US Directional Equity Dashboard

As of November 30, 2021

COMMENTARY

- The biggest narrative trends of the past few months have continued through November:
    - A relative rise in *bearish* vs. *bullish* archetypal language; and
    - A general fall in both the dueling *expensive* AND *cheap* archetypes, as valuation discussions have largely given way to discussions of fundamentals.
- We did, however, observe two changes:
    - There is now a noisy narrative around central bank activity. Our models call *dovish* language dominant, but inflation concerns, hawkish preferences and even clamoring for extended Fed intervention in markets are all present at high levels. The Fed's walk away from transitory language exacerbated this, and our spot calculation for November showed Hawkish as dominant.
    - The free-fall in *bullish* archetypal language has been largely arrested. It is low but the "fishing" for walls of worry we have been observing does appear to have dried up somewhat.
    - If there is an exception to this, it comes from the few days of Omicron coverage toward the end of the month. It shows the same narrative signs of prior walls of worry in 2021.
- **On balance, we don't see a strong narrative structure for either a strong bearish or bullish view at this time.**

Signal Values as of November 30, 2021		
Signal Category	**Signal State**	**Direction**
Central Bank Policy	Dovish	Slight Bullish
Stock Story Types	Fundamentals-Focused	Bearish
Cheap Narrative	Neutral	Neutral
Expensive Narrative	Neutral	Neutral
Cheap vs. Expensive	Neutral	Neutral
Fading Expensive Narrative	Extreme	Bullish
Rising Expensive Narrative	Neutral	Neutral
Bullish Narrative	Neutral	Neutral
Bearish vs. Bullish	Bearish	Bullish
Aggregate View		Neutral

US Directional Equity Dashboard
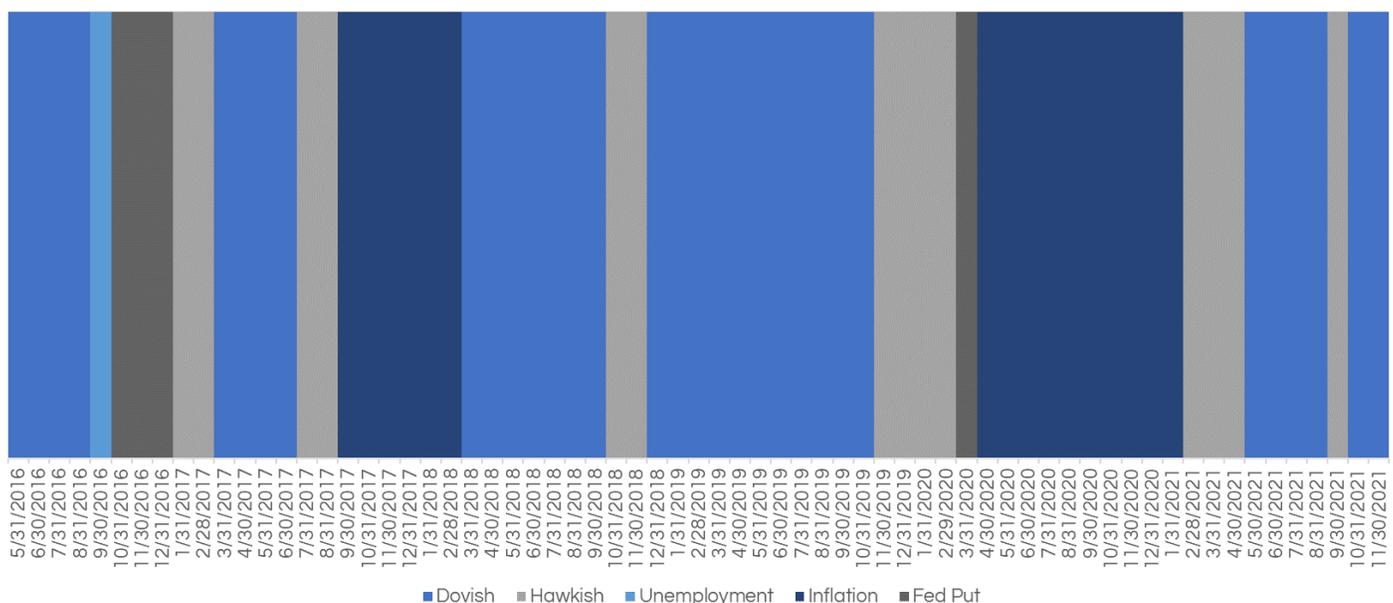
As of November 30, 2021

