THE REGULATORY FUNDAMENTALS GROUP LLC

Exchange Traded Product ("ETP") Risks: What Endowment Investors Need to Know

By Deborah S. Prutzman & Peter J. Shea

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Deborah S. Prutzman is the Chief Executive Officer of The Regulatory Fundamentals Group LLC ("*RFG")* located in New York City (www.RegFG.com). Founded in 2009, RFG helps endowment investment offices proactively address the regulatory and legal requirements they face when engaging in investment activities. RFG represents a consortium of the nation's leading endowments, which have more than $100 billion in assets under management.

Peter J. Shea is a partner in the New York office of K&L Gates LLP (www.klgates.com), a law firm with over 2,000 attorneys located in 46 countries. Mr. Shea is the co-head of the ETF Practice Group at K&L Gates. His practice focuses on the formation and operation of exchange traded products, including their compliance with federal securities and commodities laws and regulations

Exchange Traded Product ("ETP") Risks: What Endowment Investors Need to Know

Exchange Traded Products ("*ETPs*") have come to play a major role in many investment strategies and investment portfolios, both for endowments and other types of investors. ETPs have seen significant growth as an industry in recent years—mainly in the United States but also globally. For example, a subset of ETPs, U.S. exchange traded funds, as of March 2018 held more than $4 trillion in assets, up from about $1 trillion in 2008.[1] The growth in ETPs has been driven by features such as ease of acquisition and disposal, reduced costs compared to other forms of investment and, in certain cases, tax efficiencies and a desire for portfolio diversification. From a strategy perspective, endowment managers may use multiple ETPs blended together to provide a desired risk and return profile and may use a single ETP to provide an appropriate single solution strategy for the endowment's goals. Despite the obvious benefits provided by ETPs, an endowment investment office will need to appropriately diligence an ETP investment to confirm that investment objectives are likely to be achieved and evidence that fiduciary duties have been addressed. The purpose of this white paper is to highlight some of the unique features of ETPs and, thus, assist endowments as they determine the amount and type of diligence desirable for any specific ETP allocation. It consists of the following sections: an introduction to ETPs, a discussion of ETP risks (starting on page 13), where to find information about ETPs (starting on page 23). In addition, for RFG endowment consortium clients, RFG has prepared a discussion of investor reporting and filing requirements and a sample list of issues based on the review of one ETP prospectus.

[1] "Could ETF's Fall into a Liquidity Jam," by Mike Bird (Wall Street Journal Mar. 21, 2018) available at https://www.wsj.com/articles/return-of-volatility-raises-liquidity-question-for-etfs-1521627574. Total assets in global exchange traded products as of February 2018 were at $5.2trn according to ETFGI (see "Global ETF assets soar past $5trn mark" available at https://www.trackinsight.com/news/global-etf-assets-soar-past-5trn-mark/. As of December 31, 2017, the U.S. ETF industry had $3.4 trillion in assets, which represented 72% of worldwide ETF assets (see, 2018 Investment Company Fact Book – A Review of Trends and Activities in the Investment Company Industry, by the Investment Company Institute, (58th ed.) ("*2018 ETF Fact Book*") at pp. 82-87, available at https://www.ici.org/pdf/2018_factbook.pdf). See also "NYSE Arca ETF Report: Quarterly Report" (NYSE Mar. 2018) available at https://www.nyse.com/etf/exchange-traded-funds-quarterly-report.

I. Introduction to ETPs

All ETPs considered in this white paper share certain common features. One is that all ETPs are tradeable on an exchange. Another hallmark of ETPs is that they continuously issue and redeem their securities. The principal, and perhaps most important, feature of ETPs is their reliance on an "arbitrage function" performed by market participants that influences the supply and demand of ETP shares and, thus, trading prices. This arbitrage function acts to discipline ETP share trading prices to the net asset value ("*NAV*") per share of the ETP.[2] To appreciate the arbitrage function of ETPs, it is useful to understand that ETPs have two separate markets:

- The primary market between the ETP and certain broker-dealer firms that have agreed to act as Authorized Participants ("*APs*"); and
- The secondary market represented by the securities exchanges and markets upon which all other investors buy and sell the ETP's shares.

In the primary market, ETPs sell shares to and redeem shares from APs in large aggregations (*e.g.*, 25,000 or 50,000 shares), called "*Creation Units,*" at the next calculated NAV per share. An ETP's NAV is typically calculated as of the close of trading on its primary listing exchange. Any investor in ETP shares, including APs, can also buy and sell ETP shares in any quantity at current market prices through brokered orders on exchanges and markets listing the shares.

The arbitrage function operates by offering APs a profit opportunity arising from any differential between ETP trading prices and NAV. For instance, if an ETP's shares are trading at a discount to the ETP's expected NAV, APs have an incentive to purchase shares on the market and then redeem them for the higher NAV value. This AP activity reduces the supply of shares on the market and generally would result in a higher market price. When ETP shares are trading at a premium to NAV, APs have an incentive to create shares at the lower NAV and then sell them on the market, increasing the supply of the ETP's shares, until trading prices fall to meet the current NAV. In each case, the AP activity is intended to continue until market prices and expected NAV reach equilibrium.

[2] Exchange traded closed-end funds do not continuously offer and redeem their shares and do not rely on or otherwise enjoy such an arbitrage function. Thus, shares of exchange traded closed-end funds often trade at a persistent discount to their NAV. Consequently, closed end funds are not considered ETPs.

Because the arbitrage function depends on market participants' expectation of the ETP's NAV, AP arbitrage share creation and redemption activity often occurs close to the end of any given trading day as values of the ETP's underlying portfolio assets begin to be resolved. However, in practice for many popular ETPs, arbitrage activity is often low because market participants can discern or anticipate premium and discount conditions and avoid trades that would exacerbate such conditions for fear that an AP could profit from the disparity.

The ETP industry is characterized by constant innovation to meet demand for new products. Thus, separate categories of ETPs have risk profiles that can be specific to each category (based on differences in underlying assets and regulation) and, in fact, certain categories of ETPs can be further broken down into sub-categories, each with its own unique risk profile. For example, although ETPs rely on AP arbitrage, the manner in which such arbitrage is conducted may differ.

