## HedgAI Signals - 04/04/2024

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- Description/Tutorial/Disclaimer
- Buys Added: Energy \$XLE, Canadian Dollar To US Dollar Cross
- Sells Added:
- Buys Closed:
- Sells Closed:

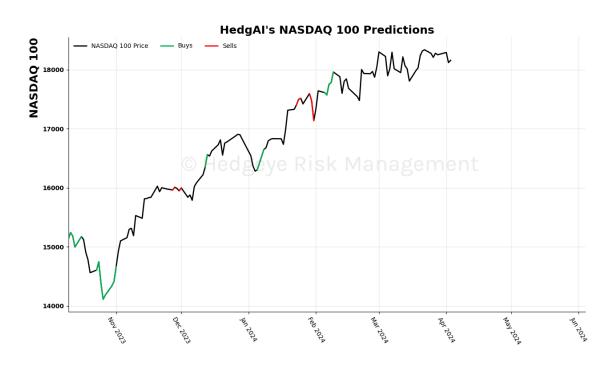
# **Top Algos Position Summary**

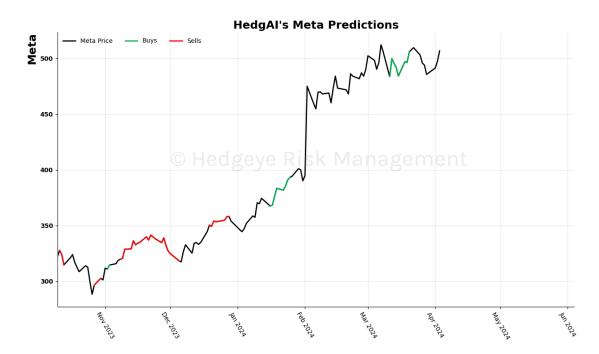
Asset	<b>Current Position</b>	Threshold	Today	1 Day Ago	2 Days Ago	3 Days Ago
NASDAQ 100	Wait and Watch	1.0	-0.86	-0.85	-0.67	-0.38
NVIDIA	Sell	0.7	-1.21	-1.37	-1.57	-1.66
Tesla	Sell	0.8	-1.01	-1.01	-0.92	-0.79
Meta Platforms	Wait and Watch	0.8	-0.06	-0.17	-0.41	-0.35
Netflix	Wait and Watch	1.0	0.2	0.09	0.13	0.1
Energy \$XLE C – e d Ø	eve Buy Sk	0.9 3	0.93	0.79	0.44	0.18
Consumer Staples \$XLP	Wait and Watch	1.0	-0.78	-0.83	-0.76	-0.61
Retail \$XRT	Wait and Watch	0.9	0.78	0.54	0.5	0.84
Steel	Wait and Watch	1.0	-0.29	-0.12	-0.99	-1.89
Uranium \$URA	Wait and Watch	0.6	-0.12	-0.12	-0.13	-0.14
Sugar	Wait and Watch	0.9	0.39	0.37	0.39	0.48
US Dollar To Yen Cross	Wait and Watch	1.0	-0.36	-0.37	-0.37	0.21
Canadian Dollar To US Dollar Cross	Buy	0.6	0.9	0.26	0.51	-0.54
UST 30yr Yield	Wait and Watch	1.0	0.83	0.7	0.62	0.56
High Yield Corp Bond \$HYG	Wait and Watch	1.0	0.34	0.18	-0.24	-0.75

