

Modern Portfolio Theory, Asset Classes,
and Life Insurance¹



GUARDIAN®

Modern Portfolio Theory is one of the most important and relevant economic theories developed in our lifetime, and has greatly influenced the movers and shakers in the investment world as well as most individuals with some discretionary income to save.

The idea of balancing return with risk in a paradigm-shifting approach toward an “efficient frontier” was developed in 1982 by Harry Markowitz. He shared a Nobel Prize in 1990 with Merton Miller and William Sharpe for what is now the best-known and most widely accepted method of portfolio selection.²



The Living Balance Sheet, a web-based tool that gives individuals and businesses the information they need to view current financial situations and build efficient strategies for the future.

Don't Put All Your Eggs into One Basket

The simple idea behind Modern Portfolio Theory (MPT) is *diversification of asset classes* to achieve the best risk/return ratio for your needs, lifestyle, financial situation, and personal preferences. The first step is to identify asset classes. Most advisors agree that the primary classes include:

- Equities (common stocks)
- Fixed Income (bonds and mortgages)
- Money Market (cash)
- Guaranteed (annuities)
- Real Estate

The next step is to diversify assets among and within these classes in order to offset both systematic risk – recession, interest rates, and the like – and unsystematic risk – or risk specific to individual stocks, businesses or industries.

No matter what precautions are taken, there is typically some reduction of earnings from all of the above asset classes due to:

- Volatility
- Inflation
- Taxes
- Fees

For example, from 1977 through 2006, total equity returns of Large Cap stocks (comparable to the S&P 500™) reflected a *nominal* compound annual rate of return of 12.27%. With the effects of taxes and investment fees (2.63%) plus the compound inflation rate (4.45%), the *actual* compounded rate of return over the 30-year period was 5.19%.³

Timing is Everything

For those seeking less short-term risk and volatility, Treasury Bonds had a 30-year compounded *real* rate of return over the same period of within a range of 0% – 2%, and Municipal Bonds produced a compound return of 1.8%. The shockingly low reward was a trade-off for the higher security of capital during that time. In a shorter time frame from 2001 – 12/31/2006, Large Cap stocks produced a real return of just 2.02% while International Stocks were up 10.01%.⁴

Life Insurance as an Asset Class

The uncertainty of risk versus reward can delay development of a sound financial strategy, so consider this smart alternative. Life insurance is an ideal vehicle to integrate into the idea of Modern Portfolio Theory as an asset class of substantial value, meeting all of the designated important criteria. Here's why:

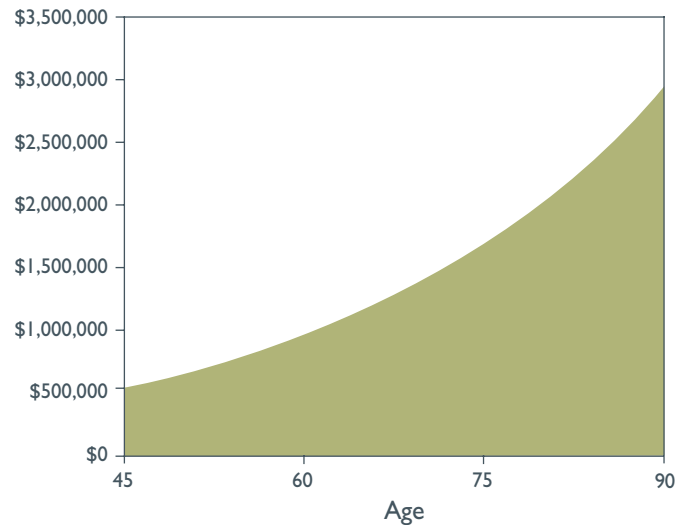
- The death benefit provides cash when needed most.
- The cash value provides the policyowner with *living benefits* similar to a fixed account with a guaranteed minimum return, and may be used as a supplement to retirement income, mortgage or loan repayments, or a wide range of other applications.
- The tax-deferred cash accumulation can be accessed income tax-free.
- The death benefit is payable income tax-free and quite possibly estate tax-free.
- Policy proceeds are typically beyond the reach of creditors.
- The policy is funded with affordable periodic payments that, over time, are inherently leveraged to a capital sum.
- Unique to life insurance – With a Waiver of Premium rider,⁵ a policy is self-completing in case of disability.
- The death benefit is based on the event of death – not a market event that can cause a downturn in value.
- Premiums may be funded with capital earned from other invested assets in lieu of budgeted income.
- Permanent life insurance can produce at least as favorable a long-term result with less risk within an equity and fixed income portfolio than a portfolio without life insurance.

The Synergies of Life Insurance Plus Investments in an Efficient Portfolio⁶

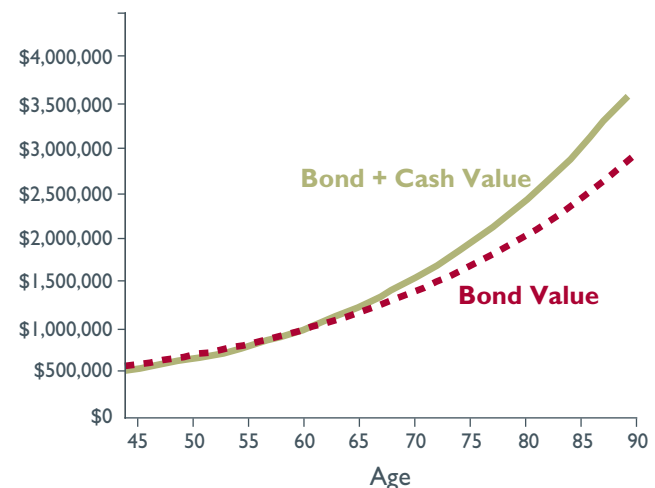
Retirement Planning

To provide income beyond Social Security during retirement, many people rely on employer-sponsored plans, investments, and life insurance. As the time to retirement gets shorter, it's wise to scale back on more risky investments and increase the stability of fixed components. The following charts demonstrate the value of integrating life insurance with a bond portfolio rather than purchasing additional bonds.

