Physics-Based Sentiment Forecasts - US Stocks| Jan 10 2025

CPM INVESTING

ETF "RSP" | S&P 500® Equal Weighted Index
Three-week Horizon
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*This three-week forecast of investor sentiment is an example of our perspective
on stock market corrections and recoveries.
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Three-Week Forecasts			
Physics-Based	**Long-Term Sentiment:**	**3** (1-4, with 4=Strongly Optimistic)	Figure 1
	Short-Term Sentiment:	Overall optimistic, some variation	Figure 1
	Flash Sentiment:	None	Figure 1
	Market Price Momentum:	Strong positive trend	Figure 3
Implied Economics-Based Sentiment:		Negative, but within normal range	Figures 2,3

Video summary of this week's report: ***https://youtu.be/W-Hv1N0G8P4***

Summary (data as of Jan 10 2025):

Outlook - The Long-Term Driver (Figure 1, lower panel) signals "moderately optimistic" sentiment over the next three weeks, suggesting a positive market price trend that will be mild compared to the Aug 2024 through Dec 2024 period. The Short-Term Driver is optimistic but varied. A dramatic decline (over 30%) in the next three weeks is unlikely unless economic news is extremely negative.

We see that the Excess RSI shown in Figure 2 is now negative but is not yet extreme enough to be considered meaningful. Should this negative trend continue and register as meaningful in Figure 3, the market will be more likely to experience large declines during the next period of naturally occurring pessimism later this year.

Predicted price momentum (14-week RSI) has a strong positive trend over the next three weeks. Near-term price gains could obscure any emerging negative economic sentiment that is beginning to be detected by the Excess RSI (Figures 2, 3).

Recent Market Dynamics - The decline of the last several weeks is consistent with expected market action associated with the end of the Exceptional Macro MRI (as described in the video linked above) and the downleg of the Micro MRI. The Micro MRI shifted to the upleg of its cycle last week, which would be consistent with the positive expected price momentum (14w RSI) shown in Figure 3.

Notes:
Introductory video: *https://youtu.be/CzI67Md1s1w*
See this page for written notes: *https://cpminvesting.com/notes*

MRI and Sentiment Drivers   Fig. 1

Video - Indicator Descriptions: *https://youtu.be/YOpocz_C8is*

Asset Price and Return Acceleration

Physics-Based Drivers for Asset

Physics-Based Sentiment Forecasts
ETF "RSP" | S&P 500® Equal Weighted Index as of Jan 10 2025
MRI and Their Drivers: Jan 12 2024 - Jan 31 2025

