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THE RENAISSANCE OF SINGLE-STOCK CONCENTRATION RISK MANAGEMENT

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Thanks to the support of the Federal Reserve and other global central banks, the stock market has performed notably in recent years, and many investors and trusts own stock positions that have risen significantly in value. However, the stock market is facing many obstacles, including (among others) escalating geopolitical tension throughout the world, tumbling oil and commodity prices, limp economies in Europe and China and, in the United States, the threat of impending interest rate hikes, continuing gridlock on The Hill and an almost surreal presidential primary and election process.

Impact of Rising Stock Market and Higher Tax Rates

Given the current investment climate, it would seem judicious, especially for trustees and fiduciaries that have an affirmative duty to mitigate undue single stock concentration risk, to sell their highly appreciated stock positions. However, with the federal capital gains tax rate now nearly 60 percent higher than its recent low, and many states boosting their tax rates as well, investors are often surprised to learn the all-in tax expense of selling their stock.

For those in the highest marginal federal tax bracket, long-term capital gains are currently taxed at 20 percent and are also subject to the 3.8 percent federal Medicare surtax for an all-in federal tax rate of 23.8%.[i] Long-term capital gains are also subject to state tax. According to The Tax Foundation, in 2016 43 of the 50 states levied a tax on capital gains averaging just over 6 percent for taxpayers in the highest marginal brackets. The highest state tax rate is 13.3 percent imposed by California.

The reality is that holders of low-cost-basis stock positions are currently exposed to a substantial tax cost upon realization of their gains. Many individuals and families have built their wealth, now embodied by their concentrated stock positions, through many years of thrift and carefully considered business risks; that a sale would trigger an immediate income tax expense of the magnitude described above is often difficult, or in some cases impossible, to accept.

Moreover, in many situations the shares received by an investor's estate or beneficiary will qualify for an adjusted tax-cost-basis equal to the fair market value of the shares upon the decedent's death.[ii] This "step-up" in basis offers investors both an opportunity and incentive to hold their shares until death in order to effectively eliminate the capital gains tax on their accrued gains.

And with the estate-tax exemption in 2017 set at nearly $11 million for a married couple, more investors and financial advisors are asking, "Is it better to sell now and incur a sizeable capital gains tax – or wait until death to avoid paying the capital gains tax and possibly the estate tax as well?"

Today, a different mindset is emerging among investors holding concentrated stock positions and their financial advisors. Prior to 2013 -- when long-term capital gains were taxed at the historically low maximum 15% rate and not subject to the Medicare contribution tax, and state tax rates were lower -- many investors for good reason were predisposed to sell their concentrated stock positions in order to "lock-in" the low capital gains rate. Today, with tax rates considerably higher, there is not a "knee jerk" reaction by investors to dispose of all of their concentrated positions to lock-in current rates; rather, investors and their advisors are more thoughtfully considering the implications of the increased value of the step-up in basis upon death as part of the tax and estate planning process.

Of course, investors are often reluctant to sell their highly appreciated stock for grounds other than tax consequences. Some believe their stock will further appreciate. Others find the dividend yield on their stock attractive relative to current fixed-income yields. Many investors possess a strong emotional bond to their stock as a result of the manner through which they acquired their shares, such as compensation for past employment with a publicly-traded company, a sale of a family business to a publicly-traded company in exchange for stock, or through inheritance or a gift from a loved one. Still others face restrictions on selling their shares compelled by either securities laws and regulations, or contractual provisions such as post-IPO lock-up agreements, merger agreements or employment contracts.

As a result, many current and former public company executives, investors and trusts currently own highly appreciated stock positions, but are not willing or able to sell all of their shares. However, they remember 2009 well and do not wish to relive that scenario, and they would like to protect their unrealized gains. Many investors with concentrated stock positions plan to sell some of their shares and continue to "chip away" at their positions over time in order to diversify; however, almost inevitably they decide to retain some portion of their stock position as a core, long-term holding which is left unhedged and often remains their largest investment risk.

Traditional Risk Management Tools Have Become More Expensive

For decades investors have come to rely upon equity derivatives such as puts, calls, collars and permutations thereof, as the principal tools in their toolkit to lessen company-specific risk and protect appreciated stock positions. Prior to the financial crisis, investors often made use of these strategies as part of a long-term, strategic approach to managing concentrated stock risk. However, the influence of the financial crisis has altered the landscape for equity derivatives in recent years. Equity derivatives have become much more expensive due to the convergence of several factors, including historically low interest rates, unfavorable volatility skew -- puts are much more costly relative to calls than in the past -- and the ramifications of Dodd-Frank on derivative dealers.