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.
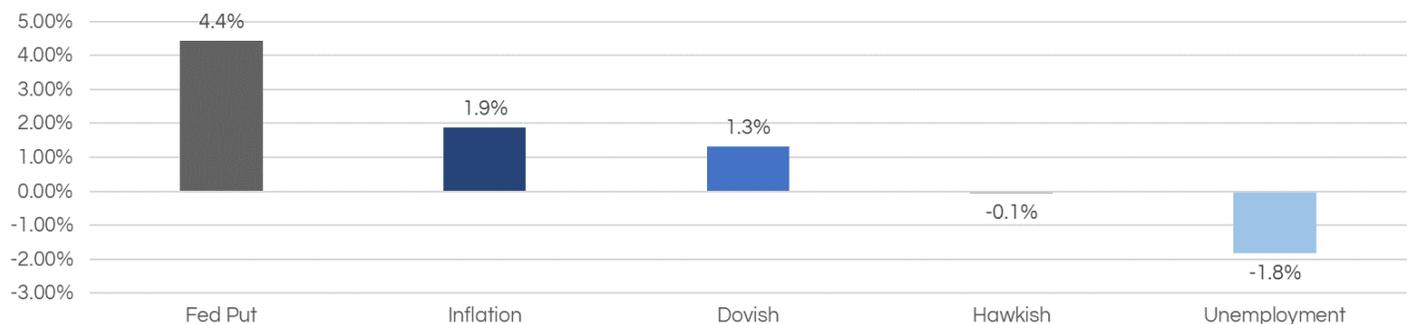
Current State	Dovish (Slight Bullish)

Historical Signal Trigger Periods

Legend: Dovish · Hawkish · Unemployment · Inflation · Fed Put

Historical Monthly S&P Returns by State

	Fed Put	Inflation	Dovish	Hawkish	Unemployment
Return	4.4%	1.9%	1.3%	-0.1%	-1.8%

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US DIRECTIONAL EQUITY DASHBOARD
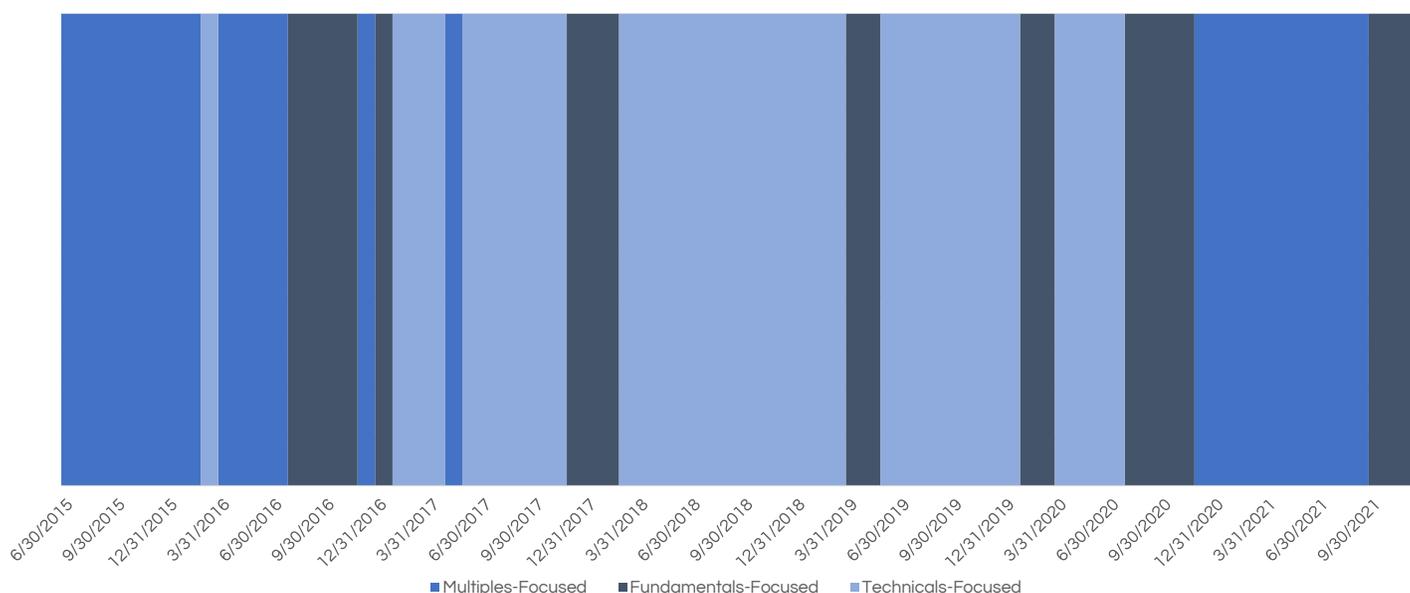
As of November 30, 2021

