Derivative Strategies ETF Report

June 2024

Main Principles Behind Global X’s Classification System for Derivative-Based Strategies

Principle 1

The product must utilize derivatives as a core component of its investment strategy. This does not necessarily mean that derivatives must make up the majority of the ETF’s portfolio. However, derivatives must serve a key purpose in achieving the investment objective stated in the ETF’s prospectus.

Principle 2

The derivative-based strategy can be utilized over a long-term period from the standpoint that it is able to be used tactically, for temporary exposure to express a market view, or within a strategic allocation. Strategies whose core objective is to be a daily trading tool will most likely not be considered for inclusion.

Principle 3

The strategy must use derivatives as a means to achieve 1 or more of the 3 main use cases of derivatives by either buying or selling short a specific type of derivative:

a. Risk Management
b. Derivative Income
c. Performance Enhancement

The Four Layers of the Global X Classification System for Derivative-Based Strategies

Layer 1 – Derivative Objective

Representing the broadest layer, this gives an understanding as to the core objective of the fund, utilizing the 3 derivative use cases of either Risk Management, Derivative Income, or Performance Enhancement.

Layer 2 – Derivative Strategy

This layer will provide investors the means by which the investment objective is being pursued. For example, an ETF that utilizes derivatives with a risk management objective can be generated using either a tail risk strategy to provide a level of downside protection or a collar strategy to provide a range-bound return outcome.

Layer 3 – Derivative Overlay

This layer describes the specific types of options positions or options packages being used to achieve the stated strategy. For example, an equity tail risk strategy on the S&P 500 may potentially be achieved by either purchasing a protective put option on this index or with a long position on VIX options.

Layer 4 – Derivative Tactic

This final layer helps to communicate to investors any unique considerations regarding the options overlay being used. For example, a strategy offering synthetic exposure may be access vehicles to a type of option or options strategy that is meant to offer investors the ability to implement their own hedges within a portfolio allocation.

Defining & Categorizing Derivative-**Based Strategies: Global X's Classification System**

All strategies within the Global X classification system have a Derivative Objective (Layer 1). However, it should be noted that some strategies may not have additional layer classifications, dependent on the usage of options within the ETF's strategy.

