

Our Investment Philosophy

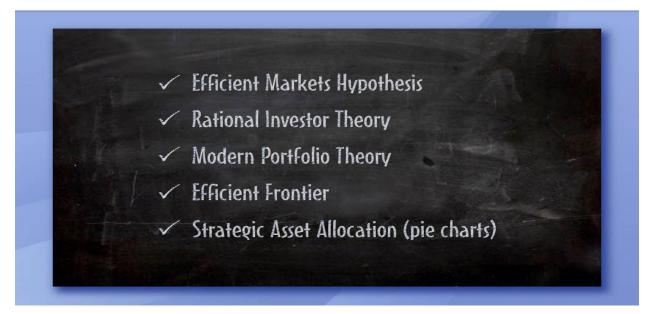
We will examine our core principals that make up our investment philosophy and the reasons that we manage portfolios very differently than many financial institutions. We believe that there are severe flaws and limitations in many of the main academic theories and financial products that have become limiting factors for investors. In addition, research in new areas has challenged many aspects to traditional academic theories. We will illuminate those academic shortfalls as well as provide research and facts that support our investment philosophy, and how we implement our investment methods for clients.

A few of the questions that you should think about and ask yourself as you read this paper are:

- What am I currently doing to manage <u>Downside Risk</u> in my investment portfolio?
- <u>How well</u> did my downside risk controls work in the last few down markets?
- Are my investment portfolio decisions based upon someone's:
 - Market Predictions
 - Flawed Academic Theories
- How will my investment portfolio be impacted as interest rates rise when we move out of this bond bull market cycle that has now extended over 30+ years?
- How often do I make investment decisions based on *Emotions*:
 - o Fear
 - o Greed
- Are there <u>Rules</u> that I should be follow and stick with in my investment portfolio?

Let us start by examining a few of the methods being used in investment portfolios today.

Academic Theory-Based Investing



There are some serious flaws in investment strategies that are based on the five academic theories outlined above as well as others not mentioned.

These academic theories all have in common, <u>what 'ought' to happen and how markets and</u> <u>investors 'ought' to behave</u>, based on theoretical models and equations.

Most of them, such as Modern Portfolio Theory, can be mathematically sound, but there are some key shortcomings when applied to the reality of investing in today's world and on a forward-looking basis. These shortcomings stem from a number of high-level assumptions:

- Diversification works: The great recession and the correlating market correction of 2007 2009 saw all asset classes, including traditionally "safe" fixed income assets come under severe duress with almost all assets had negative returns during this period. The flight to safety to many fixed income classes such as Municipal Bonds, Corporate Bonds was non-existent as all but U.S. Treasuries traded lower. Considering that most investors utilize diversification as their primary method to limit risk we saw that diversification methods provided very little benefit.
- Correlations remain constant over given periods of time and through market cycles. One key component too many academic theories is that asset correlations remain constant and that investments with lower correlation to one another provide

better diversification. Correlation metrics are dynamic and evolve throughout the business cycle, interest rate cycle and market cycles. Assets that historically have had a moderate degree of correlation to one another may expectantly have higher correlation to one another during times of distress. This became apparent throughout the 2007 – 2009 market correction, in that asset classes that either mathematically or historically had some basic correlation became very correlated and provided little to no benefit during this market correction.

- Investors always act rationally. People do not act rationally in many ways. We will demonstrate a few instances here. Investors followed the herd throughout the .com bubble by bidding up internet companies to irrational valuations. Yahoo traded at over 2000 times earnings and became a significant part of the market cap of S&P 500. In addition, many internet companies had no earnings, or revenue or alarming no real products, but still traded at a high multiple. In fact, a number of companies added the word .com or internet to their company name and their stock price and valuation shot up afterwards. One additional example or investors acting irrationally is the period that ended after the 2002 to 2007 bull market that was led by low interest rates and unprecedented speculation in residential real estate, where markets seized up in 2007 and markets fell tremendously, which in tale investors sold positions regardless of valuations or investment classes. Investors sold first and then asked questions later, many locking in large losses and became very risk averse. Afterwards, they did not deploy their assets back into the market until the market losses were received and ultimately reached new highs.
- Drawdowns do not matter: portfolios will recover quickly. Several academic theory's base assumptions on the idea that markets and or asset classes will always recover. As stated above Investors are not rational and large drawdowns scare people to making decisions that are based upon fear and that fear leads to poor investor returns.
- There is constant market growth: markets grow in perpetuity based upon historic growth rates. The financial industry states and utilizes throughout all its materials, "past performance is not indicative of future results" How is it then we utilize five, ten, twenty years of historic data to formulate return, risk and correlation metrics to utilize as inputs. Consider utilizing historic data for companies such as General Motors, Enron, when they had significant market cap or the likes of the oil industry in the 1980's just prior to the industry collapse.
- Historical Interest rate cycles are accurately reflected in forward looking assumptions.