# **Best Algos Performance Metrics**

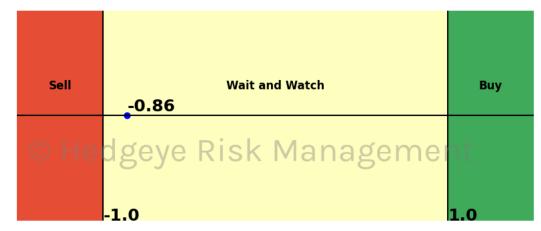
Asset	Buy Sell Batting Average	Buy Sell Win/Loss Ratio	Buy Sell Number Of Signals	Buy Only Batting Average	Buy Only Win/Loss Ratio	Buy Only Number Of Signals	Sell Only Batting Average	Sell Only Win/Loss Ratio	Sell Only Number Of Signals
NASDAQ 100	0.636	10.11	11	0.714	9.32	7 -	0.5	8.2	4
NVIDIA	0.667	2.64	9	0.714	2.41	7	0.5	1.87	2
Tesla	0.583	4.7	12	0.5	2.59	4	0.625	5.04	8
Meta Platforms	0.714	2.6	7	1.0	inf	3	0.5	1.08	4
Netflix	1.0	inf	4	1.0	inf	2	1.0	inf	2
Energy \$XLE	0.714	0.75	7	1.0	inf	3	0.5	1.19	4
Consumer Staples \$XLP	0.714	0.63		VO D1.0 $V$	a n a infra ma	ant 4	0.333	0.08	3
Retail \$XRT	0.556	1.82	Geuge	YE KIOK M	allainf, Clift	3111 3	0.333	2.21	6
Steel	0.857	2.46	7	1.0	inf	5	0.5	1.49	2
Uranium \$URA	0.857	1.14	7	1.0	inf	4	0.667	0.88	3
Sugar	0.6	1.42	5	0.0	-0.0	2	1.0	inf	3
US Dollar To Yen Cross	0.667	2.05	6	0.667	2.75	3	0.667	1.64	3
Canadian Dollar To US Dollar Cross	0.833	2.49	6	1.0	inf	2	0.75	0.78	4
UST 30yr Yield	0.5	1.04	4	0.333	0.92	3	1.0	inf	1
High Yield Corp Bond \$HYG	0.556	1.3	9	0.75	3.16	4	0.4	0.68	5

## HedgAI Signals - Asset Charts

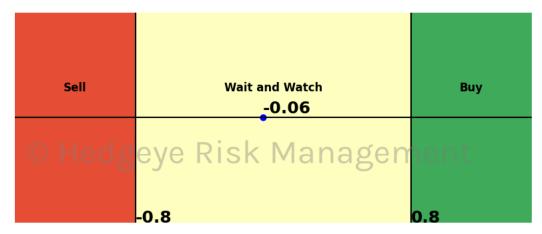


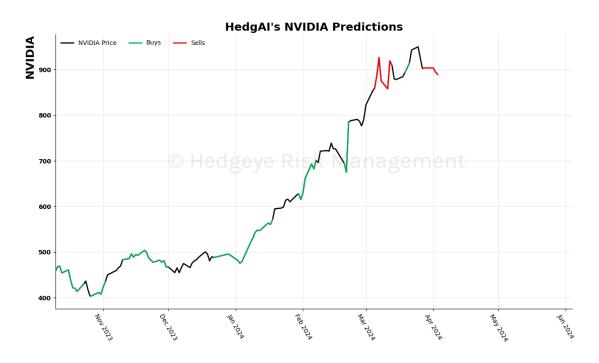


## NASDAQ 100 15 Trading Day Predictions Thresholds of 1.0 and -1.0



Meta 15 Trading Day Predictions Thresholds of 0.8 and -0.8





240

220

200

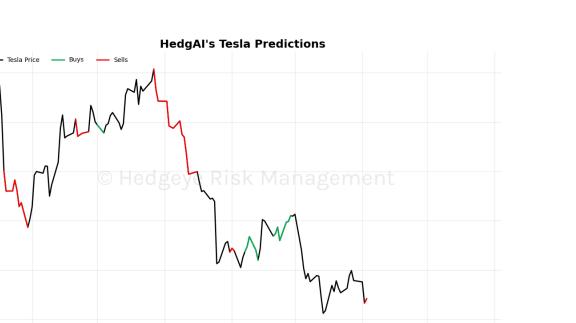
180

160

NON 202.

Dec 2023

Jan 2024



Mat 2024

May 2024

Jun 2024

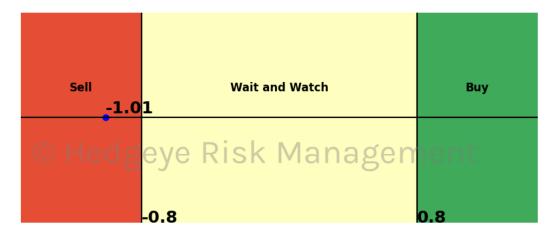
APT 2024

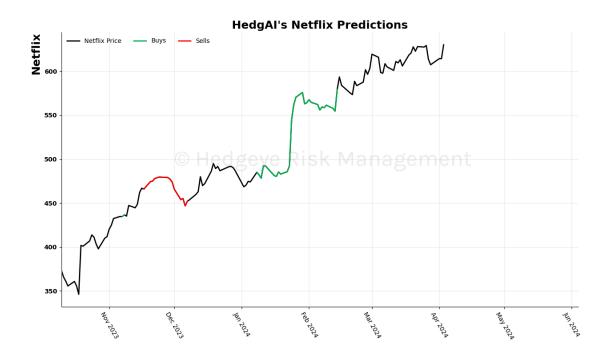
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## NVIDIA 15 Trading Day Predictions Thresholds of 0.7 and -0.7