<table>
<tr><th>Derivative Objective (Layer 1)</th><th>Derivative Strategy (Layer 2)</th><th>Derivative Overlay (Layer 3)</th><th>Derivative Tactic (Layer 4)</th></tr>
<tr><td rowspan="8">Derivative Income</td><td rowspan="2">BuyWrite</td><td>Covered Call</td><td></td></tr>
<tr><td>Covered Call & Growth</td><td></td></tr>
<tr><td>PutWrite</td><td>Barrier Options</td><td></td></tr>
<tr><td rowspan="2">Futures-Based Income</td><td>Index Dividend Futures</td><td></td></tr>
<tr><td>VIX Futures Premium</td><td></td></tr>
<tr><td>Risk Managed Income</td><td>Net-Credit Collar</td><td></td></tr>
<tr><td rowspan="2">Spread Strategy</td><td>Bear Call Spread</td><td></td></tr>
<tr><td>Bull Put Spread</td><td></td></tr>
<tr><td rowspan="5">Performance Enhancement</td><td rowspan="3">Economic Leverage</td><td>Long Call Options</td><td></td></tr>
<tr><td>Futures</td><td></td></tr>
<tr><td>Total Return Swap</td><td></td></tr>
<tr><td rowspan="2">Spread Strategy</td><td>Bull Call Spread</td><td>>100% Notional Coverage</td></tr>
<tr><td>Bull Put Spread</td><td></td></tr>
<tr><td rowspan="14">Risk Management</td><td rowspan="2">Collar Strategy</td><td>Put Spread Collar</td><td>Defined-Outcome</td></tr>
<tr><td>Protective Collar</td><td>Defined-Outcome</td></tr>
<tr><td>Credit Hedge</td><td>OTC Credit Derivatives</td><td></td></tr>
<tr><td rowspan="2">Inflation Hedge</td><td>Inflation Swaps</td><td></td></tr>
<tr><td>Yield Curve Options</td><td></td></tr>
<tr><td rowspan="2">Interest Rate Hedge</td><td>Interest Rate Swaps</td><td></td></tr>
<tr><td>Swaptions</td><td>Synthetic Exposure</td></tr>
<tr><td>Spread Strategy</td><td>Bull Call Spread</td><td></td></tr>
<tr><td rowspan="5">Tail Risk</td><td>Fixed Income + Synthetic Equity</td><td></td></tr>
<tr><td>Long Put Options</td><td></td></tr>
<tr><td>Protective Put</td><td></td></tr>
<tr><td>Protective Put Spread</td><td></td></tr>
<tr><td>VIX Hedge</td><td></td></tr>
<tr><td>PutWrite</td><td></td><td></td></tr>
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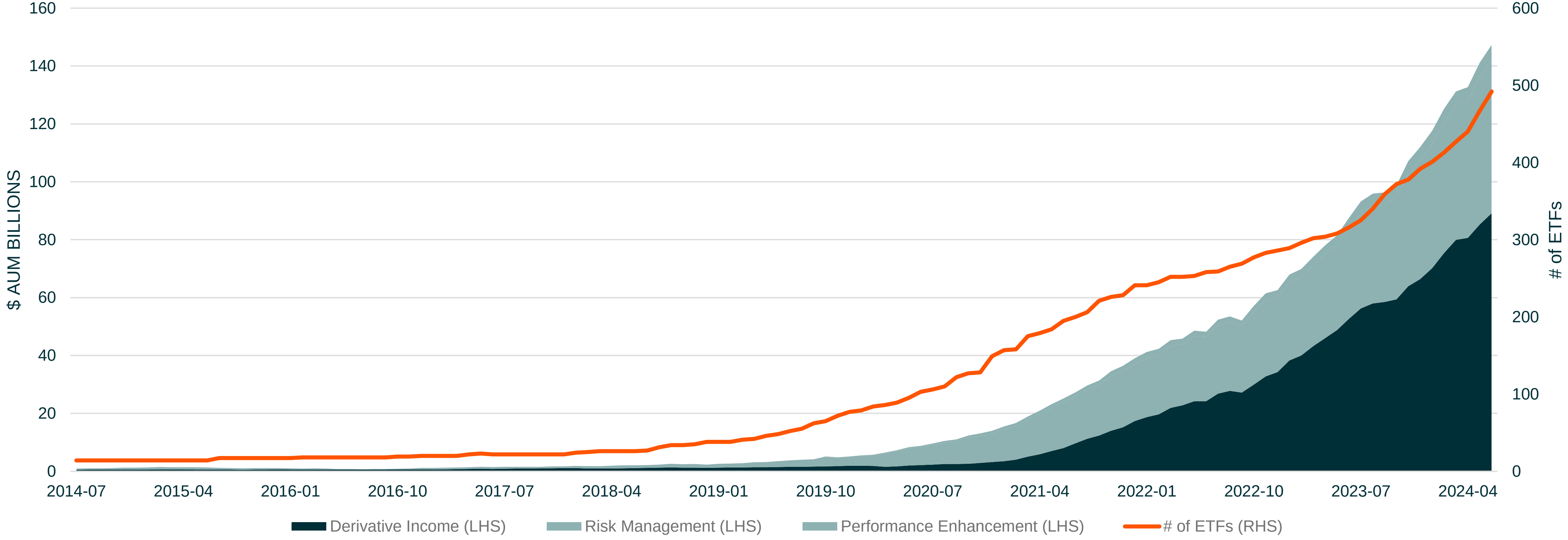
GLOBAL X
by Mirae Asset

Derivative Strategy ETF Landscape

At the end of June 2024, there were a total of 489 Derivative Strategy ETFs in operation within the U.S, governing roughly $147B in assets under management (AUM). This asset balance is representative of roughly 68% growth, year over year, and it reflects the increasing share of Derivative-based Risk Management Strategies as a portion of the total in the second quarter, when AUM for that particular objective increased approximately 14%, to about $52.9 billion.



Source: Global X ETFs, Morningstar Direct. Data measured from July 1, 2014 to June 30, 2024.

Note: AUM includes assets of funds closed until the last month of trading activity

Fund Flows Across the Derivative ETF Landscape Accelerated in the Second Quarter

Following a sharp rise in market values heading into 2024, investors expressed somewhat of a mixed attitude toward risk in the first quarter with commitments toward Risk-Management strategies decelerating and the Performance Enhancement category experiencing negative flows, as well. In the second quarter, however, these portions of the derivative ETF space underwent a commensurate rebound, while the Derivative Income category recognized its highest quarterly net flow of all time, at about $10.2 billion.

