Structure, Trading, and
Potential Issues in Litigation

Exchange-Traded Funds

Fund Overview

U.S. Market

Active and Passive ETFs

Creation and Redemption of Shares

Arbitrage

Significant Changes to ETF Regulations: Rule 6c-11

Enforcement Actions: Selected Examples

Cornerstone Research Case Studies

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Exchange-Traded Funds

Exchange-traded funds (ETFs) are pooled investment vehicles similar to mutual funds, but whose shares trade on securities exchanges, allowing investors to buy or sell the shares at market-determined prices throughout the trading day. Investors may also sell ETF shares short and trade options on ETF shares. In addition, institutions designated as authorized participants (APs) may create or redeem the ETF's shares in exchange for the underlying securities and/or cash at the daily net asset value (NAV) of the ETF portfolio.

Most ETFs invest in securities such as stocks and bonds and are registered with the Securities and Exchange Commission (SEC) as open-end investment companies or unit investment trusts under the Investment Company Act of 1940 (1940 Act). However, ETFs require exemptive relief from certain provisions of the 1940 Act in order to operate.[1]

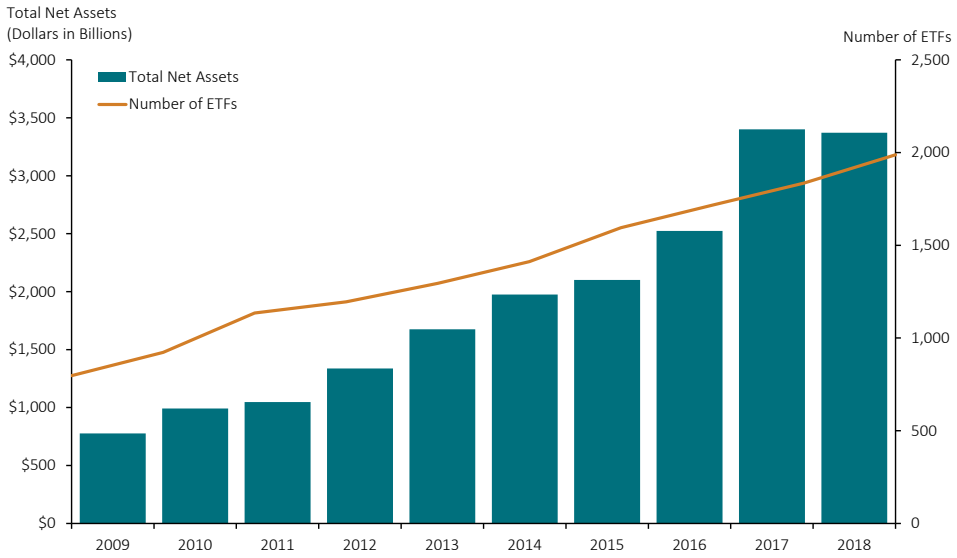
FUND OVERVIEW

Open-End Mutual Funds	Investors buy and sell shares at NAV. There is no secondary market trading.
Exchange-Traded Funds	Investors trade shares on an exchange at market prices. APs can create/redeem shares at NAV.
Closed-End Funds	Investors trade shares on an exchange at market prices. The supply of shares is fixed.
Exchange-Traded Notes	Investors trade notes on an exchange at market prices. Notes are not backed by a portfolio of underlying assets. APs can redeem notes at prices based on a reference index.

U.S. Exchange-Traded Fund Market

ETFs were launched in the United States in the early 1990s and have since grown rapidly in number and size.[2] Over the 10 years between 2009 and 2018, the number of ETFs in the United States more than doubled (from 797 to 1,998), while their total net assets more than quadrupled (from approximately $777 billion to $3.37 trillion).[3]

