Introduction

This report shows two distinct sets of proprietary measures of sentiment cycles (e.g., risk-on/risk-off, optimism/pessimism, euphoria/panic). Both sets have long-term (Macro) and short-term (Micro) cyclical components. When both cyclical components within a set are in the uplegs of their cycles, the indicator registers that sentiment conditions are supportive of higher stock prices. When they are in the downlegs, conditions are least supportive of higher prices and the market is vulnerable to declines. When one component is in an upleg and the other is a downleg the assessment is for neutral sentiment. Both sets also have indicators for temporary bursts of sentiment, which are mentioned in the report below.

The first set consists of physics-based drivers of collective investor risk tolerance. The Risk Tolerance Driver (RTD) series is based entirely on forecasts of variations in solar energy independently shown to correspond to changes in human emotion and decision making. The RTD tend to be catalysts for important inflection points in our Market Resilience Index® series described below and, in turn, the stock market. The RTD can be reliably forecast eight weeks into the future, as shown on the following pages (the trial reports shows four weeks).
Follow this link for more information: https://cpminvesting.com/risk-tolerance-drivers

The Market Resilience Index® (MRI) series shows the cycles of investor optimism and pessimism based entirely on the price movements of an index, in this case the DJIA. The MRI are proprietary measures of return acceleration. We believe they reflect the natural cycles of risk tolerance (indicated by the RTD) **_plus_** the current investor consensus on evolving market conditions (i.e., earnings growth, valuations, interest rates, inflation expectations, and geopolitical events). The MRI tend not to be affected by very short-term price cycles and news-of-the-day influences. Thus, they allow us to see current market conditions in terms of actionable resilience cycles.

Our analysis of the over 100-year history of the DJIA suggests that the MRI are leading indicators of important stock market inflection points, and are useful for making-market timing decisions. Because of the mean-reverting nature of the cycles, one must respond quickly to inflection points taking place at extreme levels in a cycle. Unfortunately, the MRI cannot be reliably forecast into the future. Thus, the RTD can give us advanced notice of potential future changes in the MRI and, in turn, the stock market.
Follow this link for more information: https://cpminvesting.com/market-resilience-indices

With these two sentiment indicators, we see the following sequence of effects:
Risk Tolerance Drivers: Natural cycles of investor risk tolerance, unrelated to economic merit.
Market Resilience Indexes: The above **_plus_** the current consensus on evolving market conditions.
Stock Index Prices: The above **_plus_** very short-term price cycles and news-of-the-day factors.

Organization of Report

A. Risk Tolerance Driver series - Graph of RTD status over the last 30 weeks and 8-week forecasts, along with commentary. The Driver categories are Volatility, Macro (long-term cycle), Episodic, and Micro (short-term cycle).

B. Market Resilience Index series - Graph of the RTD with the addition of the MRI, along with commentary. The MRI categories are Macro, Exceptional Macro, and Micro.

