Portfolio Risk Mitigation

By Jim Pritchard

The basic premise of investing through diversification no longer works. For 28 years I thought of myself as a successful money manager because I diversified my clients' portfolios and they performed better than the stock market. I was wrong. Beating the market is not as important as NOT losing money. What good is it if my portfolios beat the market but are still down 30%? Who wants to lose 1/5, 1/4 or 1/3 of their investment portfolio? The investment community has been investing incorrectly and measuring itself all wrong. It's time to re-think how we invest. Are you prepared for a repeat of 2008? If not, why not? It could happen at any time, and if you aren't prepared, you will lose sleep and unfortunately, you will lose money.

The intent of this article is to look at asset allocation to determine if it does indeed help investors protect against significant losses. Asset allocation, market timing and other previously accepted risk mitigation techniques are broken down and analyzed as to their effectiveness. In addition, more recent developments in portfolio protection will be reviewed.

In 1986, Brinson, Hood, and Beebower (BHB) published a study on the asset allocation of 91 large pension funds as measured from 1974 to 1983. Financial advisors often pointed to this study to support the idea that asset allocation is more important than all other concerns. "The study found that asset allocation was the overwhelming dominant contributor (91.5%) to the total return of an investment portfolio. Choosing the right stock or mutual fund was not the answer (4.6%), while market timing proved even more inept (1.8%). The dramatic results supported the notion that the asset allocation decision was the primary determinant of investment performance." For almost 25 years, the BHB study has been the lynch pin of the investing world. Advisors, financial planners, mutual fund companies and brokerage companies have all developed asset allocation software and asset allocation funds to help investors protect their capital.

Asset Allocation says that you should spread your investments into different asset classes, such as stock, bonds, real estate and cash, and within those asset classes, you invest in many different securities. The idea is that if you do this, your investments will be safe from market turmoil as these various asset classes and securities do not all fall in price at the same time. When some are going down others should be going up. This is called non-correlation of assets. When assets are "correlated" they will move in the same direction at the same time. The last twelve years should have driven home a new lesson for all of us. When markets fall, they can all fall at the same time. Non correlated assets can become correlated very quickly. Everything can move down at the same time. Experts say that when trouble hits (recession, war, interest rate changes and other economic crisis), the correlation of assets all go to one and as a result diversification stops working. "Asset allocation can explain past market performance, but not predict which allocation will work in the future" (The Failure of Asset Allocation, Timothy J. McIntosh, Investment Advisor, December 2008).

Investopedia **definition of Market Risk:** The day-to-day potential for an investor to experience losses from fluctuations in securities prices. **This risk cannot be diversified away.** Also referred to as "systematic risk".

Investopedia explains *Systematic Risk*
Interest rates, recession and wars all represent sources of systematic risk because they affect the entire market and cannot be avoided through diversification. **Systematic risk can be mitigated only by being hedged.**

Additionally, Investopedia tells us that market risk (aka "systematic risk") is the risk that cannot be solved by diversifying. If Investopedia is correct and market risk cannot be diversified away, asset allocation as a risk management technique is not sufficient to protect against catastrophic declines as experienced in 2008. Since 2008, many advisors and firms have been looking for ways to “fix” or “adjust” asset allocation to compensate for its weaknesses and prevent catastrophic losses. While polishing this turd may entice die-hard asset allocators to stay the course, these corrections do not acknowledge the fundamental problem. Specifically, price drops caused by market risk cannot, by definition, be reduced by diversification.

