

## THE MARKETS ARE TELLING YOU SOMETHING... ARE YOU LISTENING?

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Have you ever watched CNBC and wondered where they get all the so called "experts"? Ever think back and observe how wrong the "experts" were in calling for bottoms and tops to markets. No matter what direction a market is going there is never a shortage of experts to tell us that a top or bottom has been put in place. The fact is they are guessing, they don't really know any more than you or I what the market will do. If they did, they would not still be working for a living and they sure wouldn't tell us what was going to happen! Rather than form your opinion based on their beliefs, it is much safer to study the markets and listen to what the markets are saying. The successful long term investor will listen to the market and work with it, not against it.

The validity of momentum styles of investing versus the belief in perfectly efficient markets has been analyzed and argued over for decades, as it will continue to be. Notwithstanding, the idea that markets are perfectly efficient represents a very naïve view of markets and market participants. That such views are held provides disciplined and alert investment managers the opportunity to maximize investment returns.

The fact is markets are influenced by investors who continue to allow emotions to direct their actions. This has always been the case and will continue to be the case unless our industry devolves to the point where computers make all investment decisions based only on quantitative factors. We remain far from this point.

The majority of the analysis and academic work reviewed which supports momentum is centered on the idea that prices are auto-correlating.

That is, higher prices in one period influence prices upward in the following time period. The opposite applies for negative momentum where stocks with poor price performance in one period continue to have poor price performance in the following periods.

This belief differs completely to the random walk theory of investing which disputes that prices can correlate at all. The random walk theory (Malkiel (1973)) generally believes that any correlation is purely a coincidence and that over time prices do not correlate.<sup>1</sup>

The study and confirmation of the existence of momentum was a first step in Trend Analysis. Researchers could prove the existence of momentum but theories supporting reasons why it exists were contentiously debated. In more recent years academics and investors have brought a new term into the investment lexicon, Behavioral Finance - which is basically the study of the impact of human behavior on the financial markets.

Researchers into this area of study have brought forward many observations of human behavior and its impact on markets<sup>2</sup>, but few have progressed to developing methodologies and disciplines to profit from it.



Momentum in prices is a result of human behavior, and because of this behavior identifiable trends occur in markets and stocks. Trends occur, they will continue, and investors should be vigilant to look for triggers which can cause them to reverse.

Additionally, by augmenting trend analysis with traditional fundamental analysis and emphasizing high quality leadership companies, disciplined investors can greatly enhance the probability of generating significant excess returns relative to their benchmarks.

## Efficient Market Theory, doesn't everyone know all the same information?

If markets were absolutely efficient would there even be a market? Why would one person sell a stock and another buy the same stock if they both knew all the information and believed the same outcome for the stock price?

If information was disseminated to all investors at the same time, discovered by all investors at the same time, interpreted by all investors at the same time and believed by all investors at the same time, then market and stock prices would move in steps. Each step would be higher or lower as investors in aggregate re-evaluated and applied the correct theoretical price.

We know in reality that this is not how markets work at all. Markets are only partially efficient. Yes, for the most part information is available to all investors simultaneously. However information is discovered at different times, interpreted in different ways, and acted on depending on differing levels of belief (disbelief).

It is this reality, which takes the study of momentum supported with behavioral analysis, that leads to investment opportunities (through the study of trends and the development of a disciplined investment process).

# In the beginning.....there were momentum studies

In a highly cited study of the U.S. equity market of the years 1965 to 1989, Jegadeesh and Titman (1993)<sup>3</sup> show evidence of momentum strategies having positive returns. Their early work in the study of momentum led to their conclusions that the best (worst) performing stocks over a three to twelve month period out-performed (under-performed) over the following three to twelve months. Subsequent work by Jegadeesh and Titman in 2001<sup>4</sup>, for the period covering the 1990's, showed evidence that this period demonstrated similar positive momentum characteristics as their earlier findings suggested.

More recently, Dimson, Marsh and Staunton (2008) of The London School of Business released the results of the longest and most comprehensive study of momentum to date<sup>5</sup>. They used data from the U.K. equity market for the years 1900 to 2007. This extensive study of a pure momentum strategy, which adopts the methodology used by Jegadeesh and Titman, breaks the U.K. market down into winners and losers based on previous twelve month returns and constructs long portfolios comprised of the winners and short portfolios comprised of the losers.

Based on the period 1956 to 2007, for which a greater degree of information is available than the prior 56 years, the results are convincing. Over that period the winner portfolio (top 20% past returning stocks) out-performed the loser portfolio (bottom 20% past returning stocks) by 10.8% per year across the entire period. This remarkable finding suggests momentum is an important force operating within the markets effecting every investor and investment portfolio.