FIGURE 1: THE GROWTH OF ETFs IN THE UNITED STATES



Source: 2019 Investment Company Fact Book," Investment Company Institute

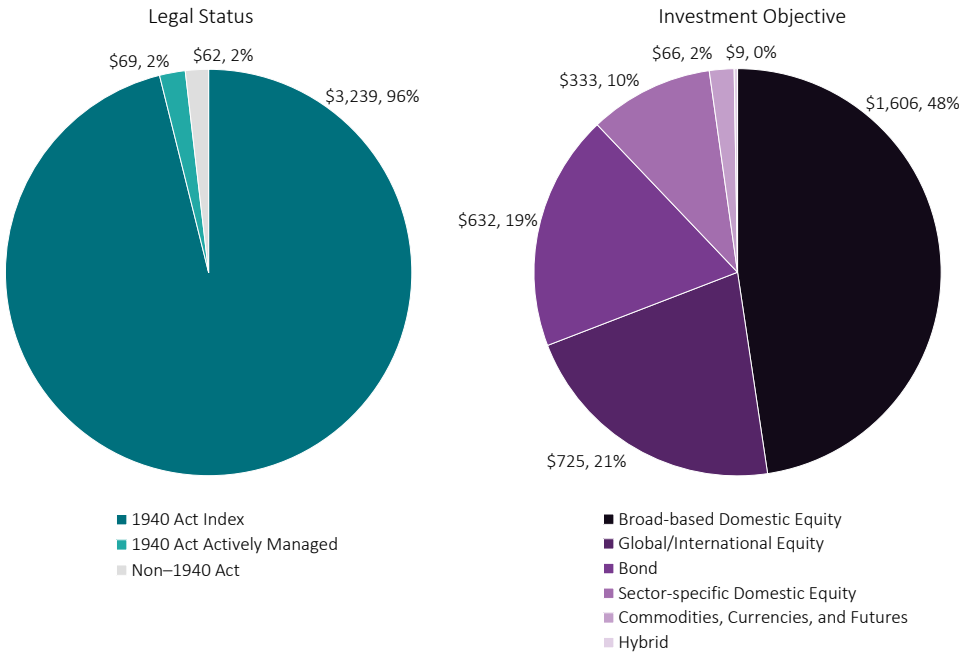
Active and Passive Exchange-Traded Funds

In the first 15 years following their introduction, ETFs approved by the SEC followed a passive investment strategy of tracking a market index or broad portfolio. The SEC granted the first exemptive order for an actively managed ETF in 2008. However, actively managed ETFs still represent only a small portion of the ETF market. One reason for the slow growth of active ETFs is the requirement for daily portfolio disclosure, which could potentially allow market participants to replicate the funds' strategies or devise trading strategies that could disadvantage the funds (e.g. front-running).[4]

As of year-end 2018, approximately 96 percent of ETFs have a passive index-based investment strategy, 2 percent have active mandates, and 2 percent are non–1940 Act ETFs.[5] Nearly 80 percent of ETFs are equity based, and most of the remainder are bond based. ETFs investing in commodities, currencies, and futures constitute only 2 percent of the total.

ETFs also represent a significant portion of secondary market trading for certain securities. For U.S. equities, for example, trading in U.S.-listed ETFs constituted almost 20 percent of U.S. equity trading by share volume and nearly 30 percent of U.S. equity trading by dollar volume over the first quarter of 2019.[6]

FIGURE 2: U.S. ETFs BY INVESTMENT OBJECTIVE AND LEGAL STATUS[7]
Dollars in Billions



Source: 2019 Investment Company Fact Book," Investment Company Institute

NON-TRADITIONAL ETFs

Non-traditional ETFs include leveraged, inverse, and leveraged inverse ETFs, which seek to deliver a multiple, the inverse, or a multiple of the inverse, respectively, of the performance of an underlying index or benchmark for a specified period (usually a single day).[8] For example, the ProShares UltraPro QQQ ETF "seeks daily investment results, before fees and expenses, that correspond to three times (3x) the daily performance of the Nasdaq-100 Index," while the ProShares Short S&P500 ETF "seeks daily investment results, before fees and expenses, that correspond to the inverse (-1x) of the daily performance of the S&P 500."[9] The ProShares UltraPro Short QQQ ETF "seeks daily investment results, before fees and expenses, that correspond to three times the inverse (-3x) of the daily performance of the Nasdaq-100 Index."[10] In 2017, assets invested in non-traditional ETFs amounted to approximately $80 billion.[11]