Most ETFs engage in creation and redemption transactions on an in-kind basis. Thus, APs creating shares must deliver a specified basket of securities in order to receive a Creation Unit of ETF shares, and APs redeeming a Creation Unit will receive a specified basket of securities from the ETF. These "deposit baskets" of securities typically represent a pro rata slice of the ETF's portfolio and are transacted on the basis of the NAV of a Creation Unit. However, some ETFs, such as fixed income ETFs, and many other types of ETPs cannot and do not operate on an in-kind share creation and redemption basis. The SEC recently adopted a liquidity risk management rule to cause ETFs and mutual funds to manage their liquidity to meet expected liabilities with significant emphasis on funds that engage in cash redemption practices.[3]

Many market participants erroneously call almost all ETPs "ETFs;"[4] however, this obscures the different investor risks of different types of ETPs. This paper highlights the different categories of ETPs commonly available to U.S. investors and some of the prominent category risks

[3] This new rule, Rule 22e-4 under the 1940 Act, is expected to go into effect in December 2018 for large ETF and mutual fund complexes having over $1 billion in assets under management and in June 2019 for smaller complexes. All funds except in-kind ETFs must (1) engage in a monthly exercise to classify each of their assets into one of four liquidity categories - Highly (Cont'd) Liquid, Moderately Liquid, Less Liquid and Illiquid - based on expected number of days to sell the asset at any given point in time and (2) state and maintain a highly liquid investment minimum percentage of assets as needed to service expected cash redemptions. See https://www.sec.gov/rules/final/2016/33-10233.pdf (Oct. 13, 2016).

[4] See https://www.sec.gov/news/speech/speech-blass-2018-03-19.

attendant to investments in them. It does not examine all risks of ETPs generally or all the risks of any specific ETP. Such particularized risk disclosure will be found in, among other places, the ETP's summary prospectus, prospectus and other information available on the ETP's website.

The following types of ETPs are the primary focus of this paper:

- ***Exchange traded funds***. Exchange traded funds ("*ETFs*") are the type of ETP that seems to be garnering the most investor interest. They operate as mutual funds whose shares are traded on a stock exchange.
- ***Exchange traded commodity products***. Other ETPs, referred to as "*ETCs*" or exchange traded commodity products,[5] offer exposure to commodities, including exposures through pools of commodities futures and physically-backed commodity trusts that track, for instance, precious metals owned by such trusts.
- ***Exchange traded notes.*** Exchange traded notes ("*ETNs*") typically offer exposures to a variety of currencies, commodities and other assets or indices through a note issued by a bank. ETNs are often utilized for hedging purposes.
- ***Exchange traded managed funds***. A recent entrant to the ETP universe is Eaton Vance's NextShares product line, called exchange traded managed funds ("*ETMFs*").[6]

Exchange Traded Funds

Simply stated, ETFs are mutual funds whose shares are traded on a stock exchange. As such, ETFs are regulated by the Securities and Exchange Commission ("*SEC*") under the Investment Company Act of 1940 (the "*1940 Act*") and continuously offer and sell their shares to APs through unlimited offerings registered under the Securities Act of 1933 (the "*1933 Act*").

The first ETF, the SPDR S&P 500 ETF Trust (Ticker: "SPY"), is organized as a unit investment trust ("*UIT*") issuing depository receipts. Its portfolio is rebalanced to match the S&P 500 Total Return Index by its administrative trustee without the assistance of a third-party adviser. Most

[5] ETCs represent about 2% of U.S. ETF and ETC assets. See 2018 ETF Fact Book at 86-87.

[6] The first NextShares ETMF launched in February 2016. See http://www.etf.com/sections/features-and-news/eaton-vances-etmf-finally-debuts?nopaging=1.

ETFs today are organized, for efficiency and flexibility of operation, as open-end management investment companies (mutual funds) issuing shares of beneficial interest and their portfolios are managed by advisers regulated under the Investment Advisers Act of 1940 ("*Advisers Act*"). Consequently, most ETFs are organized as business trusts with each separate series of the trust being a separate ETF whose operations are overseen by a governing board of trustees or directors in a structure identical to that of most mutual fund complexes. This regulatory overlay requires ETFs to:

- Provide detailed prospectus disclosures (SEC Form N-1A) and periodic reporting;
- Observe certain governance standards, including board independence standards; and
- Operate under conflicts of interest prohibitions or limitations applicable to ETF affiliates and affiliates of affiliates to protect investors.

In 1940 when the Investment Company Act was adopted, ETFs were not contemplated. Consequently, in order to operate, ETFs need exemptive relief from the SEC from certain provisions of the 1940 Act. The SEC has announced a regulatory priority to propose a rule in September 2018 that will permit ETFs meeting the rule's conditions to function under the 1940 Act without first having to procure an exemptive order from the SEC.[7] For instance, ETFs currently seek exemptive relief:

- to have ETF shares trade at exchange prices, ETFs need relief from Section 22(d) and related rules under the 1940 Act that prohibit brokers from selling shares of mutual funds for a price different from their NAV;
- from the affiliate prohibited transaction provisions of Section 17(a) and (d) of the 1940 Act;[8]
- to allow other ETFs and mutual funds to acquire an ETF's shares in excess of the Section 12(d)(1) anti-pyramiding provisions of the 1940 Act;[9] and

[7] See https://www.sec.gov/news/speech/speech-blass-2018-03-19.

[8] An AP can become an affiliate merely by holding 5% or more of the ETF's shares, which is especially possible for smaller ETFs .

[9] The anti-pyramiding provisions of Section 12(d)(1)(A) prevent an acquiring investment company from (1) acquiring more than 3% of an acquired investment company's outstanding voting securities; (2) investing more than 5% of its assets in a single investment company, and (3) investing more than 10% of its assets in multiple investment companies. This provision, among other things, is intended to prevent abuses associated with fund of funds structures, such as excessive fee layering and improper influence over acquired funds.

- alternatively, some ETFs seek anti-pyramiding relief so that they can operate as an ETF of ETFs.[10]

The take away point from this regulatory posture is that ETFs are subject to a variety of conditions under their SEC exemptive relief (and will be under any expected SEC ETF rule) that seek, among other things, to allow for an effective arbitrage function.[11]

As noted above, most ETFs engage in creation and redemption transactions on an in-kind basis where APs creating shares must deliver a specified basket of securities in order to receive a Creation Unit of ETF shares, and APs redeeming a Creation Unit will receive a specified basket of securities from the ETF. These "deposit baskets" of securities typically represent a pro rata slice of the ETF's portfolio and are transacted on the basis of the NAV of a Creation Unit. ETF in-kind share transactions do not trigger taxable events under U.S. tax law and allow an ETF to avoid substantial portfolio brokerage costs because cash proceeds do not need to be invested from share creation activity and portfolio positions do not need to be liquidated to honor redemption requests. Consequently, ETFs are comparatively tax efficient and can enjoy lower portfolio management costs.

