THORNHILL SECURITIES, INC.

# THE LONG VIEW

*A periodic review of research, topics and performance for long-term investors*

## Asset Returns

| October 31, 2006 | YTD | 2005 | 2004 | 10 Year | 20 Year |
|---|---|---|---|---|---|
| **Domestic stocks** | | | | | |
| Large | 12.1 | 4.8 | 10.7 | 9.1 | 11.9 |
| Large Value | 16.9 | 6.9 | 16.1 | 10.9 | 12.7 |
| Large Growth | 6.7 | 5.1 | 6.1 | 6.7 | 10.6 |
| Small | 15.1 | 4.5 | 18.2 | 9.3 | 10.3 |
| Small Value | 19.1 | 4.4 | 22.1 | 13.1 | 12.7 |
| Small Growth | 10.9 | 4.0 | 14.1 | 4.7 | 7.4 |
| Micro Cap | 11.8 | 5.7 | 18.4 | 13.6 | 12.8 |
| **International stocks** | | | | | |
| Large | 18.3 | 13.3 | 19.0 | 6.2 | 10.0 |
| Large Value | 21.9 | 14.4 | 24.9 | 8.6 | 12.4 |
| Large Growth | 15.3 | 13.6 | 16.5 | 3.6 | 7.6 |
| Small | 15.3 | 22.0 | 30.9 | 8.6 | - |
| Small Value | 18.1 | 23.2 | 34.8 | 10.2 | - |
| Emerg. Mtks. | 17.4 | 32.6 | 24.6 | 8.5 | - |
| EM Small | 22.1 | 25.8 | 28.9 | 10.5 | - |
| EM Value | 24.2 | 30.8 | 39.5 | 13.0 | - |
| **Sectors** | | | | | |
| U.S. REITs | 32.2 | 13.1 | 32.5 | 15.4 | 11.1 |
| Energy | 11.9 | 40.2 | 33.9 | 11.5 | 12.0 |
| **Bonds** | | | | | |
| Short Term | 3.9 | 2.3 | 0.9 | 4.3 | 4.6 |
| Five Year | 3.2 | 1.7 | 2.9 | 6.2 | 7.5 |
| Long Bond | 2.1 | 6.6 | 7.1 | 7.9 | 10.3 |
| Total Market | 3.7 | 2.4 | 4.3 | 6.2 | 8.0 |
| **Other** | | | | | |
| Inflation | - | 3.4 | 3.3 | 2.5 | 3.0 |
| Comm. RE | - | 14.5 | 16.1 | 11.7 | 7.8 |
| Residential RE | - | 8.3 | 13.5 | 6.6 | 5.3 |
| Hedge Funds | - | 2.7 | 2.7 | 9.4 | - |
| Commodities | - | 18.9 | 12.5 | 4.7 | 5.3 |

**SOURCES:**
Large Cap data is based on S&P 500 returns.
Large Value and Growth returns are based on Russell 1000 Value and Growth data.
Small Cap, Small Value & Small Growth are based on Russell 2000, R2000 Value and R2000 Growth data.
Micro Cap returns are based on the CRSP 9-10 index of the smallest publicly traded stocks.
Int'l Large, Large Value and Large Growth are based on MSCI's EAFE Indexes.
International Small & Small Value returns are based on small company data in developed markets from DFA.
Emerging Markets data is from MSCI's Emerging Market.
Emerging Market Value and Small Cap data is based on Indexes maintained by DFA.
REITs are based on the Wilshire REIT index.
Energy data is from S&P's energy index.
Short term bonds are represented by Lehman's index.
Five year bonds are five year treasury returns and long term bonds are 20 year treasuries.
Total Bond market is the Lehman Aggregate Index.
Other data comes from the Federal Reserve, National Association of Realtors, HFRI & the CRB.



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# Indexing or Structured Asset Allocation?

When I initially discuss our investment management strategy with clients or prospects, the typical response is "So you're indexing?" Although "Indexing" captures part of our underlying philosophy, the phrase carries different meanings and those are almost certainly different from our goal of "Structured Asset Allocation." Index-based products are tools we use in our process, but not the solution. In this newsletter, I will examine various definitions of "Indexing," outline our investment process at Thornhill Securities, Inc., and discuss our philosophy for structuring a portfolio.