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.
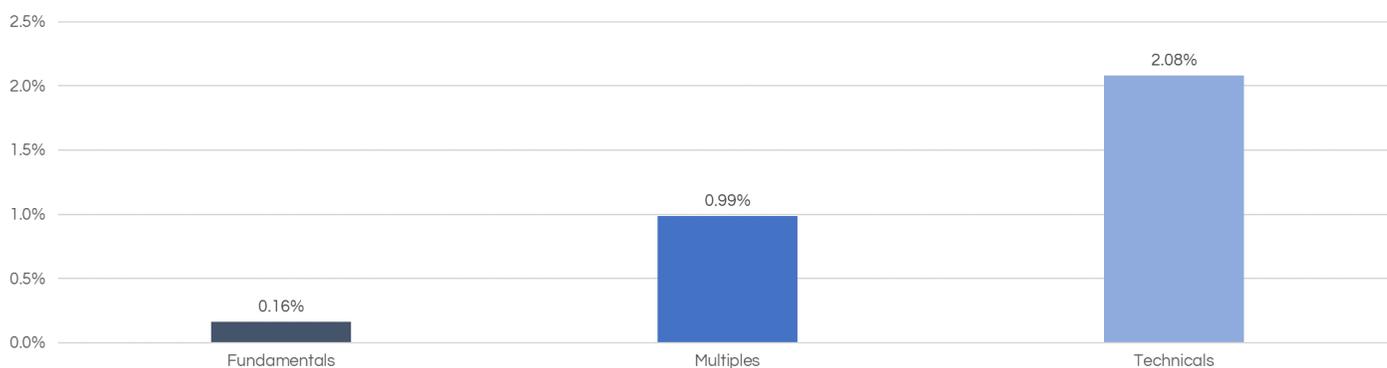
CURRENT STATE	FUNDAMENTALS-FOCUSED (Bearish)

HISTORICAL SIGNAL TRIGGER PERIODS

Legend: Multiples-Focused | Fundamentals-Focused | Technicals-Focused

HISTORICAL MONTHLY S&P RETURNS BY STATE

Fundamentals: 0.16% | Multiples: 0.99% | Technicals: 2.08%

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US Directional Equity Dashboard

As of November 30, 2021

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 <u>LONG</u> S&P 500 exposure on an extreme value.**

Current State	Neutral
Hist. Daily S&P Return When Active	0.32%

Historical Signal Trigger Periods
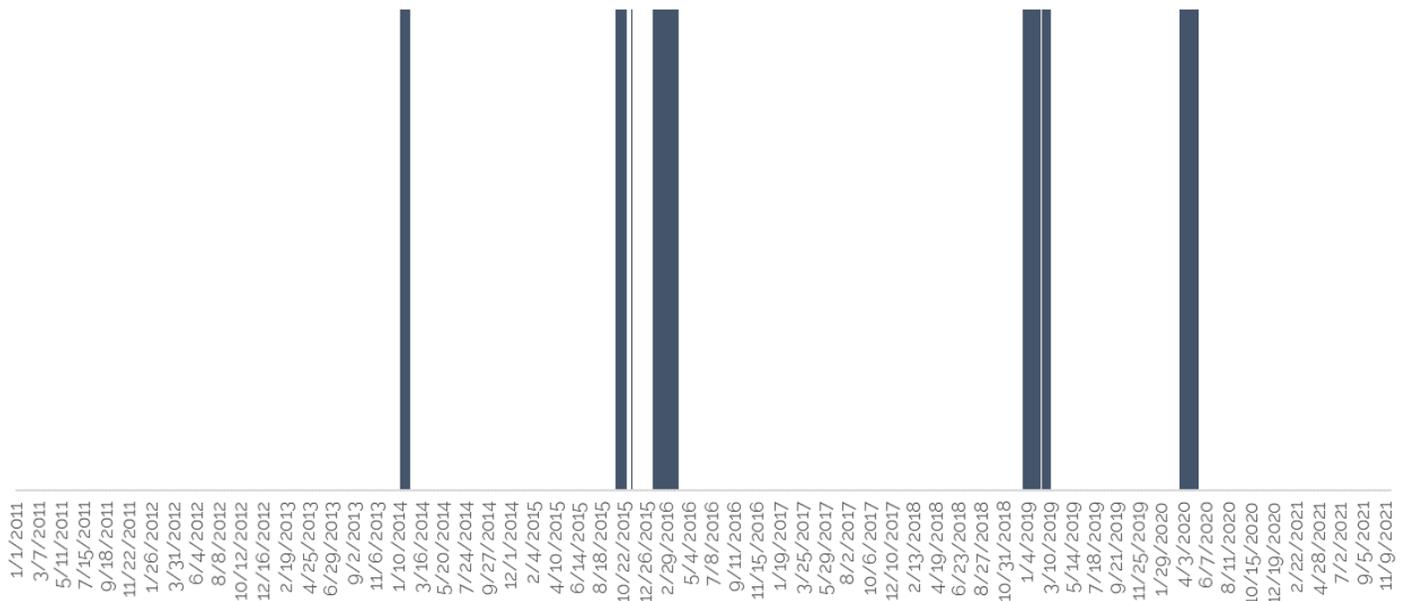
Most Recent >30 Day Triggers	Active Period S&P Return	Ann. Active Period S&P Return
03/24/2020—05/14/2020	27.83%	460.27%
12/28/2018—03/14/2019	13.40%	81.46
01/01/2016—03/31/2016	10.08%	61.62%
10/05/2015—11/02/2015	7.94%	161.70%

