OBJECTIVES-BASED INVESTING:

Aligning Investor Goals With Investment Solutions

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Someone is sitting in the shade today because someone planted a tree a long time ago. — Warren Buffett

There are many methods of building an investment strategy designed to meet an investor's future needs. Many financial advisors use an efficient frontier model to develop the strategic asset allocation for their clients. These efficient frontier models seek to strike a balance between the highest possible return for the lowest level of risk. Depending on an investor's risk tolerance, he or she is assigned a particular mix of investments as the optimal choice. However, the practice of assigning portfolios to investors based primarily on where the portfolio falls along an efficient frontier may not achieve the investor's objectives.

Pershing affiliate Lockwood Advisors, Inc. (Lockwood) believes that strategic asset allocation based on an efficient frontier framework has conceptual merit. However, we believe that whether the investor is an individual or a large institution, the starting point for portfolio construction should be defining the investor's objectives. In terms of asset class and investment option selections, an overriding focus should be on meeting the objectives of the investor from a return, risk, time horizon and liquidity perspective.

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The Evolving Investment Approach

In 1998, the S&P 500 Index closed above the 1,000 level for the first time. Two decades later, the S&P 500 Index hit a record closing-level high of 2,931 on September 20, 2018. How times—and equity markets—have changed since then. In 1998, General Electric was the biggest company in the S&P 500 Index, as measured by market capitalization. Apple Computer was number 456. Now, Apple Computer ranks as the second-biggest company in the index while General Electric dropped to 73rd place, as of October 2, 2019. Facebook Inc., the third biggest company in the index on October 2, 2019, wasn't even publicly trading in 1998. The change in the S&P 500 Index over the last 20-plus years is a striking example of how markets evolve over time.

It is a dynamic financial landscape with global markets and economies becoming more and more connected every day, and financial information available around the clock. Investing has grown more complex since Harry Markowitz pioneered modern portfolio theory (traditional asset allocation) in 1952. Advisors need to factor in human tendencies as well as the disconnect that often exists between the unique needs of an investor and a portfolio constructed via traditional asset allocation methods. It's challenging for an investor to achieve long-term financial success.

Traditional methods of portfolio construction distill the complex realm of investing into basic quantitative statistics. Decisions are based on the tradeoff between expected risk (as measured by standard deviation) and return. Portfolio construction then centers on the selected risk level. Investment results are measured against conventional, but subjective, index benchmarks. In addition, the constant barrage of financial information may make it easy for an investor to develop a myopic focus on beating an arbitrary index on a short-term basis. This same phenomenon makes it challenging for an advisor to help a client focus on and adhere to a long-term investment approach.

However, risk is more than just a number—it is a concept. Risk is personal. One investor's view of risk may be quite different from that of another. Risk also tends to differ across each phase of an investor's lifecycle from wealth accumulation, to the transition into retirement, to the management and distribution of income. For one investor, risk may be not sleeping at night during market upheavals and failing to preserve wealth. For another investor, risk may be not growing the nest egg or building wealth. For yet another investor, risk may be not receiving income from the portfolio to supplement more stable income sources. Ultimately, risk comes down to an investor not meeting his or her specific goals and objectives—the actual purpose behind an investor's assets.

Objectives-based investing reflects an evolution in the traditional portfolio construction approach and seeks to better align an investor's needs, goals and objectives to an investment strategy. Objectives-based investing is intended to better help investors stick with an investment strategy and achieve specific financial goals by reframing investment decisions and portfolio construction and redefining an investor's benchmark. The approach is designed to be more holistic and intuitive—framed in an aligned investment solution that an investor will better understand. Investment results are measured relative to an investor's ability to achieve personal goals. Risk is defined as the likelihood of falling short of those goals.

In addition, objectives-based investing may help advisors deepen client relationships and manage client expectations. It also can help control counterproductive client behaviors and biases, and provide investment solutions that are more meaningful to clients. Additionally, it may help clients remain focused on the big picture despite short-term noise and market movements. Ultimately, it can help clients achieve their personal and financial goals. Objectives-based investing begins with ascertaining a client's needs.

For additional information, please refer to the Important Disclosures at the end of this report.

Solutions for All Phases of the Investor Life Cycle

Source: Lockwood Advisors, Inc.

