## The Average Individual Investor Falls Short While Institutional Investors Lead

The average individual investor often under-performs the average institutional investor due to some common and, often avoidable, mistakes. Typically, the average individual investor has not fully developed an asset allocation strategy, does not have realistic expectations for their investments, invests with a short-term bias, attempts to "time the market", and does not own low-correlated assets. By contrast, the average institutional investor has developed an asset allocation strategy, views investing with a long-term time horizon, does not attempt to time the market and is highly diversified among low-correlated asset classes.

AVERAGE ANNUAL TOTAL
RETURNS (1995-2005)

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Source: "Quantitative Analysis of Investor Behavior" Report, Dalbar, Inc. Average equity investor represents a composite of all equity mutual fund investors as compiled by Dalbar, Inc. Institutional Foundations \& Endowments, Corporation Pensions, and Public Pensions data provided by Callan Associates. Data as of 12/31/05.
Past performance is not indicative of future results.

## Difficulty in Predicting Next Year's Winners

The table below (for illustrative purposes only) demonstrates how various asset classes performed on an annual basis from 1990 through 2005. As you can see, the best-performing asset classes change from year-to-year. Morgan Keegan believes that it is not possible to consistently predict the next year's best performing asset class. Therefore, it is important that investors not try to time the market by moving from one asset class to another. Instead, investors need to develop a well-diversified portfolio with investments across all types of asset classes and to adhere to that portfolio mix.

Annual Returns For Major Asset Classes
(Ranked in Order of Performance)


There are two primary styles of equity investments - growth and value. Growth stocks typically exhibit a high growth rate of earnings and typically pay little or no dividends. Value stocks, on the other hand, typically exhibit a slower growth of earnings and typically pay higher dividend yields.

The graph below (for illustrative purposes only) depicts the absolute return differential between value and growth (1-yr returns). The shaded area above the axis indicates periods when growth out-performs value, while the shaded area under the axis indicates periods when value out-performs growth.

There are no standard durations to a cycle, nor are the magnitudes predictable. Hence, investors need to be diversified among various styles in addition to being diversified among asset classes.

## Wealth Management

## Why Investors Under-Perform

## Investors May Have Unrealistic Expectations

Over long-term time periods, investments historically follow an upward trend. As you can see in the graph below (for illustrative purposes only), most investments have enjoyed more positive years than negative years. In order to avoid the pitfalls of unrealistic expectations, investors should understand what to expect, on average, in positive markets and negative markets.


As evidenced in the chart to the left, large and small cap stocks tend to offer higher average returns than bonds in an upward market. Bonds tend to offer better returns than stocks in a downward market.

During bull markets, many investors forget the historical risks associated with owning investments. Investor optimism often distorts expectations of realistic returns. While equity investments tend to offer greater upside potential than fixed income investments, equities also exhibit more downside risk than do bonds.

Most investments will have their "day in the sun" and each
investment will eventually be out-of-favor. The idea of investment cycles is important to understanding the degree to which different investments will outperform and underperform (graph is for illustrative purposes only).

Best \& Worst Calendar Year Returns
(Calendar Years 1956-2005)


The green bar indicates the single best year. The red bard indicates the single worst year. Source: Ibbotson Associates

## Investors Tend to be Too Focused on Near-term Market Moves

As the stock market goes up and down, it's easy for investors to become too focused on day-to-day returns. Instead, investors should keep their focus on long-term investing goals and overall asset allocation strategy. When the stock market goes down and investment losses pile up, many investors are tempted to pull out of the market altogether.

The graph below (for illustrative purposes only) shows the price volatility of an investment on a monthly basis (red line) versus the growth of $\$ 100$ in that same investment over the same time period (blue area). The key to understanding volatility is to maintain an long-term bias and allow time to work for your benefit. If an investor in this security had sold out of the investment when the price was down, that investor would have missed out on potential gains further down the road.


Source: Ibbotson Associates

## Wealth Management

## Why Investors Under-Perform

## Investors' Time Horizons Tend to be Too Short

In addition to having an investment plan and proper diversification, investors must also have a long-term investment horizon.


