

“Be fearful when others are greedy, and greedy when others are fearful.” – Warren Buffet

Great Expectations

Based on our experience, some investors have unrealistic return expectations for their portfolios. These investors don’t seem to understand how higher positive returns (upside risk) go hand-in-hand with negative returns (downside risk); nor do they realize that higher-risk investments may have prolonged periods of negative returns. We want to help investors understand expected returns and risk on a very basic level, by providing a few simple asset allocation tools to help those—without a background in finance or statistics—understand basic asset allocation concepts, concepts upon which a foundation for making better investment decisions can be built.

When looking at individual investor returns compared to returns for institutional investors, such as pension funds, individual investor returns on average are dismal. The underperformance is due to several factors but likely include higher fees, poor investment timing decisions, or both. It is human nature to yearn for all of the upside in the markets, and none of the downside; these emotions lead investors to buy into over-priced markets and to sell when markets have more relative value—in effect buying high and selling low.

Mr. Buffet recognizes how emotions affect investors. In their book, *The Investment Answer*, Daniel C. Goldie and Gordon S. Murray have a graphic titled, *The Emotional Cycle of Investing*, which attempts to help the reader understand how investors are tripped up by their own emotions (*Figure 1* is our slightly modified version of their graphic). As the market climbs, more investors, some of whom may have been burned by the market in the past, become optimistic about investing in stocks and stock funds. When large numbers of retail investors jump into the market, it is considered by many to be a sign of a late bull market.

Just look back to the tech bubble, and more recently, the mortgage bubble. During the tech bubble—prior to the crash in 2000, 2001, and 2002, when the S&P was negative for three years — investors were pouring into tech companies. Even companies like Microsoft, Apple, and Adobe were selling at incredible premiums. Other less substantial companies benefited from the tech market hype; many of these companies generated tremendous profits for early investors, but a great number of shareholders were left holding the bag after the crash.

Figure 1: The Emotional Cycle of Investing



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Long-Term Market Trends

Examining long-term market trends is very helpful in developing an investment strategy. We have very good data on US market segment returns going back 87 years. *Figure 2* depicts 87 years to December 31, 2012—the year-on-year compound returns, risk, maximum annual returns, and minimum annual returns, for select markets.

“You get recessions, you have stock market declines. If you don't understand that's going to happen, then you're not ready, you won't do well in the markets.” – Peter Lynch

Figure 2: Compound Returns and Risk (Standard Deviation) 1926—2012

| | Return | Risk | Largest 1-yr | Largest 1-yr |
|----------------------------------|--------|-------|--------------|--------------|
| US Small Cap Stocks | 11.9% | 32.3% | -58.01% | 142.87% |
| US Large Cap Stocks (S&P 500) | 9.8% | 20.2% | -43.34% | 53.99% |
| US Long-Term Corporate Bonds | 6.1% | 8.3% | -8.09% | 42.56% |
| US Long-Term Government Bonds | 5.7% | 9.7% | -14.90% | 40.36% |
| US Intermediate Government Bonds | 5.4% | 5.6% | -5.14% | 29.10% |
| US 30 Day Treasury-Bills (Cash) | 3.5% | 3.1% | -0.02% | 14.71% |
| US Inflation | 3.0% | 4.1% | -10.30% | 18.16% |

**Returns are “gross of fees”. Fees could have a significant impact on long-term returns.*

Investing in higher-risk investments like stocks should lead to higher returns in the *long-term*. Large-capitalization US stocks have returned about 10% year-on-year since 1926; investing in small capitalization stocks has historically added several percentage points of return above large-cap stocks, but with more upside and downside risk.

We tell our clients that they should have a 7-10 year time horizon for the stock portion of their portfolios (historically, the longer the holding period, the less the risk). An investor will surely have negative performance in stocks in individual years, and may also have negative or suboptimal returns for 5 or even 10 years. *Figure 3* provides data on negative rolling returns.

Figure 3: Negative Rolling Returns Historic Data

| ROLLING RETURNS PERIOD: | LARGE-CAP STOCKS WERE NEGATIVE FOR: | YEARS ENDING |
|--|---|--|
| 5-Year <i>(i.e. 1927-1931)</i> | Eleven 5-year rolling periods | 1931 1941 2002 1932 1974 2004 1933 1977 2011 1934 |
| 10-Year | Four 10-year rolling periods | 1938 2008 2009 1939 |
| 20-Year | NONE While there may be periods where stocks underperformed their long-term averages, there are no negative 20-year rolling returns for large-cap stocks (to-date). | NONE |

It makes sense to have the largest possible exposure to stocks, but understand that the stock portion of one's portfolio may take some time to perform as expected. A portfolio must be diversified in such a way, so it can provide needed cash flow for expenses and emergencies. A cautious investor would have at least 3 to 5 years of cash or other liquid assets on hand.

Why not put *all* of one's assets in the least risky investments?

The simple answer is one may lose money due to inflation.

30-day US Treasury Bills have only been negative once in 87 years (-0.02% in 1938), but have barely beaten inflation, with a real return of 0.5% (real return = return minus inflation) over the entire period. During several extended periods, US T-Bills had a negative real return, losing money to inflation, which could cause shrinking purchasing power for someone on a fixed income. There are portfolio strategies to reduce risk which should still perform well while protecting against the loss of buying power due to inflation.

