THE EMERGENCE OF THE ACTIVELY MANAGED ETF

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Since the first exchange-traded fund began trading in 1993, the ETF form has attracted enormous investment flows. However, this triumph of the ETF has been overwhelmingly limited the world of passive investment. Due to a mix of recent market innovation and regulatory change, this state of affairs is changing today. As I explain in this Article, there is much reason to believe that the actively managed ETF is now set to emerge as a significant feature of the investment landscape. And this emergence has important implications for, among others, the main parties that play key roles in protecting investors (namely, the Securities and Exchange Commission as well as investment intermediaries).

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I. INTRODUCTION

The individual contributions to this symposium on the future of securities regulation include thought-provoking views of what developments are likely to be on the horizon and how the law should approach them. In this Article, I add my contribution along these lines, focusing on niche issues relating to investment through exchange-traded funds. In particular, I focus on (1) why there is much reason to believe the actively managed exchange-traded fund (ETF) is set to emerge as a significant feature of the investment landscape and (2) the chief implications of that emergence for some of the parties that play a key role in protecting investors. In so doing, I primarily focus on what should be the main concern in this area over the coming years: the robustness of the ETF arbitrage mechanism that keeps ETF share prices aligned with their underlying fund's per-share net asset value (NAV).[1]

[1] *E.g.*, Henry T.C. Hu & John D. Morley, *A Regulatory Framework for Exchange-Traded Funds*, 91 S. CAL. L. REV. 839, 845 (2018) ("The most distinctive feature of the ETF is its arbitrage mechanism. The purposes of th[e arbitrage] mechanism is to help bring together the price at which an ETF's shares trade on a stock exchange and the pro rata value of the fund's

This Article's story proceeds as follows. For decades, the dominant form of pooled investment for ordinary, individual investors had been that offered by open-end mutual funds. But as described in Part II's primer on ETF investing, things changed on this front in the years after the first ETF came to market in 1993. Given the extent of the triumph of the ETF as a vehicle for passive investment described in Section III.A and the recent regulatory approval of controversial innovations that allowed for the first *nontransparent* actively managed ETFs to trade in mid-2020 described in Section III.B, I make the first argument noted above on the likely emergence of the actively managed ETF. And given this likely emergence, the final Part focuses on the aforementioned concern relating to the robustness of the ETF arbitrage mechanism as well as closely related concerns.[2]

underlying assets, which is known as its net asset value.); *see also* Actively Managed Exchange-Traded Funds, No. Investment Company Act Release No. 25,258, 66 Fed. Reg. 57,614, 57,618 (Nov. 15, 2001) ("The unique structure of an ETF—in which [authorized participants] can buy and redeem Creation Units at NAV, and can sell and purchase individual ETF shares in the secondary market at market price—is designed, among other things, to ensure arbitrage opportunities that would reduce any deviations between the NAV and the market price of ETF shares.").

[2] In a series of public comment letters in late 2017 and early 2018, I raised concerns about the new types of ETFs introduced above and studied in detail below in Section III.B and Part IV, *infra*. *See generally* Kevin S. Haeberle, Comment Letter on Proposed Rule to Adopt a New NYSE Arca Equities Rule 8.900 and to List and Trade Shares (Dec. 15, 2017), https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736-2808360-161694.pdf [https://perma.cc/BX3D-TVFC] [hereinafter Haeberle, 2017 Comment Letter on NYSE Arca Equities Rule]; Kevin S. Haeberle, Comment Letter on Proposed Rule to Adopt a New NYSE Arca Equities Rule 8.900 and to List and Trade Shares (Feb. 16, 2018) https://www.sec.gov/comments/sr-nysearca-2018-04/nysearca201804-3110867-161909.pdf [https://perma.cc/3LYC-DFNE] [hereinafter Haeberle, 2018 Comment Letter on NYSE Arca Equities Rule]. As noted in those letters, I received funding from an interested party (Eaton Vance) for my time spent on research and writing associated with those letters. I have not discussed this current project with anyone at Eaton Vance and more generally have not talked with anyone at that company in almost four years. Moreover, since even before the initial May 2019 SEC approval of the type of ETFs I had questioned, Eaton Vance filed for SEC approval for a related

II. A PRIMER ON ETFS: INNOVATION ACCOMPANIED BY BOTH PROS AND CONS FOR INVESTORS

As explained in this Part, the ETF represents a relatively new financial innovation that brings both advantages and disadvantages to, among others, investors who traditionally would invest via mutual funds. The core innovation is one that results in improved liquidity for investors, even if only in marginal ways. But ETFs provide further notable investor advantages—namely, reduced costs associated with both savings for the fund and tax efficiencies. That said, ETFs also come along with notable counterweights for investors—namely, those associated with spreads between both (1) bid and ask prices and (2) ETF share prices and the underlying per-share net asset value of the fund.

A. The Core Innovation and Its Basic Liquidity Advantage

Traditionally, mutual fund investment was the dominant form of pooled investment for ordinary investors. But buying and selling mutual fund shares means transacting opposite the fund itself. These purchases and sales are executed at a single price per share: the current per-share NAV of the fund.[3] This value is calculated at the end of each trading day,[4] and

ETF form. *See* Nichole M. Kramer, *Semi-Transparent Exchange-Traded Funds: A Revolution in Active Management*, INVS. & WEALTH MONITOR, Jan./Feb. 2020, at 33, 36, https://investmentsandwealth.org/getattachment/8412fae0-e184-437f-a463-cb81790e11a5/IWM20JanFeb-SemiTransparentETFs.pdf [https://perma.cc/G2UJ-WJSY]. In Part IV below, I question the extent to which the SEC and investment intermediaries should be supporting all of these new types of ETFs.

[3] *E.g.*, 17 C.F.R. § 270.22c-1(a) (2021); *Net Asset Value*, U.S. SEC. & EXCH. COMM'N, https://www.investor.gov/introduction-investing/investing-basics/glossary/net-asset-value [https://perma.cc/JR7Y-RYW8] (last visited Dec. 6, 2021).

[4] *E.g.*, INV. CO. INST., 2021 INVESTMENT COMPANY FACT BOOK: A REVIEW OF TRENDS AND ACTIVITIES IN THE INVESTMENT COMPANY INDUSTRY 96 (2021)

all investor transactions to buy or sell shares submitted after the previous end-of-day calculation of NAV and before that next one are executed at the latter.[5] Thus, if a mutual fund investor redeems her shares to the fund at 3:30 p.m. on a Tuesday, she receives the cash value of the NAV/share calculated at the 4:00 p.m. close of trading on that day. Any such investor who redeems shares after 4:00 p.m. on that same day does so in return for the NAV/share calculated at the end of the next trading day.

It follows that investment via mutual fund means a degree of illiquidity for investors. For information-driven investors, this can mean an inability to act on their time-sensitive informational asset. For diversification-driven investors, it can mean less efficient portfolio rebalancing, as by the time the fund calculates and shares its NAV, it is too late for investors to transact at that price.

Instead, ETFs, as indicated by their name, have shares of their pooled-investment funds trading on exchanges throughout the trading day.[6] Since the first ETF began trading in 1993,[7] investors have been able to buy and sell shares of this form of pooled investment fund in the open market in real time when the market is open.[8] More

("Most mutual funds calculate their NAV as of 4:00 p.m. eastern time because that is the time US stock exchanges typically close.").

5 *Id.*

6 *E.g.*, *Exchange-Traded Funds*, FINRA, https://www.finra.org/investors/learn-to-invest/types-investments/investment-funds/exchange-traded-fund [https://perma.cc/4KJM-PTLG] (last visited Dec. 6, 2021) ("Like a mutual fund, an ETF is a pooled investment fund that offers an investor an interest in a professionally managed, diversified portfolio of investments. But unlike mutual funds, ETF shares trade like stocks on stock exchanges and can be bought or sold throughout the trading day at fluctuating prices."); INV. CO. INST., *supra* note 4, at 96 ("In contrast [to mutual-fund pricing], the market price of an ETF share is continuously determined on a stock exchange.").

7 *See* Actively Managed Exchange-Traded Funds, Investment Company Act Release No. 25,258, 66 Fed. Reg. 57,614, 57,615 (Nov. 15, 2001) (noting the debut of the first ETF).

8 *See id.*; *ETFs vs. Mutual Funds*, CHARLES SCHWAB, https://www.schwab.com/etfs/mutual-funds-vs-etfs [https://perma.cc/GXD7-HP6N] (last visited Dec. 6, 2021).

specifically, like with ordinary stocks, ETFs trade in open limit order books where market makers place bid quotes and ask quotes around current market values.[9] Investors can then enter the market and transact against those quotes on demand, buying against the ask quotes (generally slightly above the current market value) or selling opposite the bid quotes (generally just below the current market value).[10]

Basic liquidity advantages follow. For information-driven traders, this structure allows for trades that immediately capture profits based on information that is not yet fully incorporated into market prices. For diversification-driven traders, the structure allows for rebalancing trades to be completed with similar immediacy.

However, the ETF structure and this improved liquidity to which it leads requires a mechanism to tie the prices at which ETF shares trade in the open market to the per-share NAV of the underlying fund. This is accomplished through the core innovation of the ETF—the introduction of Authorized Participants (APs) into the process in which ETF shares are created and redeemed.[11]

APs are authorized to transact opposite the ETF—specifically, to engage in "creation-unit transactions"[12] and "redemption-unit transactions."[13] APs do not engage in these transactions based on legal compulsion, but instead due to

[9] Kevin S. Haeberle, *Marginal Benefits of the Core Securities Law*, 7 J. FIN. REG. 254, 262–64 (2021) (discussing these general dynamics of stock trading).

[10] *See id.*

[11] *See, e.g.*, Hu & Morley, *supra* note 1.

[12] INV. CO. INST., *supra* note 4, at 99 ("ETF shares are created when an authorized participant . . . submits an order for one or more creation units. A creation unit consists of a specified number of ETF shares, generally ranging from 25,000 to 250,000 shares. The ETF shares are delivered to the AP when the specified creation basket is transferred to the fund.").

[13] *Id.* at 100 ("The redemption process in the primary market is simply the reverse of the creation process. A creation unit is redeemed when an AP acquires the number of ETF shares specified in the ETF's creation unit and returns the creation unit to the fund. In return, the AP receives the daily redemption basket of securities, cash, and/or other assets.").

market-based incentives.[14] These market incentives, along with the traditional transparency into ETFs' holdings, drive AP trading that increases and decreases the number of ETF shares in the market in a way that keeps their market prices aligned with NAV.[15]

More specifically, when ETF shares are overpriced in the market, APs have the incentive to create more of them—thereby driving their market price back in line with their NAV.[16] For example, imagine that the per-share value of the investments in an ETF adds up to $10.00, but that the shares of this ETF are trading at $10.50 in the open market. In this situation, an AP has the incentive to purchase the underlying basket of securities that composes an ETF share that

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[14] *See id.* at 102 ("APs . . . have no legal obligation to create or redeem the ETF's shares.").

[15] *See, e.g.*, *id.* at 99, 101 ("The creation and redemption mechanism in the ETF structure allows the number of shares outstanding in an ETF to expand or contract based on demand . . . . Two primary features of an ETF's structure promote trading of its shares at a price that approximates its underlying value: portfolio transparency and the ability for APs to create or redeem ETF shares at the NAV at the end of each trading day. Transparency of an ETF's holdings—either through full disclosure of the portfolio or other information on the value of the securities—enables investors to observe and attempt to profit from discrepancies between the ETF's share price and its underlying value during the trading day."); Actively Managed Exchange-Traded Funds, No. Investment Company Act Release No. 25,258, 66 Fed. Reg. 57,614, 57,618–19 (Nov. 15, 2001) ("The unique structure of an ETF—in which investors can buy and redeem Creation Units at NAV, and can sell and purchase individual ETF shares in the secondary market at market price—is designed, among other things, to ensure arbitrage opportunities that would reduce any deviations between the NAV and the market price of ETF shares. . . . This high degree of transparency in the investment operations of an ETF helps arbitrageurs determine whether to purchase or redeem Creation Units based on the relative values of the ETF shares in the secondary market and the securities contained in the ETF's portfolio.").