EXCHANGE-TRADED NOTES

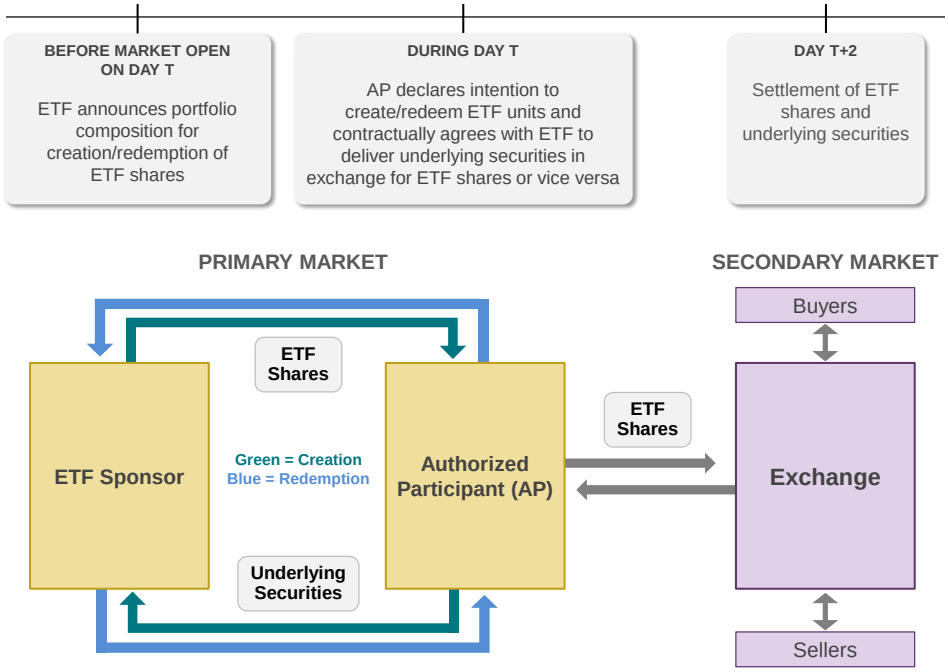
Exchange-traded notes (ETNs) and ETFs are both exchange-traded products, but there are important differences between them. Unlike ETFs, ETNs do not own an underlying portfolio of assets. ETNs are unsecured debt obligations of financial institutions and their returns are based on the performance of a reference index. This implies that holders of ETNs are exposed to the credit risk of the issuing financial institution. An investor who holds an ETN to maturity will receive a payment that is based on the performance of the corresponding index during the holding period, less investor fees. However, investors can liquidate their ETN positions before maturity by trading them on the exchange.

Creation and Redemption of Exchange-Traded Fund Shares

In a traditional open-end mutual fund, new shares are created every time an investor buys shares of the fund, and shares are redeemed when the investor sells—every transaction is a primary market transaction. In an ETF, most transactions are secondary market transactions, in which investors buy or sell existing shares on an exchange. However, existing shares may be redeemed or new shares created through the intermediation of APs, as described below.

New ETF shares are created when an AP delivers a basket of underlying securities to the ETF and receives ETF shares in exchange. Similarly, existing ETF shares are redeemed when an AP delivers shares to the ETF in exchange for a basket of the underlying securities. Creation and redemption transactions are conducted in blocks of shares known as creation units, with the size of the typical creation unit exceeding 25,000 shares.[12]

FIGURE 3: CREATION AND REDEMPTION PROCESS TIMELINE



Note: This timeline is illustrative and the actual timeline may vary.

Exchange-Traded Fund Arbitrage

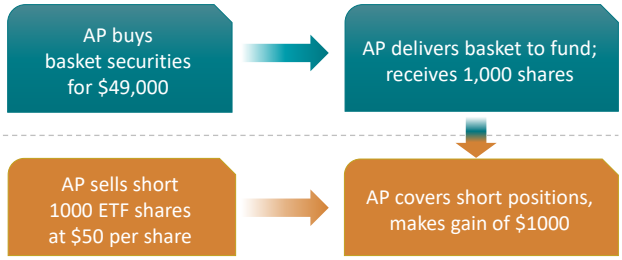
ETF shares trade at market-determined prices in the secondary market. While these prices may deviate from the value of the underlying portfolio of securities, the opportunity for arbitrage by APs is expected to restrict such deviations and keep the market price close to the underlying portfolio value.

ETFs disclose the composition of the creation/redemption basket and overall portfolio before market open on each day.[13] This enables APs and other market participants to calculate the current portfolio or basket value based on the market prices of the underlying securities.[14] APs and other market participants can compare the ETF share price to the per-share price derived from the current portfolio or basket value, and evaluate whether the difference is sufficiently large to warrant arbitrage trades.

