



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

COMMENTARY

- We'd like to take credit for being right that a dovish pivot narrative was still *far more* in play than most observers thought—especially in what people were prescribing—but I don't know that we had a mini-regional banking crisis as the trigger that would make it what everyone else thought again.
- Still, while future observers may look at the end-of-month returns for March with a yawn, it was one of the biggest narrative resets we have observed in a very long time, with major moves across a huge swath of our ETNA and Radiant signals.
- At least for now:
 - Cheapness and opportunity as a dominant theme appears to have faded to the background;
 - Bullishness has been wholly excised from the narrative; despite the generally positive trend in market returns, the dourness about all the things that could go wrong and fear about the *descriptive* narratives coming from CBs has made bearishness the core story.
- In general, all of this saturation tends to be seen by our models in a slightly bullish way, although we will note that the new narrative structure of risky markets appears to still be forming in the aftermath of the regional banking hiccup, so more changes could be coming.

SIGNAL VALUES AS OF MARCH 31, 2023

SIGNAL CATEGORY	SIGNAL STATE	DIRECTION
Central Bank Policy	Dovish	Bullish
Stock Story Types	Fundamentals-Focused	Bearish
Cheap Narrative	Neutral	Neutral (New)
Expensive Narrative	Neutral	Neutral
Cheap vs. Expensive	Neutral	Neutral (New)
Fading Expensive Narrative	Neutral	Neutral
Rising Expensive Narrative	Neutral	Neutral (New)
Bullish Narrative	Absent	Bullish (New)
Bearish vs. Bullish	Saturated Bearish	Bullish (New)
Aggregate View		Slightly Bullish

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

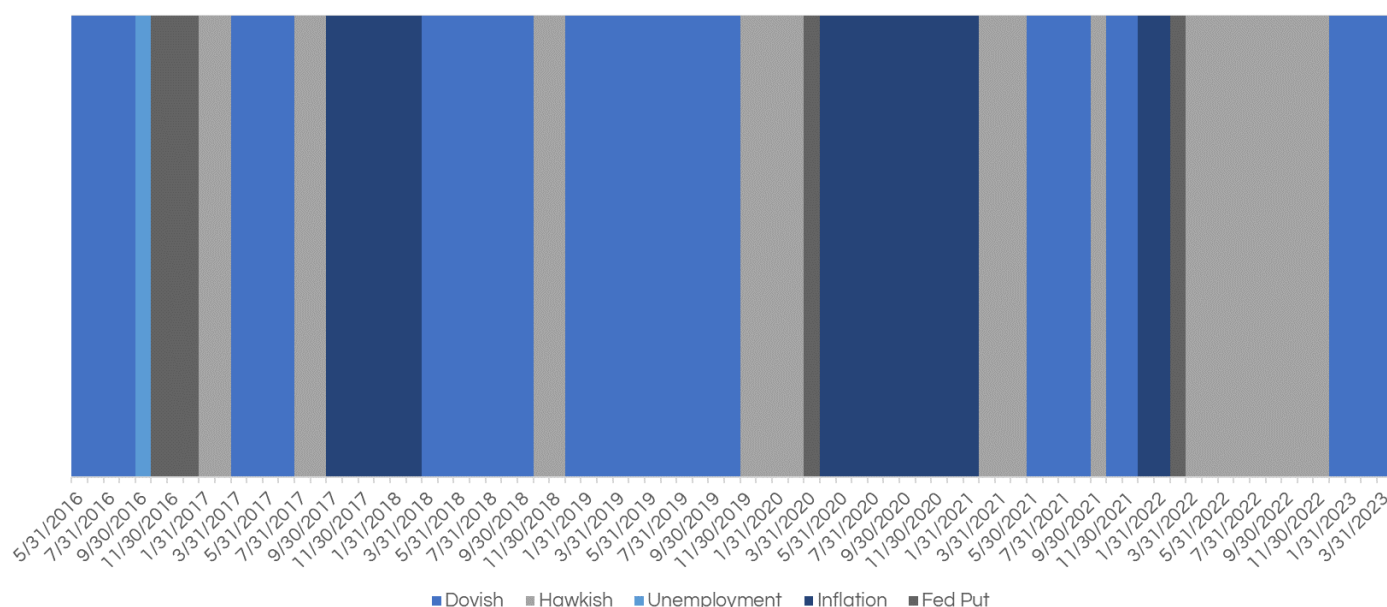
SIGNAL REFERENCE—CENTRAL BANK POLICY

This model examines the Density and Narrative Strength / Attention of certain archetypal narratives relating to Central Bank Policy. We classify the dominant narrative among five such archetypes, which we believe reflect different states of common knowledge that both respond to and influence investor behavior. Present archetypes include Dovish, Hawkish, Inflation-Focused, Unemployment-Focused and Fed Put. Historical subsequent period results for directional S&P 500 exposure and historical states for the model are presented below.

