Executive Summary

The US Securities and Exchange Commission (SEC) Asset Management Advisory Committee (AMAC) has studied and discussed the performance of exchange-traded funds (ETFs) and other exchange-traded products (ETPs) during the COVID-19 volatility in March. Although ETPs generally performed as designed during this volatility, the market conditions associated with the onset of the COVID-19 pandemic provide an opportunity to assess whether aspects of the ETP ecosystem could be improved. The SEC and the Financial Industry Regulatory Authority (FINRA) are well-situated to undertake this work because they can gather perspectives from all relevant market participants and have jurisdiction over ETPs and most related markets. Accordingly, we offer the following six recommendations that the SEC and, in some cases, FINRA should undertake to promote fair, orderly, and efficient markets for the benefit of investors:

- **The SEC should investigate the divergences that some ETPs experienced between their market prices and NAVs and issue a report on the cause of these divergences.**

- **The SEC should hold a roundtable to assess whether marketwide circuit breakers or other aspects of equity market structure should be optimized to reduce the potential for market disruption during periods of extraordinary market volatility.**

- **The SEC should consider whether investors would benefit from an ETP classification system that provides information about the structures and risks of ETPs at the point of order entry.**

- **The SEC and FINRA should analyze whether TRACE dissemination requirements should be calibrated to enhance transparency.**

- **The SEC and FINRA should analyze whether TRACE should be enhanced to include bid-offer information for corporate bonds and whether TRACE should disseminate bid-offer information in real-time to market participants.**

- **The SEC should conduct a thorough review of fixed income market structure to assess whether other changes would encourage the evolution of market characteristics in the hopes of enhancing transparency, liquidity, and price discovery.**

This memorandum summarizes the AMAC’s findings about the ETP market during the volatility associated with the onset of the COVID-19 pandemic and provides additional information about these recommendations.

---

Background

ETPs are an increasingly significant aspect of capital markets and investing. There are approximately 2,370 US ETPs, which held in aggregate approximately $4.3 trillion in assets as of June 30, 2020. ETPs account for roughly a third of overall US equity trading volume, and this percentage has increased steadily in recent years.

The volatility associated with the beginning of the COVID-19 pandemic during the first quarter of 2020 presented the strongest test for the resilience of ETPs since the 2008 global financial crisis. Between February 19 and March 23, 2020, the S&P 500 Index experienced a decline of more than one third. This volatility triggered marketwide circuit breakers for stocks several times in March, and caused spreads to widen and liquidity to worsen across markets. In fixed income markets, for example, the spread between off-the-run and on-the run Treasuries widened to approximately 7 basis points (bps) in mid-March, compared to less than 1 bp earlier in the quarter, while spreads for investment grade bonds widened to nearly 40 bps, despite hovering around 5 bps during the previous 12 months. Markets calmed after the Board of Governors of the Federal Reserve System (Fed) announced a series of measures to ease liquidity pressures, including a liquidity facility to purchase corporate bond ETFs holding a broad range of corporate bonds in the secondary markets.

The AMAC discussed the impact of the COVID-19 volatility on ETPs and financial markets during its meeting on May 27, 2020. Based on that meeting, the AMAC believes ETPs withstood the tumult of the COVID-related volatility in March. ETPs fulfilled their critical role of enabling investors to diversify across broad portfolios of securities in a cost efficient manner and acted as "shock absorbers" and price discovery vehicles for less liquid asset classes.

The AMAC recognizes, however, that the market volatility associated with COVID-19 revealed aspects of ETP trading characteristics and equity and fixed income market structure that merit study. For example:

- Some ETPs (most notably fixed income ETFs) experienced notable divergences between their market prices and net asset values (NAVs). At one point amid the COVID-19 volatility, more than 700 ETFs, accounting for roughly a third of all ETF assets, traded at a discount to their NAV of at least 1 percent.
  - Some ETFs experienced significantly greater divergences, with fixed income ETFs representing the largest portion of this cohort. At one point, nearly half of taxable bond ETFs closed at a 1 percent or greater discount to NAV, with those ETFs accounting for around 60 percent of aggregate taxable bond ETF assets. In addition, about 5 percent of taxable bond ETFs closed at a 5 percent plus discount, though those ETFs represented only 3 percent of assets. It is unclear whether greater divergences would have developed or for how long notable divergences would have continued absent Fed intervention.
  - These divergences accompanied significant price adjustments and strained liquidity conditions in many fixed income markets, including significantly wider spreads and higher transaction costs. During the height of the volatility, volume migrated away from electronic trading platforms as market participants expressed a preference to transact by phone.

- Certain ETPs, particularly those offering inverse or leveraged exposures, experienced conditions that industry participants might have found hard to predict, such as triggering provisions that

---

2 A transcript of this meeting is available on the SEC’s website: [https://www.sec.gov/files/amac_052720_transcript.pdf](https://www.sec.gov/files/amac_052720_transcript.pdf)
Trading paused four times in equity markets because significant price declines triggered marketwide circuit breakers. Three of these halts occurred during the first hour of trading and before the first trades occurred in some stocks included in broad-based indexes tracked by some ETPs.

The AMAC encourages the SEC to review these notable events to improve understanding of ETP performance during the March volatility and to identify potential market structure refinements that could make ETPs and financial markets generally more robust to volatility and uncertainty.

Specifically, we offer six recommendations for SEC consideration, one of which relates to ETP trading characteristics, two on equity market structure, and three on fixed income market structure. The majority of these recommendations focus on understanding the impacts of the COVID-19 volatility on ETPs. This is a critical first step in the process of strengthening ETPs and related markets. We urge the SEC to utilize the data it gathers during this “learning” phase to inform potential regulatory reforms, after the COVID-19 health crisis subsides.