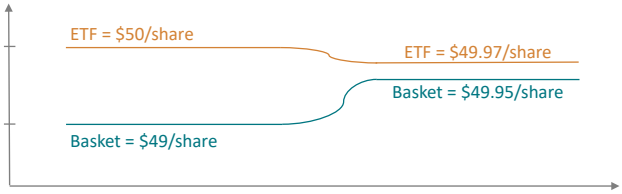
When the market price is at a significant premium to the underlying portfolio value (i.e., NAV), APs can (i) buy the basket securities at the NAV and sell short the ETF shares at the higher market price; (ii) tender the basket securities to the fund in exchange for ETF shares; and (iii) use the newly acquired ETF shares to cover their short positions in the market.

FIGURE 4: ETF ARBITRAGE – A HYPOTHETICAL EXAMPLE

- ETF shares trading at $50 per share.
- Basket of underlying securities trading at an implied price of $49 per ETF share.
- Creation/Redemption in units of 1000 shares.



- After arbitrage, ETF share price decreases and basket price increases so that they converge within the bounds of arbitrage.



Similarly, when the market price is at a significant discount to the NAV, APs can (i) sell short the basket securities at the NAV and buy the ETF shares at the lower market price; (ii) tender the ETF shares to the fund in exchange for the basket securities; and (iii) use the newly acquired basket securities to cover their short positions in the market. Since the exchange of securities for shares is an in-kind transaction, it will not be affected by subsequent changes in the prices of the basket or the ETF shares. Therefore, the AP can lock in the premium or discount at the time of the arbitrage trades.

Studies have shown that the vast majority of ETFs trade at prices relatively close to their NAVs, suggesting that the arbitrage mechanism generally functions effectively for those ETFs. For example, the SEC has found that during 2016–2017, "the closing price[s] of ETFs based on U.S. equity indexes were within 1 percent of NAV for 97.9 percent of trading days and within 1 percent of NAV for actively managed ETFs investing in U.S. equities for 98.5 percent of trading days. The absolute weighted average of the daily difference between the NAV and market price during a six-month period ending in December 2017 was 0.014 percent for ETFs based on U.S. equit[y] indexes and 0.074 percent for actively managed ETFs investing in U.S. equities."[15] An academic study similarly found that the mean absolute deviation between market price and NAV for a sample of 1,670 ETFs in the period 2007–2012 was six basis points.[16]

While the majority of ETFs trade at prices close to their NAV, there is substantial variation across ETFs in terms of the mean premium/discount. In particular, ETFs that invest in less liquid securities such as international equities have displayed larger deviations between market prices and NAVs.[17] However, this does not necessarily mean that the arbitrage mechanism works less efficiently for such ETFs—it could instead be a sign of staleness in the price of the ETF shares or underlying securities, or both.

For example, the Intraday Indicative Value or IIV and, in some instances, NAV, may be based on closing prices on a foreign securities exchange that closed several hours prior to the NAV calculation. Such prices would not reflect changes in market valuations between the closing of the exchange and the time of the NAV calculation. Similarly, the closing price of an ETF, as reported by exchanges and data vendors, may be based on a trade that occurred several hours earlier. In these instances, the observed premium or discount may not be a sign of illiquidity but instead reflects staleness in prices.[18] Academic research suggests that staleness may account for a substantial portion of the observed deviations between ETF price and NAV.[19]

Significant Changes to Exchange-Traded Fund Regulations: Rule 6c-11

ETFs organized as investment companies under the 1940 Act need to obtain exemptive relief from the SEC from certain provisions of the Act in order to operate.[20] In particular, Rule 22c-1 under the 1940 Act generally requires that a redeemable security is only transacted at a price based on its NAV. Because secondary market trading in ETF shares takes place at current market prices, and not at NAV, ETFs need to be exempt from Rule 22c-1. Some ETFs may also have other features that are inconsistent with provisions of the 1940 Act, requiring additional exemptive relief from the SEC.[21]

In September 2019 the SEC adopted Rule 6c-11, which replaces the system of individualized exemptive relief for ETFs with a uniform set of guidelines that ETF sponsors would be able to rely on for operation.[22]

Rule 6c-11 defines an ETF as "a registered open-end management investment company that: (i) issues (and redeems) creation units to (and from) authorized participants in exchange for a basket and a cash balancing amount (if any); and (ii) issues shares that are listed on a national securities exchange and traded at market-determined prices."[23] Both index-based and actively managed ETFs would be subject to the same requirements under the rule.