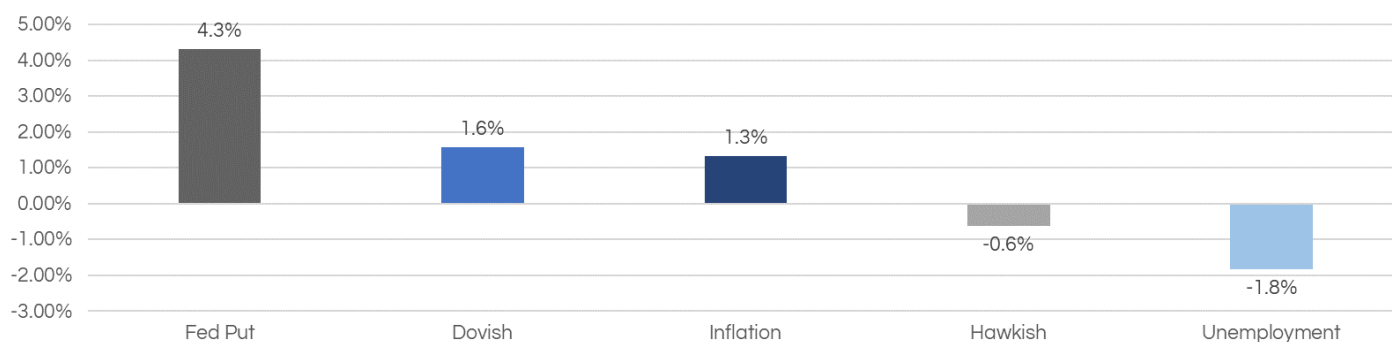
CURRENT STATE

DOVISH (BULLISH)

HISTORICAL SIGNAL TRIGGER PERIODS



HISTORICAL MONTHLY S&P RETURNS BY STATE



Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

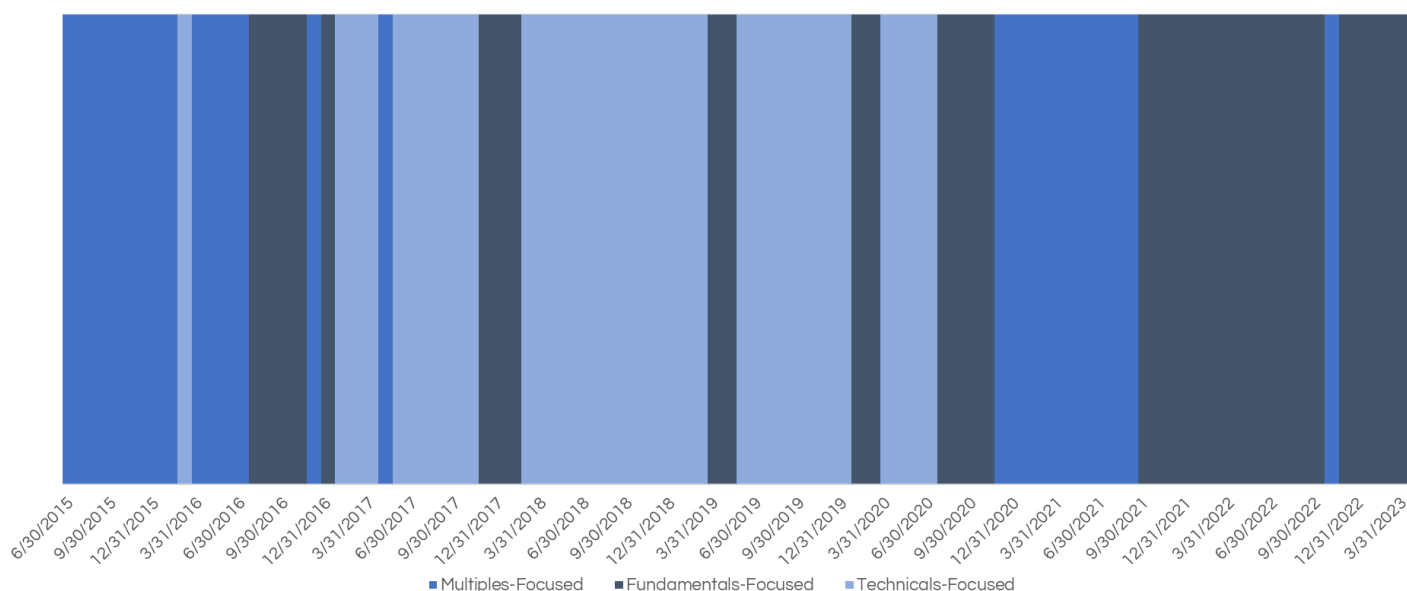
SIGNAL REFERENCE—STOCK STORY TYPES

This model examines the Density and Narrative Strength / Attention of certain linguistic archetypes of investment theses promoted in financial media and by sell side research houses. We think there are three such archetypes: multiples-focused, technicals-focused or fundamentals-focused. That is, analysts and commentators tend to describe why investments are attractive or unattractive using one or more of those linguistic sets. We think the market's varying tendency to frame investment outcomes in terms of each of these archetypes is indicative of risk appetites.