[16] In both redemption and creation transactions, the APs are often buying or redeeming ETF shares on behalf of distinct market participants that are interested in engaging in ETF-arbitrage transactions. To limit unnecessary complication, I focus almost exclusively on the AP trading described in the text. But given the important role of these non-AP arbitrageurs in ETF arbitrage, this additional layer of complication is worth formally recognizing at this point in the Article.

(transaction costs aside) costs $10.00. This allows the AP to accumulate and then deliver the relevant amount of securities in-kind to the fund in return for each (currently overpriced) ETF share sought. This new supply of ETF shares from the fund thus results in AP selling activity in the open market that places downward pressure on the overpriced ETF shares. Continuing to ignore transaction costs, the AP has the incentive to create ETF shares in this way at $10.00/share and sell them off in the open market at higher prices (starting at $10.50/share), until the market price of those shares reflects the fund's NAV (here, $10.00).

When ETF shares are underpriced in the market, APs likewise have a market incentive to correct mispricing. In this situation, APs can buy ETF shares in the open market and redeem them to the fund in return for a basket of securities that is, by definition in this situation, worth more. In such transactions, the AP buys the underpriced ETF shares in the open market ($9.50/share) and sells them to the fund in return for the basket containing assets that can be sold for a higher price ($10.00/share).[17] The AP is thus incentivized to buy ETF shares at $9.50/share in the open market and sell them back to the fund in return for a basket of financial instruments that it expects to be able to sell at prices beginning at $10.00/share. This buying of underpriced ETF shares in the open market by APs drives the price of those shares up. Transaction costs aside, APs have the incentive to continue buying and redeeming ETF shares for the per-share fund basket (worth $10.00 in the above example) until the ETF shares are priced at the value of that basket.

B. Further Advantages Beyond the Basic Liquidity Feature

ETFs also introduced two related, yet conceptually distinct, categories of advantages for investors: (1) reduced

[17] *See, e.g.*, Jeffrey Colon, *The Great ETF Tax Swindle: The Taxation of In-Kind Redemptions*, 122 PA. ST. L. REV. 1, 14 (2017) ("ETFs permit redemptions, but the redemptions are generally paid in kind—that is, with securities of the ETF, and not in cash.).

costs associated with operational savings for the fund and (2) reduced costs associated with favorable tax treatment. For most investors, it is these advantages that make the ETF form and its core innovation so appealing.

1. Reduced Costs Associated with Operational Savings for the Fund

Pooled-investment funds of course incur costs associated with pooling investor capital and deploying it toward productive use.[18] But ETFs generally incur fewer such costs relative to mutual funds.[19] In particular, mutual funds incur the administrative costs associated with transacting in the way described above (i.e., directly with investors), whereas ETFs bypass these costs by trading in the way described above (i.e., only opposite APs in large blocks[20]).[21] At the extreme, the issuers of a mutual fund must transact directly with a long line of individual investors in amounts as little as a share.[22] As mutual funds complete these transactions with their investors, the funds must complete a variety of administrative

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18 *See* Actively Managed Exchange-Traded Funds, 66 Fed. Reg. at 57,617.

19 *See id.*

20 *See supra* note 13 and accompanying text (noting the typical size of creation-unit and redemption-unit transactions by APs).

21 Actively Managed Exchange-Traded Funds, 66 Fed. Reg. at 57,617 ("ETF expenses are often lower than the expenses of index [mutual] funds. Because most ETF shareholders purchase and sell ETF shares through secondary market transactions rather than through transactions with the ETF, ETFs do not have the same degree of shareholder recordkeeping and service expenses as index funds.").

22 Birdthistle, *supra* note 22 ("ETFs do not conduct anything close to the number of transactions with retail investors that mutual funds do. Mutual funds must process all the purchases and redemptions of every single investor in their fund, large or small; those transactions generate significant costs associated with shareholder recordkeeping and managing accounts. ETFs, on the other hand, conduct far fewer large-scale transactions, with investors wealthy and sophisticated enough to traffic in creation units, portfolio deposits, and redemption baskets." (footnote omitted)).

tasks in a highly regulated environment.[23] The costs of these tasks can manifest themselves in a number of fees for mutual fund investors.[24] Moreover, to reduce the extent to which they must trade opposite individual investors in small amounts, mutual funds often have minimum-purchase amounts and "loads"—additional unattractive features from the investor perspective[25] that are not present in the ETF context.[26]

Mutual funds also have greater "cash drag" than ETFs.[27] Mutual funds have to hold cash on hand so that they can be sure that they can meet redemption requests in a timely manner.[28] After all, they generally complete redemption transactions by providing redeeming shareholders with cash.[29] But that means leaving an often not insignificant amount of the money under management in cash.[30] This cash

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[23] *Id.* at 104 ("Because mutual funds handle a variety of administrative tasks associated with their funds' investors, they charge a variety of fees. Mutual funds or their agents are responsible for tracking the purchase and sale of all fund shares, for generating statements to investors, for maintaining safe custody of the fund's assets, and for promoting the sale of fund shares to intermediaries such as brokers and dealers." (footnotes omitted)).

[24] *Id.* ("For each of these services, mutual funds charge transfer agency fees, account maintenance fees, custodian fees, 12b-1 fees, and more." (footnote omitted)).

[25] Fees charged by funds when an investor purchases or sells shares of the funds are known as "sales loads" or "sales charges." *Investor Bulletin: Mutual Fund Classes*, U.S. SEC. & EXCH. Comm'n, https://www.sec.gov/oiea/investor-alerts-bulletins/ib_mutualfundclasses.html [https://perma.cc/85JQ-WWWP] (last updated Feb. 6, 2017).

[26] FINRA, *supra* note 6 ("ETFs do not have loads[.]").

[27] Birdthistle, *supra* note 22, at 90.

[28] *Id.*

[29] *See* Colon, *supra* note 17, at 20 ("In-kind redemptions of securities were clearly contemplated from the genesis of the federal regulation of mutual funds in the 1940 Act, although mutual funds almost always redeemed shareholders with cash." (footnote omitted)).

[30] *See, e.g.*, *id.* at 11–12; Birdthistle, *supra* note 22, at 90 ("[I]n comparison to mutual funds, ETFs can operate with far lower cash reserves on hand. Mutual funds typically maintain a significant cash reserve of up to 5% to use in redeeming any investor who wishes to sell shares back to the fund.").

will generally have an expected return that is significantly lower than that of the mutual fund's main holdings. For this reason, for at least funds that produce sufficiently positive returns, the cash holdings reduce investment return.[31] ETFs need not maintain these cash reserves, as they instead generally complete redemption transactions by distributing securities (or some mix of securities and cash) rather than just cash.[32]

Two final points on these reduced costs for ETF investors associated with operational savings for the fund bear mentioning. First, mutual funds have been more costly to investors because they and their once-a-day pricing have been more susceptible to market-timing and late-trading abuses.[33] Second, ETFs generally offer cost simplicity by charging investors only a single management fee.[34]

2. Reduced Costs Associated with Favorable Tax Treatment

For mutual funds (and therefore mutual-fund investors), redemptions generally mean capital-gains tax when the fund's investments rise in value. In redemption transactions, mutual funds generally provide shareholders with the dollar value of their shares at the end of the trading day.[35] So if a mutual fund buys Company XYZ shares at $10/share and then sells some of those shares for $30/share five years later to fulfill a redemption request, it has generated $20 of taxable capital gains per share. This is because the law understandably

[31] *See* Colon, *supra* note 17, at 11–12, 14 ("Holding cash can cause a fund's return to lag behind the relevant benchmark if the return on cash is less than the return on the fund's securities. The lag can be quite pronounced if the fund's underlying investments generate returns greater than returns on the cash.").

[32] *See supra* notes 13–17 and accompanying text.

[33] *See* Birdthistle, *supra* note 22, at 101–03.

[34] *Id*. at 104 ("ETFs, by contrast, are relatively free from layers of disparate fees. Often, they charge only a single management fee, from which they discharge any and all of their operational obligations.").

[35] *See* Colon, *supra* note 17, at 12, 24–25.

treats such mutual-fund gains realized in order to distribute cash to a shareholder as a taxable event.[36]

In contrast, on this same redemption side, the ETF arbitrage-mechanism generally revolves around the provision of ETF shares from APs to the fund in return for the relevant basket of securities.[37] But the Internal Revenue Service does not treat such in-kind transfers of securities from a fund to a redeeming AP as a taxable event.[38] Thus, distributions of underlying investment positions that have increased in value do not constitute a taxable event for funds or their investors.[39] Moreover, ETF managers are able to select the shares with the largest investment gains for distribution first, thereby maximizing this avoidance of tax on capital gains.[40]

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[36] Actively Managed Exchange-Traded Funds, Investment Company Act Release No. 25,258, 66 Fed. Reg. 57,614, 57,617 (Nov. 15, 2001) ("When a mutual fund sells portfolio securities to pursue its investment strategies or to generate cash for shareholder redemptions, the mutual fund may realize capital gains if the value of the securities increased while they were in the fund portfolio. A mutual fund distributes accumulated capital gains to its shareholders, and shareholders generally must pay taxes on those distributions."); Colon, *supra* note 17, at 24–25.

[37] *Supra* Section II.A.

[38] Colon, *supra* note 17, at 25 ("In case of an in-kind redemption by an ETF, the fund-level treatment is clear: under section 852(b)(6), the ETF does not recognize any gain or loss." (footnote omitted)); Actively Managed Exchange-Traded Funds, 66 Fed. Reg. at 57,617.

[39] Mutual funds too can avail themselves of this tax benefit, but generally do not do so. *See, e.g.,* Colon, *supra* note 17, at 24 ("Throughout the history of U.S. investment companies, in-kind distributions have been exempt from tax at the fund level. As Congress began to limit and finally prohibit in 1986 the tax-free distribution of appreciated property by corporations, it continued to specifically exempt open-end funds from this rule."). *See Exchange-Traded Funds*, *supra* note 6 ("While ETFs held in a taxable account will generally result in less tax liabilities than if you held a similarly invested mutual fund in the same account, there can be exceptions.").

[40] *See* Colon, *supra* note 17, at 3 ("It is well known that ETFs strategically distribute low-basis securities to redeeming shareholders to substantially reduce or eliminate future fund-level capital gains." (footnote omitted)); *see also* Actively Managed Exchange-Traded Funds, 66 Fed. Reg. at 57,617–78 ("The Redemption Basket also may include securities from the ETF portfolio that have the highest unrealized capital gains *(i.e.*, securities

C. Two Notable Counterweights

The above-described advantages of investing via ETF come along with two notable disadvantages for investors: one associated with the introduction of bid-ask spreads and the other with that which can be referred to as "tracking spreads."

In the mutual fund context, investors buy and sell shares directly opposite the fund.[41] These transactions therefore do not involve market-making intermediaries and related dynamics that introduce bid-ask spreads. However, because ETF shares trade throughout the day in the open market,[42] such spreads will generally be present.[43] As with stock trading on exchanges and most off-exchange trading platforms, ETF transactions generally involve liquidity-taking sales and purchases opposite, respectively, liquidity-making bid and ask quotes.[44] Those quotes are typically spread out from current market values.[45] Bid quotes are generally below the

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that have appreciated in value the most while in the ETF portfolio). Because the ETF may be able to eliminate securities with significant unrealized capital gains from its portfolio through the redemption process, the ETF may avoid realizing some capital gains if the ETF needs to sell securities at a later date to track its index." (footnote omitted)).