## Momentum + Fundamentals + Investor Behavior = Trends

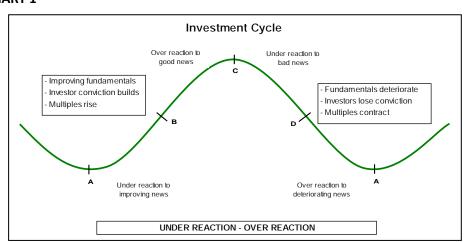
So after a great deal of early debate about whether momentum exists or not, this research has shown conclusively that momentum does exist. The follow-up question is why? Do investors simply support ever rising (and declining) prices by following the herd or are there recurring behavioral characteristics investors demonstrate which better explain why momentum exists?

Developing an understanding of how investors discover, interpret and react to the release of fundamental information is the key. It is this slow process of the building of evidence and investor reaction (behavior) that starts, builds, sustains, and ultimately stops and reverses price trends.

The two most important characteristics exhibited by investors supporting trends (up or down) are **under-reaction** and **over-reaction**. It is these concepts which lead investors to ignore improving (deteriorating) news on a country, industry, or stock due to their pre-conceived beliefs and biases away from (towards) that investment idea.

Much research<sup>6</sup> has focused on each of these behaviors independently; they are two forces which work to develop, build and reverse trends. Look at a typical investment cycle.

# CHART 1



Source: Marvin & Palmer and Associates, Inc.



At position A in Chart 1, the stock's share price is washed out. Investors do not believe there are reasons for the share price to move higher, or at least they are not expressing that belief by purchasing the shares at rising levels. Quoting Burton Malkiel "Stocks are bought on expectations, not facts". Meaning investor expectations are that the upside opportunities for this company are limited.

As we move through the cycle the information available begins to improve. A positive research report may be written, the company has a positive earnings surprise, an optimistic comment comes from management. The prospects for the company are improving! It is at this point that we first begin to witness most investors' under-reaction to the better news.

For while the improving fundamental story is there for all investors to see, because of human emotion not all investors react simultaneously. Nonetheless a few do and they begin to buy the shares; and thus begins the trend. The trend continues as information improves and more investors accumulate the shares. They have under-reacted to the improving prospects so far, but as they gain conviction in the better outlook they slowly begin believing and expectations rise (position B). This cycle of improving news flow, rising investor conviction and share accumulation continues to build developing identifiable trends. It is important to recognize that this process of new information released supporting rising expectations can take years to fully develop. The building of the trend continues through the cycle until expectations reach a point where they are no longer realistic (position C).

It is at *this* point that under-reacting to good news is surpassed by over-reacting to good news and under-reacting to bad news. It is during this period that investors without a disciplined approach can overstay a trend by not recognizing deteriorating fundamental conditions (position D). It is here that undisciplined investors are investing with their hearts versus their heads. This is the point where the better investment managers distinguish themselves.

# Why leadership and quality matter?

Investing in high quality, market leading companies is a *safer* and *more profitable* way of participating in identified trends.

High quality companies participate in and often pioneer the developing trends. As the trends persist, leading companies take market share, expand margins, drive innovation and improve quality ahead of the second tier players. Investors in the highest quality companies can be rewarded further as the under-reaction tendencies are even more pronounced and last longer. These companies are often rewarded with higher multiples on the up-side of the cycle as investors gradually increase their belief in the companies' long run ability to generate ever increasing earnings.

When fundamentals deteriorate during normal market cycles trends will begin to reverse. It is often the high quality leadership companies that give investors the greatest protection during the changing market conditions.

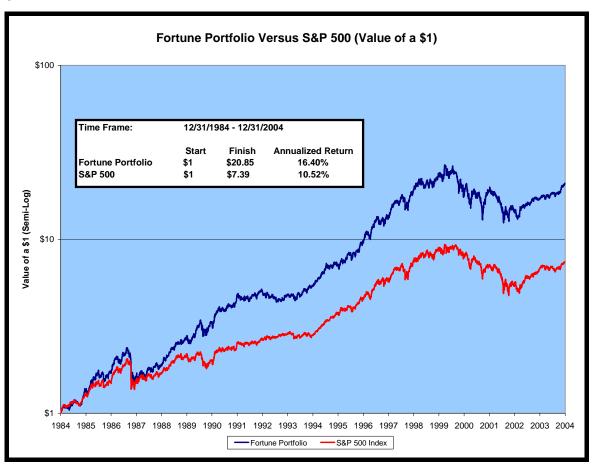
The out-performance of quality companies is supported by work done by Anderson and Smith (2006). In a paper titled "A Great Company Can Be a Great Investment" they present their conclusion that quality does matter. The study used Fortune magazine's annual list of the 10 most admired companies in America. The list is compiled in part from surveying executives, directors and analysts on topics ranging from financial stability to quality of franchise and management. They then constructed annual portfolios based on these 10 high quality leadership companies and held the portfolios for approximately 1 year until the next year's portfolio was published. According to



Anderson and Smith "The Fortune strategy beat the S&P 500 by a margin that is both substantial and statistically persuasive." In order to evaluate whether or not this impressive result could be explained by other factors they went on to test for the influence of market, size, value, momentum and individual stock performance and found no statistical significance to the extra alpha generated.