Finally, ETFs can take advantage of subchapter M of the U.S. Internal Revenue Code as regulated investment companies ("*RICs*") to avoid corporate taxation at the fund level. As RICs, ETFs and mutual funds must abide by subchapter M requirements as to diversity of portfolio holdings, annual distribution of all income and limit the amount of income and gains from non-securities investments to below 10% of annual income.

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[10] Section 12(d)(1) relief is typically one or the other - allowing other investment companies to invest in the ETF or allowing the ETF to invest in other investment companies - because the SEC does not want to allow three-tiered fund of fund structures.

[11] Broker's trading in ETF shares also need exemptive relief from a variety of provisions of the Securities Exchange Act of 1934 (the "*1934 Act*"), such as relief from certain trading activity or "market conditioning" restrictions under Regulation M when a share offering has commenced since ETFs are engaged in continuous or "evergreen" offerings. Consequently, the SEC has issued a number of class-relief no-action letters under the 1934 Act for ETFs. For a discussion of the exemptive and no-action relief ETF's rely on, see the Investment Company Institute guide "Understanding the Regulation of Exchange Traded Funds Under the Securities Exchange Act of 1934" available at https://www.ici.org/pdf/ppr_17_etf_listing_standards.pdf.

Exchange Traded Commodity Products

Generally, U.S. markets offer two different types of ETCs: (i) an exchange traded commodity pool that invests in commodity futures or (ii) a grantor trust or similar pass-through tax vehicle that owns a physical commodity (or spot commodity) whose shares are traded on an exchange. An example of the former would be the Invesco DB Agriculture Fund (f/k/a PowerShares DB Agriculture Fund) (ticker: "DBA"). An example of the latter would be SPDR Gold Trust (ticker: "GLD"). Both types of ETCs register their share offerings under the 1933 Act but do not fall under the 1940 Act or the Advisers Act since any securities in their portfolios are merely "incidental" in the eyes of the SEC. Consequently, ETCs register fixed amounts of shares on SEC registration statements utilized by ordinary operating companies (SEC Forms S-1 or S-3).

The first kind of ETC product, exchange traded commodity pools, are subject to regulation under the Commodity Exchange Act (the "*CEA*") by the Commodity Futures Trading Commission ("*CFTC* ") and the National Futures Association ("*NFA*"). Such pools' sponsors are regulated as commodity pool operators and may employ regulated commodity trading advisers. As a commodity pool, this type of ETC must observe a variety of CFTC prospectus disclosure obligations in addition to those imposed by the SEC. In addition, the CFTC also imposes periodic reporting, recordkeeping and advertising requirements.

Further, the CFTC's regulation of the futures markets results in ETC futures trading limitations (e.g., position limits). Nevertheless, ETCs lack many of the protections afforded to ETF investors that exist under investment company regulation. For instance, sponsors of ETCs are not subject to the oversight of an independent board and have greater latitude to engage in transactions that would generate fees for themselves and their affiliates that would otherwise be limited under the 1940 Act. Further, the 1940 Act requires that ETFs be able to daily redeem their shares. ETCs are under no such statutory obligation and may suspend rights to redeem shares at their sponsor's discretion.

Finally, commodity pool ETCs typically do not create and redeem their shares in-kind since the futures contracts they hold cannot easily be broken into "odd" lots and not all APs are able to engage in futures transactions with ETPs due to position limits and for other reasons. Thus, commodity pool ETCs create and redeem their Creation Units wholly in cash. To the extent that

ETCs hold cash or cash equivalents, they do so primarily to support margin requirements, although these holdings also can be used to service redemption requests.

The second type of ETC, physically backed ETCs, is typically formed as a grantor trust that has no governing board. Instead, physically backed ETCs are operated by their sponsors within the strictures of their governing trust agreements. As grantor trusts, these ETCs avoid ETC-level taxation. In order to qualify as a grantor trust, these ETCs are unable to engage in any activities other than issuing Creations Unit for their referenced commodity, holding their referenced commodity as trust assets, and delivering their referenced commodity upon Creation Unit redemption. Thus, physically backed ETCs create and redeem their Creation Units in-kind. They typically pay their sponsor's fees in kind as well. While there may be latitude to liquidate the ETC's asset under certain circumstances, such sales activities and cash holdings may jeopardize the ETC's tax status as a grantor trust.

Determination of a physically backed ETC's NAV may be complex, as in some instances multiple locations around the world are recognized pricing locations for a referenced asset. For precious metal ETCs, this pricing issue is avoided by use of London precious metal prices but the issue remains for other spot commodities. Presently in the U.S., the formation of base metal ETCs has been thwarted by metal industry opposition to financial speculation in industrial markets.

Exchange Traded Notes

As noted above, ETNs are merely general obligation debt instruments of an issuing bank, the value of which is tied to the performance of a referenced asset, commodity, currency or index. Since the issuing bank hedges its exposure to its ETNs, the performance of an ETN often suffers from the drag of bank hedging activity costs as well as other costs. Many ETNs offer returns that are a multiple, the inverse or a multiple inverse performance of the ETN's referenced asset, currency or index. As with ETCs, ETNs do not offer investors the same regulatory protections that ETF investors enjoy.

Exchange Traded Managed Funds

ETMFs are similar to ETFs and are subject to the same regulatory structure under the 1940 Act and the Advisers Act. However, ETMFs have some significant differences. Unlike ETFs, which daily disclose their portfolio holdings, ETMFs only disclose their portfolio holdings as required of mutual funds (*e.g.*, quarterly within 60 days of quarter end). This masking of the ETMF's portfolio permits ETMF managers to engage in more active portfolio management strategies without fear of third parties reverse engineering their strategy and front running the fund's trades or free riding on the manager's strategy. Moreover, ETMF shares trade on exchanges at prices based on the next expected NAV plus or minus a premium or discount determined by the market at the time of execution of a transaction (which premium or discount could be zero). Thus, a hypothetical investor wishing to purchase an ETMF share at 2:00 pm on a trading day would execute at a share price of, for instance, +$0.02 plus NAV (with the NAV to be determined at 4:00 pm). While the investor will have some idea of the total amount it will pay for the shares based on yesterday's NAV and intra-day indicative values of the ETMF's NAV, the investor will not know exactly the amount of its settlement obligation until the next NAV is determined and the execution-time premium or discount is added or subtracted.