[41] *Supra* note 26 and accompanying text.

[42] *Supra* note 6 and accompanying text.

[43] *See* Lawrence R. Glosten & Paul R. Milgrom, *Bid, Ask and Transaction Prices in a Specialist Market with Heterogeneously Informed Traders*, 14 J. FIN. ECON. 71, 72 (1985) ("[A] bid-ask spread can be a purely informational phenomenon, occurring even when all the [market marker's] fixed and variable transactions costs (including his time, inventory costs, etc.) are zero and when competition forces the specialist's profit to zero. . . . In effect, then, the [market maker] must recoup the losses suffered in trades with the well informed by gains in trades with liquidity traders. These gains are achieved by setting a spread.").

[44] *See, e.g.*, Haeberle, *supra* note 9, at 271–78.

[45] *See, e.g.*, LARRY HARRIS, TRADING AND EXCHANGES: MARKET MICROSTRUCTURE FOR PRACTITIONERS 287–88 (2003) (describing that market makers aim to "set their bids just below fundamental values and their ask prices just above [them]."). The bid-ask spread is the product of a number of forces. Chief among them are a concern on the part of liquidity makers for adverse-selection at the hands of better-informed traders and the risk of carrying inventory in securities whose prices typically changed quickly. *See, e.g.*, Glosten & Milgrom, *supra* note 43 (providing the seminal study of the

current market value of a financial instrument.[46] Sellers therefore often receive something less than that value when selling ETF shares. Ask quotes are generally above the current market value of a stock.[47] Buyers therefore often pay more than that value to buy the stock.

ETF shares also may trade around market values (and thus bid and ask prices) that stray from the per-share value of the investments in the fund that they track.[48] This is because that per-share NAV is simply the aggregate value of the underlying holdings in the fund, while the current market value of the ETF shares is instead the value generated by buying and selling activity in the open market.[49] To be sure, the ETF-arbitrage mechanism reduces the extent of this "tracking-spread" problem. But the overview of that market mechanism and the description of its largesse provided in Section II.A should not be interpreted to be saying that this mechanism is perfect.[50] Indeed, that description of the arbitrage mechanism had the unrealistic stated assumptions of zero transaction costs and sufficiently robust AP creation and redemption activity. As discussed in Part IV, these assumptions should be called into question at least when it comes to the trading of nontransparent actively managed ETFs.

III. ETF HISTORY PARTS I AND II

In this Part, I explain why there is much reason to believe that ETF history can be divided into two main parts that can be labeled "ETF History Part I: The Passive Age" and "ETF

adverse-selection component of the bid-ask spread); Ananth Madhavan, *Market Microstructure: A Survey*, 3 J. FIN. MKTS. 205, 213–15 (2000) (discussing the inventory component of the bid-ask spread).

[46] HARRIS, *supra* note 45.

[47] *Id.*

[48] *See supra* note 1 and accompanying text.

[49] *See supra* Section II.A.

[50] *See* Hu & Morley, *supra* note 1, at 843 ("The arbitrage mechanism's effectiveness is essential to the integrity of ETF trading prices and the ETF's core investment premise. And this mechanism has sometimes failed catastrophically, even with very large and simple ETFs.").

History Part II: The Varied Age." I do so by first delineating the former, which began when the first ETF hit the U.S. market in 1993.[51] I then explain why the moment at which the first *nontransparent* actively managed ETFs traded in mid-2020 is likely the line of demarcation between that period and the second one that is currently proceeding. Given this new period and the extent of the emergence of the actively managed ETF that defines it predicted below, in Part IV, I consider the road forward in this area for the SEC and key investment intermediaries.

A. ETF History Part I: The Passive Age (1993 Through at Least Mid-2020)

Over the past almost thirty years, the ETF innovation has introduced meaningful advantages for investors,[52] albeit along with notable frictions for the same.[53] The extent to which the advantages have dominated the frictions—as evidenced by the tremendous growth in popularity in ETF investing—is perhaps one of the more remarkable stories of finance from the past thirty years. In that period, investment via ETF became one of the most prominent features of U.S. securities markets. By the close of 2020, U.S. ETFs had hit new highs in size—with over $5.4 trillion in assets under management[54] and around nine percent of U.S. households

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51 *See, e.g.*, Actively Managed Exchange-Traded Funds, No. Investment Company Act Release No. 25,258, 66 Fed. Reg. 57,614, 57,615 (noting the debut of the first ETF).

52 *Supra* Sections II.A–B.

53 *Supra* Section II.C.

54 *E.g.*, INV. CO. INST., *supra* note 4, at 97 ("At year-end 2020, the US ETF market—with 2,204 funds and $5.4 trillion in total net assets—remained the largest in the world[.]"); Simon Smith, *SEC Grants Preliminary Approval for Semi-Transparent Active ETFs*, ETF STRATEGY (Nov. 15, 2019), https://www.etfstrategy.com/sec-grants-preliminary-approval-for-semi-transparent-active-etfs-t-rowe-price-fidelity-natixis-blue-tractor-39504/ [https://perma.cc/JFX7-GB32] ("ETFs have become a $5 trillion-plus market in recent years with investors drawn to their tax efficiency, low-cost structure, and convenience."); *see also* Hu & Morley, *supra* note 1, at 842 ("The ETF . . . now stands alongside shares of individual

holding ETFs.[55] Moreover, that number has seen noticeable growth in recent years.[56]

Through at least the end of 2020, this triumph of the ETF has been almost completely limited to passive, index-based ETFs.[57] This is mainly because the robustness of the central innovation of the ETF form—found in its arbitrage mechanism that helps reduce tracking spreads[58]—turns on transparency into funds' holdings.[59] Traditionally, the SEC therefore provided the necessary exemptions that funds must

companies, mutual funds, and hedge funds as one of the most important investments in the world.").

[55] INV. CO. INST., *supra* note 4, at 113.

[56] *Id*. at 109 ("For 2020 as a whole, net share issuance of ETF shares (including reinvested dividends) surged to a record $501 billion, up from 2019's robust $323 billion[.]" (citation omitted)).

[57] *E.g.*, *id*. at 94 (noting that of the $5.4 trillion in total net assets held by ETFs registered as investment companies at the close of 2020, $5.1 trillion was held by index-based ETFs); Smith, *supra* note 54 ("[T]he overwhelming majority of ETFs are based on passive strategies."). Notably, these numbers include recent inflows into actively managed ETFs that followed the developments described in Section III.B, *infra*. Before those developments, actively managed ETFs had garnered an even smaller portion of ETF investment. *See* Nate Geraci, *Can Nontransparent ETFs Save Active Mgmt?*, ETF (June 13, 2019), https://www.etf.com/sections/etf-strategist-corner/can-nontransparent-etfs-save-active-mgmt [https://perma.cc/6QNN-TSYB] ("[T]ransparent actively managed ETFs are only a sliver of the nearly $4 trillion ETF market—less than 1% (about $12 billion in assets).").

[58] *See* s*upra* note 1 and accompanying text; Section II.A.

[59] *See, e.g., supra* Section II.A; *see also* Smith, *supra* note 54 ("[D]ue to regulatory requirements for daily portfolio transparency, the overwhelming majority of ETFs are based on passive strategies.").

receive to issue ETFs[60] only if fund sponsors agreed to disclose their portfolio holdings on a daily basis.[61]

The SEC's concern about the extent to which ETF share prices track their NAV without such disclosure is understandable.[62] But generally speaking, that level of transparency does not work for actively managed funds and their managers because it would require them to share their "secret sauce."[63] This level of information sharing simply is

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60 Before regulatory developments in late 2019, *see* SEC Exchange-Trade Funds Rule, 17 C.F.R. § 270.6c-11 (2021), all ETFs required SEC exemptions from the Investment Company Act of 1940. *See* Investment Company Act of 1940, 15 U.S.C. § 80a-6 (2018) (granting the SEC discretion to exempt companies from 15 U.S.C. § 80a-1–80a-64 or any rule or regulation thereunder). This remains the case for more exotic types of ETFs today, including the nontransparent actively managed ones in focus in Section III.B and Part IV, *infra*. *See, e.g.,* Notice of Application of Fidelity Beach Street Trust, Investment Company Act Release No. 33,683, 84 Fed. Reg. 64,140, 64,140–41 (Nov. 14, 2019) ("Due to their characteristics, [nontransparent] ETFs (including those proposed by Applicants) are only permitted to operate in reliance on Commission exemptive relief from certain provisions of the [Investment Company] Act and rules thereunder."). For a general overview of the considerable shift in the SEC's approach to ETF regulation represented by Rule 6c-11, see Henry Hu & John Morley, *The SEC and Regulation Exchange-Traded Funds: A Commendable Start and a Welcome Invitation*, 92 S. CAL. L. REV. 1155 (2019).

61 *See*, Actively Managed Exchange-Traded Funds, Investment Company Act Release No. 25,258, 66 Fed. Reg. 57,614, 57,619 (Nov. 15, 2001) (noting how less transparency in portfolio holdings presents challenges for arbitrageurs).

62 The SEC highlighted its main concern relating to nontransparent ETFs as early as 2001: "Can effective arbitrage occur without any disclosure of the specific securities in an ETF's portfolio (*i.e.*, arbitrage that is based strictly on the NAV and market price of ETF shares)?" *Id.*

63 *See, e.g.*, Trevor Hunnicutt, *New ETF Lets Active Managers Keep Secret Sauce*, INV. NEWS (Dec. 21, 2014), https://www.investmentnews.com/new-etf-lets-active-managers-keep-secret-sauce-60268 [https://perma.cc/6C96-UG5B] (noting that a "requirement to disclose . . . underlying holdings" is a "no-go for many fund managers, who believe the best way to maintain the value of their strategies is to avoid telegraphing them to the market"); Geraci, *supra* note 57 ("Many active managers view daily disclosure as giving away their 'secret sauce,' allowing other market participants to potentially reverse engineer their strategies and erode their 'edge.'").

not good for those interested in earning revenue in return for offering and managing active portfolios. For one thing, rational investors generally have little interest in paying for active portfolio management when the active strategy at issue is freely available. For another, actively managed funds that disclose their portfolio holdings are more susceptible to return-damaging frontrunning by brokers and others.[64]

All that said, as early as 2001, there was an appetite among fund sponsors and investment advisers for issuing actively managed ETFs.[65] But despite its willingness to consider the matter in more detail at that time,[66] the SEC remained dubious. In fact, the agency only approved the first actively managed ETFs years later, in 2008.[67] And that approval was limited to actively managed ETFs that agreed to provide daily disclosure of their portfolio holdings.[68] Thus,

64 *See e.g.*, *infra* note 145 and accompanying text. "Front running is the illegal practice of purchasing a security based on advance non-public information regarding an expected large transaction that will affect the price of a security." *What is Front Running*, CORP. FIN. INST., https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/front-running/ [https://perma.cc/K7WN-3EZP] (last visited Dec. 12, 2021).

65 *See* Actively Managed Exchange-Traded Funds, 66 Fed. Reg. at 57,615 ("Recently, the concept of an 'actively managed ETF' has attracted significant attention, even though many of the details regarding the potential operations of actively managed ETFs are apparently still in development.").

66 *See id.* ("All existing ETFs are based on various equity market indices. An actively managed ETF would not track an index. This type of ETF currently does not exist, and the Commission is interested in public comments on this concept to help inform the Commission's consideration of any proposals for actively managed ETFs.").