Consequently, the strategic utilization of equity derivatives to manage the long-term risk of a concentrated stock position is, in most instances, simply not practical. Today, equity derivatives are typically used in a tactical manner for both short-term protection and income generation.

Moreover, investors have historically been challenged to make consistent use of equity derivatives to manage single-stock risk for reasons other than cost. Equity derivatives are, by their nature, tax-inefficient in that, generally, gains are taxed as short-term capital gains, losses aren't currently deductible, and dividends received while a stock is being protected are taxed as ordinary income instead of LTCG.[iii] The shares being hedged must be pledged to, and generally held in custody with, the dealer, and therefore can't be sold until the derivative matures or is terminated. The investor is exposed to the credit risk of the dealer counterparty. Equity derivatives are complex and can be difficult for investors to fully understand. Finally, the pricing of over-the-counter derivatives, which are often utilized to achieve better tax-efficiency and achieve greater customization, is inherently not a transparent process.

Investors Are Turning To Alternative Single Stock Risk Management Solutions

As a result, investors holding concentrated stock positions have been on the lookout in recent years for additional tools. This article will describe three solutions -- two that can be helpful to investors who wish to tax-efficiently diversify out of their positions over time, and another that can be helpful to investors who wish to retain a portion of their position as a core holding but while affordably and tax-efficiently protecting their unrealized gains.

Exchange Funds

Investors holding highly appreciated stock have employed Exchange Funds, sometimes referred to as Swap Funds, ever since their conception in the 1960s.

An Exchange Fund can prove useful for investors who own highly appreciated stock, wish to exit completely from a portion of their positions in a tax-efficient manner, and desire to diversify into a portfolio of publicly traded stocks.

Structurally, an Exchange Fund is a partnership or similar entity (i.e., a fund) whose partners each contribute their low-cost-basis shares into the fund. Before the contribution, each investor owns shares of stock of a different company. After the contribution, each investor owns a pro-rata interest in the fund, which now holds a diversified portfolio of stocks in a variety of industries.

An Exchange Fund enables investors to mutualize, and therefore substantially reduce, single-stock risk. The investors obtain the benefit of diversification similar to that achieved through an investment in a mutual fund or ETF. Economically, it's as if each investor sold his shares tax-free and immediately reinvested the proceeds into the fund. Going forward, each investor is exposed primarily to the upside potential and downside risk associated with the portfolio of stocks that the fund sponsor has constructed, rather than solely to the stock that was contributed.[iv]

The contribution of shares to an Exchange Fund does not trigger a taxable event, and each investor's tax-cost-basis in his fund interest is the same as his basis in the shares that were contributed (i.e., a carryover basis). For federal tax purposes, investors must remain invested in the fund for at least seven years. Subsequently, investors usually have the right to redeem their fund interest (and in turn receive a basket of securities equal in value to their fund interest) or remain invested in the fund.[v] If an investor elects to redeem his fund interest, the basket of securities received has the same cost basis as that of his fund interest (i.e., a carryover basis). For example, if an investor contributes shares worth $1 million that have a zero cost basis, elects to redeem his fund interest after seven years and receives a portfolio of stocks worth $2 million, those stocks will have a zero cost basis.

However, if an investor dies while invested in the fund, the estate or beneficiary of the decedent receives the fund interest with a stepped-up tax-cost-basis. If the estate or beneficiary of the deceased subsequently redeems its fund interest, it will receive a portfolio of securities that have the same tax-cost-basis that the fund interest possessed, which was stepped-up to fair market value. Therefore, if an investor contributes highly appreciated shares to an Exchange Fund with an unlimited life, the investor can reasonably expect that the unrealized gains on the contributed shares and any further gains will be eliminated at death. For example, if an investor contributes shares worth $1 million that have a zero cost basis, remains invested in the fund for ten years and then dies, and the estate or beneficiary of the deceased elects to redeem its fund interest and receives a portfolio of stocks worth $2 million, those stocks will have a tax-cost-basis of $2 million and the shares could be immediately sold without triggering any capital gains tax.

