S&P Dow Jones Indices

A Division of S&P Global

The Growing S&P 500® ESG Index Liquidity Ecosystem

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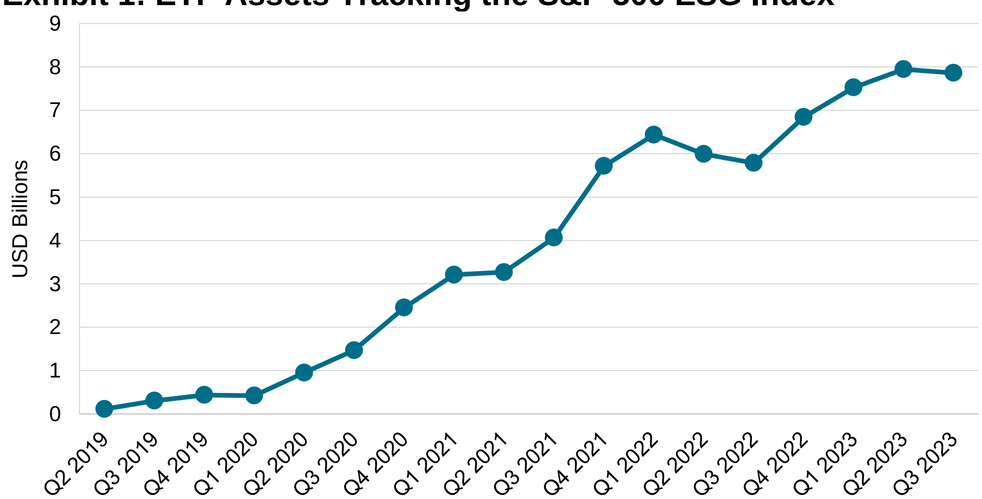
Introduction

Since its launch in 2019, the S&P 500 ESG Index has emerged as an important benchmark to measure the S&P 500 with an ESG lens. While assets under management (AUM) based on the index have grown steadily (see Exhibit 1), the S&P 500 ESG Index is also notable for the liquidity associated with the growing network of financial products based on it. Though dwarfed by the scale of the S&P 500, the trading volumes based on the ecosystem of exchange traded funds (ETFs), futures and options surrounding the S&P 500 ESG Index are unmatched by other offerings in the market, bolstering the index's position as the most liquid index that incorporates ESG factors for U.S. equities.

Exhibit 1: ETF Assets Tracking the S&P 500 ESG Index



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Sept. 29, 2023. Note that this analysis tracks ETF assets under management to the standard S&P 500 ESG Index, and not variants. Chart is provided for illustrative purposes.

About the Index

As of Sept. 29, 2023, the S&P 500 ESG Index included 319 companies from the S&P 500. The S&P 500 ESG Index seeks to reflect many of the attributes of the S&P 500 itself, while incorporating ESG factors. This outcome is achieved by applying various business activity exclusions and using S&P Global ESG scores to target 75% of the market capitalization in each S&P 500 GICS® industry group. The index construction process is outlined in Exhibit 2.[1]

Exhibit 2: Overview of the S&P 500 ESG Index Methodology

S&P 500

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Exclude companies involved in thermal coal (mining and electricity generation using coal powered plants), tobacco, small arms, military contracting, controversial weapons and oil sands, as well as companies classified as non-compliant with UNGC, in addition to the bottom 25% of companies within the GICS industry groups, as ranked by S&P Global ESG Scores.

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Rank companies by S&P Global ESG Score. **Select** top-ranked constituents, targeting 75% of the market cap in each S&P 500 GICS industry group, with the goal of achieving broadly sector neutral exposure relative to the S&P 500.

↓

Weight companies by float-adjusted market capitalization.

↓

S&P 500 ESG Index

Source: S&P Dow Jones Indices LLC. Chart is provided for illustrative purposes.