Performance of S\&P 500 from 1926 to 2005
Source: Ibbotson Assoc

The longer an investor's time horizon, the lower the volatility in the stock market. In fact, if an investor's time frame is less than 3 to 5 years, they should give serious thought as to whether or not they should be in the stock market at all.

This chart (for illustrative purposes only) illustrates that as the time horizon increases, the volatility, or range of potential returns, decreases. Short-term investors will often be disappointed in the performance of their portfolios.

Over time, the stock market has exhibited a general upward trend. Investors have a better chance of realizing positive returns the longer they stay invested.

This chart (for illustrative purposes only) illustrates that as the holding period for large cap stocks increases, the potential for realizing negative returns decreases. According to the chart, investors with holding periods of 1 year are twice as likely to realize a negative return as investors with holding periods of 5 years. Another way to interpret this information: the more frequently an investor looks at their portfolio, the better the chance of seeing negative returns and being dissatisfied.

Large Company Stocks
Returns Over Different Holding Periods (1956-2005)


1-Year Period



5-Year Period


## Investors Hurt Themselves by Market Timing

In addition to having a long-term time horizon, investors must also remain in the market and not try to time the ups and downs. This chart clearly shows that trying to time the market is a loser's game.

This data (for illustrative purposes only), which was compiled for the ten year period ending 12/31/2005, shows that, had investors missed just 20 of the biggest up days of the more than 2,000 trading days during this period, their average annual return would have decreased from nearly $13 \%$ to roughly $8 \%$. It is highly unlikely that any investor could have accurately predicted which of the 20 biggest days to be in the market.

| Period |  |
| :--- | :---: |
| - Full Period | S\&P 500 Return |
| - Less the 10 biggest up days | $12.8 \%$ |
| - Less the 20 biggest up days | $10.0 \%$ |
| - Less the 30 biggest up days | $7.9 \%$ |
| - Less the 40 biggest up days | $6.2 \%$ |
| - Less the 50 biggest up days | $4.6 \%$ |
|  | $3.2 \%$ |
|  |  |
|  |  |
|  |  |

Source: Ned Davis Research, Inc.

## Investors Do Not Include Alternative Investments

The term "alternative investment" generally refers an investment category comprising nontraditional (stocks and bonds) investments. Alternative Investments can include futures and options (derivatives) as well as hedge fund investments and are considered riskier than traditional investments; however, successful performance of these types of investments does not depend on continued upward movement in the stock market.

During the bull market from 1997 to 2000, many alternative investment strategies slightly under-performed traditional equity asset classes. In fact, several alternative investment strategies performed more in-line with fixed income asset classes.

Past Performance is no guarantee of future results. Standard deviation measures variability of returns around the average return for an investment fund. Higher standard deviation suggests greater risk. Performance data quoted represents past results. Chart data represents a positive stock market period from 01/1997 to 03/2000 And is provided for informational purposes only. It is not mean to represent the Performance of any particular investment. It is not possible to invest directly in an index.


## Investors Do Not Include Alternative Investments

During the bear market from 2000 to 2002, all of the equity asset classes represented below under-performed the alternative asset classes. Chart is for illustrative purposes only.

Alternative investment asset classes out-performed and provided investors with positive performance during a volatile downward trend in market. Alternative investment asset classes can offer investors low correlation to traditional investments and some downside protection.

Past Performance is no guarantee of future results. Standard deviation measures variability of returns around the average return for an investment fund. Higher standard deviation suggests greater risk. Performance data quoted represents past results. Chart data represents a positive stock market period from 01/1997 to 03/2000 And is provided for informational purposes only. It is not mean to represent the Performance of any particular investment. It is not possible to invest directly in an index.


# Individual Pitfalls vs. Institutional Strategies for Success 

## INDIVIDUAL INVESTOR

Lacks asset allocation strategy

Has unrealistic expectations

Has short time horizon

Attempts to market time

Lacks alternative investments

## INSTITUTIONAL INVESTOR

Well developed asset allocation strategy

Understands risk/reward trade-off

Longer time horizon for investments

Does not market time

Broadly Diversified

# How does one solve the problem of individual investor under-performance? 



Disciplined,<br>long-term asset allocation.