These assumptions that are inherent in flawed academic theories are interrelated and pose substantial threats to investors who have their money managed in accordance with academic theory's such as Modern Portfolio Theory and because financial markets and key inputs such as rates of return, correlation, interest rates, etc change throughout time due to many reasons will affect the risk/reward characteristics. These changes to assumptions are important to consider and are key when investing and real money is at stake.

How do you presently measure Risk in your investment portfolio?



Most investors would agree that investment risk is the chance of substantial loss - like you might suffer during a Bear Market. If you invest \$100,000 and the value of that investment is only now worth \$90,000 you experienced a loss.

Surprisingly, academics don't agree with that common-sense view! The academic definition of investment risk can be quite different.

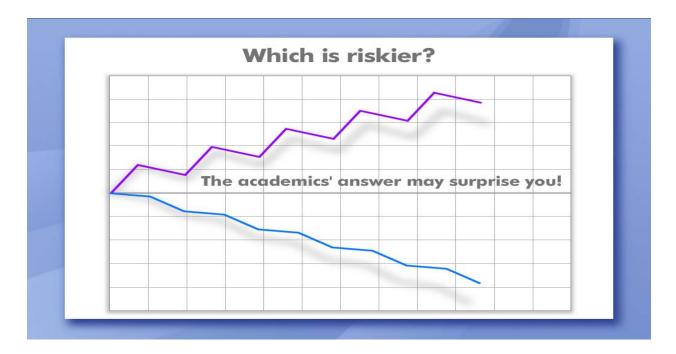
There are a number of different ways that investment risk is measured, for instance:

- Standard Deviation
- Beta

Naturally, knowing what risks you are undertaking is an essential part of any activity. But what exactly is risk in investing?

Let's start by looking at Standard Deviation.

Academics use *Standard Deviation* to define Risk:



This chart represents the performance of two hypothetical investments.

The top line is trending upward, but has experienced bigger 'wiggles' along the way. The bottom line is trending downward, while experiencing smaller wiggles along the way.

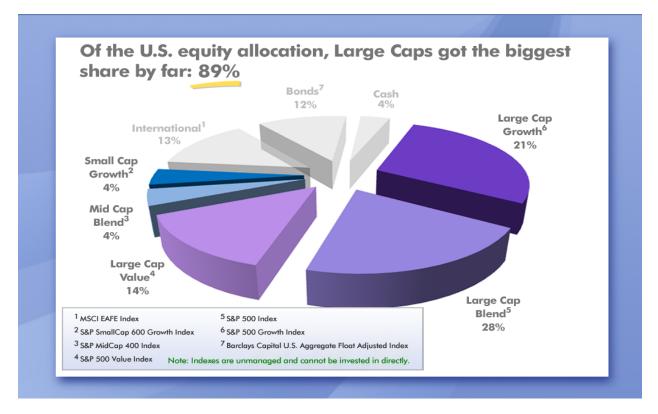
Academics call these wiggles 'variances', and their statistical measurement is called 'standard deviation.' In academic investing theory, risk is frequently measured by standard deviation - the higher the standard deviation of an investment, the higher the risk; the lower the standard deviation, the lower the risk.

Because the downward trending line on this chart has a lower standard deviation, this academic definition would imply it is 'less risky' - even though it is currently trending downward. And counter-intuitively, by the same definition, the top line might be considered to be *more* risky - and presumably less-desirable - even though it is currently trending upward!