The S&P 500 ESG Index has appealed to investors for a number of key reasons, including:

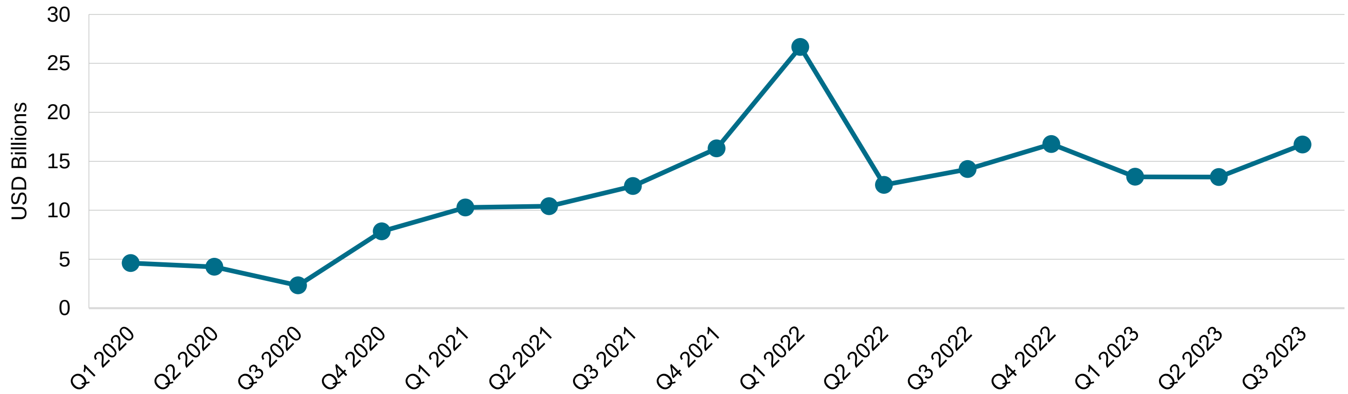
- A historically similar risk/return profile to the S&P 500 with improved ESG characteristics; and
- An easy-to-understand, rules-based and transparent methodology.

[1] For a full walkthrough of the index methodology, please see the published methodology and our education paper S&P 500 ESG Index: Defining the Sustainable Core.

Introduction and Growth of S&P 500 ESG Index Derivatives

In November 2019, exchange-traded futures were launched based on the S&P 500 ESG Index. Before the introduction of the futures, the only liquidity pool available to market participants was represented by ETFs. However, the addition of these futures provided additional liquidity. At the end of June 2020, ETFs that tracked the S&P 500 ESG Index had about USD 1 billion in AUM and USD 2.65 billion in value traded, versus USD 8.8 billion of notional traded value (NTV) on derivatives. In comparison with ETF trading, the futures provided a significant injection of liquidity into the marketplace. Futures trading volumes hit a record in Q1 2022, with NTV rising to USD 26.7 billion as depicted in Exhibit 3.

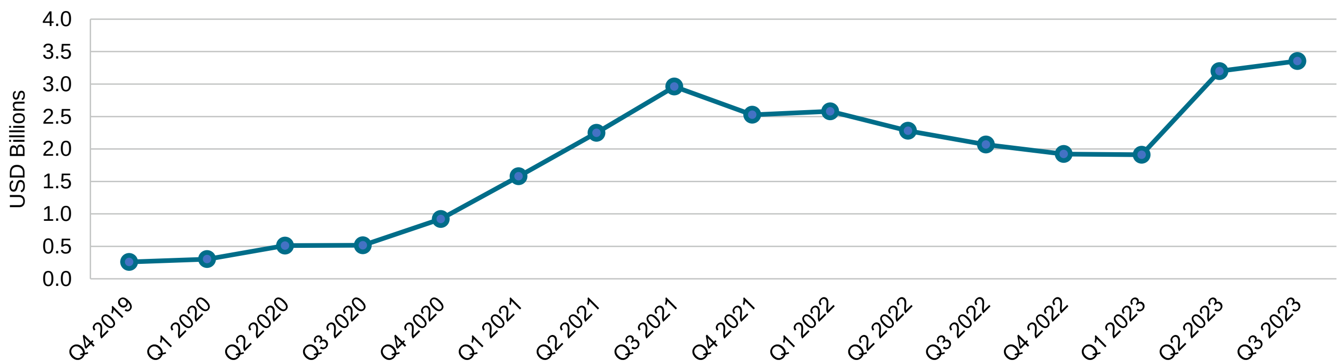
Exhibit 3: NTV of S&P 500 ESG Index Futures over Time



Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Although recent trading volumes have yet to surpass 2022 highs, open interest (OI) has reached record levels this year, with investors possibly looking to use these products as a way of achieving exposure to U.S. large-cap stocks with stronger ESG credentials.