Source Figs.2&3—2003 Ibbotson Stocks, Bonds, Bills and Inflation (S&BBI) Classic Yearbook

*“Investing should be more like watching paint dry or watching grass grow. If you want excitement, take \$800 and go to Las Vegas.”
– Paul Samuelson*

Long-Term Strategic Thinking

Investing is a discipline, involving long-term strategic thinking. Most investors would do well to heed Mr. Samuelson’s admonition. Why do investors think they can beat the long-term averages? Why do investors chase performance? Investors are bombarded and overwhelmed by noise in the marketplace. There are plenty of pundits and marketers that seize upon investor fears or irrational exuberance to pitch the latest and greatest, or predict with certainty what the markets will do. Marketers are often selling magic bullets, based on last year’s, or last quarter’s, returns.

Regardless of claims to the contrary, the upside and downside are usually part and parcel of any investment strategy—more upside performance brings more downside risk. A portfolio’s asset allocation refers to how an investor mixes different investments and asset classes together. What should one expect from a particular asset allocation? A simple spreadsheet calculator can be used to approximate expected portfolio returns.

| <i>Figure 4: Expected Return Calculator</i> | WEIGHT | | RETURN | | PORTFOLIO RETURN |
|---|---------|---|--------|---|------------------|
| STOCKS | | | | | |
| US LG CAP STOCKS | 50.00% | X | 9.80% | = | 4.90% |
| US SM CAP STOCKS | | X | | = | |
| DEVELOPED INTL STKS | | X | | = | |
| EMERGING MKTS STKS | | X | | = | |
| REIT INDEX | | X | | = | |
| BONDS | | | | | |
| US Long-Term Corporate | | X | | = | |
| US Long-Term Government | | X | | = | |
| US Intermediate Government | 50.00% | X | 5.40% | = | 2.70% |
| US GOVT/CORP Aggregate | | X | | = | |
| US HIGH YIELD | | X | | = | |
| GLOBAL AGGREGATE | | X | | = | |
| 30-Day US T-Bills (Cash) | | X | | = | |
| TOTAL | 100.00% | | | | 7.60% |
| Inflation | | | | | 3.00% |
| REAL RETURN (Return minus Inflation) | | | | | 4.60% |

** For Illustration Purposes Only*

To calculate expected portfolio returns, simply multiply the expected returns of each asset class by the percentage weighting in that asset class—then add those asset class returns. In Figure 3, we have a portfolio that is 50% US Large-Cap stocks and 50% US Intermediate bonds. As you can see, using the returns from Figure 2 as our expected returns, Large-Cap stocks should contribute 4.90% and US Intermediate Government bonds should contribute 2.70%.

When added together there is a total expected return of 7.60%. We have also included inflation, so real return can be calculated.

When inflation is subtracted the real return in this 50/50 portfolio is 4.60% (7.60% minus 3.00%). Of course there are other asset classes, and sub-asset classes, which could be included as well. Historical returns are available for many of those asset classes, but perhaps not for the same 87 year time period.

Most everyone has heard Einstein’s description of the power of compound interest. The *Rule of 72* provides a handy way to estimate the compounding effects of various rates of return. If one divides an investment’s (or a portfolio of investments) rate of return into 72, the answer is the number of years until the investment doubles.

Figure 5: The Rule of 72

| 72 | ÷ | Return on Investment (ROI) | = | Years to Double |
|----|---|----------------------------|---|-----------------|
| 72 | ÷ | 10% | = | 7 |
| 72 | ÷ | 7% | = | 10 |
| 72 | ÷ | 3% | = | 24 |

We mentioned earlier that institutional investors, such as defined benefit (DB) pension plans and endowments, have significantly better investment track records than individual stock or bond investors.

Why do institutional investors outperform individuals? Cost is a factor, since larger investors are generally able to negotiate lower fees based on assets under management. Organizational structure likely has a major effect on asset allocation decisions as well. These plans are usually administered by trustees who employ various professionals to assist them in their work: investment consultants, actuaries, accountants, investment managers, custodians, and attorneys. With so many experienced professionals involved, various tactics can be discussed and investment plans arrived at after thorough consideration.

Common to most institutional plans:

- ✓ **Diversification** among asset classes and within asset classes—investing in various areas of the US and International stock markets, bond markets, and real estate markets, to name a few,
- ✓ A **Strategic Asset Allocation** which is modified only after careful consideration, and
- ✓ An **Expected Return on Investments (ROI)** based on their long-term strategic asset allocation, often 7%-9%.

Diversification is key to reducing risk.

Over time, when one mixes individually risky investments together, risk can be reduced and returns enhanced. If one mixes Large-Cap US stocks, developed international stocks, US Small-Cap stocks, International Emerging Market stocks, and REITs for example, one would hope that returns would be comparable or better than US Large-Cap stocks by

themselves, longer-term. Overall portfolio risk can be mitigated by diversifying across multiple asset classes. By mixing stocks and bonds, returns are lowered, but so is the risk. Since many asset classes don't move together, combinations should reduce overall volatility risk. By selecting portfolio investments that tend to have a low correlation to each other, some investments zig while the others zag. The goal is to build a portfolio which, while meeting one's long-term return expectations, does so with less volatility.

A Strategic Asset Allocation is important to long-term investment discipline.

We believe once a strategic allocation is fully implemented, deviation from the strategic plan should be limited to taking advantage of significant asset class gains due to market exuberance, or buying undervalued areas of the market—usually when many investors are fearful. Lacking metrics to determine these points of sale or entry, most investors should rebalance on a regular schedule, like once every six months or every year. In 401(k) plans, investors have even more restrictions on trading, so a long-term asset allocation should only be adjusted to reduce risk as the participant nears retirement.

Developing a reasonable ROI may prevent poor market timing decisions.

Since many institutions have a 7%-9% ROI target, that range would be a reasonable starting place for most other investors. There is significant downside risk in stocks, but a disciplined investor expects these market gyrations and reversions to the mean at both market highs and lows, and builds a diversified portfolio that will reflect their risk tolerance and reasonable long-term return expectations.