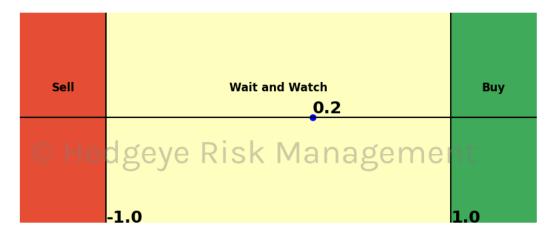


Tesla 15 Trading Day Predictions Thresholds of 0.8 and -0.8

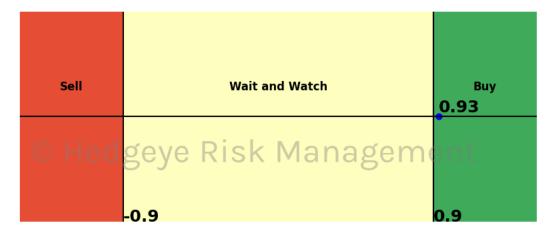


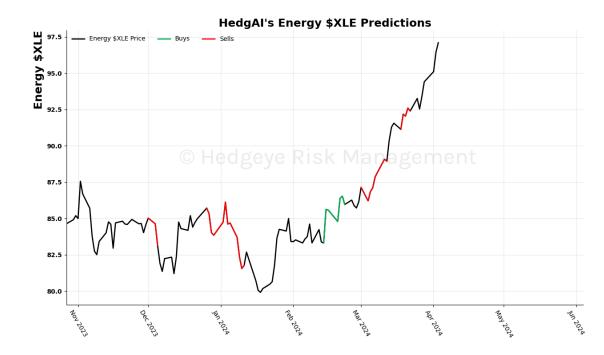


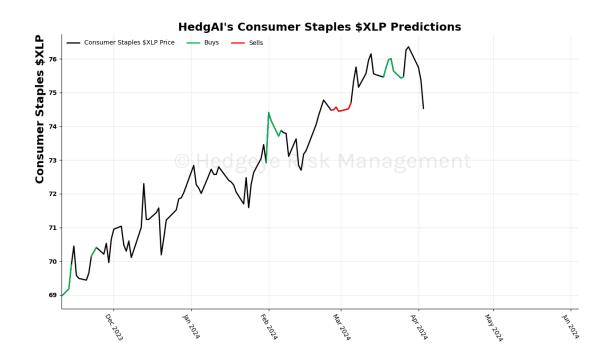
#### Netflix 15 Trading Day Predictions Thresholds of 1.0 and -1.0