Directly following the financial crisis, there was a sudden and sharp drop in the use of Exchange Funds and they fell out of favor for several years. However, as the stock market rebounded, investors began to utilize

Exchange Funds once again. Data regarding the size of the market for Exchange Funds is very difficult to access. However, one researcher has estimated that, as of 2010, the market for Swap Funds has exceeded $30 billion (Herzig 2010).

Exchange Funds have continued to benefit from rising asset inflows the past few years, and sponsors have begun bringing new Swap Funds to market. The growing appetite for Exchange Funds is likely due in large part to the continued strength of the stock market, the higher tax cost of selling outright and the continued higher cost of equity derivatives that prohibits their consistent, long-term use.

Stock Protection Funds

Many investors with highly appreciated stock positions do eventually diversify out of some of their positions. However, for the reasons described above they often retain some portion of their concentrated position as a core, long-term holding that's left unhedged and often remains a major risk exposure for the investor relative to his or her net worth.

A Stock Protection Fund, sometimes referred to as a Stock Protection Trust (Protection Fund), can be used by senior public company executives, investors and trusts – those who would like to continue to own a portion of their positions as a core, long-term holding -- to substantially reduce downside risk attributable to the idiosyncratic factors associated with their particular stock, without incurring excessive expenses or taxes, and while retaining all future upside potential.

Stock Protection Funds, sometimes referred to as Stock Protection Trusts (Protection Funds), are a fairly recent development.[vi] Economically, Protection Funds have some similarities to Exchange Funds. Protection funds allow investors to retain ownership of their single-stock positions to benefit from continued price appreciation and dividend growth, while simultaneously attaining the benefit of diversification and reduction of downside risk analogous to that achieved through Exchange Funds.

The foundation of Protection Funds is rooted in the principles of both modern portfolio theory (MPT) and risk-pooling/insurance; by combining these principles it's possible to replicate the economic equivalent of either at-the-money or slightly out-of-the-money put protection at just a fraction of the cost.

MPT reveals that as individual stocks are added to a portfolio, the average covariance of the portfolio will decline. While there is still some debate over the number of stocks necessary to achieve adequate diversification (see, for example, Evans and Archer 1968; Tole 1982; Statman 1987; Campbell, Lettau, Malkiel and Xu 2001), most investors and researchers agree that 20 disparate and equal-sized stocks are sufficient to maximize the benefits of diversification.[vii]

Assuming an equally dollar-weighted portfolio of 20 stocks in different industries, over time there will be substantial dispersion in individual stock performance among the 20 stocks on a total return basis. Some will outperform (achieving large gains), many will perform in-line with the market, and some will underperform (losing substantial value). In other words, after a period of years, the distribution of total returns of the 20 stocks comprising the portfolio will approximate a normal or bell shaped curve, with the big winners reflected on the right tail, the in-line performers in the middle of the curve, and the big losers on the left tail. *Protection Funds integrate these key elements of MPT with the notion of risk-sharing (i.e. a self-insurance pool) to truncate or eliminate left-tail risk*.

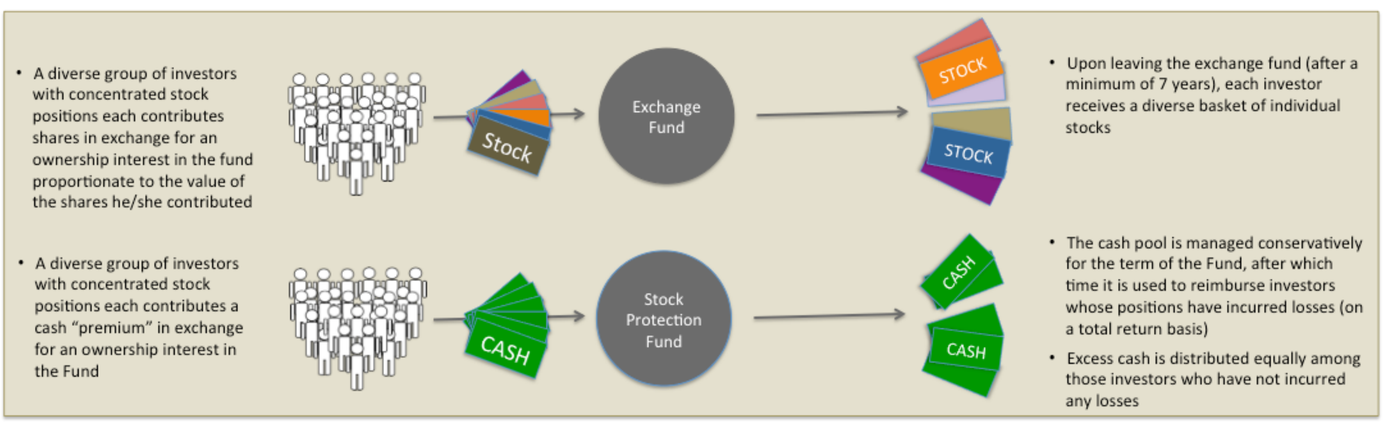
More specifically, 20 investors -- each owning a different stock in a different industry and each wishing to protect the same notional amount of stock -- contribute a modest amount of cash (not their shares, which they continue to own) into a fund that will terminate in five years. The cash is invested in U.S. government bonds that mature in five years, and upon termination, the cash is distributed to investors whose stocks have lost value on a total return basis. Losses are reimbursed until the cash pool is depleted. If the cash pool exceeds total losses, all losses are eliminated, and the excess cash is returned to investors. If, on the other hand, total losses exceed the cash pool, large losses are substantially reduced.

