UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

NASDAQ, INC., Plaintiff, -v- EXCHANGE TRADED MANAGERS GROUP, LLC, and ETF MANAGERS GROUP, LLC, Defendants.	17 Civ. 8252 (PAE) OPINION AND ORDER

PAUL A. ENGELMAYER, District Judge:

This decision sets out the Court's findings of fact and conclusions of law pursuant to Federal Rule of Civil Procedure 52, following a 10-day bench trial.

This case principally involves reciprocal claims of contract breaches among entities in a corner of the securities industry—that involving the development, operation, and marketing of exchange-traded funds ("ETFs"). Plaintiff/counterclaim defendant is Nasdaq, Inc. ("Nasdaq"). Nasdaq owns the second largest stock exchange in the world and offers a variety of financial services. In June 2016, Nasdaq acquired International Securities Exchange ("ISE"). ISE's business lines included constructing indexes that it licensed to ETFs and, relevant here, supplying the capital to launch and support ETFs in exchange for a share of the profits, if any, from the ETFs' operation. In the latter capacity, ISE was party to contracts with service providers, including ETF Managers Group, LLC and Exchange Traded Managers Group, LLC

(together, "ETFMG"), defendants/counterclaim plaintiffs here.[1] By contract, ETFMG was responsible for, *inter alia*, managing certain ETFs (the "PureShares ETFs") for which it served as fund advisor. When Nasdaq acquired ISE, it succeeded to ISE's rights and obligations in connection with these ETFs and to ISE's business arrangements with ETFMG.

In early to mid-2017, the working relationship between Nasdaq and ETFMG ruptured, with reciprocal allegations of breaches and, eventually, letters purporting to terminate the parties' contracts. This lawsuit followed.

In brief, Nasdaq claims that ETFMG, irked by Nasdaq's lukewarm commitment to the PureShares ETFs and fearful that Nasdaq intended to shrink and eventually shutter this business line, unlawfully seized and asserted entitlement to the stream of profits from these ETFs. In fact, Nasdaq claims, those profits belonged to Nasdaq and a business partner, PureShares LLC, with whom Nasdaq had conceived of and developed these funds. ETFMG counters that it was entitled to keep these profits, or at least the profits from one ETF, a fund focused on cybersecurity issuers known as HACK, which was by far the most profitable of the PureShares ETFs. ETFMG alternatively claims that Nasdaq had materially breached its obligations to ETFMG in various ways, justifying ETFMG in terminating its agreements with Nasdaq and thereafter retaining the profits earned by these ETFs.

[1] Except where noted otherwise, the Court uses "ETFMG" to refer collectively to the two above defendants and their predecessor companies.

Trial was held between May 13 and 30, 2019. The Court heard testimony from 15 live witnesses;[2] received deposition testimony from two witnesses;[3] and received hundreds of exhibits.

The findings of fact that follow are based on the Court's review of the entire trial record. Where based in whole or part on a witness's testimony, the Court's findings reflect credibility determinations based on the Court's assessment of, *inter alia*, the relevant witness or witnesses' experience, knowledge, and demeanor.

For the reasons set forth below, the Court finds that Nasdaq, with PureShares, was contractually entitled to the profits from the PureShares ETFs, including profits from HACK. ETFMG's compensation for its services, the Court finds, was specifically delineated by written contracts. ETFMG's compensation did not include a right to residual profits of the ETFs after payment of this delineated compensation. The Court further finds that ETFMG blatantly

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[2] The direct testimony of each party-controlled witness was received in the form of a sworn affirmation. These witnesses were then subject to cross (and follow-on) examinations. Nasdaq called four such witnesses: Terry Wade, its former president of business development for global information services; Casey Freire, its associate vice president for global information services; David Gedeon, its vice president for global information services; and Vinita Juneja, a damages expert. ETFMG offered the testimony of seven such witnesses (although several of these were called by Nasdaq as adverse witnesses on its case in chief). These were John Flanagan, ETFMG's chief financial officer and the principal financial officer of ETF Managers Trust; David Mahaffey, an outside counsel for ETF Managers Trust and ETF Managers Group; Samuel Masucci, ETFMG's CEO; Barney Karol, ETFMG's president; Terry Loebs, a member of ETF Managers board of directors; Donald May, a damages expert; and Matthew Chambers, a lawyer presenting expert testimony on the ETF industry. In addition, Nasdaq called Andrew Chanin, CEO of PureShares, LLC, and Kris Monaco, the former head at ISE of ETF Ventures. And ETFMG called Adena Friedman, Nasdaq's CEO, and Boris Ilyevsky, ISE's former managing director. The Court cites herein to testimony received by affirmation as "[NAME] Aff. ¶ []"; to reports accompanying expert testimony as "[NAME] Rept. ¶ []"; and to trial testimony as "Tr. at [] (NAME)."

[3] These were John Southard, a former member of ETF Managers Trust board of directors; and Scott Friske, a Senior Vice President of First Trust, Advisors, L.P. The Court cites herein to deposition testimony as "[NAME] Dep. Tr. []."

breached its contractual duty to furnish those profits to Nasdaq and PureShares by appropriating these profits for itself, as it continues to do to this day. The Court does not find any material breaches on Nasdaq's part.

As damages, the Court finds that ETFMG owes $78,403,172.36 to Nasdaq, plus prejudgment interest. This sum principally reflects the profits that ETFMG misappropriated from Nasdaq during the parties' relationship and the profits that the Court projects Nasdaq would have earned from three PureShares ETFs (HACK, SILJ, and IPAY) in future years. This sum includes the share of the profits to which Nasdaq's venture partner PureShares was entitled, and which, but for ETFMG's theft of all profits, Nasdaq would have remitted to PureShares.

This decision is in five sections.

First, the Court sets forth its findings of fact as to the parties and the broad chronology of events.

Second, the Court sets forth its findings of fact on a discrete but central issue: the contractual right to the profits earned from HACK.

Third, the Court sets forth its findings of fact on Nasdaq's contractual right to profits earned from two other ETFs, SILJ and IPAY, that were profitable and whose profits ETFMG appropriated for itself prior to the termination of the parties' relationship in mid-2017.

Fourth, the Court reviews and resolves, and sets forth its conclusions of law, as to the parties' respective claims of breach. The Court finds three breaches, all by ETFMG: ETFMG's (1) misappropriation of the profits from three PureShares ETFs (HACK, SILJ, and IPAY); (2) violation of the Wholesaling Agreement; and (3) continued operation of two other ETFs, known as GAMR and IFLY, which Nasdaq had instructed ETFMG to terminate.

Fifth, and finally, the Court tabulates the damages due Nasdaq from ETFMG.[4]

I. Findings of Fact: The Parties and the Chronology of Events

A. The Parties

Nasdaq is a publicly-traded Delaware corporation, headquartered in New York City. Nasdaq owns the second largest stock exchange in the world. In 2016, Nasdaq acquired ISE, including ISE's business developing and marketing various exchanged-traded funds, or ETFs. As part of this acquisition, Nasdaq acquired all the assets, investments, and intellectual property owned by ISE.

Before its acquisition, ISE had been an electronic securities exchange that operated the nation's largest options trading exchange. One division of ISE, ETF Ventures, is relevant here. ETF Ventures was in the business of constructing indexes that it licensed to ETFs. ETF Ventures constructed options indexes that it licensed to ETFs. ETF Ventures also sometimes operated as an ETF sponsor, supplying the capital to launch and support ETFs in exchange for a share of the profits, if any, derived from the ETF's operation. ISE employee Kris Monaco headed ETF Ventures.

Exchange Traded Managers Group, LLC, is the corporate parent of ETF Managers Group, LLC. Samuel Masucci is the co-founder and CEO of each company.[5] ETFMG's business, as explained in more detail below, involves assisting other companies to issue and operate ETFs. ETF Managers Group, LLC, acts as an investment advisor to ETF Managers

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[4] Although the latter two sections largely consist of conclusions of law, each embeds additional findings of fact.

[5] Masucci was named as a defendant in this lawsuit. In a decision issued August 21, 2018, the Court dismissed all claims against Masucci. *See* Dkt. 50.

Trust (the "Trust"), formerly known as Factorshares Trust. The Trust has a three-member board of trustees, two of whom must be independent of the investment advisor.

ETF Managers Group is the successor in interest to a number of companies that Masucci previously owned and/or operated. These include Gencap Advisors, LLC ("Gencap" or "Gencap/ETFMG") and Factor Advisors, LLC ("Factor" or "Factor/ETFMG").[6]

Non-party PureShares, LLC, doing business as PureShares ("PureShares") is a Delaware limited liability company with its principal place of business in New York. During the relevant period, it was headed by Andrew Chanin. PureShares' business involves the marketing and branding of ETFs.

B. General Background on ETFs

A brief explanation of the supply side of the ETF industry is useful here.

An ETF is an exchange-listed investment product that tracks a specific index.[7] Indexes may track the overall financial market, targeted subsets of the overall market, or other collections of stocks, bonds, commodities, and currencies. An index-based ETF allows investors to invest in indexes that cannot be invested in directly—*e.g.*, an investor can invest in an ETF that tracks the S&P 500 market index, even though that investor cannot directly invest in the S&P 500. Investors can buy and sell shares of ETFs throughout the trading day, much as they trade shares of stocks, on a major exchange. Gedeon Aff. ¶ 2.

[6] Because Factor and Gencap are the predecessors in interest to defendants, the Court refers to Factor and Gencap as "ETFMG" or, where necessary to avoid confusion, "Factor/ETFMG" and "Gencap/ETFMG," respectively.

[7] ETFs may also be actively managed, but the ETFs at issue here involve index-based ETFs. Accordingly, for purposes of this opinion, the Court uses the term ETF to refer solely to index-based ETFs. *See* Chambers Rept. ¶ 18 n.10.