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US Directional Equity Dashboard

As of November 30, 2021

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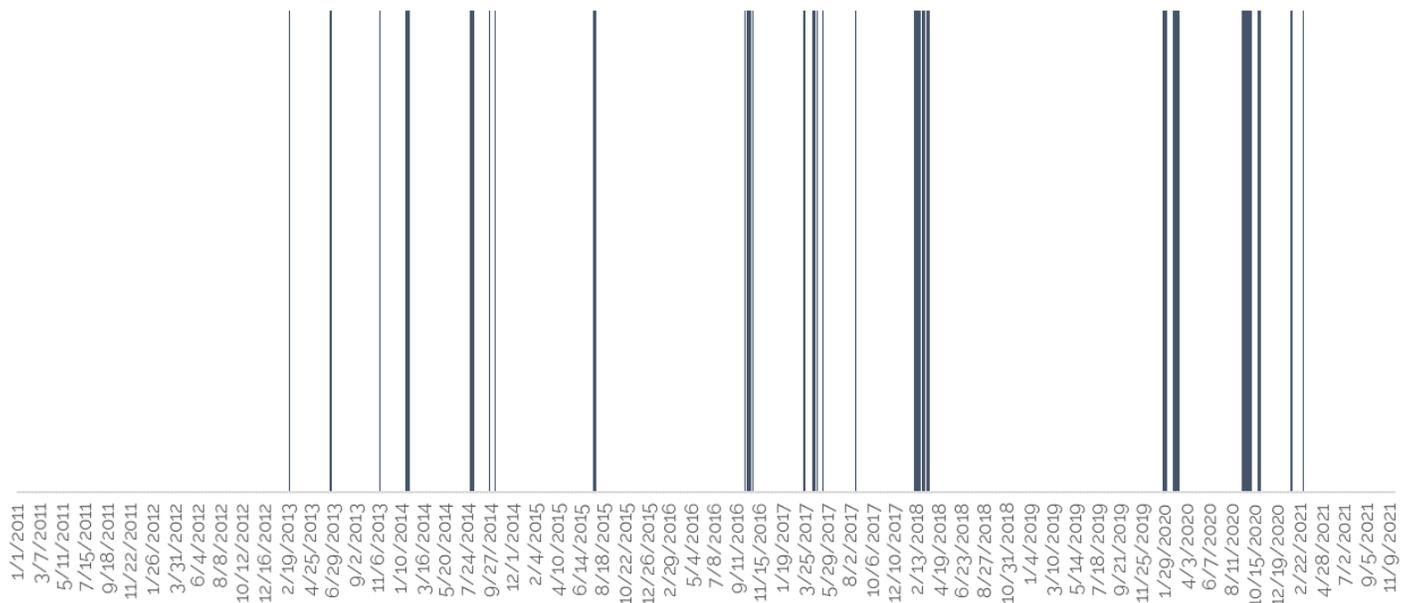
MOST RECENT TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
09/04/2020—11/04/2020	-0.13%	-0.75%
02/25/2020—03/20/2020	-28.42%	N/A
03/14/2018—04/02/2018	-6.56%	-71.01%
10/12/2016—11/07/2016	-0.14%	-1.85%