Other Types of ETPS

Other types of ETPs are traded outside of the U.S. but are beyond the scope of this whitepaper. For instance, there are a variety of ETFs that are traded on the London Stock Exchange and other European exchanges. Unlike U.S. ETFs, European ETFs and some Canadian and Asian ETFs, besides being outside of U.S. regulatory jurisdiction and failing to address the tax concerns of most U.S. investors, tend to be wholly synthetic with performance generated by a pre-paid or "funded" swap agreement or other derivative investment. Thus, these ETFs tend to have greater counterparty risks than U.S. ETPs (except for ETNs where the issuing bank counterparty risk is apparent). In addition, a variety of spot commodity investments not offered on U.S. markets are available on foreign exchanges. For instance, the London Metals Exchange ("*LME*") facilitates the trading in a wide variety of metal "warrants" that represent interests in metals held by LME licensed warehouses.[12]

While ETPs are gaining assets outside of the U.S., they have not experienced the acceptance rates that U.S. ETPs have. For instance, the Tokyo Stock Exchange lists about 100 ETPs, which is about the number of ETFs that are opened or closed annually in the U.S. In other countries, such as South Korea or Australia, ETPs have gained some acceptance but with products that are specifically designed for the local investor (e.g., high leverage rates, local company investment, commodity emphasis, etc.).

New Kinds of U.S. ETPs on the Horizon

Meanwhile, the U.S. ETP markets continue to evolve. A number of new ETP products are presently seeking approval exemptive applications or exchange listing rules from the SEC. A couple of the more prominent proposals are discussed below.

- ***True Active*.** There are a number of proposals in front of the SEC that would permit actively managed ETFs that do not require full daily portfolio disclosure. These proposals seek to allow sophisticated active management (as found in the mutual fund industry)

[12] See www.lme.com.

while leveraging the benefits of the ETF industry and its pre-existing infrastructure and masking the actual portfolio so as to reduce the risk of trade front running and strategy free riding.

Instead of full daily transparency for an ETF's portfolio, the proposals rely on the daily dissemination of substitute information concerning the ETF's actual portfolio. For example, one such proposal relies on intra-day publication (every second) of a verified intraday indicative NAV ("*VIIV*") of the ETF's actual portfolio.[13] Other proposals rely on the daily publication of a "proxy" or "shadow" portfolio that closely tracks the performance of the ETF's actual portfolio.[14] In all these proposals, the information being provided (*e.g.*, VIIV or proxy portfolio information) is designed to facilitate the arbitrage function for these types of ETFs in the absence of full daily portfolio disclosure.

- ***Crypto.*** Presently, no exchange traded bitcoin or cryptocurrency product is offered in the U.S., although several efforts are underway. In a January 18, 2018 letter from the SEC's director of the Division of Investment Management to two fund industry groups,[15] the SEC staff raised a variety of issues concerning investment by mutual funds and ETFs in cryptocurrencies. The staff focused on, among other things, problems cryptocurrencies present associated with valuation, liquidity, custody, arbitrage for ETFs, manipulation and fraud. The staff indicated that it would not allow investment companies to invest in cryptocurrencies in a significant manner until these issues have been resolved by the industry.

  Nonetheless, several "crypto" ETC listing rule proposals are pending with the SEC. For example, the SEC announced that it is considering a proposed rule change to list and

[13] See "Notice of Filing of Proposed Rule Change to Adopt a New NYSE Arca Rule 8.900-E and to List and Trade Shares of the Royce Pennsylvania ETF; Royce Premier ETF; and Royce Total Return ETF under Proposed NYSE Arca Equities Rule 8.900-E," SEC Rel. No. 34-82549 (Jan. 19, 2018) at https://www.sec.gov/rules/sro/nysearca/2018/34-82549.pdf, and "Fifth Amended and Restated Application for an Order under Section 6(c) of the Investment Company Act of 1940," by Precidian ETF Trust et al. (filed Dec. 4, 2017) at https://www.sec.gov/Archives/edgar/data/1499655/000114420417062140/0001144204-17-062140-index.htm.

[14] See, e.g., "Application for an Order under Section 6(c) of the Investment Company Act of 1940," filed by Natixis ETF Trust II et al. (filed Jan. 22, 2018) available at https://www.sec.gov/Archives/edgar/data/1018331/000119312518015812/d521051d40app.htm.

[15] SEC letter available at https://www.sec.gov/divisions/investment/noaction/2018/cryptocurrency-011818.htm.

trade the shares of ProShares Bitcoin ETF and ProShares Short Bitcoin ETF.[16] While styled as "ETFs" these products are, in fact, ETCs since they are investing in commodity futures and are not regulated under the 1940 Act. The first fund will seek results that correspond to the performance of lead month bitcoin futures contracts listed and traded either on the Chicago Board of Options Exchange ("*CBOE*") or the Chicago Mercantile Exchange ("*CME*"). The second fund will attempt to achieve results for a single day that correspond to the inverse of that performance.

[16] See "Self-Regulatory Organizations; NYSE Arca, Inc.; Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to List and Trade the Shares of the ProShares Bitcoin ETF and the ProShares Short Bitcoin ETF under NYSE Arca Rule 8.200-E, Commentary .02," SEC Rel. No. 34-82939 (Mar. 23, 2018) available at https://www.sec.gov/rules/sro/nysearca/2018/34-82939.pdf.

II. Major Risks Associated with Exchange Traded Products

Against this backdrop, this section provides some insights and context with respect to major risks associated with the various types of ETPs outlined above.

Market Risk

All ETPs are exposed to market risks concerning the trading of their securities. Ideally, an ETP's market would track the market prices of its underlying assets. However, ETPs face an additional risk that market prices for the ETP will not correspond to the NAV of its underlying assets. Such fluctuations might occur because of changes in the expectations as to the next determined NAV, intraday changes in the value of the ETP's assets, or supply and demand for the ETP's shares. The amount of premium or discount of ETP trading prices relative to ETP NAV may also be influenced by, among other things, non-concurrent trading hours between the ETP's primary listing exchange and the exchanges or markets upon which the ETP's underlying assets are traded. For instance, foreign securities held by an ETF are expected to have less liquidity when their foreign market is closed. As a result, bid/ask spreads on trading prices, and the resulting premium or discount, on the ETF's shares may widen during these gaps in market trading hours.