Derivative Strategy ETF Landscape By Category

Flows By Category

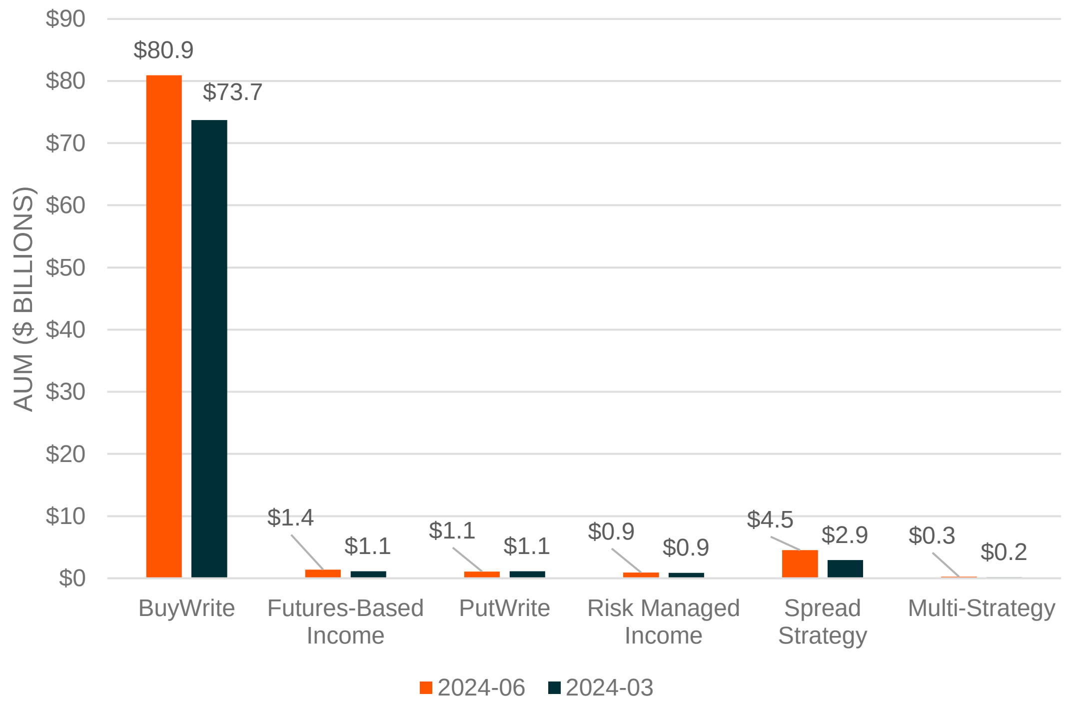
Source: Global X ETFs, Morningstar Direct. As of June 30th, 2024.

Note: AUM includes assets of funds closed until the last month of trading activity