An index provider such as ISE generally designs and supports an index that will, in turn, be licensed for use in, and tracked by, the ETF. *Id.* ¶¶ 3–4. The index provider develops a methodology governing the composition of the index. *Id.* ¶ 3. The methodology consists of a set of rules that the index provider sets and must follow to decide whether to include individual stocks in an index, and what weight to assign to these stocks. *Id.* Index providers generate revenue by licensing their indexes to one or more third-party asset managers. Tr. at 689 (Wade).

An entity that sponsors an ETF typically makes money based on the ETF's revenues, less the ETF's expenses. The ETF's revenues derive primarily from the management fee charged to investors in the ETF. Many ETFs prove unprofitable; the majority of those unsuccessful ETFs liquidate in the three years after they first launch. Juneja Aff. ¶ 56. The management fee charged to each investor consists of a small percentage of that investor's total holdings in the ETF. As an ETF attracts more investors and generates a greater volume of assets under management ("AUM"), and hence management-fee revenue, it is more likely to succeed. *Id.*

In addition to requiring a sponsor and an index provider, an ETF, to launch, requires a trust to issues shares of the ETF. The Investment Company Act of 1940 (the "1940 Act") governs the management and administration of ETFs. It requires that ETFs be issued by an independent trust, whose board must have a majority of independent trustees. The trustees meet periodically, request and review reports relating to ETF matters, and engage in discussions with investment advisors, auditors, and other relevant actors. The trustees oversee, *inter alia*, financial reporting, compliance, portfolio performance, valuation, and disclosure.

The independent trustees hire an investment advisor to carry out the day-to-day operation of an ETF. Under the 1940 Act, the advisor must be registered with the SEC. The advisor's duties generally include portfolio management and trading; statutory distribution; recommending

and implementing changes in investment policy; engagement and supervision of service providers, including a fund administrator and fund custodian; regulatory reporting, compliance, and disclosures; shareholder votes; sales activity; fund taxes; and other SEC-imposed responsibilities. Masucci Aff. ¶ 12; Chambers Rept. ¶ 22.

The advisor may choose to perform these functions itself, through an affiliate, or by hiring a third party. The advisor typically has a seat on the trust board, but the advisory contract between the trust and the advisor must be approved by vote of the independent trustees and be up for renewal at least annually. Masucci Aff. ¶ 12; Chambers Rept. ¶ 21.

It is ordinarily the job of the ETF's advisor, subject to board approval, to identify the index the ETF will track and select the index provider. The index provider, usually in exchange for a fee that is a percentage of the ETF's AUM, maintains the index and adjusts it for changes in the underlying securities, corporate events, and other actions. The index provider supplies daily files describing changes to the index, which the advisor uses during market hours to administer the ETF so that it tracks the index. Masucci Aff. ¶ 14; Chambers Rept. ¶ 18.

The ETF's trustees select a principal underwriter, also known as a statutory distributor, for the ETF. The statutory distributor is tasked with selling or distributing ETF shares and must be a registered broker-dealer under the Securities Exchange Act of 1934. Often, the distributor is an affiliate of the ETF's sponsor or advisor. Under the 1940 Act, the distributor must serve pursuant to a written contract approved by the board at least annually. An ETF distributor's responsibilities include effecting transactions with authorized participants, communicating the details of creation and redemption baskets, and reviewing and submitting advertising and marketing materials to the Financial Industry Regulatory Association ("FINRA"). Masucci Aff. ¶¶ 18, 90; Loebs Aff. ¶ 24.

C. The Relationship Between ISE, ETFMG, and PureShares Through June 2016

The dispute in this case has its roots in a business arrangement that commenced in 2012 between ISE, Nasdaq's predecessor in interest, and certain of ETFMG's predecessor companies. PureShares also played a central originating role. These three entities collaborated to open and operate a series of new ETFs, each keyed to a specialized market niche. One ETF in particular, HACK, focusing on cyber-security issuers, proved highly lucrative. The following section recounts the origins and progress of that working relationship, through June 30, 2016, when Nasdaq purchased ISE.

1. The Original PureShares ETFs

ISE was a stand-alone electronic securities exchange. One division of ISE, ETF Ventures, constructed options indexes that it licensed to exchange-traded funds. It also sometimes operated as an ETF venture partner, supplying the capital to launch and support ETFs in exchange for a share of the profits derived from the ETF's operation.

In 2012, ISE's ETF Ventures, headed by Monaco, and PureShares, headed by Chanin, discussed launching, under the PureShares brand, a series of ETFs tracking ISE indexes (the "PureShares ETFs"). Tr. at 725 (Monaco); Tr. at 114 (Chanin). These parties envisioned that ISE would provide index design and financial support for three or four new equity ETFs. DX-12 at 040174–75. In return, ISE would receive a share of profits, according to a formula dividing the ETF's profits among itself and PureShares. The formula keyed each entity's entitlement to profits to particular tiers of revenue from the ETF. ISE's and PureShares' entitlement to profits would arise if and when the ETF in question cleared a "break-even" point, *i.e.*, once the ETF's management-fee revenues fee covered all expenses, with the excess constituting fund profits. *Id.* at 040172. The three initial ETFs were Junior Silver ETF, ticker "SILJ"; Diamond/Gemstone

ETF, ticker "GEMS"; and Mining Service ETF, ticker "MSXX." *Id.* at 040174; Ilyevsky Aff. ¶ 6; JX-1 at 18–29.

PureShares, a small entity then operated by Chanin and Paul Zimnisky, lacked the operational expertise and the regulatory approval required to launch and operate ETFs. And ISE did not wish to take on the burden of running an ETF day-to-day. As a result, ISE's Monaco worked with PureShares to engage Masucci at ETFMG, which was to be responsible for creating the Trust to issue these ETFs and for acting as advisor to the Trust pursuant to the 1940 Act. The parties agreed that Chanin would be responsible for the funds' marketing and act as their public face. Ilyevsky Aff. ¶ 7; Masucci Aff. ¶ 22.

To govern this initial business relationship in connection with the original three PureShares ETFs—SILJ, GEMS, and MSXX—the parties entered into a series of contracts, which the Court reviews below.

a. The Index License Agreement

To launch an ETF, the parties must have a license to use the underlying index that the ETF tracks. Tr. at 180 (Chanin). Accordingly, to govern their relationship and to put into practice their business plan, ISE and PureShares—but *not* ETFMG—executed an agreement titled the Index License and Exchange-Traded Product Agreement ("Index License Agreement"). Boris Ilyevsky signed it for ISE and Zimnisky for PureShares on June 18, 2012. JX-1 at 32. Ilyevsky, Monaco's superior, signed for ISE because Monaco lacked authority to enter such an agreement. Tr. at 902–03 (Monaco).

As relevant, the Index License Agreement set forth:

> the terms and conditions applicable to (i) the licensing of the Index(es) and the ISE Marks by ISE to PureShares[;] (ii) the development of the Product(s), as well as to establish the parties' respective rights in and to the Product(s)[;] (iii) the listing for trading, marketing and promotion of the Product(s); and (iv) making disclosures

> about the Product(s) under applicable laws, rules and regulations in order to indicate that ISE is the source of the Index(es).

JX-1 at 1.

Under the Index License Agreement, ISE "grant[ed] to PureShares a non-transferable, non-exclusive, royalty-bearing license (i) to use the Index(es) solely in connection with issuing and listing for trading of the Product(s) . . . and (ii) to use and refer to the ISE Marks in connection with the marketing and promotion of the Product(s) in order to indicate that the Product(s) are based on the Index(es) and that ISE is the source of the Index(es)." *Id.* at 1–2. ISE further agreed that it would, among other things: (i) "calculate the values of each of the Index(es)"; and (ii) "provide certain financial support in connection with the creation, launch, and on-going operation of the Product(s)." *Id.* at 2–3.

Under the Index License Agreement, PureShares, in turn, agreed that it would (i) "provide certain financial support in connection with the launch and on-going operation of the Product(s)"; (ii) "coordinate legal and regulatory requirements for launching the Product(s)"; (iii) "coordinate third-party participation in connection with the creation, launch, and on-going operation of the Product(s), including product listing"; (iv) "provide, or cause another party on its behalf to provide, marketing and advertising services in connection with the promotion of the Product(s)"; (v) "perform or cause another party on its behalf to perform, portfolio management in connection with the Product(s)"; (vi) "cause a third party to perform distribution services in connection with the Product(s)"; (vii) "incorporate the disclaimer set forth in Exhibit 1 [] in its agreement with any Approved Stock Exchange"; and (viii) "obtain an agreement . . . from any person . . . that issues such products (the 'Sublicensees')." *Id.* at 3–4.

In short, therefore, PureShares was obligated to arrange for the launch and operation of the PureShares ETFs, and to provide marketing support for the products and be the "face" of the PureShares ETFs. Tr. at 119 (Chanin).

The Index License Agreement contemplated that ISE and PureShares would participate in the launch and operation of as many as 10 ETFs. JX-1 at 6. The agreement did not, however, obligate ISE to partner with PureShares to launch additional, new ETFs.

Attached to the initial version of the Index License Agreement was a "Schedule I" that listed the initial products that would be created pursuant to the agreement: the GEMS, SILJ, and MSXX ETFs. *Id.* at 18–29. Schedule I also provided that ISE would be solely responsible for covering the "listing, legal, and regulatory costs and expenses" associated with launching the products and the "costs and expenses associated with the on-going operation" of the products. *Id.* at 18–19. Schedule I further provided that PureShares would be responsible for other costs, including costs for "marketing, advertising and distribution services" for the ETF products. *Id.* at 23.