C. RTD and MRI Table - The table shows the RTD (recent history and forecasts) and the MRI (history only). The table highlights inflection points.
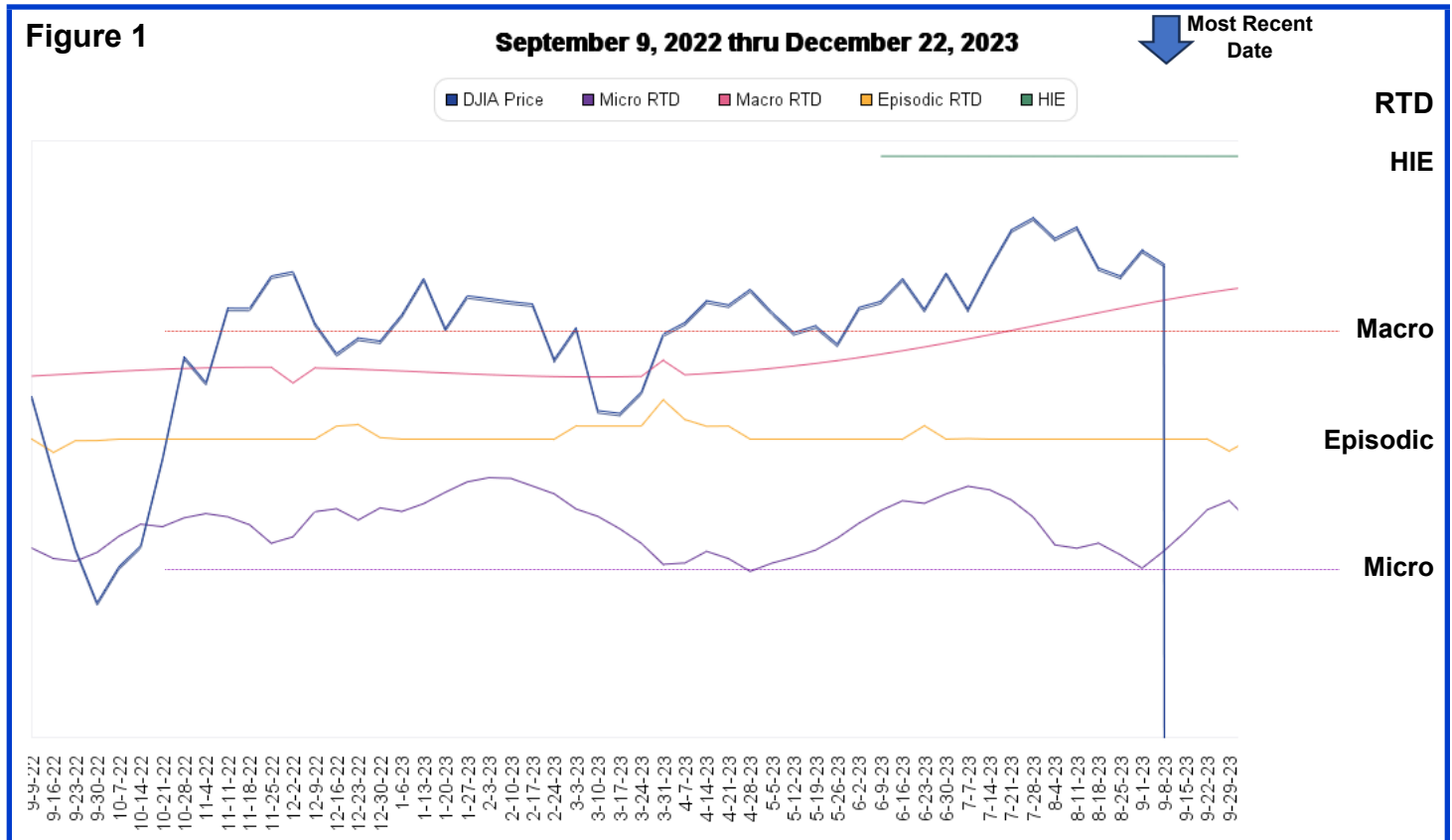
D. Notes, Terminology, and Descriptions - This section provides information useful to understanding

A. Risk Tolerance Driver Series - RTD categories are listed on the right side of Figure 1 below. Lines representing the midpoints of the cycles are shown for the Macro, Episodic, and Micro Drivers. The volatility driver indicating a period of high investor excitability (HIE) is shown only during an HIE period. The most recent date is indicated by the large downward pointing arrow. The price level of the DJIA is represented by the heavy blue line that drops to the x-axis on the most recent Friday.

Figure 1 — September 9, 2022 thru December 22, 2023. Legend: DJIA Price, Micro RTD, Macro RTD, Episodic RTD, HIE. Most Recent Date. RTD categories: HIE, Macro, Episodic, Micro.

Comment

Jeff Hansen - September 8, 2023

An important recent change has been the onset in early June of a period of higher index price volatility designated as "High Investor Excitability" (HIE). The HIE period (topmost green line in graph, column 1b in the table on page 4) indicates that investors will be more susceptible to euphoria and panic than they have been since late 2021.

The longer-term volatility driver "Macro Power" is shown in the table on page four but not in the figure above. It indicates that the Macro RTD is stronger than the average of the last several decades.