Discounts/Premiums & Bid/Ask Spreads. The arbitrage function played by APs is supposed to alleviate market risk by facilitating the creation or redemption of shares when demand and supply for an ETP in the secondary market is out of balance. However, the AP arbitrage function can be imperfect and can break down. These imperfections and breakdowns can result in episodic and sometimes persistent premium or discount conditions in an ETP's share trading prices relative to its NAV. Also, some research indicates that ETF prices may diverge from underlying securities prices during turbulent markets.[17]

A growing bid/ask spreads in the pricing of ETP shares by an ETP's market makers often creates growing premium/discount conditions. Large bid/ask spreads have the potential to wipe out any gains or otherwise substantially increase losses over those expected based on the ETP's

[17] See e.g., Exchange Traded Funds (ETFs), Annual Review of Financial Economics, revised Sept. 16, 2017, at section 4.4, p. 20 available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2865734 (noting several market occasions when market prices and NAV diverged due to a lack of AP arbitrage activity during stressed markets).

NAV performance over the period of investment. Market maker firms (which can be APs of an ETP) are utilized by exchanges to maintain an orderly market in listed securities. They do this by executing transactions to smooth and support security price performance during the trading day. For any ETP, market makers are concerned with obtaining effective hedges against their market making activities since they are not, as a matter of business, speculating in ETP shares for which they make markets.

Effective hedging typically requires a degree of transparency about the ETP's underlying assets and/or a degree of liquidity on the part of those underlying assets. The amount of market liquidity for the ETP's shares is also a factor for market makers because less trading volume in an ETP's shares indicates that the market maker may be exposed longer to the risks of holding the ETP's shares. Thus, a history of large bid/ask spreads on buy and sell quotes for an ETP's securities is a statement by its market makers as to the uncertainties concerning the risks of those shares and should be a "red flag" for any investor seeking to invest in that ETP. An investor's broker can provide current bid/ask spread information, and the ETP's website and other financial service information websites can provide historical bid/ask trading price spread information.

***ETP Primary Exchange Trading Halts and Delisting*.** Trading in ETP shares may be halted due to market conditions or because an ETP's listing exchange deems further ETP share trading inadvisable. Extraordinary market volatility conditions may result in exchange "circuit breaker" rules halting trading for a specified period. ETPs also must comply with their exchange's listing rules or risk suspension from trading or de-listing. Typically such a step would trigger the liquidation of an ETP at what could be an inopportune time for investors. Index ETFs face an increased risk of delisting since the 2017 adoption of continuous listing rules that require the ETF's sponsor to determine that the ETF's underlying *index*, not the ETF's shares or assets, meets specified liquidity requirements. [18]

***Market Illiquidity for Shares*.** Although ETPs are listed for trading, there is no guarantee that an active market can be maintained for any ETP's shares. If an investor has to sell its ETP shares when there is no active market, the sale price (assuming the shares can be sold at all), will likely

[18] Securities Exchange Act Release No. 80189 (Mar. 9, 2017) (NYSE Arca Order); Securities Exchange Act Release No. 80169 (Mar. 7, 2017) (Bats Order); Securities Exchange Act Release No. 79784 (Jan. 12, 2017) (Nasdaq Order).

be lower than what could be obtained in an active market. If one or more of the ETP's APs withdraw from participation, the shares will be less liquid and this may adversely affect the ETP's arbitrage function and trading market. For this reason, ETFs may be hard to sell in market downturns.

Price Volatility and Illiquidity for Referenced Assets or Index. To the extent, the ETP's underlying index or referenced asset experiences high price volatility, such volatility should be expected in the ETP's share prices and may be amplified by increased trading spreads. Moreover, illiquidity for the ETP's underlying assets will make it harder for the ETP to liquidate assets at desired prices. Such illiquidity may result from government actions to halt trading or market interventions (*e.g.*, futures position limits, withdraw of credit to market participants, short selling moratoriums or foreign market trading halts for political reasons). Such illiquidity will usually result in increased ETP trading spreads due to the value uncertainty caused by illiquidity. For instance, disruption in the pricing of listed securities on August 24, 2015 (with successive market circuit breaker trading halts) caused many ETFs tracking those securities to experience wild swings in their pricing.[19]

This kind of underlying asset illiquidity can manifest negatively in ETP prices in many ways. For instance, the Wall Street Journal reported in March 2018 on the potential for ETF's to fall into a "liquidity jam" noting that given increased volatility in 2018, investors were shorting shares of some ETFs invested in high-yield debt. Apparently, the shorting investors were focused on the possibility that APs might redeem shares. This caused the redeeming-for-cash ETFs to sell their most liquid underlying securities when the redemptions occurred, leaving the ETFs with less liquid assets, which, in turn, further negatively impacted trading prices.[20]

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[19] An SEC report available at https://www.sec.gov/marketstructure/research/equity_market_volatility.pdf on the August 24, 2015 equity market volatility notes that 40% of the 50 largest capitalization exchange traded products declined by 10% or more, and 36.5% of more than 1,300 other ETPs also declined by 10% or more. The report concludes that "ETPs as a class experienced more substantial increases in volume and more severe volatility than Corporates on August 24, but individual ETPs varied widely in terms of their volatility… A minority of ETPs (19.2%) … declined by 20% or more (compared to only 4.7% of Corporates)." It also noted that, "Extreme volatility seemed to occur idiosyncratically among otherwise seemingly similar ETPs. SPY, for example, traded at a premium to its NAV until 9:37, while the next largest ETP – the iShares Core S&P 500 ("IVV") – traded at a substantial discount to the SPY, EMini, and SPY NAV until 9:43." Consequently, market orders by ETP investors can be very problematic, and an ETP investor should consider limit orders when executing their transactions, especially in volatile market conditions.

[20] Article available at https://www.wsj.com/articles/return-of-volatility-raises-liquidity-question-for-etfs-1521627574.

NAV Calculations May be Erroneous. NAV may be in error where the ETP's underlying assets cannot be accurately valued at a fixed settlement price. This is also known as fair valuation risk where the fund must value its assets but must do so upon incomplete or stale information. For instance, fair valuation risk can arise for a foreign equity ETF, which determines its NAV typically at 4:00 pm (U.S. Eastern Time), but the markets for the foreign securities held in its portfolio closed hours before.

Index ETF Risks

Tracking Error. An index-based ETF's return may not match the return of its underlying index for a number of reasons. For example, the ETF incurs operating expenses not applicable to the underlying index, and incurs costs in buying and selling securities, especially when rebalancing the ETF's securities holdings to reflect changes in the composition of the underlying index. In addition, the performance of the ETF and the underlying index may vary due to asset valuation differences and differences between the ETF's portfolio and the underlying index resulting from legal restrictions, costs or liquidity constraints.

