

The Wave-Trend Momentum Approach to Investing

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April 2021

Abstract: Many asset managers consider commodities when it comes to establishing a trend/momentum strategy. However, research into trend/momentum finds that other asset classes including stocks, bonds, and currencies can be utilized when it comes to developing a strategy. As far as the time frame for establishing a change in trend, the 200 day moving average appears to be the more popular time period for establishing a change in trend. Both Meb Faber and Professor Jeremy Siegel have identified the 200 DMA as the benchmark. This paper identifies a shorter wave moving average crossover to utilize with the 200 DMA. The results of a backtest reflect a 49% premium over a equal weight portfolio from 2006 to present.

Dr. Jessica James concluded that 1) 85% of Commodity Trading Advisor (CTA) fund returns can be explained by simple trend following, 2) almost 100% when carry and option trading are included.

She discovered that "the key to successful trend following is to discover when a trend starts and ends, and not be taken in by false signals." She found that the majority of models give very similar results.

In their paper, "Two centuries of trend following," the authors find conclusively that "long term trends exist across all asset classes and are stable in time."

In the paper, "Which trend is your friend," the author looks at 1) time-series momentum (TSMOM) and 2) moving average crossover (MACROSS) strategies. They discover that the MACROSS (32/128) and the TSMOM (260) have the highest Sharpe ratios, 1.33 and 1.45 respectively.

In their study, "Momentum Strategies Across Asset Classes," the authors, find momentum strategies "provide downside protection and risk reduction to a portfolio of traditional risky assets."

You don't need a python algorithm or neural network to find the existence of momentum aka trend following across asset classes.

In this paper, we are specifically going to test a strategy that utilizes a 5 day trimmed mean (70%) minus a 35 day trimmed mean (70%) minus a 200 day trimmed mean (70%) approach.

We hope to further the study of Elliott waves as a momentum trading strategy that can be used to eliminate false positives with a longer 200 day moving average approach.

Since 2006, Meban Faber has been updating his research on a simple trend-following approach in his paper, A Quantitative Approach to Tactical Asset Allocation. The simple asset protection approach

uses a 200-day moving average price to go long when the current price moves above the moving average and a cash move when it falls below it. This chart and table illustrate the protective qualities of the approach.

Utilizing the Elliott Wave Oscillator, the Golden Cross, and volume, this asset allocation approach may be used to allocate in and out of stocks when dynamically:

- Wave & Volume properties indicate a primary wave trend down (or up) in stocks is occurring.

Elliott Wave Oscillator (EWO) is simply the difference between a five-period and a thirty-five-period simple moving average.

The EWO indicator is used to determine where an Elliott wave ends, and another begins. When the oscillator begins to put in a series of lower highs while price puts in higher highs, a trend change occurs.

The basis of the Elliott principle, which quantifies market crowd behavior, works best in equities that (1) have lots of volume (liquidity) and (2) move according to fundamental forces of fear and greed on the part of many participants.

The Golden Cross is a longer-term trend measure that utilizes the 200-day moving average. It sometimes is coupled with a shorter 50 day moving average. In Meb Faber's paper, *A Quantitative Approach to Tactical Asset Allocation*, a 1% move of the one-day change in the price above or below the 200-day moving average.

Faber, in his paper, cites Jeremy Siegel with the 1% specification:

"The most often cited long-term measure of trend in the

technical analysis community is the 200-day simple moving average. In his 2008 book *Stocks for the Long Run: The Definitive Guide to Financial Market Returns & Long-Term Investment Strategies*, Jeremy Siegel investigates the use of the 200-day SMA in timing the Dow Jones

Industrial Average (DJIA) from 1886 to 2006. His test bought the DJIA when it closed at least 1 percent above the 200-day moving average and sold the DJIA and invested in Treasury bills when it closed at least 1 percent below the 200-day moving average.

He concludes that market timing improves the absolute and risk-adjusted returns over buying and holding the DJIA. Likewise, when all transaction costs are included (taxes, bid-ask spreads, commissions), the risk-adjusted returns are still higher when employing market timing, though timing falls short on an absolute return measure."

We find a cumulative asset growth advantage of 50% vs. an equal allocation across equities, bonds, commodities, currencies from September 2006 through September April 2021.

Wave-Trend	\$ 616,386.86
Equal	\$ 414,195.64
Difference	\$ 202,191.22
% Difference	49%

To access the back-test: [Wave-Trend Investing – Terry Grennon](#)

Password: Wave

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