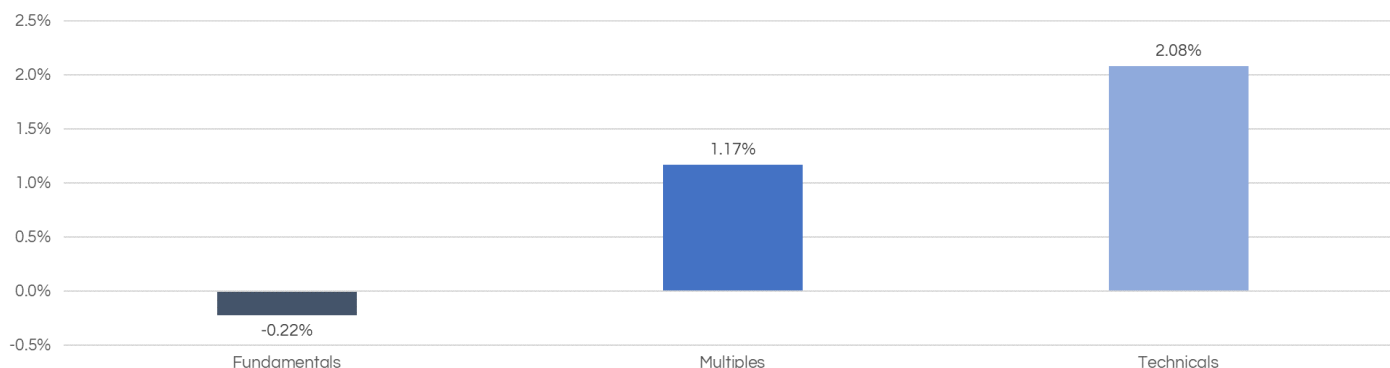
CURRENT STATE

FUNDAMENTALS-FOCUSED (BEARISH)

HISTORICAL SIGNAL TRIGGER PERIODS



HISTORICAL MONTHLY S&P RETURNS BY STATE



Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

SIGNAL REFERENCE—EXTREME CHEAP NARRATIVE

This model examines the Density and Narrative Strength / Attention of narratives describing the stock market in general as being inexpensive, cheap or a “good value.” We believe that extreme values for these language patterns may be predictive of marginal investor buying behaviors and above average forward-looking excess returns for equity markets, sectors and individual securities. **The signal indicates LONG S&P 500 exposure on an extreme value.**

