

How Counter-Trend Moves Your Portfolio

Noisy Periods

- Uncertainty in the markets, but not necessarily high volatility
- Bull markets typically consist of 50% directional periods and 50% noisy periods
- Strong positive returns for counter-trend models

Directional Periods

- Low uncertainty, low volatility
- Positive returns for equities and trend followers
- Fewer opportunities for counter-trend models

Capturing Inflection Points

- Noisy periods are characterized by an abundance of inflection points
- Counter-trend models trade these inflection points
 - Buy on downswings
 - Sell on upswings
- Inflection points can whipsaw trend-following models

All Market Environments	BULL	BEAR
# of Months	182	46
Average Monthly Return		
S&P 500	1.48%	-2.37%
Short-Term Counter-Trend	0.65%	1.40%
Trend Following	0.80%	0.35%
Average Annualized Volatility	15.17%	26.16%
% of Positive Months	69.23%	34.78%

Directional Markets	BULL	BEAR
% of Months	47.25%	43.48%
Average Monthly Return		
S&P 500	2.82%	-2.75%
Short-Term Counter-Trend	-0.11%	-0.26%
Trend Following	1.44%	0.11%
Average Annualized Volatility	14.11%	22.74%
% of Positive Months	79.07%	35.00%

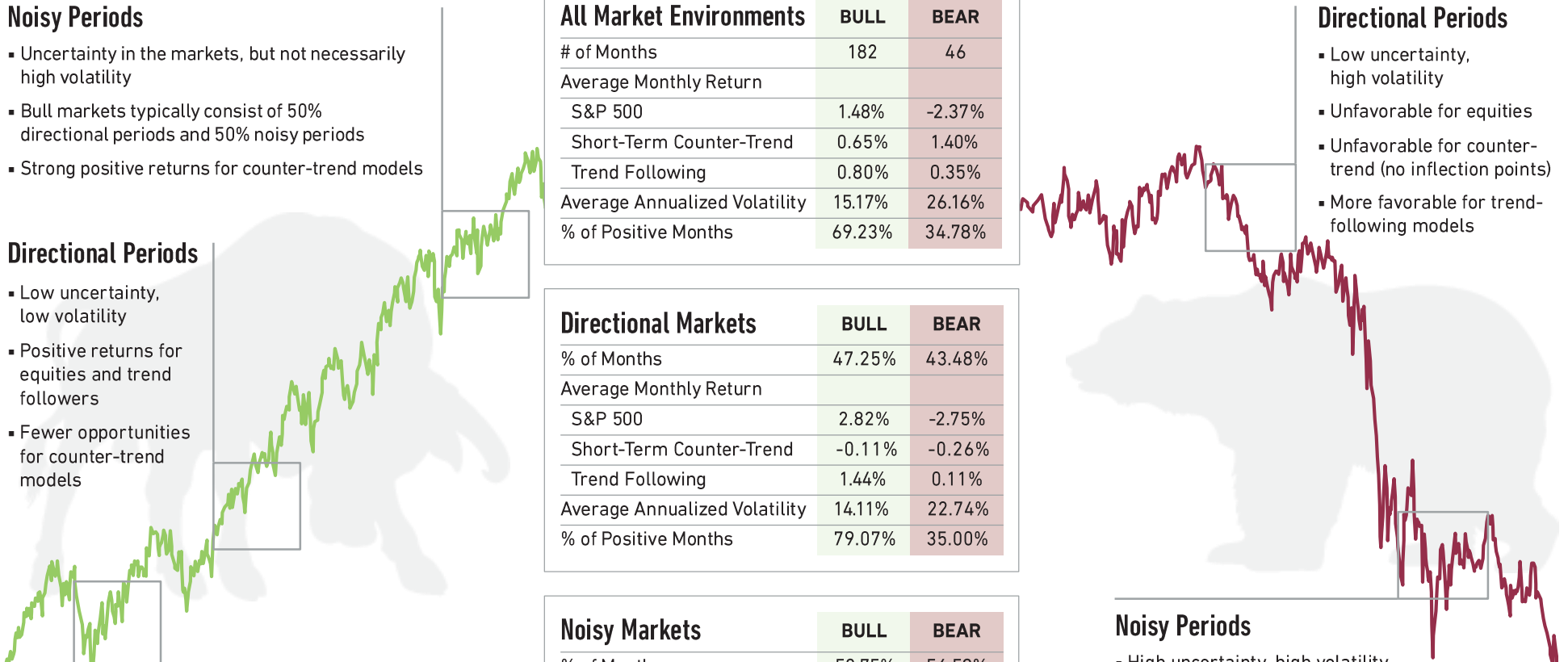
Noisy Markets	BULL	BEAR
% of Months	52.75%	56.52%
Average Monthly Return		
S&P 500	0.28%	-2.08%
Short-Term Counter-Trend	1.34%	2.68%
Trend Following	0.21%	0.53%
Average Annualized Volatility	16.13%	28.78%
% of Positive Months	60.42%	34.62%

Directional Periods

- Low uncertainty, high volatility
- Unfavorable for equities
- Unfavorable for counter-trend (no inflection points)
- More favorable for trend-following models

Noisy Periods

- High uncertainty, high volatility
- Unfavorable for equities
- Strong returns, but increased risk for counter-trend models
- Reduced return potential and higher risk for trend-following model



Short-Term Counter-Trend is average performance of three simple, rules-based counter-trend models run on S&P 500. Returns are gross of trading costs and fees. Trend-Following is performance of HFRI Macro: Systematic Diversified Index. This index is composed of strategies which employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Bull markets defined to be following time periods for S&P 500: 1/97-6/00; 1/03-10/07; 3/09-12/15. Bear markets defined to be following time periods for S&P 500: 7/00-12/02; 11/07-2/09. Directional markets were defined as any S&P 500 month with a noise level less than 80%. Noisy months were defined as any S&P 500 month with a noise level greater than or equal to 80%.