

Asset Returns

Mar 31, 2010	YTD	2009	2008	10 Year	20 Year
Domestic stocks					
Large	5.4	26.5	-36.8	-1.0	8.1
Large Value	6.9	19.7	-36.9	2.3	8.6
Large Growth	4.5	37.2	-38.5	-4.1	7.3
Small	8.9	27.2	-33.8	3.3	8.1
Small Value	10.3	20.6	-29.0	8.0	10.1
Small Growth	7.8	34.5	-38.6	-1.6	5.6
Micro Cap	9.5	28.1	-36.7	6.3	10.6
International stocks					
Large	1.3	32.5	-43.1	1.3	4.1
Large Value	0.6	35.1	-43.7	3.7	5.6
Large Growth	2.8	29.9	-42.5	-1.3	2.1
Small	5.3	42.0	-43.9	8.7	4.8
Small Value	5.0	39.5	-41.7	11.3	6.3
Emerg. Mkts.	1.5	79.0	-53.3	9.4	9.8
EM Value	3.4	92.3	-53.9	13.9	15.4
EM Small	5.5	99.7	-54.5	12.3	13.0
Sectors					
U.S. REITs	10.2	28.2	-37.4	10.5	7.9
Energy	-0.5	38.4	-42.9	16.3	12.4
Bonds					
Short Term	0.4	1.9	4.0	3.7	4.9
Five Year	1.8	1.5	8.4	5.1	6.0
Long Bond	0.9	-12.0	22.5	7.4	8.0
Total Market	1.7	5.9	5.1	6.1	6.8
Other					
Inflation	-	2.8	-0.1	2.6	2.8
Comm. RE	-	-16.9	-6.5	7.3	6.5
Residential RE	-	-4.3	-5.4	4.8	4.1
Hedge Funds	-	13.4	-25.5	2.5	-
Commodities	-	-14.0	3.9	4.8	1.4

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 Barclays Aggregate Index.
 Other data comes from the Federal Reserve, National Association of Realtors, HFRI & the CRB.

PAST PERFORMANCE IS NOT A GUARANTEE OF FUTURE RESULTS. INVESTMENT OBJECTIVES, RISKS, CHARGES, EXPENSES AND OTHER IMPORTANT INFORMATION ABOUT A FUND ARE CONTAINED IN THE PROSPECTUS; READ AND CONSIDER IT CAREFULLY BEFORE INVESTING. PROSPECTUSES ARE AVAILABLE ON COMPANY WEBSITES OR FROM TSI.

Thornhill Securities, Inc.
 336 South Congress, Suite 200
 Austin, TX 78704

Written by Gabe Thornhill, CFA
 © 2010 Thornhill Securities, Inc.

April 2010

Risk and Return in Different Market Environments

A continual stream of economic and business news bombards investors on a daily basis. Experts pontificate on CNBC and in the Wall Street Journal about the future and what it holds for stocks, bonds, gold and many other investments. Additionally, there is a constant flow of corporate earnings, economic reports and market data. The experts usually have impeccable educational credentials and deep backgrounds in the markets. Their views can vary dramatically and their arguments about the future can be very interesting and entertaining. One commentator sees the pending bust of the dollar and collapse of the world financial system. The next commentator sees an unprecedented boom, driven by China, India and other less developed countries. Typically, both commentators will claim to have predicted the market collapse and moved their clients back into equities after the market bottomed last year. The central theme of the information flow is how to make money from today's markets. The focus is return, often at the exclusion of any discussion of risk. To the extent we see a discussion of risk it's usually in the context of something to avoid or "high risk" is used as a foil for a lower risk high return opportunity elsewhere.

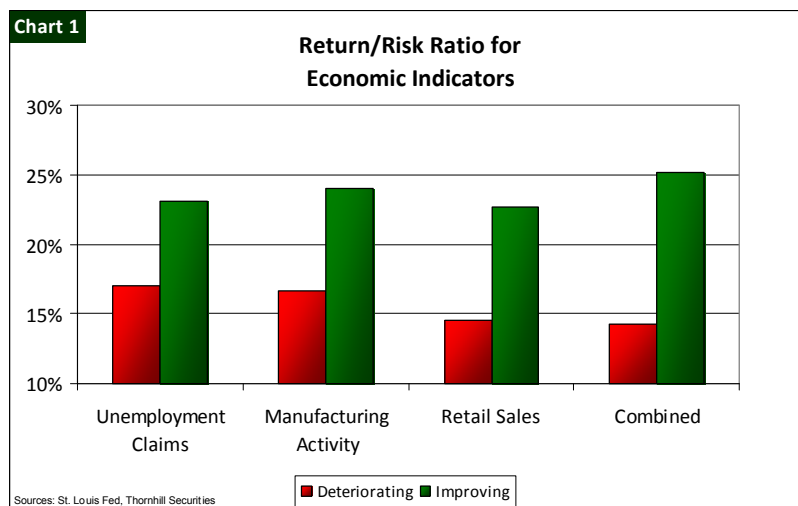
Ultimately, market risk and return are related and I have little faith in anyone claiming to predict the future. However, I believe the risk/return relationship fluctuates based on three factors: economic/business fundamentals, valuation and market action. Both equities and fixed income securities are impacted by these factors. The trade-off between risk and return has been a central theme of our investment management efforts. In our portfolio construction and investment choices we try to maximize return for a given level of risk. To accomplish this goal, we use extensive historical data for multiple asset classes and portfolio options. We are trying to provide additional tools to understand the risk/reward inherent in the market by monitoring the variability of fundamentals, valuation and market internals.