This equating of investment risk with standard deviation is seemingly at odds with the common sense perception of risk as simply the chance of losing money. Standard deviation has been a major factor in the creation of millions of pie charts, the ones that have guided many investors and investment management professionals for years.

Standard Deviation: has been a major factor in creating diversified portfolios often illustrated in Asset Allocation Pie Charts.

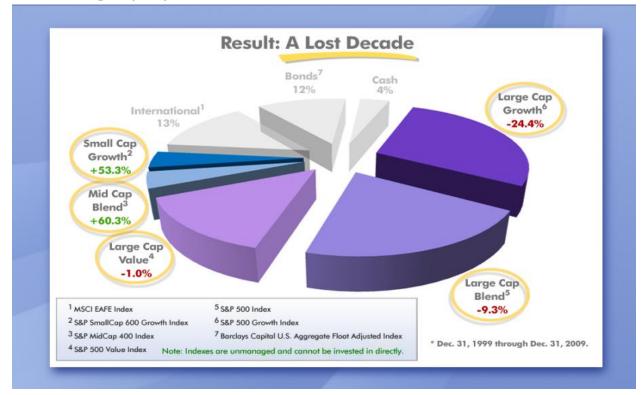
Here is a typical asset allocation pie chart for a 45 year old investor. More than 70 cents of every dollar presented in this pie chart is invested in U.S. equities.



As you can see, the typical Asset Allocation formula using Standard Deviation will be overweight in Large Cap equities. Only tiny little slivers of the U.S. holdings are left over for SmallCap and MidCap stocks.

The reason for this huge disparity is simple: LargeCaps have a lower standard deviation than MidCaps and SmallCaps; therefore, portfolio optimization programs that design these asset allocation pie charts, automatically give outsize portions to the allegedly 'less risky' LargeCap asset classes and minimize allocation to higher risk asset classes such as the midcap and smallcap investments.

However, as you can also see, all of the supposedly "lower-risk" LargeCap classes lost money for the entire decade starting 12/31/1999 and ending 12/31/2009.



And the smaller slices of the pie given to the supposedly higher-risk MidCap and SmallCap, *made* money with nice returns for the decade.

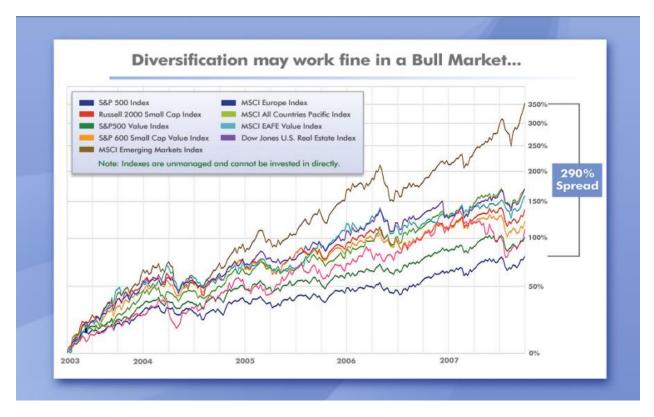
But of course, the LargeCap allocations completely overwhelmed the tiny MidCap and SmallCap allocations, resulting in a loss for the entire US equity portion of the pie - handing investors what the financial press has referred to as 'a *Lost Decade*.'

Perhaps most surprisingly, even at the culmination of the lost decade, LargeCaps were *still* classified as lower-risk than MidCaps and SmallCaps, based largely on the academic notion that risk-equals-standard-deviation. Even though LargeCaps lost money for the decade – they did so with lower variance and standard deviation!

Asset Class	Annualized Standard Deviation		
Large Cap Blend	16.11%		
Large Cap Value	16.84%		
Large Cap Growth	17.22%		
Mid Cap Blend:	18.71%		
Small Cap Growth	22.31%		

1Standard Deviation for 12/31/99 – 12/31/09, (using monthly close index data, annualized)

"What are you currently doing to manage Downside Risk in your investment portfolio?"



