

# **“It’s Tough To Make Predictions, Especially About The Future.”**

We often cite wise proverbs from famous investors and Nobel laureates. While modern day philosopher Yogi Berra qualifies as neither, the recent period of historic economic and financial decline has reminded us of two of his notable observations. One is the title of this paper. The other is “The future ain’t what it used to be.” We believe both statements apply today in many areas including prudent investment practices.

We have obviously long been advocates of diversification as evidenced by our company’s name. We also understand that the benefits of diversification have possibly never been more debated than over the course of this past year. Wasn’t a prudently diversified portfolio supposed to withstand the ill effects of a free-falling market? What happened to the time-honored principle of reducing investment risk through diversification? Why should I ever trust diversification again since it didn’t keep me from losing money during this recession? We will attempt to address these questions openly and without hiding behind platitudes and ivory tower investment jargon. First allow us to offer a few practical analogies.

## A Few Real World Analogies

What do a weatherman and a money manager have in common? They both have educated guesses about what is going to happen tomorrow, but they can only accurately report what happened in the past. However, as has often been said, a meteorologist can be wrong 90% of the time and remain gainfully employed. A money manager or financial advisor typically does not receive that much forgiveness.

A growing body of research conducted chiefly at the Santa Fe Institute is gaining increasing attention. It concludes that the stock market is a “Complex System” much like the weather. In plain English, a Complex System is one whose outcome cannot be reliably determined even if all inputs are known. An important feature of Complex Systems is that we don’t fully understand how they work – nor will we likely ever know. Try as they may, brilliant prognosticators from around the globe cannot reliably predict the outcomes of Complex Systems. This past year provided a sober reminder that investors should be exceptionally cautious and skeptical of anyone offering investment returns immune to downside market risks. The same holds true for too-good-to-be-true “fountain of youth” investment schemes. Projecting something as dynamic and complex as the global financial markets depends on assumptions layered upon assumptions which, should any one of them be wrong, often invalidates the entire forecast.

Perhaps economists could take some cues from another Complex System – ecology. Bear with us. This has nothing to do with global warming – pro or con. Ecologists know that some species have the ability to produce offspring that hatch over a number of years rather than all at once. This method provides the likelihood of at least some of the offspring surviving despite harsh environments that arise on occasion. This is nature’s illustration of the benefits of diversifying risks. Likewise, investment managers attempt to achieve diversification by owning assets that are not highly correlated with one another. Broadly speaking, correlation is the tendency of things to move together. The idea in constructing a portfolio with assets that are not highly correlated is all the assets won’t go down at the same time. However, as we have seen firsthand, diversification is no guarantee of immunity during a global financial crisis. To complete the ecosystem analogy, biologists note that what works well for general survival is very often less effective during a large-scale crisis. The extinction of dinosaurs is an example of this phenomenon. Some wide-spread crisis changed the rules of the game.

Likewise, the long-held investment principle of diversification seems to have worked fairly well in most times, but offered less effective protection during these recent times. A piece of conventional investment wisdom in investment circles which has been oft-repeated recently is “in times of crisis, correlations go to 1.” In layman’s terms, this means that most financial assets behave similarly when things get really bad. An obvious question is “Why is this?”

### No Place To Hide

A familiar headline in the financial press during 2008 was “There’s No Place to Hide.” Why was that? It might be helpful to take a step back and talk about interpreting market correlations. The term “correlation coefficient” describes the standard method for expressing the degree of correlation between two things. For example, if stocks in the Dow Jones Industrials go up, historically speaking what direction do U.S. Government Bonds go over that same period? Are they in lock step? Do they move in the same direction but to different degrees? Do they move at all? Or do they move in the opposite direction? A basic tenet of diversification is that you want to have portfolio assets which are not in lock step with one another and thus some will zig while the others zag. Simply put, a correlation coefficient of “1” implies that the two things move perfectly together which does not offer any diversification. A correlation of “-1” implies two things move exactly opposite one another. All other measures are just degrees along the -1 to +1 continuum. Below is an example of the correlations of some indices we follow for the period 1/1/79-5/31/08 (an ending date immediately before the real impact of the recent financial crisis began to hit).

