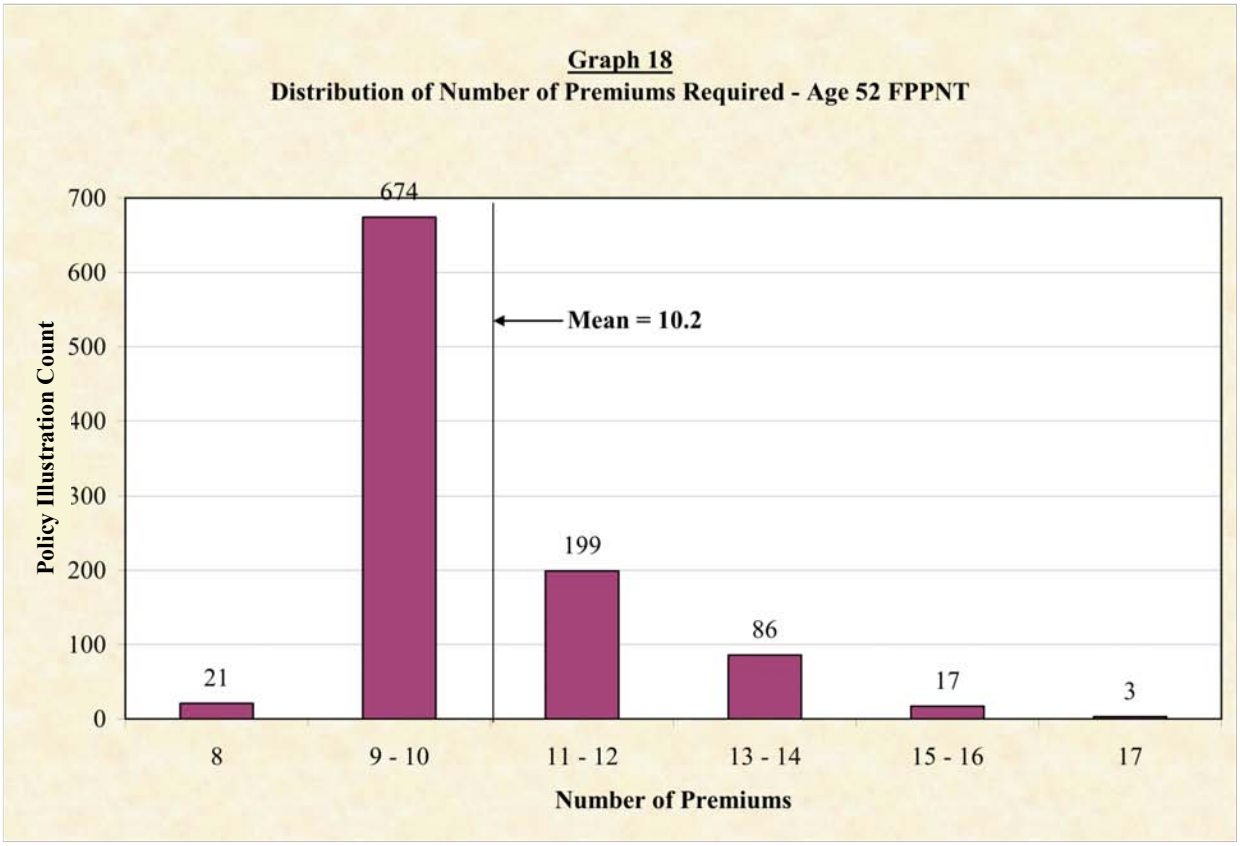
Note: The cash value bar graph is very similar to the death benefit graph above (i.e., cash values are slightly lower than the death benefits at age 100, but patterns are basically identical) and, once again, will not be shown.

Natural Premium Offset - 52 Female - Preferred



What does the interest rate bar graph tell us?

Again, the mean and standard deviation is the same as previous examples, but there are subtle differences in each distribution. From our observations, we know that there is an 80.9% likelihood that the interest rate used to determine the dividend scale is 5.6% or above, a 50.2% likelihood the rate is 6.6% or above, and a 16.5% likelihood the rate is 7.6% or above.



Note: Bar Graph 18 above has been summarized so that each bar is within one standard deviation of the mean. All other bar graphs (unless noted) are in one-half standard deviation increments.

What does the premium payment bar graph indicate?

1. Again there is a skew to the left of the mean, but this is different from the death benefit graph we saw in the full pay scenarios. Values to the left of the mean in this graph are those where the highest dividends are paid, and those to the right are the lower dividend scenarios.

2. The absence of a pronounced tail to the left is first a result of using fewer bars to display the results.

3. The graph also shows us there is an absolute minimum number of premiums needed (8), and that it doesn't matter how high your dividends are – it still takes a minimum number of years (8 to 10) before paid-up addition cash values are high enough to sustain this par whole life policy.

4. The tail to the right of the mean tells us that although the probabilities are low, there are future interest rate scenarios that require a significant number of additional premium payments – a result that is not surprising. The encouraging point is that those probabilities get quite small as you move to the right.