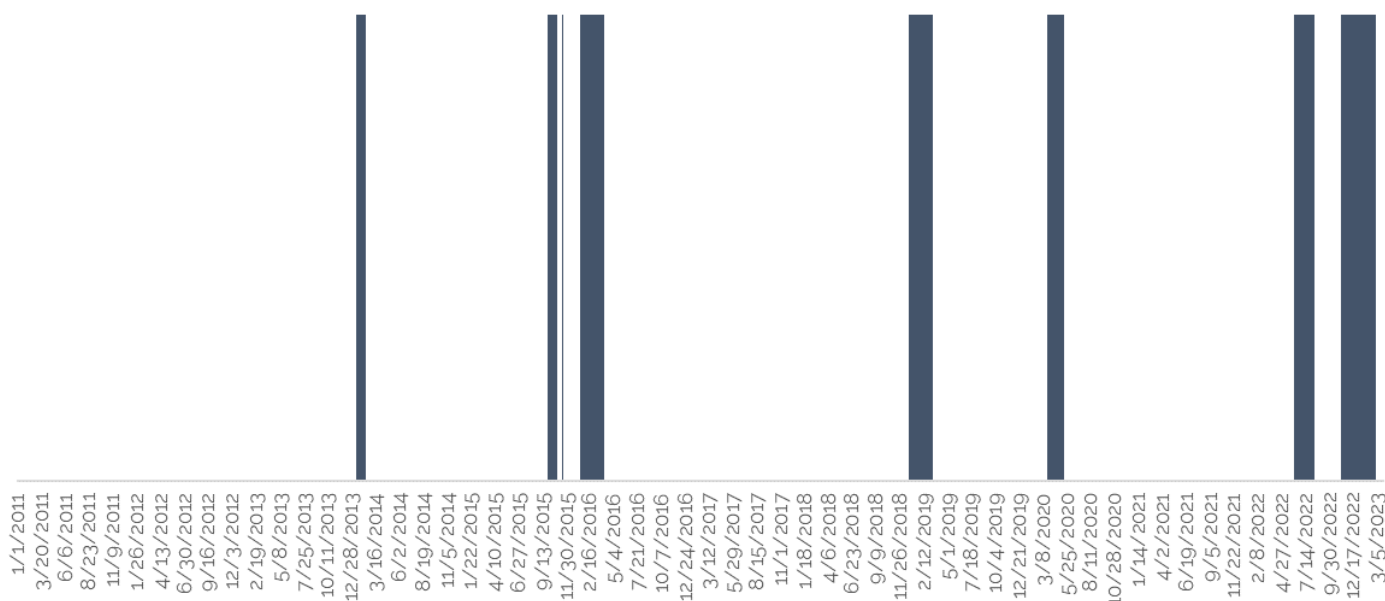
CURRENT STATE

NEUTRAL

HIST. DAILY S&P RETURN WHEN ACTIVE

0.28%

HISTORICAL SIGNAL TRIGGER PERIODS



MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
11/10/2022—2/28/2023	5.00%	17.39%
06/10/2022—8/12/2022	6.64%	44.32%
03/24/2020—05/14/2020	27.83%	460.27%
12/28/2018—03/14/2019	13.40%	81.46%

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

SIGNAL REFERENCE—EXTREME EXPENSIVE NARRATIVE

This model examines the Density and Narrative Strength / Attention of narratives describing the stock market in general as being expensive or overpriced. We believe that extreme values for these language patterns may be predictive of marginal investor selling behaviors and below average forward-looking excess returns for equity markets, sectors and individual securities. **The signal indicates SHORT or REDUCED S&P 500 exposure on an extreme value.**

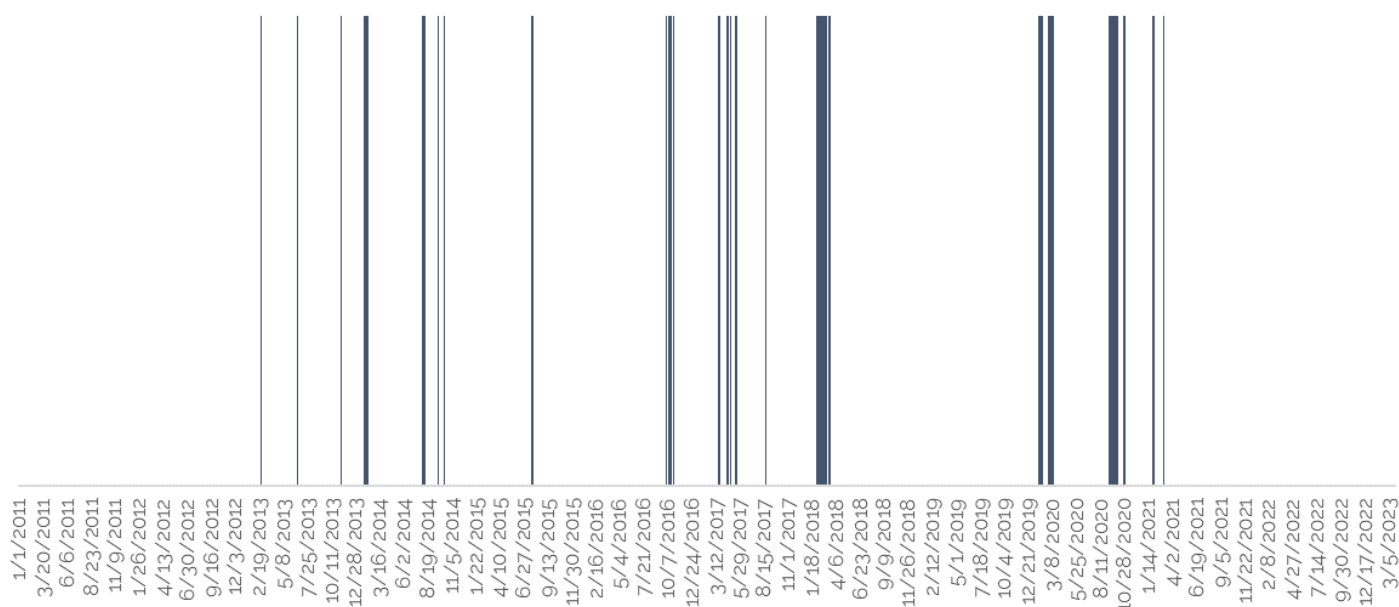
CURRENT STATE

NEUTRAL

HIST. DAILY S&P RETURN WHEN ACTIVE

0.00%

HISTORICAL SIGNAL TRIGGER PERIODS



MOST RECENT TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
09/04/2020—11/04/2020	-0.13%	-0.75%
02/25/2020—03/20/2020	-28.42%	N/A
03/14/2018—04/02/2018	-6.56%	-71.01%
10/12/2016—11/07/2016	-0.14%	-1.85%