24/7 Sway

Many years ago, market information was limited to daily newspapers, evening newscasts and weekly financial publications. Investors tracked their accounts and portfolios through quarterly paper statements delivered by mail. Market and financial information was provided after the fact.

Today, real-time information is available 24 hours a day, seven days a week, 365 days a year. Financial news networks, websites, mobile phone apps and media pundits provide an endless stream of data, commentary and opinions. Many of these stories are geared more toward capturing an investor's attention rather than providing an objective overview of events. Look at these eye-catching headlines:[1]

› "How to profit from the 'best of both worlds' in stock investing"

› "Why the world's top investors say now may be the time to raise cash"

› "How to trade the S&P 500's breakout from its long-term trading range"

› "Don't stand in the way of this bull market in stocks"

› "These overlooked stocks may offer better growth potential than popular big names."

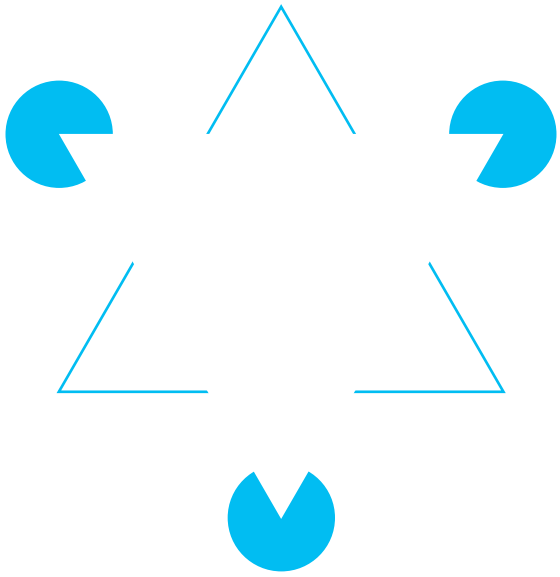
An investor can get swayed by emotion, make snap judgments, come to misperceptions or be overwhelmed with data. In short, investors are barraged with non-stop financial information about the markets and the economy. It is tempting for an investor to focus on the short-term noise rather than maintain perspective on the big picture of long-term financial goals and objectives.

[1] September 20, 2019 sampling of headlines from the MarketWatch website

Perception Is Deception

The deluge of 24/7 financial information, when coupled with human tendencies, makes it challenging for an investor to arrive at objective investment decisions. When it comes to how the brain processes information, optical illusions are prime examples of how perceptions can be deceptions. One such example is the Kanizsa Triangle, in which a triangle is perceived even though it is not actually there.