The Macro Driver (red in graph, column 2a in table), which boosts longer-term risk tolerance, indicates that a boost in risk tolerance began last March. It is expected to continue in the upleg of its cycle for at least the next four weeks.

March also saw Flash optimism (yellow line in graph, column 4b on table) from the Episodic catalysts. The Macro Driver and Flash optimism both coincided with the public announcement of Chat-GPT (March 14), which likely contributed to the enthusiasm for the announcement. We expect a mild flash of negative sentiment the week ending September 19. Because this coincides with an expected inflection point in the Micro Driver (mentioned below), this flash is more likely to be an important catalyst for a change to a period of greater risk aversion.
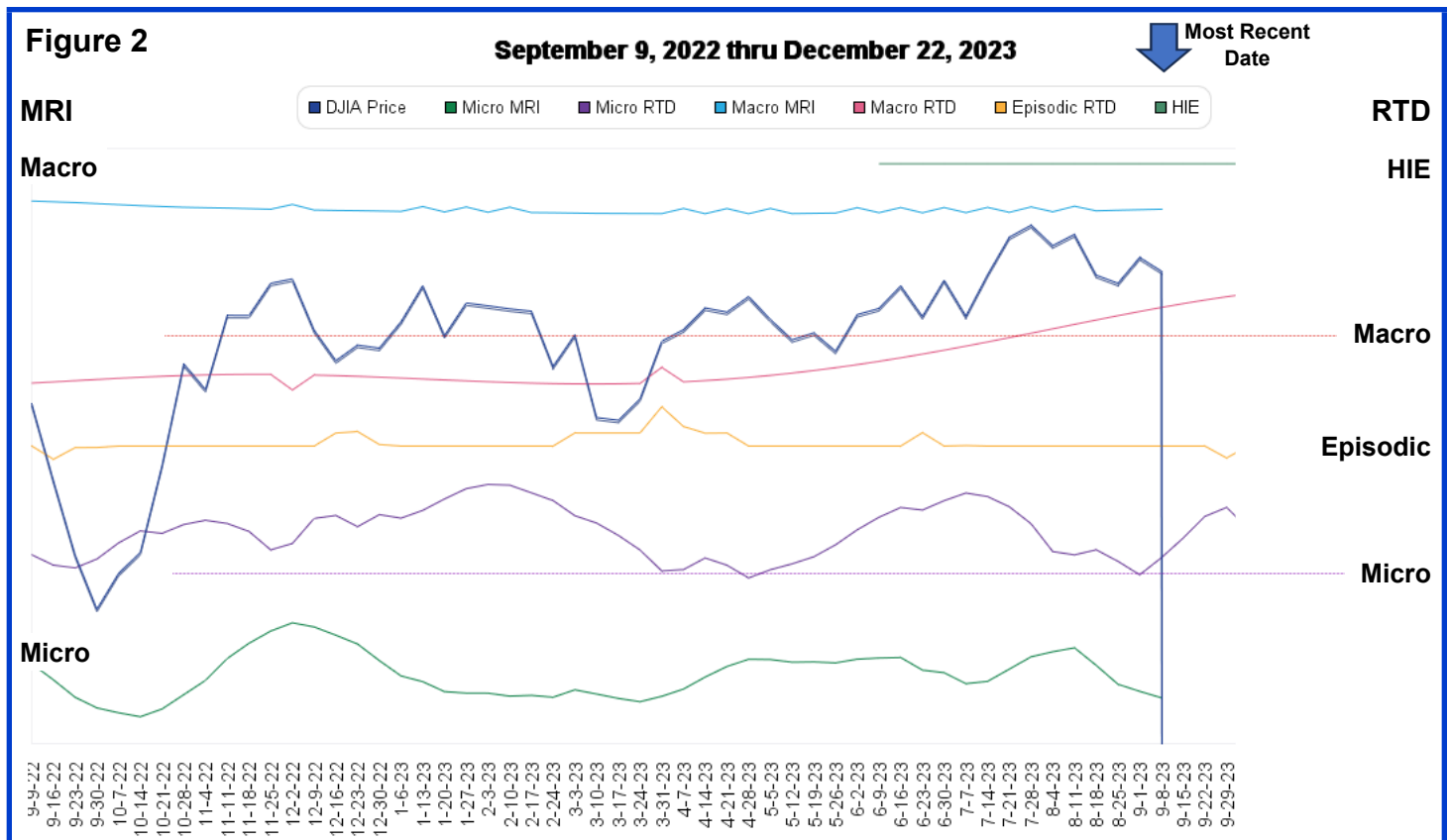
We are at the beginning of a short upleg in the Micro Driver cycle (purple line in graph, column 3 in table), which boosts shorter-term risk tolerance. the upleg began the week of September 1 and is projected to end the week of September 29. As the Micro cycle peaks, shorter-term risk tolerance and optimism will be reduced.