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

SIGNAL REFERENCE—CHEAP VS. EXPENSIVE

This model examines the relative deviation of the Density and Narrative Strength / Attention of narratives describing the stock market as being cheap and expensive, respectively, relative to their historical norms. In short, we believe that the *relative dominance* of cheap archetypal language over expensive archetypal language may be predictive of investor risk-taking behaviors above and beyond the raw value of the density and influence of cheap language itself. **The signal indicates LONG or INCREASED S&P 500 exposure on an extreme value differential in favor of Cheap language.**

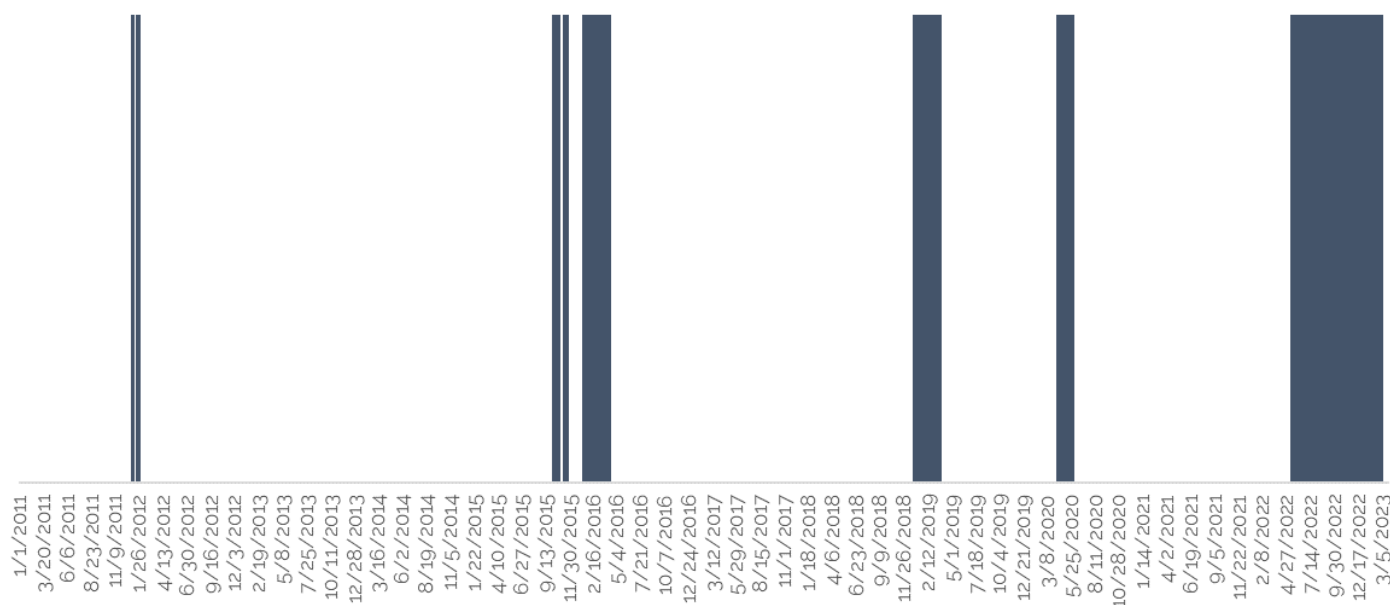
CURRENT STATE

NEUTRAL

HIST. DAILY S&P RETURN WHEN ACTIVE

0.16%

HISTORICAL SIGNAL TRIGGER PERIODS



MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
05/13/2022—3/8/2023	0.45%	0.54%
04/08/2020—06/05/2020	20.53%	217.34%
12/26/2018—03/29/2019	21.23%	111.15%
01/19/2016—04/13/2016	11.38%	58.01%

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

SIGNAL REFERENCE— FADING EXPENSIVE NARRATIVE

This model examines the rate of change of the Density and Narrative Strength / Attention of narratives describing the stock market as being expensive. In short, we believe that sharp rates of change in the use of archetypal language in favor of cheapness may be predictive of investor risk-taking behaviors above and beyond the raw value of the density and influence of cheap language itself. **The signal indicates INCREASED S&P 500 exposure on a rapid shift away from Expensive archetypal language.**