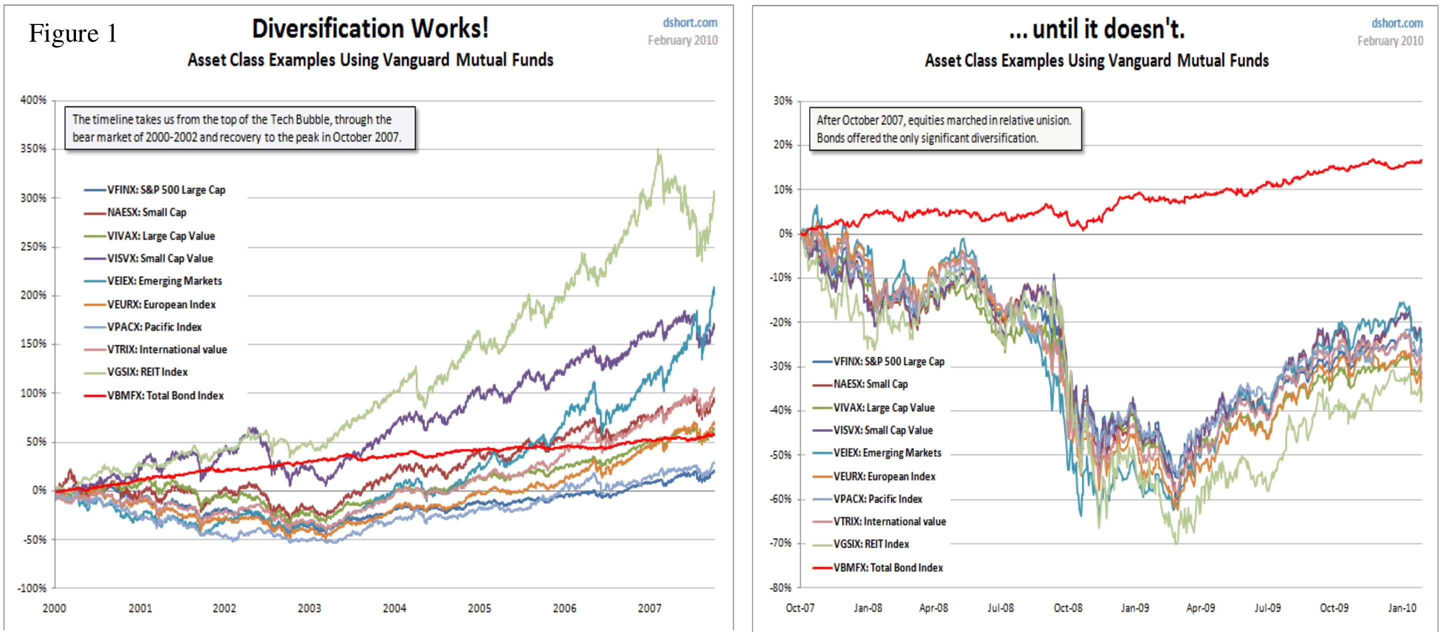

Figure 1

Asset Allocation, Market Timing Etc...

In normal markets, the value in asset allocation is that a diversified portfolio will lose less money than a non-diversified portfolio. Let’s look at some examples. Figure 3 compares a well diversified portfolio (Lipper diversified index) of stocks and bonds (48% US Stocks, 12% International Stocks, 40% US Diversified Bonds & Cash) with the S&P 500. As this chart makes obvious, the Lipper portfolio performed slightly better in down markets and not quite as good in up markets. During the four negative years over the past ten years, asset allocation saved the investor from being down as much as the stock market, but not by very much. In 2008, when the market was down 37%, the diversified portfolio was down 31%! Investors don’t care if they beat the market if that means they will lose 1/3 of their hard earned money. Investors are not well served in down markets by a diversified asset allocation portfolio.