B. Market Resilience Index Series - Figure 2 below shows the same information as Figure 1 with the addition of the Macro (light blue line), Exceptional Macro, and Micro (lower green line) MRI. The presence of the Exceptional Macro MRI is indicated as a wiggle in the blue line representing the Macro MRI. The table on page four shows the levels of the Macro and Micro MRI on a scale of 0 to 100. Our analysis suggests that the MRI reflect the Risk Tolerance Drivers and the collective investor consensus of evolving market conditions.

Figure 2 — MRI / RTD — September 9, 2022 thru December 22, 2023 — Most Recent Date
Legend: DJIA Price, Micro MRI, Micro RTD, Macro MRI, Macro RTD, Episodic RTD, HIE

Comment

Jeff Hansen - September 8, 2023

The Macro MRI has been forming a long-term trough over the last few months. Compared to most troughs over the last 100 years, the formation of the trough has been slow; the Macro MRI has not made a strong move higher. This suggests there is less long-term optimism among investors about the current market conditions.

This view is reinforced by the Exceptional Macro, which has appeared and disappeared several times over the period shown above. Typically, the Exceptional Macro appears at/near a major market bottom and remains present for roughly 12 months. The recent off-and-on character of the Exceptional Macro indicates that investors have been tentative about this market rebound.

The Exceptional Macro is not present as of this report.

Over the recent months, the market seems have followed most closely the path indicated by the Macro RTD shown by the red line in Figure 2. This seems to be especially true over the last few weeks. Historically, this has been associated with meaningful market declines when the RTD moves to the downleg of its cycle. The downleg is expected to begin later this year.

C. Forecasts

Date	Volatility 1a MacPwr 1-5	1b HIE H	2 Macro RTD a Pri	2 Macro RTD b Sec	3 Micro RTD	4 Episodic Catalysts a AFP	4 b Flash	4 c Noise	5 Macro MRI Level 0-100	6 Excep Macro Y/N	7 Micro MRI Level 0-100	DJIA Price
11/3/2023												
10/27/202												
10/20/202												
10/13/202												
10/6/2023	4		green	green	red				-------- Not Applicable --------			
9/29/2023	4		green	green	red			pink				
9/22/2023	4		green	green	light green							
9/15/2023	4		green	green	light green							

