



US EQUITY TREND DASHBOARD

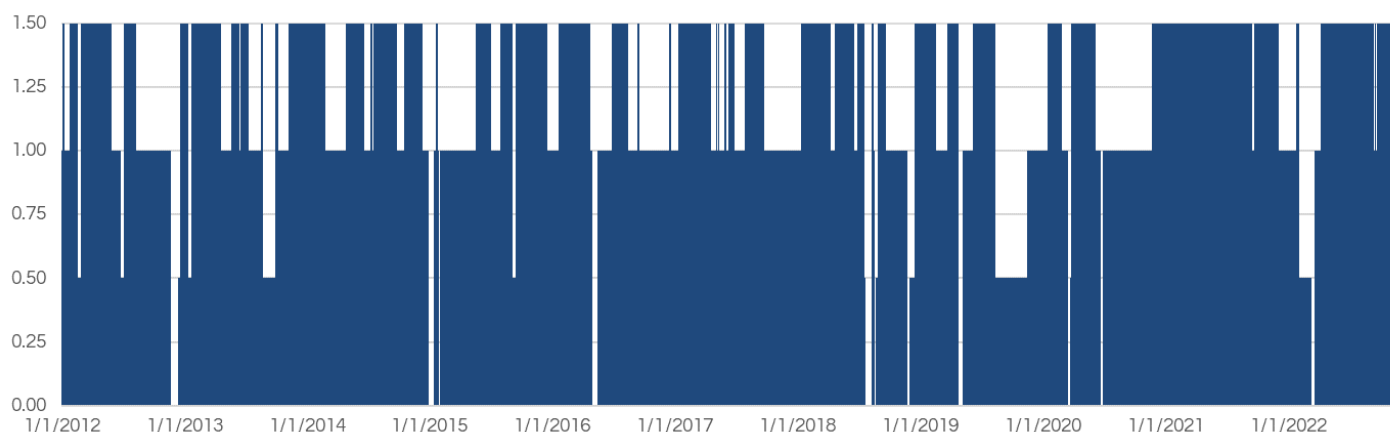
As of November 30, 2022

DIRECTIONAL EQUITY TREND

- We believe that a trending risky asset market is *inherently* a story market—sometimes the price comes first and the story is fit to it, and sometimes it's the other way around.
- For strategies which toggle directional exposure, our hypothesis is that what matters is simply the *existence* of a powerful story. A market confused about the story is generally not a directionally trending market. We think measuring those stories can inform how much risk to allocate to trend-based strategies.
- Our illustrative dashboard is simple: we toggle exposure to a hypothetical strategy going long the S&P based on a 50/25/25 mix of 12, 6 and 3-month S&P returns based on our Cheap, Expensive, Bullish and Bearish narrative archetypes. If there is a dominant narrative of **ANY** type, we overweight the index. If Cheap/Expensive or Bullish/Bearish are neutral, we underweight it.
- Our model remains in an overweight state on trend-following exposure for November.

CURRENT STATE	OVERWEIGHT (1.5X)										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Directional Equity Trend	6.2%	32.2%	22.2%	-3.9%	11.5%	24.4%	-1.9%	18.8%	2.9%	42.1%	-18.0%
US Trend Strategy	12.0%	30.8%	11.7%	-7.1%	4.6%	21.8%	0.2%	17.8%	-0.5%	27.5%	-13.4%
Difference	-5.7%	1.4%	10.6%	3.3%	7.0%	2.6%	-2.0%	1.1%	3.4%	14.6%	-4.7%

HISTORICAL SIGNAL TRIGGER PERIODS



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. The US Trend Strategy is a hypothetical strategy which attempts to simulate a common directional trend-following strategy by going long the S&P based on the total return of the S&P over 3, 6 and 12 month horizons. Those three periods are weighted as 25%, 25% and 50%, respectively, such that the strategy would have a 0% allocation to the S&P 500 if performance were negative over each period, and a 100% allocation if it were positive. 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. This is not a product and as such is not adjusted for any fees or transaction costs.