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US DIRECTIONAL EQUITY DASHBOARD

As of November 30, 2021

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	0.28%

HISTORICAL SIGNAL TRIGGER PERIODS
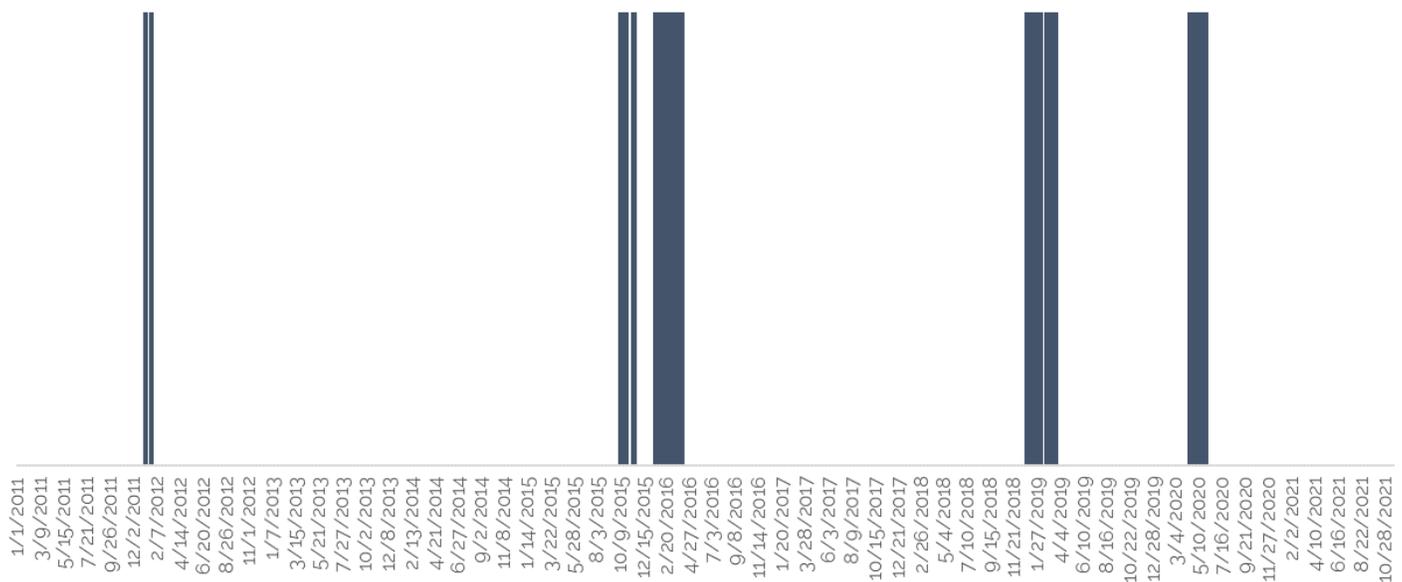
MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
04/08/2020—06/05/2020	20.53%	217.34%
12/26/2018—03/29/2019	21.23%	111.15%
01/19/2016—04/13/2016	11.38%	58.01%
10/06/2015—11/24/2015	7.41%	68.52%

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US Directional Equity Dashboard