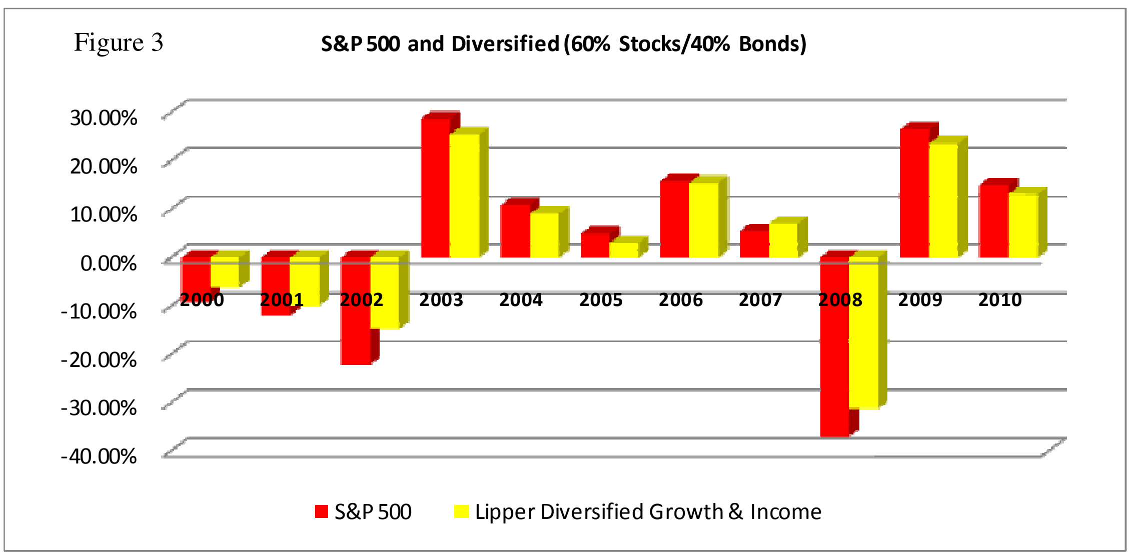

Figure 3

As 2008 showed us, everything can come crashing down very quickly. In March of 2009, the stock market was at the same level it had been at in 1997, approximately 7000 on the Dow Jones. Twelve years of gains had been wiped out! The optimism that I had shown in the markets for 28 years had dried up. No longer could I believe in buy and hold (hope), stay the course, average down etc. Too many times I had seen investors lose years’ worth of gains in a very short period of time. What about other advisors? What are they doing to help their clients? I have a feeling more and more have become like me, jaded and wary. I spoke to many other advisors who felt the same way. They have become non-believers. They are either getting out of the business altogether or they are looking for the answer. Even a couple of months ago, on May 6th; we had a huge "intra" day crash with the market losing almost 1,000 points in half an hour!! The markets are more volatile than ever before. Most investors have lost faith and do not trust in the market any longer.

Can asset allocations' problems be fixed by timing or dynamic (tactical) asset allocation?

Can we figure out a way to continue to use Asset Allocation and yet protect investment assets? Various fixes have been proposed and used. Most don't work that well. I have found a couple of risk reduction techniques that do work. Let's start with what doesn't work.

Why don't you just time the market, get out at the top and buy back in lower or tactically move between asset classes? Advisors claim to be able to move money to bonds and cash when the market is going to go down. Additionally, some advisors tactically move between asset classes during different cycles in the economy.

Timing the market successfully is incredibly difficult, based on numerous studies over the past 30 years. To illustrate, let's go back to August of 1987 and suppose you exactly timed exiting the market before the October '87 "crash." Now, when do you get back in? History indicated that you should stay out of the market a full two years as that was the average length of a bear market. As we know from hindsight, however, the 1987 market started to recover in December, just two months after the "crash." Unfortunately, timing the market involves calling it right twice, not just once, and that's nearly impossible. Vanguard says "...aggressive market-timing can have a potentially devastating impact on long-run performance"[1]

Many people are familiar with the Fidelity Magellan Fund. Although Magellan had a fantastic record of beating the market during the long bull market that ended in March of 2000, a large percentage of investors in this fund actually lost money. Ironically, they tended to invest after a significant increase in prices, but sold during down periods. I have been in this business 28 years and can tell you that although this is exactly opposite of what you should do, it is a very normal psychological reaction. This phenomenon has been documented in many financial magazines and academic studies, including a Dalbar study in 2003, which showed that the average investor stayed invested in equity funds for less than three years, buying when stocks went up and selling when the going got tough. The end result was that equity fund investors earned an average of 2.57% from 1984 to 2003, a hair below inflation of 3.14%, and far short of the 12.2% annual gain on the S&P 500 for the same period.[2] John Bogle, the founder of Vanguard has said "This pattern is all too typical. Investors, in short, have been bearish when they should have been bullish and bullish when they should have been bearish. It is not a formula for success."