US EQUITY TREND DASHBOARD

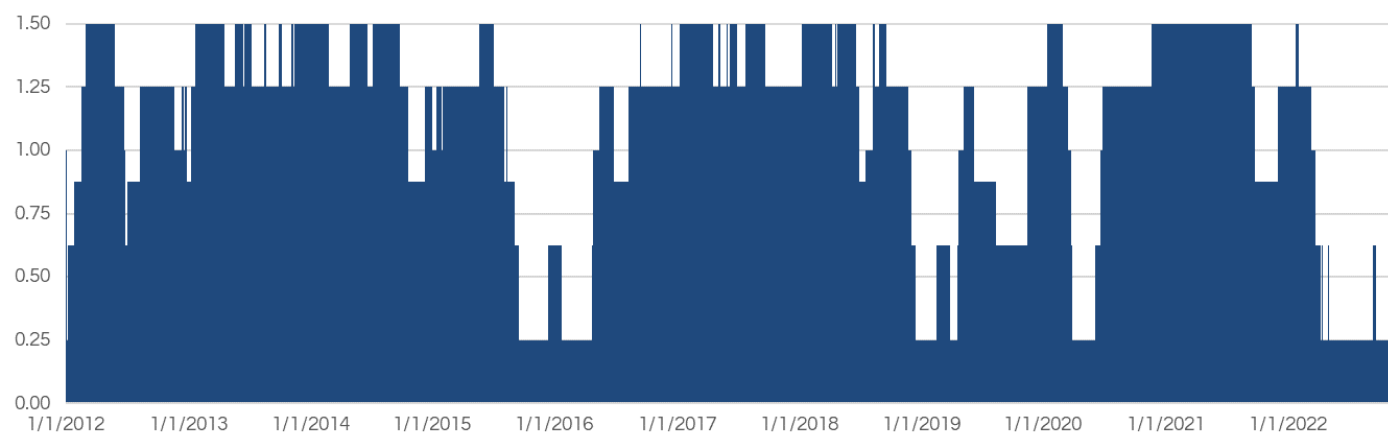
As of November 30, 2022

LONG TERM EQUITY RELATIVE MOMENTUM (12 Mo)

- For strategies which allocate among assets on a market neutral basis based on their relative momentum, the existence of *any* kind of story isn't enough. Our hypothesis is that relative momentum archetypes are bullish stories without the mean reversion implications of cheap archetypal language.
- Our dashboard is simple: we modulate exposure to a portfolio that overweights sectors with above average 12-month price momentum by allocating more when bullish archetypal language is strong and when cheap archetypal language is absent. It allocates less when bullish archetypal language is low and when cheap (i.e. mean reversion stories) archetypal language is influential.
- Our models retain a strong preference against** strategies with relative allocation among sectors based on 12-month momentum; greater expensive language density and softer bullish archetypal density have combined to make our models more skeptical about the near-term prospects for relative trend-following.

CURRENT STATE	VERY UNDERWEIGHT (0.25x)										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Modified GICS RV Mom.	10.6%	30.4%	0.8%	3.3%	-4.0%	2.5%	-3.2%	5.9%	29.5%	-24.1%	11.9%
S&P Sectors RV Mom.	4.2%	20.1%	1.4%	1.5%	-9.4%	2.7%	-3.5%	3.3%	10.2%	-16.6%	16.4%
Difference	6.4%	10.4%	-0.6%	1.8%	5.4%	-0.2%	0.3%	2.6%	19.3%	-7.5%	-4.5%

HISTORICAL SIGNAL TRIGGER PERIODS



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. The S&P Sectors RV Momentum is a hypothetical portfolio which allocates 100% long exposure equally to sectors which outperformed the S&P 500 over the last year, and 100% short exposure equally to sectors which underperformed, rebalanced daily. It is not investable. 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. This is not a product and as such is not adjusted for any fees or transaction costs.