67 *See Bear Steans Begins Trading of First Actively Managed ETF*, GLOB. CUSTODIAN (Mar. 25, 2008, 12:00 AM), https://www.globalcustodian.com/bear-stearns-begins-trading-of-first-actively-managed-etf/ [https://perma.cc/2SFL-EW7D]; Bear Sterns Asset Mgmt., Inc., Investment Company Act Release No. 28172, 92 S.E.C. Docket 2098 (Feb. 27, 2008).

68 *See e.g.*, INV. CO. INST., *supra* note 4, at 94 ("In early 2008, the SEC granted approval through exemptive relief orders to several fund sponsors to offer *fully transparent*, actively managed ETFs." (emphasis added)); Notice of Application of Bear Stearns, Investment Company Act Release No.

despite the general appeal of ETFs to investors, only passively managed ETFs existed in the United States for the first fifteen or so years after the ETF first came to market.[69] And even after a narrow category of actively managed ETFs (which required daily portfolio transparency) came to market, the funds and fund managers who were okay with such transparency into the funds' investment holdings were in the extreme minority.[70] These products thus remained a relatively insignificant feature of the ETF market until at least mid-2020,[71] leaving the period from 1993 until at least mid-2020 one that can be fairly described under the heading of this section, "ETF History Part I: The Passive Age."

B. ETF History Part II: The Varied Age (Mid-2020 Forward)

After years of attempts to solve the secret-sauce problem in a way that worked for regulators,[72] in May 2019, the SEC approved an exemption from the Investment Company Act that paved the way for the first *nontransparent* actively managed ETF.[73] This product allowed open-end funds to issue

28,143, 73 Fed. Reg. 7768, 7700 (Feb. 5, 2008) ("On each Business Day, before the commencement of trading in [ETF shares] on the Exchange, each Fund will disclose on its website the identities and quantities of the portfolio securities and other assets held by the Fund that will form the basis for the Fund's calculation of NAV at the end of the Business Day. Applicants assert that the website disclosure of each Fund's portfolio securities and other assets will provide a level of portfolio transparency that is substantially similar to that of index-based ETFs.").

[69] *See* INV. CO. INST., *supra* note 4, at 94.

[70] *See supra* note 57 and accompanying text (noting the relatively small amount of assets under management in actively managed funds even at the end of 2020 when the first nontransparent actively managed funds began trading).

[71] *See supra* note 57 and accompanying text.

[72] *See infra* note 116 and accompanying text.

[73] *See* Precidian ETFs Tr., Investment Company Act Release No. 33,477, 2019 WL 12423266, at *1 (May 20, 2019); Bailey McCann, *What to Know About 'Nontransparent' ETFs*, WALL ST. J. (May 5, 2019, 10:01 PM), https://www.wsj.com/articles/what-to-know-about-nontransparent-etfs-11557108061 (on file with the Columbia Business Law Review).

ETF shares without complying with the traditional ETF requirement of daily disclosure of fund holdings.[74] Instead, fund sponsors who issue these "ActiveShares" are permitted to disclose their portfolio holdings in line with standard mutual-fund rules (quarterly, with a delay of up to sixty days beyond the quarter end).[75] This periodic, delayed disclosure thus allows actively managed investment funds to offer ETF shares while maintaining a strong degree of confidentiality as to their investment advisers' investment strategies.

The first such ETF began trading almost a year later, in April 2020.[76] But it was not alone. Late in the previous year, the SEC had approved distinct secret-sauce-protecting ETFs

[74] *See, e.g.*, *Precidian ETS Tr.*, 2019 WL 12423266, at *1 & n.2 (noting the daily disclosure requirement for ETFs absent exemption) Natixis Advisors, L.P., Investment Company Act Release No. 33,711, 2019 WL 6716048, at *1 (Dec. 10, 2019) (noting the same); *see also* Ben Johnson, *Active Non-Transparent ETFs: What Are They Good For?*, MORNINGSTAR (Jul. 28, 2020), https://www.morningstar.com/articles/993801/active-non-transparent-etfs-what-are-they-good-for [https://perma.cc/57C9-DUEY] (stating that actively managed ETFs' "most distinctive feature is that they do not disclose the contents of their portfolios to the public on a daily basis"); Justin Baer, *The Next Big Thing in ETFs: Less Transparency*, WALL ST. J. (July 13, 2019, 5:30 AM), https://www.wsj.com/articles/the-next-big-thing-in-etfs-less-transparency-11563010201 (on file with the Columbia Business Law Review) ("[F]irms . . . plan to launch exchange-traded funds that bet on stocks without disclosing investments each day.").

[75] *See, e.g.*, Notice of Application of Natixis ETF Trust II, Investment Company Release Act No. 33,684, 84 Fed. Reg. 64,153, 64,155 n.16 (Nov. 14, 2019) (noting that the funds would "at a minimum, provide the quarterly portfolio disclosures required for mutual funds"); *see also* Baer, *supra* note 74 ("The ETFs would reveal positions quarterly, as mutual funds do, to prevent front-running of trading ideas.").

[76] *E.g.*, STATE ST., A NEW MILESTONE FOR EXCHANGE TRADED FUNDS 2–3 (2020), https://www.statestreet.com/content/dam/statestreet/documents/Articles/a-new-milestone-semi-transparent-etf.pdf [https://perma.cc/HWN8-46BJ] (noting that first non-transparent actively managed ETFs traded for the first time on April 2, 2020); LEGG MASON, INC., *Precidian Issues Statement on Launch of American Century ActiveShares® ETF*, PR NEWSWIRE (Apr. 2, 2020, 10:24 AM), https://www.prnewswire.com/news-releases/precidian-issues-statement-on-launch-of-american-century-activeshares-etf-301034189.html [https://perma.cc/U7SK-CLMG] (noting the same).

that turn on the daily disclosure of proxy portfolios.[77] Like ActiveShares, they began trading in the spring of 2020.[78] These ETFs too provide disclosure pursuant to mutual-fund standards rather than traditional, more transparent ETF ones.[79]

Crucially, the SEC's move to open the door to nontransparent actively managed ETFs was premised on the introduction of new twists on the traditional ETF-arbitrage mechanism. For the initially approved product, ActiveShares, APs work through an AP representative to carry out their price-aligning redemption and creation transactions. These new Wall Street intermediaries serve as "trusted agents" to the APs. In that role, they are the lone market participants outside of the fund to be privy to the contents of the fund's redemption and creation basket on a daily basis. This arrangement thus involves AP principals with AP-representative-operated accounts. The principals are blocked from knowing the identity and quantity of the securities held

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[77] *See* T. Rowe Price Assoc., Inc., Investment Company Act Release No. 33,713, 2019 WL 12423347 (Dec. 10, 2019) (exempting an ETF from disclosing its portfolio holdings daily); Fidelity Beach Street Tr., Investment Company Act Release No. 33,712, 2019 WL 6716049 (Dec. 10, 2019) (exempting the same); *Natixis Advisors, L.P.*, 2019 WL 6716048, at *1 (exempting the same); *see also infra* note 88 and accompanying text.

[78] *See* INV. CO. INST., *supra* note 4, at 95 ("[B]y year-end [2020] there were 19 ETFs with nearly $1 billion in total net assets under these approved models."); *see infra* notes 79–89 and accompanying text.

[79] *See, e.g.,* Notice of Application of Fidelity Beach Street Trust, 84 Fed. Reg. at 64,142 n.15 ("The Funds would, at a minimum, provide the quarterly portfolio disclosures required for mutual funds."); Robert J. Jackson Jr. & Allison Herren Lee, Comm'rs, Statement of Commissioners Jackson and Lee on Non-Transparent Exchange Traded Funds, U.S. SEC. & EXCH. COMM'N, (Nov. 15, 2019), https://www.sec.gov/news/public-statement/statement-jackson-lee-2019-11-15 [https://perma.cc/F64Y-J5UX]; INV. CO. INST., *supra* note 4, at 94 ("These ETFs, commonly referred to as non-transparent or semi-transparent ETFs, provide limited daily information on the value of the securities they hold and, similar to mutual funds, publicly disclose their full schedule of portfolio holdings at least quarterly.").

in their agent's accounts,[80] even though they are the beneficial owners of those accounts.

As with traditional ETFs, the APs for these funds (as well as distinct arbitrageurs who trade through APs[81]) continue to focus on identifying the situation where ETF shares are overpriced or underpriced in the open market. However, when these APs find such a mispricing, they cannot engage in creation and redemption transactions directly. After all, they are not permitted to know the contents of the creation and redemption baskets. Instead, they must go through their AP representatives to use those trusted agents' knowledge of those contents to enter into creation and redemption transactions with the associated fund in the AP's confidential account.

More specifically, where ETF shares are overpriced in the market, the AP directs its AP representative to buy the creation-basket of investments in the AP's account and transfer them in kind to the relevant fund in return for new ETF shares—all without the AP being able to view the identity of those investments. Those new ETF shares are beneficially owned by the AP as soon as they are acquired by the AP representative from the fund. The AP can then sell those new ETF shares in the open market (or direct its AP representative to do the same). This selling of newly created ETF shares, like that in more traditional AP arbitrage activity, drives ETF share prices down toward the associated fund's per-share NAV.[82]

Where ETF shares are underpriced in the market, an AP buys those shares (or instructs its AP representative to buy them). Those shares are then redeemed by the AP

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[80] Proposed Rule Change to Adopt a New NYSE Arca Rule 8.900-E, 83 Fed. Reg. 3846, 3848 (proposed Jan. 19, 2018).

[81] As in Section II.A, *see supra* note 16 and accompanying text, to avoid unnecessary complication, other than the reference in the text here, I continue focus on APs alone rather than APs and these distinct traders that engage in ETF arbitrage activity through APs.

[82] *See supra* note 12 and accompanying text (describing traditional AP creation transactions).

representative to the associated fund.[83] In return, that fund provides the AP representative with the basket of securities that corresponds to the ETF units redeemed.[84] That basket of securities is then beneficially owned by the AP. But it is the AP representative that must sell off each of the AP's holdings in the basket, as the AP is barred from knowing the contents of that basket even after its agent acquires them for the AP's account. Once the AP representative liquidates the redemption-basket securities, it provides the liquidation proceeds to its AP principal.[85]

Critical to the SEC's approval of this new type of ETF was the publication of a "verified intra-day indicative value" (or VIIV) that essentially represents funds' current NAVs, updated every second throughout the trading day.[86] Thanks to the computing and sharing of this VIIV for each relevant fund each second, APs can spot ETF mispricings even while operating blindly as to the identity of the holdings in the underlying basket of investments. In short, when the VIIV is out of line with the market price of ETF shares, the APs can spot arbitrage opportunities that they can pursue through their AP representatives, thereby performing the ETF-arbitrage work traditionally performed by APs who can see funds' daily portfolio holdings.[87]

The later-approved related types of nontransparent actively managed ETFs noted above involve distinct twists on the traditional ETF-arbitrage mechanism. To help improve

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[83] *See supra* note 13 and accompanying text (describing traditional AP redemption transactions).

[84] Funds can also satisfy AP representative redemptions by providing the latter with cash rather than some (or even all) of the basket of securities. But the typical situation would be the type of in-kind redemption transactions described in the text. *See* Proposed Rule Change to Adopt a New NYSE Arca Rule 8.900-E, 83 Fed. Reg. 3846 at 3851.

[85] *See* INV. CO. INST., *supra* note 4, at 100.

[86] *See* PRECIDIAN INVS., ACTIVESHARES 8 (2020), https://www.activeshares.com/content/dam/activeshares/documents/ActiveShares%20Brochure%205-20.pdf [https://perma.cc/P5V6-N9BD].