Recommendation Regarding ETP Trading Characteristics

Although ETPs generally performed as designed during the COVID-19 volatility, the divergences—especially discounts—that some fixed income ETPs experienced relative to their NAVs merit further study. A number of factors could explain these divergences, including:

- Market participants’ use of ETPs as a price discovery vehicle;
- NAV calculations that might not reflect the costs and risk associated with market makers providing immediate intraday liquidity for portfolio securities; and
- Supply and demand characteristics of the ETP.

Although each of these factors potentially contributed to the divergences observed during the COVID-19 volatility in March, assessing the role of any particular factor (or the contribution of other factors) requires a thorough assessment of how all parts of the ETP ecosystem experienced the COVID-19 volatility. The SEC is uniquely positioned to gather perspective from all players in this ecosystem (e.g., ETP sponsors, market makers, exchanges, and pricing vendors) because of its regulatory and oversight responsibilities for many of these market participants and for ETPs themselves. The SEC similarly would be well-positioned to bring views from these diverse market participants together to provide further insights into the cause of market price/NAV divergences.

---


The AMAC recommends that the SEC investigate the divergences that some ETPs experienced between their market prices and NAVs and issue a report on the cause of these divergences.

Recommendations Regarding Equity Market Structure

Equity markets generally functioned as designed during the COVID-19 volatility, but the volatility revealed potential opportunities to improve market resiliency. For example, market participants have questioned whether marketwide circuit breakers should be recalibrated to ensure that markets fully open before any trading halt takes effect.

In addition, the growth of ETPs and the proliferation of more complex products, particularly those incorporating inverse and leverage, have been accompanied by a lack of clarity about the level of complexity and risk among ETPs with different structural features. Alerting an industry participant to the structure of an ETP and providing additional information about risks associated with that structure at the time of order entry (e.g., at the order entry or trading screen of an online broker) could help industry participants navigate the ETP market and make more informed investment decisions.4

- The AMAC recommends that the SEC hold a roundtable to assess whether marketwide circuit breakers or other aspects of equity market structure should be optimized to reduce the potential for market disruption during periods of extraordinary market volatility.
- The AMAC recommends that the SEC consider whether investors would benefit from an ETP classification system that provides information about the structures and risks of ETPs at the point of order entry.

Recommendations Regarding Fixed Income Market Structure

Divergences between market prices and NAVs were particularly notable in fixed income ETPs. Changes to fixed income market structure may reduce transaction costs and lessen the severity of premiums/discounts in fixed income ETPs during future periods of volatility. Discussion at the May 27, 2020, AMAC meeting focused on four potential changes to fixed income market structure that could enhance transparency and price discovery in fixed income markets:

- Aggregating bids and offers through FINRA’s Trade Reporting and Compliance Engine (TRACE);5
- Evolving market standards to encourage more use of firms quotes;
- Disseminating a national best bid and offer; and
- Imposing tighter reporting and public dissemination requirements for bonds.

Analyzing data from the COVID-19 market volatility—as well as data gathered before and after the volatility—would help policymakers assess the extent to which regulatory change could improve transparency and price discovery.

---

4 The SEC Fixed Income Market Structure Advisory Committee (FIMSAC) also recommended that the SEC establish an ETP classification scheme and proposed criteria that the SEC could use to differentiate among different types of ETPs. See Letter from SEC FIMSAC to Brent J. Fields, Secretary, SEC, dated October 29, 2018, available at https://www.sec.gov/spotlight/fixed-income-advisory-committee/fimsac-etp-naming-convention-recommendation.pdf.

Our recommendation urges the SEC to provide classification information at the point of trade (e.g., through exchange listing rules, ticker symbol extensions, or otherwise) to promote a careful assessment of the characteristics and risks of a particular ETP at the time of the purchase or sale decision.

5 The AMAC is aware that the FIMSAC issued a recommendation on pre-trade transparency in the municipal securities market.
Policymakers also should consider whether changes to fixed income market structure or associated regulations could improve liquidity, considering the liquidity challenges experienced during the COVID-19 volatility. In addition, commenters on the SEC’s proposed rules on good faith determination of fair value observed that opportunities may exist to enhance valuation practices in fixed income markets, for example, by incorporating more liquidity risk dynamics into pricing models during volatility or incorporating smaller trade sizes into valuation models during volatile markets.6

The AMAC supports the evolution of more liquid, transparent, and efficient fixed income markets and emphasizes the importance of using data to inform regulatory changes. We encourage the SEC and FINRA to comprehensively examine fixed income market structure and to leverage data to assess whether changes to quoting, trading, reporting, public dissemination, or other fixed income market practices or requirements would reduce the potential for fixed income ETPs to trade at steep discounts or premiums even in volatile markets.

- The AMAC recommends that the SEC and FINRA analyze whether TRACE dissemination requirements should be calibrated to enhance transparency.
- The AMAC recommends that the SEC and FINRA analyze whether TRACE should be enhanced to include bid-offer information for corporate bonds and whether TRACE should disseminate bid-offer information in real-time to market participants.
- The AMAC recommends that the SEC conduct a thorough review of fixed income market structure to assess whether other changes would encourage the evolution of market characteristics in the hopes of enhancing transparency, liquidity, and price discovery.

6 Comments on this proposal are available on the SEC’s website: https://www.sec.gov/comments/s7-07-20/s70720.htm.