

Life Insurance as a “Hedge”

What is a “hedge”? A hedge, in a general sense, is a technique employed to protect an asset from a particular risk. There is a variety of hedging products or techniques that can protect a portfolio of assets. Many estate planning techniques can be thought of hedges put in place to protect an estate. The purpose of this paper is to focus on one product that lately has been talked about as a possible portfolio hedge but has not necessarily reached the mainstream thinking of many investment firms or family offices – Life Insurance.

Traditionally, life insurance discussions in the high-net-worth market place tend to focus on the need for life insurance as it relates to estate tax mitigation, estate liquidity, and estate equalization. I recently wrote a paper about why high-net-worth families may want to consider owning life insurance and one area that was briefly discussed was using life insurance as a hedge. A hedge to protect a family’s portfolio in today’s volatile global markets.

The question is; can life insurance serve as an invaluable tool in a family’s wealth management strategy? Can it be used as a unique portfolio hedging technique?

Well let’s see.....

I believe this kind of hedge can be quantified and measured like any other financial asset, and then one can decide whether it makes sense to incorporate life insurance as a component of their overall wealth management or risk mitigation strategy.

As a portfolio hedge, life insurance offers the following benefits:

- It can reduce or hedge investment tail risk by paying guaranteed death benefits
- It can ensure the funding of charitable interests
- It can protect a family foundation from poor investment performance, thus maintaining the family’s planned charitable giving
- It can replenish wealth for later generations as an exponentially larger number of family members draw down funds

The fundamental question that is different with this kind of hedge is “when” or what is the life expectancy data tell us about the timing of death benefit proceeds actually being realized. This is different from a traditional investment hedge, like an option, in which the question is “if” the contract will be “in the money” and hence exercised. In traditional hedging an expiring “out of the money” option is a true expense with no residual value and it must be renewed at an unknown cost in the future at available contract durations. This is in contrast to life insurance which is uncorrelated to the market that can either offset poor performance or add to the overall portfolio investment pool. The cost of a life insurance hedge is about 100 bps. to 250 bps. annually and can be funded by a reallocation of either income or assets of the estate.

Let's try to quantify the impact of this risk mitigation tool. One metric that can be looked at is the Sharpe Ratio. This ratio is used to compare investment options with different risk profiles. The Sharpe Ratio looks to quantify the incremental return differential above a risk-free rate of return given the incremental increase (or decrease) in risk as measured by the portfolio standard deviation.

One study looked at it this way¹:

Let's assume a healthy 65 yr. old couple with a \$100mm diversified investment portfolio with a weighted average return of 6.95% and a standard deviation of 11.43%. We have based this on 75%/25% equity to bonds ratio. Using an assumed risk-free rate of return of 3% this translates into a .35 Sharpe Ratio. If you incorporate a \$50mm guaranteed survivorship life policy with an annual premium of \$516,000 per year, this family can increase their overall Sharpe Ratio to .46 primarily by decreasing the standard deviation by 2%. This is a risk-adjusted return increase of 31%. Assuming a normal distribution the expected range of returns -4.48% to 18.38% is 67% of the time. By decreasing the standard deviation, 67% of the time the portfolio returns would be between -2.48% and 16.38% inclusive of the life insurance death benefit payment (rate of return on death of the life insurance was based on the 2008 VBT Joint Mortality).

The Sharpe Ratio tells us that including life insurance in one's overall wealth management plan can reduce the risk profile, therefore increasing the risk adjusted returns. Does this translate into an opportunity? A Monte Carlo simulation can demonstrate to a family that by incorporating life insurance into their overall risk and wealth management plan can increase both the average and median expected returns while at the same time reducing downside risk. Conversely, the allocation of resources to life insurance has a nominal impact on the potential upside performance. The risk of having the residue of the estate fall under \$200mm is reduced by 7% while the median expected return is increased by 5.4%, or \$19.3mm. As you can see, from an enterprise risk management perspective incorporating life insurance into the overall plan has reduced downside exposure risk and increased expected returns of the beneficiaries.

Monte Carlo analysis does have some limitations. While it can be a useful tool in quantifying the statistically likely outcomes of investment decisions, what happens when statistically unlike events happen? This is commonly referred to as "tail risk". An alternative analysis incorporating historical returns under extreme conditions may help us put "tail risk": into perspective. For example, from January 1929 through December 1938 the S&P 500 had negative annualized returns six times. An investor with \$100mm at the beginning of January 1929 would have had to wait 15 yrs. before breaking even and over 20 yrs. to have doubled his initial portfolio based on historical returns. A life insurance allocation could have immediately hedged initial investment and could have been 133% greater than the un-hedged portfolio at the maximum historical differential point.

¹ Beyond Estate Taxes, by Kenneth J. Masters; Private Wealth, March/April 2011

In the above analysis tax considerations, asset management expenses, nor estate tax issues were incorporated so as not to skew the results by aggressive assumptions and not to bias the outcomes. As we all know, life insurance enjoys tax preferences not available with other assets. The tax-free nature of death benefits or the access to cash values (if a priority in structuring the life insurance) can not go unnoticed.

Additional considerations as to the impact of life insurance inclusion are centered around current investment research and recent experience which indicate that asset class correlation increases during periods of extreme market volatility precisely at the time when the benefits of asset allocation are desired most. Traditional hedging techniques using options and futures see their ability to hedge weakened by the fact that the costs escalate with increased market volatility. Life insurance remains uncorrelated to these market factors and holds a constant “cost”².

During times of market volatility and uncertain economic conditions most investors will overweight their investment allocations to lower yielding securities which may provide some portfolio stability but may come at the cost of sacrificing long-term returns. Life insurance can provide a capital preservation floor at death allowing advisors to maintain or increase allocations into equities.

Another advantage that cannot be overlooked about life insurance is that sophisticated planning requires complexity and in some situations a “ceiling of complexity”³ may be reached at certain times which preclude the use of some of the most useful estate planning tools and risk/wealth transfer techniques. Also, many techniques lose their leverage as time elapses, therefore, life insurance can “buy time” in those situations.

In conclusion, life insurance is not the “end all be all” in estate planning but can be a very useful risk-mitigation tool for high-net-worth families. Life insurance should be seen as a complementary component of an enterprise risk management plan. Analyzing the potential benefits of utilizing life insurance can provide the family and their advisors with the necessary information to make informed decisions.

² Life Insurance as an Asset Class: A Value-added Component of an Asset Allocation, Richard M. Weber, Ethical Edge, 2008

³ The Strategic Coach Program, Dan Sullivan