5. Based on this set of trials, we observe there is:

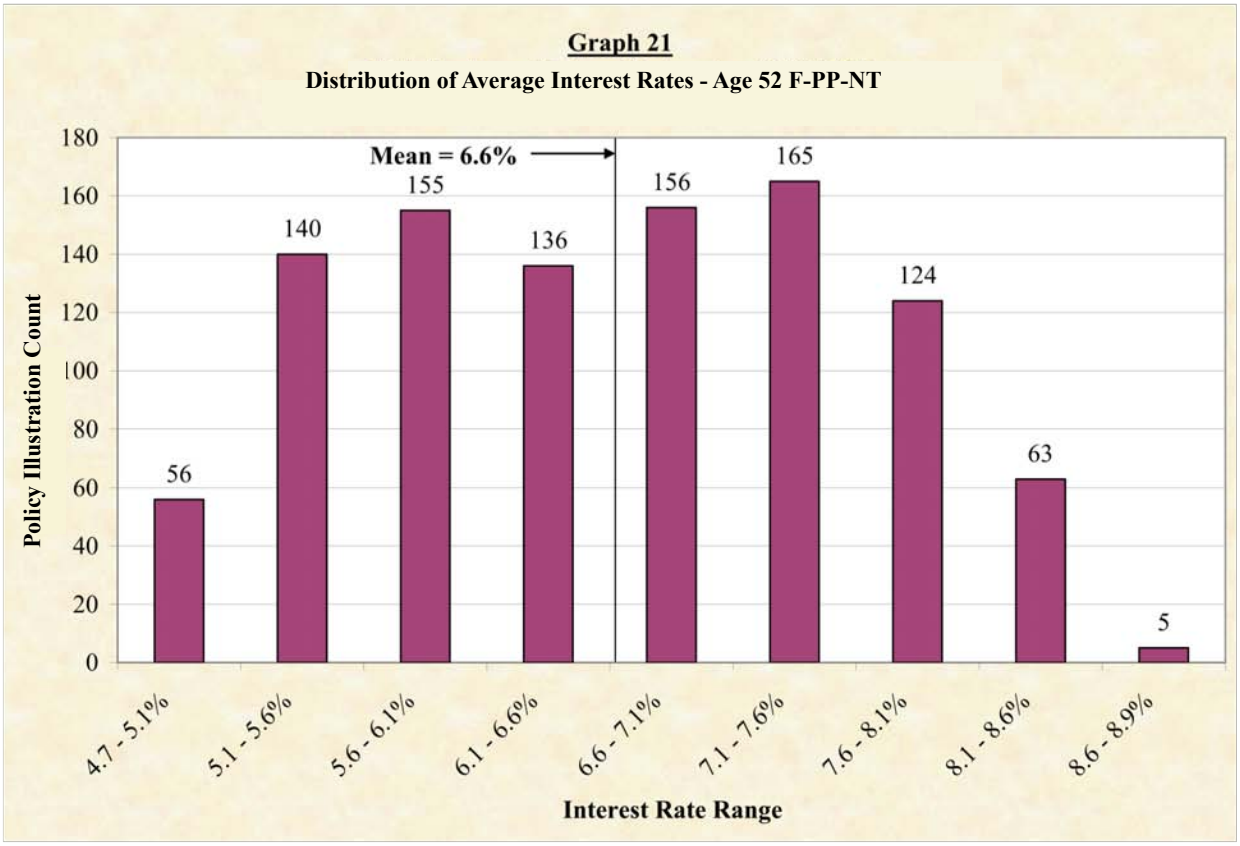
   - An 97.9% likelihood that at least 9 payments will be needed;

   - A 30.5% likelihood that at least 11 payments will be needed;

   - A 10.6% likelihood that at least 13 payments will be needed; and

   - Only a 0.2% likelihood that 15 or more payments will be needed.

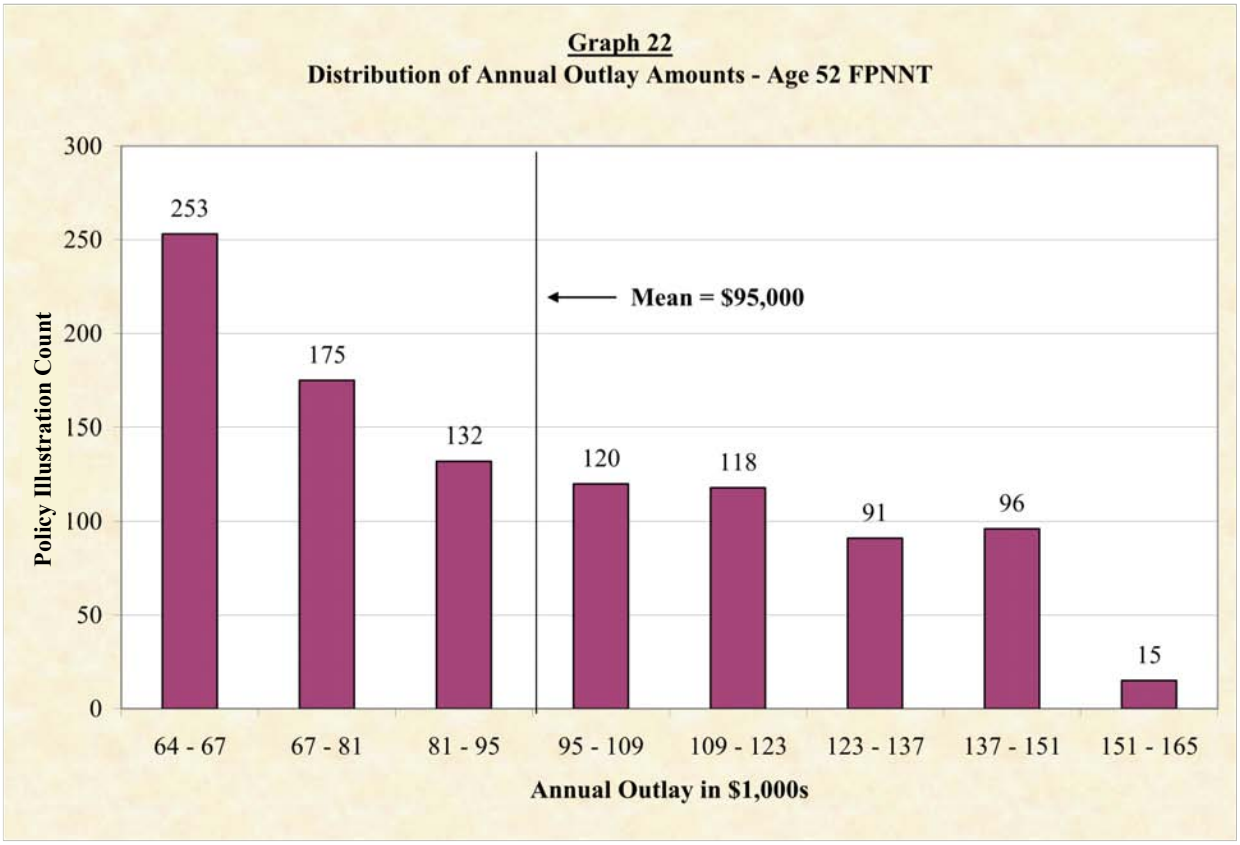
Natural Premium Offset 85 - 52 Female - Preferred



What does the interest rate bar graph tell us?