For each of the three initial PureShares ETFs, Schedule I contained a chart setting out how ISE and PureShares would split the profits generated by the operation of the three funds. *See, e.g.*, *id.* at 24. For each fund, ISE's share of the profits ranged from 50% to 60%, with PureShares entitled to the balance. The precise share each quarter depended on whether the fund's AUM exceeded certain thresholds. PureShares and ISE understood the Schedule to define the profit split between the two entities. Tr. at 199–200 (Chanin); 724 (Monaco).

In summary, the Index License Agreement dictated that ISE would be responsible for providing indexes and financing for the PureShares ETFs that would be created pursuant to the agreement, and that PureShares would be responsible for launching or arranging for launching

the products. The parties understood that ISE's motivation for entering into the agreement was to receive profits, if any, from ETFs launched pursuant to it. *Id*. at 724 (Monaco) ("Q: Why did ISE enter into the index licensing agreement with PureShares? A: In order to participate in the revenue that they would receive from the advisor that they selected. . . . [W]e had entered into an agreement to provide the index and financial support so that an ETF would be issued and we would participate in their revenue that they would earn . . . .").

b. Background to the Agreements With ETFMG: The Decision to Retain ETFMG and the "White-Label" Business Model

As noted, ISE and PureShares recognized that PureShares did not have the expertise or resources required to launch and operate the PureShares ETFs. Tr. at 119–20 (Chanin). Accordingly, in 2012, PureShares entered into a business agreement with ETFMG's predecessor, FactorShares. ETFMG marketed itself as a "white-label" or "private-label" ETF issuer. PX-69; PX-72.

The "white-label" model, a familiar one in the industry, is crucial to understanding ETFMG's intended and actual role in the trilateral business relationship among it, ISE/Nasdaq, and PureShares. Under the white-label ETF model, ETFMG provided a service to entities that desired to launch an ETF but that lacked the back-office functionality to launch and operate an ETF. PX-72; Tr. at 1901–02 (Karol); 2317 (Loebs); 2286 (Ilyevsky). As ETFMG later explained, its role in that model is "to launch ETFs based on third party investment ideas with the third party paying all of the costs until the fund reaches the break-even point." PX-72 at 00041188 (internal quotation marks omitted). If and when the fund surpasses the break-even point, "the third party receives most of the profit. ETFMG thus is always earning fees and not supporting products." *Id*. This model, ETFMG explained, "appeals to sponsors with a unique investment idea who don't want to build their own costly regulatory and operational structure."

Id. Under this model, therefore, ETFMG was a service provider. It typically would be paid a fee, from fund revenues, to service and operate the ETF. If the ETF proved profitable and surpassed the break-even point, ETFMG would pass all (or, depending on the particular contractual arrangement, some) of the profit associated with the ETF to the sponsor, such as ISE. Tr. at 749 (Monaco); 1282 (Masucci).

The uniform testimony at trial was that the relationship between ISE, PureShares, and ETFMG tracked, and was intended to track, the familiar "white-label" model. ISE's Monaco, who bore primary operational responsibility within ISE for the PureShares ETFs, agreed that ETFMG was a white-label provider and was to be compensated, by contract, for its services launching and advising the funds. It was, however, to furnish the profits, if any, that the funds yielded to ISE and PureShares—the clients that had engaged it. *Id.* at 749 (Monaco). For his part, PureShares' Chanin testified that ETFMG's predecessor exclusively acted as a white-label advisor, which had built its business model around servicing white-label clients, of whom PureShares and ISE were among the first. *Id*. at 121–26 (Chanin). Wade, of Nasdaq, which succeeded to ISE's interest, testified that ETFMG's business relationship with ISE followed the white-label model. *Id*. at 613 (Wade). ETFMG's Masucci did not seriously dispute that ETFMG followed a white-label model, but testified that "there were instances" in which ETFMG negotiated with its clients to take on a share of the financial responsibility in exchange for a share of some profits. *Id*. at 1330 (Masucci).

The Court therefore finds that when ISE and PureShares selected ETFMG to launch and operate the original PureShares ETFs, all parties involved understood that, consistent with the white-label model, ISE and PureShares would share the profits generated by profitable funds. The uniform testimony was that no participant intended or anticipated that ETFMG would retain

the profits from these funds. *See, e.g.*, *id*. at 724–25 (Monaco) ("Q: Would ISE ever have agreed to finance the launch and operation of the [PureShares] ETFs if it wasn't going to be paid a share of the revenue generated from those funds? A: No."); 749–50 (Monaco) ("Q: What was your expectation of what . . . ETFMG was going to do with the profits generated by the PureShares ETFs? A: The residual profits would be sent to PureShares, and then ultimately ISE would participate in those profits."); 130 (Chanin) ("Q: And at the time that you hired [ETFMG], did you have an understanding of [their] business model? A: Their business model was to approach third parties . . . that had ideas that just needed service providers to carry out those various services, and for a fee they . . . would do the services needed to get our product to market so that in the event that the products became successful, that the white-label clients, in this case being PureFunds and ISE, that we could profit from these products."); 1330 (Masucci) ("Q: Keeping the fund profit would be inconsistent with the white-label business model generally, right? A: Certainly in this use, yes."); 2287 (Ilyevsky) ("Q: Is it fair to say that ISE and PureShares ultimately hired ETFMG to launch the PureShares ETFs? A: I mean, I'd say yes, yes. Q: Now, your understanding was that ISE and PureShares were paying ETFMG a fee for its service? A: Well, my understanding was that we, ISE, was providing all of the funding. Q: And it was your understanding that ISE was paying ETFMG a fee for its service as the white-label provider for these funds? A: We were paying the startup costs and whatever other fees ended up at third parties. So, yes. Q: You certainly didn't expect ETFMG to keep the profits from the operations of the ETFs that ISE was financing, did you? A: No, I did not.").

c. The Sublicense Agreement

In order to launch the three original ETFs, ISE and PureShares needed to sublicense to ETFMG the right to use the underlying ISE indexes. *Id*. at 1310–11 (Masucci). In August 2012, to provide ETFMG the necessary rights, ISE, PureShares, and ETFMG together executed a

Sublicense Agreement. It granted ETFMG "a non-exclusive and non-transferable sublicense to use the Intellectual Property in connection with the issuance, distribution, marketing, and/or promotion" of the original PureShares ETFs. JX-2 § 1.

In the Sublicense Agreement, ETFMG further "acknowledge[d] that it has received and read a copy of the License Agreement (excluding the Schedule setting forth the license fees) and agree[d] to be bound by all the provisions thereof, including, without limitation, those provisions imposing any obligations on PureShares." *Id.* § 2.

d. The Business Management Agreement

To cover ETFMG's obligations and compensation, PureShares entered into an additional contract, the Business Management Agreement ("BMA"), with ETFMG's predecessor. JX-12A. Pursuant to the BMA, PureShares agreed to pay ETFMG a set formula-driven fee—more than $300,000 annually—to operate the three funds originally contemplated by the Index License Agreement (GEMS, MSXX, and SILJ). JX-12A at 093769.

ISE was not a named party to the BMA. At the time, ISE continued to maintain its line of business as an exchange operator and index provider, and it did not wish to be publicly identified as a sponsor of an ETF, lest this lead ISE's index licensees—*i.e.*, its own customers—to view ISE as a competitor. Tr. at 754 (Monaco); 2291–92 (Ilyevsky). However, all parties, including PureShares and ETFMG, understood, consistent with the Index License Agreement, that ISE was PureShares' business partner with respect to the PureShares ETFs. *Id*. at 760 (Monaco); 135–36 (Chanin); 1314 (Masucci).

2. The Parties' Adoption of Streamlined Procedures Regarding the Payment of Fund Expenses and Profits

With respect to the three original PureShares ETFs—GEMS, MSXX, and SILJ—there was thus no written agreement in place *between ISE and ETFMG* governing fund expenses. The

bilateral agreements in place between PureShares and ISE, and PureShares and ETFMG, instead set out the obligations of the parties with respect to the payment of expenses. Under the Index License Agreement between PureShares and ISE, ISE was obligated to cover fund expenses on PureShares' behalf; and under the BMA between PureShares and ETFMG, PureShares was obligated to cover fund expenses. Without spelling out the flow by which expenses were to be paid, these agreements therefore implicitly contemplated that PureShares would operate, in effect, as a middleman in the process by which fund expenses were paid, with ISE paying PureShares the money to cover the operation of the three original ETFs, and with PureShares then forwarding to ETFMG the money to cover those expenses.

In practice, however, the three parties agreed to eliminate PureShares as the intermediary in this flow of money to pay expenses. ISE instead directly paid ETFMG money to cover the ETFs' start-up and operating expenses. *Id*. at 757–56, 766–67 (Monaco).

Along the same lines, the parties agreed to eliminate PureShares from the process by which the profits generated by the PureShares ETFs were transmitted from ETFMG to ISE. The parties agreed that ETFMG would send any profits generated by the original PureShares ETFs directly to ISE, which would then remit to PureShares the portion of the profits to which it was contractually entitled, rather than sending the profits to PureShares and requiring PureShares to furnish ISE its share of the profits. *Id*. at 767, 1044–45 (Monaco); Ilyevsky Aff. ¶¶ 9–10; Masucci Aff. ¶¶ 24–25.

The parties adopted these streamlined processes because ISE had a more sophisticated accounting operation than PureShares. Tr. at 767 (Monaco). This arrangement was also preferable from ISE's perspective, because profits would flow directly to it. It would not be required to attempt to collect its share of profits from PureShares. *Id*. at 768 (Monaco).

Accordingly, in November 2012, when the original three PureShares ETFs launched, ETFMG charged ISE (not PureShares) for the operating expenses that ETMG had incurred. *See, e.g.*, JX-309–321 (October 2014 – October 2015 SILJ Profit and Loss Statements). Consistent with the parties' understanding, ISE approved and paid every invoice it received from ETFMG. Tr. at 758 (Monaco).

