

SUSTAINABLE INVESTMENT STRATEGIES™

50 Day and 200 Day Exponential Moving Average Research

Defining the issue

The 50 and 200 day Exponential Moving Average (EMA) are technical indicators thought to provide insight into short-term and long-term trends respectively. The EMA differ from a simple moving average in that the EMA weights current pricing slightly more.

Why we follow these indicators

The single biggest mistake the average investor and professional investors make is letting emotion get involved in the investing process. A trend following investment strategy removes emotion and the urge to time the market and puts in its place a disciplined set of metrics for buying and selling. The metrics answer the following questions all investors share:

- How and when to enter the market
- How much to buy
- When to exit if the position is unprofitable
- When to exit if the position is profitable

Statistics

The following statistics are based on the prices of the Vanguard 500 Index fund VFINX from the period 1/3/1985 to 3/6/2009. This study is to determine how many of the best and worst days in this security happened below the 50 day and 200 day EMA.

Under 50 Day EMA		Under 200 Day EMA	
Worst	Best	Worst	Best
49 of 50 - 98%	40 of 50 - 80%	42 of 50 - 84%	45 of 50 - 90%
97 of 100 - 97%	67 of 100 - 67%	81 of 100 - 81%	74 of 100 - 74%
182 of 200 - 91%	107 of 200 - 54%	147 of 200 - 74%	123 of 200 - 62%

(Source: Sustainable Investment Strategies LLC, This data is for illustrative purposes only and is not indicative of the actual performance of any investment.)

Why removing the noise matters

The chart below reveals that by reducing the largest swings up and down returns become very consistent.

Days Missed	Missing Best	Missing Worst	Missing Both
10	4.10%	11.23%	8.15%
20	2.15%	13.80%	8.58%
30	0.54%	15.83%	8.61%
40	-0.93%	17.59%	8.82%

(Source: NAAIM, Inc., This data is for illustrative purposes only and is not indicative of the actual performance of any investment. S&P 500 Index returns do not reflect reinvested dividends.)

While missing all the best and/or all the worst days is not achievable the chart of the moving averages on the previous page indicates that you can get close while limiting your exposure to extreme downturns.

Below are two examples of up trends and downtrends and their moving averages. Charts courtesy of StockCharts.com