History

Date	1a MacPwr	1b HIE	2a Pri	2b Sec	3 Micro RTD	4a AFP	4b Flash	4c Noise	5 Macro MRI	6 Excep Macro	7 Micro MRI	DJIA Price
9/8/2023	4		green	green	light green				34		23	34,577
9/1/2023	4		green	green	light green				33	green	30	34,838
8/25/2023	4		green	green	red				32		39	34,347
8/18/2023	4		green	green	red				31	green	65	34,501
8/11/2023	4		green	green	red				30	green	84	35,281
8/4/2023	4		green	green	red				30	green	81	35,066
7/28/2023	4		green	green	red				29	green	75	35,459
7/21/2023	4		green	green	red				29	green	60	35,228
7/14/2023	4		green	green	red				29	green	43	34,509
7/7/2023	4		green	green	red			light green	29		40	33,735
6/30/2023	4		green	green	light green				28	green	56	34,408
6/23/2023	4		green	green	light green			light green	28	green	59	33,727
6/16/2023	4		green	green	light green				28	green	74	34,299
6/9/2023	4		green	green	light green				28	green	74	33,877
6/2/2023	4		green	green	light green				28	green	73	33,763
5/26/2023	4		green	green	light green				28		68	33,093
5/19/2023	4		green	green	light green				27		69	33,427
5/12/2023	4		green	green	light green				27		69	33,301
5/5/2023	4		green	green	light green				26	green	72	33,674
4/28/2023	4		green	green	light green				26	green	73	34,098
4/21/2023	4		green	green	red	light green			26	green	64	33,809
4/14/2023	4		green	green	red	light green		pink	26	green	50	33,886
4/7/2023	4		green	green	green	light green			27	green	34	33,485
3/31/2023	4		green	green	red	dark green			27		24	33,274
3/24/2023	4		red	green	red	light green		pink	27		19	32,238
3/17/2023	4		red	green	red	light green			27		22	31,862
3/10/2023	4		red	green	red	light green			27		27	31,910
3/3/2023	4		red	green	red	light green			28		32	33,391
2/24/2023	4		red	green	red				28		23	32,817
2/17/2023	4		red	green	red				29	green	26	33,827

D. Notes, Terminology, and Descriptions

Notes

DJIA Price: The price of the Dow Jones Industrial Average (DJIA) is shown in the graphs on a log scale. No scale is shown, and the line indicates relative price movement. The DJIA price is shown on the table.

Timing: The dates shown on the table are more accurate than those on the graph. While specific dates are indicated on the table, the expected range is the indicated date plus or minus a week.

Terminology

Market Resileince: Indicates how quickly and completely it will recover from negative news and events. A resilient market recovers quickly and completely, a vulnerable market does not.

Macro: Cycles and trends that last several quarters or years.

Episodic Catalyst: Tends to have a temporary impact and there may be long periods between episodes when there is no impact on risk tolerance.

Micro: Cycles that last roughly 6 months, with each leg (upleg and downleg) of the cycle lasting roughly 3 months.

Descriptions

1. 'Volatility' - Volatility Drivers
    b. 'Micro HIE' - High Investor Excitability
        Timing: 18 months for each HIE period
        Graph Notes: Shown as a horizontal green line at the top of the graph. Only periods of high investor excitability are indicated.
        Table Notes: When the indicator is colored yellow in the table, the stock market is in a HIE period.
        Comment: During HIE periods, investors are more likely to experience euphoria or panic. Historically, weekly volatility of the stock market is significantly higher during HIE periods than during "LIE" periods (low investor excitability).

    a. 'MacPwr' - Macro Cycle Power Score (1-5, 5=High)
        Timing: Varies
        Graph Notes: Not shown on the graph.
        Table Notes: Shown as a score in a colored box. The color will be shades of green for scores 1 and 2 indicating lower volatility. It will be shades of yellow (indicating caution) for scores 4 and 5 indicating higher volatility.
        Comment: The score indicates the expected power of the Macro Driver rated from 1 to 5, with 5 being the most powerful. Macro Driver Power can may remain at high or low levels for many years. The period from 2003 through 2017 was generally a low-power period for the Macro Driver. We have been in a higher power period since 2017. We expect it to continue for several years.

2. 'Macro RTD' - Macro Risk Tolerance Driver. The Macro Driver has a stronger long-term impact on investor risk tolerance than does the Micro Driver. The Macro Driver line in the graph (red) consists of two cycles. The primary Macro Driver is more powerful than the secondary.
    Graph Notes: The larger spikes in the red line represent the inflection points of the more powerful Primary cycle and the smaller spikes represent a weaker Secondary cycle. For visual simplicity, each

spike represents the week at which the cycle has its initial impact; the effect of the cycle typically continues to be felt long after the initial inflection point.