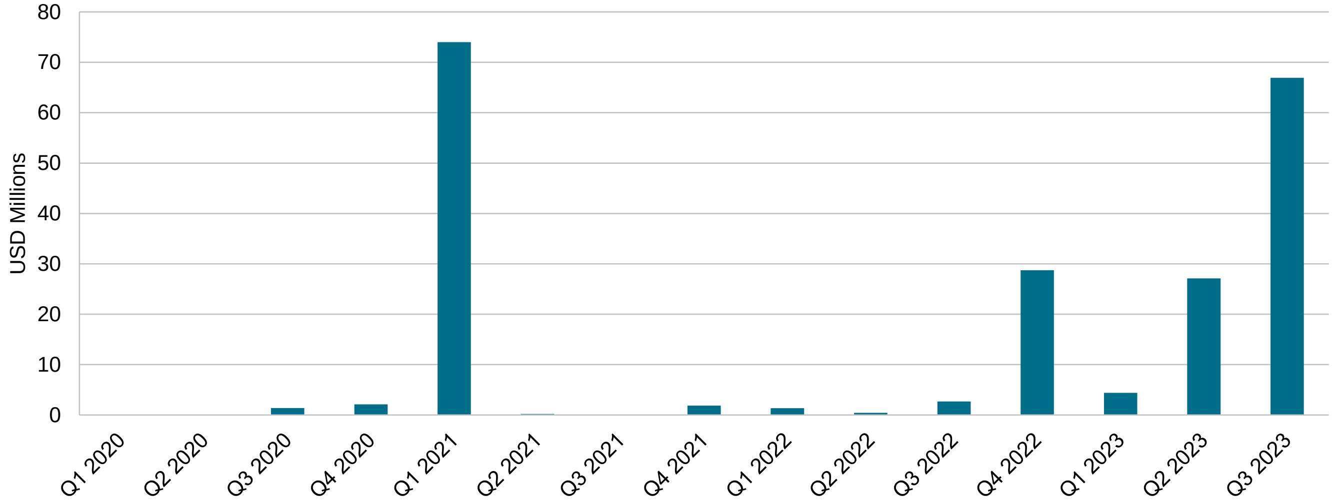
Exhibit 4: Growth in OI of S&P 500 ESG Index Futures over Time



Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Furthermore, exchange-traded options on the S&P 500 ESG Index were introduced to the market in September 2020. Although trading volumes remain modest, these options provide an additional avenue for expressing views on the index and represent a key part of this growing ecosystem. 2023 has seen greater OI in these options.