The error between the performance of an index ETF and its underlying index (known as "*tracking error*") can increase when an ETF pursues a "representative sampling strategy" instead of a "full replication" strategy. In a full replication strategy, the index ETF invests in all the component securities of the underlying index with the same weightings of the underlying index. In a representative sampling strategy, the ETF holds only certain index component securities with weightings different from those present in the index.

Passive Investment Risk. Index-based ETFs are not actively managed and their managers do not attempt to take defensive positions in declining markets. The value of index ETF shares will decline, more or less, with any decline in value of the underlying index. Unlike many investment companies, index ETFs do not utilize investing strategies that seek returns in excess of their underlying indexes. The underlying index may not contain the appropriate mix of securities for any particular economic cycle, and the timing of movements from one type of security to another in seeking to track the underlying index could have a negative effect on the ETF. Unlike an actively managed fund, an index ETF does not use techniques or defensive strategies designed to lessen the effects of market volatility or to reduce the impact of periods of market

decline. This means that based on market and economic conditions, the ETF's performance could be lower than other types of registered investment companies that may actively shift their portfolio assets to take advantage of market opportunities or to lessen the impact of a market decline. Maintaining investments in securities regardless of market conditions or the performance of individual securities could cause the ETF's return to be lower than if the ETF employed an active strategy.

The fact that an ETF is passive does not protect it from experiencing losses when securities are sold or purchased. For example, an index ETF will purchase or sell a security when its underlying index adds or removes that security and at no other time. Thus, an index ETF could be purchasing or selling at inopportune times without regard to then-current market prices.

Active ETF Risks

All actively managed ETFs currently on the market in the U.S. are required by the SEC to have full public transparency to their portfolio holdings on a daily basis. Most current active ETFs are fixed income funds, which are not amenable to front running or strategy free riding due to the nature of bond trading. The few actively managed equity ETFs rely on portfolio management methodologies that are difficult to reverse engineer. In addition to the general ETP risks, these ETFs' risks would be the same as those of comparable actively managed mutual funds, which are dependent on the strategies employed and their asset class exposures.

ETC Risks

While ETCs generally conduct 1933 Act "shelf" offerings where they continuously offer their shares, they are only permitted to register a fixed quantity of shares at any one time. As creation activity occurs, an ETC draws registered shares down from its "shelf" registration and sells them to the AP requesting a Creation Unit. Redeemed ETC shares are not available for reissuance by the ETC and are cancelled. As the ETC nears the depletion of the number of shares registered for public sale, it must seek to register more shares. If there is any delay in the registration of the additional shares or such registration is blocked or prevented, a premium condition for the ETC's shares will persist and potentially grow. Such registration delays may occur, for instance due to government actions, such as when the CFTC revises its position limits

and an ETC is compelled to delay further share registration until it can revise its investment strategy to meet the new regulatory conditions.[21] ETC shares purchased during such a premium condition could lose value when the SEC declares a new shelf registration effective for the ETC.

ETC Risks - Commodity Pools

Commodity Pool ETCs are exposed to all the risks of investing in commodities futures contracts, which include risks of high price volatility, inflation, interest rate and exchange rate sensitivity, sensitivity to weather and other environmental conditions and CFTC regulatory risk. Index based commodity pool ETCs with fewer contracts contained in their underlying index will experience higher volatility. Moreover, spot commodity price indexes typically do not account for the "roll yield" that occurs when the ETC's current portfolio of futures are about to expire and must be replaced by the next contract. Negative roll yield occurs when futures contract market is in "contango" - the next contract is more expensive than the expiring contract. Positive roll yield results from "backwardation" market conditions - the next contract is cheaper than the expiring contract. Moreover, ETCs are not considered diversified, and the performance of an ETC may actually be correlated to the performance of stocks and bonds in a variety of market conditions.

ETC Risks - Physically Backed

Physically backed ETCs are by their nature passive and non-diversified. Their underlying asset and, consequently, their shares can be very volatile. Further, a decline in the integrity or perceived integrity of the pricing methodology of the underlying commodity will negatively impact the ETC's share prices.[22]

ETN Risks

[21] See "Fueling a Losing Bet", by John Spence (Market Watch Jan. 4, 2010) at https://www.marketwatch.com/story/natural-gas-etf-burned-investors-in-2009-2010-01-04. ("Over the summer the [United States Natural Gas Fund L.P.] temporarily halted the creation of new shares as it waited for regulatory approval to issue new shares after it ran out. As a result, the [ETC] traded at a premium to net asset value, which sometimes happens in closed-end funds. The halt in share creation disrupted the process by which ETF premiums and discounts are arbitraged away.")

[22] A potential example of this loss of price determination integrity would be the hypothetical failure of the electronic gold auction clearing market process that were instituted in March 2015 by the London Bullion Market Association to establish a daily worldwide price of gold bullion. See https://www.theice.com/iba/lbma-gold-silver-price.

ETNs offer investors exposure to certain asset classes, especially to asset classes not otherwise offered by other kinds of ETPs. As a result, the investor will be subject to the risks of the ETN's underlying asset class. However, an ETN may trade at a premium or discount to its NAV. The value of an ETN may be influenced by time to maturity, level of supply and demand for the ETN, volatility and lack of liquidity in the underlying market, changes in applicable interest rates, and economic, legal, political or geographic events that affect the referenced asset(s) market. In addition, a discount may occur because an investor will indirectly bear its pro rata share of the fees and expenses incurred by the ETN, including advisory fees or hedging costs. ETN issuers investing in commodities may be, or may become, subject to regulatory trading limits that could hurt the value of their ETNs.

Because ETNs are debt securities, they are subject to credit risk: the value of an ETN may differ from the valuation of its reference market due to changes in the issuer's credit rating. ETNs generally are senior, unsecured, unsubordinated debt securities issued by a sponsor, such as an investment bank. If the issuer has financial difficulties or goes bankrupt, an investor may not receive the return it was promised and could lose its entire investment. While an ETF issuer's credit rating typically will be investment grade at the time of investment, the credit rating may be revised or withdrawn at any time and there is no assurance that a credit rating will remain in effect for any given time period. If a rating agency lowers the issuer's credit rating, the value of its ETNs may decline. A lower credit rating reflects a greater risk that the issuer will default on its obligations.