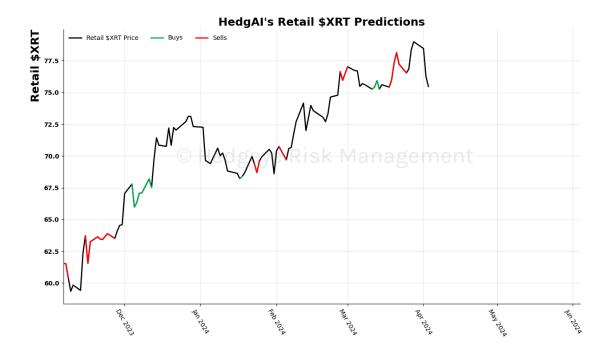


Energy \$XLE 15 Trading Day Predictions Thresholds of 0.9 and -0.9







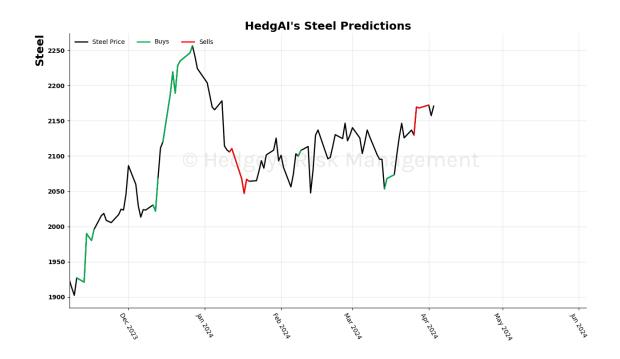


## Consumer Staples \$XLP 15 Trading Day Predictions Thresholds of 1.0 and -1.0



Retail \$XRT 15 Trading Day Predictions Thresholds of 0.9 and -0.9

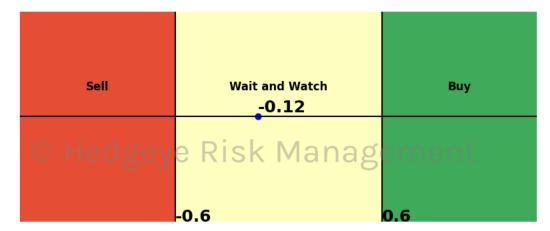


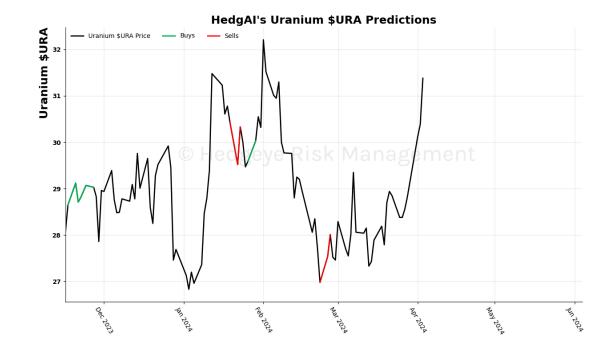


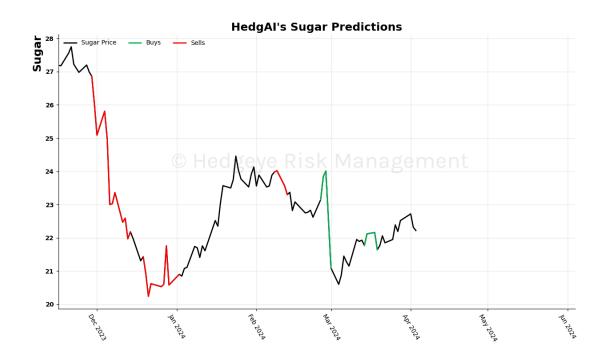
## Steel 15 Trading Day Predictions Thresholds of 1.0 and -1.0