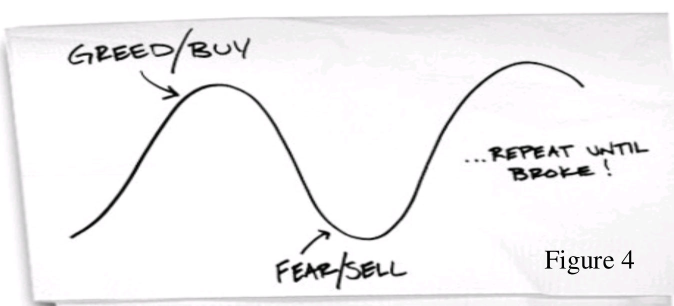

Figure 4

"Most of us make the same mistake with our money over and over again: We buy high out of greed and sell low out of fear, despite knowing on an intellectual level that it is a very bad idea." (How Greed & Fear Kills Returns, Carl Richards - New York Times, March 24, 2010). Based on all the studies I have read, market timers play a "loser's game."

You might be thinking, "Well, I can't time the market successfully, but surely there are professionals who do." The record on professionals timing the market is just as abysmal. The Hulbert Financial Digest has tracked what would have happened if every year an investor put his or her money into the prior year's top performing market timing newsletter. The results aren't pretty. Over the 21 years ending December 31, 2002, the result would have been an annualized loss of 31.4 percent a year. In the real world, that's equivalent to investing $10,000 in January 1981 and finding that all you have left at the end of 2002 is $2.32. [3] As Bogle said, this is not a formula for success.

[1] https://global.vanguard.com/international/web/pdfs/webelieve8_042006.pdf
[2] http://www.efmoody.com/investments/markettiming.html
[3] http://www.fundadvice.com/FEhtml/PsychHurdles/0304b.html

In the July 2010 issue of "Employee Benefit Advisor" magazine, various professionals are quoted in an article entitled "Target-date funds evolve with the times" as finding new ways to mitigate the "significant" losses that many of the funds took in the 2008 market. Buck Consultants' Leon Travis said "for a lot of people, it was a nasty surprise that many of these funds…took significant losses…It was an eye opener for participants and plan sponsors." In response to the nasty surprise, some firms have decided to add market timing into the mix disguised as risk control. One large mutual fund family has decided it can accurately move into bonds and cash when appropriate. They call this "de-risking" the portfolio. I call it market timing. Additionally, Tactical Asset Allocation, moving between asset classes as you deem appropriate, may work during normal markets, it does not work when all asset classes become correlated and are going down at the same time, as Figure 1 & 2 show (Asset Allocation Works…Until it Doesn't).

Too much is working against trying to time the market: emotions, much of the financial press, transaction costs, taxes, and the need to call it right not once, but twice. Add to that list a compelling and growing body of research that indicates that both professionals and individuals destroy value by trying to time the market. For the overwhelming majority, market timing does not work!

Risk Reduction Techniques that work!

Academic studies and reports written by industry experts show that investors can protect their investments just as they insure their home, life and cars. These studies and reports demonstrate that investors can generate cash in their portfolio to pay for this protection and over time, they can earn income over and above the amount they paid for the protection.

A study by E. Szado and H. at the Isenberg School of Management, University of Massachusetts, Amherst called "Collar the Cube," looked at the feasibility of this idea. The article assesses the effectiveness of a long collar on the QQQ (Nasdaq index), as a protective strategy. The protective collar strategy provides downside protection through the use of index put options and finances the purchase of the puts through the sale of short index call options. The put option allows for the sale of the QQQ's at a specified price which protects the portfolio in a declining market. This is sometimes called "portfolio insurance" as it insures the investment against the risk of decline. Szado and Kazemi found that "the magnitude of risk reduction was quite impressive"[4] and that "most implementations of the strategy significantly outperform the QQQs overall"[5]. Over the 108 month study period, March 1999 to March 2008, this strategy returned more than 150% while the QQQ portfolio lost over 12%.

Additional risk management strategies have been outlined in a report put out by the Chicago Board Options Exchange (CBOE) in 2006. "High-net-worth Investors & Listed Options - Portfolio Management Strategies for Affluent Investors, Family Offices, and Trust Companies" summarized five strategies; (1) the protective put for hedging, (2) the covered call for income, (3) the protective collar for low-cost hedging, (4) the long index call for market exposure, and (5) the long index put for protection from a market downturn.