NON-TRANSPARENT ETFs

Over the course of 2019, the SEC approved the first ETFs that would not be required to publicly disclose their portfolios on a daily basis, pursuant to applications from ETF sponsors Precidian, T. Rowe Price, Fidelity, Blue Tractor and Natixis. These different sponsors have proposed different non- or semi-transparent ETF models.[24] For example, instead of public disclosure, the proposed ActiveShares ETFs from Precidian would disclose the composition of their creation/redemption baskets on a confidential basis to an unaffiliated broker-dealer known as an AP Representative.[25] The AP Representative would be the sole party authorized to exchange basket securities for ETF shares and all APs would be required to trade through the AP Representative. An AP seeking to create (redeem) shares would deliver the cash value of the creation basket (ETF shares) to the AP Representative, who would engage in the necessary transactions with the ETF and deliver the shares (cash value of the basket) to the AP. To facilitate arbitrage and ensure that the market price of ETF shares is close to the underlying portfolio value, the ETFs would disseminate the Verified Intraday Indicative Value (VIIV) of the portfolio holdings every second during the trading day. The proposed ETFs would only invest in relatively liquid securities trading on U.S. exchanges to enable the AP Representative to quickly buy or sell basket securities upon receiving an order from an AP.[26]

ETFs that meet the conditions of the proposed rule would be allowed to "(i) redeem shares only in creation unit aggregations; (ii) permit ETF shares to be purchased and sold at market prices, rather than NAV; (iii) engage in in-kind transactions with certain affiliates; and (iv) in certain limited circumstances, pay authorized participants the proceeds from the redemption of shares in more than seven days."[27]

The rule imposes a set of disclosure requirements on ETFs pertaining to portfolio holdings, creation/redemption basket construction, share pricing, and historical bid-ask spreads:

- Before the start of trading on an ETF's primary listing exchange on each day, the ETF would be required to publicly disclose its portfolio holdings as of close of business on the prior day. This would form the basis for calculating the NAV per share on that day.[28] Portfolio holdings would include securities, assets, and other positions, including cash holdings and short positions.[29]
- ETFs would have the flexibility to customize their creation and redemption baskets, including using baskets that are not pro-rata representations or representative samples of their portfolios, as well as adopting different baskets for different transactions on the same day. However, ETFs relying on the rule would be required to "adopt and implement written policies and procedures that govern the construction of baskets and the process that will be used for the acceptance of baskets."[30]
- ETFs would be required to post on their websites daily the NAV, market price, and premium or discount of the market price to NAV as of close of the prior business day. To allow for the possibility that the market price may be stale when the NAV is established, the rule defines "market price" as either the official closing price or the midpoint of the NBBO when NAV per share is calculated.[31]
- ETFs would be required to disclose on their websites "the ETF's median bid-ask spread over the last thirty calendar days" and "a tabular chart and line graph showing the ETF's premiums and discounts for the most recently completed calendar year and the most recently completed calendar quarters of the current year."[32]

While the proposed rule would not require ETFs to disseminate an IIV, current exchange-listing standards already include a requirement that ETFs disseminate IIVs every 15 seconds.

Enforcement Actions: Selected Examples[33]

Violation of Net Capital Requirements for ETF Holdings

Broker-dealers are required to hold net capital against their ETF positions. However, the SEC allows broker-dealers to instead offset their ETF positions with positions in predetermined "qualified stock baskets."[34] The goal is to facilitate the activities of APs and other broker-dealers acting as market makers in ETFs, while ensuring that they are reasonably hedged by holding portfolios that are sufficiently correlated with their benchmark index. In 2014, the SEC pursued an enforcement action against a high-frequency trading firm over its failure to maintain minimum net capital.[35] The firm engaged in proprietary trading in ETFs and the component securities of those ETFs. The SEC alleged that the firm held insufficient net capital against its ETF positions, in part because it claimed to have offset its ETF positions with positions in securities that were not "qualified stock baskets." The company agreed to pay a penalty of $16 million and cease and desist from any further violations.

Suitability of Inverse ETFs

In 2017, FINRA pursued an enforcement action against a broker-dealer, alleging that the firm did not adequately implement required policies and procedures to ensure that clients understood the risks involved with purchasing inverse ETFs.[36] FINRA determined that the broker-dealer failed to establish and maintain a supervisory system, including written procedures, aimed to address the unique features and risks involved with these ETFs, including the risk that their long-term performance may deviate substantially from their benchmark index. The broker-dealer entered into a consent agreement with FINRA, and agreed to pay a fine and restitution to affected customers.[37]

Valuation of Odd-Lot Securities

In 2016, the SEC fined an investment management company $20 million over allegations that the company misled investors about the performance of one of its actively managed ETFs.[38] In the first four months after its launch in 2012, the fund pursued an "odd-lot" trading strategy, which involved buying smaller-sized odd-lot positions in mortgage-backed securities that traded at a discount relative to larger round lots. However, the fund valued its odd-lot positions using third-party pricing based on trading in round lots. The SEC claimed that the fund's NAV was overstated as a result of this practice and that the fund did not have a reasonable basis to believe that the third-party pricing marks accurately reflected the exit price it would receive for its odd-lot positions. The SEC also claimed that valuing its odd-lot positions at round-lot prices caused the fund's reported performance to be misleading and unsustainable as it grew in size.