[87] Notice of Application of Precidian ETF Trust, Investment Company Act Release No. 33,440, 84 Fed. Reg. 14,690, 14,694 (Apr. 8, 2019); *see also supra* note 1 and accompanying text, Section II.A.

the extent to which the shares of these ETFs track their NAVs, the sponsors of these ETFs turn not to AP representatives and a VIIV, but instead to the provision of daily disclosure of a proxy portfolio noted above.[88] That proxy portfolio, rather than the actual underlying portfolio or something close to it, serves as the basis for AP creation and redemption transactions.[89] In so doing, the proxy portfolio helps conceal the actively managed fund's holdings, thereby preserving its main appeal to investors, fund sponsors, and investment advisers.

Thus far, the rollout of nontransparent actively managed ETFs has experienced only limited success.[90] As of mid-June

[88] *See, e.g.*, Notice of Application of T. Rowe Price, Investment Company Act Release No. 33,685, 84 Fed. Reg. 64,117, 64,120 (Nov. 14, 2019) ("Each day a Fund would publish a basket of securities and cash that, while different from the Fund's portfolio, is designed to closely track its daily performance . . . . In addition, every day the Fund would disclose the percentage weight overlap between the holdings of the prior business day's Proxy Portfolio compared to the holdings of the Fund that formed the basis for the Fund's calculation of NAV at the end of the prior business day[.]"); Notice of Application of Fidelity Beach Street Trust, Investment Company Act Release No. 33,683, 84 Fed. Reg. 64,140, 64,142 (Nov. 14, 2019) ("Each day a Fund would publish a basket of securities and cash that, while different from the Fund's portfolio, is designed to closely track its daily performance (the 'Tracking Basket'). In addition, every day the Fund would disclose the percentage weight overlap between the holdings of the prior business day's Tracking Basket compared to the holdings of the Fund that formed the basis for the Fund's calculation of NAV at the end of the prior business day . . . . Such number would help market participants evaluate the risk that the performance of the Tracing Basket may deviate from the performance of the portfolio holdings of a Fund." (footnote omitted)).

[89] *See* Jackson Jr. & Herren Lee, *supra* note 79 ("APs for these funds will have access to a 'proxy' portfolio that, the applicants say, gives [the APs] enough information to keep the fund's price in line with asset values." (footnote omitted)).

[90] *See Active Non-Transparent ETFs*, ETF DATABASE (Nov. 13, 2021), https://etfdb.com/themes/active-non-transparent-etfs/ [https://perma.cc/YLP4-3ARE] (showing only forty-two nontransparent actively managed ETFs); Sanghamitra Saha, *A Guide to Active Non-Transparent (ANT) ETFs*, NASDAQ (Apr. 19, 2021, 3:01 PM), https://www.nasdaq.com/articles/a-guide-to-active-non-transparent-ant-etfs-2021-04-19-0 (on file with the Columbia Business Law Review) ("The asset class is yet to see success. Even after a year of two American Century

2021, nontransparent actively managed ETFs had just $1.5 billion in assets under management in the aggregate.[91] As of two months earlier, the nontransparent actively managed ETF that attracted the most investment was the Fidelity Blue Chip Growth ETF (FBCG).[92] It had just $313 million in assets under management at that time.[93] The next largest such fund then had just $214.4 million in assets under management.[94] As one news article summed it up, nontransparent actively managed ETFs "were a hot new thing in an industry known for innovation. . . . But in a year when practically everything on Wall Street boomed, exchange-traded funds that hide their strategies struggled to make a mark."[95]

What comes next is unknown. But for fund sponsors and investment advisers, there is much room for optimism.[96]

product launches (the first in the United States), existing funds have amassed about $1 billion in flows – pretty low compared with the $676 billion invested in all U.S. ETFs in the past one year . . . . There are about 40 ANT ETFs so far. . . . Current [nontransparent actively managed ETF] assets account for just 0.3% of the amount possessed by their parent firms' mutual funds.").

91 John Hyland, *One Year In, Active ETFs Gain Promise*, ETF.COM (June 17, 2021), https://www.etf.com/sections/features-and-news/one-year-active-etfs-gain-promise?nopaging=1 [https://perma.cc/7CNJ-CFWX] ("Regarding actual asset flows, the combined assets under management (AUM) of these new style funds is about $1.5 billion. At first glance, that seems a bit modest, particularly when ETFs as a whole brought in $500 billion in flows over roughly the same time period.").

92 Saha, *supra* note 90.

93 *Id.*

94 *Id.* (describing popularity of the American Century Focused Dynamic Growth ETF").

95 Claire Ballentine, *Secret-Strategy Funds Struggle To Win Fans in Their First Year* BLOOMBERG (Mar. 29, 2021, 7:30 AM), https://www.bloomberg.com/news/articles/2021-03-28/secret-strategy-funds-struggle-to-win-fans-in-their-first-year (on file with the Columbia Business Law Review).

96 *See, e.g.*, Geraci, *supra* note 57 ("All signs point to active ETFs as the likely candidate for higher rates of future growth"); *see also* Saha, *supra* note 90 ("Many industry experts expected high demand for [nontransparent actively managed] funds, especially given the rising inclination toward an ETF format over the mutual funds."). One survey from 2019 found that thirty-seven percent "of fund managers are planning to develop active

Indeed, these nontransparent actively managed ETFs have been referred to as the "holy grail" for open-end-fund active management.[97]

Self-serving industry statements aside, for four main reasons, it is likely that considerable amounts of investment money will flow into actively managed ETFs over the coming years. First, a slew of large investment companies have already signed on to issue nontransparent actively managed ETF shares.[98] Beyond even their broad marketing reach, these companies can attempt to convert their existing actively managed mutual fund products into actively managed ETF ones.[99] Second, it is reasonable to expect investors to, on their

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ETFs." Gerci, *supra* note 57. Further, Rick Genoni, who at the time was the head of ETF product management at Legg Mason, commented that the firm "see[s] active ETFs as the next stage of evolution of the business." *Id*.

[97] *See Nontransparent ETF Channel*, ETF.COM, etf.com/channels/nontransparent-etfs (on file with the Columbia Business Law Review) (last visited Dec. 9, 2021) ("Nontransparent actively managed ETFs have been the holy grail for the ETF industry for the better part of a decade, with many market commenters asserting that active manager would not want to launch transparent actively managed ETFs for fear of front-running.").

[98] Press Release, Legg Mason, Legg Mason and Clearbridge Investments Launch Semi-Transparent ETF Using Precidian Investments' Innovative ActiveShares® Technology (May 28, 2020), https://www.leggmason.com/content/dam/legg-mason/documents/en/corporate-press-releases/financial-release/2020/release-cb-precidian-cfcv-launch.pdf [https://perma.cc/54AX-TE5K] (noting that ActiveShares technology "has been licensed by 14 licensees, covering 26% of the actively managed U.S. equity market"); Geraci, *supra* note 57 ("[As of June 13, 2019, t]he following fund companies have already licensed ActiveShares from Precidian Legg Mason, BlackRock, Capital Group, J.P. Morgan, Nationwide, Gabelli, Columbia and Nuveen [and] American Century has taken the additional step of filing for exemptive relief to launch ActiveShares ETFs.").

[99] Claire Balletine, *JPMorgan is Boosting its Active ETFs With a $10 Billion Mutual Fund Switch*, BLOOMBERG (Aug. 11, 2021, 8:50 AM), https://www.bloomberg.com/news/articles/2021-08-11/cathie-wood-effect-jpmorgan-to-convert-10-billion-mutual-funds-to-active-etfs (on file with the Columbia Business Law Review) ("[JPMorgan Chase & Co.] plans to convert four mutual funds with $10 billion in assets into ETFs in 2022[.["); *see also* Ballentine, *supra* note 95 (speculating that companies could convert mutual funds to nontransparent ETFs).

own accord, shift a substantial amount of their capital from actively managed *mutual funds* to actively managed *ETFs* over time given (1) the relative advantages (tax and otherwise) of ETFs over mutual funds[100] and (2) the fact that nontransparent active management is now possible on the ETF side.[101] Third, now that active management without giving away the secret sauce is possible via ETF, some investors who have been drawn to ETFs over mutual funds (and thus passive investment during the Passive Age) may shift some portion of their $5 trillion-plus holdings in passively managed ETFs to actively managed ETFs during the Varied Age. Fourth, the new SEC rule from the fall of 2019 that makes it easier for fund sponsors to bring *transparent* ETFs to market[102] might lead to more fund sponsors and managers offering transparent actively managed ETFs (specifically, more of those who are comfortable with sharing their secret sauce offering those actively managed ETF products). While one might not expect many fund sponsors and managers to proceed in this way,[103] the experience with products like target-date funds may suggest otherwise. After all, indexed target-date funds are still offered (and sold) with great success on the mutual-fund side even though they can be closely replicated at lower cost thanks to the quarterly disclosure of their underlying investment mixes.[104]

100 *See supra* Sections II.A–B (describing these investor advantages, many of which apply even for investments made in tax-favored retirement accounts).

101 *See* Ballentine, *supra* note 95 ("Actively nontransparent ETFs . . . are touted by proponents as the key to sucking yet more assets from the mutual-fund world.").

102 *See supra* note 60 and accompany text (discussing adoption of 17 C.F.R. § 270.6c-11).

103 *See supra* Section III.A (discussing why disclosure concerns resulted in few actively managed ETFs coming to market before nontransparent actively managed ETFs began trading in mid-2020).

104 *See* David C. Brown & Shaun William Davies, Off Target: On the Underperformance of Target-Date Funds 2, 30–31 (Nov. 1, 2021) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3707755 (on file with the Columbia Business Law Review) (documenting the lagging performance

On these points, it is worth noting that the often-reported outflows from domestic-equities-focused actively managed mutual funds are real.[105] Some of these outflows are no doubt attributable to portfolio rebalancing in a market where those equities have greatly outperformed bonds.[106] But selling out of gains in equity-focused actively managed mutual funds to reduce the percentage of an investment portfolio allocated to equities and increase the percentage allocated to less risky investments only partially explains these dynamics.[107] Other such outflows are likely associated with an increasing investor preference for passive investment. But much of the outflows are no doubt driven by a preference for ETFs given the advantages they offer to investors.[108] As a consequence, in the

of target-date funds (after considering fees and related considerations including cash drag) relative to funds consisting of as little as four low-cost ETFs that replicate the disclosed investment strategy of the target-date funds).

[105] *See* INV. CO. INST., *supra* note 4, at 57 ("Actively managed domestic equity mutual funds had outflows in every year after 2005, while domestic equity index mutual funds had inflows in each of these years except for 2020.").

[106] *See id.* at 67 ("Domestic equity mutual funds experienced net outflows, reflecting two major factors: an ongoing shift to index-based products and redemptions to keep equity allocations at their portfolio targets in response to substantial gains in US stock prices during the year.").

[107] *See id.* 67, 69 ("Long-term mutual funds experienced net outflows of $486 billion in 2020, as outflows from equity and hybrid funds were only partially offset by inflows to bond funds.").

[108] *See supra* Sections II.A–B (providing an overview of these advantages). Despite all the reports of the death of active management, active management still might dominate passive management. At the close of 2020, sixty percent of long-term investment company assets were managed by active mutual funds or ETFs and forty percent were managed by passive mutual funds or ETFs. INV. CO. INST., *supra* note 4, at 48. That said, one may properly question the extent to the which the money deployed to active managers is in fact actively managed. *See* Jonathan Lewellen, *Institutional Investors and the Limits of Arbitrage*, 102 J. FIN. ECON. 62, 77 (2011) (providing empirical evidence to support the conclusion that "institutions as a whole seem to do little more than hold the market portfolio"); *see also* Jill E. Fisch, *Rethinking the Regulation of Securities Intermediaries*, 158 U. PA. L. REV. 1961, 2018 (2010) ("Many actively

coming years, outflows from actively managed *mutual funds* might increasingly shift to actively managed *ETFs*.

