

Harbor Commodity All-Weather Strategy ETF

Quantix Commodities LP

Subadvisor Since 02/09/2022

Investment Philosophy

The Harbor Commodity All-Weather Strategy ETF (HGER) seeks to provide investment results that correspond, before fees and expenses, to the performance of the Quantix Commodity Index (the "Index"). The Index is composed of futures contracts on physical commodities and is constructed using Quantix's proprietary quantitative methodology, which considers a commodity's relative inflation sensitivity and the relative cost of holding a "rolling" futures position in the commodity (as described below).

Under normal market conditions, the Index contains at least 15 U.S. dollar-denominated commodity futures traded on exchanges in the United States and United Kingdom. A commodity futures contract is a legal agreement to buy or sell a particular commodity (for example, metals, oil or agricultural products) at a predetermined price at a specified time in the future.

Portfolio Managers



Matthew Schwab

Ticker: HGER
CUSIP: 41151J505
Net Expense Ratio: 0.68%
Gross Expense Ratio: 0.68%
Total Net Assets: \$70,774,849
Benchmark Name: Quantix Commodity Index

WEIGHTS & PERFORMANCE

As of 03/31/2023

Commodity Sector Weights				
Commodity Sector	Commodity	Ticker	Facility	Daily Weight %
Precious	Gold	GCM3	CME	34.17
Petroleum	Brent Crude Oil	CON3	ICE	12.98
Petroleum	RBOB Gasoline	XBN3	CME	9.58
Industrial	Aluminum	LAN23	LME	5.76
Industrial	Comex Copper	HGN3	CME	5.56
Petroleum	Heating Oil	HON3	CME	4.94
Industrial	Zinc	LXN3	LME	4.79
Grains And Soybean Products	Corn	C N3	CME	3.77
Petroleum	Gasoil	QSN3	ICE	3.71
Grains And Soybean Products	Soybeans	S N3	CME	3.39
Industrial	Nickel	LNN3	LME	2.62
Softs	Sugar	SBN3	ICE	2.29
Grains And Soybean Products	Bean Oil	BON3	CME	2.12
Precious	Silver	SIN3	CME	2.00
Petroleum	WTI Light Crude Oil	CLN3	CME	1.91

Average Annual Returns

	3 Months	YTD	1 Yr.	3 Yr.	5 Yr.	10 Yr.	Since Inception	Inception Date
Harbor Commodity All-Weather Strategy ETF (NAV)	0.68%	0.68%	-2.48%	N/A	N/A	N/A	9.86%	02/09/22
Harbor Commodity All-Weather Strategy ETF (Market)	0.50%	0.50%	-2.40%	N/A	N/A	N/A	9.95%	02/09/22
Quantix Commodity Total Return Index	1.12%	1.12%	-0.70%	N/A	N/A	N/A	11.73%	02/09/22
Bloomberg Commodity Index Total Return(SM)	-5.36%	-5.36%	-12.49%	N/A	N/A	N/A	-0.64%	02/09/22

Performance data shown represents past performance and is no guarantee of future results. Past performance is net of management fees and expenses and reflects reinvested dividends and distributions. Investment returns and principal value will fluctuate and when redeemed may be worth more or less than their original cost. Returns for periods less than one year are not annualized. Current performance may be higher or lower and is available through the most recent month end at harborcapital.com or by calling 800-422-1050.

Shares are bought and sold at market price not net asset value (NAV). A fund's NAV is the sum of all its assets less any liabilities, divided by the number of shares outstanding. Market price returns are based upon the closing composite market price and do not represent the returns you would receive if you traded shares at other times.



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Market in Review

Macroeconomic crosscurrents created a challenging investing environment in the first quarter of 2023. Conflicting signals have generated significant turbulence for the U.S. Federal Reserve (“Fed”) as it attempts to navigate a “soft landing.” Overall, investors have had to “fasten their seatbelts” due to unstable economic conditions.