## The Asset Allocation Solution

There are three major risk factors determining the success or failure of your portfolio. These risk factors are:

1. Incorrect Asset Allocation
2. Inappropriate Asset Correlation and Performance
3. Failure to Monitor and Maintain Portfolio

## The Importance of Asset Allocation

Studies have shown that as much as $93 \%$ of an investment portfolio's differential return is determined by the asset allocation decision. For our purposes, the asset allocation decision is defined as the percentage of your investments diversified among stocks and bonds. Not only does the asset allocation decision determine the majority of the portfolio's return, but it is also a critical factor in determining the risk or volatility of the overall portfolio.


## The Asset Allocation Solution

## Let Compounding Work for You

Compounding is the earning of interest on interest, or the reinvestment of income and/or capital gains. For instance, if you invest $\$ 1,000$ at 8 percent, you will earn $\$ 80$. By reinvesting the earnings and assuming the same rate of return, next year you will earn $\$ 86.40$ on your $\$ 1,080$ investment. The following year, $\$ 1,166.40$ will earn $\$ 93.31$.

By using the Rule of 72, investors can somewhat judge an investment's potential. Divide the projected return of the proposed investment into 72. The result of that formula equals the number of years that it will take for the investment to double in value. For example, an investment that earns 8 percent per year will double in 9 years.

The effects of compounding are amplified when the investment time horizon is long-term. In the example given above, during the first year of earning $8 \%$ on a $\$ 1,000$ investment, the growth was $\$ 80$. If that same investment continues to grow at 8\% per year for the next 20 years, the final year's growth would be $\$ 345$ - which is 4.3 times more than the earnings in the first year!

Through the use of a sound asset allocation, investors can let the power of compounding work in their favor.

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## Wealth Management

## The Asset Allocation Solution

## Set Realistic Return Expectations

One of the dangers in investor behavior comes from over-exuberant optimism during a period of significant market appreciation. During such a period, investors tend to assume that the market can only go up and that investing in equities is the only asset class in which to invest. As a result, investors begin to expect nothing less than double-digit annual returns from stocks.

Sir John Templeton once said, "Bull markets are born on pessimism, grow on skepticism, mature on optimism, and die on euphoria." Investors can avoid the investing traps created by periods of investor optimism and euphoria by setting realistic expectations for returns. In the graph below, investors who purchased stocks within the last 5 years were disappointed if their expectations were unrealistic. However, an investor with a diversified portfolio of stocks and bonds would have been protected from the trap of unrealistic return expectations.

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History of the Capital Markets


Historical Data as of December 31, 2005

## The Asset Allocation Solution

## Be Patient: Staying Invested Works

Financial markets are often affected by external global events, i.e., social, political, or both. However, it is important that investors remember that world events generally have short-term ramifications for financial markets. A long-term investing plan will benefit investors by reducing the effects of short-term events.

The graph below represents the long-term performance of various equity and fixed income asset classes compared to inflation. As depicted, stocks offer the greatest possibility of achieving superior returns over inflation, but also produce greater volatility. On the other hand, fixed income securities offer the lowest possibility of achieving superior returns over inflation, but offer lower volatility.


Source: Ibbotson \& Associates Stocks, Bonds, Bills, and Inflation 06/06.
This is for illustrative purposes only and is not indicative of the performance of any specific investment option. The performance illustrated is past performance which is never a guarantee of future investment results.

## Don't Chase Performance; Diversify to Increase Returns and Manage Risk

One way to look at asset allocation is the benefit of not being married to any one asset class over a given period of time during which asset performance is naturally unpredictable. If one asset class significantly outperforms the others over time, why not tolerate any additional risk (volatility) to achieve the higher return?

The case could be made for such an argument if it weren't for the fact that over long periods of time ( 30 to 50 years) such major asset classes as Large Cap, Small Cap, and International have very similar returns.
Diversification, therefore, is the means by which an investor can strive for investment goals while being exposed to less risk (as measured by volatility).

Risk - Return Analysis
1986-2005


## The Asset Allocation Solution

## Utilize the Benefits of Low Correlation

Historically, many risk averse investors have believed that being invested 100\% in bonds was their least risky investment posture. As this chart (for illustrative purposes only) shows, however, this has simply not been the case. Utilizing the benefits of low correlation may help you to avoid the second major risk factor, inappropriate asset correlation.