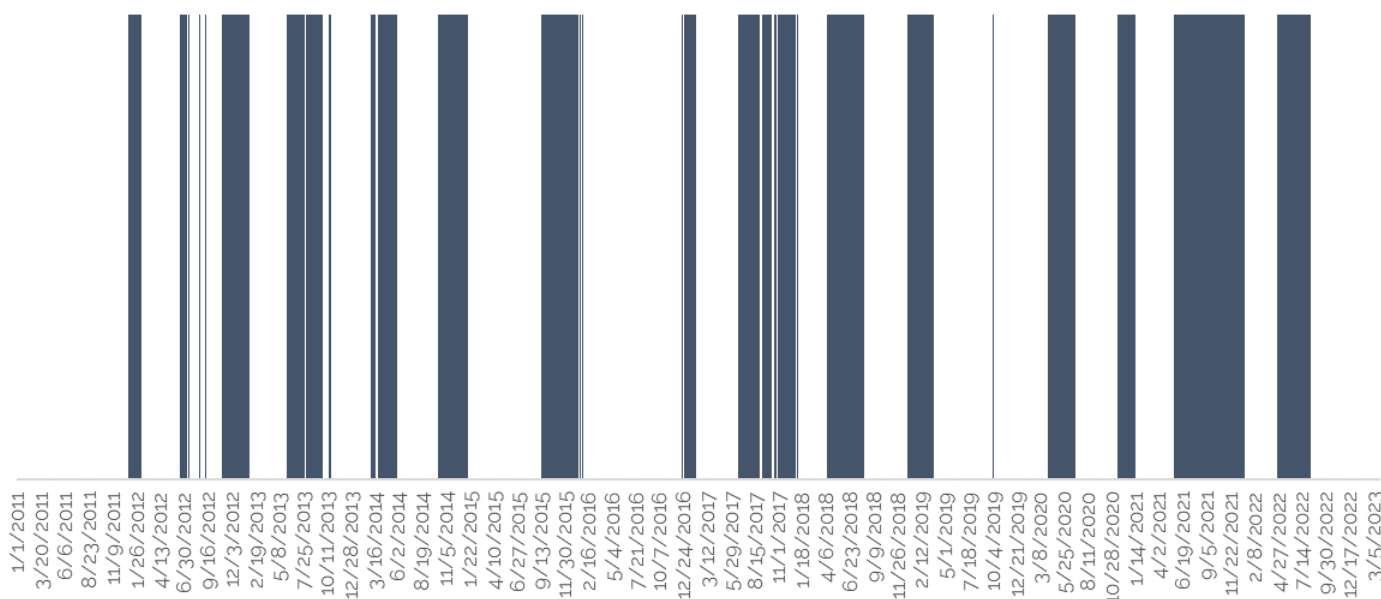
CURRENT STATE

NEUTRAL

HIST. DAILY S&P RETURN WHEN ACTIVE

0.11%

HISTORICAL SIGNAL TRIGGER PERIODS



MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
04/27/2022—8/11/2022	1.18%	4.07%
05/24/2021—01/04/2022	16.38%	27.91%
11/20/2020—01/14/2021	6.22%	48.16%
04/06/2020—06/29/2020	23.24%	145.33%

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

SIGNAL REFERENCE— RISING EXPENSIVE NARRATIVE

This model examines the rate of change of the Density and Narrative Strength / Attention of narratives describing the stock market as being expensive. In short, we believe that sharp rates of change in the use of archetypal language in favor of cheapness may be predictive of investor risk-taking behaviors above and beyond the raw value of the density and influence of cheap language itself. **The signal indicates REDUCED S&P 500 exposure on a rapid shift toward Expensive archetypal language.**