Table Notes: The primary and secondary cycles are shown in separate columns.

a. 'Pri' - Primary Cycle
Timing: Several quarters per leg

Graph Notes: Indicated by the red Macro line. An upward spike indicates a shift to the risk tolerant portion of the cycle. A downward spike indicates a shift to the risk averse portion of the cycle.

Table Notes: Green=Upleg (increasing risk tolerance and optimism), Red=Downleg (decreasing risk tolerance and optimism)

b. 'Sec' - Secondary Cycle
Timing: Several quarters per leg

Graph Notes: Indicated by the red Macro line. An upward spike indicates a shift to the risk tolerant portion of the cycle. A downward spike indicates a shift to the risk averse portion of the cycle.

Table Notes: Green=Upleg (increasing risk tolerance and optimism), Red=Downleg (decreasing risk tolerance and optimism)

3. 'Micro RTD' - Micro Risk Tolerance Driver
'Level' - Micro Driver Level
Timing: 3-15 weeks per leg

Table Notes: Green=Upleg (increasing risk tolerance and optimism), Red=Downleg (decreasing risk tolerance and optimism). The inflection points are based on a nine-week centered window.

4. 'Episodic' - Episodic Risk Tolerance Catalysts. Three separate catalysts are shown by the yellow Episodic line on the graph and by three separate columns in the table.
a. 'AFP' - Anxiety-Free Period
Timing: Occurs every 7-10 years and lasts about 1 year

Graph Notes: A component of the yellow line labeled "Episodic" in the graph.

Table Notes: Shown as a prominent green when present.

Comment: An Anxiety-Free Period tends to have a big impact on the markets. Investors are relatively free from anxiety and pessimism for roughly one year. An AFP can be an inflection point for a positive longer-term trend in stock prices if economic conditions are appropriate. An AFP can also lead to euphoric sentiment and market crashes if economic conditions do not support price appreciation. There was an AFP before the 1987 Crash (a powerful AFP) and one in late 2017. We will note them prominently in the commentary.

b. 'Flash' - Optimistic Flash
Timing: Intermittent and episodes last 4-8 weeks

Graph Notes: A component of the yellow line labeled "Episodic" in the graph.

Table Notes: The intensity of the green shading indicates the degree of optimism.

Comment: These flashes of optimism have a stronger ability to start a new sentiment trend compared to "Noise."

c. 'Noise' - Expected Noise
Timing: Intermittent and episodes last 1-3 weeks

Graph Notes: A component of the yellow line labeled "Episodic" in the graph.

Table Notes: Green shading indicates optimistic noise. Light red indicates pessimistic noise.

Comment: These episodes can be a catalyst for longer-term optimism or pessimism if supported by economic conditions. They can also be considered a "head fake" by the market and should not be acted upon unless there are other justifications for taking action.

5. 'Micro' - Micro MRI
a. 'Short-Term Cycle' - Short-Term MRI
Timing: 12w/leg

Graph Notes: Shown on as the line second from bottom on the graph. The bottom line is the Micro

Driver, which affects the Micro MRI.

Table Notes: The scores are shaded red if they are a maximum score, which indicates a possible decline in stock prices due to growing risk aversion. They are shaded green if they are minimum scores, which indicates a possible increase in stock prices due to growing risk tolerance.

Comment: See this page for more information: https://cpminvesting.com/mri

6. 'Ex. Macro' - Exceptional Macro MRI
'Y/N' - "Yes" Indicates that the Exceptional Macro is present

Timing: Varies

Graph Notes: The Exceptional Macro MRI is indicated by a wiggle in the blue line representing the Macro MRI.

Comment: When the Exceptional Macro MRI is present it can compensate for the lack of resileince from the Micro or Macro MRI. The most common state is for it to be absent. See this page for more information: https://cpminvesting.com/mri

7. 'Macro' - Macro MRI
a. 'Long-Term Cycle' - Long-term MRI

Timing: 1.75y/leg

Graph Notes: Shown as the upper line (blue) labelled on the left. The Exceptional Macro MRI is indicated by a wiggle in the blue line. The line below it is the Macro Driver, which affects the Macro MRI..

Comment: See this page for more information: https://cpminvesting.com/mri