Violation of Exemptive Relief

In 2017, the SEC instituted enforcement proceedings against an investment management company, alleging that an ETF sponsored by the company operated for a period of time without the required exemptive relief.[39] The company claimed that the ETF was covered under exemptive relief previously issued to certain other ETFs it sponsored, which the SEC disputed. The company agreed to pay a penalty of $1.5 million and cease and desist from any further violations.

Case Studies

Trading in ETF Basket Securities by an Authorized Participant

Cornerstone Research was retained by counsel for a large financial institution to assist with its internal investigation into whether the NAV of certain high-yield ETFs was manipulated through trading in the market for the underlying bonds. We examined whether manipulative trading occurred in certain bonds in the delivery basket of an AP such that the bond price was inflated close to 3:00 PM, when the fund's NAV was calculated. This inflation would benefit the AP if the bond was included in the AP's delivery basket in a higher proportion than its weight in the fund's portfolio. However, fund shareholders would be damaged as the delivery basket would be overvalued, causing the fund to issue "too many" shares to the AP.

We analyzed bond trading data from FINRA, quotation data from Bloomberg, and "request for quotes" data from the AP to examine whether there was a pattern of trades at abnormally high prices close to 3:00 PM in bonds included in the AP's delivery basket. We calculated the potential inflation in the bond price and the associated damages.

We presented our findings to the relevant parties, including the SEC and the ETF's board.

Trading in ETF Shares by Affiliated Parties

Cornerstone Research was retained by counsel for a financial institution to assist with an internal investigation into trading in ETF shares by affiliated parties (affiliated trades).

We examined whether certain affiliated trades may have been motivated by the desire to manipulate the reported closing price for the ETF shares on certain dates. We researched the closing price reporting rules of different exchanges and data vendors and studied the pricing of the affiliated trades relative to market quotes as well as the intraday indicative values at the time of the trade. We analyzed whether the affiliated trades impacted the closing price of the funds relative to the NAV.

For certain affiliated trades, we compared the relative economics of purchasing the ETF shares in the open market versus having an AP create the shares.

We presented our findings to the ETF's board.

Valuation of Odd-Lot Holdings of Securities by ETFs

Cornerstone Research was retained by counsel for a financial institution to address SEC questions regarding the valuation of certain odd-lot holdings of securities held in its ETFs.

The securities at issue were purchased as odd lots by certain funds sponsored by the financial institution. As odd-lot transactions, the securities were purchased at a slight discount to the market price. However, the end-of-day valuation of the securities was based on prices provided by a third-party vendor, which were based on round-lot transactions and did not include a discount. This resulted in a price increase between purchase and end of day, with a corresponding increase in the NAV.

We analyzed data from FINRA and Bloomberg to estimate the size of the odd-lot discount. We recalculated the NAV assuming that the odd lots were valued at purchase price on the date of purchase and allowing for different scenarios of subsequent price changes. We examined simultaneous purchases of the same security by other funds of the same institution and analyzed the effects of accounting for the combined holdings of the securities, potentially resulting in an aggregate round-lot position.

The SEC did not pursue the investigation based on the financial institution's explanation, which included the results of our analyses.

Leveraged and Inverse ETFs

Cornerstone Research was retained by a financial institution to assist with an internal investigation of investor trading activity and gains/losses in leveraged and inverse ETFs.

We examined and analyzed participant-level transaction data to determine the extent of investor trading in these ETFs, the popularity of different funds, the variation and impact of holding periods on investor returns, and individual and aggregate gains and losses. We also analyzed the use of margin accounts, developed scenarios to demonstrate the impact of daily re-leveraging on the returns of leveraged and inverse ETFs, and calculated internal rates of return for all investors with trading activity in these funds.

We presented our findings to company management.