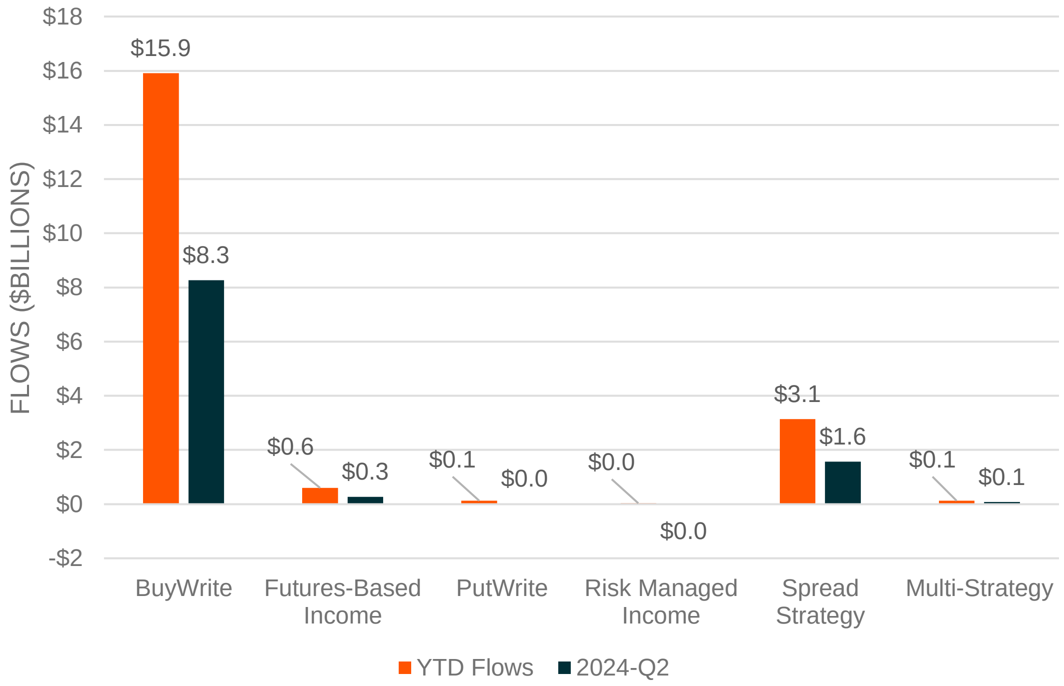
Derivative Income Landscape Update

Buywrite strategies have historically represented the largest growth driver of assets within the Derivative Income category. This is a function of Buywrite ETFs making up some 64% of the fund total within the space. The gap between Buywrite strategies and the field grew even wider in the second quarter, however, with 10 Buywrite ETF launches taking place compared to 17 for the Derivative Income strategy on the whole. Still, flows toward Futures-Based Income, Spread Strategies, and Multi-Strategies all accelerated during the second quarter.

Derivative Income ETF Landscape By Strategy



Flows By Strategy



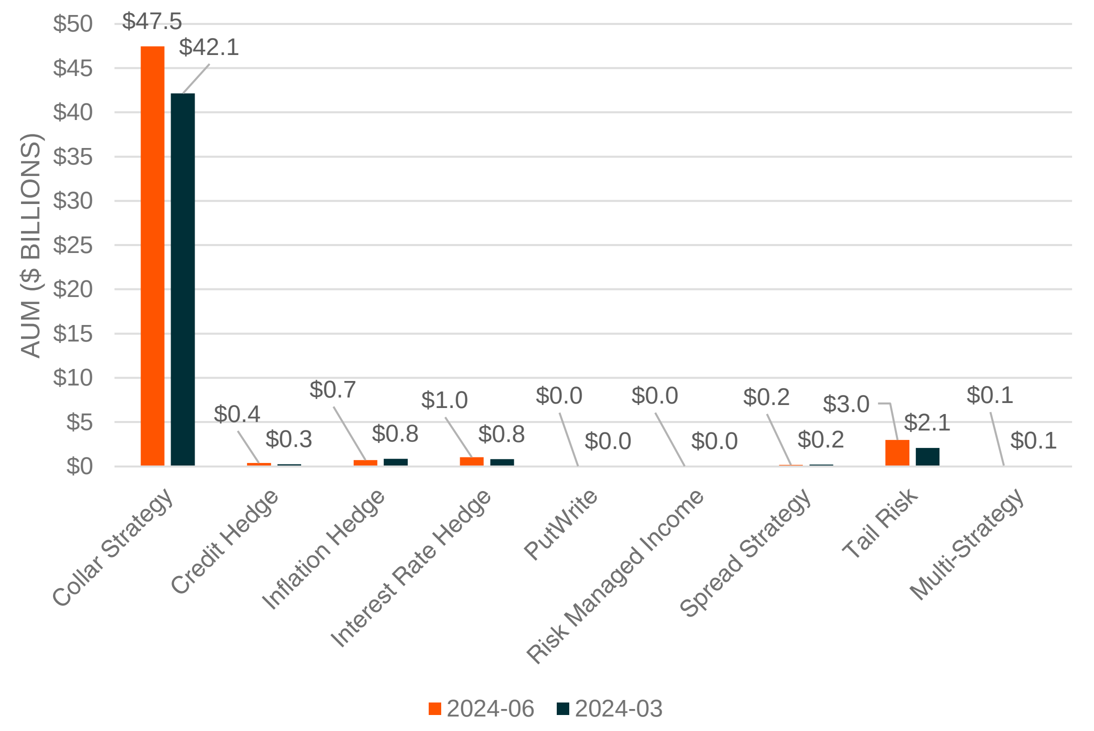
Source: Global X ETFs, Morningstar Direct. As of June 30th, 2024.