<b>Monthly Correlations 1/79-5/08</b>					
	<b>Bar Agg</b>	<b>S&amp;P 500</b>	<b>Ru 2000</b>	<b>EAFE + EM</b>	<b>Wil REIT</b>
<b>Bar Agg</b>	1.000	0.225	0.127	0.145	0.190
<b>S&amp;P 500</b>		1.000	0.805	0.589	0.494
<b>Ru 2000</b>			1.000	0.536	0.618
<b>EAFE + EM</b>				1.000	0.337
<b>Wil REIT</b>					1.000

*Index Legend: Bar Agg-Domestic Fixed Income; S&P 500-Large Capitalization U.S. Equity; Ru 2000-Small Capitalization U.S. Equity; EAFE+EM-International Equity; Wil REIT-U.S. REIT*

But as the financial crisis gained steam, the above historical correlations began converging and thus neutered the benefits of diversification. The same correlation matrix for the nine months in the heart of the financial crisis reveals this change.

<b>Monthly Correlations 6/08-2/09</b>					
	<b>Bar Agg</b>	<b>S&amp;P 500</b>	<b>Ru 2000</b>	<b>EAFE + EM</b>	<b>Wil REIT</b>
<b>Bar Agg</b>	1.000	0.658	0.545	0.847	0.446
<b>S&amp;P 500</b>		1.000	0.971	0.870	0.853
<b>Ru 2000</b>			1.000	0.829	0.932
<b>EAFE + EM</b>				1.000	0.724
<b>Wil REIT</b>					1.000

It is clearly evident there was a marked increase in correlation for each of these major asset classes during the crisis. For example, look at the S&P 500 Index which represents large capitalization U.S. stocks, versus the Barclay’s Aggregate Index which represents domestic fixed income. These indices historically offered a low correlation of .225 prior to this recent period. But during the last half of 2008 and beginning of 2009, the two moved much closer together, as the .658 correlation coefficient suggests. Or examine the Russell 2000 Index, which represents small capitalization U.S. stocks, versus the S&P 500. The two were fairly strongly correlated

in normal times, with a coefficient of .805. However during the crisis, they were almost perfectly correlated at .971.

### The MBS Epidemic

An epidemic occurs when new cases of a disease substantially exceed what is expected based on past experience. For an infectious disease to become an epidemic, it must be both (a) very potent and (b) very contagious. In many regards, the spread of the financial crisis was very epidemic-like. The epicenter of the crisis was in the collapse of the residential real estate market. How does a blow-up in one seemingly insulated corner of the market lead to protracted declines in others? Most economists point to the lax lending practices prevalent in the market during the run up to the crisis. They generally agree that ultimately this provided potency to the infection via a rapidly deflating bubble, while high leverage further facilitated the impact by making losses highly “contagious.” Numerous institutional investors held securities that represented residential mortgages – commonly referred to as mortgage-backed securities or “MBS” for short. Often institutional investors borrowed to purchase greater quantities of MBS – an investment practice known as leverage. As MBS began to decline in value, lenders started to call in their loans. Investors who had outstanding loans which were still less than the value of their MBS holdings could simply sell these securities and repay their borrowings with the proceeds. But as dictated by the iron law of supply and demand, these forced sales began to weigh on the price of all other outstanding MBS.