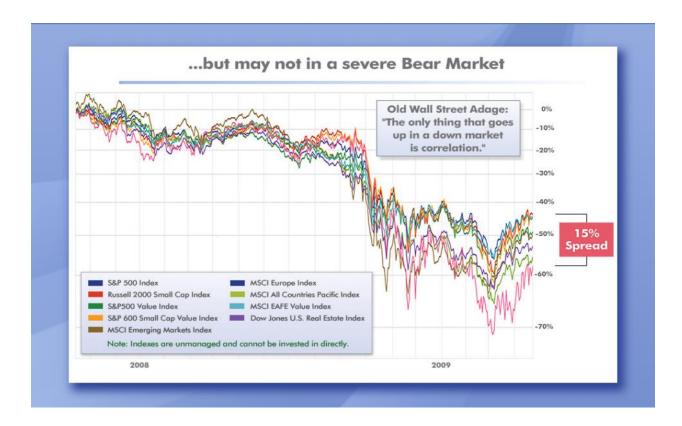
Another one of the most widely-followed academic theories is that diversification protects investors in declining Markets.

The idea is that different types of investments will march to the beat of different drummers, and so - theoretically - while some asset classes are going down, others might be going up.

This chart shows that diversification across nine non-fixed-income asset classes, works pretty well in a Bull Market, producing a very wide dispersion of returns - almost 300%, from top to bottom. Even though all these asset classes were generally up-trending, they definitely went up at different rates providing the desired 'diversity' in returns.

"Does Diversification actually work, or is it a Myth?"

Most people have used some form of diversification to attempt to manage downside risk in their portfolio and the reality is, in most all bear market declines, Diversification alone did very little to help control loses in the average investment portfolio.

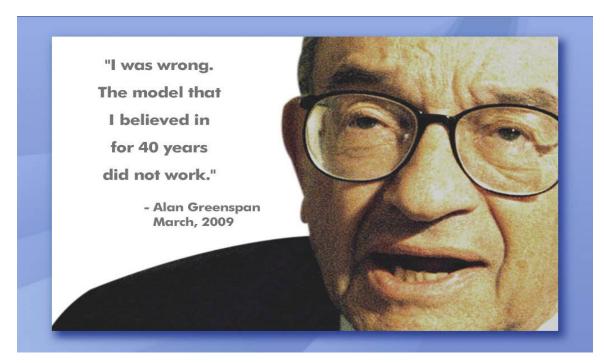


As you can see even though this diversified portfolio performed well and recovered in the period from spring of 2003 through the fall of 2007, in the Bear Market that followed from fall of 2007 to the spring of 2009 this diversified portfolio gave up all of the gains.

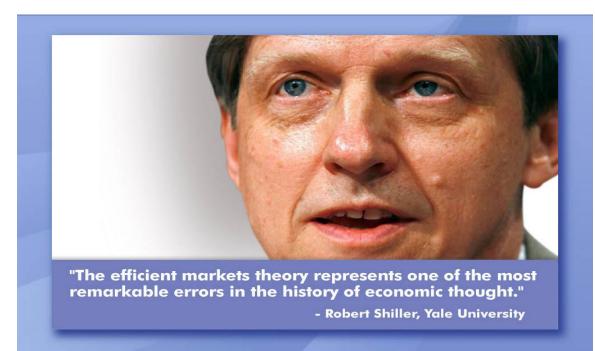
And as you can see the dispersion of returns collapsed dramatically. The supposed benefits of diversification across these nine asset classes, just weren't there: An almost 300% dispersion of returns during the Bull Market, shrank to a tiny 15% dispersion of returns during the Bear Market.

This collapse of dispersion means that the correlation of the returns among these asset classes skyrocketed! ('Correlation' is the tendency of one asset class to behave like another.)

Alan Greenspan, America's chief economist during his 20-year tenure as Federal Reserve Chairman, was forced to admit that the academic theories underpinning his work were flawed. He told Congress in 2009:

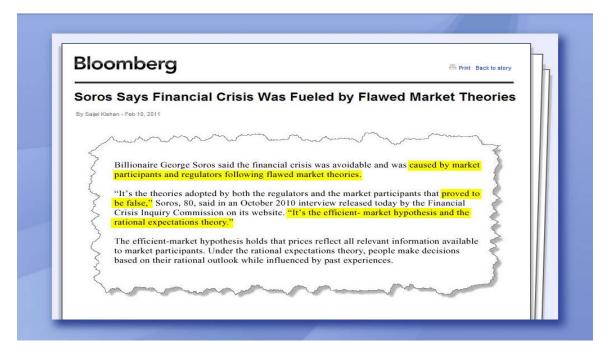


Another well-respected economist, Professor Robert Shiller of Yale University, is leading the way in blowing big holes in some of the investing world's dominant academic theories.