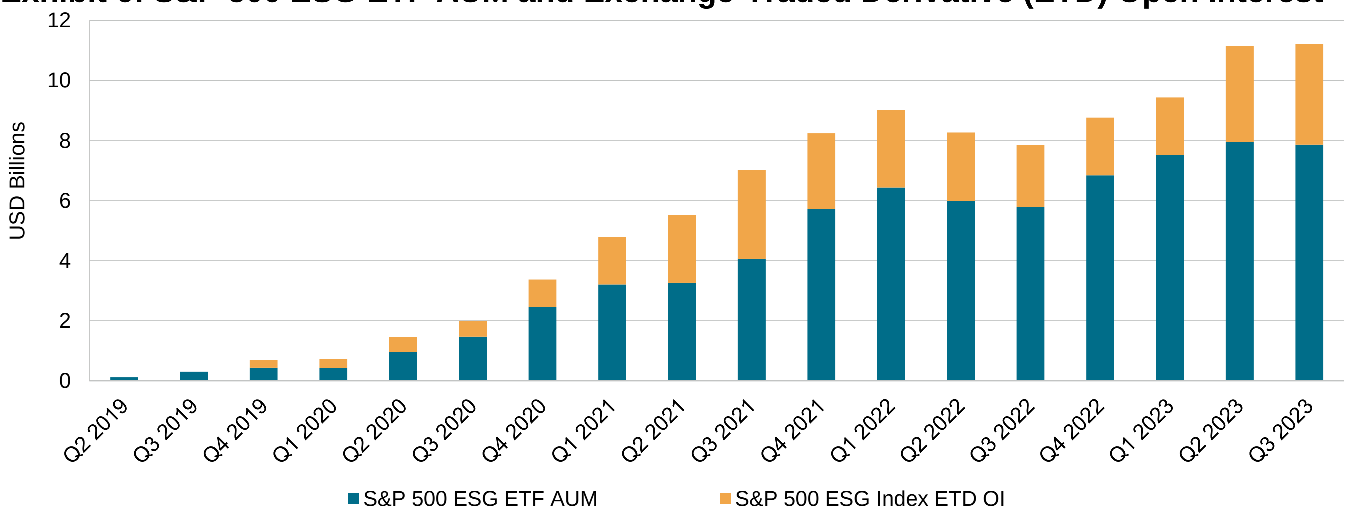
Exhibit 5: S&P 500 ESG Index Options OI



Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibits 6 and 7 further illustrate the role of futures in the broader S&P 500 ESG Index liquidity ecosystem. As of September 2023, only about 30% of all exposure[2] fell into the OI of futures, but when it comes to liquidity, over 90% of notional value was traded through futures.

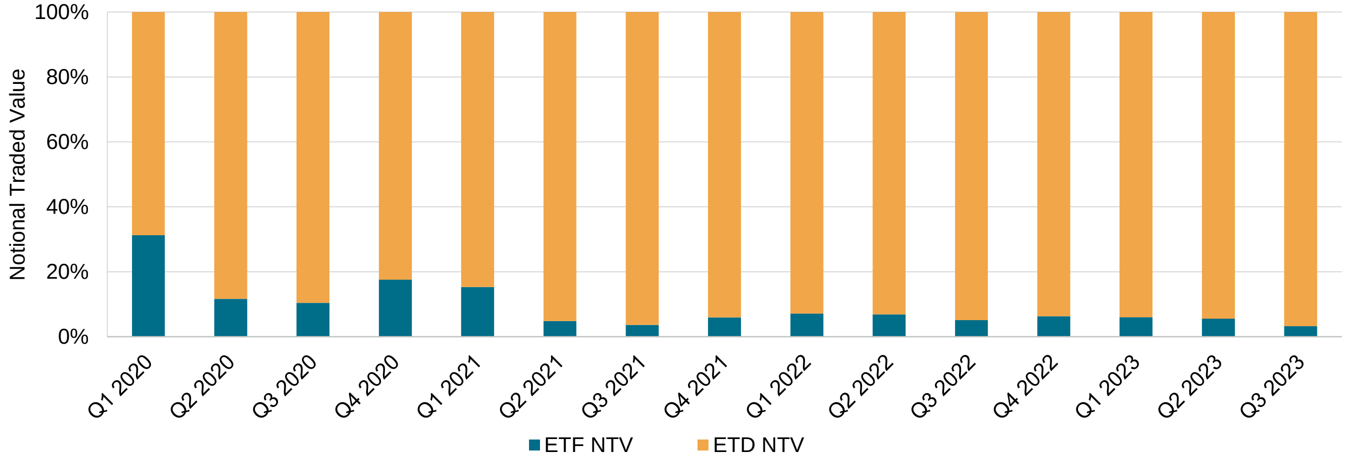
Exhibit 6: S&P 500 ESG ETF AUM and Exchange-Traded Derivative (ETD) Open Interest



Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

[2] Exposure is defined as ETF AUM in USD + exchange-traded derivative open interest converted to USD.

Exhibit 7: S&P 500 ESG (ETD versus ETF NTV)



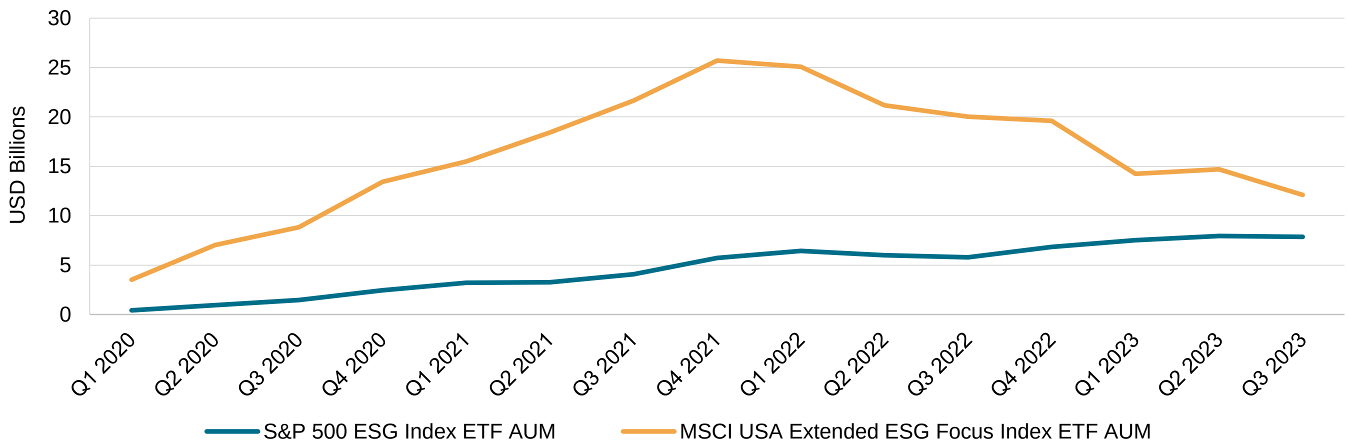
Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Underlying values expressed are in USD billions. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