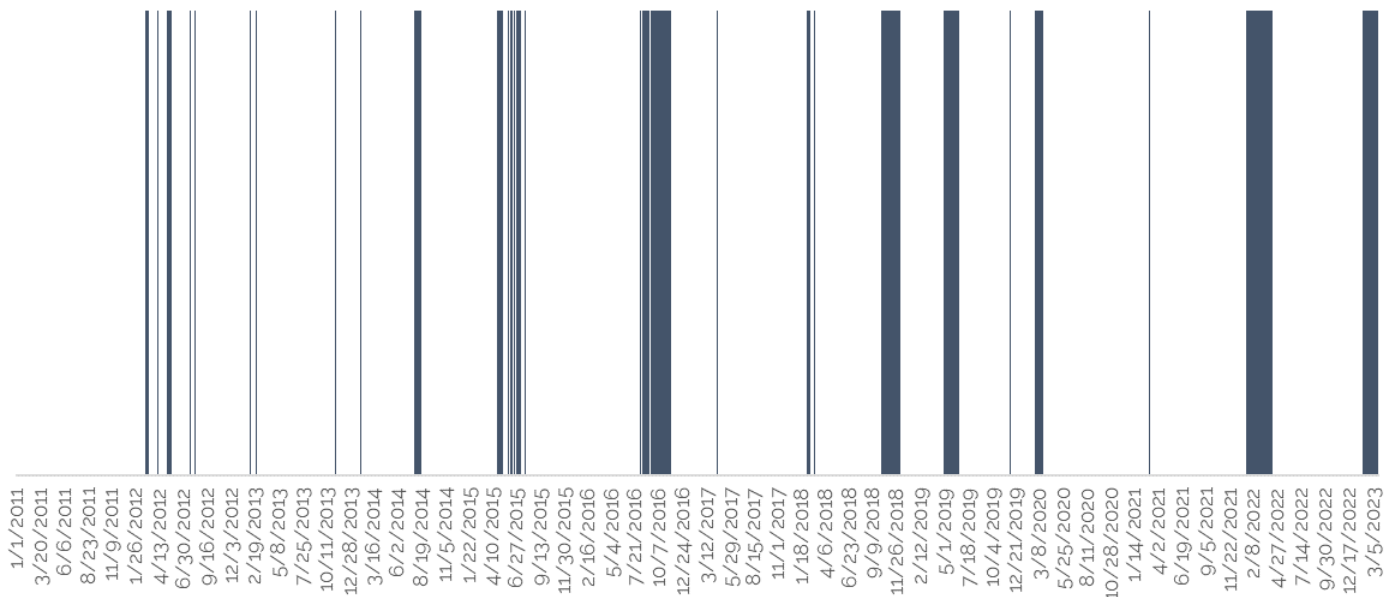
CURRENT STATE

NEUTRAL

HIST. DAILY S&P RETURN WHEN ACTIVE

0.06%

HISTORICAL SIGNAL TRIGGER PERIODS



MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
02/3/2023– 03/24/2023	5.24%	45.22%
01/18/2022—4/13/2022	-3.77%	-15.06%
02/26/2020—03/20/2020	-26.19%	N/A
05/02/2019—06/18/2019	0.14%	1.08%

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.



US DIRECTIONAL EQUITY DASHBOARD

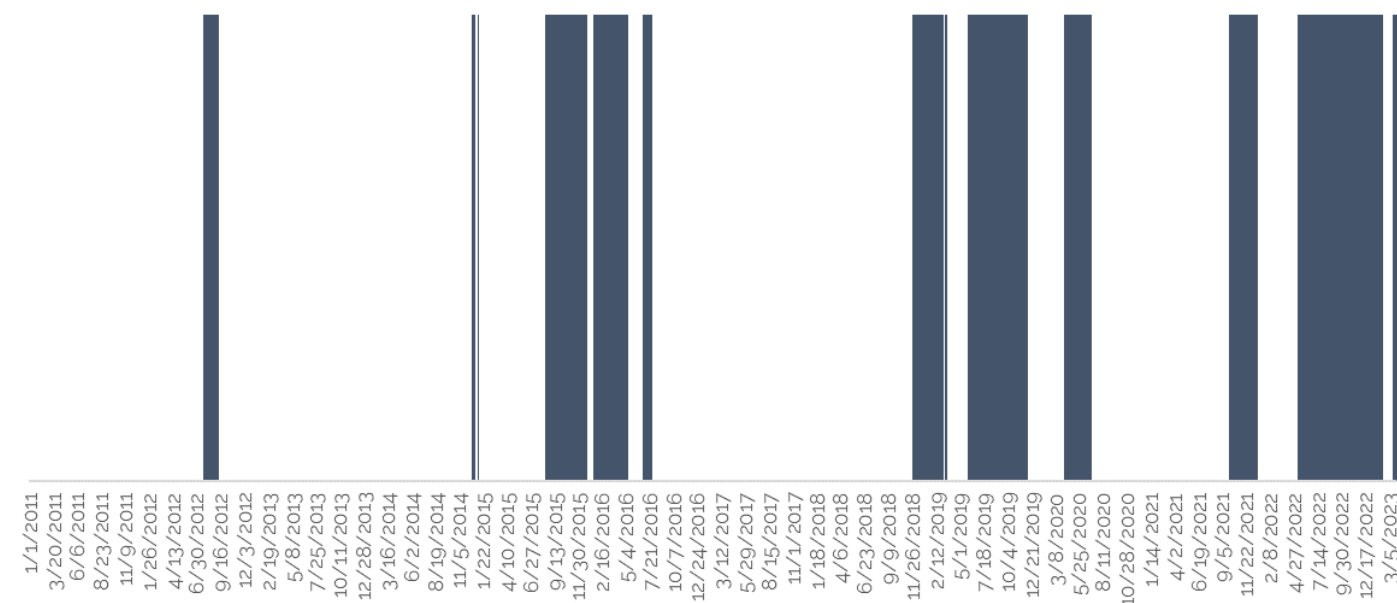
As of March 31, 2023

SIGNAL REFERENCE— BEARISH VS. BULLISH

This model examines the relative deviation of the Density and Narrative Strength / Attention of narratives describing using the tropes and linguistic patterns of bullish and bearish archetypes, respectively, relative to their historical norms. We believe that the *relative dominance* of bearish over bullish archetypes may be indicative of a narrative structure saturated by pessimism in ways that create upside asymmetry to individual assets and risky assets more broadly. The signal indicates LONG or INCREASED S&P 500 exposure on an extreme value differential in favor of Bearish language.