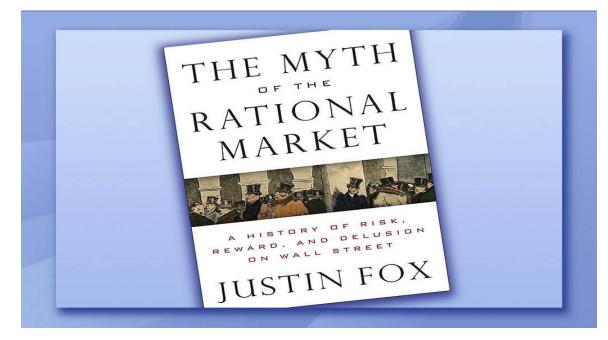
The Financial Crisis Inquiry Commission was established by Congress in 2009 to study and report on the causes of the recent financial crisis.

The Commission interviewed billionaire investor George Soros, and the interview was short and blunt.



The *Myth of the Rational Market,* published in 2009, relates in great detail the origins and history of the major academic investing theories.

As the title implies, the author concluded that those theories are myths.



The other misunderstood or ignored risk that the typical asset allocation models may get really wrong going forward is:

Interest Rate Risk

Ask yourself this question, Do I clearly understand the Real Risk going forward of rising interest rates?



As you can see on this chart, we have had a 34-year Bull run in the Bond Market. Interest rates did not go straight down over the last 34 years but over all they have declined from all time highs to all time lows.

We at Harvest are not into predictions and attempting to forecast the future, and yes we recognize that interest rates could possibly remain low as they did in Japan for an extended period of time. However, the likelihood or probability that they will continue to decline over the next 10 or 20 or even 30 years the same way that they have over the past 30 years is not only improbable, it's impossible.

The reason this is critically important to understand is that the historical total returns in the bond market are made up of Interest Yield and Capital Appreciation. As bonds have at times risen in value as interest rates have declined this has created Total Returns that are going to be nearly impossible to duplicate in the near to mid-term future.

As previously discussed, asset allocation models are typically built using historical returns and standard deviation as two of the largest components that drive allocation percentages. These models are often built in such a way that they use bond exposure to reduce risk and, even though historically or in a declining interest rate environment that goal of reducing risk can be achieved, in a rising interest rate environment adding bond exposure may actually at times increase risk of loses in the overall portfolio.

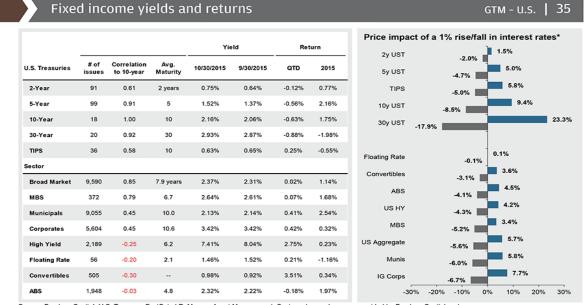
It is imperative to analyze and understand the true risk / reward ratio of having bond exposure in your investment portfolio. In other words, is the potential dividend yield going to be dwarfed by the potential capital loses as interest rates rise?

As you can see, if interest rates rise 1% the negative impact on:

- 5yr US Treasury bond could see a 4.7% loss of principal
- 10 yr US Treasury bond could see a 8.5% loss of principal
- 30yr US Treasury bond could see a 17.9% loss of principal
- 10yr Municipal bonds could see a 6.0% loss of principal