■ Price (log)   ■ Macro MRI: 68 | Neg   ■ Micro MRI: 18 | Pos   ■ Excep Macro MRI | No
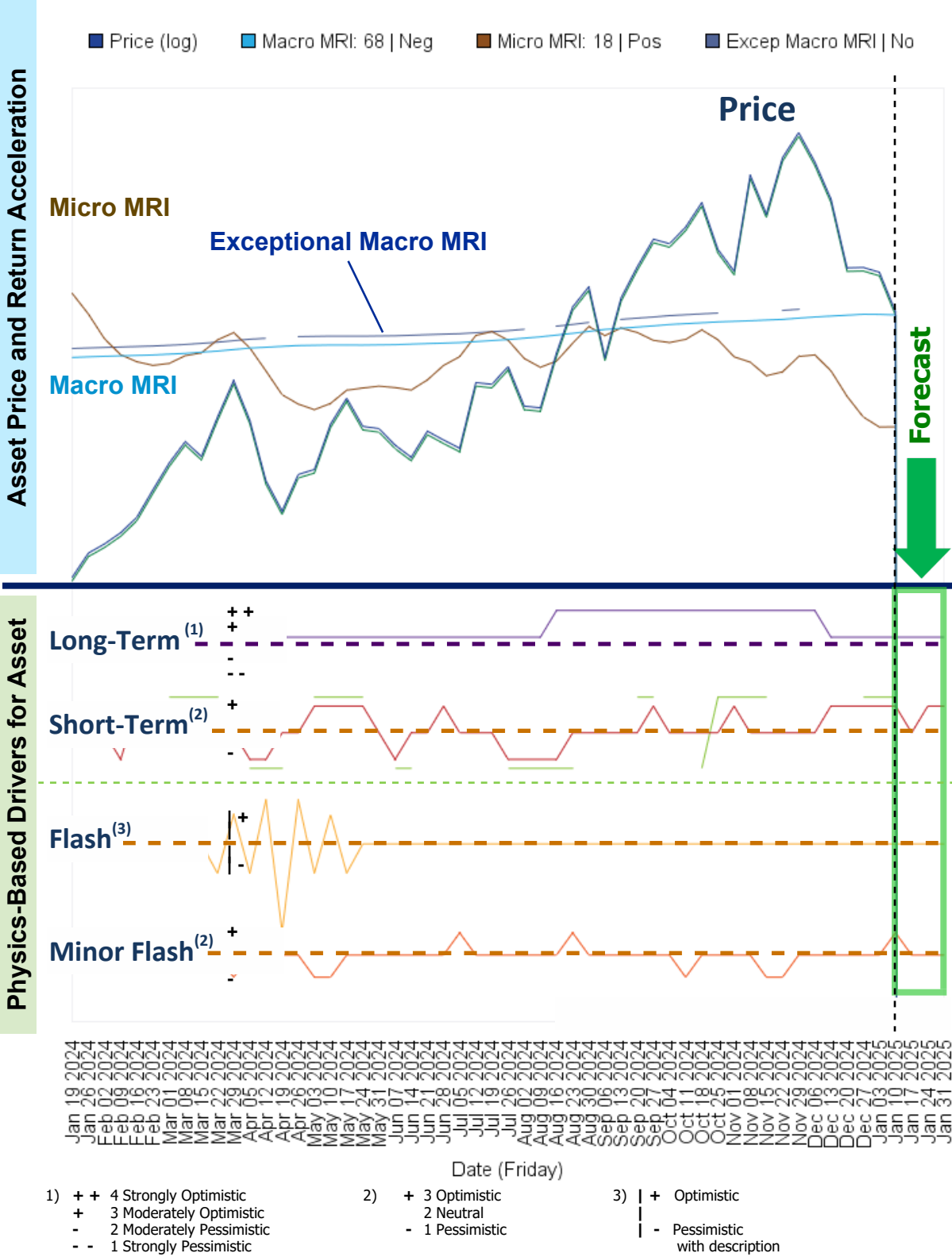
The Macro MRI has shifted to a negative slope, signaling that the stock market's long-term price trend is no longer positive. As expected, the Micro MRI is moving to the upleg of its cycle, and could trigger a short-term price rally.

The Long-Term Driver reflects a "moderately optimistic" stance. The Short-Term Driver maintains a varied but generally optimistic stance.

1)	+ +	4 Strongly Optimistic	2)	+	3 Optimistic	3)	| +	Optimistic
	+	3 Moderately Optimistic			2 Neutral		|	
	-	2 Moderately Pessimistic		-	1 Pessimistic		| -	Pessimistic
	- -	1 Strongly Pessimistic						with description

RSI Analysis - 10-Year   Fig. 2

ETF "RSP" | S&P 500® Equal Weighted Index
14-Week RSI - Actual and Predicted: Jan 23 2015 - Jan 10 2025