Why is this important? Let's consider interest rates over the last 30 years. In 1981, the 10 year treasury topped 15% yield. In late 2008, it was closer to 2.5%, near the low of 2.4% going back to the 1950s. An investor in 1981 buying a 10 year treasury had a very different risk/reward profile than an investor in 2008 buying the exact same security (long term treasuries were at or below current levels for most of the 1940's and 1950's). We don't need to predict the future to appreciate the difference. However, when constructing a portfolio and monitoring its performance, it's helpful to know where we are and where we've been in the past. That's exactly our goal in monitoring fundamentals, valuation and market internals.

Over the next several newsletters I will outline research on additional tools for managing investment risk based on these three areas. I'll first focus on economic and business fundamentals. In the remainder of this newsletter, I'll review three fundamental areas of the economy that impact the volatility of the markets: unemployment, retail sales and industrial production.

There are dozens of different economic indicators available to help monitor the state of the domestic and international economies. Some indicators are available in almost real time, i.e. interest rates, while others become available well after the fact and are often revised significantly, i.e. Gross Domestic Product (GDP). I've limited this analysis to three important indicators that are available with limited lag and have long histories. I've reviewed their histories from 1970 to 2009 and used S&P 500 return and volatility data over that same period as a proxy for the equity markets. In future newsletters, I'll review valuation and market action metrics for the same time period. I'll also review fixed income investments and their correlation with these indicators.

Employment – Although overall employment is often viewed as a lagging market indicator, the change in unemployment claims can signal changing market volatility. Chart 1 outlines the return/risk ratio associated with deteriorating or improving unemployment claims as a



percentage of the private workforce (the ratio of return to risk is defined as the average monthly return on the S&P 500 divided by the average monthly volatility of return from 1970-2009). Intuitively, if more people are filing for unemployment insurance, we would expect higher market volatility because of changes in the workforce and increased economic uncertainty. Historically, this higher volatility has also been linked to slightly lower market returns. A combination of higher volatility and lower returns has led to a substantial difference between the return/risk ratio for markets with different employment scenarios.

Manufacturing Activity –The Institute for Supply Management (ISM) surveys its members monthly and reports an index of activity on the first business day of each month. The survey includes a review of new orders, employment prospects, production delays and other

factors monitoring the health of manufacturing in the domestic market. When the index is above 50, the economy is considered to be expanding. Instead of focusing on the absolute level of activity, our analysis focuses on the change in the activity and the direction of that change. Chart 1 shows the return/risk profile for environments where the index is rising (improving) vs. falling. As with employment, there is a substantial difference in the return/risk profile for an improving economic environment (as measured by the ISM index) vs. a deteriorating environment.

Retail Sales – Consumer retail sales are reported monthly based on the prior month's sales as tabulated by the Census Bureau. Since consumer spending represents almost 2/3 of the Gross Domestic Product (GDP), the retail sales figures are an important indicator of consumer financial health. I've compiled the real change in retail sales relative to population growth, but excluded the volatile auto sector which includes new car sales and gasoline sales. The auto numbers fluctuate substantially based on interest rates and the price of oil. By excluding them from this analysis, I'm trying to isolate core retail spending and its changes. When real sales are rising, I consider this an improving environment. Alternatively, if consumers are cutting back on spending and the ratio of sales to population growth is falling, this is considered a deteriorating environment. As with unemployment claims and manufacturing activity, improving retail sales have been associated with a more favorable return/risk profile in the domestic equity markets.

Combined – Chart 1 also shows the risk/return profile when all three indicators are combined into a single model with improving or deteriorating fundamentals. The result is much the same as for the individual indicators. Equity market risk and return ratios can be very different depending on these simple economic trends. The combined model shows somewhat wider dispersion between profiles for improving and deteriorating environments. Although we use additional indicators to monitor the state of fundamentals in the economy, these examples provide a simple demonstration of the value of monitoring the current state of affairs.

Conclusion – Ultimately, our exploration of additional tools to gauge risk and return is intended to give us a better understanding of the choices we face when making investment decisions. That understanding goes into our management process and is applied to individual portfolios.

Gabe Thornhill