3. The Wholesaling Agreement

By early 2013, ISE, PureShares, and ETFMG decided to build an infrastructure to market and grow the PureShares ETFs. Towards that goal, in April 2013, ISE and an ETFMG predecessor entered into the Wholesaling Platform Services Agreement (the "Wholesaling Agreement"). JX-11.

Under the Wholesaling Agreement, ETFMG agreed to manage employees responsible for the wholesale marketing of the ETFs, and ISE agreed to cover various designated expenses incurred by ETFMG relating to such marketing. JX-11 at 1–4. ISE was required to make three types of payments to ETFMG: (1) a fee based on the AUM of the ISE-backed ETFs; (2) reimbursement for designated pre-approved expenses incurred marketing products on the wholesaling platform; and (3) the salary and benefits of wholesalers hired by ETFMG to market the ETFs. *Id.* at 14. Exhibit B to the agreement identified the funds to which it applied: the three original funds—GEMS, MSXX, and SILJ—and a fourth fund operated by another company. *Id.* at 12. Exhibit A addressed the expense items that ISE was obligated to cover; ETFMG was to invoice ISE monthly for such expenses. It provided that "[a]ll such expenses shall be agreed by ISE and [ETFMG] in advance of those expenses being incurred, and . . . shall not exceed $50,000 per year ("Expense Cap"), unless specifically agreed in writing by ISE." *Id.* at 11 This provision was intended to allow ISE to control the marketing expenses for which it was obliged to reimburse ETFMG. Tr. at 916–17 (Monaco). Finally, Exhibit C specified that $250,000 was

the maximum ISE would be obliged to reimburse ETFMG annually. JX-11 at 14. ETFMG agreed, *inter alia*, to abide by 24 specified conditions, including that it "not provide statutory distribution services for the securities on the Platform," as such services "shall be provided by a third-party service provider." *Id.* at 2–3. The Wholesaling Agreement specified that it could be amended only in writing. *Id.* at 9.

In August 2013, ISE and ETFMG amended Exhibit B, in writing, to add to the platform a fifth fund, YYY, that ISE supported but which was being launched by a different ETF issuer. JX-11A; PX-103.

4. The HACK ETF

a. The Launch of HACK

This section recounts the development of HACK, which proved by far the most profitable of the PureShares ETFs. Because the parties' dispute centrally turns on HACK—and on ETFMG's assertion in 2017 that it was entitled to keep all profits from HACK and deny these to ISE and PureShares—an extended discussion of HACK is warranted.

In 2012, ISE decided to develop an index tracking publicly traded companies in the cybersecurity field. Tr. at 771–72 (Monaco). This index, the first of its kind, became formally known as the ISE Cyber Security Index ("HXR"). Whereas some indexes include only broadly traded companies with large market capitalizations, HXR's methodology allowed for the inclusion of smaller cybersecurity companies (*i.e.*, companies with market capitalizations below $200 million), which were more thinly traded. Gedeon Aff. ¶ 7. And the HXR methodology's focus on companies purely in the cybersecurity area—as opposed to conglomerates with tangential involvement in cybersecurity—led to the index's inclusion of such smaller, lower-liquidity companies from its inception. *Id.*

In fall 2014, ISE, with PureShares, devised the idea to launch an ETF that tracked the HXR index. ISE's Monaco and PureShares' Chanin agreed to partner in launching this ETF, which became known as HACK. HACK was a "pure play" ETF—one solely comprised of the stocks of companies that are primarily or solely within the defined investment thesis of the ETF. As such, HACK owned shares of smaller cybersecurity issuers, which tended to lack more diversified revenue sources and, as reviewed above, to be more thinly traded. Tr. at 220–21, 465–67 (Chanin); *id.* at 2330 (Loebs); Gedeon Aff. ¶ 7.

ISE and PureShares agreed to add HACK to the Index License Agreement. They did so on September 12, 2014, by executing Supplement 1 to Schedule 1 of the Index License Agreement (the "HACK Supplement"). *See* JX-3; *see also* Tr. at 154–55 (Monaco).

Pursuant to the HACK Supplement, ISE was responsible, as before, for financing the launch and operation of HACK. It was to receive 70 to 80 percent of the profits created by the operation of the fund. PureShares was again responsible for doing the work necessary to launch and operate the fund, and was entitled to the balance of the profits. JX-3 at 4. ISE later partnered with another entity, Amplify, which, in return for a percentage of the HACK profits paid from ISE's share, was to provide additional marketing support. Tr. at 775, 784–85 (Monaco).

As with the first three PureShares funds, because PureShares lacked the operational ability to launch and operate HACK, ISE and PureShares again chose to hire ETFMG to carry out these services, after receiving a proposal from ETFMG president Masucci. Tr. at 779 (Monaco). On behalf of ISE and PureShares, Monaco negotiated with Masucci the fees that ETFMG would charge for its services in connection with HACK. PX-80A. Thereafter, in September 2014, PureShares, pursuant to its contractual duty under the Index License Agreement

and the HACK Supplement to handle HACK's launch and operation, entered into a contract with ETFMG entitled the SEC '40 Act Platform Services Agreement ("HACK PSA"). *See* JX-5.

The HACK PSA set out, *inter alia*, the respective duties of ETFMG and PureShares. It also set out the fees that ETFMG would receive for these services. *See id*. The annual fees that ETFMG was to earn for operation of the HACK ETF were set out in a chart attached to the HACK PSA. It listed, in bullet points, 14 components of the "Annual Fund Platform Operating Fee." *Id*. at 13. Six of these took the form of fixed fees.[8] Two took the form of estimates of fees.[9] The remaining six took the form of fees measured by the application of designated basis points (bps) to the fund's AUM, subject to minimum fees.[10] Based on the minimum fees in these categories, the chart estimated a total "annual fund platform operating fee" for ETFMG of $231,800. *Id*.

For the same reasons reviewed in connection with the BMA, ISE chose not to be a named party to the HACK PSA so as to avoid publicly identifying itself as an ETF sponsor or financier. Tr. at 165–66 (Chanin); 775, 779–81 (Monaco).

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[8] These were for: "annual audit and tax" ($20,000); "fund compliance" ($15,000); "principle [sic] financial officer" ($15,000); "board members contribution" ($12,000); "NYSE annual listing fee" ($5,000); and "IIV calculation fee" ($5,000).

[9] These were for: "annual fund legal support (est.)" ($25,000); and "E&O & D&O insurance (est.)" ($15,000).

[10] These were for: "product management" ($35,000 minimum; 10 bps for AUM $0 to $50 million; 8 bps for the next $100M in AUM; and 6 bps for AUM over $150M); "fund admin/accounting & TA" (for the first year, $45,000 minimum and 5 bps; for the second year, $50,000 minimum and with a revised formula with bps declining from 5 bps to 3 bps depending on AUM); "domestic custody" ($4,800 minimum; 1 bps); "sub-advisory" ($20,000 minimum; 5 bps); "statutory distribution," defined as "manage ETF issuer FINRA licensees and salesman oversight" ($15,000 minimum; 1.5 bps); and "wholesale distribution" ($0 minimum; 5 bps).

Important for the present dispute, the HACK PSA did not contain a provision specifying the entity or entities that would be entitled to receive profits, if any, generated by the HACK ETF. It did not refer to profits. And, unlike the Sublicense Agreement to which ETFMG is a party, the HACK PSA did not refer to the Index License Agreement, which, as noted, provided for the allocation of profits of the three initial PureShares ETFs between ISE and PureShares.

The uniform credible testimony, however, is that ISE, PureShares, and ETFMG all envisioned, with respect to HACK, an arrangement tracking, in all relevant respects, their arrangement with respect to the original three PureShares ETFs, including with respect to the right to profits. ISE's Monaco testified that ISE and PureShares were partners on HACK, that ISE anticipated—alongside PureShares—receiving profits from HACK, and that the parties intended that the three entities' obligations and rights as to HACK would "mirror" those for the original three funds. Tr. at 780–81, 790, 1054 (Monaco). PureShares' Chanin similarly testified that ISE was to cover HACK's start-up and operating costs, and in return had the right, with PureShares, to the profits from HACK. *Id*. at 189, 191 (Chanin). Masucci's testimony was to the same effect. *See id*. at 1298–99 (Masucci) ("Q: And these were going to be private label ETFs, right? A: Yes. Our first. Q: And your understanding was that ISE was going to be paying all the costs to launch and operate the PureFunds ETFs? A: Yes. Q: And if the funds weren't profitable ISE was going to be responsible for paying the costs of running those funds? A: Yes."). Monaco and Chanin testified that it would not have made economic sense for ISE to enter into the HACK PSA had it, along with PureShares, not been entitled to profits from HACK. *Id*. at 189 (Chanin); 780–81 (Monaco). Consistent with the parties' uniform understanding, from the point that HACK became profitable soon after its inception through the point at which Nasdaq acquired ISE in June 2016, ETFMG transferred to ISE the profits

generated by HACK. ISE thereafter divided these between itself and PureShares. *Id*. at 793–94 (Monaco). The Court finds a uniform understanding among all parties that HACK's profits belonged to ISE and PureShares.

As to expenses, the HACK PSA set forth the expenses that PureShares was responsible for paying ETFMG in connection with services associated with HACK's launch and operation. These included more than $50,000 in expenses to launch the fund, and more than $200,000 in annual expenses to operate it. JX-5 at 11–13.

On October 9, 2014, before HACK launched, ETFMG requested from ISE and PureShares a copy of the Index License Agreement and the "Supplement to Schedule I" of the Index License Agreement—the HACK Supplement—by which ISE and PureShares had added HACK to that agreement. PX-93 at 098918. On October 10, 2014, ISE provided ETFMG a copy of these agreements. However, ISE redacted the tables showing the specific profit split between ISE and PureShares (described as the "license fees"). *Compare* PX-93 at 098922–098923, *with* JX-3. ETFMG thus received written documentation of the fact that, under the Index License Agreement, ISE and PureShares were obligated to divide profits from the operation of the PureShares ETFs, but, as a result of the redactions, ETFMG was not alerted to the precise profit split. JX-3A; Tr. at 765 (Monaco); 1314 (Masucci).