1. Again, the mean and standard deviation is the same as previous examples, but there are subtle differences in each distribution.

2. Using our standard deviation calculation and statistical theory, and given that each bar segment is one half of a standard deviation, we know that there is an 80.4% likelihood that the interest rate used to determine the dividend scale is 5.6% or above, a 51.3% likelihood the rate is 6.6% or above, and a 19.2% likelihood the rate is 7.6% or above.



What does the annual outlay bar graph tell us?

1. The lowest outlay is $64,000 per year – a total of $960,000 over the 15 year period. This is a pretty good result when you realize the total out-of-pocket for the policyholder before age 85 was only $674,190. Not quite as good as our age 38 example, but a pretty fair result. [IRR = 1.45% or better]

2. We observe a 74.7% likelihood the annual outlay is $67,000 or higher. [IRR = 1.64% or better]

3. We observe a 44% likelihood the annual outlay is $95,000 or higher. [IRR = 3.03 % or better]

4. We observe a 20.2% likelihood the annual outlay is $123,000 or higher. [IRR = 4.04% or better]

5. In all cases, this also feels like a “good news – good news” result!

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Volume 17, August 2010

The economy continues to struggle with the effects of the severest downturn since the Great Depression, with unemployment in particular remaining stubbornly high. Monetary policy makers, tasked with balancing economic growth and low inflation, have signaled a willingness to keep interest rates near zero for as long as needed.

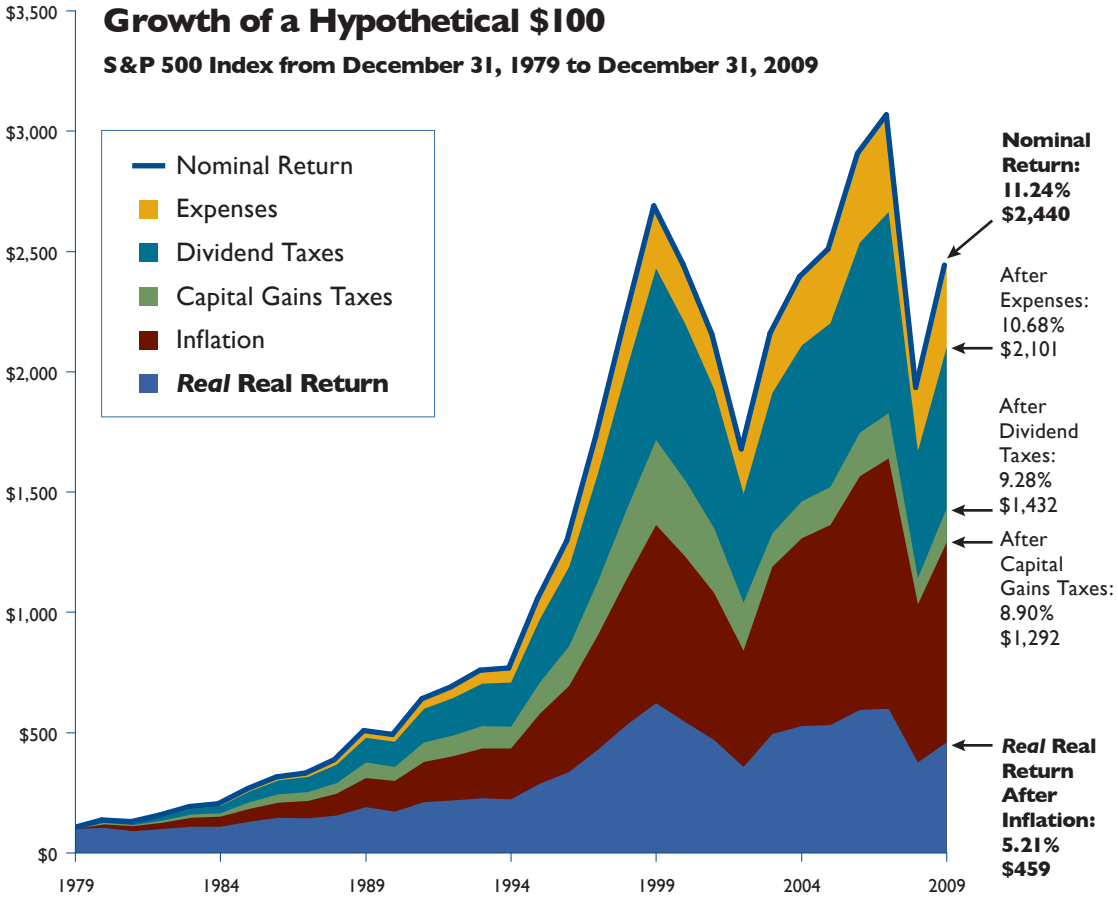
Meanwhile, fiscal authorities have enacted enormous spending programs in an effort to create jobs and foster growth. While these are laudable goals, the increased spending is likely to have long-lasting effects on our government's balance sheet. The most recent budget released by the White House projects a deficit of more than $1 trillion for fiscal year 2011. Between 2011 and 2020, deficit spending is projected to exceed $10 trillion; by 2020, it is projected that 3.5% of U.S. GDP will be going to interest payments on federal government debt (up from 1.3% in 2010).

Additional revenues in the form of taxes will be required to support government spending — few are predicting that tax rates will decrease from here. And it remains to be seen whether higher inflation will be a by-product of the federal government printing new dollars that are worth less than the dollars they borrowed.

For investors, it's more important than ever to look beyond the stated, or nominal, returns to what an investment earns after inflation, taxes, and expenses — the *real* real return. The results of this year's study are consistent with historical results. Two asset classes — common stocks and municipal bonds — have provided the highest *real* real returns over the past 30-year period.

A Study of *Real* Real Returns

It's easy to get caught up in performance figures. At Thornburg Investment Management, we believe investors should look carefully at total returns, and many investors have seen the value of looking past the nominal figures to the real (post-inflation) data. We've gone beyond stated performance numbers for several asset classes and calculated returns that are adjusted for inflation, taxes, and investment expenses. We call them the *real* real returns.