Seeing What Isn't There

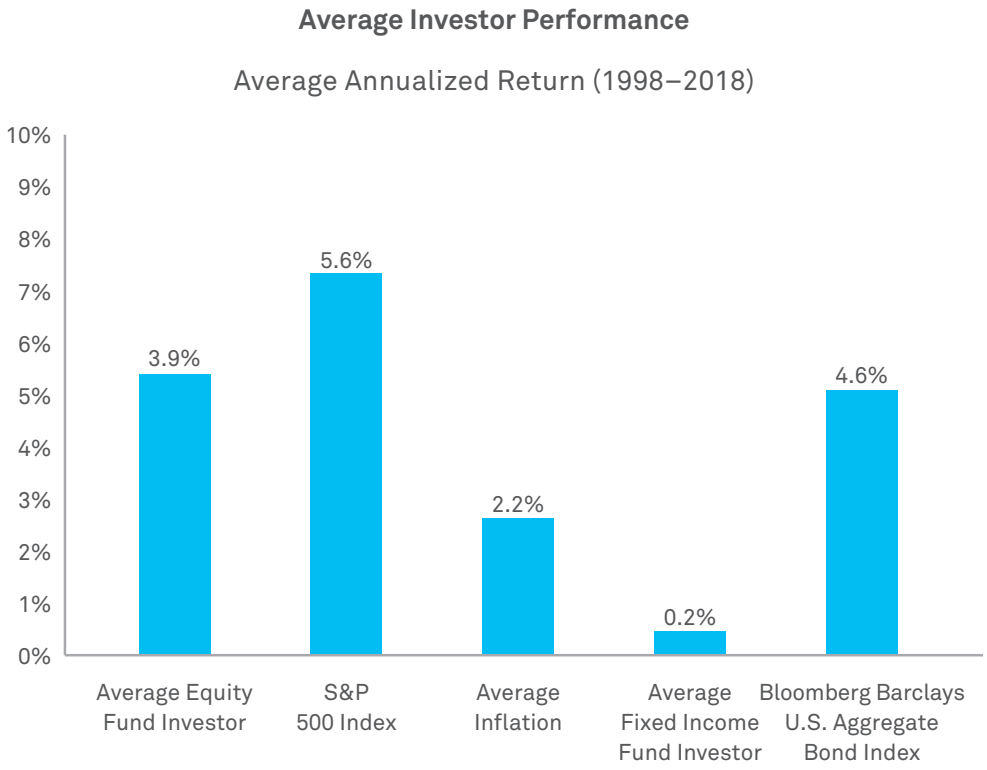


Source: Cognitive Neuroscience Society

Similarly, within financial data and the realm of investing, perceptions can differ from reality. Investors see patterns or trends that may not exist, giving more weight to something just because it is in the press. Perhaps they might be overwhelmed with the financial data and do nothing (i.e., analysis paralysis). Investors might show confirmation bias, screening information to ignore anything that doesn't confirm their views. These innate—and often unconscious—biases can transform investors' perceptions into misperceptions, which can lead to decisions and behaviors that aren't logical, though they might appear to be.

Investor Behavior

Although modern portfolio theory assumes investors act logically and make rational decisions, investors' emotions, perceptions and unconscious biases often influence their decisions. These factors also can work against their ability to reach their long-term financial objectives and goals. The chart below shows the annualized return of the S&P 500 Index versus the average equity mutual fund investor and inflation for the same period. The chart also shows the annualized return of the Bloomberg Barclays U.S. Aggregate Bond Index, generally considered a broad measure of the U.S. taxable fixed income market, versus the average fixed income fund investor.



Source: "A Buy-and-Hold Strategy Can Serve Investors Well." ©2019 American Funds Distributors Inc. Lit. No. INGEFL-050-0519P and J.P. Morgan Asset Management 3Q 2019 Guide to the Markets®

The information on indices is presented for illustrative purposes only and is not intended to imply the potential performance of any fund or investment. Indices are unmanaged and are not available for direct investment. Index performance assumes the reinvestment of all distributions but does not assume any transaction costs, taxes, management fees or other expenses, which would reduce performance shown. The S&P 500 Index is a capitalization-weighted index of 500 widely traded stocks. Created by Standard & Poor's, it is considered to represent the performance of the stock market in general. The Barclays U.S. Aggregate Bond Index seeks to provide a broad measure of the U.S taxable U.S fixed income market. **Past performance is not a guarantee of future results**.

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The S&P 500 averaged a 5.6% annual return for the time period between 1998 and 2018, approximately 170 basis points higher than the return of the average equity mutual fund investor. That difference is more striking on the fixed income side, with the Bloomberg Barclays U.S. Aggregate Bond Index earning 23 times that of the average fixed income investor. While investors may understand that staying the course may better help them achieve their personal and financial goals, investors' emotions and biases often win out, and they don't stick with their long-term investment strategy. Staying with a long-term strategy is more challenging when portfolios are constructed via traditional asset allocation methods (i.e., modern portfolio theory).

Modern Portfolio Theory

Modern portfolio theory dates back to 1952, when Harry Markowitz introduced the concept in the *Journal of Finance*. Despite its simplicity, the concept was one of the most profound developments in modern finance. It is likely the most widely used "tool, of institutional and individual investors, to develop portfolios." The basic concept is that there are many combinations of assets that an investor can use in designing a portfolio. However, based on the combination of risk, return and covariance, an optimal set of portfolios, known as the efficient frontier, can be identified. Any portfolio combination that lies below the efficient frontier is considered sub-optimal, as there exists either a portfolio on the frontier that offers higher return for that given level of risk, or a portfolio that offers lower risk for that given level of return.

Markowitz's work formed the basis of modern portfolio theory, which, is now considered the traditional approach to asset allocation. Within modern portfolio theory, model assumptions (i.e., expected returns, risk and correlation) are key components in determining the efficient frontier and the optimal portfolio for an investor. However, using historical returns to determine portfolio positioning is akin to driving a car by looking in the rear view mirror. You can see where you have been but not where you are heading.