Video - Excess RSI Analysis: https://youtu.be/eH7Od3G6Zow
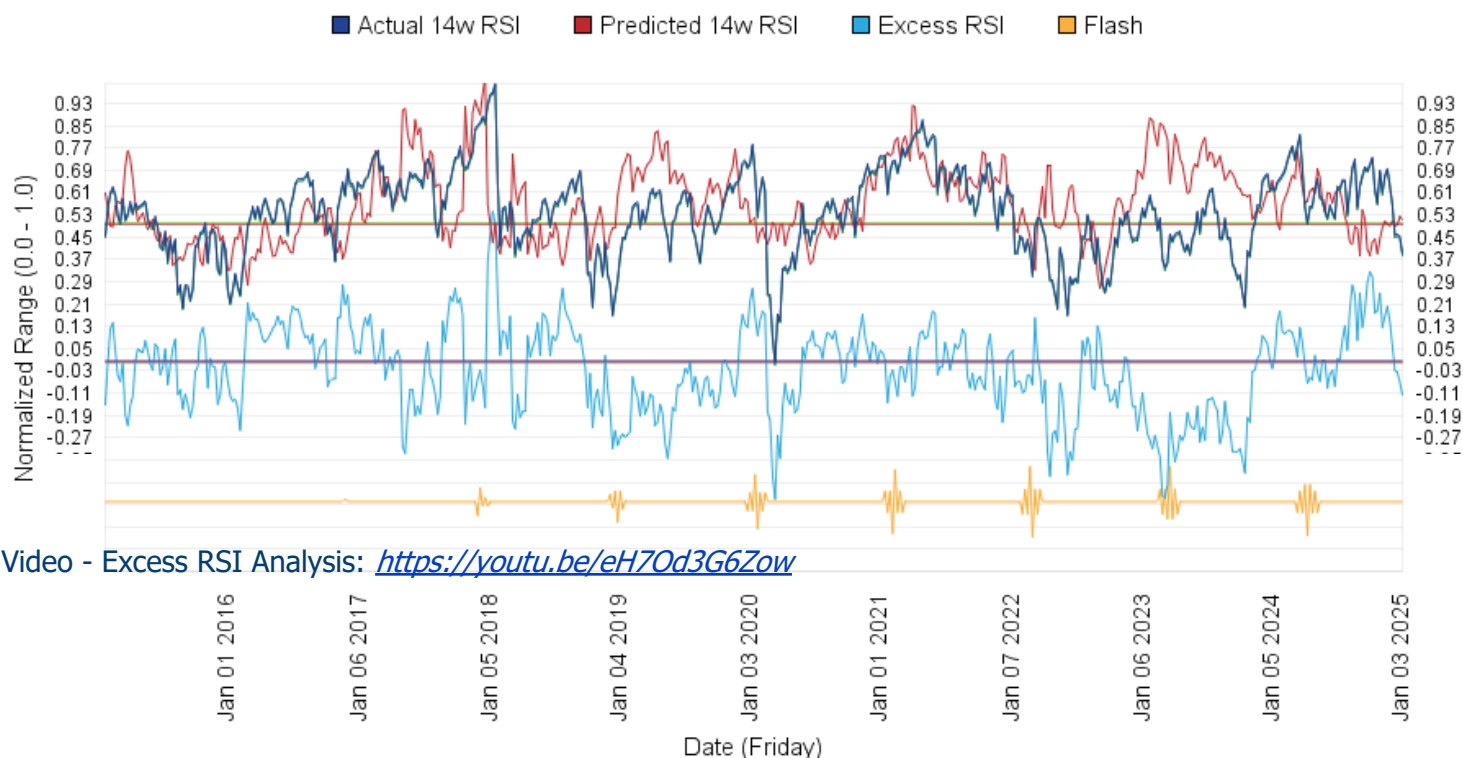
The 14-week RSI is an important component within the Short-Term Driver shown in Figure 1. RSI is a widely used measure of asset price momentum. Our predicted RSI explains most of the weekly volatility of the actual RSI over the last several decades. | The upper portion of Figure 2 displays the predicted and actual 14-week RSI for the asset price (not shown) over the past 10 years. The light blue line in the middle of the figure, labeled "Excess RSI," represents the difference between the two series. High values of Excess RSI indicate stronger-than-expected price momentum, often driven by positive economic or market conditions. Conversely, low values suggest weaker-than-expected momentum, likely reflecting negative conditions. We consider Excess RSI to be a measure of "Implied Economics-Based Sentiment. | The Flash Driver

Comments (data as of Jan 10 2025): On the far right of Figure 2, the light blue line shows the Excess RSI has moved below the center line. Compared to recent months, this suggests investors have adopted a more neutral outlook on economic, market, and real-world conditions. A further negative shift in Excess RSI would be a bearish signal for the stock market. Investor sentiment related to valuations, inflation, interest rates, and other factors is captured in the Excess RSI.