These forced sales created a collective action problem, not unlike the case of yelling “Fire!” in a crowded movie theater. What was best for each individual (running for the exits) was not best for the group as a whole (a calm and orderly departure). Large investors were trying to sell their MBS, and as everyone attempted to dump their securities on the market at once, the price of all other MBS began to decline at an accelerating pace. This led to many investors owing more on their MBS portfolios than those securities were worth. In order to repay their loans, not only did they have to sell their MBS, but they were forced to raise cash by selling other assets such as high quality U.S. stocks, international equities, bonds and REITs. As continued forced sales lowered prices even further, additional margin calls came, resulting in even more forced sales which precipitated a virtual bank run across much of the globe. Eventually, many distressed investors wouldn’t invest the smallest bit of capital in anything other than the safest of safe havens – U.S. government obligations. This pushed short-term Treasury yields as low as they could go, to 0%. Such a first-come, first-served collective rush for the exits made almost all asset classes plunge simultaneously and thus all correlations converged towards “1.” An understandable inference from this is diversification failed. We believe it would be folly to draw such a quick conclusion. In fact, we believe such a broad answer should be responded to with the ole adage – “don’t throw the baby out with the bath water.”

### What Matters Now?

The financial markets continuously evolve. Although wise investment principles should withstand the test of time, the investment world is not static. We have devoted significant resources to examining lessons that can be learned and have taken a fresh look at what matters with regard to the time-honored investment principle of diversification.

**Bonds matter:** In 1997, we distributed a piece entitled “Who Needs Bonds?” which promoted the utilization of bonds in a diversified portfolio even though at the time it appeared the stock market would never decline again. We concluded by saying, “While bonds seem pedestrian in a roaring bull market, the diversification benefits of a bond allocation continue to make sense for many investors.” Throughout much of the extended bull market of

the 1980s and 1990s, even cautious investors asked themselves why they had any bond allocation at all. It was well documented that certain big time investors, such as David Swensen of Yale endowment fame, had minimal exposure to bonds. In the midst of a market crisis, however, a committed allocation to fixed income has proven to be very useful for investors. A quick test will illustrate this. Match the following returns for the nine month period of June 1, 2008 to February 28, 2009 (the height of the financial crisis): 2.7%; -27.9%; and -50.6% to the following asset allocation strategies: (a) 100% to fixed income; (b) 50% to a diversified basket of equities and 50% to fixed income; and (c) 100% to a diversified basket of equities. Obviously, the best performance was enjoyed by the 100% fixed income allocation and the worst by the one committed 100% to stocks. While a fixed income allocation is often a drag on overall performance in a bull market, it does provide a nice safety net when things turn bad.

**Liquidity matters:** Another basic tenet of investing is that an investor should receive a return premium for investing in illiquid assets in order to compensate for the associated lack of liquidity. While we believe this to be true, the recent crisis brought home just how important liquidity can be in a falling market. Several notable endowments from very prestigious universities had continued to increase their exposure to private equity, hedge funds and natural resources funds with lockups on their capital. As many of these institutions were forced to scale back operations because their endowments had shrunk significantly, meaningful portions of their portfolios were not easily convertible to cash. We continue to believe that illiquid assets and their associated return premium characteristics have an appropriate place in an investment portfolio. However, over-reliance on them in the pursuit of stellar long-term portfolio performance without regard for cash flow needs can leave an investor in the lurch.

**Income matters:** In an environment of positive double-digit investment returns for equities, the seemingly boring concept of dividends and interest income do not receive much attention. However, based on data collected by Yale professor Robert Shiller, dividends have accounted for nearly 60% of real stock returns since 1945 and for over 70% since 1871 (both figures through 12/31/08). Yet during the long-term period from the early 1980's through the end of 2008, dividends accounted for less than 40% of real returns. Investors have grown content to let companies eliminate dividends and use the excess cash for acquisitions and/or share buybacks. However, we expect there will be an increased interest from investors for dividends based on the age-old premise that a bird in the hand is worth two in the bush. A stock or bond that produces current income provides a hedge relative to one that relies solely on capital appreciation. We think this will be another remembered tenet of diversification in the coming years.