Thornburg Investment Management's *real* real return study illustrates that a hypothetical $100 investment in large-cap stocks (as measured by the S&P 500 Index) would have grown to **$2,440** over the past 30 years – a very impressive nominal return.

However, that figure masks the impact of expenses, taxes on dividends and capital gains, and the insidious erosion of purchasing power caused by inflation. Once these influences are factored in, the *real* real value of that $2,440 is just **$459**.

Results reflect past performance and do not guarantee future results. The performance of an index is not indicative of any particular investment. Investors may not make direct investments into any index. Sources are provided at the end of this study.

A Look at the Results

While 2008 was negative for virtually all asset classes, 2009 represented a direct turnaround – only government bonds showed a negative nominal return. Although stocks, commodities, and municipal bonds failed to recover their 2008 losses completely, the economic recovery helped them rebound from the market lows of March 2009. The best-performing asset class on a *real* real return basis during 2009 was international stocks, followed by U.S. small cap stocks, and U.S. large caps. The results are summarized on the following page.

Investors also witnessed dramatic volatility in 2009. The swings from negative territory in 2008 to positive results in 2009 were some of the biggest in history. From the low point in March 2009 until the end of 2009, the S&P 500 increased by 67.8%.

Even though equity returns were quite positive in 2009, investors can gain valuable insights by focusing beyond one-year results. Thornburg's study includes *real* real returns of all asset classes over both 20- and 30-year time periods. The 30-year perspective is particularly important since it generally encompasses two key periods of an investor's life – 30 years working and accumulating assets in preparation for 30 years of retirement. And, when nominal returns are adjusted for inflation, taxes, and investment expenses, we see a truer picture of which asset classes can contribute to the growth of real wealth over the long term.

> "Over the long term, **common stocks** and **municipal bonds** generated the highest real real returns."

Despite the volatility of the past two years, the results of this year's study are consistent with our previous studies. Over the long term, common stocks and municipal bonds generated the highest *real* real returns. These results underscore the premise that accumulating real wealth and generating real income can best be achieved by focusing on basic investment strategies, rather than short-term trading, market speculating, or searching for the "magic" alternative investment strategy.

2009 in Perspective

In 2009, U.S. common stocks (represented by the S&P 500 Index and the Russell 2000 Index) generated nominal positive returns of 26.46% and 27.17%, respectively – well above the large-cap stock long-term average of approximately 9% over the past 80 years. After accounting for inflation, taxes, and investment expenses, their *real* real returns in 2009 were 18.52% and 19.14%, respectively. Yet, for the past 10 years (2000–2009), both of these indexes lost value on a *real* real basis.

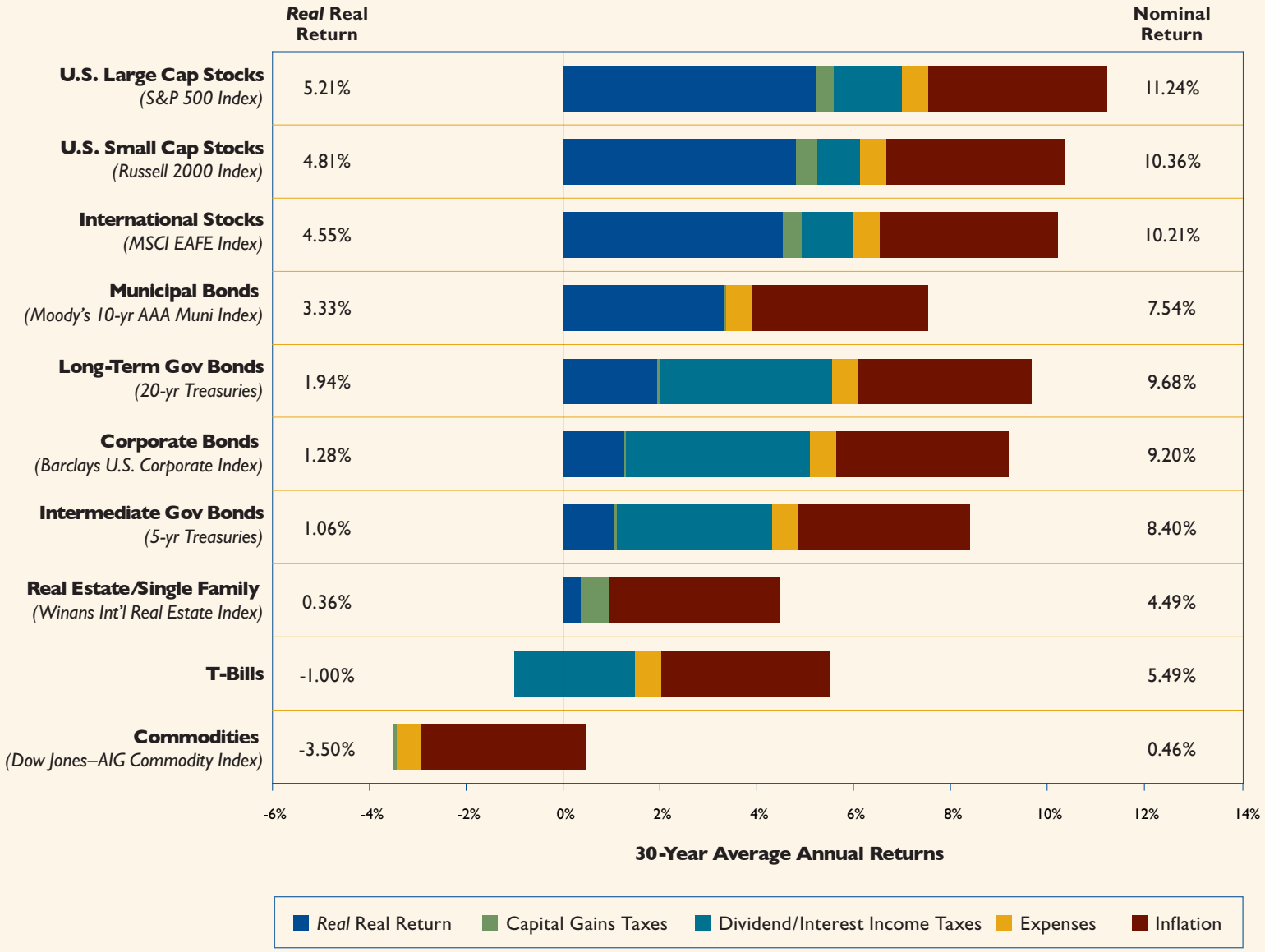
It has been argued that the past decade was the lost decade for stock market returns, and the evidence supports that thesis. However, when looking at 15-, 20- and 30-year periods, stock returns are positive, with both U.S. stocks and municipal bonds outperforming all the other asset classes. It is only within the past five and 10 years that government and corporate bonds have outperformed stocks. Why is this so?