These macro effects drove big price swings in commodities. In January, the belief that rates had neared their peak led to buoyant commodity markets (apart from natural gas) for most of the month. Then, persistently strong inflation data and a hawkish Fed dampened this optimism in February, leading to moderate declines. In March, we saw the first significant signs of rate-induced financial stress feed into the market through well-publicized bank failures, leading investors to dump commodities (particularly crude oil) in a major way.

Commodity markets, as measured by the Bloomberg Commodity Index Total Return (“BCOMTR”) were negative during the first quarter, down -5.36%. More than two-thirds of these losses came in U.S. natural gas, as an exceptionally warm winter meant that concerns about not having enough supply quickly turned to concerns about oversupply.

Gold, on the other hand, told another story. Since the Global Financial Crisis, the path of real rates has been a reliable signal for the price of gold. As real rates rose, the price of gold fell, and vice versa. Given the rapid nominal rate hikes witnessed in 2022, real rates rose dramatically and should have led to a precipitous decline in the price of gold. However, that did not happen. Instead of dropping, gold prices remained steady throughout the year.

The reason for this relative strength was discovered early this year: massive central bank demand. In 2022, central banks bought a record 1,136 tons of gold worth around \$70 billion — by far the most purchased since 1950 — according to the World Gold Council.

Portfolio Performance

During the first quarter, the Harbor Commodity All-Weather Strategy (HGER) ETF (“ETF”) returned 0.68% at NAV (net asset value), underperforming its benchmark, the Quantix Commodity Index (QCI), which returned 1.12%.

The main impact on HGER’s performance was the market’s perception of how far along the Fed is in its monetary tightening policy. The belief that this cycle was nearing an end drove the rally at the start of the quarter, however, that belief soon faded as the quarter went on to deliver higher-than-expected inflation data.

On a relative basis, the Soft and Petroleum sectors detracted from HGER’s performance, while having no position in natural gas contributed to performance. A higher weight in the Precious Metals sector also helped. in.

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Contributors & Detractors

On a sector basis, Petroleum, Grains, and Industrial Metals detracted from returns, while Precious Metals and Softs contributed positively to returns.

The largest individual detractors from performance were nickel, Brent crude oil, and heating oil — all three were impacted by fears of reduced demand, as stronger inflation data in February led the market to reprice. In addition, the stress in the banking system in March, which led to Silicon Valley Bank and Signature Bank closings, spilled over into other risk assets. This led investors to reduce positions in commodities, crude oil in particular.

Gold was the largest individual contributor to performance, as real rates continued to decline, and the U.S. dollar weakened. Gold was the biggest holding in the QCI, having been increased in the fourth quarter of 2022 amid further signs that the debasement theme was growing more important than the scarcity theme.

Buys & Sells

HGER aims to track the QCI, which rebalances on a quarterly basis. During rebalances, the index methodology considers the latest inflation data as well as the cost to hold and roll each commodity. It also considers whether inflation is more likely to come from a scarcity or a debasement environment and adjusts the weight of gold relative to consumable commodities accordingly.

In the fourth quarter rebalance, which was calculated in December 2022 and implemented in the roll in the first half of January 2023, the weight in the Precious Metals sector (gold and silver) was reduced while the weight in Base Metals (aluminum, nickel, zinc, and copper) was increased, as was the weight in Petroleum (gasoline and Brent crude oil). The Grains sector remained at approximately the same weight, while the weight in Kansas City wheat was reduced and soybeans and corn increased.

These changes were primarily reflective of the change in the shape of the futures curves (for example, Brent crude oil moved more into backwardation, potentially generating a positive roll yield), as well as the reweighting mechanics of the index.

Outlook

The index methodology of QCI is rules-based and therefore does not incorporate Quantix's discretionary views. However, broadly speaking, events of the first quarter have proven that the flight path to a soft landing for the economy continues to remain unclear. The decision by U.S. regulators to provide emergency liquidity to stabilize regional banks may have avoided a crash landing, but in doing so, we believe it simultaneously ensured more "circling of the airfield" in continuing hazardous conditions.

It is only natural for investors to fixate on every bump on this flight. However, Quantix believes the best opportunity will be revealed by stepping back and focusing on what the environment will look like once markets "deplane." The structural themes of deglobalization and decarbonization will be present wherever and whenever the plane touches down, and we believe will be supportive for commodity markets for the foreseeable future.