As of November 30, 2021

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	Bullish

Hist. Daily S&P Return When Active	0.12%

Historical Signal Trigger Periods
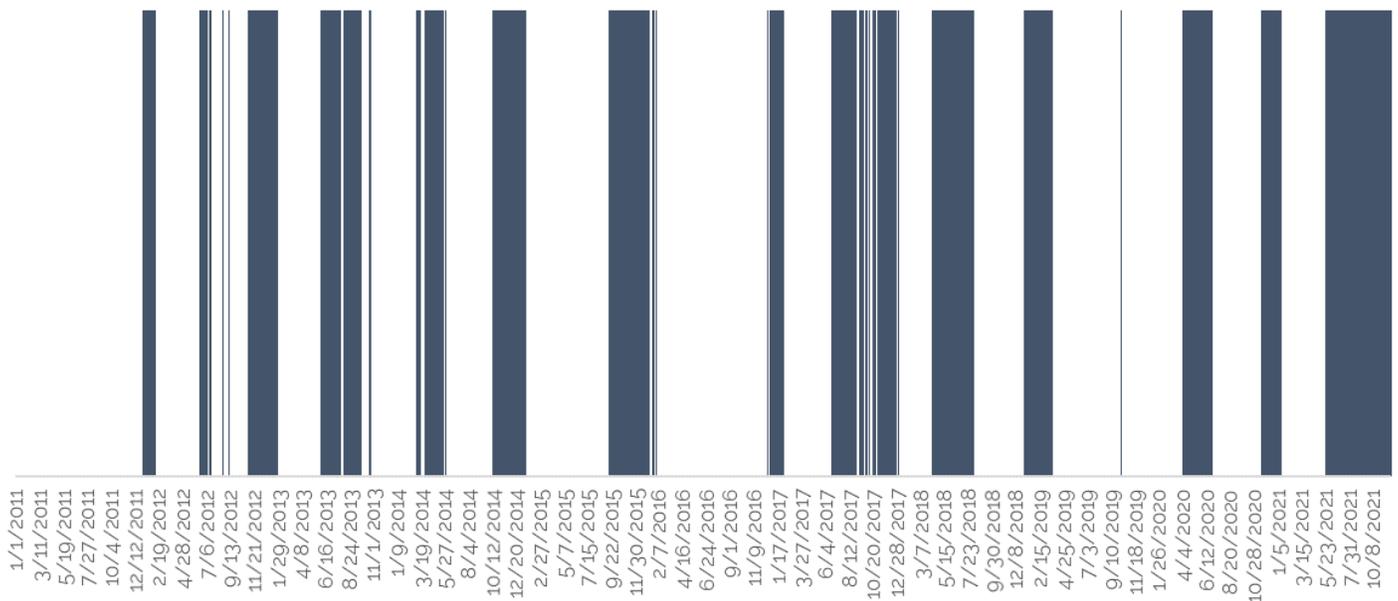
Most Recent >30 Day Triggers	Active Period S&P Return	Ann. Active Period S&P Return
05/24/2021—Present	12.81%	26.06%
11/20/2020—01/14/2021	6.22%	48.16%
04/06/2020—06/29/2020	23.24%	145.33%
12/31/2018—03/22/2019	13.23%	73.87%

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US Directional Equity Dashboard

As of November 30, 2021

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.**
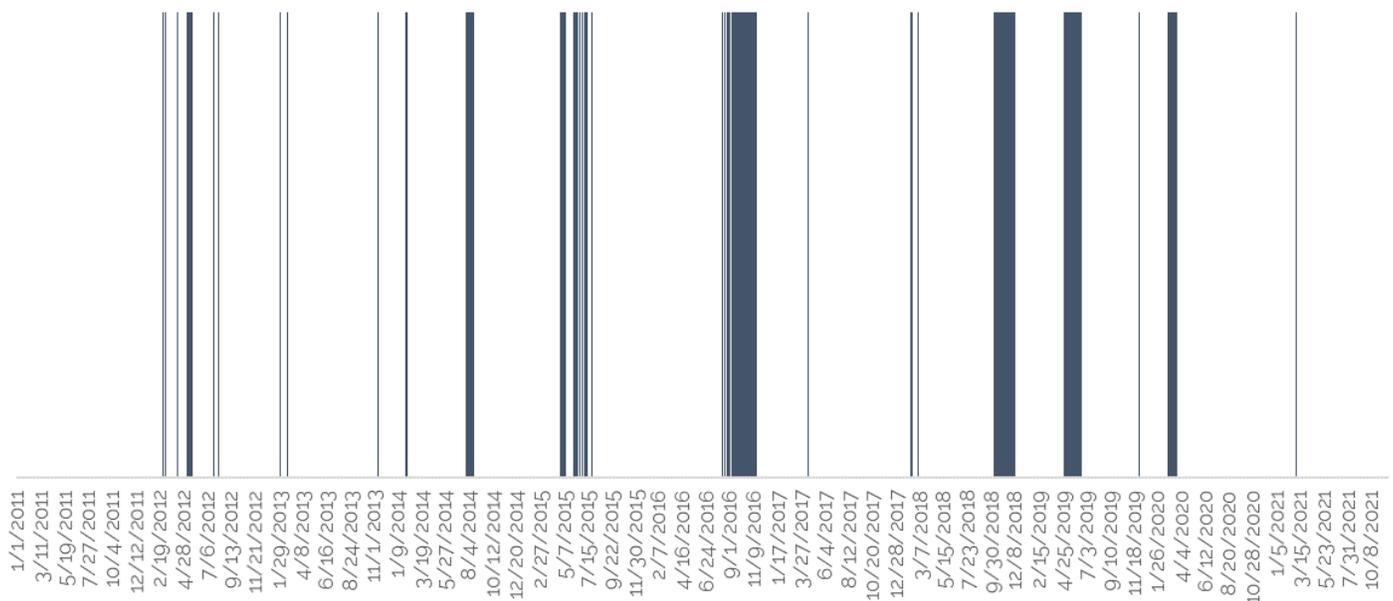
Current State	Neutral