The decade from 2000 to 2009 was marked by two bubbles that burst. The first was the "tech" bubble that began in the late 1990s and started to deflate in early 2000. The second was the real estate bubble that began near the middle of the decade, started deflating in 2006 and 2007, and continues to search for a floor. Both of these events dramatically affected the stock and bond markets. During the boom-bubble formation years, stocks rapidly ascended, only to fall to lows from which they have not yet recovered. The S&P 500 Index reached a high in October 2007, but at the end of 2009 was almost 25% below that level. At year end, the Russell 2000 Index (small cap stocks) was still 24% below its July 2007 peak.

During much of the decade, the stock markets were highly volatile while the fixed income markets were relatively stable. However, after the real estate bubble popped, economies in the United States and the rest of the world contracted sharply in late 2007 and throughout 2008, spooking investors and driving worldwide interest rates to historic lows, where they remain today. This, combined with a flight to quality, resulted in historic positive returns for government bonds in 2008.

Also of interest is the fact that both commodities and real estate, the two asset classes most often noted as providing inflation protection, continue to generate slightly negative returns over longer periods of time on a *real* real return basis. Even though commodities generated a positive 12.27% *real* real return in 2009, over all examined time periods except the 10-year period, the returns are negative. Real estate

Erosion of Total Returns Over 30 Years (As of 12/31/2009)



Real Real Returns

	U.S. Large Cap Stocks	U.S. Small Cap Stocks	Int'l Stocks	Municipal Bonds	Long-Term Gov Bonds	Corporate Bonds	Intermediate Gov Bonds	Real Estate*	T-Bills	Commodities	Inflation
30 Years	5.21%	4.81%	4.55%	3.33%	1.94%	1.28%	1.06%	0.36%	-1.00%	-3.50%	3.51%
20 Years	3.69%	3.93%	0.31%	3.94%	2.41%	1.34%	1.33%	-0.40%	-0.81%	-1.84%	2.73%
15 Years	3.88%	3.61%	1.35%	4.43%	2.73%	1.40%	1.45%	0.30%	-0.80%	-0.82%	2.47%
10 Years	-4.21%	-0.09%	-1.93%	3.66%	2.44%	1.06%	1.44%	-0.34%	-1.28%	0.51%	2.53%
5 Years	-2.89%	-2.69%	0.33%	1.64%	0.32%	-0.63%	0.40%	-4.19%	-1.23%	-3.85%	2.56%
1 Year	18.52%	19.14%	23.36%	9.93%	-18.52%	10.51%	-6.12%	-1.27%	-3.07%	12.27%	2.72%

Methodology: The chart above shows how fees, taxes on dividends and capital gains, and inflation erode real wealth. The amount at the far right shows the nominal return of an investment, while the area in gold reflects the amount eaten away by fees (in our example, fees of 50 basis points (0.50%) were applied to the investment, with the exception of real estate, which includes a one-time 6% commission). The impact of taxes on income from the investment (either dividend or interest income) are represented by the area in teal. Taxes on capital gains provide a further drag on performance and are represented by the area in green, while the silent tax of inflation, in burgundy, can often turn a positive nominal return into a negative real real return. Sources and descriptions of each index and asset class are provided at the end of this study.

*For the one-year real real return, the 6% real estate commission was not deducted.

generated a negative 1.27% real return in 2009 (even without the standard 6% commission) and could continue to decline in 2010. Its real real return for all periods is basically zero, except for the most recent five years when the bursting bubble resulted in a negative 4.19% real real return.

The stand-outs in the bond category for 2009 were corporate bonds and municipal bonds. The corporate bond market experienced significant price appreciation as the spreads against Treasuries narrowed from historic gaps in 2008. The 2009 real real return from corporate bonds was 10.51%. Municipal bonds also rebounded in 2009, generating a real real return of 9.93%. While corporate bonds outperformed municipal bonds in 2009, over all longer-term time periods (5, 10, 15, 20 and 30 years), municipal bonds have generated a higher real real return than corporate bonds.

Government bonds were the laggards in 2009. Even though interest rates remained at historic lows, investors abandoned the flight to safety that occurred in 2008 by shedding government bonds from their portfolios and moving back to riskier assets.

Historically, on a before-tax basis, corporate and government bonds have delivered competitive returns. However, these vehicles generally derive a large portion of their returns from interest income, which is taxed at high ordinary rates. An investor's real real return can be significantly impacted by asset location, or how investments are distributed across taxable and tax-deferred accounts. As such, investors should analyze their time horizon, income needs, and tax bracket to determine which vehicles – taxable or tax-deferred – make the most sense for their corporate and government bond allocation.

Analyze Every Investment for Its *Real* Real Return

Taxes and inflation remain the investor's two primary obstacles to building long-term wealth. And these variables are likely to have an even greater negative affect on portfolio returns in the future.