Research is one thing, but can any investment advisor show that this can be done in the real world? The continuation of my long career in the investment management industry hinged on finding the answer. I began a search for advisors' who have protected their client's capital through the use of one or a combination of the risk management strategies as outlined in the CBOE paper ("High-net-worth Investors …") and had a long term track record to prove it. I found very few advisors using these types of portfolio protection strategies and only one with a long term track record. Swan Consulting has been managing money using its "Defined Risk Strategy" (DRS) since 1997 and has been extremely successful in both protecting client capital and growing it as well. The majority (85-90%) of client capital is invested in the S&P 500 via exchange traded fund, SPY. The remaining capital is used to purchase put options (insurance against a market drop) and to sell options on a monthly basis to help pay for the put protection.

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[4] Edward Szado, CFA and Hossein Kazemi, PhD, CFA, "Collaring the Cube

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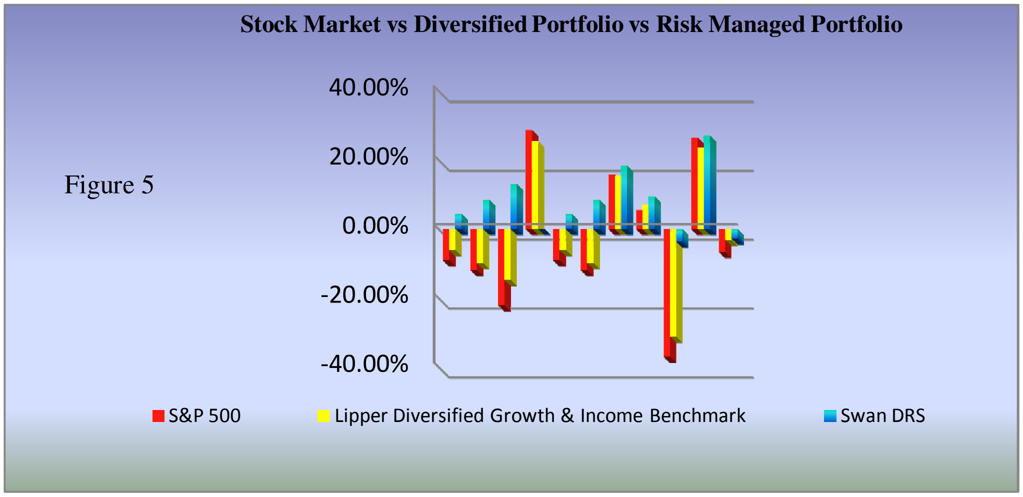


Figure 5

In Figure 5, Swan's DRS has been added for comparison purposes to the S&P 500 and Lipper Diversified index benchmark chart we saw earlier. It is obvious that investors can protect their hard earned dollars and still obtain much of the upside in the stock market. Additionally, while most investors were losing money in the market, Swan[6], using proven risk reduction techniques, delivered positive returns (2000, 2001, and 2002). In the worst year (2008), when a well diversified portfolio lost over 30%, Swan's DRS was down only 4.5% after fees.

Over the entire "Lost decade" from January 1, 2000 to December 31, 2009, $100 invested in the S&P 500 (Figure 6) had declined to $90.89! The Lipper Diversified Benchmark earned slightly over 1% per year and had a final value of $112.46. Swan, using its Defined Risk Strategy had a value of $246.35!