CURRENT STATE	SATURATED (BULLISH)
HIST. DAILY S&P RETURN WHEN ACTIVE	0.11%

HISTORICAL SIGNAL TRIGGER PERIODS





US DIRECTIONAL EQUITY DASHBOARD

As of March 31, 2023

SIGNAL REFERENCE— BULLISH NARRATIVE

This model examines the rate of change of the Density and Narrative Strength / Attention of narratives describing bull cases for individual assets or the market in general. We believe that bull case language tends to gain influence after the case has been demonstrated in market performance—thus, it is the relative absence of bull case narratives that we expect to be moderately predictive of above average returns. **The signal indicates INCREASED S&P 500 exposure on a low density/influence of Bullish archetypal language.**

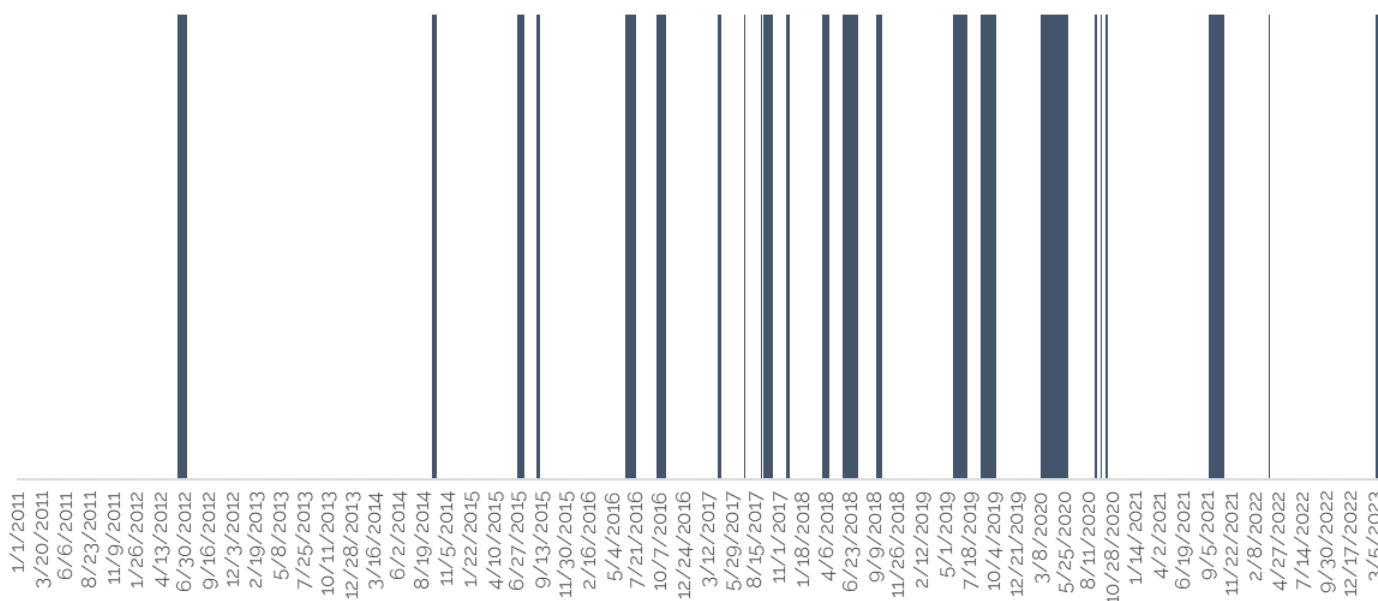
CURRENT STATE

ABSENT (BULLISH)

HIST. DAILY S&P RETURN WHEN ACTIVE

0.16%

HISTORICAL SIGNAL TRIGGER PERIODS



MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
09/15/2021—11/03/2021	4.36%	39.25%
03/13/2020—06/05/2020	29.39%	202.32%
08/30/2019—10/15/2019	2.58%	21.87%
05/31/2019—07/12/2019	8.33%	97.22%

Important Disclosures: These signals are provided for research purposes only and have not been customized to the specific circumstances of any client. There can be no guarantee that any investment strategy based on these signals would be successful, or that their success in the past would be indicative of similar success in the future. Investors should consider a wide range of factors specific to their portfolio and circumstances before making any investment decisions. The S&P 500 is a market cap-weighted index of approximately US large capitalization stocks. These signals and triggers are historical simulations. They did not exist in the periods examined. While efforts to examine economically intuitive relationships are core to our process, knowledge about the past inevitably skews the creation of such models. You should examine their results with skepticism and care. Past performance is NOT a guarantee of future results.