Value of Bond Component with Income Purchasing More Bonds



Asset Values of Bonds and Life Insurance



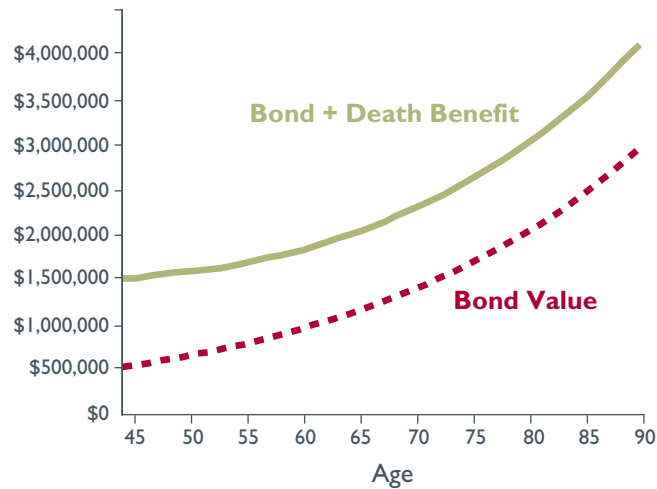
The charts evaluate growth of a \$500,000 initial investment from age 45 to age 90. The first chart shows that the investment in bonds, growing at an assumed constant 4% rate of return over the years would accumulate an asset value of \$2,920,588.

The second chart compares the results if the \$20,000 initial bond income was used to purchase a whole life policy with the results of an all-bond option. During the first 19 years, the all-bond option produces slightly higher accumulations than the bond/cash value alternative, then the values utilizing life insurance rapidly increase, outstripping the bond value alone in the later years. This coincides with the years when an individual may want additional resources to draw upon for income, as inflation and the cost of living could have outpaced Social Security and a pension.

Legacy Planning

Because the life insurance death benefit is paid in full at the event of death, no matter what the “timing,” the legacy value of the bond/life insurance combination delivers a significantly greater result in every year.

Legacy Value of Bond Plus Insurance Death Benefit



The synergy in funding a life insurance policy from the income stream of a component of a fixed portfolio is this – it will typically produce a more favorable result because the return will be higher and the risk lower – achieving the ideal “efficient frontier” highly sought in the applications of Modern Portfolio Theory.

Let’s Look at Another Example

This variation evaluates the 45-year-old’s \$500,000 municipal bond/fixed component in the ability to maximize retirement distributions as well as the legacy value at life expectancy:

Option 1: \$500,000 Bond Investment Converted to Income at Age 65

| | |
|--|-------------|
| Accumulated value at age 65 | \$1,095,562 |
| Interest-only after-tax income beginning at age 65 | 42,137 |
| Portfolio legacy value at life expectancy +5 | 1,095,562 |
| Risk index | 2.48 |
| Net after-tax return | 4.0% |

Option 2: Bond income to pay \$20,000 annual premium on a 20-Pay Whole Life Insurance Policy; \$1,064,171 Face Amount; Amortize Income from Age 65 – 89

| | |
|---|-------------|
| Bond accumulated value at age 65 | \$ 476,178 |
| Policy cash value at age 65 | 611,711 |
| Total cash value at age 65 | \$1,087,889 |
| Interest/principal after-tax income beginning at age 65 | 49,308 |
| Portfolio legacy value at life expectancy +5 | 0 |
| Whole Life insurance death benefit | \$1,357,789 |
| Risk index – accumulation phase | 2.10 |
| Risk index – distribution phase | 2.43 |
| Imputed net after-tax return | 4.52% |

Take-Aways

1. Diversification is critical for a well thought-out portfolio.
2. Risk profile and time horizon are both important considerations in developing investment choices.
3. Permanent life insurance is a qualified asset class, and provides the ideal capstone to a solid, balanced financial strategy.

¹This brochure is derived with permission from *Life Insurance as an Asset Class: A Value-added Component of an Asset Allocation*, by Richard M. Weber, MBA, CLU and Christopher Hause, FSA, MAAA, both of Ethical Edge Insurance Solutions, LLC.

²*Asset Allocation*, Roger C. Gibson, McGraw Hill 2000. Third Edition.

³*A Study of Real, Real Returns*, Thornburg Investment Management, 2007.

⁴*Ibid.*

⁵Riders may incur additional costs.

⁶Charts and examples derived from *Life Insurance as an Asset Class: A Value-Added Component of an Asset Allocation*, by Richard M. Weber, MBA, CLU and Christopher Hause, FSA, MAAA. Please note that deduction of all applicable fees and charges could result in lower performance than shown in examples.