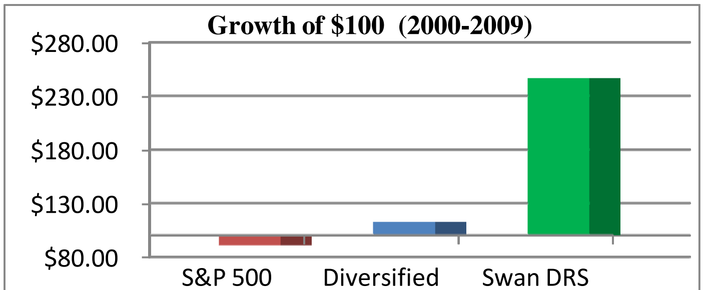
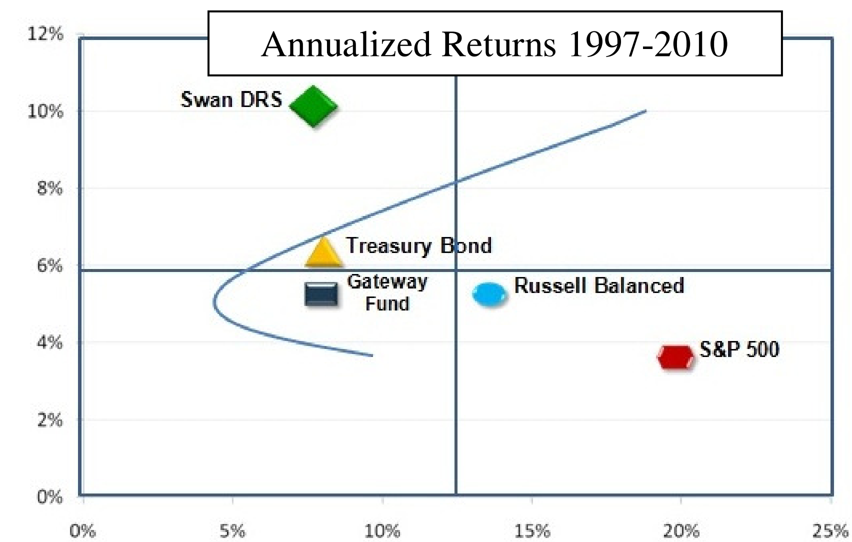


Figure 6



Risk vs. Return 1997 to 2010

Over thirteen and a half years, using options to protect portfolios and to generate income has helped to increase returns and lower portfolio risk substantially (as measured by annual standard deviation) versus the S&P 500. In fact, this strategy has about the same risk as Treasury Bonds with greater annualized returns. Source: Swan Consulting, Inc

What does the Future Hold?

There is no denying that US and Global markets have become increasingly volatile. Many assets have crashed and or are now valued well below their peaks. As JP Morgan's David Schiff says in the summer issue of FTSE Global Markets, *"The Flash*

Federal Reserve Chairman Ben Bernanke, speaking to the Senate Banking Committee on July 21, 2010, acknowledged growing signs of weakness in the recovery, saying that the economic outlook remains "unusually uncertain."

[6] Swan Consulting, Inc, Defined Risk Strategy (DRS- developed in 1997)

Crash (May 6th, 2010 1000 point drop in the Dow) heightened awareness in a very significant way from a risk perspective…May 6th was not an isolated case but symptomatic of a larger issue. It seems like every other week we are faced with a "perfect storm" event. In that sense, we need to anticipate problems and prepare for them." (Roundtable, July - August 2010). It's hard not to agree.

Pressure on the markets has been rising since Long Term Capital Management failed in 1998. Lehman Brothers, Bear Stearns, the stock market, real estate and, corporate debt all had meltdowns in 2008. 2009 saw a low in the stock market not seen since 1997 at 666 (S&P 500) and then we had a nice stock market recovery, prior to this years' "Flash Crash". Don't let the good returns since March of 2009 fool you. We are still in a recession. Some experts say we are actually in a depression.

According to the Elliott Wave Financial Forecast, July 2, 2010 issue, new housing permits, personal incomes, nonagricultural employment and change in net worth are all significantly lower. All of these indicators are worse than their values during the recession of 1973-1974, the worst post war recession on record and "parallel the experience of the 1930's so closely"[7] that Elliott Wave changed their charts to read "depression" instead of "recession"!