There may be restrictions on an ETN investor's right to redeem its investment in an ETN, which are meant to be held until maturity. There are no periodic interest payments for ETNs, and principal is not protected. A portfolio manager's decision to sell ETN holdings may be limited by the availability of a secondary market.

Leveraged and Inverse ETP Risks

Leveraged and Inverse ETPs are designed to deliver performance that is a multiple of the performance of an underlying index or referenced asset (*e.g.*, "*multipliers*" of +2x,+ 3x, +4x, -1x, -2x, -3x or -4x). Thus, they seek to deliver a performance return that is a positive multiple (+x),

the inverse (-1x) or a multiple inverse (-x) of the underlying index's or referenced asset's performance. The design of these products dictates that they are only suitable for day trading. The investor will need to purchase such an ETP at the beginning of the trading day and then sell their shares at the end of that day in order to experience investment performance that correlates to the underlying index or referenced asset multiplied by the performance multiplier. Holding these ETPs for less than a day or for longer than a day potentially generates returns to the investor that may not correlate to the performance of the underlying index or referenced asset over the holding period. In particular, holding these shares over longer periods subjects the investor to several uncontrollable risks caused by the design of these products.[23] This attribute results from these ETPs utilizing, or otherwise behaving like, swap contracts that reset every day, which results in compounded daily returns when these ETPs are held for more than one day.

Leveraged and inverse ETFs and ETCs generate their returns by holding swap agreements and other derivatives referenced to these ETPs underlying index level or referenced asset price performance. These swap agreements have a notional amount based on the ETP's then-current assets under management and automatically adjust when shares are created or redeemed, which can occur on a daily basis.[24] The swap agreements generating the performance of these ETFs and ETCs measure index or asset price performance from the last trading day closing index level or asset price to the next closing trading day level or price. Consequently, the level of the swap contract against which the multiplier is applied is reset before the commencement of trading every day and the performance of the swap is only measured at the end of that trading day. This daily resetting, among other things, will help protect against the swap from "zeroing out" (and the ETP shutting down) due to adverse multi-day index level or asset price movements.[25] Leveraged and inverse ETNs engage in the same daily resettings for the same

[23] See https://www.sec.gov/investor/pubs/leveragedetfs-alert.htm and http://etfdb.com/leveraged-etfs/7-mistakes-to-avoid-when-trading-leveraged-etfs/.

[24] They also hold a large amount of short-term U.S. Treasuries that are used to cover or collateralize their derivative and margin exposures.

[25] The daily reset will not protect the swap from "zeroing out" if a large enough adverse intra-day move in underlying index level or referenced asset price occurs. Typically, these swaps have provisions where they will terminate (resulting in termination of the ETP) if a single day level or price movement is adverse to 80%, for example, of the swap's notional value. Some leveraged and inverse ETPs utilize arrangements that provide for "downside protection" so that no adverse move in the level or price of greater than 90%, for instance, would be recognized by the swap. This downside protection comes at the "cost" of capping the

reasons but it is done directly through the NAV calculation of the ETNs, as opposed to a swap agreement held in a portfolio.

Over any time period longer than a day, the performance of the ETP is nearly certain to differ from, and may be significantly worse than, the multiple or inverse of the change in the underlying index or referenced asset from the beginning to the end of that period. This is especially true when the underlying index or referenced asset is experiencing high volatility. This is because the leveraged exposure reflected in ETP will be reset daily, so that each day's leveraged return will be compounded by the next day's leveraged return, and so on. Consequently, the performance of the ETP over any period longer than one day will depend not only on the change in the underlying asset or index from the beginning to the end of that period, but also on the level of the underlying on each day in that period. As a result of the daily reset leverage and the path-dependent nature of ETP's performance, an investor holding the ETP for a period longer than one day may correctly anticipate where the underlying index level or referenced asset price will be at the end of that period but nevertheless experience significant losses on the ETP because the returns of the ETP over that period are compounded daily returns of the ETP for every day of the period.

The SEC has described the compounded daily return of leveraged and inverse ETPs as follows:

> Here's a hypothetical example: let's say that on Day 1, an index starts with a value of 100 and a leveraged ETF that seeks to double the return of the index starts at $100. If the index drops by 10 points on Day 1, it has a 10 percent loss and a resulting value of 90. Assuming it achieved its stated objective, the leveraged ETF would therefore drop 20 percent on that day and have an ending value of $80. On Day 2, if the index rises 10 percent, the index value increases to 99. For the ETF, its value for Day 2 would rise by 20 percent, which means the ETF would have a value of $96. On both days, the leveraged ETF did exactly what it was supposed to do – it produced daily returns that were two times the daily index returns. But let's look at the results over the 2 day period: the index lost 1 percent (it fell from 100 to 99) while the 2x leveraged ETF lost 4 percent (it fell from $100 to $96). That means that over the two day period, the ETF's negative

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upside performance of the swap. Thus, a beneficial movement of the underlying level or price of 100% would result in only a 90%, for instance, gain on the swap's value, which will cap the ETP's intraday upside performance.

returns were 4 times as much as the two-day return of the index instead of 2 times the return.[26]

The SEC provided the foregoing Investor Alert immediately after the financial crisis that began in 2008. Many investors apparently had held inverse financial sector ETPs for many weeks and months over a period characterized by extreme volatility. Once their compounded returns were calculated, many investors experienced significant losses on these ETPs despite the referenced inverse index showing large gains over the same periods. Adding insult to injury, the daily resetting feature causes these ETPs to recognize short term gain or loss every day where the U.S. tax code does not permit the offsetting of short term gains with short term losses. Consequently, these investors in 2009 not only experienced a substantial loss on their inverse ETP investment due to compounded daily returns, but they had to pay income taxes on their accumulated short term gains.

Even if held for only one day, leveraged and inverse ETPs are highly vulnerable to sudden large changes in the values of their underlying asset or index. Because such an ETP reflects a leveraged exposure (rather that a positive 1x proportionate exposure) to the change in the underlying from one trading day to the next, the ETP will experience magnified losses if the applicable underlying value depreciates sharply over that one-day period. Moreover, a large enough loss could cause the ETP to instantly terminate and lock in investor losses, usually total losses, at the worst possible time. For example, a one-day 100% increase of the long value of the Cboe S&P 500 Volatility Index will lead to a one-day 94% loss on the inverse XIV ETNs, which will have the effect of triggering the liquidation of the XIV ETNs and thereby locking in investor losses that occurred during one trading session.[27] A similar result can occur to a three-times return (+3x) ETF that is based on the S&P 500, for instance, if the S&P 500 in one day fell by 35%.