**Psychology matters:** Before the crisis, efficient market theories were close to gaining a filibuster-proof supermajority in the investing world. During the crisis, the broadly accepted tenets of this modern finance theory were severely tested. In turn, it seems as though the "behavioralists" may now get their day in the sun. They have long theorized that humans often behave irrationally. Investors simply do not exhibit any consistency of dispassionately weighing price versus value while making fully informed decisions. Standing tough in the face of market adversity and buying when everyone else is selling sounds good – until that circumstance actually arrives and stares an investor in the face. Evidence from the financial crisis continues to reinforce the notion that emotions are meaningful drivers of investment decisions. Accordingly, perhaps diversification and risk management are not measured best by antiseptic concepts such as standard deviation and efficient frontier charts. Albert Einstein once said, "Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted." As such, a well-diversified portfolio in the future should address more than certain risk/return metrics and so-called optimizing algorithms. Sufficient weight must also

be given to the investor's psychological tolerance for significant losses. By its very nature this will likely never be reduced to an exact science, but must be taken into account as part of the risk equation.

**Low-probability events matter:** Some have described the risk-taking of the last several years in terms of writing hurricane insurance. Since most hurricane seasons are relatively benign, hurricane insurers typically enjoy great profits most years. But inevitably a Category 5 strikes and wipes out much of the profit earned during the good years. Hurricane insurers know this so they write policies that hopefully pay them enough in the good times to enable them to stay afloat when the improbable Category 5 strikes. Much of the financial risk-taking of the last several years mistook "low" probability events for "no" probability events. Many investments were made under the premise that a Category 5 was not just unlikely, but indeed impossible. However, markets have a humbling way of correcting errant viewpoints. In the throes of the crisis, long-watched measures of volatility not only reached historical levels, they blasted through them. If investors were hurricane insurers, the events of 2008 would look like one Category 5 hitting New York City while another simultaneously hit South Florida. Accordingly, we believe investors will carefully consider the potential of extreme downside risks when evaluating how best to construct a diversified portfolio going forward.

**Time horizon matters:** The "long-term horizon" that protects an investor's capital from loss has been pushed out further in the future. So what now? Should you abandon basic principles of investing and start swinging for the fences or hope to hit the lottery? We do not believe so. Long-term investment success does not depend upon the fortune of a random "spinning of the wheel." We believe it would be unwise to toss out long-held investment principles due to a couple of quarters which caught even the most sophisticated investors by surprise due to unprecedented events. Regardless of the convergence described above, there was not universal meltdown. What has been witnessed during these recent times is that virtually all investment principles get stretched in times of extreme crisis. Many investors have also rediscovered that formerly pedestrian concepts such as cash reserves and income producing assets like bonds have their place in most portfolios. And we also believe that alternative assets, such as quality private equity and hedge funds, have their place when they are appropriately matched to an investor's situation.

### Conclusion

So what is our conclusion? While diversified portfolios certainly were not immune to the painful declines of the recent bear market, well distributed asset allocations tended to experience much less portfolio damage than those invested in more concentrated strategies. Some of the newest advocates of diversification are those who previously had many of their eggs concentrated in one basket. Certain fundamental principles continue to provide practical wisdom. First, investors should always try to avoid exuberance in good times and paranoia in trying times. Many investors often seem to be solidly in one camp or the other. Second, reasonable expectations need to be maintained relative to future returns and risk. An effort to play catch up to huge returns from "missed opportunities" is frequently a formula for failure. And finally, long-term investment strategies should be periodically challenged to ensure they still fit overall financial objectives. If your investment strategy has changed but your objectives have not, you may want to reassess the reason for your strategy change. We believe the reports of the death of diversification have been greatly exaggerated, and we continue to recommend a balance among investment strategies tailored to each particular situation. As we have said before, this approach may not give you cocktail party hot tip bragging rights, but it is certainly much more conducive to having success in building long-lasting wealth.

## **DIVERSIFIED TRUST**