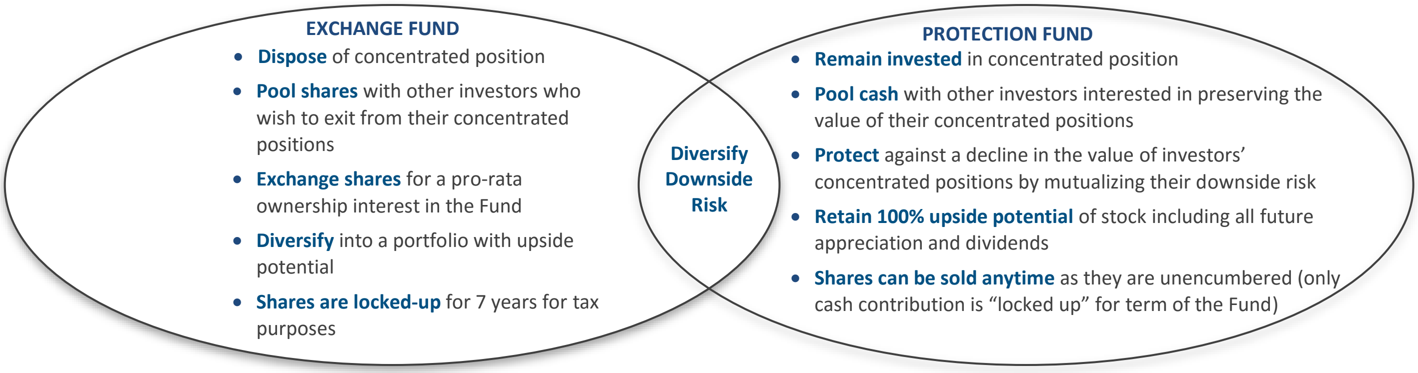
However, losses are reimbursed in a very precise manner. The largest loss is reimbursed first to the level of the second-largest loss. Next, these two losses are reduced to the level of the third-largest loss. Next, these three losses are reduced to the level of the fourth-largest loss, and so forth and so on. This “reverse waterfall” methodology continues until either all losses are reimbursed or the cash pool is depleted. The largest remaining loss at this point defines what is referred to as the “maximum stock loss” for all investors who have incurred losses (stated as a percentage of the notional amount of stock being protected).

The maximum stock loss is akin to the strike price of a long put protecting a stock position. For instance, if the maximum stock loss is 15 percent, an investor whose stock lost 80 percent of its value would be reimbursed from the cash pool reducing that loss from 80 percent to 15 percent, but an investor whose stock lost 10% of its value would not receive any reimbursement. If the maximum stock loss is 0 percent, both the investor’s stock loss of 80 percent and the investor’s stock loss of 10% would be fully reimbursed by the cash pool.

For example, a “real money” Protection Fund -- which protected 20 stocks for 20 investors and required an upfront cash contribution of 10% of the notional value of the stocks being protected (i.e. a 2% “premium” per annum for the 5 year term of the Fund) -- was operated during the 5-year period June 1, 2006, to June 1, 2011. Of the 20 stocks protected, eight incurred losses (37%, 32%, 24%, 18%, 13%, 8%, 5%, and 1%). For investors participating in the Fund, all stock losses were reimbursed (i.e., the maximum stock loss was 0%) and the remaining cash was returned to the investors. Each of the 20 investors received protection that was akin to an “at the money” put on their stock, and the amortized cost of that protection was only 1.38% per annum.