All this said, one should not assume that all—or even most—of the mutual fund money that is now actively managed will shift to the actively managed ETF side. Much of that money will likely stay put for four main reasons. First, for retirement-account investment where investors are not taxed on capital gains qua capital gains,[109] the tax advantages offered by ETFs are limited. Second, at least thus far, nontransparent actively managed ETFs are generally expensive relative to more traditional ETFs and perhaps even relative to traditional actively managed mutual funds.[110] Third, as I discuss next in Part IV, we might expect to see a reluctance to pursue investment via these new types of ETFs on the part of both investors and their advisers. For the latter, this reluctance could come from the below-discussed legal duties they owe to their investor clients. Lastly, and likewise discussed below, the SEC could take action that, at a minimum, restrains the emergence of the actively managed ETF.

managed mutual funds hold portfolios that do not differ significantly from the relevant index-fund benchmark. . . . Investors who purchase closet index funds pay a premium for active management while receiving index fund returns."). Whatever the precise level of active management versus passive management and whatever the equilibrium between the two one might expect given the increased incentive to engage in active management the more others are moving to passive management, allowing for nontransparent actively managed ETFs helps level the playing field for active funds seeking to better compete with passive ones.

[109] *Taxation of Retirement Income*, FINRA, https://www.finra.org/investors/learn-to-invest/types-investments/retirement/managing-retirement-income/taxation-retirement-income [https://perma.cc/3BB7-QY6H] (last visited Dec. 12, 2021).

[110] *See* Ballentine, *supra* note 95 ("One issue that active nontransparent funds face are hefty expense ratios, especially since the industry overall is reducing costs."); *see also infra* Section IV.2.B (focusing on why the tracking-spread disadvantages of the ETF form may be exacerbated for nontransparent actively managed ETFs.). According to Bloomberg, costs for nontransparent funds range from charges of 0.39% to 0.90%, while some active ETFs charge less than 0.30%. Ballentine, *supra* note 95.

In sum, the future of the actively managed ETF remains uncertain. But absent restraint arising from the law, there is much reason to believe that the recently approved market innovations that cure the decades-old secret-sauce problem will lead to a significant emergence of the actively managed ETF over the coming years. This emergence, combined with the traditional dominance of passively managed ETFs and large inflows into the same in recent years, makes it fair to label the current period, which began as early as mid-2020, as "ETF History Part II: The Varied Age."

IV. THE NEED FOR THE SEC AND INVESTMENT INTERMEDIARIES TO KEEP AN EYE ON NONTRANSPARENT ACTIVELY MANAGED ETFS

During the Passive Age, the main downsides to ETF investing (the introduction of tracking spreads and bid-ask spreads)[111] were generally of limited significance, albeit with notable disconcerting exceptions.[112] As demonstrated in this Part, the SEC as well as securities brokers and investment advisers should keep an eye on the extent to which the new mechanisms that have been promised to cure the special-sauce problem do so without introducing countervailing problems along these dimensions. I make these points in Section A by focusing broadly on the main relevant investor-protection roles of the SEC and these investment intermediaries. I then illustrate those points in Section B below by returning to the fine-grained focus from Section III.B on ActiveShares, the first-approved nontransparent actively managed ETF form and its ETF-arbitrage mechanism.

A. The Main Relevant Investor-Protection Roles for the

[111] *Supra* Section II.C.

[112] *See* Antti Petajisto, *Inefficiencies in the Pricing of Exchange-Traded Funds*, 73 FIN. ANALYSTS J., First Quarter, 2017, at 24, 25 (documenting significant mispricings of ETFs); Hu & Morley, *supra* note 1, at 843 (noting that the ETF-arbitrage "mechanism has sometimes failed catastrophically, even with very large and simple ETFs.").

SEC and Investment Intermediaries

Both the SEC and investment intermediaries have investor-protection roles that will be triggered by the above-predicted emergence of the actively managed ETF.

1. The Role of the SEC

The SEC has a good deal of discretion with respect to *nontransparent* actively managed ETFs. At the most basic level, those ETFs require an SEC exemption to come to market[113] as well as a distinct SEC exemption to trade in the national market system.[114] As the SEC stated in granting the former exemption for ActiveShares to come to market, the availability of that exemption turns on "the extent that such exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of" the Investment Company Act."[115]

Notably, the exemptions for these new products were not granted overnight. To the contrary, they were granted only after a lengthy series of unsuccessful proposals.[116] Eventually, those behind the proposals persevered by addressing enough of the concerns of a majority of the

[113] *See supra* note 60 and accompanying text (noting that nontransparent ETFs fall outside of the new, more permissive approach to ETFs found in Rule 6c-11 from 2019).

[114] *See, e.g.*, Order Granting Limited Exemptions to Exchange Act Section 11(d)(1) to ActiveShares, Release No. Exchange Act Release No. 88,301A (Feb. 28, 2020).

[115] Notice of Application of Precidian ETFs Trust, Investment Company Act Release No. 33,440, 84 Fed. Reg. 14,690, 14,691 (Apr. 8, 2019) (quoting Section 6(c) of the Investment Company Act.).

[116] *See, e.g.*, Notice of Application of T. Rowe Price, Investment Company Act Release No. 33,685, 84 Fed. Reg. 64,117, 64,117 (Nov. 14, 2019) (noting filing of the original application on September 23, 2013, with seven amendments filed from 2014 through 2019). Notably, amendments in this area typically follow, at a minimum, the raising of issues and objections and related indications of expected rejection from the SEC. *See, e.g.*, *id.*

commissioners in office at the time[117] and by agreeing to ongoing disclosure to help the SEC monitor the performance of these new products.[118] But even in granting the exemptions, the SEC remained cautious.[119] In the end, one

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117 *See Final Commission Votes for Agency Proceedings: Calendar Year 2019*, U.S. Sec. & Exch. Comm'n, https://www.sec.gov/about/commission-votes/annual/commission-votes-ap-2019.xml (on file with the Columbia Business Law Review) (last visited Dec. 11, 2021) (noting that the Investment Company Act exemption for the initial nontransparent actively managed ETF proposal that the SEC approved on May 20, 2019 (that for ActiveShares) passed by a three-to-one vote along party lines). *See generally*, Precidian ETF Trust, Investment Company Act Release No. 33,477, 2019 WL 2176712, at *1 (May 20, 2019) (ordering SEC approval of the ActiveShares proposal); Jackson Jr. & Herren Lee, *supra* note 79 ("Each fund's portfolio will only include securities that trade on an exchange, and the fund will establish thresholds for tracking error and bid-ask spreads, with the board taking needed action if the thresholds are crossed.").

118 *See, e.g.*, Notice of Application of T. Rowe Price, 84 Fed. Reg. at 64,123 (stipulating that the SEC's approval of the novel nontransparent actively managed ETF at issue requires that "[e]ach Fund will provide the Commission staff with periodic reports . . . containing such information as the Commission staff may request.").

119 *E.g., id.* at 64,122. The SEC noted:

> In considering relief from [Investment Company Act] section 22(d) and rule 22c-1 for ETFs, the Commission has focused on whether the ETFs' arbitrage mechanism addresses the concerns underlying those provisions. The Commission believes that the alternative arbitrage mechanism proposed by Applicants can work in an efficient manner to maintain a Fund's secondary market prices close to its NAV. The Commission recognizes, however, that the lack of full transparency may cause the Funds to trade with spreads and premiums/discounts [relative to NAV] that are larger than those of comparable, fully transparent ETFs. Nonetheless, as long as arbitrage continues to keep the Fund's secondary market price and NAV close, and does so efficiently so that spreads remain narrow, the Commission believes that investors would benefit from the opportunity to invest in active strategies through a vehicle that offers the traditional benefits of ETFs.

Id. (footnotes omitted); *id.* at 64122 n.33 ("The performance of a Fund's Proxy Portfolio and portfolio holdings may deviate to some extent, which would make market participants' estimates of the profitability of their

can view this victory by those in favor of this new form of investment as more the product of the regulators' inclination to give the market a chance to tell all involved the extent to which these new ETFs will be welfare-enhancing for investors, and less of the product of belief that the ETFs will in fact serve that end. Indeed, for those who have followed the SEC over the past decade, the regulatory approach might loosely resemble that embodied in the increasingly popular pilot approach deployed in other controversial areas.[120]

However the SEC's approach to these ETFs should be properly described, it is fair to say that a market experiment is following the regulatory approval introduced above and that this current and ongoing experiment should continue to be closely monitored by the SEC. In particular, if the tracking spreads and bid-ask spreads associated with nontransparent actively managed ETFs prove too problematic, the SEC's prior decision to permit these market experiments pursuant to the above-noted standard should not justify continued exemption from the Investment Company Act. The same applies to the Exchange Act exemptions that allow for these shares to trade in the national market system.[121] For example, the fruition of the problems discussed below in Section IV.B during periods of illiquidity would cut in favor of an end to the nontransparent actively managed ETF market experiment.

arbitrage transactions less precise. To account for this possibility, market participants would likely require wider spreads to trade Shares.").

[120] *See, e.g.*, INV. ADVISORY COMM., RECOMMENDATION OF THE INVESTOR ADVISORY COMMITTEE: DECIMALIZATION AND TICK SIZES, 6–7 (2012), https://www.sec.gov/spotlight/investor-advisory-committee-2012/investment-adviser-decimilization-recommendation.pdf [https://perma.cc/GKZ5-CMTX] (recommending against pilot program increasing tick size for stocks); Order Approving the National Market System Plan To Implement a Tick Size Pilot Program, Exchange Act Release No. 74,892, 80 Fed. Reg. 27,514 (May 6, 2015) (approving the implementation of the tick size pilot program); N.Y. Stock Exch. LLC v. SEC, No. 19-1042, 2020 WL 6020771 (D.C. Cir. June 16, 2020) (rejecting the SEC's plan to implement a pilot program to test trading with lower fees and rebates for liquidity-making and liquidity-taking for brokers).

[121] *See supra* note 114 and accompanying text.

To be sure, the SEC is watching and has already achieved a number of safeguards in addition to those described in Section III.B.[122] But at some point, there will be sufficient market data on the tracking spreads and bid-ask spreads (including during times of unusual market stress) of these new ETFs such that the Commission in office at the time might find that monitoring and those safeguards to be insufficient to protect at least ordinary, individual investors.

More generally, one might still wonder whether all of this involves a desirable use of government resources—including those required for the SEC and others to monitor and enforce the types of issues I note in this Section. For one thing, it is far from clear that the benefits investors will receive from ETF-based active management dominate the costs traceable to the same.[123] For another, even to the extent that quality actively managed products dominate for investors, it is likewise unclear that these products are socially desirable. After all, the advantages of ETF investing described in Sections II.A and B are those specific to investors. For society, the advantages of ETF investing are less clear. Indeed, the tax benefits described in Section II.B.2 have no doubt played a considerable role in the triumph of the ETF from its inception in 1993 through to today. Yet, the desirability of those tax advantages for investors must be distinguished from the very questionable desirability of the same for society.[124]

Thus, one might not be surprised to see that the SEC has allocated a good deal of scarce government resources toward

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[122] *See, e.g.*, Notice of Application of Fidelity Beach Street Trust, Investment Company Act Release No. 33,683, 84 Fed. Reg. 64,140, 64,144–45 (Nov. 20, 2019) (detailing remedial measures that the funds and their adviser must take "if the funds do not function as anticipated").