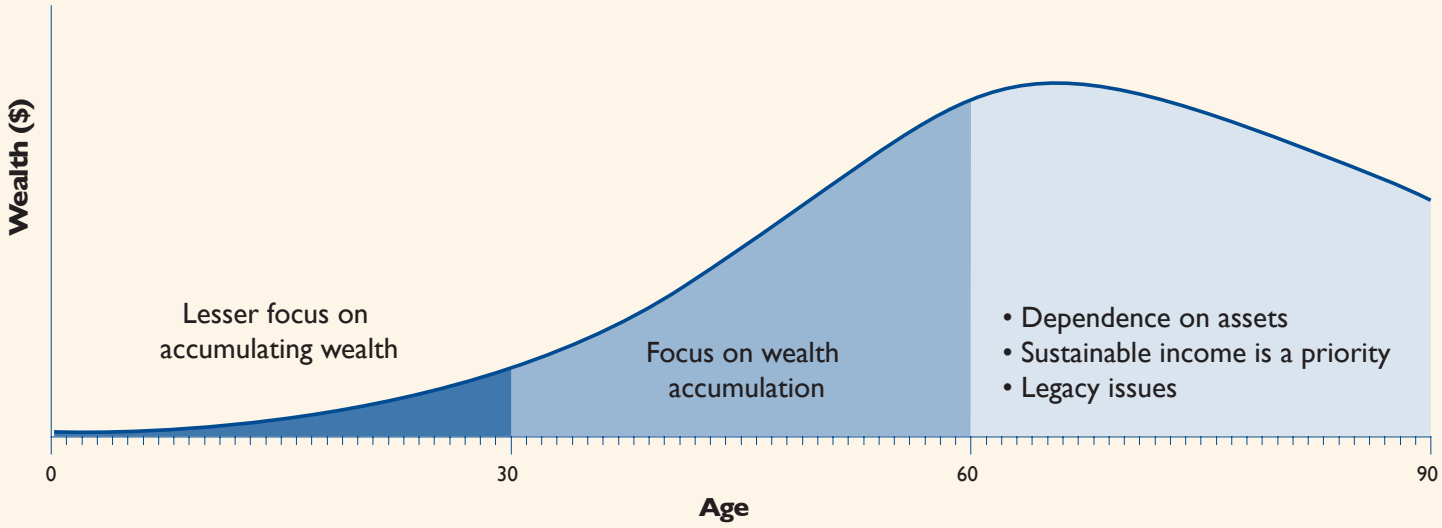
The government's deficit-fueled spending spree and growing debt may necessitate an increase in taxes and may very well contribute to an increasing rate of inflation. Over the past 30 years, taxes have averaged around 40% for investors, while inflation has averaged 3.5%. Looking at the real real returns for stocks and municipal bonds over the past 20 and 30 years, one can see how difficult it is to generate real real returns that exceed 3–4% on an annualized basis.

It is increasingly probable that investors will face higher taxes on dividends and capital gains (and higher taxes on interest income for very high-net-worth investors), possibly combined with higher inflation due to excessive deficit spending. None of these events is likely to be short-lived.

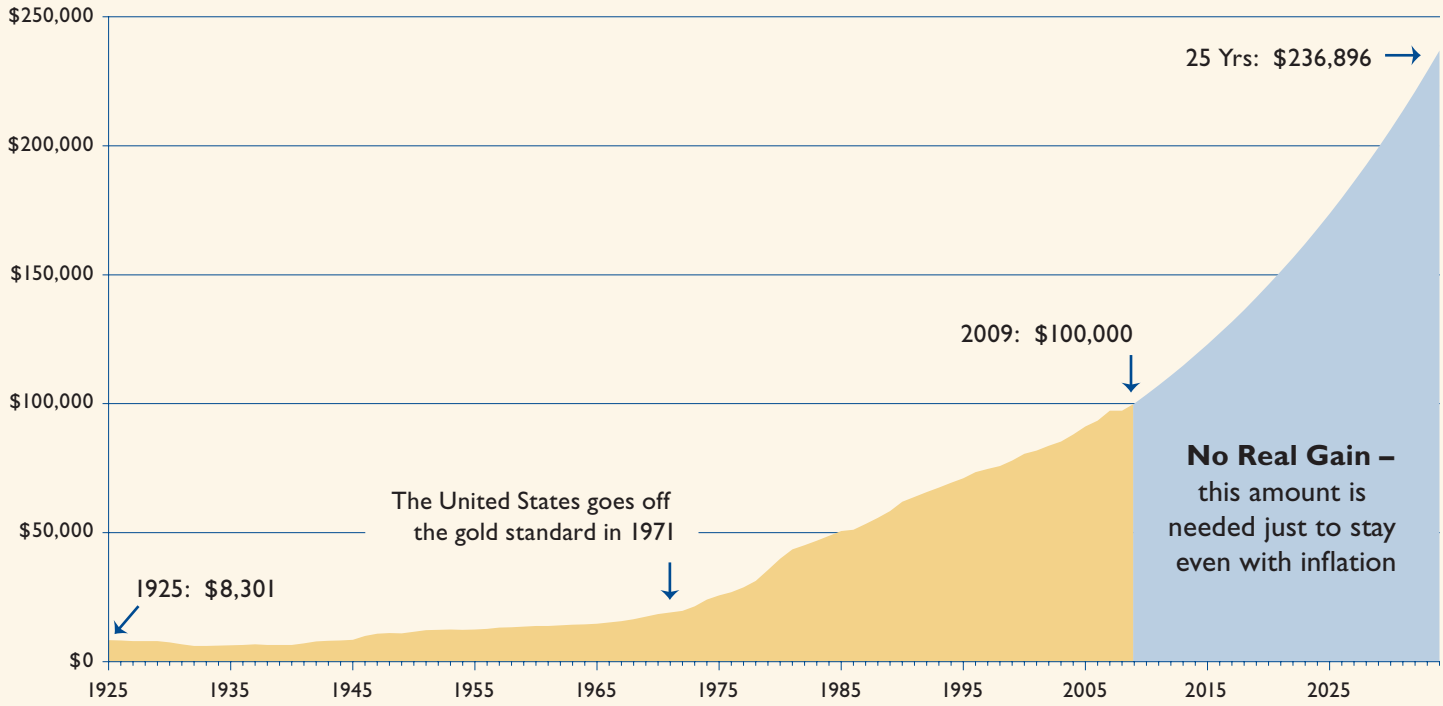
Investment expenses have also eroded investor returns over time. Even though expenses have steadily decreased over the years, we believe it's reasonable to expect that they will stay about the same in the coming years, especially given the recently passed financial regulatory reform. In fact, they may even rise a bit.