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[26] "Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors," SEC Investor Alerts and Bulletins (Aug. 1, 2009) available at https://www.sec.gov/investor/pubs/leveragedetfs-alert.htm.

[27] "Inverse Volatility Products Almost Worked," by Matt Levine (Bloomberg Feb. 9, 2018) available at https://www.bloomberg.com/view/articles/2018-02-09/inverse-volatility-products-almost-worked. The Bloomberg article also highlights the risks of purchasing inverse ETPs during the trading day rather than at the open when trading prices can depart radically from the indicative intraday value (or NAV) of these ETPs.

III. Where to Find Information About ETPs

Given the complexities of ETPs and the risks outlined above, investors are well-advised to avail themselves of information on the structure and performance of a prospective investment. ETFs are required as a condition of their SEC exemptive relief to maintain a website upon which they typically disclose, among other things, the ETF's

- most current prospectus,
- summary prospectus (a short form of the longer prospectus contained in the fund's registration statement),
- annual reports, other periodic or current reports,
- "fact sheet" providing a summary overview of the ETF and various ETF historical metrics,
- prior Business Day's NAV,
- market closing price or mid-point of the bid/ask spread at the time of calculation of such NAV,
- performance data and charts, and
- daily posting of portfolio holdings and required deposit baskets.

Other ETPs post similar information to their websites as an industry practice.

Also, the SEC's Website (www.SEC.gov > *EDGAR Documents and Filings*) provides access to a variety of current and historical filings with the SEC by each ETP. Access them through the "Company Search" function. Unfortunately, the Company Search function requires the proper name of the legal entity that is the SEC "registrant." For ETFs and ETCs operated as series of business trusts, the trust's proper name, not that of the ETF series, is the only way to locate the relevant SEC filings. Once the trust's filings are located, an investor has the ability to select the filings pertaining to just the relevant ETP series.

The Form N-1A registration statements for ETFs and the Form S-1 or S-3 registration statements for other ETPs include the prospectuses for the ETPs and in many cases additional non-prospectus disclosure, such as the statement of additional information ("*SAI*") for ETFs. These registration statements also attach as exhibits the ETP's charter documents and other material contracts and agreements.

ETFs file Forms N-CSR containing the (1) annual report to shareholders with audited annual financial statement and management's discussion of fund performance and (2) semi-annual reports to shareholders with unaudited semi-annual financial statements. Form N-CSR also contains, among other things, the ETF's codes of ethics, security holdings, proxy voting policies and other disclosures. ETFs also file annually Form N-SAR that essentially is incomprehensible since it is composed of answers to questions that are not present on the form and is used mainly by the SEC. Form N-SAR is being eliminated and being replaced by a more user friendly annual Form N-CEN.

Currently, ETFs file Form N-Q to report their portfolio holdings as of the end of their first and third fiscal quarters. Form N-Q will shortly be replaced by quarterly Form N-PORT public filings, which will contain portfolio holdings and a variety of other ETF risk metrics or disclosures. Form N-PORT is to be filed non-publicly with the SEC on a monthly basis, with only the quarterly filings being made public.[28]

Form 40-APP is also available for ETFs. This form contains the ETF sponsor's application, including various representations and conditions, for exemption from 1940 Act provisions and rule necessary for the ETF to operate legally.

Other ETPs file annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K. These types of filings should also appear on the ETP's website.

Finally, the stock exchanges on which an ETP is traded may disseminate additional information (often relating to per share valuation every 15 seconds) through their consolidated tapes and provide additional trading data about ETPs. The consolidated tape information is best accessed through securities industry websites such as www.YahooFinance.com. For indicative intraday share values ("*IIV*"), an investor should know the ticker symbol of the ETP's IIV, which is usually the ETP's ticker symbol with the suffix"-IV". For example, for the SPDR S&P 500 ETF Trust (Ticker: SPY) the IIV can be found under the ticker symbol "SPY-IV." Nevertheless, the exchange

[28] "Filing of Form N-PORT through the EDGAR system will begin in April 2019 for larger fund groups and in April 2020 for smaller fund groups. To ensure that investors do not lose access to important information, the Commission is requiring funds to continue filing public reports on existing Form N-Q until they begin filing reports on Form N-PORT using EDGAR." SEC explains at https://www.sec.gov/news/press-release/2017-226.

websites are often useful to determine whether trading in an ETP has been suspended, the ETP may be delisted and the ETP is in compliance with exchange listing rules. The three principal U.S. exchange websites are:

- NYSE Arca: www.NYSE.com
- NASDAQ Market: www.nasdaq.com
- Cboe BZX ETF Marketplace: https://markets.cboe.com/us/equities/etfmarketplace/listed_products/

For general information, there are a variety of private and pubic websites.

Several ETP industry groups provide websites that contain significant public and free information concerning ETP investing, ETP industry developments and specific data concerning many ETPs. For instance, the following websites may be useful to ETP investors:

- www.etf.com
- www.exchangetradedfunds.com
- www.morningstar.com/etfs.html
- www.ici.org

In addition, the SEC and FINRA provide resources on ETFs that describe basic information on how they are structured, the different types, and certain risks for investors:

- Exchange-traded Funds (ETFs)[29]
- Investor Bulletin: Exchange-Traded Funds (ETFs)[30]
- SEC-FINRA Investor Alert on Leveraged and Inverse ETFs[31]
- SEC Fast Answers, Exchange-Traded Funds[32]
- FINRA Regulatory Notice 09-31[33]

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[29] Available at https://www.investor.gov/introduction-investing/basics/investment-products/exchange-traded-funds-etfs.

[30] Available at https://www.investor.gov/additional-resources/news-alerts/alerts-bulletins/investor-bulletin-exchange-traded-funds-etfs.

[31] Available at https://www.investor.gov/additional-resources/news-alerts/alerts-bulletins/sec-finra-investor-alert-leveraged-inverse-etfs.

[32] Available at https://www.sec.gov/fast-answers/answersetfhtm.html.

- FINRA Non-Traditional ETFs FAQ[34]
- Mutual Funds and ETFs – A Guide for Investors[35]

[33] Available at https://www.sec.gov/cgi-bin/goodbye.cgi?www.finra.org/Industry/Regulation/Notices/2009/P118953.

[34] Available at https://www.sec.gov/cgi-bin/goodbye.cgi?www.finra.org/Industry/Regulation/Guidance/P119781.

[35] Available at https://www.sec.gov/investor/pubs/sec-guide-to-mutual-funds.pdf.