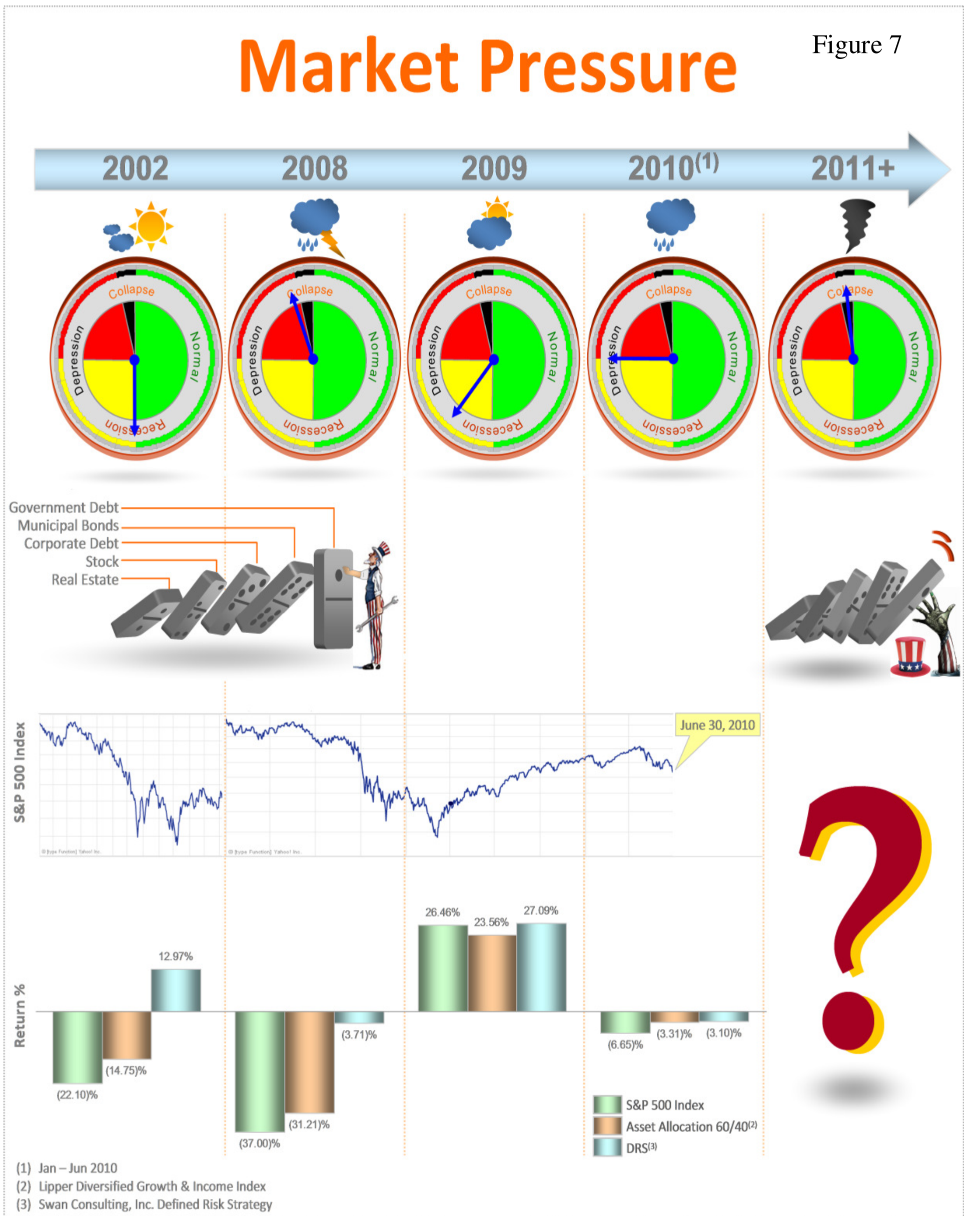


Figure 7

Conclusion

Things do not seem to be getting better for most Americans. We think the economic and market "pressure", as seen in Figure 7, is building. The United States government has artificially propped up the markets. Financial instruments (dominoes) are teetering on the edge. Investors need to prepare for the worst case scenario. When the last of the dominoes (Government bonds) fall, 2008 may look good in comparison!

Hoping for economic and market recovery is not good enough. Asset Allocation has demonstrated its ineffectiveness to protect against significant losses. A new paradigm is upon us with more turbulent markets. Advisors and investors must adopt proven risk reduction strategies. The good news is that since it has been proven that stock investments can be protected on the downside, a higher allocation to stocks can and probably should be made to increase overall portfolio returns.

[7] Hochberg and Kendall, The Elliott Wave Financial Forecast, July 2 2010, page 7.

Final Note: *The author, Jim Pritchard, was so ecstatic to find a successful firm using proven risk reduction techniques that he joined the firm as a partner in July 2010. Swan Consulting, Inc. is a Registered Investment Advisor firm based in Durango, CO.*

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