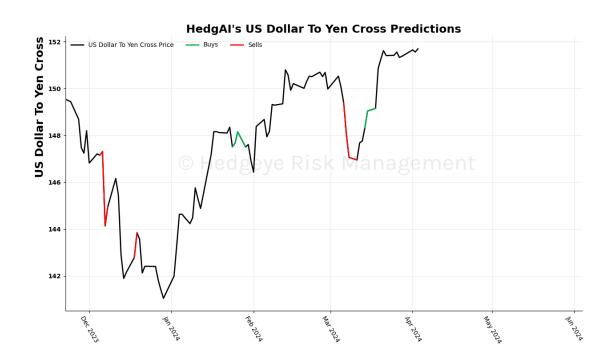


Uranium \$URA 15 Trading Day Predictions Thresholds of 0.6 and -0.6

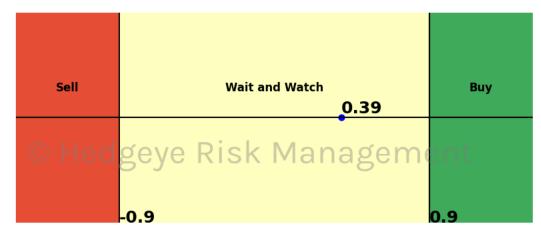






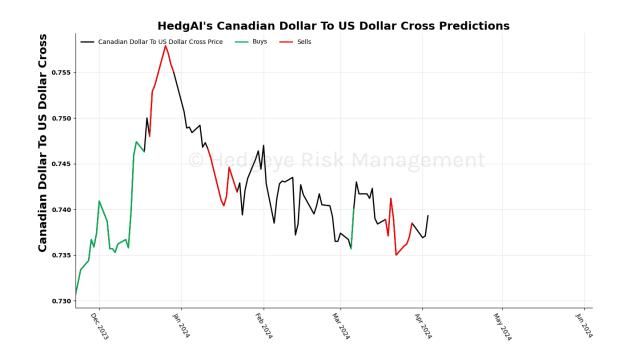


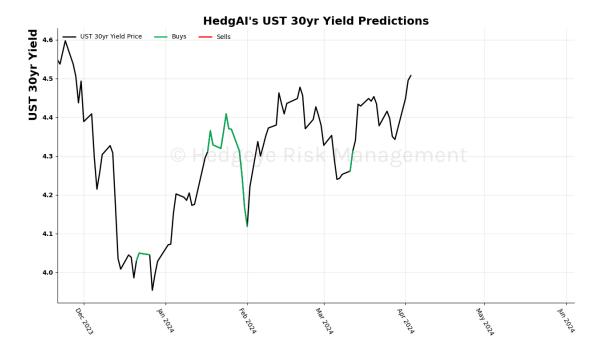
## Sugar 15 Trading Day Predictions Thresholds of 0.9 and -0.9



## US Dollar To Yen Cross 15 Trading Day Predictions Thresholds of 1.0 and -1.0





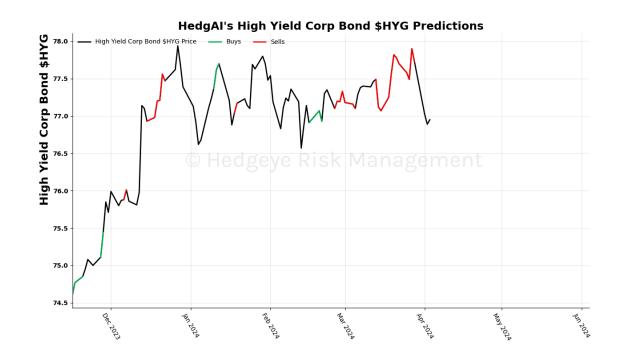


## Canadian Dollar To US Dollar Cross 15 Trading Day Predictions Thresholds of 0.6 and -0.6



UST 30yr Yield 15 Trading Day Predictions Thresholds of 1.0 and -1.0





## High Yield Corp Bond \$HYG 15 Trading Day Predictions Thresholds of 1.0 and -1.0



#### HedgAI Signals – Product Description

HedgAI Signals are simple at their core. The Signals are generated by our proprietary "HedgAI" artificial intelligence (AI) trained algorithms—applying non-linear, squared error methods—to identify relationships between past market data and desired predictive outcomes. Each HedgAI algorithm (the "Algo" or "Algos") is trained using one data set and validated and operated on a separate data set.

We have back tested each Algo against years of historical market data and have been pleased with the results. We look forward to applying #timestamps to future iterations. Please keep an eye out for that.

Current signals (Buy, Sell, and Wait and Watch) are a directional call generated by the Algos, as of the date of publication. "Wait and Watch" means the Algo for that asset does not have a directional call as of the date of publication. Signals are updated daily based on the Algos' daily predictions.

Signaling data for each asset is the result of a unique Algo designed specifically for that asset, and trained using third-party historical market data. Each market day, the Algos ingests market data and updates their signal to either a Buy, Sell or Wait and Watch. Based on proprietary calculations against historical market data, each Algo then predicts 15 trading days into the future. The resulting published Z Score is a trailing twelve-month (TTM) Z Score of the Algo's predictions.

Each asset has a unique threshold that marks the point where signals are opened and closed.

The Algo opens a Buy signal if the TTM Z Score goes above the published threshold. The Algo closes a Buy signal when the TTM Z Score dips back below the same published threshold.

The algorithm opens a Sell signal if the TTM Z Score goes below the additive inverse of the published threshold (i.e. if a threshold is 1.0, a Sell signal is opened when the TTM Z Score hits -1.0). The Sell signal is closed when the TTM Z Score goes back above the same additive inverse of the published threshold.

Wait and Watch is an output generated by the Algo when the TTM Z Score is neither above or below the published threshold or its additive inverse. During Wait and Watch periods, the Algo assumes no signal (Buy or Sell) in the asset.