In the lead-up to launching HACK, ISE, PureShares, and Amplify determined that an ETF management fee of 75 basis points should be charged to HACK investors for managing the fund. PX-94; PX-95. On October 16, 2014, the ETFMG Trust Board authorized the launch of HACK under the PureShares brand, with ETFMG as advisor, and approved the 75 basis point fee. DX-407 at 7–10; DX-412 at 45622; Tr. at 771 (Monaco).

As the investment advisor to the PureShares ETFs, ETFMG was obligated to file a prospectus with the Securities and Exchange Commission ("SEC") for each ETF. The prospectus that ETFMG filed with the SEC in connection with HACK discussed contracts that ETFMG entered into regarding HACK. As to PureShares, the HACK Prospectus stated:

> The Adviser [ETFMG] has entered into an Agreement with PureShares, LLC (the "Sponsor"), under which the Sponsor agrees to sub-license the use of the Underlying Index to the Adviser and assumes the obligation of the Adviser to pay all expenses of the Fund, except Excluded Expenses. Although the Sponsor has agreed to be responsible for the payment of certain expenses of the Fund, the Adviser retains the ultimate obligation to the Fund to pay such expenses. The Sponsor will also provide marketing support for the Fund, including distributing marketing materials related to the Fund.

PX-21 at 18 of 102. As to ISE, the HACK Prospectus stated:

> The ISE Cyber Security Index (Symbol: HXR) (the "ISE Index") is a product of ISE. The Adviser [ETFMG] has entered into a license agreement pursuant to which the Adviser pays a fee to use the ISE Index and the marketing name and licensed trademark of ISE ("Index Trademark"). The Adviser is sub-licensing rights to the ISE Index to the Fund at no charge. The Adviser is permitted to sub-license the Index Trademark for the purpose of promoting and marketing the Fund. The ISE Index is compiled and calculated by ISE. ISE has no obligation to take the needs of the Adviser or the owners of the Fund into consideration in determining, composing or calculating the ISE Index.

PX-21 at 11 of 102.

On November 11, 2014, HACK launched. Thereafter, ETFMG began sending to ISE, with copies sent to PureShares, monthly profit and loss statements ("P&L") setting out the monthly profit or loss derived for the HACK ETF, calculated by deducting from the ETF's revenue (the management fees) the costs associated with operating the fund. ISE paid these monthly operating costs as it had in connection with the earlier PureShares ETFs. PX-99.[11]

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[11] Also in November 2014, ISE and ETFMG executed a second written amendment to Exhibit B of the Wholesaling Agreement ("Second Amendment to the Wholesaling Agreement" or "Second Amendment"). This amendment removed GEMS and MSXX, which had not proven

HACK was a virtually instant success, and, very soon after launching, became profitable. The approximate break-even point for an ETFMG ETF charging a 75 basis point management fee is $50 million in AUM. PX-72. When an ETF passes that threshold, the management fee is sufficient to pay the operating costs associated with the fund. HACK passed the break-even point in December 2014 and became profitable. JX-176.

The process with respect to the tabulation and dissemination of HACK profits thereafter was as follows. The custodian for HACK, US Bank, would, at the end of each month, calculate the monthly management fee and, a few days later, send that sum to ETFMG. Tr. at 1174. (Flanagan). In the first week of each new month, ETFMG would send ISE a P&L statement detailing the monthly management fee and monthly expenses. ETFMG would then pay ISE the monthly profits for HACK, typically within two weeks of the end of the month. *Id*. at 858 (Monaco); 1337–38 (Masucci). After receiving this monthly profit, ISE would divide the profit pursuant to the terms of the Index License Agreement and send PureShares and Amplify their shares of the profit. *Id*. at 1052–53 (Monaco); 199–200 (Chanin).

By the end of July 2015, HACK's AUM had grown to more than $1.3 billion. ETFMG was sending ISE more than $600,000 per month in HACK profit. JX-184; DX-848.

b. The Existence of an Oral Agreement as to HACK Profits

A central issue at trial was whether ETFMG had a binding contractual duty to pay profits from HACK to ISE and PureShares. ETFMG denied such an obligation. It instead sought to account for its payment of HACK profits to ISE and PureShares through approximately the end of 2016, and its cessation to do so thereafter, on the ground that an oral agreement had existed

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profitable, from the wholesaling platform, and added HACK. JX-11B. This was the last written amendment to the Wholesaling Agreement. As of that amendment, there were four ETFs on the wholesaling platform, two of which were PureShares ETFs: SILJ and HACK.

among the parties under which ETFMG had the right unilaterally to determine whether to keep these profits or furnish them to ISE. Nasdaq asserted that ETFMG had been obliged unconditionally by the parties' written agreements and course of dealings to provide the profits generated by HACK to ISE and PureShares. It denied that ETFMG had any latitude to retain these profits.

The Court resolves this dispute later in this decision. In brief for now, the Court finds, with Nasdaq, that Nasdaq and PureShares exclusively had the contractual right to profits from HACK. The Court rejects, as contrived and unpersuasive, ETFMG's claim that an oral agreement existed that gave ETFMG a right, under any circumstances, to retain such profits. *See infra* Part II. Specifically, the Court finds that (1) ISE and PureShares had an unconditional contractual right to the profits from HACK; (2) to the extent an oral agreement existed in this area, it governed no more than the mechanics of payments among the parties with respect to all PureShares ETFs, *i.e.*, that, as reviewed above, ISE and ETFMG would engage directly with each other and not use PureShares as a middleman in the flow of expenses and profits and expenses; and (3) ETFMG's claim, articulated at trial by Masucci, of an oral agreement entitling ETFMG to retain HACK's profits lacks any credibility, was unsupported by and inconsistent with other testimony, and ultimately was fatally undermined by the testimony of Masucci himself. *Id*.

5. New PureShares ETFs: IPAY, BIGD, GAMR, and IFLY

In July 2015, ISE and PureShares agreed to launch two new ETFs pursuant to the Index License Agreement: the PureShares ISE Mobile Payments ETF ("IPAY") and the PureShares

ISE Big Data ETF ("BIGD").[12] ISE and PureShares amended the Index License Agreement to add these funds. This "Supplement II" to the Index License Agreement set out the division of profits from these two new ETFs between ISE and PureShares. JX-4 at 4, 8.

As with HACK, ISE and PureShares chose ETFMG as the white-label ETF issuer to bring IPAY and BIGD to market. By now, ISE was no longer concerned about being publicly connected with financing ETFs. Tr. at 866–67 (Monaco). Accordingly, as to these funds, ISE and PureShares entered into a "Platform Services Agreement" with ETFMG for IPAY and BIGD ("IPAY/BIGD PSA") pursuant to the 1940 Act. JX-6. The IPAY/BIGD PSA shared many similarities with the HACK PSA. ISE and PureShares agreed to pay ETFMG, as with the prior PureShares funds, a management fee. *Id.* at 14. As before, that fee would be calculated "on a monthly basis" and "calculated and paid at the end of each month." *Id.* at 14. And, again, statutory distribution and compliance support was to be provided by a third party. *Id.* at 13.

Unlike the HACK PSA, which had been silent with respect to profits, the IPAY/BIGD PSA expressly stated that ETFMG was to pay "all Fund Profits within ten (10) days of such Fund Profit being made available to ETFMG or the administrator of the Funds." *Id.* § 8(d). The IPAY/BIGD PSA also provided that ISE and PureShares had a "right to receive Fund Profit." *Id.* § 8(e). ETFMG agreed to "require that any new controlling party or new advisor to the [ETFMG] Trust acknowledge Client's right to receive Fund Profit." *Id.* Consistent with this agreement and with its course of dealing on the earlier PureShares funds, every month after ETFMG launched IPAY and BIGD, ETFMG sent ISE a P&L statement detailing the

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[12] By this point, only one of the original three PureFunds ETFs was still operating: SILJ. On December 30, 2013, after the original three ETFs had been operating for several months, ISE and PureShares wrote ETFMG requesting that ETFMG close and liquidate two of the three original ETFs: MSXX and GEMS. PX-67. ETFMG did so. Masucci Aff. ¶ 28.

management fee received for the prior month and the operating expenses incurred that month. *See, e.g.*, JX-108; JX-277.

Thus, at this time, there were a total of four PureShares/ISE/ETFMG ETFs in operation: SILJ, the lone surviving original ETF, which was subject to the BMA; HACK, which was subject to the HACK PSA; and BIGD and IPAY, which were subject to their own PSA.

On October 12, 2015, ISE and PureShares agreed to launch two new ETFs, pursuant to the Index License Agreement: the PureShares ISE Electronic Gaming ETF ("GAMR") and the PureShares ISE Drone Technology ETF ("IFLY"). *See* DX-6; JX-8; JX-9. ISE and PureShares again agreed as to how to divide between them any profits from these new ETFs.

ISE and PureShares again chose ETFMG as the white-label ETF issuer to bring GAMR and IFLY to market. To this end, on November 4, 2015, ISE and PureShares entered into a Platform Services Agreement with ETFMG for GAMR ("GAMR PSA") and IFLY ("IFLY PSA"). JX-8; JX-9. The GAMR and IFLY PSAs were similar to the BIGD/IPAY PSA, and again included a schedule providing that ISE/PureShares would be obliged to pay ETFMG for operating expenses. Like the BIGD/IPAY PSA, the GAMR and IFLY PSAs contained a provision requiring ETFMG to pay ISE/PureShares "all Fund Profits . . . within ten (10) days of such Fund Profit being made available to ETFMG or the administrator of the Funds." JX-8 § 8; JX-9 § 8. On December 2, 2015, to effectuate the launch of these two new ETFs, ISE, PureShares, and ETFMG executed a new version of the Sublicense Agreement. PX-71; JX-2A. Appendix A to this version stated that it was adding two new funds (GAMR and IFLY) to the four existing funds covered by the Sublicense Agreement (SILJ, HACK, BIGD, and IPAY). PX-71 at 3.