Adding stocks to an all-bond portfolio has historically reduced risk because of what is called correlation. Different assets react differently to particular market conditions when some go up, others go down.


When put together, the resulting diversification oftentimes results in a less risky portfolio.

The percentage of stocks added will depend upon a particular client's tolerance for risk, time frame, and income requirements.

Prudent investing indicates that investors create a portfolio which mixes different asset classes to allow them to achieve desired returns without taking undue investment risk.

By finding the appropriate mix of stocks and bonds, investors may reduce overall portfolio risk and improve the chances of earning more consistent returns over time. In addition, creating a diversified portfolio and maintaining a disciplined investment approach can help keep investors focused on their financial goals.

Stocks: Total return of the Standard \& Poor's 500 Index compounded annually, with dividends reinvested.
Bonds: Total return of long term U.S. government bonds.
Source: Ibbotson Associates

## Alternative Investments Offer Lower Correlation

Correlation is an investment concept which, simply stated, means different assets react differently relative to particular market conditions or indices when some go up, others go down. Alternative investment asset classes historically offer lower correlation to traditional asset classes, which may allow investors further diversification within a portfolio consisting of only traditional equity and fixed income asset classes.

A Note on risk: There is no guarantee that a diversified portfolio will outperform a non-diversified portfolio, or that diversification among different asset classes reduces risk. Alternative asset classes present unique risks which should be carefully considered before investing.

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The S\&P 500 Index is a free-float market capitalization-weighted index of 500 of the largest U.S. companies. Large Cap Growth is represented by the Russell 1000 Growth Index: A market capitalization-weighted index of growth-oriented stocks of the 1,000 largest companies in the Russell Universe, which comprises the 3,000 largest U.S. companies. Large Cap Value is represented by the Russell 1000 Value Index: A market capitalization-weighted index of value-oriented stocks of the 1,000 largest companies in the Russell Universe, which is comprised of the 3,000 largest U.S. companies. Small Cap is represented by the Russell 2000 Index: A market capitalization-weighted index of stocks of the 2,000 smallest companies in the Russell Universe, which is comprised of the 3,000 largest U.S. companies. International is represented by the MSCI EAFE (Morgan Stanley International Europe, Australasia, Far East) Index: A free-float-adjusted market capitalization index that measures developed foreign market equity performance, excluding the U.S. and Canada. Real Estate is represented by a 50/50 allocation to the NAREIT-All and NCREIF-National Indexes. Natural Resources is represented by the HFRI Sector: Energy Index. Managed Futures is represented by the Stark 300 Trader Index. Fund of Funds is represented by the HFRI Fund of Funds Composite Index.

## Add More to Your Core Portfolio



By adding a strategic mix of alternative investment asset classes to a portfolio, investors can potentially boost diversification, increase growth potential, and reduce risk over time.

In the illustration below, three portfolios are represented during a seven-year period ending in December of 2005. A portfolio consisting of $100 \%$ stocks
provided the least return with the greatest potential for risk, as measured by standard deviation. By adding 20\% of bonds to the stock portfolio, risk is reduced and returns improve. However, by incorporating an additional $15 \%$ to alternative investment asset classes risk is significantly reduced and returns are improved further.

Because alternative investment strategies can offer low correlation to traditional asset classes, overall portfolio returns can become less volatile which may, in turn, improve overall portfolio performance over time.

Historical Returns vs. Risk
Seven-year Period Ended 12/31/05


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## The Asset Allocation Solution

## Follow a Disciplined Approach to Rebalancing

Once an investor has created an asset allocation strategy that best fits investment goals, risk tolerance, time horizon, and other factors, it is important to maintain the target weights of each asset class. Following a disciplined approach to rebalancing can help you avoid the last major risk factor, which is failure to properly monitor and maintain your portfolio.

Rebalancing is the process of taking from the winners (relative outperformers) and giving to the losers (relative under-performers) to return to the target allocation. This prevents an over-weighted allocation in the portfolio from sustaining a market correction in the future - something many unfortunate investors have experienced during the technology market collapse from 2000 to 2002. The graph below (for illustrated purposes only) shows the excess return and decrease in risk that can result when a portfolio is rebalanced on a regular basis.

## Risk - Return Analysis 1986-2005