A Comparative Lens

To appreciate this liquidity effect on the S&P 500 ESG Index, let us compare it to the U.S. equity ESG index with the largest combined ETF AUM—the MSCI USA Extended ESG Focus Index—which had USD 12.40 billion in ETF AUM as of September 2023.

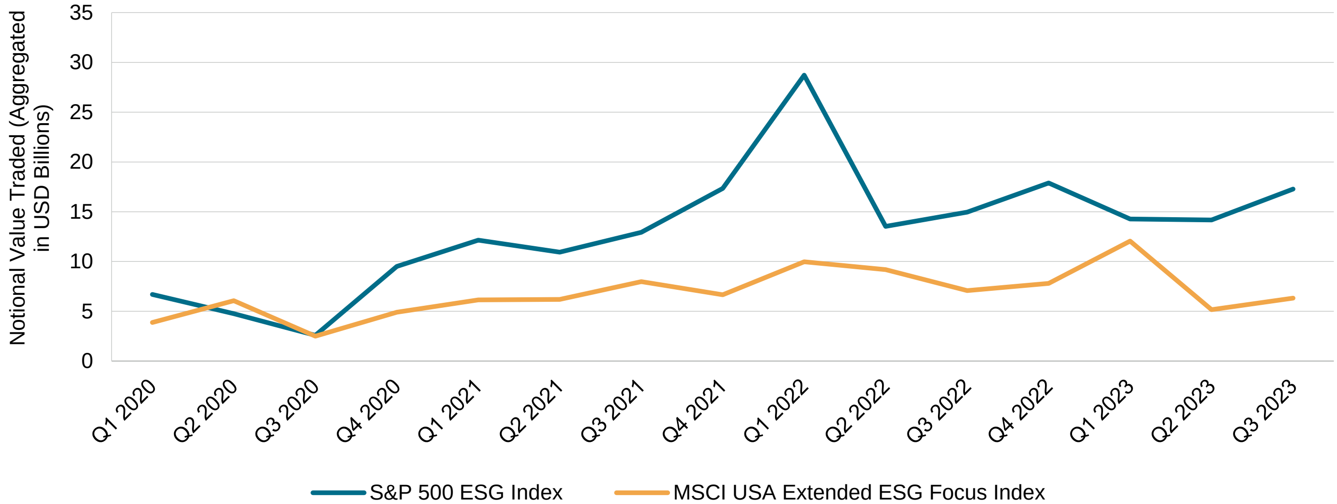
Although the MSCI USA Extended ESG Focus Index has more ETF AUM tied to it than does the S&P 500 ESG Index, the MSCI index doesn't have ETDs that help expand its liquidity ecosystem. As such, its YTD NTV through September 2023 was USD 23.5 billion, about one-half of the NTV of the S&P 500 ESG Index's total of USD 45.7 billion. In addition, the recent trajectory of both asset and liquidity growth has been much more positive for the S&P 500 ESG Index in comparison to the MSCI index (see Exhibits 8 and 9).