Assumptions: Risk and Return

Under the traditional asset allocation framework, model assumptions are critical in determining what the optimal portfolio should look like. Traditional asset allocation models are typically based on historical risk and return figures for asset classes. They assume that future results will be similar to those experienced in the past, which often is not the case. Evidence suggests that the risk side of the equation may tend to be stable over time. However, returns can vary from one period to the next.

For example, over the 15 years ending December 31, 2013, bonds outperformed stocks at less than one-third of the level of risk, as measured by standard deviation. However, over the 15 years ending December 31, 2018, stocks returned double the return of bonds with less risk than for the 15-year period ending December 21, 2013.

Return and Risk Statistics for Stocks and Bonds

15-Year Return and Risk, Ending 12/31/2013		
Asset Class[2]	Return	Risk (Standard Deviation)
U.S. Equity	4.7%	15.5%
U.S. Fixed Income	5.2%	3.5%

15-Year Return and Risk, Ending 12/31/2018		
Asset Class[2]	Return	Risk (Standard Deviation)
U.S. Equity	7.8%	13.5%
U.S. Fixed Income	3.9%	3.2%

Source: Morningstar, Inc.
Indices are unmanaged and are not available for direct investment.
Past performance is not a guarantee of future results.

Based on 15 years of data ending December 31, 2013, most optimization modeling programs used in the traditional portfolio construction approach would likely overallocate to bonds relative to stocks. Bonds have benefited from one of the largest secular interest-rate declines in recent years. After declining from double-digits in the 1980s, interest rates reached record-low levels following the Federal Reserve's easy monetary policies enacted in 2008; the policies included quantitative easing programs and targeting a federal funds rate level of 0.00% to 0.25%. However, with yields at such relatively-low levels, bonds may not have a repeat performance for quite some time as interest rates have continued to normalize and rise. (A bond's price moves inversely with its yield.) Similar results occurred at the end of the 1990s, but in favor of stocks. Overallocating to stocks right before the technology bubble burst in 2000 would have had disastrous results.

In addition to the fact that returns can vary widely from one period to the next, the historical return and risk assumptions used in the traditional portfolio construction approach are time-period dependent. Different historical time periods (such as 10-, 15- or 20-years) and the beginning and end date of that time period, may lead to very different portfolio optimization and construction results. The time period dependency is even more evident—and meaningful—when delving deeper than just the broad asset class level. Given the market's ups and downs, as well as the economic and business cycles, performance and risk levels of sub-asset classes may be quite different depending on the time period, potentially leading to very different portfolio asset allocation results. Not only can return statistics within a given asset class vary meaningfully over different time periods, historical returns (a rear-view mirror approach) often fail to factor in new circumstances and dynamics that didn't exist when the historical returns were generated.

[2] Bonds as defined by the Bloomberg Barclays U.S. Aggregate Bond Index, and stocks as defined by the S&P 500 Index.

Assumptions: Theory Versus Reality

In modern portfolio theory (i.e., traditional asset allocation), investors seek to maximize their portfolio's expected return for a given level of risk, or minimize risk for a given level of return. Modern portfolio theory has become accepted finance theory, likely because of its simplicity in distilling the complex realm of investing down to quantitative risk, return and covariance statistics. However, that theory often doesn't hold up in reality. The result is that an investor may end up with a sub-optimal portfolio—a portfolio that is disconnected from the investor's unique investment goals, objectives, time horizon and constraints.

The modern portfolio theory framework incorporates many implicit and explicit assumptions about the markets and investors, many of which hold true to varying degrees in reality. A few examples of typical assumptions are shown below:

› All investors behave rationally and logically

› All investors have access to the same information about markets and securities at the same time

› Risk is defined by the variability of expected returns (i.e., standard deviation of returns)