Endnotes

1. The exemptive relief was granted by the SEC on an individualized basis until recently. The grant of this relief is referred to as "approval." In September 2019, the SEC adopted a new rule (Rule 6c-11) under the 1940 Act that standardizes the approval process. Details of the new rule are discussed in the section titled Significant Changes to Exchange-Traded Fund Regulations: Rule 6c-11.
2. *See* Comment Letter to the SEC by Karl-Otto Hartmann, August 16, 2015, describing the creation of the SuperTrust Trust for Capital Market Fund Inc.
3. "2019 Investment Company Fact Book," Investment Company Institute, April 30, 2019, Table 11, https://www.icifactbook.org/deployedfiles/FactBook/Site%20Properties/pdf/2019/19_fb_table11.pdf.
4. The SEC approved the first ETF without the requirement for daily public disclosure of its portfolio in May 2019. *See* box titled "Non-Transparent ETFs."
5. A small fraction of ETFs invest in commodities, currencies, and futures and are not registered investment companies under the 1940 Act. "Non-1940 Act ETFs that invest in commodity or currency futures are regulated by the Commodity Futures Trading Commission (CFTC) under the Commodity Exchange Act and by the SEC under the Securities Act of 1933. Those that invest solely in physical commodities or currencies are regulated by the SEC under the Securities Act of 1933." "2019 Investment Company Fact Book," Investment Company Institute, April 30, 2019, https://www.icifactbook.org/ch4/18_fb_ch4.
6. "Exchange-Traded Funds – Final Rule," SEC 17 CFR Parts 210, 232, 239, 270, and 274 [Release Nos. 33-10695; IC-33646; File No. S7-15-18] ("Final Rule"), p. 10, https://www.sec.gov/rules/final/2019/33-10695.pdf.
7. Broad-based ETFs are those that track broad market indices such as the S&P 500 index. Sector-specific ETFs invest in specific sectors such as energy. Hybrid ETFs invest in both stocks and bonds.
8. "Non-Traditional ETFs FAQ," Financial Industry Regulatory Authority (FINRA), https://www.finra.org/rules-guidance/key-topics/etf/non-traditional-etf-faq.
9. "UltraPro QQQ," ProShares, https://www.proshares.com/funds/tqqq.html; "Short S&P500," ProShares, https://www.proshares.com/funds/sh.html.
10. "UltraPro Short QQQ," ProShares, https://www.proshares.com/funds/sqqq.html.
11. "Worries over Exotic Exchange Traded Funds Deepen," *Financial Times,* February 14, 2018, https://www.ft.com/content/6c4f40dc-1113-11e8-940e-08320fc2a277.
12. Until recently, creation and redemption baskets were generally required to be pro-rata representations of the ETF portfolio, with some exceptions. However, Rule 6c-11 eliminates this requirement and allows custom baskets that are not pro-rata representations and may differ from previously transacted baskets on the same day. *See* section titled Significant Changes to Exchange-Traded Fund Regulations: Rule 6c-11.
13. Under Rule 6c-11, ETFs will be required to disclose their portfolio holdings, but not basket information, on their websites.
14. Until recently, most ETFs were required to disseminate the current value of their portfolios (known as the "Intraday Indicative Value" or IIV) to the market every 15 seconds. As discussed in the section titled Significant Changes to Exchange-Traded Fund Regulations: Rule 6c-11,, the SEC has discarded this requirement under the new rule 6c-11. However, ETFs continue to be subject to the requirement under exchange-listing standards.
15. "Exchange-Traded Funds," SEC 17 CFR Parts 239, 270, and 274 [Release Nos. 33-10515; IC-33140; File No. S7-15-18] ("Proposing Release"), p. 44, https://www.sec.gov/rules/proposed/2018/33-10515.pdf.
16. A. Petajisto, "Inefficiencies in the Pricing of Exchange-Traded Funds," *Financial Analysts Journa*l 73, no. 1 (2017): 24–54.
17. Proposing Release, pp. 44–45.
18. A study of ETF price dynamics by Madhavan and Sobczyk (2016) states that due to staleness issues, "the IIV is not useful for APs and arbitragers for trading purposes. Rather, these market participants will use their own proprietary models and data to estimate the underlying value of the ETF." A. Madhavan and A. Sobczyk, "Price Dynamics and Liquidity of Exchange-Traded Funds," *Journal of Investment Management* 14, no. 2 (2016): 86–102 ("Madhavan and Sobczyk (2016)").
19. *See* Engle and Sarkar (2006) for a study of intraday deviations and Madhavan and Sobczyk (2016) for a study of daily deviations between ETF share price and NAV. R. Engle and D. Sarkar, "Premiums-Discounts and Exchange Traded Funds," *Journal of Derivatives* 13, no. 4 (2006): 27–45; Madhavan and Sobczyk (2016).