6. March–June 2016: Nasdaq Prepares to Acquire ISE

On March 9, 2016, Nasdaq announced that it was acquiring ISE. PX 2002; Wade Aff. ¶ 4. After the announcement, Nasdaq's Terry Wade discussed ISE's dealings multiple times with ISE's Monaco, who was to leave ISE shortly after the acquisition closed on June 30, 2016. *See* PX-46 (May 16, 2016); PX-47 (May 27, 2016); PX-48 (May 31–June 2, 2016); PX-51 (June 2, 2016). Monaco explained to Wade the general mechanics of the ETF Ventures business, the individuals involved with each product, and ISE's contractual relationships. Wade Aff. ¶ 15. Nasdaq employees David Gedeon and Rob Hughes also met with Monaco about ISE's ETF Ventures business. Tr. at 959 (Monaco); Gedeon Aff. ¶ 20.

Monaco explained to the Nasdaq personnel that ETF Ventures had two business models: (i) licensing indexes to ETF providers for a licensing fee, and (ii) providing indexes and financing for ETFs in exchange for a percentage of the profits generated by the ETF in question. Wade Aff. ¶¶ 5, 6; Gedeon Aff. ¶¶ 15, 20. With respect to this second business model—the one relevant here—Monaco explained that ISE had partnered with PureShares to launch the PureShares ETFs using ETFMG's services, had partnered with Chanin to launch the ISE Cyber Security GO UCITS ETF ("ISPY") through ETF Securities, and had partnered with other firms to bring additional ETFs to market. Wade Aff. ¶ 13. Monaco gave Nasdaq copies of the relevant contracts regarding the PureShares ETFs, as well as P&L statements and invoices sent by ETFMG, and explained to Nasdaq the flow of money. *Id.* ¶¶ 9–13; Gedeon Aff. ¶¶ 16–21. In particular, Monaco explained that ISE directly paid, to ETFMG, expenses incurred under the ETF operating agreements; and that ETFMG, in turn, sent any profits directly to ISE, which then split the profits with PureShares and any other entity contractually entitled to a share. Monaco

did not refer to any oral agreement governing the payment of HACK profits, such as the one that ETFMG's Masucci, years later at trial, claimed existed.[13] Wade Aff. ¶ 17.

Around this time, Monaco, on behalf of ISE, also began negotiations with PureShares to launch two new ETFs through ETFMG: the PureShares Solactive FinTech ETF ("FINQ"); and the PureShares ETFx Healthtech ETF ("IMED"). Tr. at 224 (Chanin); PX-139. Like the other PureShares ETFs, ISE and PureShares entered into SEC 1940 Act Platform Services Agreements for both FINQ ("FINQ PSA") and IMED ("IMED PSA"). JX-7; JX-10; Tr. at 224 (Chanin). The Trust Board authorized the launch of the FINQ and IMED PureShares ETFs at its June 22, 2016 meeting, days before Nasdaq's acquisition of ISE.

To prepare for Nasdaq's acquisition of ISE, Bernard Karol, ETFMG's President, prepared an analysis of the contracts governing the relationship between ISE, PureShares, and ETFMG. Between June 17, 2016 and June 22, 2016, Karol shared drafts of this analysis with Masucci for comment. PX232A (June 17); PX-232B (June 17); PX-232C (June 18); PX-232D (June 20); PX-232E (June 22). In anticipating Nasdaq's options as to the PureShares ETFs upon its acquisition of ISE, Karol wrote that, among other options, "Nasdaq could do nothing. They will have obligations to us under the PSAs of at least $1 [million] for two years and of around $500,000 under the Wholesale Ag[reemen]t. They could net this against the HACK profits but

[13] After the March 9, 2016 announcement that Nasdaq would acquire ISE, Monaco and Masucci engaged in negotiations regarding a new wholesaling agreement that would expand ISE's commitment to ETFMG. Tr. at 945–46 (Monaco). Nasdaq was not made aware of these discussions. *Id*. at 945–47 (Monaco). The proposed wholesaler agreement would, *inter alia*, permit ETFMG to provide statutory distribution services, which, by contract, otherwise had to be provided by third parties. *Id*. at 958–59 (Monaco). As Nasdaq proceeded with its effort to acquire ISE, Monaco attempted to persuade his supervisors at ISE to enter the new proposed wholesaling agreement. Monaco's supervisors refused, finding the new proposed agreement too onerous. The Wholesaling Agreement thus remained in place.

need to recognize that HACK has been in redemption and that we could reduce the fee." PX-232E.

7. The CIBR ETF Licensed by Nasdaq

As of the time Nasdaq and ISE were negotiating towards an acquisition, Nasdaq also was affiliated with a cyber-security index, "NQCYBR," which it had licensed to another entity, First Trust. In July 2015, First Trust launched its own cybersecurity ETF, CIBR, based on Nasdaq's index. Gedeon Aff. ¶ 6. Nasdaq's cyber-security index differed from the ISE index on which HACK was based in certain respects. NQCYBR did not permit the inclusion of companies with smaller market capitalizations, whereas such smaller cyber security companies were key components of ISE's index. *Id*. ¶ 7. First Trust's CIBR ETF also charged a lower management fee (60 basis points) than HACK's (75 basis points). Friske Dep. Tr. at 66.

As reviewed below, as ETFMG's business relationship with Nasdaq soured, it increasingly claimed that Nasdaq's support of CIBR and monetary interest in CIBR's success presented a conflict of interest. *See infra* Part II. Correspondingly, at trial, ETFMG claimed that Nasdaq's support for CIBR breached a contractual obligation to ETFMG. *See infra* Part IV.B.3.

Between July 2015 and June 30, 2016, when it acquired ISE, Nasdaq marketed the NQCYBR index. Gedeon Aff. ¶¶ 9–10. During that period, the two cybersecurity ETFs experienced different growth trajectories. HACK's AUM shrank from $1.4 billion in July 2015 to $671 million by June 30, 2016. Juneja Aff. ¶ 62, Ex. 12c. During that same period, CIBR's AUM increased to approximately $90 million. *Id.*

D. The Post-Acquisition Relationship between Nasdaq, ETFMG, and PureShares After June 2016

1. Nasdaq Acquires ISE

On June 30, 2016, Nasdaq acquired ISE. Upon acquiring ISE, Nasdaq was faced with the question whether to expand ISE's ETF Ventures line of business, maintain it, or shrink and/or sell it off. Wade Aff. ¶¶ 18–21, 60–61. That line of business had not been among the aspects of ISE that had attracted Nasdaq to purchase ISE. Nasdaq eventually decided to maintain that line of business but not to expand the PureShares ETF business into new ETFs. *Id*. ¶¶ 20–21, 24. And, with respect to the Wholesaling Agreement, Nasdaq decided, to the extent permitted under that agreement, to reduce the costs it was obliged to cover and to terminate the agreement as soon as it was contractually permitted to do so. *Id*. ¶ 24. Shortly after the acquisition, several ISE Ventures employees were let go. Ilyevsky Aff. ¶ 3. Among the employees to depart ISE was Monaco, who went on to launch Prime Indexes—an eventual competitor to Nasdaq's index-licensing business.

To facilitate its decision to minimize costs associated with the PureShares ETFs, Nasdaq directed ETFMG to remove various unprofitable ETFs from the wholesaling platform. It did so in accordance with a provision of the Wholesaling Agreement, which ISE had theretofore not invoked, that required ETFMG automatically to remove funds from the wholesaling platform that failed to achieve certain profitability benchmarks (*e.g.*, $50 million in AUM). Wade Aff. ¶¶ 41–42; JX-11 at 13. On July 18, 2016, Nasdaq's Wade sent a letter to ETFMG's Masucci directing him to remove SILJ, IPAY, and BIGD from the wholesaling platform. PX-113. As Wade testified, Nasdaq intended to continue to remove funds from the Wholesaling Agreement until it could, consistent with the agreement's terms, terminate the Wholesaling Agreement completely. Wade Aff. ¶ 23.

Wade's letter marked one of Nasdaq's first consequential communications with ETFMG. It made evident Nasdaq's limited enthusiasm for the PureShares ETF line of ISE's business. The letter suggested—and ETFMG took it to suggest—that Nasdaq was apt to exercise its rights to scale down the PureShares ETF business that had become central to ETFMG. Wade's letter also ruffled feathers at ETFMG insofar as Nasdaq had not consulted with ETFMG before invoking the provision of the Wholesaling Agreement calling for the removal of the three funds from the platform. This initial, unwelcome directive from Nasdaq to ETFMG was viewed at ETFMG as legalistic, rather than collegial. It set the tone for the strained relationship that would develop between these parties, and catalyzed a series of progressively more antagonistic responses by ETFMG.

On July 26, 2016, Masucci responded to Wade by letter. Masucci's letter did not dispute Nasdaq's right to demand removal of the funds from the Wholesaling Platform, and confirmed that ETFMG would remove SILJ, IPAY, and BIGD. Masucci also explained, from his perspective, the contractual relationship between ISE, PureShares, and ETFMG. PX-147. Masucci's letter described ETFMG as a "'private label' issuer of exchange traded funds." He stated that ETFMG's relationship with ISE "is governed by several interrelated contracts," and then described the PSAs, the Wholesaling Agreement, and the Index License Agreement. *Id.* at 1–2. As to the Index License Agreement, he wrote that "ISE rights to HACK profits, if any, are governed only by the Index Agreement." *Id*. Masucci's letter did not refer to any oral agreement between ISE and ETFMG. Nor did it claim that the division of profits from the operation of HACK was governed by an oral understanding. Masucci's letter also expressed concern that Nasdaq might have a conflict of interest with respect to HACK, insofar as Nasdaq

maintained its own cybersecurity index, NQCYBR, which it licensed to a cybersecurity ETF, CIBR, that competed with HACK. *Id*.

