THE

JANUS

FACTOR
Jan

us
“In some seasons trend following is good; in others, reversing is good.”

Victor Niederhoffer, *The Education of a Speculator*
1. Feedback systems
1. Feedback systems

2. A binary method for calculating relative strength
1. Feedback systems
2. A binary method for calculating relative strength
3. Key indicators
1. Feedback systems

2. A binary method for calculating relative strength

3. Key indicators

4. A long strategy
Feedback Systems
Feedback System

Market Events (Input) → Traders' Response (Output)
Positive Feedback

Amplified Audio Screech
Thermonuclear Bomb
Burning House
Positive Feedback

Price Rises → Traders Buy → Price Falls → Traders Sell → Price Rises

Price Rises → Traders Buy → Price Falls → Traders Sell → Price Rises
Positive Feedback = Acceleration
Positive feedback creates a trend.
Negative Feedback

Thermostat
Engine Governor
Predator-Prey
Negative Feedback

1. Price Rises
2. Traders Buy
3. Price Falls
4. Traders Sell
5. Price Rises
6. Traders Buy
7. Price Falls
8. Traders Sell

The cycle continues with negative feedback.
Negative Feedback = Stable (Cycle)
Negative feedback counters the trend.
Offense and Defense
The defensive qualities of a stock/group are most severely tested during periods of market weakness, when the risk of loss is most acute.
Stronger Defense  |  Weaker Defense

Benchmark:

70  80  90  100  110  120  130

Defense
Since the risk of lost opportunity is greatest as the market rises, the offensive qualities of a stock/group are best measured as the market advances.
OFFENSE

130
120
110
100
90
80
70

BENCHMARK

Stronger Offense

Weaker Offense
How Feedback Generates Systematic Capital Flow
Positive Feedback

Traders buy strength and/or sell weakness.
Expanding Universe
Positive Feedback as the Market Advances

Strongest stocks lead the way higher.
June 1999
Positive Feedback as the Market Declines

Weakest stocks lead the way lower.
Negative Feedback

Traders sell strength and/or buy weakness.
Contracting Universe

[Diagram showing a scatter plot with axes labeled 'OFFENSE' and 'DEFENSE', with a cluster of points indicating a trend towards lower offense and defense values.]
“The prime mover in a financial market is not value or price, but price *differences*; not averaging, but arbitraging.”

Benoit Mandelbrot, *The (Mis)Behavior of Markets*
Structure, Entropy and Traders’ Confidence
1. Ace of Spades
2. King of Spades
3. Queen of Spades
4. Jack of Spades
5. Ten of Spades
6. Nine of Spades
1. King of Spades
2. Three of Diamonds
3. Jack of Diamonds
4. Ten of Hearts
5. Two of Clubs
6. Seven of Hearts
Positive Feedback structures the market by increasing the relative strength difference between winners and losers.
The emergence of structure is the trend.
Negative Feedback collapses structures built up during periods of positive feedback.
The collapse of RS structure “re-shuffles” the market.
Entropy

The tendency for all matter and energy in the universe to evolve toward a state of inert uniformity; deterioration of [the structure of] a system or society.

Webster’s
Two distinct market environments driven by two opposed trading paradigms.
“In some seasons trend following is good.”
“Trading strategies that buy past winners and sell past losers realized significant abnormal returns over the 1965 to 1989 period.”

“The historically strongest stocks produced the best future results and the historically weakest stocks produced the worst.”

(Study based on data from October 1960 to October 1965)
“In others, reversing is good.”
Harold M. Gartley, who had pioneered relative strength to study stock groups, abandoned its use in the 1930s and 1940s because it did not work.
“In a narrow market, when prices are not getting anywhere to speak of but move within a narrow range, there is no sense in trying to anticipate what the next big movement is going to be, up or down. . .“

Jesse Livermore, Reminiscences of a Stock Operator (Lefevre)
“Those were the lean years, 1911-1914. The market flattened out. Things drifted from bad to worse. 
I not only lost all I had but got into debt again. There was no money to be made.”

Jesse Livermore, Reminiscences of a Stock Operator (Lefevre)
Dow Industrial Average
Key Indicators
The Relative Strength Spread

Is feedback positive or negative?
The Spread
Rising Spread
- result of positive feedback (momentum)
Falling Spread

- result of negative feedback (entropy)
Direction of Momentum

In what direction is momentum (positive feedback) moving the market?
Direction of Momentum

DOM
Direction of Momentum

DOM

SP-500

91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14
Direction of Entropy

![Graph showing the direction of entropy with two lines labeled DOM and DOE. The x-axis represents years from 1991 to 2014.](image)
The Janus Strategy
Morningstar Sub-Industry Groups

- Stocks in each group equally balanced
- No survival bias
Relative Strength Leaders
Average Group
DOM-Adjusted Relative Strength Leaders

Relative Strength Leaders

Average Group
December 1990 – January 2014

Long – 71%
Cash – 29%
Direction of Momentum

Adaptive MA
Performance Spread
Performance of RM Leaders versus SP-500
Janus Long Strategy
DOM-Adjusted Relative Momentum Leaders
DOM-Adjusted Relative Strength Leaders
Average Group
“It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change.”

Charles Darwin, *The Origin of Species*
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