

Trading Strategies Summary

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The goal of this document is to outline different trading strategies implemented with the Metaculus data on the VIX, SPY, and their derivatives. Each strategy only trades 1 stock per action.

Metaculus Momentum

This simple strategy involves opening a position when the Metaculus series increases and closing the position when it decreases. This strategy only allows for one open position at a time.

	VXX	SPY
PnL	\$38.10	\$86.85
Sharpe Ratio	-2.06	-4.89

Table 1: Summary of results from 1/1/2020 to 4/1/2022

Metaculus Moving Average

This strategy involves a slow and a fast moving average indicator on the Metaculus series. For the SPY, when the fast moving average passes the slow moving average (indicating populace uncertainty), we short as we expect volatility to increase. We then close our positions when the slow moving average passes the fast one. Similarly, for the VXX, we trade using the opposite strategy. The fast moving average passing the slow one is interpreted as a signal to buy while the slow passing the fast is a signal to close the position. In both cases, if the position is open for a pre-determined hold period, it is immediately closed. We ran optimization on the slow, fast, and hold-periods to find the following results:

	VXX	SPY
Slow Moving Average	67	50
Fast Moving Average	8	16
Hold Period	7	17
PnL	\$80.10	\$100.28
Sharpe Ratio	-3.37	-1.33

Table 2: Summary of results from 1/1/2020 to 4/1/2022

Metaculus Bollinger Bands