[123] The main quality that matters in the active-management context more generally relates to the expectation of profits net of the costs of that management. For decades, there has been a debate on the extent to which actively managed investment funds generate risk-adjusted returns net of the fees they charge that outpace the returns from passive investing net of its far lower fees. *See, e.g.*, Brown & Davies, *supra* note 104, at 2–3.

[124] As its title suggests, Jeffrey Colon's "The Great ETF Tax Swindle," *supra* note 17, provides an in-depth critique of the current approach to ETF taxation.

bringing about the current market experiment for nontransparent actively managed ETFs. But to the extent these products (1) turn out to raise costs for investors without bringing them sufficient benefits or (2) are merely desirable to investors due to a tax dodge (and not due to the financial attractiveness of active management via a more liquid and perhaps less costly form), it becomes harder to appreciate why the SEC should continue its work in this area. In sum, it is understandable why so many in the fund industry care about these new products and their success. But the government's interest (independent of direct and indirect industry pressure) is less clear.

2. The Role of Securities Brokers and Investment Advisers

Similar monitoring is appropriate for key investment intermediaries—namely, investment advisers and securities brokers. Securities brokers have a duty to provide retail investors with recommendations that are in the best interest of those investors.[125] This general best-interest obligation owed by brokers is one that includes several "component obligations," including a "care obligation."[126] As stated in the SEC's adopting release for Regulation Best Interest:

> Under the Care Obligation, a broker-dealer must exercise reasonable diligence, care, and skill when making a recommendation to a retail customer. The broker-dealer must understand potential risks, rewards, and costs associated with the recommendation. The broker-dealer must then consider those risks, rewards, and costs in light of the customer's investment profile and have a reasonable basis to believe that the recommendation is in the

125 Regulation Best Interest: The Broker-Dealer Standard of Conduct, 84 Fed. Reg. 33,318, 33,330 (July 12, 2019) (to be codified at 17 C.F.R. pt. 240) ("[T]he retail investor will be entitled to a recommendation (from a broker-dealer) . . . that is in the best interest of the retail investor and that does not place the interests of the firm or the financial professional ahead of the interests of the retail investor.").

126 *Id.* at 33,320.

> customer's best interest and does not place the broker-dealer's interest ahead of the retail customer's interest. A broker-dealer should consider reasonable alternatives, if any, offered by the broker-dealer in determining whether it has a reasonable basis for making the recommendation.[127]

The main frictions introduced by nontransparent actively managed ETFs may make those products inimical to the best interests of many retail-level investors. The failure to uphold these obligations of course can result in liability for brokers.[128] Brokers will thus have to proceed with caution before directing those investors to these new ETFs in place of, for example, more traditional managed mutual funds (whether actively or passively managed) or more traditional ETFs (i.e., ones without the ETF-arbitrage frictions in focus in this article). The same general principles apply to investment advisers.[129] Thus, in addition to whatever further action the SEC opts to pursue in this area to protect investors, securities brokers and investment advisers should closely monitor the robustness of the new nontransparent actively managed ETFs—and do so with the considerations discussed in this Article in mind. Any defense of "the SEC permitted the products" should be insufficient to protect these brokers and investments advisers from legal actions by, among others, the Financial Industry Regulatory Authority (FINRA), private plaintiffs, state attorney generals, and even the SEC itself.

B. Illustration: ActiveShares and the Robustness of the

[127] *Id.* at 33,321.

[128] *Id.* at 33,418–21.

[129] *See, e.g.*, Commission Interpretation Regarding Standard of Conduct for Investment Advisers, 84 Fed. Reg. 33,669 (July 12, 2019); Regulation Best Interest, 84 Fed. Reg. at 33,321 n.23 ("[A]n investment adviser's fiduciary duty under the Advisers Act comprises a duty of care and a duty of loyalty. This combination of care and loyalty obligations has been characterized as requiring the investment adviser to act in the 'best interest' of its client at all times.").

ETF-Arbitrage Mechanism

The desirability of heightened monitoring by the SEC and investment intermediaries is illustrated by taking a fine-grained look at perhaps overlooked costs that are likely to impede the robustness of the price-alignment process for ActiveShares. These costs include those incurred by firms in order to provide AP representative services as well as those incurred by APs to monitor these new Wall Street intermediaries. Both of these costs may ultimately be borne by the APs in a way that reduces the incentive to engage in sufficient ETF-arbitrage activity, thereby increasing both tracking spreads and bid-ask spreads for these ETFs.

At the most basic level, the provision of AP representative services is not free for the firms that offer those services. To stay in the AP representative line of business, these firms must of course cover their costs. One notable industry participant (State Street) publicly shared its thoughts on the scope of these costs: "Do not underestimate the work required to establish the new APR role. . . . Even with all of our experience servicing ETFs, the APR role was new and different. . . . Receiving the fund's confidential portfolio information is a monumental undertaking not to be dealt with lightly."[130]

Looking more closely at the AP representative role reveals particularly notable compliance costs that might not be fully appreciated today. Two such costs are (1) those associated with avoiding insider trading violations and (2) those associated with avoiding illegally frontrunnnig funds and clients.

"Insider" trading law is of course often less about trading by c-suite insiders and more about trading by anyone (director, officer, or complete outsider) on material, non-public information in ways that are said to constitute "deceit."[131]

130 STATE ST., *supra* note 76, at 4.

131 The typical focus on insider trading law in the scholarly literature on securities law is that embodied in judicial interpretations of section 10(b) of the Securities Exchange Act, 15 U.S.C. § 78j(b) (2018), and Rule 10b-5 promulgated thereunder, 17 C.F.R. § 240.10b-5 (2021). Although less

Relevant here, section 10(b) and Rule 10b-5 are read to prohibit the *deceptive* misappropriation of material, non-public information from its source for trading use.[132] And it is said to be deceitful when a person takes material, non-public information from its source—despite a duty to keep it confidential—and then uses that information to purchase or sell a security (or tip others with an eye on the same).[133] These forms of securities deceit are prosecutable both civilly (by the SEC and/or private plaintiffs) as well as criminally (by the DOJ).[134]

Trading by AP representatives should invoke concern for illegal misappropriation-type insider trading. To complete their trading on behalf of APs, AP representatives receive confidential information (i.e., that about the portfolio holdings of the ETFs).[135] AP representatives therefore have access to information that the market more generally lacks. Moreover, they have it throughout each trading day of the year. At a minimum, to the extent that the holdings of nontransparent actively managed funds are likely to outperform the market, having access to that information is valuable. At times, this

prominent in that literature, section 17(a) of the Securities Act of 1933, 15 U.S.C. § 77q is also relevant to insider selling. Likewise, under-emphasized federal prohibitions on mail and wire fraud also often sit at the center of criminal prosecutions in the area. *See* 18 U.S.C. § 1341; *See generally* William K.S. Wang, *Application of the Federal Mail and Wire Fraud Statutes to Criminal Liability for Stock Market Insider Trading and Tipping*, 70 MIAMI L. REV. 220, 222 (2015).

[132] *See* United States v. O'Hagan, 521 U.S. 642, 652–53 (1997).

[133] *Id*. at 651–52. Arguably, the tipping activity is only deceitful when the tipper expects to receive a personal benefit in return for the tip. *See* Dirks v. SEC, 463 U.S. 646, 662 (1983). *But see* Merritt B. Fox & George N. Tepe, *Personal Benefit Has No Place in Misappropriation Tipping Cases*, 71 SMU L. REV. 767, 768 (2018) (arguing that the personal benefit requirement, while part of the classical theory of insider trading, should not be inserted into the misappropriation theory of insider trading).

[134] *See* 15 U.S.C. § 78ff (criminalizing "willful" violations of most Exchange Act provisions).

[135] *See supra* notes 82–83 and accompanying text.

information will be sufficiently valuable to make it "material."[136]

AP representatives work under agreements that bar them from trading on this portfolio information and from tipping others to do the same.[137] Under insider-trading law as it is understood today, AP representatives therefore owe a duty of trust and confidence to the source of that information (the funds).[138] Yet, mere *possession* of material, non-public information while trading in relevant securities involves the *use* of that information.[139] Trading while in possession of material, non-public information while operating under an agreement that bars a party from trading on confidential

[136] *See* TSC Indus. Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976) (defining a material fact in the context of alleged fraudulent proxy statements under Exchange Act Rule 14a-9 as one where "there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote[]"—and thereby laying the foundation for the definition of materiality under the federal securities laws more generally).

[137] *See* Proposed Rule Change to Adopt a New NYSE Arca Rule 8.900-E, 83 Fed. Reg. 3846, 3852 n. 23 (proposed Jan. 19, 2018).

[138] The relevant duty first arose under the common law out of relationships of trust and confidence between counterparties to a transaction. But these duties were then greatly expanded in the insider-trading context via purported statutory interpretation by federal judges. *See, e.g.*, United States v. Chestman, 947 F.2d 551, 567–70 (2d Cir. 1991). Today, the duty at issue is also traceable to an SEC rule. 17 C.F.R. § 240.10b5-2 (2021).

[139] *See* 17 C.F.R. § 240.10b5-1(b) ("[A] purchase or sale of a security of an issuer is 'on the basis of' material non-public information about that security or issuer if the person making the purchase or sale was aware of the material nonpublic information when the person made the purchase or sale."). Similarly, caselaw provides that "when an insider trades while in possession of material nonpublic information, a strong inference arises that such information was used by the insider in trading." SEC v. Adler, 137 F.3d 1325, 1337 (11th Cir. 1998). The extent to which this caselaw is preempted by the aforementioned SEC rule is unclear. For ease of exposition, here forward I focus only on the SEC rule when thinking about the extent to which possession of confidential fund information means the use of it by AP representatives.

information is thus illegal when affirmative defenses[140] are not available.

Of course, those prosecuting such an insider-trading case also need to prove additional elements. But when the information at issue is material, the key duty and use elements are met due to the mix of the confidentiality agreement, the trading and/or tipping, and the possession of the information during the time of that trading and/or tipping. Yet, Rule 10b5-1 contains no apparent affirmative defense for this AP representative trading.[141] And given the scope of the emergence of investment via actively managed ETF (namely, via nontransparent actively managed ETF) predicted above,[142] AP representatives could have information relating to the demand for every publicly traded stock in the market each and every trading day of the year. Consequently, AP representatives can even be said to be acting in a way that is presumptively inconsistent with these same standards when those representatives are merely engaging in the brokering activity on third-party trading platforms at arm's length that the AP-representative arrangement contemplates. As a technical matter, even merely assisting the APs in their ETF-arbitrage creation and redemption transactions dictates that AP representatives are trading "on the basis of" confidential portfolio information when they transact in shares of the securities in the underlying creation and redemption basket. After all, the *possession* of such information while trading in relevant securities equals its *use* under the law.

To be sure, the analysis in the immediately preceding paragraph could be said to be exceedingly technical. And "materiality" of the information at issue is far from clear. But even if so and prosecutors, private plaintiffs, the SEC, and FINRA had no issue with such trading, closely related problems remain. For example, an AP representative would be proceeding on very thin ice if it used shares from its own

[140] *See* 17 C.F.R. § 240.10b5-1(c) (specifying affirmative defenses).

[141] *See id.*

[142] *See supra* Section III.B.

inventory (i.e., as a broker-*dealer*[143]) to help assemble some of the shares required for a creation-unit transaction. In this situation, the AP representative would be selling those shares to the AP (as beneficial owner) while having knowledge of the funds' trading patterns with respect to the security at issue. Yet, that AP representative possession of that information—at least if material—constitutes its use. By buying these shares for the AP from its own inventory, the AP representative would thus be violating insider trading law.