RSI Analysis - 1-year with EMA   Fig. 3

ETF "RSP" | S&P 500® Equal Weighted Index
Index Price, Predicted 14-Week RSI: Jan 12 2024 – Jan 31 2025

Video - Excess RSI Analysis: https://youtu.be/eH7Od3G6Zow
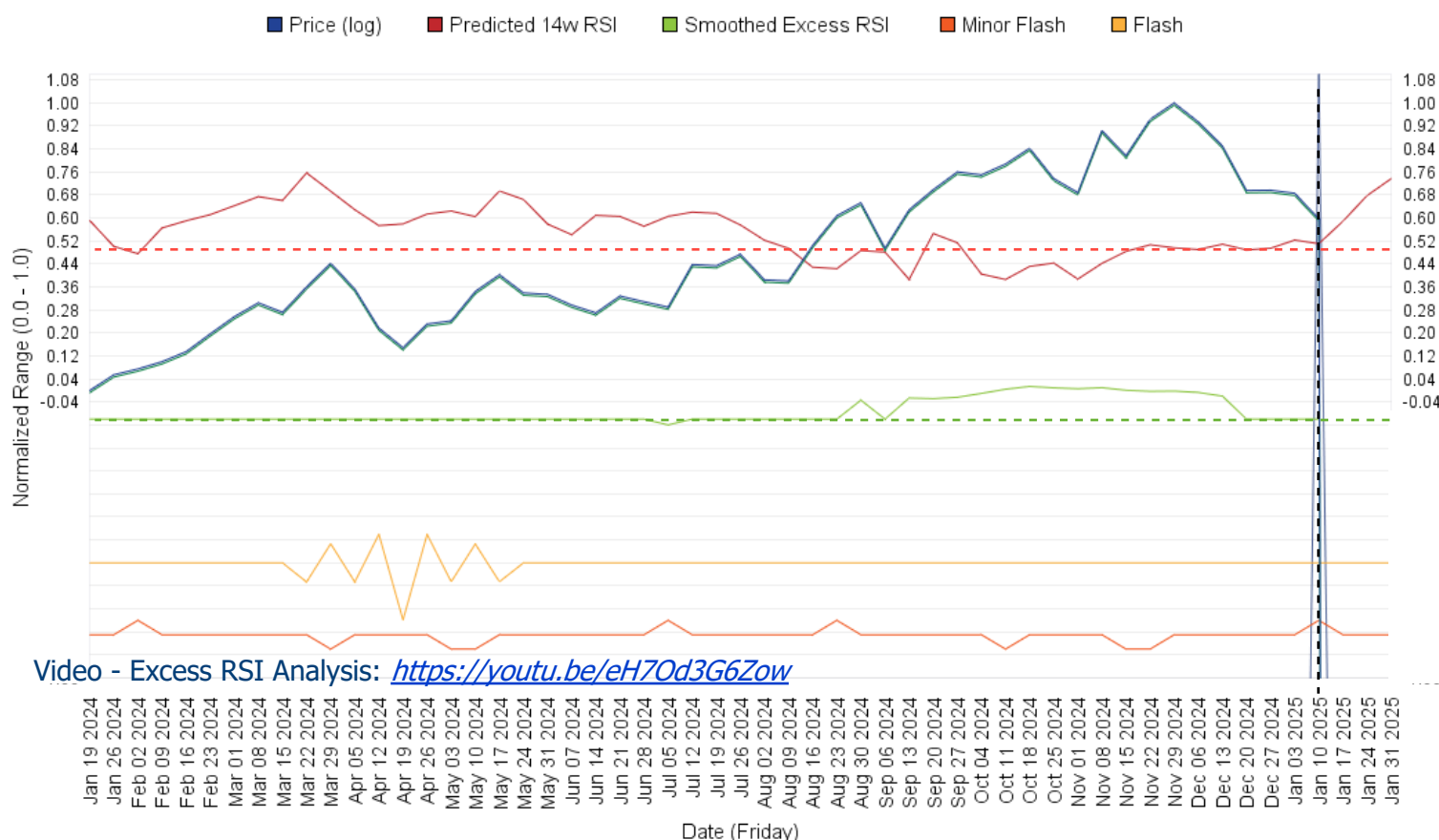
The asset price (heavy blue line) and predicted price momentum measured as the 14w RSI (red) are shown in the upper panel of Figure 3. "Smoothed Excess RSI" is shown as the light green line. This line deviates from its neutral reading, indicated by the dashed light green line, when the actual 14w RSI of the market (not shown) is meaningfully higher or lower than what can be expected from the natural shifts in sentiment as measured by the predicted RSI. This line can call attention to economic conditions that are unusually strong or weak based on the sustained deviation of the actual RSI relative from the predicted RSI. Smoothed Excess RSI is calculated as the exponential moving average (EMA) of the actual 14w RSI less the predicted 14w RSI (labeled "Excess RSI" on the prior page). Only z-score values in excess of +/-0.5 are shown in order to highlight meaningful deviations. When the line is horizontal, the actual 14w RSI is not meaningfully different than what we expect from the natural shifts in sentiment.