Note: AUM includes assets of funds closed until the last month of trading activity

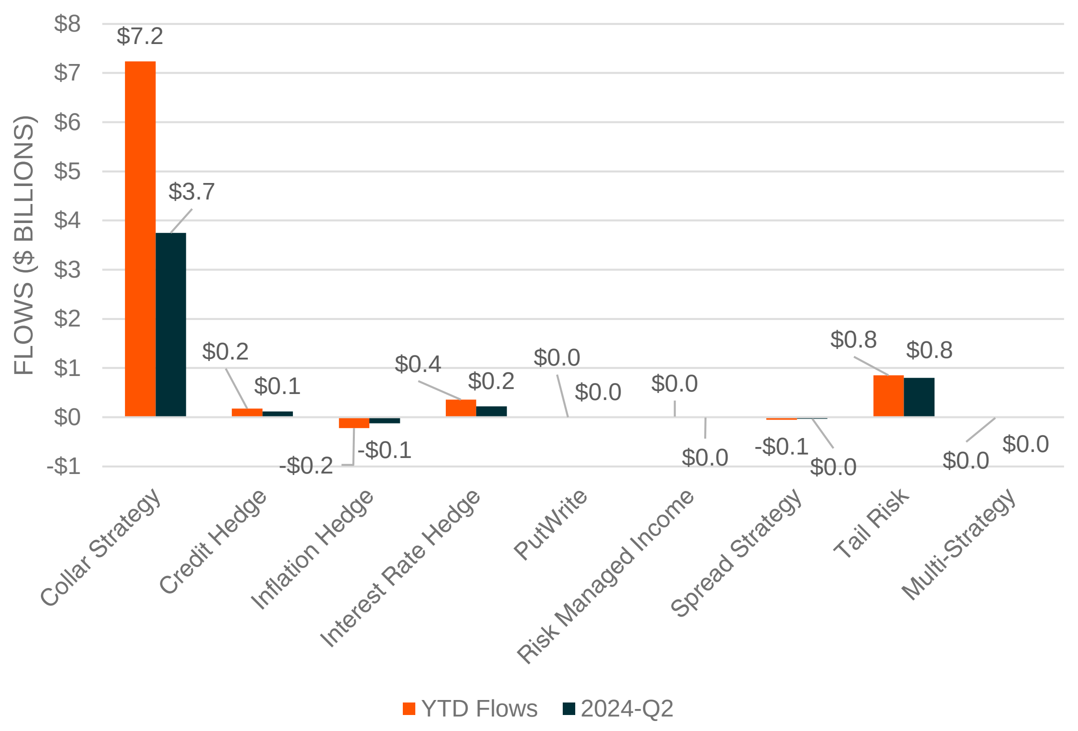
Risk Management Landscape Update

With Collar strategies accounting for such a material portion of the assets allocated toward the Risk Management objective, funds that operate these types of strategies often represent the benchmark by which the objective will perform. For the second-consecutive quarter, however, flows to the category were subdued, on a relative basis. This supports the sentiment that investors remain bullish on equity price appreciation potential. It also outlines the likelihood that they are instead pursuing derivative income opportunities to potentially lower their portfolio betas.

Risk Management ETF Landscape By Strategy



Flows By Strategy



Source: Global X ETFs, Morningstar Direct. As of June 30th, 2024.

Note: AUM includes assets of funds closed until the last month of trading activity