20. *See* Hu and Morley (2018) for an extensive discussion of the regulatory framework governing ETFs. H. Hu and J. Morley, "A Regulatory Framework for Exchange-Traded Funds," *Southern California Law Review* 91 (2018): 839–941.
21. For example, Section 22(e) of the Investment Company Act prohibits a registered open-end fund from suspending the right of redemption, or postponing the date of payment or satisfaction upon redemption for more than seven days after the tender of such security for redemption. ETFs investing in foreign securities and redeeming in kind are sometimes unable to meet this requirement. *See* "Actively Managed Exchange-Traded Funds," SEC 17 CFR Part 270 [Release No. IC-25258; File No. S7-20-01], Section IV.D, https://www.sec.gov/rules/concept/ic-25258.htm.
22. Rule 6c-11 will not apply to ETFs organized as Unit Investment Trusts, leveraged and inverse ETFs organized as open-end funds, and ETFs that issue multiple classes of shares.
23. Final Rule, p. 18.
24. Following an application by Precidian LLC, Precidian ETF Trust, Precidian ETF Trust II, and Foreside Fund Services, LLC (together, "Precidian"), the SEC filed a Notice of Application on April 8, 2019 ("SEC Notice of Application") and approved the application on May 20, 2019. The SEC filed Notices of Applications pursuant to applications by T. Rowe Price Associates, Inc. et al., Fidelity Beach Street Trust et al., Blue Tractor ETF Trust et al., and Natixis Advisors, L.P., et al. on November 15, 2019.
25. The funds propose to transact in baskets that correspond pro rata to the portfolio holdings, except for certain instances when cash may be included in the basket.
26. SEC Notice of Application, p. 12 and fns. 24 and 25.
27. Final Rule, p. 15. Under the new rule, ETFs would have the discretion to set the size of the creation unit. Until the adoption of the new rule, ETFs needed to obtain exemptions from provisions of the 1940 Act and Securities Exchange Act of 1934 in order to conduct these activities.
28. Thus, "[c]hanges in an ETF's holdings of portfolio securities would . . . be reflected on a T+1 basis." Final Rule, p. 79.
29. The SEC recently approved a proposal from Precidian Funds LLC to operate an actively managed ETF that would not publicly disclose its holdings on a daily basis. *See* box titled "Non-Transparent ETFs." However, "[b]ecause these non-transparent ETFs do not provide daily portfolio transparency, they would not meet the conditions of rule 6c-11." Final Rule, p. 6, fn. 8.
30. Final Rule, p. 86 ("These policies and procedures must cover the methodology that the ETF will use to construct baskets. For example, the policies and procedures should detail the circumstances under which the basket may omit positions that are not operationally feasible to transfer in kind. The policies and procedures also should detail when the ETF would use representative sampling of its portfolio to create its basket, and how the ETF would sample in those circumstances. The policies and procedures also should detail how the ETF would replicate changes in the ETF's portfolio holdings as a result of the rebalancing or reconstitution of the ETF's underlying securities market index, if applicable.").
31. The rule defines "market price" as: "(i) the official closing price of an ETF share; or (ii) if it more accurately reflects the market value of an ETF share at the time as of which the ETF calculates current NAV per share, the price that is the midpoint of the national best bid and national best offer ('NBBO') as of that time." Final Rule, p. 99.
32. Final Rule, p. 214.
33. Includes selected examples from the Securities Enforcement Empirical Database (SEED) that tracks and records information for SEC enforcement actions filed against public companies traded on major U.S. exchanges and their subsidiaries. The database is created and maintained by the NYU Pollack Center for Law & Business in cooperation with Cornerstone Research. *See* https://www.law.nyu.edu/centers/pollackcenterlawbusiness/seed.
34. Securities Exchange Act of 1934 Release No. 73125, September 17, 2014, ¶ 10, https://www.sec.gov/litigation/admin/2014/34-73125.pdf.
35. Securities Exchange Act of 1934 Release No. 73125, September 17, 2014, https://www.sec.gov/litigation/admin/2014/34-73125.pdf.
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