Responding in writing to Masucci, Nasdaq denied that there was such a conflict. *See, e.g.*, DX-123 (October 25, 2016 Wade email to Masucci: "[W]e do not believe that there is a current conflict of interest."); DX-131 (November 22, 2016 Wade email to Masucci: "[W]e continue to believe there is no conflict of interest."). Although Masucci sought to pursue further this issue with Nasdaq, Nasdaq did not meet with him to do so, Tr. at 620 (Wade), which Masucci read as reflecting a lack of interest on Nasdaq's part in engaging with his concerns, *id*. at 1481 (Masucci) (testifying that Nasdaq did not pay attention to his concerns regarding CIBR until much later, when the business relationship was on the verge of rupture).

2. August–September 2016: Tensions Grow Between Nasdaq and ETFMG

The relationship between ETFMG and Nasdaq, off to a fragile start, deteriorated from there. Masucci had initially hoped that Nasdaq's acquisition of ISE, given its greater resources, would provide an "an opportunity" for "a significant expansion" of the ISE-ETFMG business relationship. *Id*. at 1388, 1548 (Masucci). Wade's letter deflated those hopes. *Id*. Masucci testified that he thought his letter in response, to the extent it explained the relationship between ETFMG and ISE, might cause ETFMG and Nasdaq to get "on a positive track." *Id*. It did not.

Instead, for its part, during the period following the acquisition, Nasdaq was considering its options as to the PureShares ETFs. In a draft slideshow prepared for an August 2016 meeting with Nasdaq CEO Adena Friedman, three options were outlined: to (1) continue to expend money to maintain the ETFs; (2) find a buyer to assume Nasdaq's contracts; or (3) wind down unprofitable funds, in accordance with the contracts. DX-110. Nasdaq came to settle on the third approach. Also in August 2016, Wade met with Masucci and Karol to discuss the

PureShares ETFs. Masucci Aff. ¶ 67. In that meeting, Wade conveyed that Nasdaq would "honor the letter" of its contractual obligations, but that Nasdaq, in time, would seek to exit the PureShares ETF business. *Id.*; *see also* Tr. at 613–14 (Wade).[14]

Notwithstanding Nasdaq's limited enthusiasm for the PureShares ETFs, it honored its obligations under the Wholesaler Agreement to support the most recent PureShares ETFs, FINQ and IMED, to which ISE had committed shortly before Nasdaq acquired ISE. PX-148. For example, after ETFMG's controller Corey Donohoe, on August 15, 2016, emailed Nasdaq seeking payment for a "June '16 T&E Invoice" for $2,982.90, PX-26, Nasdaq, on August 22, 2016, paid that bill, PX-158.

Nasdaq, however, questioned and/or resisted some expenses requested by ETFMG as inconsistent with the Wholesaling Agreement. And the relationship between ETFMG and Nasdaq soured as Nasdaq questioned certain of ETFMG's requests for reimbursement, which grew following Nasdaq's acquisition of ISE.[15] A dispute that arose in September 2016 was particularly notable in this regard. On August 8, 2016, ETFMG sent Nasdaq a "July Wholesaler

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[14] Masucci testified that he made multiple efforts to contact Wade at Nasdaq in the early days after Nasdaq's acquisition of ISE, but Nasdaq did not respond to his calls. Tr. at 1550 (Masucci). Although the Court has no occasion to reject that specific testimony, Wade's in-person meeting with Masucci during the second month after the acquisition is in tension with Masucci's portrait of wholesale disregard of ETFMG by Nasdaq.

[15] In the period before the acquisition, the expenses for which ETFMG sought reimbursement from ISE under the agreement had grown. For example, as to compensation of the wholesalers hired by ETFMG, although the agreement had anticipated two PureShares ETF wholesalers, ETFMG had sought, and ISE had paid for, three beginning as early as the second quarter of 2015. PX-607. On May 12, 2016, after ISE's acquisition by Nasdaq was announced but before it had been consummated, ETFMG sought reimbursement for the salaries of four wholesalers. PX-118. Total wholesaler compensation had earlier fluctuated between $50,000 and $80,000 per quarter, growing to about $80,000 in the third quarter of 2016. PX-577; PX-584; PX-594; PX-607; PX-616; PX-619; PX-623. In the fourth quarter, ETFMG sought $127,968.11 in reimbursement for such compensation. PX-119.

Invoice," PX-121, which sought to charge Nasdaq for travel expenses incurred by PureShares wholesalers and for $17,750 in expenses ETFMG had incurred in connection with an "Inside ETFs" conference to be held in January 2017. On September 21, 2016, Nasdaq declined to cover the expenses associated with the conference. ETFMG, it explained, had failed to get the required pre-approval for these expenses. Tr. at 764–65 (Wade); PX-160. Further, Nasdaq informed ETFMG that it (Nasdaq) was already paying for a booth at this conference, which ETFMG could share instead of paying for its own and charging the expense to Nasdaq under the agreement. PX-160 at 1–2; Tr. at 674–75 (Wade). Upon learning of Nasdaq's position, on September 22, 2016, ETFMG president Karol emailed Masucci: "I see this as a dance rather than a declaration of war." PX-160 at 1. Notwithstanding the rejection of the conference-related expenses, Nasdaq's September 2016 payments to ETFMG under the Wholesaler Agreement exceeded $280,000. Tr. at 1197 (Flanagan); PX-247 at 301765. Masucci testified that, following this incident, his view was that "the game had changed," that significant tensions had developed between himself and Nasdaq, and that it had become clear that ETFMG's relationship with Nasdaq would be more contentious than that with ISE. Tr. at 1551, 1569 (Masucci).

An additional source of tension arose from decisions taken at a September 29, 2016, meeting of the Trust Board. The board approved ETFMG's recommendation that PureShares replace its statutory distributor, Alps, with internal ETFMG personnel at ETFMG Financial, a newly formed subsidiary. DX-417. At the time, ETFMG Financial had not yet been approved by the SEC and FINRA to launch a broker-dealer. *Id*. at 1457–60 (Masucci); 2339 (Loebs). This decision was undertaken without input from Nasdaq and PureShares. Chanin of PureShares expressed displeasure at this action. PX-164. At the same meeting, prompted by ETFMG, the

board discussed whether to reduce HACK's management fee, then fixed at 75 basis points, noting a market trend towards lower fees—although the board left that fee intact. DX-417.

3. October 2016–February 2017: ETFMG Engages in "Netting" and Continues to Claim a Conflict of Interest, and the Relationship Between Nasdaq and ETFMG Further Deteriorates

In October 2016, ETFMG, acting unilaterally, began a practice in which it would net expenses that it contended were proper under the Wholesaling Agreement against the profits it remitted to Nasdaq from the PureShares ETFs, without first seeking Nasdaq's approval of various of these expenses. This practice, to which Nasdaq vigorously but unsuccessfully objected, badly exacerbated the tensions between Nasdaq and ETFMG.

On October 18, 2016, ETFMG's then-controller Donohoe sent Nasdaq the first of what would be four netting statements. This October 2016 netting statement netted, against the profits that ETFMG owed Nasdaq for HACK for July 2016, various types of payments ETFMG claimed that Nasdaq owed ETFMG under the Wholesaling Agreement. Wade Aff. ¶ 66; PX-221. The expenses that ETFMG deducted included expenses related to other contracts, as well as ETFMG's $17,750 July travel and entertainment ("T&E") expense for the Inside ETFs conference that Nasdaq had rejected.

Nasdaq objected to the particular netting statement, and more broadly the practice of netting, as problematic, for multiple reasons. First, although ETFMG had been paid the monthly management fee from US Bank for the preceding months, the profits ETFMG credited to Nasdaq did not include those to which Nasdaq was entitled for August and September 2016. Instead, ETFMG, in the October netting statement, paid Nasdaq the profits for only July 2016, in the amount of $330,056.41. PX-429; PX-430. Second, although Nasdaq had expressly disapproved the $17,750 expense, Wade Aff. ¶¶ 73(f), 74; Freire Aff. ¶ 15, ETFMG netted this payment anyway, using the netting process effectively to override Nasdaq's disapproval. Third, ETFMG

deducted expenses that Nasdaq had already paid, including expenses related to two of the employees covered by the Wholesaling Agreement. Wade Aff. ¶ 74. Fourth, Nasdaq felt that ETFMG inaccurately deducted expenses for timeframes not covered by the statement. *Id.* ¶¶ 74, 81. More broadly, Nasdaq balked at the practice of netting, viewing it as undermining Nasdaq's contractual right to pre-approve expenses.

ETFMG's netting also complicated Nasdaq's accounting. ETFMG's netting statements often purported to aggregate multiple invoices and sometimes credited ETFMG for expenses that had not yet been invoiced, as against the profits it was obliged to remit to Nasdaq. This process made it difficult for Nasdaq's accounting department to keep track of which expenses had been paid to Nasdaq and which expenses Nasdaq had yet to pay. Freire Aff. ¶ 21.

At trial, ETFMG's Masucci defended his decision to net ETFMG's expenses against profits owed to Nasdaq on the grounds that, in his opinion, "Nasdaq was [a] deadbeat partner." Masucci Aff. ¶ 116. However, ETFMG's CFO Flanagan testified that he had never been told by ETFMG that ETFMG was netting because Nasdaq had failed to make any payment required by the Wholesaling Agreement. Tr. at 1201 (Flanagan). And at trial, ETFMG, although disputing as wrong Nasdaq's decision not to approve the $17,750 conference expense, did not identify any bill for an expense undisputedly covered by the Wholesaling Agreement that Nasdaq had failed to pay. The Court therefore rejects as untrue Masucci's testimony as to this ostensible factual justification for netting.