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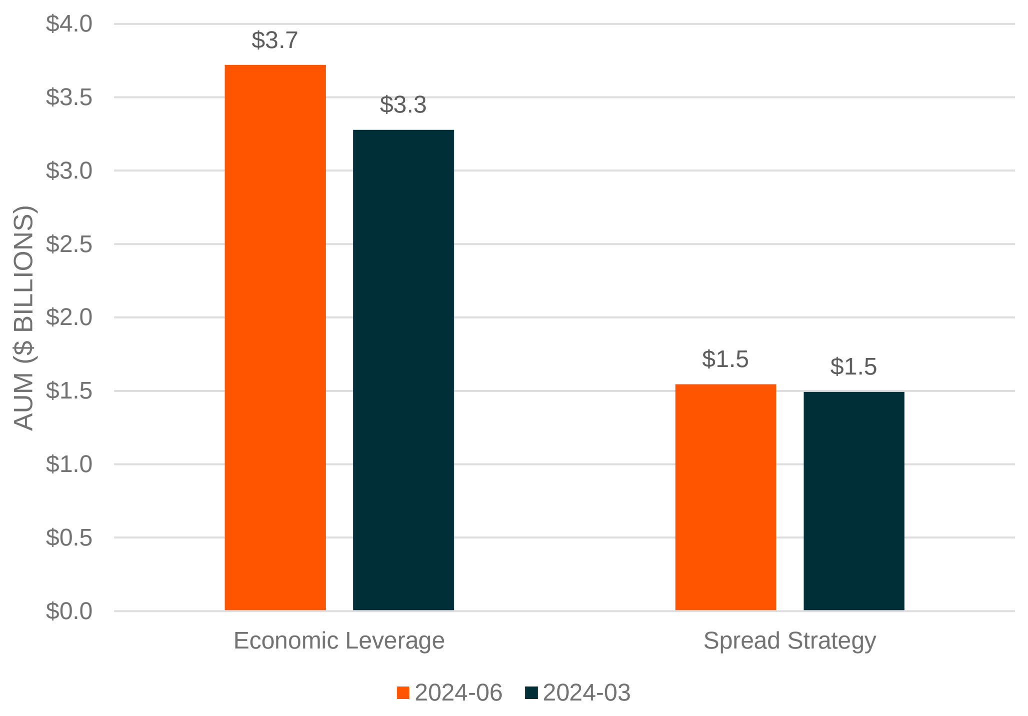
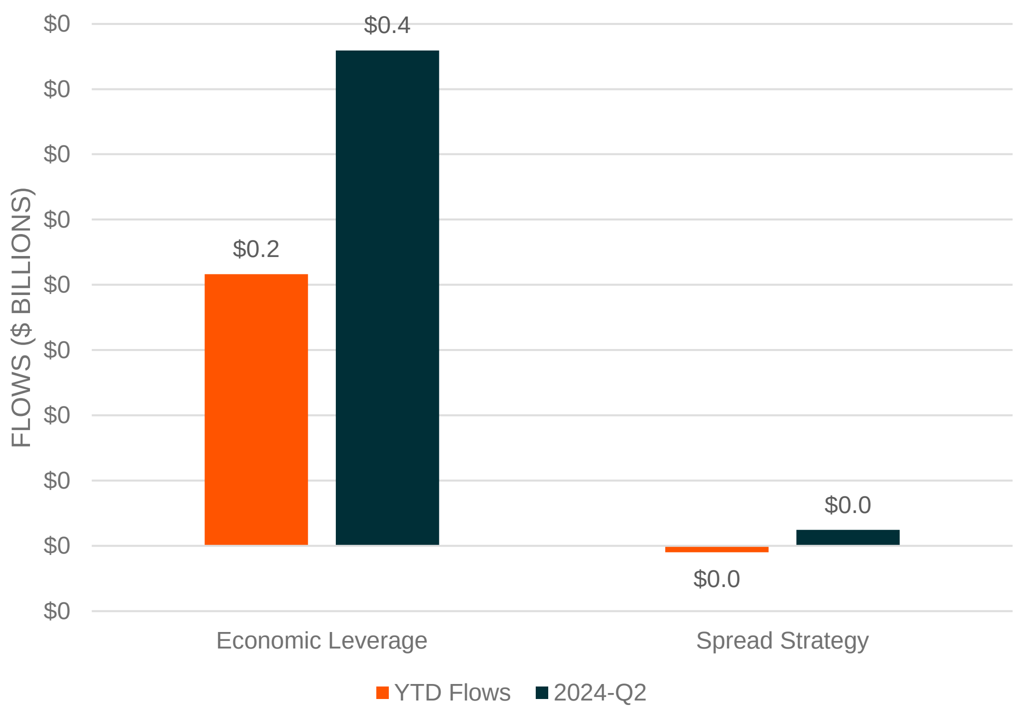
Performance Enhancement Landscape Update

Flows to the Performance Enhancement derivative objective ticked upward in the second quarter, dragging the first-half total back into the black. The performance was, at large, driven by funds that seek to harness futures positions on treasuries and various commodities to increase leverage and take advantage of carry premiums in the current inflationary environment. The recovery reflected a more bullish attitude toward market participation, levering up in the pursuit of more generous returns.