Hist. Daily S&P Return When Active	-0.05%

Historical Signal Trigger Periods

Most Recent >30 Day Triggers	Active Period S&P Return	Ann. Active Period S&P Return
02/26/2020—03/20/2020	-26.19%	N/A
05/02/2019—06/18/2019	0.14%	1.08%
10/09/2018—12/08/2018	-8.36%	-41.21%
08/11/2016—11/15/2016	0.80%	3.04%

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US DIRECTIONAL EQUITY DASHBOARD

As of November 30, 2021

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	OVERSOLD (BULLISH)
HIST. DAILY S&P RETURN WHEN ACTIVE	0.14%

HISTORICAL SIGNAL TRIGGER PERIODS
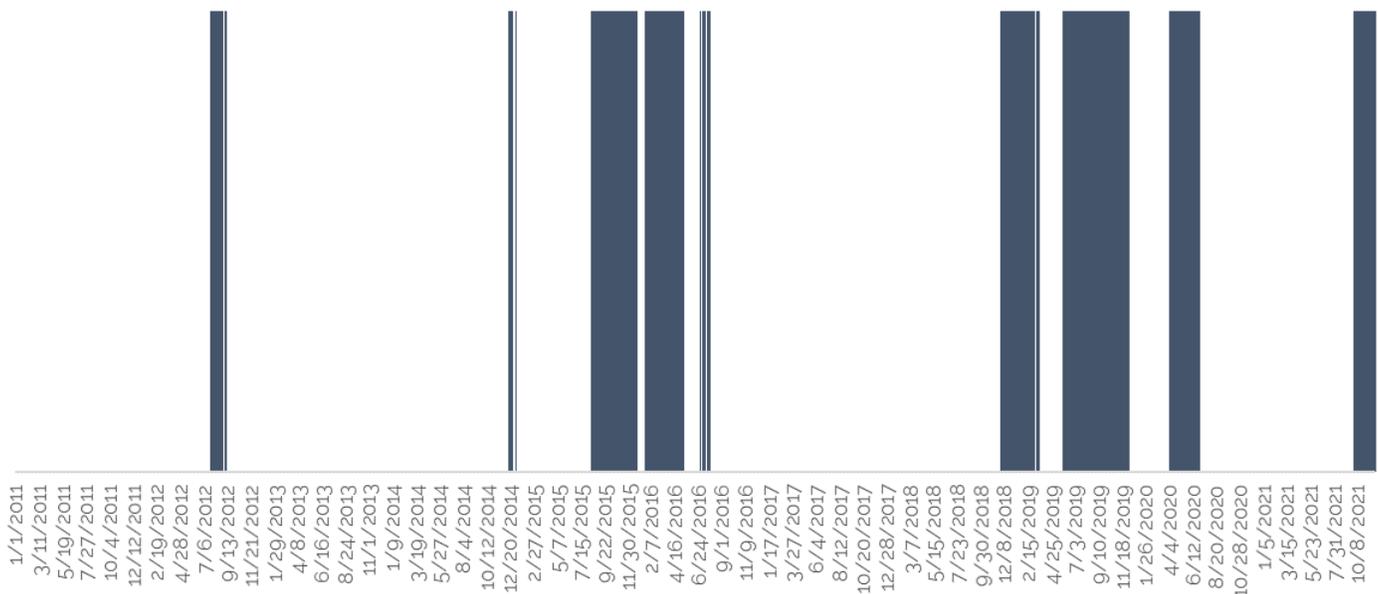
MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
09/27/2021– Present	4.73%	31.29%
04/06/2020—07/02/2020	26.38%	164.11%
05/29/2019—12/06/2019	12.74%	25.61%
11/28/2018—03/19/2019	6.21%	21.70%

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US DIRECTIONAL EQUITY DASHBOARD