The two charts below compare and contrast Protection Funds to Exchange Funds.





Protection Funds have some attractive features. Protection Funds cost but a fraction of what comparable put option protection costs; this cost-effectiveness enables investors to protect their unrealized gains consistently over a longer-term period. Investors retain 100% of future stock price appreciation and all dividends and distributions. Protection Funds are inherently tax-efficient. Their use does not trigger a statutory or common law "constructive sale" nor constitute a "straddle", and therefore any gain is long-term capital gain and any loss is currently deductible. Any dividends that are "qualified" remain "qualified" and taxed at the long-term capital gain rate. Investors can sell, gift, borrow against or otherwise dispose of their shares anytime they wish. There is no derivative dealer counterparty credit risk. Protection Funds are simple and easy to understand, and completely transparent. It's worth noting that the investment in a Protection Fund can be made cashless if funded through a conservative (i.e. 10% LTV) margin or private banking loan against the stock being protected; therefore, the client's existing asset allocation need not be disturbed. Finally, the use of a Protection Fund does *not* trigger a reportable event for "insiders" (i.e. senior public company executives) and can be used to protect both stock *and* stock-based compensation such as restricted stock units and stock options.

Tax-Optimized Equity Strategies

Tax-optimized equity strategies combine investment and tax considerations in making investment decisions -- they start with the generic concept of tax efficiency and quantitatively incorporate dimensions of risk and return in the investment decision-making process. In the context of managing the risk of a concentrated stock position these strategies can be used in two primary ways: 1) as an index-tracking strategy; and 2) in the construction of completeness portfolios.

An *index-tracking separately managed portfolio* is typically funded by existing investor cash or a partial sale of the investor's concentrated stock position. The portfolio is quantitatively designed to track a broad-based market index (e.g. the S&P 500 Index) on a pre-tax basis, and outperform it on an after-tax basis. The goal from an investment-return perspective is not to perfectly replicate the benchmark, but instead, to track it closely. This strategy employs opportunistic capital loss harvesting and gain deferral techniques, which can be used by the holder of the concentrated stock position to sell a commensurate amount of their concentrated stock position without incurring any capital gains taxes thereby gradually reducing specific company stock risk over time.

A *completeness portfolio* incorporates the risk characteristics of the concentrated stock position to build a "completeness" portfolio such that the combination of the two portfolios tracks the broadly diversified market benchmark to the best extent possible. A completeness portfolio is either funded by existing investor cash or from a partial sale of the investor's concentrated stock position. It minimizes correlation with the concentrated stock by minimizing industry and sector bets. Capital loss harvesting in the completeness portfolio allows a concurrent sale of the concentrated stock position without incurring a tax liability. Over time, the size of the concentrated stock position is gradually whittled down to zero, whereupon the completeness portfolio becomes an index-tracking one.

Tax-optimized equity strategies can be an attractive way to diversify out of a concentrated position, but it does come with certain risks and costs.

Most obviously, these strategies are intended to be implemented over a fairly long period of time, so the investor must continue to retain the company-specific risk of the remaining, albeit progressively diminishing, concentrated stock position. In this regard, it would seem prudent to utilize a Protection Fund (described above) in conjunction with Tax-Optimized Equity Strategies to cost-effectively and tax-efficiently protect some or all of the concentrated stock position that the investor continues to hold upon the initiation of the strategy.

Second, the best possible result is that the client moves from holding a single low-basis stock to holding a diversified portfolio of stocks, many, potentially, with a low basis. Hence, if this diversified market portfolio needs to be liquidated, there could be a significant capital gains tax associated with it.

Fiduciary Considerations

Under the prudent investor rule, which has been adopted by most states, fiduciaries, as well as financial advisors who hold themselves out as "expert" on the management of concentrated positions, have an affirmative duty to mitigate undue stock concentration risk[viii] and must be capable of evaluating and implementing single-stock risk mitigation strategies that are available in the marketplace.[ix] Therefore, fiduciaries and financial advisors need to consider all available risk reduction strategies (i.e. not just equity derivative-based strategies) including those described herein as a possible alternative to an outright sale or continued holding of a concentrated position (see Crawford 1995; Borkus 2001; Miller 2002; Boczar 2007).