This year's real real return study is consistent with previous results: investors should realistically expect real real

Investment Priorities by Age



A Picture of Inflation



The gold area in the graph shows the equivalent of $100,000 in 2009 dollars, based on CPI for each year. So, $8,301 in 1925 had the same purchasing power as $100,000 in 2009. The blue area shows nominal amounts representing no real gain on $100,000 starting in 2010 if inflation averages 3.51%, the 30-yr average inflation rate.

investment returns for common stocks over long periods of time to be no more than 4–5% and for municipal bonds to be no more than 3–4%. For intermediate- and long-term government and corporate bonds, they should expect even less, especially as interest rates rise in the future from their current historically low levels. If there is increasing inflation in the near future, both commodities and real estate may benefit, but over longer periods of time they have not generated any significantly positive *real* real returns.

Sustaining Portfolios in Retirement

How can investors use the results of the *real* real returns study to help prepare a portfolio for retirement? With advancing longevity, it's fair to assume a 30-year need. That leaves many unanswered questions:

- What returns should an investor assume going forward?
- How can investors generate a desired level of income from their investments?
- How should they manage portfolios during times of extreme volatility? Bear or bull markets? Low returns with greater stability?
- How much can they withdraw each year to provide a high probability a portfolio will survive for an entire 30-year period — or longer?
- Is there a way to preserve some or all investment wealth for future generations?

Many experts have conducted studies to determine a reasonable and safe rate of income withdrawal during retirement. Typically, investors will hold more conservative investments in these years than they did during the accumulation years, but the portfolio must also contain a certain percentage of equities, which can provide growth and the possibility of retaining purchasing power.

The challenge is to not only determine the right asset mix in a portfolio that will generate the desired income but also implement a spending policy that will weather the fluctuations

of various markets. It should be noted that the Thornburg study, covering the past 30 years, includes both extreme bear and bull market environments (2000-2002, 2008-2010), as well as periods of extremely high and low inflation (1979-1981, 1997-1998, 2001-2003). Investors can expect to see more of the same in the next 30 years. The study also covered decades of exceptional stock returns and decades of little or no stock returns.

One of the most significant studies of recent times, conducted by Bill Bengen, CFP,® author of Conserving Client Portfolios During Retirement, used *Ibbotson Stocks, Bonds, Bills and Inflation* data going back to 1926. Bengen analyzed actual historical returns (as opposed to Monte Carlo simulations) for 50 different 30-year periods and concluded that the initial maximum safe withdrawal rate from a portfolio allocated 63% to equities (both large and small capitalization) and 37% to bonds (intermediate government) was 4.15%, with annual rebalancing of the portfolio and annual increases for inflation. Bengen also concluded that a higher allocation to small caps, less-frequent rebalancing, and active management with added alpha can increase the withdrawal rate. However, these steps may result in an unacceptable level of volatility.

It should be noted that the Bengen study provided no guarantee that portfolio purchasing power would be retained or that real wealth would be created. Since his study only refers to nominal returns, albeit with the income withdrawals adjusted for inflation, the question remains: When assuming *real* real returns, would Bengen's portfolio maintain its purchasing power?

It is difficult to conclude whether the same portfolio adjusted for inflation, taxes, and expenses would retain its purchasing power. However, after examining the conclusions from Thornburg's studies over the past 20 years, one can see how difficult it is to achieve a *real* real return greater than 4-5% over long periods of time. Even with a portfolio comprised of only domestic large-cap equities, the *real* real return was barely greater than 5% over 30 years and less than 4% over the previous 20 years. Surely the level of risk and volatility associated with an all-equity portfolio would be unacceptable for most investors in their retirement years. For comparison purposes, a weighted portfolio of 63% large-cap stocks and 37% municipal bonds, but with no rebalancing or income withdrawals, would yield the following results:

30 years – 4.52% *real* real return
20 years – 3.78% *real* real return
15 years – 4.08% *real* real return

Implications for Baby Boomers

Those that are either recently retired or within the "baby boom" generation have been hit over the past 10 years with two severe bear markets and two recessions. It's possible they will experience similar circumstances in the future. And given the likelihood we'll see both higher taxes and inflation in coming years, the necessity to manage a portfolio with these challenges in mind becomes not only a more important task but also a more difficult one.

Too often there is a search for a "magic" solution that will overcome these challenges. Yet, more often than not, it is a simple strategy that, when given adequate time with continued discipline and persistence, may result in the most favorable results. Considering the need for income in retirement, and the general practice of relying on an investment portfolio for at least a portion of that income, it seems logical that retirees would attempt to preserve their real wealth and purchasing power during these years.

Bengen's study concludes that there must be a significant allocation to equities during retirement to maintain and increase the likelihood that a portfolio will survive for a full 30 years. Thornburg's *real* real return study confirms that the highest returns come from the more traditional asset classes – common stocks and municipal bonds. Asset classes that have traditionally been associated with inflation protection have not generated significant positive *real* real returns over long periods of time.

Over the 20 years that Thornburg has conducted this study, the results have been consistent. There is no reason to think that they will change significantly going forward. The two primary unknowns, inflation and tax rates, will remain. Investment expenses will also continue. A simple asset allocation among the highest *real* real return asset classes, accompanied by a reasonable withdrawal rate and spending policy, may provide investors with the best chance of sustaining their portfolios and preserving wealth going forward.

The Long-Term Winners Remain:

Common Stocks & Municipal Bonds

Comments

A note on the use of total return: we used so-called total return figures in this study because total return is the standard measure used in the financial community. Total return is really only an adequate measure of the return one could achieve with U.S. Treasury bills, because investors in T-bills effectively roll the entire portfolio every 90 days. There is simply no perfect way to track a hypothetical portfolio, whether it consists of fixed income or equity securities. In addition, similar criticisms can be made of single-family homes: for purposes of this study, we have ignored leverage, tax deductibility, and maintenance costs.* While some details may be unclear, the general picture of real real returns – after inflation, taxes, and expenses – for the different classes of investments is clear and indisputable.