#### How HedgAl Works

When HedgAl opens a Buy or Sell signal, on a given day, the Algo notes the available closing price for that same day based on third-party market data available to Hedgeye. The Algo assumes the signal remains open until the TTM Z Score dictates the signal should be closed (above the threshold for a Buy signal or below the additive inverse of the threshold for a Sell signal). The Algo records the closing price based on third-party market data available to Hedgeye on the day that the Algo selects to close the signal based on the TTM Z Score moving below the threshold for an open Buy signal, and above the additive inverse for a Sell signal.

Using an example where the asset's threshold (and additive inverse) is 1.0 and -1.0 [Day, TTM Z Score, Closing Price]:

[8/14/2023, 0.9, 11], [8/15/2023, 1.2, 10], [8/16/2023, 1.3, 12], [8/17/2023, 1.4, 10], [8/18/2023, 0.8, 9], [8/21/2023, -1.1, 10], [8/22/2023, -2.0, 11], [8/23/2023, -0.9, 7], [8/24/2023, 0.2, 9].

Using the threshold stated (remember this is different for each Algo) the signals would be as follows: The Algo would open a buy on 8/15/2023 at \$10 and close the buy on 8/18/2023 at \$9, losing 10% on its signal. The Algo would also open a sell on 8/21/2023 at \$10 and close the sell on 8/23/2023 at \$7, a 30% positive price movement on the signal.

#### Understanding Product Graphics

Every day you will be given a list of 'Buys Added', 'Sells Added', 'Buys Closed', 'Sells Closed'

#### Summary Signals

Each market day, the Summary Signals will include all signals whether "opened" or in "wait and watch", the Algo's predicted threshold, the Z Score calculation against yesterday's closing price, one day prior to yesterday's close, 2 days prior to yesterday's close and 3 days prior to yesterday's close.

Our Algos run daily analysis across a large set of assets, including those not published. Each publication will represent our top performing algos based on our interpretation of the data. Assets may be added or dropped from the published list based on our interpretation of performance. We will communicate in our daily notes when assets are added and removed.

#### Performance Metrics

The results and performance in this section represent hypothetical results and do not represent actual trades. Back test results are from all data since publication of each algo on an asset basis. Results update daily on a one-day look back as each Algo makes hypothetical signals against future third-party market data. We will update results of each Algo on an asset basis against a hypothetical environment.

Each Algo's back tested results are from the initial publish date and are broken down into three strategies: Sell Only, Buy Only, and Buy Sell.

Sell Only hypothetical results assume the model only acted on the Algo's Sell signals for a given asset. Buy Only hypothetical results assume the model only acted on the Algo's Buy signals for a given asset. Buy Sell hypothetical results assume the model acted on all signals — Buy and Sell — for the given asset. "Batting Average" calculates the hypothetical signals directional (buy/sell) accuracy by dividing the number of hypothetical signals that were directionally accurate by the total number of hypothetical signals (0.73 means that on 73% of the hypothetical signals were directionally accurate). "Win/Loss Ratio" is the average positive delta divided by the average negative delta. "Number of Trades" is the amount of hypothetical open then closed signals.

Back test results are calculated in a hypothetical environment against third-party market data and therefore, may not reflect the impact that material conditions and market factors would have had on decision-making or the impact of the timing of actual cash flows into or out of an actual portfolio. The back test and model performance does not reflect brokerage commissions, trading costs, custodian fees, taxes or any other expenses associated with actual transaction, and as such, actual investment returns would be lower.

Results have not been verified by an independent third-party. Hedgeye has not verified third-party market data and makes no representations or warranties as to either's accuracy or completeness. Results are provided for illustrative purposes only. Subscribers are expected to test the results themselves before relying upon them. Past results are not indicative of future results. See Disclaimer below for additional information.

#### Trading Day Threshold Slider Graph

Each market day, the slider chart will illustrate the Algo's current TTM Z Score in relation to the threshold for all signals.

#### Algo Signal Graph

Each market day, the Algo Signal Graph will update with the prior day's signal generated by the model. The graph starts from the signal generated the day prior to the first day of publication for each asset. Signals are not actual trades.

#### Asset Non-Stock Asset Classes Models

The Algos designed to make predictions relating to exchange-traded securities are trained and tracked based on the third-party pricing available to those securities. The Algos designed to make predictions relating to assets classes which are not exchange-traded securities, have been trained and tracked based on the following Bloomberg<sup>®</sup> Tickers. The following chart also provides one example ETF that purports to correlate to the price movement of the corresponding asset.