Fixed income

35



Source: Barclays Capital, U.S. Treasury, FactSet, J.P. Morgan Asset Management. Sectors shown above are provided by Barclays Capital and are represented by – Broad Market: U.S. Aggregate; MBS; U.S. Aggregate Securitized - MBS; Corporate: U.S. Corporates; Municipatis: Muni Bond 10year; High Yield: Corporate High Yield; TIPS: Treasury Inflation Protection Securities (TIPS). Floating Rate: FRN (BBB); Convertibles: U.S. Convertibles Composite; ABS: ABS + CMBS. Treasury securities data for # of issues based on U.S. Treasury benchmarks from Barclays Capital. Yield and return information based on belivethers for Treasury securities. Sector yields reflect yield to worst, while Treasury yields are yield to maturity. Correlations are based on 10-years of monthiny returns for all sectors. Change in bond price is calculated using both duration and convexity according to the following formula: New Price = (Price + (Price * Duration * Change in Interest Rates))+(0.5 * Price * Convexity * (Change in Interest Rates))+(0.5 * Price * Convexity * (Change in Interest Rates)) and to 0.00%. Chart is for illustrative purposes only. Past performance is not indicative of future results. Guide to the Markets – U.S. Data are as of October 31, 2015.

J.P.Morgan Asset Management

Hopefully this has caused you to begin to ask yourself some important questions about your investment portfolio.

- 1. Have I been relying on some form of diversification as the primary way to manage downside risk in my investment portfolio?
- 2. Am I relying on flawed academic theories to give me asset allocation models that may not always provide the asset protection that they have been represented to give me?
- 3. Am I in investment positions directly or indirectly that give me bond exposure that is likely to lose value when interest rates rise?

If you answered YES to any or all of those questions, then you're probably also asking yourself "*Is there a better way to manage my investments*?"

The answer to that is a resounding YES!

At Harvest Investment Services, we believe in managing risk with:

Fact Based, Rules Driven, Actively Managed models.

Fact Based:

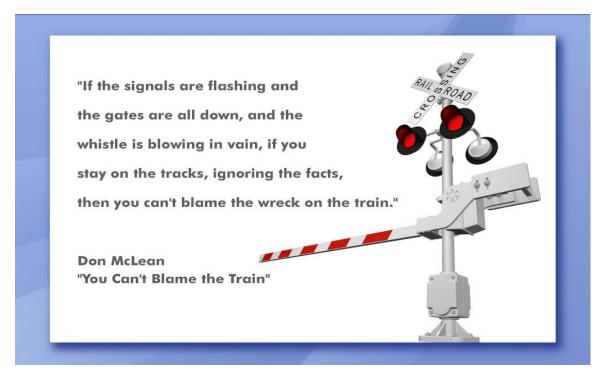
We use the Facts of the Current Market conditions,

- 1. Which means that we don't rely upon Predictions or Market Forecasting
- 2. Which means that we are investing based upon real time current market trends, as opposed to trying to predict what might happen tomorrow.
- 3. Which means we position portfolios attempting to capture gains in positions currently delivering the out-performance. This is often referred to as momentum investing in the asset classes and or sectors that are currently delivering the best gains while attempting to avoid those that are lagging.

Rules Driven:

We follow both *Buy* and *Sell* rules that have been time-tested to deliver proven out-performance through multiple market cycles.

- 1. Which means when the signal says Sell we Sell.
 - Just like you stop at Red Lights
- 2. Which means when the signal says Buy we Buy.
 - Just like you Go when the Light turns Green
- 3. Which means we don't just ride markets down, we use Rule Driven Downside Risk Controls to limit loses.
 - Just like you stop at railroad gates that are down



Each of our *AlphaSolutions* Models employ various different rules such as:

- 1. Some models use Trending Strategies such as the 13 50 day Moving Averages,
 - When the Green line = the 13 day moving average is on top we are in.
 - When the Red line = the 50 day moving average is on top we are out.