Comments (data as of Jan 10 2025): The Smoothed Excess RSI shown by the green line continues to be neutral, indicating that investor sentiment about real-world conditions is within the range of normal expectations.

The solid red line shows that the predicted RSI will rise over the next three weeks. If market prices fail to increase meaningfully during this period, it will likely signal further weakening of implied economics-based sentiment.

Additional Notes

Links
  Please contact us with questions: contact@cpminvesting.com
  See additional notes: www.cpminvesting.com/notes
  General information: www.cpminvesting.com
  Join our Discord Server: https://discord.gg/3c6327VwbW

Citations

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   For more information, visit: https://www.invesco.com

Background

 Sentiment shifts occur periodically and are described as changes between:
   Optimism|Pessimism   Risk-on|Risk-off   Resilience|Vulnerability   Euphoria|Panic   Aspirational thinking|Critical thinking

Total sentiment reflects economic forces and the naturally occurring forces that directly affect human behavior:
  > Economic forces
      - Investor views on economic conditions
      - Investor views on market fundamentals
      - Investor behavior (e.g., trend following, mean reverting, calendar effects, response to current events)
  > Natural forces - Our focus is here

Naturally Occurring Shifts Have a Big Impact: Naturally occurring sentiment shifts have a bigger impact than many investors realize, and typically explain over 70% of the weekly variability of widely used index price momentum measures such as the Relative Strength Index (RSI). In addition, systematically predicting the future strength of the natural forces can be done more easily and reliably than predicting the future strength of economic forces.

We can Infer Impact of Economic and Market Conditions: When total sentiment deviates meaningfully from the natural shifts, we can infer that economic forces have a higher impact. If we take the actual RSI, for example, which reflects both economic and natural forces, and subtract the effect of the natural forces (represented by the predicted series), the difference is a reasonable gauge of the impact of the economic forces.

Early Indicators of Market Declines: Key early indicators of an impending market correction are a) when Excess RSI (EMA) moves to negative levels, and b) when actual sentiment metrics, such as one of our Market Resilience Indexes or the 14-week RSI, converges with a negatively trending predicted metric. See Note #4 on this page:
              https://cpminvesting.com/notes

Two types of Physics-Based Sentiment Drivers: We maintain over two dozen physics-based drivers. There are two general types:
  > Cyclic Drivers - sentiment changes gradually over time. The Long- and Short-Term drivers are cyclic.
  > Episodic Drivers - sentiment changes abruptly. The Flash and Minor Flash drivers are episodic. Our forecasts of Episodic Drivers tend to be more accurate than those for the Cyclic Drivers.

For descriptions of each driver, see Note #2 on this page (https://cpminvesting.com/notes).

Two Sentiment-Related Metrics: We use two different metrics in our forecasts of sentiment. We forecast the 14-week

Relative Strength Index (RSI) to measure price momentum for a market index. Upward sloping RSI indicates positive sentiment:

https://en.wikipedia.org/wiki/Relative_strength_index

We also forecast our own Market Resilience Index® (MRI) series. The MRI measure return acceleration. Upward sloping MRI indicate positive sentiment. MRI indicate short- and long-term shifts in market resilience for each market index:
> Micro MRI - short-term trends lasting several weeks
> Macro MRI - long-term trends lasting several quarters

The RSI and MRI have different features.
 RSI (Relative Strength Index)
   - Widely used in investment industry
   - Effective in identifying market bottoms
   - Less effective in identifying market tops. RSI can peak several months before the index price peaks.

 MRI (Market Resilience Index)
   - Designed to identify accurately both market tops and bottoms

For descriptions of each driver, see Note #1 on this page (https://cpminvesting.com/notes).

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