**Definitions of Indexing**

The most common definition of "Indexing" is buying a product that tracks the S&P 500 index. There are numerous mutual funds and Exchange Traded Funds ("ETFs") that track large cap stocks and most of the money invested in "indexes" uses proxies for large cap domestic stocks. As I discussed last month, passively managed funds often outperform their actively managed alternatives. Consequently, "Index" funds are an attractive alternative for investors seeking performance similar to specific benchmark indices.

Buying an ETF is another possible definition of "Indexing." Most of the EFTs currently available track an index defined by Standard & Poors, Russell, Dow Jones, or Lehman Brothers. The indexes underlying these ETFs follow everything from the price of oil to the Taiwanese stock market. Over 300 different ETF products[1] are available from a wide range of providers.

Although still relatively small, "Indexing" can also be an attempt to "enhance" index performance by tilting the portfolio construction in a way that modifies performance characteristics relative to a traditional index. For example, "fundamental indexing" uses factors other than market capitalization when weighting stocks. Additionally, some ETFs employ leverage to produce returns that multiply those of traditional indexes (both to the upside and downside.)

Finally, "Indexing" could mean the use of index funds to supplement the construction of a diversified portfolio. In this scenario, the investor would substitute index funds for actively managed mutual funds or separately managed accounts. The index products are used selectively in concert with active products to achieve a target portfolio.

**Structured Asset Allocation**

We apply the science of investment management to our business and construct portfolios for our clients that seek to generate returns and risk consistent with the goals and preferences of each client. The use of an index product is incidental to the analysis of asset class returns, correlations, and volatility and an understanding of how those factors impact the allocation decision for each client. To put asset allocation in context, I would summarize the work flow for our business as follows:

1. **Research –** markets, asset classes, investment theory
2. **Due diligence –** client & advisor need to understand each other
3. **Allocation –** cash, bonds, stocks, size, valuation, international
4. **Implementation –** investment policy, vehicle selection, structures
5. **Monitor –** policy review & modification, monitoring, communication
6. **Return to #1**

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The primary goal of a "Structured" allocation approach is to effectively match our clients with portfolio that provides risk and return characteristics that are appropriate for their situation. Fundamentally, risk and return are related and higher risks should produce higher returns. This seems straight forward, but the implementation of this concept has been lacking in the past.

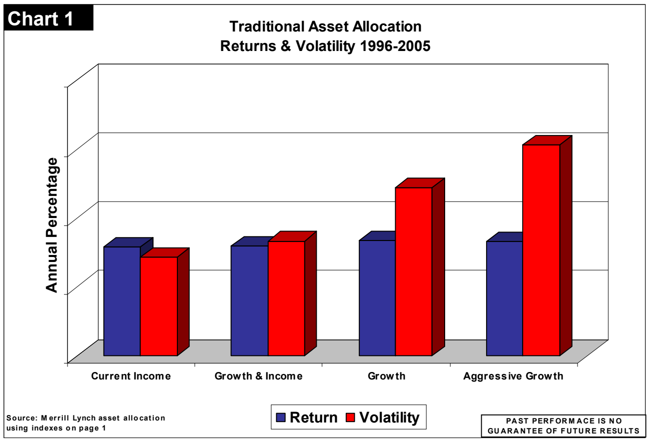



Chart 1 shows the volatility and returns from 1996-2005 generated by the allocation policy recommended by a major brokerage firm (the graph is similar for other time periods, we use index returns for the underlying allocations.) The allocations include assets across the investment universe and appear very reasonable. However, the resulting risk and return profile does not reward investors for taking on higher risk. On the contrary, risk (annual volatility) climbs 105% and return only rises 5% as investors move from the most conservative to the most aggressive portfolio.