As of November 30, 2021

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	NEUTRAL (NEW)
HIST. DAILY S&P RETURN WHEN ACTIVE	0.16%

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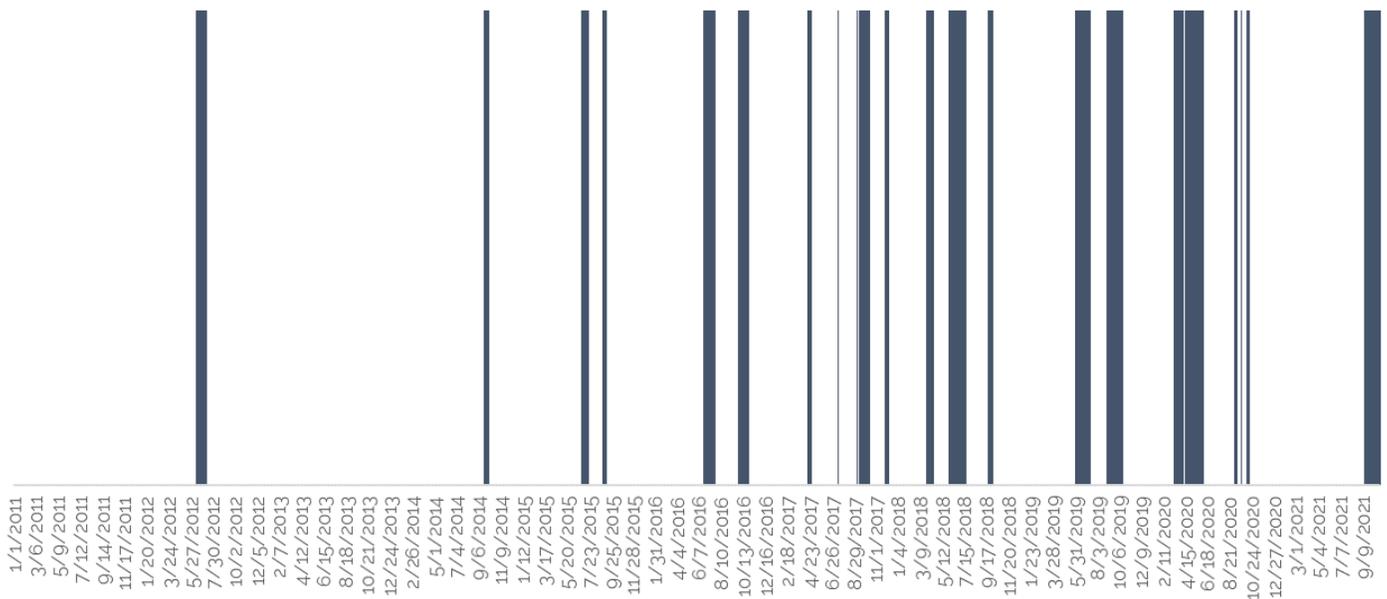
MOST RECENT >30 DAY TRIGGERS	ACTIVE PERIOD S&P RETURN	ANN. ACTIVE PERIOD S&P RETURN
09/15/2021—11/03/2021	4.36%	39.25%
03/13/2020—06/05/2020	29.39%	202.32%
08/30/2019—10/15/2019	2.58%	21.87%
05/31/2019—07/12/2019	8.33%	97.22%

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As of November 30, 2021

Central Banks Indicative News

Headline	Outlet	Link
Manchin setting up meeting with Powell over inflation	The Hill	Article Here
Wall Street Breaks New Records After Powell Nomination	Advisor News	Article Here
Corporate America's borrowing binge seen barely slowing as Federal Reserve tapers	Marketwatch	Article Here
How 'substantial' was progress for the US Federal Reserve?	Business Standard	Article Here
The Fed Begins Stepping on the Brakes	CNN	Article Here

US Equity Narrative Structure - Indicative News

Headline	Outlet	Link
The House just approved the biggest climate investment in U.S. history — now it heads to the Senate	CNBC	Article Here
Zuckerberg's Major News Adds to a Deepening Rift	NY Times	Article Here
Elon Musk says Tesla has not signed a deal with Hertz yet.	CNBC	Article Here
China's yuan jumps to 5-month high as investors cheer Biden-Xi meeting	Reuters	Article Here
Activision's Board Is Full of CEO's Old Friends	Bloomberg	Article Here
Gary Gensler's 2-and-20 Push Won't Help Hedge-Fund Investors	Washington Post	Article Here
The latest twist in the 'Great Resignation': Retiring but delaying Social Security	Washington Post	Article Here
Execs seemed confused about the metaverse on Q3 earnings calls	CNBC	Article Here
Authentic Brands Group shelves IPO, to sell $12.7 billion stake to private investors	CNBC	Article Here