The results of a close replication of the Fortune study (Refer Chart 2) confirms their conclusion that quality does matter. The Fortune portfolio outperformed the S&P 500 by just under 6% per annum over the 20 year period 1984 to 2004.

## **CHART 2**



Source: Marvin & Palmer and Associates, Inc.

High quality companies that are leaders in a country or sector exhibit the following characteristics:

Strength in Management – Managements that have proven over time they have the vision and skills to guide their company to the top spot. They are forthright with investors and have earned the respect of their employees, shareholders, customers, and peers.

Strength in Franchise - Most sought after products and services, typically taking market share.

Strength in Balance Sheet – Companies with a balance sheet capable of supporting management's operating strategy.



# Portfolio Construction "When the facts change, I change my mind. What do you do sir?" 9

A process which utilizes trend identification combined with a focus on quality and leadership can reward investors during periods of opportunity and also help protect them from downside during periods of increased risk.

A study looking at American companies with market capitalizations greater than 5 billion U.S. dollars shows that stocks do in fact trend and that significant value added can be obtained by further orienting the portfolio towards high quality, leadership companies.

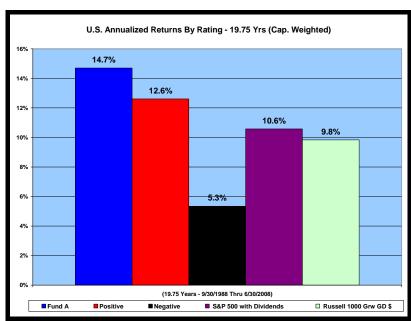
The methodology used for the study involved analyzing month by month returns of all the U.S. companies with a market capitalization greater than 5 billion U.S. dollars from 1988 to 2008. These companies were divided into categories each month. Companies that had outperformed with returns that were still accelerating upward (rising at an increasing rate) versus the index on a long-term trend basis were rated positively while companies that had underperformed with returns that were still accelerating downward (declining at an increasing rate) versus the index on a long-term trend basis were rated negatively.

The returns of each rating category for the following month were then computed by aggregating the returns of all the individual companies in the respective categories. The group of companies divided into each rating category changed each month to reflect the movement of companies from one rating category to another. Finally, the universe was market-capitalization adjusted to more accurately reflect the investable universe.

A portfolio was also constructed using the methodology of trend identification combined with a focus on quality and leadership (Fund A).

The results are shown in Chart 3 – the positive rating category outperformed the negative rating category by 7.3% per annum and Fund A outperformed the positive rating category by a further 2.1% per annum.

## **CHART 3**



Source: Marvin & Palmer and Associates, Inc.



Focusing on the sustainability of these trends and letting winners run is critical to compounding investment returns. As has been shown though, under-reacting to deteriorating conditions can lead to investors overstaying their welcome and giving hard fought gains back. Successful investors will construct portfolios with higher conviction levels when they can identify the existence of trends. Conversely as fundamentals begin to deteriorate, an investor with a disciplined investment process will have a greater propensity to exit a reversing trend.

Needless to say it is critical to constantly evaluate the portfolio to ensure it is populated with the best companies (high quality, market leaders) that are simultaneously the best stocks (exhibiting positive relative price strength).

#### Conclusion

All investors are subject to human emotion, the manifestation of which is investment decisions resembling herding - where repeated actions of under-reaction and over-reaction are typical. Momentum in equity markets is the result of human behavior and the progressive discovery of new and improving fundamental information for a country, sector or stock. It is this slow discovery process combined with the under-reaction (over-reaction) to the news that causes growing expectations of future price levels to take place over time i.e. the development of trends. It is critical to have a disciplined process which recognizes that markets are influenced by human behavior. By utilizing a process that acknowledges behavioral biases and momentum, and identifies relative price trends, an investor can raise the probabilities of consistently outperforming the market. Further, by focusing on the highest quality leadership companies, investors can take greater advantage of the trend while protecting the portfolio during periods of changing trends.



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