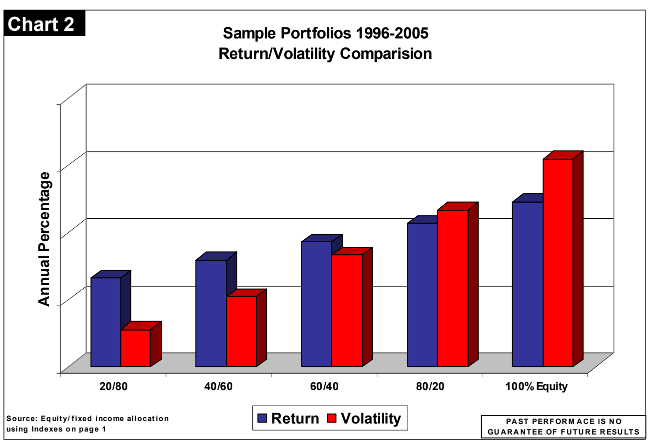
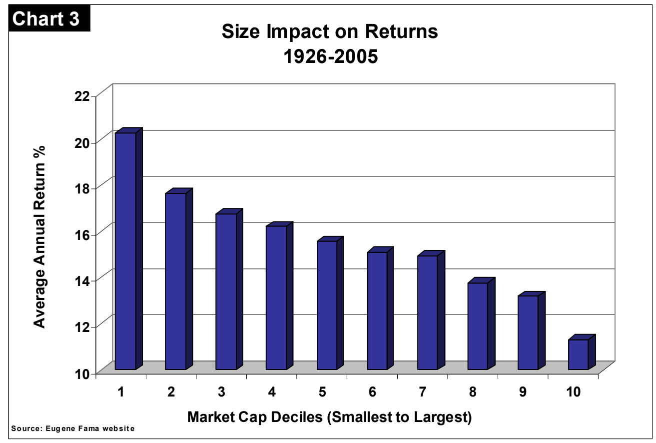



Chart 2 shows risk and returns for portfolios generated using our structured allocation approach over the same period. The allocations are based on research on asset class returns, volatility and correlations going back to 1926. By applying this research, we attempt to engineer portfolios that reward investors for higher risks. Alternatively, we can attempt to reduce volatility and produce a portfolio with the highest return for a given level of historic volatility.

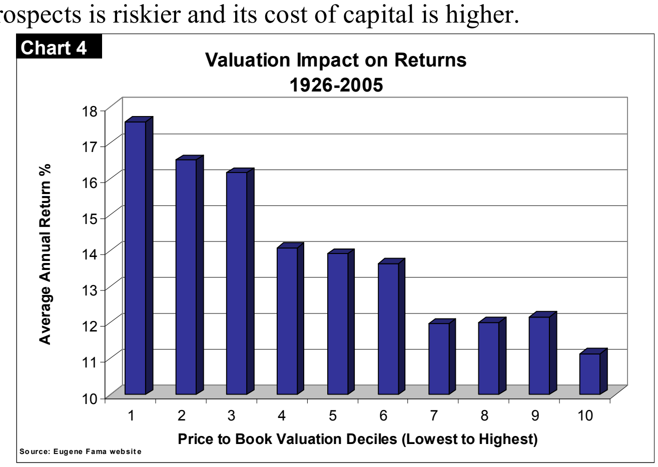
The primary variables we use in an allocation decision are:

1. Stocks and/or bonds
2. Bond duration
3. Market cap
4. Valuation
5. International market diversification
6. Sector exposure

In the future newsletters, I'll discuss each of these areas in more detail and explain the research and theory behind our ideas for each variable. However, I will quickly review two factors that are very important to our equity allocation decision: size and valuation. Chart 3 shows annualized returns for different size companies since 1926[2]. Smaller companies have shown higher returns than larger companies through time and also much higher volatility. The higher volatility and returns reflect the higher cost of capital the market demands of riskier companies. The higher equity premium is like a higher loan rate for a riskier asset. This effect is consistent across both domestic and international markets.




Valuation is the other key driver of equity returns. Chart 4 shows the returns for different valuation deciles since 1926. Again, returns and volatility are related and consequently the lower valuation stocks have higher volatility than higher valuation stocks. Growing companies with strong prospects usually command higher valuations. Struggling companies with uncertain prospects is riskier and its cost of capital is higher.




By researching and understanding the structural opportunities in the markets (i.e. size and valuation) we can portfolios that take advantage these factors.

Although we primarily use passively managed products to structure portfolios for our clients, most of those funds do not track a published "Index." Instead, the funds are designed to capture specific structural dimensions of the capital markets within the framework of a diversified portfolio. In this context, "index funds" can be a tool we use in a "Structured Asset Allocation," but "Indexing" is not the solution we provide.

*Gabe Thornhill*

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[1] http://www.cbsmarketwatch.com, http://www.morningstar.com; both websites have a section devoted to Exchange Traded Funds

[2] *http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/;* this website contains the data for the valuation and size charts