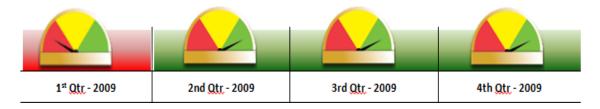


2. Trailing Stops

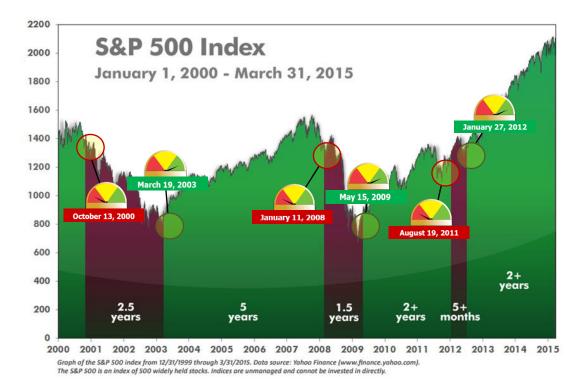
3. Asset Class and Sector Rankings – Relative Rankings

U.S. Intermediate-Term Asset Class Rankings						
	Major Asset Classes	Туре	Rank	Week Ago Rank		
	Nasdaq 100	1	1	1		
	Technology	3	2	2		
	Dow 30	1	3	4		
	LargeCap Growth	1	4	5		
Above Average -	LargeCap Blend	1	5	6		
best for new positions	Consumer Non-Cyclical	3	6	3		
	Consumer Cyclical	3	7	8		
	Industrial	3	8	10		
	Telecom	3	9	11		
	Real Estate	2	10	7		
	Energy	3	11	16		
US Mkt Avg	Russell 3000 Index		12	14		
Below Average	Financial	3	13	12		
	LargeCap Value	1	14	13		
	SmallCap Value	1	15	20		
	Basic Materials	2	16	19		
	CASH (1-3 mo T-Bills)		17	15		
	SmallCap Growth	1	18	21		
	Utilities	3	19	9		
	MidCap Value	1	20	22		
	MidCap Blend	1	21	23		
	MidCap Growth	1	22	24		
	Emerging Markets	2	23	18		
	Developed Int'l Markets	2	24	17		
	SmallCap Blend	1	25	25		
	Healthcare	3	26	26		

However, most all of our AlphaSolutions models employ the Downside Risk Control rules of our Bull Bear Indicator.



Here you can see the actual historical dates that our Bull Bear Indicator triggered Buy and Sell signals



Actively Managed:

- 1. Our AlphaSolutions models are not the conventional "Buy and Hold" approach to managing money.
- 2. We typically use Exchange Traded Funds (ETF's) and individual securities in order to be able to employ our downside risk control strategies.
- 3. Some of our models can trade Daily, others trade Monthly and some trade Quarterly, all according to the rules of the respective model.

So if you are looking for a different way to have your portfolio managed based upon Fact Based, Rules Driven, Actively managed models with timetested proven out-performance, take the time to check out our *AlphaSolutions* models at <u>www.harvestinvestmentservices.com</u> or speak to one of our advisors to learn how Harvest can help you *Harvest Gains and Limit Loses*.

Important Disclosures:

The investment descriptions and other information contained in this summary are for educational and illustrative purposes and does not constitute an offer to sell or a solicitation of an offer to buy any securities and may not be relied upon in connection with any offer or sale of securities. This report should be read in conjunction with Harvest Investment Services' Form ADV Part II and Form ADV Part II B all of which should be requested and carefully reviewed prior to investing. Past performance is not necessarily indicative or a guarantee of future results.

Investment in the Harvest Investment Services AlphaSolutions strategy or any other investment or investment strategy involves risk, including the possible loss of principal; and there is no guarantee that investment in this or any other investment strategy will be profitable for a client's or prospective client's portfolio. Investments in the Harvest Investment Services AlphaSolutions strategy account or any other investment or investment strategy, are not deposits of a bank, savings and loan or credit union; are not issued by, guaranteed by, or obligations of a bank, savings and loan, or credit union; and are not insured or guaranteed by the FDIC, SIPC, NCUSIF or any other agency.

Comprehensive Financial planning and Investment Advisory services offered through Harvest Investment Services, LLC a Registered Investment Advisor.

Analyst Certification Firm Overview: Founded in 2008^ (Reorganized from Integrity Financial Associates, founded in 1982) Key Investment Personnel Tim J. Newell, CFP® AIF® and John K. Alyo, CIMA® Key Differentiators • Global approach to asset allocation • Tactical management • Portfolio managers' accessibility • Length of investment experience • Numerous risk control strategies Asset Allocation Variance: Equities 0-98% Fixed Income 0-90% Cash and Cash Alternatives 0-100%

All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

Alternatives 0-50%