Further, the logic (even if not current application) of the misappropriation theory of insider trading suggests that securities deceit may be found even where the information secretly misappropriated and used for trading purposes is valuable, yet not quite "material." In this situation, the valuable information can said to be *deceptively* misappropriated in connection with the purchase or sale of a security because the information was secretly used for trading purposes—thereby violating the prohibition on deceit in connection with the purchase or sale of a security found, among other places, in section 10(b) of the Exchange Act.[144] Thus, the logic of section 10(b) and Rule 10b-5's prohibition on deceptive misappropriation of material, non-public information could be argued to apply equally to the misappropriation of other valuable confidential information that falls short of being deemed "material," as that term of art is defined. If that is the case, then use of confidential fund information by AP representatives could give rise to legal sanction under a more liberal interpretation of section 10(b) and Rule 10b-5 as well.

Closely related concerns exist with respect to trading with the help of fund information even when that trading does not rise to the level of illegal insider trading. For example, the AP representatives will also have to undertake efforts to comply

143 *See* Securities Exchange Act of 1934, 15 U.S.C. § 78c(a)(5) (2018) (defining "dealer" as "any person engaged in the business of buying and selling securities . . . for such person's own account through a broker or otherwise.").

144 *See* 15 U.S.C. § 78j(a)(2)(b).

with rules barring frontrunning.[145] Whether labeled as "deceit" or "frontrunning," it is clear that AP representatives have an incentive to use the confidential portfolio information in their possession to frontrun funds and/or AP clients (or tip others to do the same). The incentive broker-dealers have to frontrun customers' orders exists today even when they have only limited information as to the customers' holdings (e.g., a single mutual fund is interested in selling a block of Oracle stock this week). Securities regulators and institutional investors have long allocated significant resources to police and curb front-running activity. Yet, when it comes to nontransparent actively managed funds, the information at issue is the composition of the funds' entire portfolio—and not just a single security or smalls set of securities, as in the more traditional basic frontrunning case. And if AP representatives are to achieve any kind of efficiency with respect to their narrow line of business, they will have such information for a large number of funds. AP representatives can thus use their inside knowledge of funds' trading patterns to anticipate those funds' likely future purchases and sales of securities, and frontrun them profitably in a way that is perhaps far more disconcerting than that present in more traditional frontrunning contexts.

Moreover, AP representatives working as broker-dealers are operating on the sell-side of Wall Street. They therefore have the incentive to pass along valuable frontrunning opportunities to those who might buy their liquidity services in the future. In short, for at least broker-dealers, having access to the funds' confidential portfolio information means having access to valuable information not just for themselves directly, but also for non-AP clients of the broker-dealer firm.

Of course, AP representatives operate walled off from their intra-firm and extra-firm colleagues.[146] Questioning the extent to which traditional Wall Street walls erected between investment bankers and sell-side colleagues at the same firm are sufficiently robust is beyond the scope of this Article. But

[145] *See* FINRA MANUAL r. 5270 (Fin. Indus. Regul. Auth. 2021).

[146] *See supra* Section III.B.

the idea that AP representative broker-dealers will be able to be sufficiently separated from their fellow sell-side colleagues performing more general broker-dealer services at the same firm is fair to question here.

Lastly, APs themselves will be in the dark on the contents of the creation and redemption baskets. They will therefore be less able to monitor the extent to which their trusted agents are acting in the interests of the APs as opposed to pursuing their own distinct interests. For example, APs will have difficulty determining the extent to which AP representatives are providing them with "best execution" as required under both FINRA rules and state common law.[147] The APs will not be able to engage in any kind of real-time (or even proximate-time) monitoring of the extent to which the shares accumulated by AP representatives in a creation-basket transaction are in fact purchased at prices that are consistent with those brokers-dealers' duty of best execution.[148] The same goes for policing the best-execution by AP representatives when those broker-dealers are selling redemption-basket securities on behalf of the AP to assist the AP in redeeming ETF shares in return for the liquidated value of the securities in that basket.[149] Given well-established concerns about broker-dealer conflicts in today's market (e.g., those relating to the incentive to route orders to the broker-

147 *See* FINRA MANUAL r. 5310(a)(1) (Fin. Indus. Regul. Auth. 2021) ("In any transaction for or with a customer . . . a member and persons associated with a member shall use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions."). For prominent examples of the common law best-execution standard, see *In re* Merrill Lynch, 911 F. Supp 754, 760–61 (D.N.J. 1995); *id.* at 769. ("A broker-dealer's duty to seek to obtain the best execution of customer orders derives from the common law agency of loyalty, which obligates an agent to act exclusively in the principal's best interests . . . ." (citations and quotation marks omitted) (alteration in original)).)); Newton v. Merrill Lynch, Pierce, Fenner & Smith, Inc., 135 F.3d 266, 270–71 (3d Cir. 1998) ("The duty of best execution, which predates the federal securities laws, has its roots in the common law agency obligations of undivided loyalty and reasonable care that an agent owes to his principal.").

148 *See supra* notes 72–75 and accompanying text.

149 *See id.*

dealer's own dark pool[150] or to trading platforms that provide the highest rebates to the broker rather than the best execution for the client[151]), the above-raised issues should not be dismissed without careful study.

It follows that firms offering AP representative services will be operating on thin ice with respect to insider trading law as well as broker-dealer-specific areas of regulation. They will therefore have to incur significant costs to avoid violating the law. All of this is not to say that the introduction of the VIIV is not helpful.[152] But the ETF-arbitrage process envisioned for nontransparent ETFs with the help of this VIIV only works if the market incentive to engage in AP redemptions and creations is sufficient. And that incentive is only as good as the ability to carry out the AP function profitably. Yet, performing AP representative duties is not free. And, like most principals, APs will find it in their interest to monitor their agents. To the extent that all of these costs

[150] *See, e.g.*, Scott Patterson, *The Questions Hovering over Dark Pools*, WALL ST. J. (JUNE 16, 2013, 3:33 PM), https://www.wsj.com/amp/articles/BL-MBB-2405?responsive=y (on file with the Columbia Business Law Review) ("Because the firms benefit from executing as many trades in their dark pool as possible, they have an incentive to route as many possible orders to their own venues."); Kristin N. Johnson, *Regulating Innovation: High Frequency Trading in Dark Pools*, 42 J. CORP. L. 834, 867 ("[C]onflicts of interest abound in dark pools.").

[151] *See generally* MERRITT B. FOX, LAWRENCE R. GLOSTEN & GABRIEL V. RAUTERBERG, THE NEW STOCK MARKET: LAW, ECONOMIC, AND POLICY 281–288 (2019) (discussing maker-taker fees under the current structure of the stock market).

[152] It is worth noting that the VIIV, even if calculated based on the midpoint price of the bid-ask spread for each portfolio holding, *see* Alger, *Verified Intraday Indicative Value (VIIV) Price Calculation & Methodology*, https://www.alger.com/AlgerDocuments/Viiv_Methodology.pdf [https://perma.cc/2HHB-R3A4] (last visited Jan. 16, 2022), is not an exact replication of the cost an AP or arbitrageur would face in, for example, accumulating portfolio holdings in order to engage in a creation-unit transaction. This is because the true price to accumulate the underlying holdings in significant size would generally be at least the best (lowest) ask price for each holding. Moreover, without knowing the particular holdings, the AP or arbitrageur cannot know the precise bid-ask spread for each holding. And bid-ask spreads of course vary widely for different types of even relatively liquid securities.

ultimately fall on the APs and those who pursue ETF arbitrage through them,[153] they will affect the extent to which APs and these arbitrageurs perform their pricing function.[154] In particular, these costs will add to the transaction costs associated with AP trading and thus add frictions for the all-important ETF-arbitrage mechanism. In the end, we might therefore expect these types of nontransparent actively managed ETF shares to have larger tracking spreads.[155] Those larger tracking spreads can add risk for market makers, thereby leading them to quote larger bid-ask spreads for these ETFs. These heightened tracking spreads along with any closely connected problem relating to the size of bid-ask spreads matter even if they were to only manifest themselves during periods of heightened market stress.[156]

In sum, the SEC and investment intermediaries should keep an eye on the extent to which the types of costs examined above will limit the robustness of ActiveShares's arbitrage mechanism.[157] There are of course distinct types of ETF-

[153] *See* INV. CO. INST., *supra* note 4, at 100 (discussing the trading of non-AP ETF arbitrageurs).

[154] *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 308 (1976) (describing agency costs).

[155] *See* Jackson Jr. & Herren Lee, *supra* note 79 (asserting that ETFs hold $5 trillion worth of the American people's savings in large part due to the enhanced liquidity of ETFs over mutual funds, and noting that such liquidity hinges upon the price reliance that has until now only been assured through transparency).

[156] There has been a longstanding concern for the robustness of the ETF-arbitrage mechanism for even traditional, passive ETFs during times of heightened market stress. *See, e.g.*, INV. CO. INST., *supra* note 4 at 102 ("Over the years, policymakers have expressed concern that APs will step away from their role in facilitating creations and redemptions of ETF shares during periods of market stress[.]").

[157] Of course, if the types of concerns raised in this Section prove too much for APs and ETF arbitrageurs more generally, then fund sponsors will be hesitant to offer nontransparent ETFs in the first place and the emergence I predict above in Section III.B will be less robust. In that scenario, the SEC and investment intermediaries will have less work cut out for them with respect to these products and will perhaps even be able to steer clear of them to a good degree.

arbitrage mechanisms (namely, the proxy-portfolio ones discussed in Section III.B) for the other types of nontransparent actively managed ETFs that came to market in mid-2020. A similar close look at their arbitrage mechanism is outside the scope of this Article. But the ActiveShares illustration provided in this Section gives reason to believe that such similar innovative mechanisms developed to allow funds and their managers to protect their secret sauce while still fostering an effective ETF arbitrage mechanism are likely to introduce frictions similar to the ones detailed here.

V. CONCLUSION

This Article sought to contribute to this symposium on the future of securities law by addressing the current development of notable features in the investment landscape. In particular, it argued (1) that there is much reason to believe the actively managed ETF is set to emerge as a significant feature of that landscape, and (2) that this emergence should trigger investor-protection work by the SEC and investment intermediaries. In so doing, the Article took a close look at the nontransparent actively managed ETFs that came to market in mid-2020, with a special focus on the first such product, ActiveShares. These actively managed ETFs, I argued, present special concern—most notably relating to the robustness of their ETF-arbitrage mechanisms.

Among the key questions in this area that remain are the following. First, have market participants cracked the code for a sufficiently robust ETF arbitrage mechanism that allows for actively managed ETFs to trade while protecting their managers' secret sauce? Or have those participants, after years of pushing, instead cracked the code for the right Commission membership to allow them to offer such ETFs—perhaps without a satisfactory ETF-arbitrage mechanism? Second, and relatedly, one must wonder how regulatory approval of new entrants in this area will proceed in the future. Will that approval primarily turn on the political or ideological leanings of the members that compose the Commission, thus allowing for more new entrants in some four-year periods but not others? Or will it eventually follow

the new regime for ETFs more generally (which of course currently excludes nontransparent actively managed ETFs) and be subject to a more standardized regulatory process governed by longer-term SEC staff members?[158] And just how far should the SEC's current rope extend to the current nontransparent actively managed ETFs and those who sponsor and manage them? Lastly, to what extent is it best to continue the market experiment with as much competition in the space as possible under the existing regulatory framework now that some of these products have been approved?

[158] *See* Hu & Morley, *supra* note 60 (discussing the new framework for ETF regulation following the adoption of Rule 6c-11 in late 2019.).