Performance Enhancement ETF Landscape By Strategy



Flows By Strategy



Source: Global X ETFs, Morningstar Direct. As of June 30th, 2024.

Note: AUM includes assets of funds closed until the last month of trading activity

Key Takeaways

Takeaway 1 – A Record Period for Derivative ETF Fund Launches

Amid the near-perpetual expansion of the Derivative ETF fund space, launches have displayed a historic tendency to take place in bunches. That said, even as it relates to recent quarters, wherein launch volume has been broadly elevated, the second quarter of 2024 saw a significant uptick in activity with some 65 new products being introduced to the market. This represents growth of roughly 15% relative to the end of the first quarter and the most active quarter in terms of launches dating back some ten years.

Takeaway 2 – Issuers Are Rounding Out Their Defined-Outcome Portfolios

At first blush, the abovementioned batch of launches might seem somewhat groundbreaking. And in a sense, it is, as issuers recognize material demand for derivative-based ETFs that can suit an array of investment portfolios. It should be noted, however, that many of these launches reflect defined outcome strategies that have already been formulated and put to use by pre-existing products. The full benefit of a defined outcome strategy might only be recognized by an investor if they take positions at the onset of the outcome period, however. To wit, it is often necessary for issuers to add new Put Spread Collar opportunities to their rosters so investors may receive their fully intended protections.

Takeaway 3 – Derivative Income Remains at the Head of the Table

With some $19.9 billion in flows being earmarked toward Derivative Income strategies through the first six months of 2024, investors have seemingly continued to recognize the value that can be attained by attempting to monetize volatility and systematically sell options contracts. This is proving the case despite market volatility periodically checking in at lows not witnessed since before the pandemic. Buywrite strategies have also been able to gain acclaim despite the presence of a widely upward-trending equity market, wherein they typically lag performance. A defensive positioning appears to be developing, as well, exemplified by Bear Call Spread strategies attracting greater flows so far in 2024 than they did all of last year despite only one new fund launch taking place using that overlay.

[1]Source: Global X ETFs with data from Morningstar Direct. Measured from July 1, 2014 to June 30, 2024

Important Information

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The Global X Derivative Strategy Classification System is based on the expertise, views, and opinions of the Global X Derivative Strategy Classification Committee and are subject to change.

Global X defines thematic investing as the process of identifying powerful disruptive macro-level trends and the underlying investments that stand to benefit from the materialization of those trends. By nature, thematic investing is a long term, growth-oriented strategy, that is typically unconstrained geographically or by traditional sector/industry classifications, has low correlation to other growth strategies, and invests in relatable concepts.

The process to identify a derivative-based strategy incorporates three main principles:

1. The product must utilize derivatives as a core component of its investment strategy. This does not necessarily mean that derivatives must make up the majority of the ETF’s portfolio. However, derivatives must serve a key purpose in achieving the investment objective stated in the ETF’s prospectus.

2. The derivative-based strategy can be utilized over a long-term period from the standpoint that it is able to be used tactically, for temporary exposure to express a market view, or within a strategic allocation. Strategies whose core objective is to be a daily trading tool will most likely not be considered for inclusion.

3. The strategy must use derivatives as a means to achieve 1 or more of the 3 main use cases of derivatives by either buying or selling short a specific type of derivative:

- Risk Management – These are strategies with an objective of achieving higher risk-adjusted returns by lowering overall portfolio volatility with the usage of derivatives.
- Income – Strategies that utilize derivatives as a core investment to potentially achieve high income for its investors.
- Performance Enhancement - Strategies that use derivatives to enhance the upside potential for capital appreciation, typically increasing the economic leverage used within a portfolio.

Taking the above principles into account, it should be noted that the derivative-based classification system does not consist of leveraged/inverse ETFs whose core objective is to track an index that rebalances daily. This goes against the 2nd principle stated above regarding the strategy being a long-term investment.

Based on the definitions and principles described above, the derivative-based classification system is organized into multiple layers for a more refined understanding as to the objective of each strategy. Note that some options strategies can be utilized for multiple purposes, whether that be for Income, Risk Management, or Performance Enhancement, resulting in some categories appearing more than one time. The system consists of four layers of classification: (1) Derivative Objective (2) Derivative Strategy (3) Derivative Overlay and; (4) Derivative Tactic.