Important Information

This information should not be considered tax advice. Any tax statements contained herein are not intended to be used, and cannot be used, for the purpose of avoiding tax penalties. Please consult your independent tax advisor as to any tax, accounting, or legal statements made herein.

Statements contained herein are based upon information furnished to us from independent sources. While we do not guarantee their correctness, we believe them to be reliable and have ourselves relied upon them.

The Consumer Price Index (CPI) measures prices of a fixed basket of goods bought by a typical consumer, including food, transportation, shelter, utilities, clothing, medical care, entertainment and other items. The CPI, published by the Bureau of Labor Statistics in the Department of Labor, is based at 100 in 1982 and is released monthly. It is widely used as a cost-of-living benchmark to adjust Social Security payments and other payment schedules, union contracts, and tax brackets. CPI is also known as the cost-of-living index.

Sources

William P. Bengen, Conserving Client Portfolios During Retirement, FPA Press, 2006.

White House Budget: http://www.whitehouse.gov/omb/budget/overview/

Real real returns were calculated by Thornburg Investment Management using data obtained from the following sources:

Inflation/Consumer Price Index–Urban (CPI-U) and Treasuries data were obtained from the Ibbotson SBBI Classic Yearbook, © 2010. All rights reserved. Used with permission.

Municipal bond, commodity, and real estate data were obtained from Global Financial Data.

Corporate bond data was obtained from Barclays Capital.

Index data for the S&P 500, MSCI EAFE, and Russell 2000 were obtained from FactSet.

Tax rates were obtained from the Internal Revenue Service. The study applied the highest marginal tax rate in each calendar year allowable per the IRS to compute hypothetical dividend and interest taxes. The study assumes all equity dividends are qualified for the periods covered under The Jobs and Growth Tax Relief Reconciliation Act of 2003.

Index & Asset Class Descriptions

Bonds are debt investments in which an investor loans money to an entity (corporate or governmental) which borrows the funds for a defined period of time at a fixed interest rate. Bonds are subject to certain risks including loss of principal, interest rate risk, credit risk, and inflation risk. The value of a bond will fluctuate relative to changes in interest rates; as interest rates rise, the overall price of a bond falls.

Government bonds, or Treasuries, are negotiable debt obligations of the U.S. government, secured by its full faith and credit and issued at various schedules and maturities. Income from Treasury securities is exempt from state and local, but not federal, taxes. Treasury bill data is based on a one-bill portfolio containing, at the beginning of each month, the bill having the shortest maturity not less than one month. Intermediate government bond data is based on a one-bond portfolio with a maturity near five years. Long-term government bond data is based on a one-bond portfolio with a maturity near twenty years.

Municipal bonds are debt obligations issued by states, cities, counties, and other governmental entities. Municipal bonds offer a predictable stream of income which is free from federal and, in some cases, state and local taxes, but may be subject to the alternative minimum tax. Because of these tax savings, the yield on a muni is usually lower than that of a taxable bond. Higher grade munis have higher degrees of safety with regard to payment of interest and repayment of principal and marketability in the event you must sell before maturity. This study uses Moody's 10-Year AAA Municipal Bond Index as a general representation of the municipal bond market. The index consists of munis with a AAA credit rating from across the United States.

A corporate bond is a debt security issued by a corporation. Corporate bonds are taxable and have more credit risk compared to Treasuries. This study uses Barclays Capital U.S. Corporate Investment Grade Index, which is a general representation of the investment-grade corporate bond market.

A stock is a share in the ownership of a company. As an owner, investors have a claim on the assets and earnings of a company as well as voting rights with the shares. Compared to bonds, stock investors are subject to a greater risk of loss of principal. Stock prices will fluctuate, and there is no guarantee against losses. Stock investors may or may not receive dividends. Dividends and gains on an investment may be subject to federal, state or local income taxes.

Standard & Poor's 500 Stock Index is an index consisting of 500 stocks chosen for market size, liquidity and industry grouping, among other factors. The S&P 500 is designed to be a leading indicator of U.S. equities and is meant to reflect the risk/return characteristics of the large-cap universe.

The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The unmanaged index is a subset of the Russell 3000® Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. Small-cap stocks are subject to greater volatility than large-cap stocks.

The MSCI EAFE (Europe, Australasia, Far East) Index is an unmanaged index. It is a generally accepted benchmark for major overseas markets. Index weightings represent the relative capitalizations of the major overseas developed markets on a U.S. dollar adjusted basis. The index is calculated with net dividends reinvested in U.S. dollars. There are special risks associated with international investing, including currency fluctuations, government regulation, political developments, and differences in liquidity.

Compared to the other investments in this study, single-family homes are relatively illiquid. Property values can fluctuate and there are no guarantees. Gains on the sale of a property may be taxable at the federal, state, or local level. Real estate data in this study uses the Winans International Real Estate Index,™ which tracks the prices of new home prices in the United States with Census Bureau data.

A commodity is a physical good – such as food, grain, oil, natural gas, and metals – which is interchangeable with another product of the same type, and which investors buy or sell in an active market, usually through futures contracts. If you buy a futures contract, you are basically agreeing to buy something that a seller has not yet produced for a set price on a specific future date. The futures market is extremely liquid, risky, and complex. Commodity prices can be affected by uncertainties such as weather and war and there are no guarantees against losses. In this study, commodities are represented by the Dow Jones-AIG Commodity Index (DJ-AIGCI),® from 1990 to present. Prior to that, returns are represented by the Dow Jones Futures Price Index. The DJ-AIGCI is designed to be a highly liquid and diversified benchmark for commodities traded on U.S. exchanges. For purposes of this study, it is assumed that commodity exposure is obtained through a vehicle tracking the index and not by purchasing the underlying futures contracts.

The performance of an index is not indicative of the performance of any particular investment. Unless otherwise noted, index returns reflect the reinvestment of income dividends and capital gains, if any, but do not reflect fees, brokerage commissions or other expenses of investing. Investors may not make direct investments into any index.

*For the one-year real real return, the real estate commission was not deducted. For longer periods, a 6% commission was applied to approximate the economic reality of a typical real estate investment transaction.

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