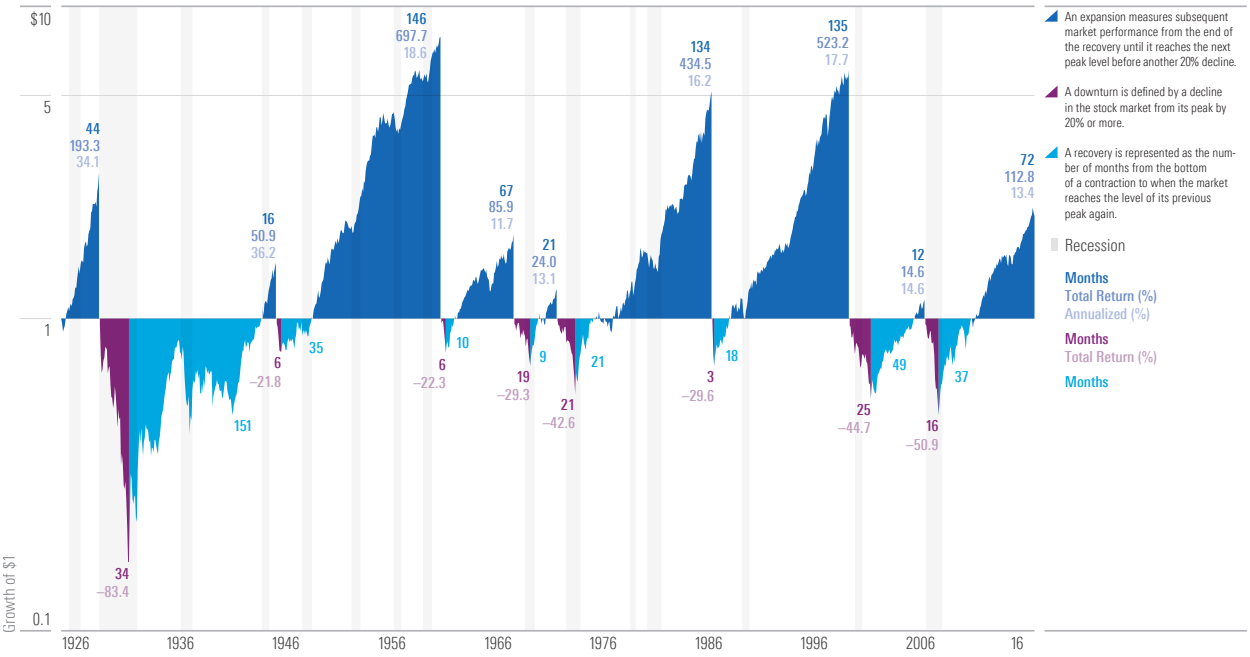
› Risk and returns, two parameters in the model, behave according to normal statistical assumptions

Objectives-Based Investing

In contrast to the traditional efficient frontier approach to portfolio construction, objectives-based investing is not a one-size-fits-all approach. Objectives-based investing is multidimensional and dynamic across an investor's investment life cycle. It seeks to align an investor's unique goals, objectives, liquidity needs and time horizon with a more customized and potentially more effective investment solution. Objectives-based investing is not about trying to predict the weather (or forecast the future), it is about crafting the boat so investors can navigate through the market cycles to potentially improve their chances of reaching their ultimate destination and achieving their financial goals.

In today's society with fast-paced, non-stop financial news, it is easy for investors to get caught up in the short-term noise and lose perspective of where we are in the context of longer-term market cycles, corporate fundamentals and economic growth. Objectives-based investing—investing from the perspective of a client's needs—can allow advisors to help their clients remain focused on their goals and not the markets, thereby aiding their clients with maintaining more disciplined investment behavior.