Crude oil may be in deficit in the second half of the year, especially if demand from China's economic reopening continues to pick up.

Within the latest QCI rebalance in March, there were multiple changes on an individual commodity basis as the index responded to the changing shapes of futures curves. The weight to the Grains and Softs sectors increased, while the weight to the Precious Metals and Base Metals sectors decreased.

Risks

Investing involves risk, principal loss is possible. Unlike mutual funds, ETFs may trade at a premium or discount to their net asset value. Harbor ETFs are new and have limited operating history to judge.

There is no guarantee that the investment objective of the Fund will be achieved. Stock markets are volatile and equity values can decline significantly in response to adverse issuer, political, regulatory, market and economic conditions. A non-diversified Fund may invest a greater percentage of its assets in securities of a single issuer, and/or invest in a relatively small number of issuers, it is more susceptible to risks associated with a single economic, political or regulatory occurrence than a more diversified portfolio.

Commodity Risk: The Fund has exposure to commodities through its and/or the Subsidiary's investments in commodity-linked derivative instruments.

Authorized Participant Concentration/Trading Risk: Only authorized participants ("APs") may engage in creation or redemption transactions directly with the Fund.

Commodity-Linked Derivatives Risk: The Fund's investments in commodity-linked derivative instruments (either directly or through the Subsidiary) and the tracking of an Index comprised of commodity futures may subject the Fund to significantly greater volatility than investments in traditional securities.

Benchmarks

The Quantix Commodity Total Return Index ("QCI") is calculated on a total return basis, which combines the returns of the futures contracts with the returns on cash collateral invested in 13-week U.S. Treasury Bills. This unmanaged index does not reflect fees and expenses and is not available for direct investment. The Quantix Commodity Index was developed by Quantix Commodities LP and is owned by Quantix Commodities Indices LLC.

The Bloomberg Commodity Index measures the performance of future contracts on physical commodities which traded on US exchanges and London Metal Exchange. The commodity weightings are based on production and liquidity, subject to weighting restrictions applied annually. This unmanaged index does not reflect fees and expenses and is not available for direct investment.

Disclosures

Expense ratio information is as of the Fund's current prospectus, as supplemented. Gross expenses are the Fund's total annual operating expense.

This information should not be considered as a recommendation to purchase or sell a particular security. The weightings, holdings, industries, sectors, countries, and returns mentioned may change at any time and may not represent current or future investments.

As a result of changing market conditions, total net asset levels, expenses and other statistics may change at any time and may differ from those shown.

The total amount shown for sector, industries, or country holdings may be greater than 100% because of the inclusion of derivatives and the collateral securities supporting those instruments.

Views expressed herein are drawn from commentary provided to Harbor by the subadvisor and may not be reflective of their current opinions or future actions, are subject to change without prior notice, and should not be considered investment advice.

Quantix derives a Quality Score for each commodity based on Inflation Sensitivity and Roll Yield Return. The Quality Score is determined based on the sensitivity of a commodity futures contract to inflation. The Quality Scores rank higher those commodity futures contracts in the Eligible Universe that show a higher sensitivity to inflation or a lower cost of holding a rolling futures position using a proprietary Quality Score framework.

Investors should carefully consider the investment objectives, risks, charges and expenses of a fund before investing. To obtain a summary prospectus or prospectus for this and other information, visit harborcapital.com or call 800-422-1050. Read it carefully before investing.

Quantix Commodities LP ("Quantix") is a third-party subadvisor to the Harbor Commodity All-Weather Strategy ETF.

Foreside Fund Services, LLC is the Distributor of the Harbor ETFs.

Definitions

Roll is adjusting a short-term contract into a longer-term contract.

Scarcity is when the demand for a good or service is greater than the availability of the good or service.

Debasement refers to lowering the value of a currency.

Backwardation is when the current price of an underlying asset is higher than prices trading in the futures market.

Roll yield is the return from adjusting a futures position from one futures contract to a longer-dated contract.