Summary

Many public company executives, investors and trusts have accrued huge stock gains over the past several years and hold highly appreciated stock positions that they don't wish to or can't sell because of tax and other considerations.

The "traditional" tools investors have used to protect their unrealized gains -- equity derivatives such as puts, calls, collars and prepaid variable forwards -- have become much more expensive in recent years due to the convergence of several factors; today, equity derivatives are typically used in a tactical manner for both short-term protection and income generation.

Exchange Funds, Protection Funds and Tax-Optimized Equity Strategies are three "non-traditional" concentrated stock management tools that can be used to strategically reduce the risk of a concentrated stock position over a longer period of time, and are often overlooked by investors and advisors. Each of these tools has some very attractive features.

An *Exchange Fund* can be useful to investors and trusts that own highly appreciated stock, wish to exit completely from some portion of their stock positions in a tax-efficient manner, and seek to diversify into a portfolio of other publicly-traded stocks.

A *Protection Fund* can be helpful to public company executives, investors and trusts who wish to continue to own a portion of their stock as a core, long-term holding, by substantially reducing downside risk attributable to the idiosyncratic factors associated with their particular stock, without incurring excessive expenses or taxes, and while retaining all future upside potential.

Tax-Optimized Equity Strategies -- either an index-tracking separately managed portfolio or a completeness portfolio -- offer investors an alternative means of diversifying out of concentrated positions gradually over time in a tax-efficient manner.

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Endnotes

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[i] The American Taxpayer Relief Act of 2012, enacted January 2, 2013, increased the top tax rate on long-term capital gains to 20% for high-income earners. In addition, beginning in 2013 long-term capital gains became subject to an additional 3.8% surtax, enacted as part of the Health Care and Education Reconciliation Act of 2010.

[ii] See Code Section 1014.

[iii] These tax results are achieved because, in almost all instances, the stock position, when combined with the derivative hedging instrument, will be deemed a “straddle” under Code Section 1092; further, the dividend holding period requirements of Code Section 1(h)(11)(B)(iii)(I) will not be satisfied.

[iv] It should be noted that for federal tax purposes, at inception of an Exchange Fund, no more than 80 percent of the Fund’s assets can consist of stocks, and at least 20 percent must be invested in “not readily marketable” securities. Most Exchange Fund sponsors make various forms of commercial real estate investments to satisfy this requirement, which are typically funded primarily through debt. For example, an Exchange Fund that accepts $1 billion of publicly-traded stock as assets might also have illiquid real estate investments of $250 million which were funded through a $250 million loan against the Fund’s $1.25 billion of assets.

[v] Exchange Funds can be structured to terminate on a given date in the future, which term is typically the minimum holding period required for federal tax purposes (i.e. currently 7 years). This type of structure is often referred to as a “bullet” Fund. In a bullet Fund, participating investors know exactly what the investments are that the Fund holds upon initiation of the Fund, and no additional stocks are accepted during the term of the Fund. On the termination date, each investor receives his/her pro-rata interest in the Fund’s assets. Bullet Funds used to be quite common and popular, but none have been sponsored in recent years. Instead, Exchange Funds have been structured with no fixed termination date (i.e. an unlimited life). These Funds accept new investors/stocks over time. Investors can remain in the Fund as long as they desire, and they can periodically elect to redeem some or all of their interest in the Fund. On redemption, the investor does not receive a pro rata portion of the Fund’s assets, as is the case with a bullet Fund. Rather, the investor receives a portfolio of stocks selected by the sponsor; if the investor does not like the stocks selected by the sponsor for redemption, the investor can opt to remain in the Fund.

[vi] The Protection Fund methodology described herein is protected by a portfolio of U.S. patents: Nos. 7,720,736; 7,739,177; 7,987,133; 8,229,827; and 8,306,897.

[vii] Reilly and Brown (10th Edition, 2012, 213–214) summarizes the relevant research studies and findings.

[viii] See *Uniform Prudent Investor Act*, Section 3 (1995) and comment to Section 3. See also *Restatement (3rd) of Trusts*, Section 227.

[ix] See *Levy v. Bessemer Trust Co*., 197 WL 431079, S.D.N.Y., July 30, 1997. See also *Brane v. Roth*, 590 N.E.2nd 587 (Ind. Ct. App. 1992).