Market Cycles



Adopting a Broader View

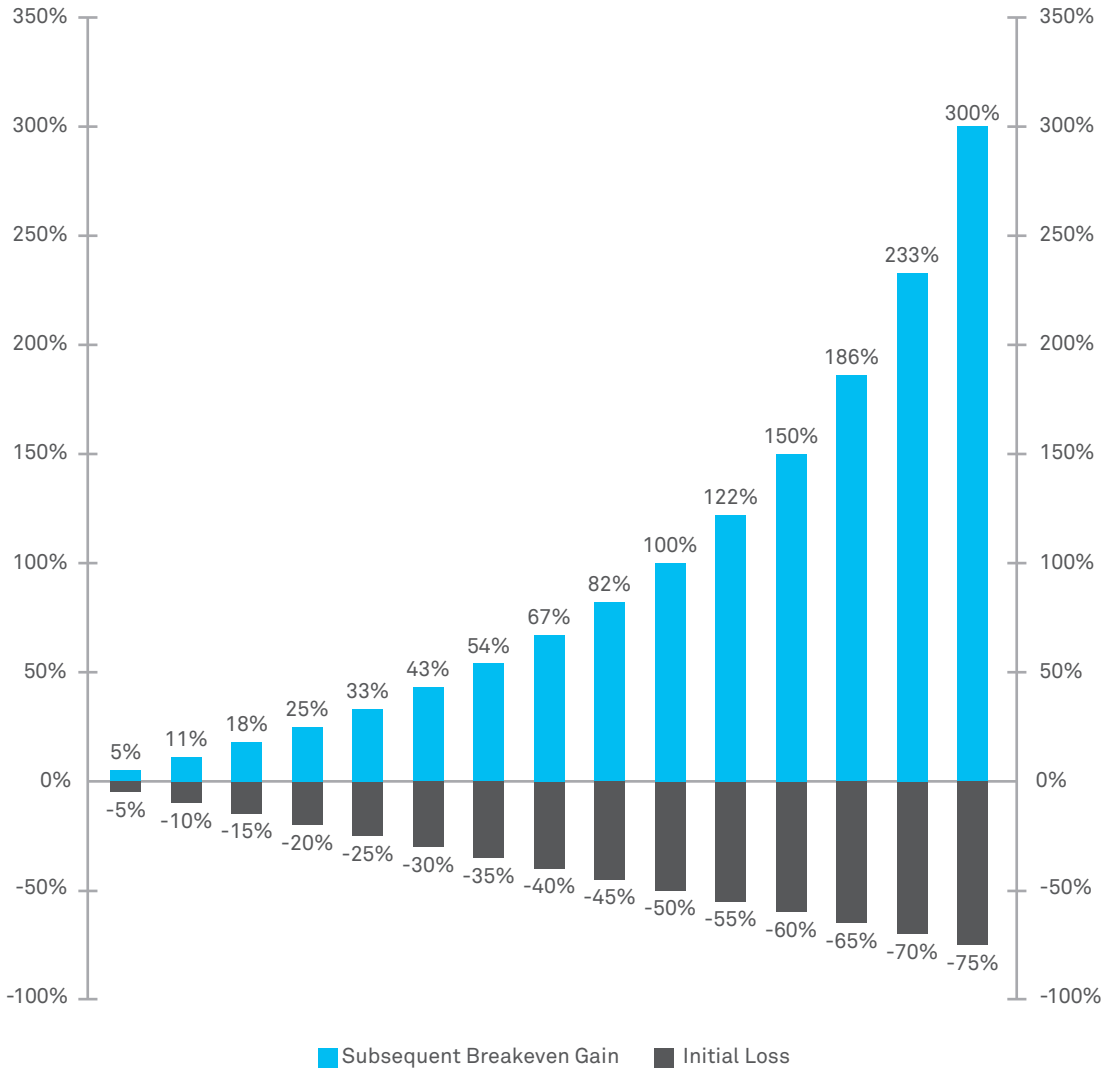
Helping investors adopt a broader view of their wealth, prospects and objectives and making a long-term commitment to an aligned portfolio solution may also help advisors counter client tendencies that can impede clients from achieving long-term financial goals. As was previously mentioned, investors often let their emotions guide their investment decisions, which can lead to ill-timed or counterproductive decision making. Other subconscious behaviors that often trump an investor's rational decision making include procrastination, loss aversion, hindsight bias and regret.

In addition to helping clients maintain a disciplined investment strategy, objectives-based investing may also lead an advisor to have more personal and meaningful discussions with their clients as performance is viewed in the context of meeting a client's goals. This, in turn, provides ongoing opportunities to review a client's goals and financial plan. Ultimately, objectives-based investing may be a win-win for both advisors and their clients by having an aligned investment solution a client is more likely to stick with as well as likely improving the probability of an advisor helping clients achieve their long-term goals and objectives.

Limiting Large Loss

Having an aligned investment strategy may also help advisors counter many investors' tendencies to sell low and buy high (i.e., get out of the market when the market is down and get back into the market when the market is up). After all, historically speaking, it is time in the market and not timing the market that has the greatest likelihood of achieving financial success. Also keep in mind that recouping losses requires a larger percentage gain than the loss itself. In addition, as shown in the chart below, the difference between losses and gains becomes more dramatic as losses get larger. Not shown in the exhibit below, is the opportunity cost of the time spent trying to recoup the losses. Finally, the sequencing of returns may be important, depending on the investor's stage in his or her life cycle.

Gains Required to Breakeven From Losses



Source: Lockwood Advisors, Inc.