Hedgeye does not have any influence or control over the management of the example Related ETFs listed and is not responsible for their performance. The Algos' performance in relation to tracking price movement of an asset may vary significantly from any ETF's performance for several reasons outside of Hedgeye's control. Hedgeye does not recommend the investment in any ETF relative to another.

Asset	Bloomberg Ticker	Example Related ETF		
US 30yr yield	USGG30YR Index	TLT*		
US 10yr yield	USGG10YR Index	UST*		
US 2yr yield	USGG2YR Index	SHY*		
Russell	RTY Index	IWM		
S&P 500	SPX Index	SPY		
Nasdaq	NDX Index	QQQ		
Shanghai	SHCOMP Index	FXI		
Japan	NKY Index	EWJ		
Germany	DAX Index	EWG		
Dollar	DXY Curncy	UUP		
EUR/USD	EURUSD Curncy	FXE		
USD/YEN	USDJPY Curncy	FXY*		
GBP/USD	GBPUSD Curncy	FXB		
CAD/USD	CADUSD Curncy	FXC		
Brent Oil	CO1 Comdty	BNO		
Copper	HG1 Comdty	CPER		
Silver	SI1 Comdty	SLV		
Sugar	SB1 Comdty	CANE		
Steel	STEEL Index	SLX		
Uranium	URA US Equity	URA		
Lithium	LIT US Equity	LIT		
Wheat	W 1 Comdty	WEAT		
Palladium	XPD Curncy	PALL		
Platinum	XPT Curncy	PPLT		
Crude Oil	CL1 Comdty	USO		
Corn	C 1 Comdty	CORN		
Natural Gas	NG1 Comdty	UNG		
Soybean	S 1 Comdty	SOYB		
Gold	XAU Curncy	GLD		
Cotton	CT1 Comdty	None		
Coffee	KC1 Comdty	None		
Bitcoin	XBTUSD Curncy	BITO		

#### Disclaimer

HedgAl Signals do not represent actual trades. Hedgeye does not make, and has never made, actual trades based on the HedgAl Signals. Graphics and depictions of HedgAl Signals relative to the market are hypothetical, based third-party market data available to Hedgeye. Hedgeye has not validated third-party data. Due to the hypothetical nature of the model, all Signals and results do not take into consideration trading costs, commissions, or other factors that could impact actual trading results. Actual market conditions, including the price at which a transaction may be executed (including transaction costs), are likely to differ from information communicated through HedgAl Signals. Specifically, some models are trained off underlying asset prices movements that may not be investable instruments. ETFs purporting to track assets are managed by third-parties unaffiliated by Hedgeye. Hedgeye has not verified the price correlation between such ETFs and the underlying asset. Periods of fast markets and specific individual financial instruments' characteristics (such as liquidity, market cap and market interest) may cause significant slippage, less than ideal fills or general unavailability to execute the desired order. Hedgeye does not offer brokerage services and is not responsible for, and cannot control, a subscriber's ability or inability to achieve specific entry or exit points. Hedgeve makes no guarantee that a subscriber will have access to any or all financial instruments listed in HedgAl signals. All investments entail a certain degree of risk; shorting instruments presents increased risk and fees, including, but not limited to, additional broker fees, margin requirements, "short squeezes" and theoretical unlimited loss risk. These market conditions are outside of Hedgeye's control. Neither Hedgeye, nor any market prognosticator, can know for certain the actual price range an investable instrument can or will trade at in the future.

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Hedgeye makes no representation or warranty that past results will or can be repeated. Hedgeye relies on thirdparty data for market prices, the training of its model and in calculating price movement and other selected market indicators published with the HedgAI Signals. Hedgeye has not verified the accuracy of any third-party data. Errors in third-party data, AI computations and programming can result in false results. HedgAI algos have not been stress tested by an independent third-party.

HedgAI Signals do not include results from other Hedgeye products or services relating to these, or other, securities, and are based on market factors and strategies that may vary from other Hedgeye products and services.

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HedgAI does not include results from other Hedgeye Products or Services and may contradict other Hedgeye research including other Hedgeye signaling tools, Risk Ranges, Real-Time <u>Alerts</u> and Investing Ideas.