Exhibit 8: ETF AUM on the S&P 500 ESG Index and the MSCI USA Extended ESG Focus Index



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Sept. 29, 2023. ETF assets assessed are only those tracking the two indices mentioned. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

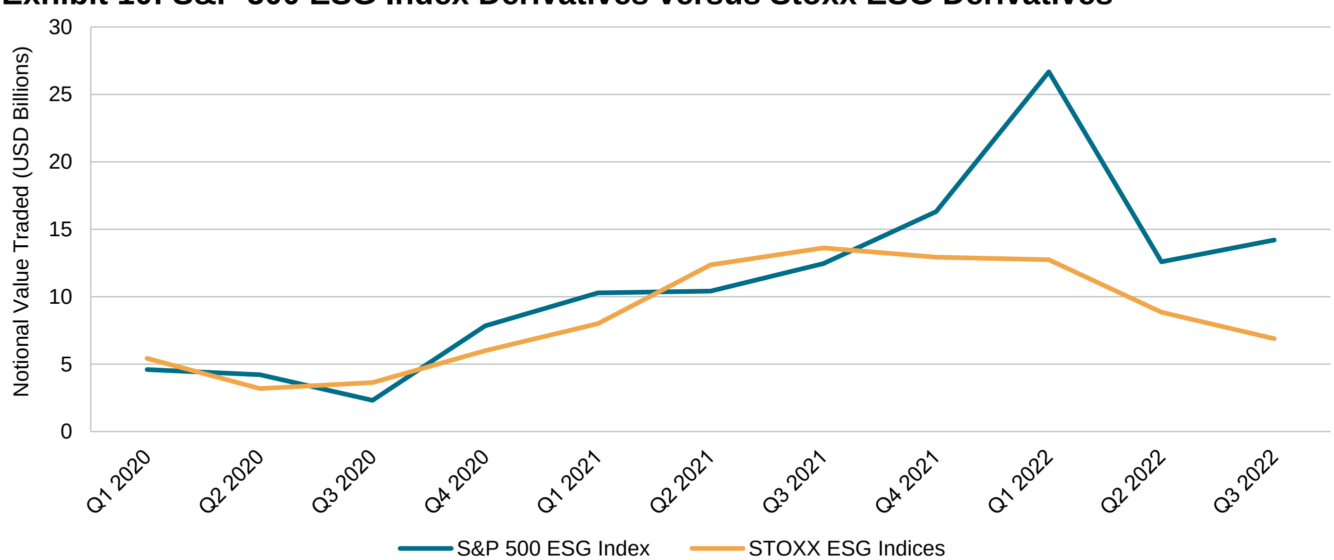
Exhibit 9: NVT (ETFs and ETDs) on the S&P 500 ESG Index and the MSCI USA Extended ESG Focus Index



Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Note that this compares ETF and ETD trading from the S&P 500 ESG Index, and solely ETF trading on the MSCI USA Extended ESG Focus Index, as ETDs are not listed on the latter. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Trading volumes of S&P 500 ESG Index-linked products also compare favorably to the next most actively traded suite of ESG index derivatives, which are based on several STOXX European equity ESG indices. In fact, the NTV of the S&P 500 ESG Index has outpaced the aggregate trading value of all STOXX European ESG indices, combined with S&P DJI's share growing over the past two years (see Exhibit 10).

Exhibit 10: S&P 500 ESG Index Derivatives versus Stoxx ESG Derivatives[3]



Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

[3] Note that indices included in this analysis are: S&P 500 ESG Index, EURO STOXX 50 ESG Index, STOXX Europe 600 ESG-X Index, STOXX Europe ESG Leaders Select 30 Index and STOXX Europe Climate Impact Index

Taking one step further back to see the entire global market, S&P 500 ESG Index ETD volumes have held relatively firm when compared to all global ESG index-based ETDs. On average, since the launch of the S&P 500 ESG Index futures, 40% of all ESG index derivatives notional traded across the global market was based on the S&P 500 ESG Index.[4]

Conclusion

As sustainable investing has increased in popularity, a wide array of ESG indices entered the market and gained traction either as benchmarks or as the basis for investable products. However, the S&P 500 ESG Index stands out from the crowd due to the range of products and trading activity around the index. With 18 ETFs listed in five markets[5] across North America, Europe and Asia, as well as actively traded ETDs accessible nearly 24 hours per day, the S&P 500 ESG Index has quickly developed a growing liquidity ecosystem unmatched by other comparable ESG indices in the market.

[4] Source: S&P Dow Jones Indices LLC, FIA, Bloomberg. Data as of Sept. 29, 2023.

[5] Note this includes dual share class listings.

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