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Conclusion

We believe adopting an objectives-based approach may increase the likelihood of an investor meeting his or her goals versus more traditional approaches. An objectives-based approach, as compared to a one-size-fits-all approach via traditional modeling, reflects an evolution in traditional portfolio construction. Objectives-based investing reframes investment decisions and portfolio construction, from an investor's point of view. Investment results are measured relative to an investor's ability to achieve personal goals, and risk is defined as the likelihood of falling short of those goals. The approach is designed to be more holistic and intuitive; an aligned investment solution that an investor may better understand and that may be more effective. Objective-based investing is not about trying to predict the weather (or forecasting the future); it is about crafting the boat to help investors seek to better navigate through the various market cycles.

As Yogi Berra (Major League Baseball Hall of Fame catcher, outfielder and manager) once said, "If you don't know where you are going, you might wind up someplace else." Objectives-based investing is designed to better align an investor's needs and objectives with an investment strategy and to help advisors work with their clients to get them to where they ultimately seek to be: attaining their financial goals.

Index Definitions

Bloomberg Barclays U.S. Aggregate Bond Index—Bloomberg Barclays U.S. Aggregate Bond Index represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. Securities must have at least one year to final maturity regardless of call features and must have at least $250 million par amount outstanding.

S&P 500 Index—S&P 500 Index, an unmanaged index, includes 500 of the largest stocks (in terms of stock market value) in the United States. Although the S&P 500 focuses on the large-cap segment of the market, with approximately 80% coverage of U.S. equities, it is also used as a proxy for the total U.S. equity market.

Important Disclosures

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The statistical data contained herein has been obtained from sources believed to be reliable, but we cannot guarantee their accuracy.

It is important to remember that there are risks inherent in any investment and that there is no assurance that any money manager, asset class, style, index or strategy will provide positive performance over time. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost.

Diversification and strategic asset allocation do not guarantee a profit nor protect against a loss in declining markets. **Past performance is not a guarantee of future results. All investments are subject to risk, including the loss of principal.**

The performance data quoted represents past performance and does not guarantee future results. Current performance may be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost.

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Equity securities (i.e., stocks), as well as portfolios that invest in equity securities, are subject to several general risks, including the risk that the financial condition of the issuer may become impaired or the general condition of the stock market may deteriorate, either of which may cause a decrease in the value of the issuer's securities. Equity securities are susceptible to general stock market fluctuations and to sudden, significant and prolonged increases and decreases in value as market confidence in and perceptions of the security's issuer change. These perceptions are based on various and unpredictable factors, including expectations regarding government, economic, monetary and fiscal policies, inflation and interest rates, economic expansion or contraction, and global or regional political, economic, and banking crises. There can be no assurance that an issuer will pay dividends on outstanding shares of its common stock, as the payment of dividends will generally depend upon various factors, including the financial condition of the issuer and general economic conditions. Holders of common stocks of any given issuer will generally incur more risk than holders of preferred stocks and debt obligations of the same issuer because common stockholders, as owners of the issuer, generally have subordinated rights to receive payments from such issuer in comparison with the rights of creditors or holders of the issuer's debt obligations or preferred stocks. The existence of a liquid trading market for certain equity securities may depend on whether dealers will make a market in such securities. There can be no assurance that a market will be made for any securities, that any market for the securities will be maintained, or that any such market will be or remain liquid. The price at which an equity security may be sold will be adversely affected if trading markets for the security are limited or absent.

Fixed income securities are subject to several general risks, including interest rate risk, credit risk, the risk of issuer default, liquidity risk and market risk. These risks can affect a security's price and yield to varying degrees, depending upon the nature of the instrument, and may occur from fluctuations in interest rates, a change to an issuer's individual situation or industry, or events in the financial markets. In general, a bond's yield is inversely rated to its price. Bonds can lose their value as interest rates rise and an investor can lose principal. If sold prior to maturity, fixed income securities are subject to gains/losses based on the level of interest rates, market conditions and the credit quality of the issuer.

Liquidity risk increases when particular investments are difficult to purchase or sell. A lack of liquidity also may cause the value of investments to decline. Illiquid investments may be harder to value, especially in changing markets. Typically liquid investments may become illiquid, particularly during periods of market turmoil. When illiquid assets must be sold in such market conditions (to meet redemption requests or other cash needs for example), it may be necessary to sell such assets at a loss.Morningstar data:

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