‘Derivative Objective’ is the broadest layer and this gives an understanding as to the core objective of the fund, utilizing the 3 derivative use cases defined in the Principles section: (1) Risk Management, (2) Derivative Income, and (3) Performance Enhancement. One layer down is ‘Derivative Strategy,’ which will provide investors the means by which the investment objective is being pursued. For example, an ETF that utilizes derivatives with a Risk Management objective can be generated using either a Tail Risk Strategy to provide a level of downside protection or a Collar Strategy to provide a range-bound return outcome. Although slightly different, the commonality between these two overlays are the fact that their core purpose is to provide Risk Management.

Important Information (Continued)

Further down, we identify 'Derivative Overlay' as a layer describes the specific derivatives being used and the manner in which they are being used (Long or Short, Bull or Bear). For example, a Tail Risk overlay can obtain a level of downside protection using many kinds of derivatives. Some overlays include either "going-long" with put options via a Protective Put or harnessing VIX Futures as an overlay on an existing stock portfolio. Lastly, 'Derivative Tactic' help to communicate to investors any unique considerations regarding the options overlay being used. For example, a strategy offering a Synthetic Exposure are primarily meant to be exposure vehicles to. Another example is a Defined-Outcome ETF, which utilizes put spread collars to offer a specific level of downside protection with capped upside potential if held over the course of the stated "outcome-period", making each iteration different from one another.

The number of derivative objectives, derivative strategies, derivative overlays, and derivative tactics are expected to change as new derivative-based strategies come to market. These updates will be made by the Global X Derivative Strategy Classification Committee ("the committee") and take into account official fund prospectus filings as well as fund company materials.

The ETF industry is continually innovating to provide unique derivative exposures to investors. The Global X Derivative Strategy Classification Committee evaluates these innovations by first investigating if a fund aligns with the core three principles of what it believes a derivative strategy to be. Then, once a fund is deemed a "Derivative Strategy", the committee identifies what the core objective is, how this objective is being achieved, and what types of derivative positions are being utilized within the strategy by reviewing prospectuses, index methodologies (if applicable), stated objectives by the fund company, as well as underlying holdings. Once per month, the committee will review all new U.S.-Listed ETF launches to determine if the fund should be added and how it should be classified. In addition, the committee will also review any strategy changes that have occurred amongst existing ETFs within the Classification System that might merit reporting in the next monthly Derivative Strategy ETF Report.

While an ETF may engage in multiple objectives or strategies utilizing derivatives, the committee will determine the classification based on the true nature of the ETF.

While an ETF may be classified within a certain objective, strategy, overlay, or tactic, Global X does not give any assurances that the ETF provides good and accurate exposure to the specific exposure it is targeting. For example, an ETF may convey or market itself in a specific manner but still utilize a specific derivative trading strategy that has its own nomenclature.

The derivative classification system is reviewed monthly by the Global X Derivative Strategy Classification Committee to consider new changes and/or additions to the layers (categories) stated above. In addition, the committee will also seek to add newly launched, U.S.-listed ETFs that fit the 3 main principles of a derivative-based strategy.

In the event that an ETF changes its investment objective to another one that goes against the 3 principles of a derivative-based strategy, the strategy will be removed from the classification system and its historical assets under management data will be maintained within the monthly report. On the other hand, if an ETF changes it investment objective to something that fits within the parameters of the 3 principles, it will be considered for inclusion in the classification system where its AUM will start to be reflected in the report.

Global X accepts requests for reviews or appeals for any ETFs. Please contact Global X at research@globalxetfs.com, and the appeal will be considered in a timely manner. ***There are no guarantees that an appeal will result in a change in the ETF's classification.***

Important Information (Continued)

The Derivative-based ETF Report, including the classification system, falls under the supervision of the Global X Derivative-Based Strategy Classification Committee. The Committee consists of members from Global X's research and product teams who have extensive knowledge of the strategies themselves and the ETF industry. The goal of the committee is to properly identify and classify ETFs that fit the 3 principles. The Committee meets at least monthly to review the classification system, as well as on an ad-hoc basis to review new ETF launches or ETFs that change their strategy.

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For more information on Global X, please contact research@globalxetfs.com. For access to Global X Derivative Strategy Classification System – Methodology please click here.

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