The Court instead finds that ETFMG's netting was contractually unjustified. It was in square conflict with the Wholesaling Agreement, under which ISE, and later Nasdaq, had an express right to approve expenses in advance. Neither the Wholesaling Agreement nor any other agreement gave ETFMG the right effectively to approve unilaterally expenses by withholding

corresponding amounts of profit from Nasdaq. The Court finds that ETFMG's Masucci instead commenced netting out of frustration, as an act of retaliation against Nasdaq, and to get Nasdaq's attention. The Court finds that Masucci was angered by Nasdaq's repeated exertions of its contractual authority and distressed by Nasdaq's stated desire gradually to shrink the PureShares ETFs, which were central to ETFMG's livelihood. For Masucci, the Court finds, netting was a crude means of expressing his discontent with his unwanted business partner Nasdaq, and of claiming, by fiat, authority over the PureShares ETFs that ETFMG did not contractually possess. The Court also finds that Masucci viewed Nasdaq as having disrespected the smaller ETFMG. At trial, Masucci described Nasdaq as having a "global footprint" and as the "second largest exchange in the country." Tr. at 1548 (Masucci). He testified that he had resorted to netting in part because "[i]t was very difficult to reach anybody at Nasdaq." Tr. at 1435 (Masucci).

On October 25, 2016, a week after the first netting statement, Masucci emailed Wade, raising concerns, among other things, about Nasdaq's providing the NQCYBR index used by the CIBR ETF that competed with HACK. That same day, Wade emailed a letter to ETFMG. Objecting to the netting statement, he reiterated that Nasdaq would pay only those wholesaling expenses that were expressly detailed in the Wholesaling Agreement. DX-123. Wade also again disputed that Nasdaq's association with both HACK and CIBR presented a conflict of interest. *Id*.

On December 9, 2016, Masucci sent Nasdaq a second netting statement, which netted the profits ETFMG owed Nasdaq for HACK from August 2016 ($343,487.96, PX-429) and September 2016 ($354,921.16, PX-430) against various expenses that ETFMG claimed under the Wholesaling Agreement. These included three months of wholesaler compensation. After deducting all of these expenses, ETFMG wired the balance, $129,247.84, to Nasdaq. PX-173

at 35975 (the "Second Netting Statement"). Nasdaq again vigorously objected to this practice on the same grounds as before, including that the practice of netting was not provided for in any agreement, deprived Nasdaq of its contractual right to pre-approve wholesaling expenses, and created accounting difficulties, including to the extent that ETFMG combined multiple time periods into a single invoice. Wade Aff. ¶ 107.

On December 20, 2016, in response to objections from Nasdaq about ETFMG's practice of netting, Masucci wrote Wade. Masucci represented that ETFMG's policy had long been to net payments involving different contracts. PX-176 at 24561. This was false. And Masucci admitted at trial that ETFMG had never thus netted payments to ISE. Tr. at 1442–43 (Masucci). The impetus for the Second Netting Statement was instead, the Court finds, the same as for the first. Indeed, Masucci testified at trial that, by December 2016, around the time of the Second Netting Statement, he was "a lot less optimistic" and was "angered" by his interactions with Nasdaq. *Id*. at 1570 (Masucci).

By the end of 2016, ETFMG was significantly behind in sending Nasdaq P&L statements for HACK profits. There were several consequences of this: Nasdaq was denied profits to which it was entitled; it was inhibited in remitting to PureShares its share of such profits; and it was in practice unable to timely send ETFMG monthly invoices, per ISE's longstanding practice. The record does not supply any justification for the delay in ETFMG's transmitting profits to Nasdaq, and the Court finds that this delay, too, was willful and retaliatory. ETFMG's months-long delay in paying Nasdaq the profits to which it was entitled also contributed to the erosion of trust between the two companies. Nasdaq viewed this practice, like netting, as a breach of contract. Wade testified that he asked ETFMG "to simply comply with the agreement and that

we would make sure payments were there . . . . Since [Nasdaq] . . . was owed hundreds of thousands of dollars, I asked that . . . [ETFMG] comply with the contract." *Id*. at 571 (Wade).

On January 26, 2017, ETFMG produced a P&L for the IPAY ETF showing that for the month of December 2016, IPAY had generated net revenues of $5,673.23. PX-517. This was the first month that the IPAY ETF was profitable. From that point on, IPAY, along with HACK, were the two ETFs that were consistently profitable. ETFMG also generated a P&L for December 2016 HACK profits of $307,831.35. PX-433.

Notwithstanding providing Nasdaq with these P&Ls, ETFMG did not remit to Nasdaq the IPAY profits for December 2016, or for any month thereafter, during each of which IPAY was profitable. At trial, Masucci admitted that he made a deliberate decision not to remit the profits from IPAY to Nasdaq. Tr. at 1352–53 (Masucci).

During the week of February 13, 2017, Wade met with Masucci and Karol at ETFMG's office in New Jersey. PX-183. At the meeting, Wade demanded that ETFMG stop netting payments and asked that ETFMG discuss marketing expenses with Nasdaq before incurring them. Wade Aff. ¶ 107. On February 21, 2017, Wade sent Masucci an email summarizing important points from the meeting. These included: (a) "HACK will be brought up to date no later than Friday 2/24"; (b) ETFMG will avoid "netting" and Nasdaq will promptly pay ETFMG for billed expenses; (c) ETFMG will provide a "marketing report to Nasdaq . . . spelling out marketing activity . . . for the current month" to give Nasdaq an opportunity to weigh in; (d) ETFMG will provide a proposal to restructure the "wholesaler agreement"; and (e) Nasdaq will provide "index research around indexes that it supplies . . . ." PX-183 at 2. Masucci responded that same day; he refused to stop netting. He stated, falsely, that the netting practice "has been our policy with all of our ETF clients." *Id*. at 1.

On February 28, 2017, Masucci sent Nasdaq a new netting statement (the "Third Netting Statement"). It netted profits that ETFMG owed Nasdaq from HACK from October 2016 ($362,785.58, PX-430A), November 2016 ($298,405.83, PX-431), and December 2016 ($307,831.35, PX-433), against monies ETFMG claimed that Nasdaq owed for expenses ETFMG had incurred in December 2016 and January 2017, for future wholesaler expenses that ETFMG intended to incur during second quarter of 2017, and for future expenses for six other PureShares ETFs. PX223A; Freire Aff. ¶ 48. The Third Netting Statement did not take into account the HACK profits from January or IPAY profits from December and January. Nasdaq again objected to the Third Netting Statement on the same grounds as before, including that it credited ETFMG for various unapproved expenses. On February 24, 2017, Nasdaq's Freire and Wade both emailed ETFMG asking for backup for the costs that ETFMG was netting against Nasdaq, and again insisting that Nasdaq stop the process of netting. PX-184; PX-185. ETFMG refused to provide backup for the expenses and refused to stop netting payments. PX-184; PX-185.

On March 1, 2017, Wade emailed ETFMG's Masucci, writing: "[t]here is no need or provision for you to advance bill and net the wholesaler fees for the second quarter in February. We will have many other questions, but we request you send us today the $138k you netted from the money we are owed." PX-185. On March 1, 2017, Masucci responded that "this is the same policy that was used when we were working with ISE." *Id.* At trial, Masucci admitted knowing that this statement was untrue at the time that he made it. Tr. at 1442–43 (Masucci). Masucci's response also hinted at the possibility that the management fees charged to investors in the PureShares ETFs—from which the funds' revenues, and hence Nasdaq's profits, derived—were

poised to change. These fees, he stated, "are ultimately set by the Trust Board and can change." PX-185.

By this point, the Court finds, Masucci was enraged by Nasdaq and was unsubtly striking out at Nasdaq in multiple ways. His responses were retaliatory and were made without careful regard to ETFMG's contractual obligations or to Nasdaq's rights. As Terry Loebs, an ETFMG Trust board member appointed with Masucci's support, observed, Masucci appeared to resent the unproductive working relationship that had developed between ETFMG and Nasdaq, in contrast to the "give-and-take" and "collaborative" relationship that ETFMG had had with ISE. Tr. at 2391–92 (Loebs). Loebs sensed that Masucci was unhappy with Nasdaq and believed that Nasdaq did not respect him or the PureShares ETFs. *Id*. at 2391 (Loebs). Masucci, for his part, testified that by March 2017, he regarded the business relationship between ETFMG and Nasdaq as "a corpse." *Id*. at 1570 (Masucci). By then, he had concluded that the "idea that we would all kiss and make up is not going to happen." *Id*.

Given the fraught relations with ETFMG, Nasdaq took Masucci's reference to the management fee as a provocative implied threat—that Masucci could advise the Trust Board to lower the management fee, eating into any profits generated by the funds and thereby injuring Nasdaq. The following day, March 2, 2017, Wade replied to Masucci's email. He wrote: "I disagree with you netting this cost and it is not in compliance with the agreement. We will pay the fees owed when they are due per the agreement. Please return these funds to us immediately. Are you recommending to the boards any changes in management fees of any of the funds we are involved in[?] You communicated to us that you would discuss this with us and the other partners before making any recommendations or changes." PX-185. That same day, Masucci replied. He stated that he expected the ETFMG board, at its board meeting on March 15, 2017,

would decide whether to lower the HACK management fee, and/or take action against Nasdaq based on alleged problems with the maintenance of the index underlying HACK. PX-186.

4. March–April 2017: The HACK Management Fee Reduction, ETFMG's Retention of Profits, and Growing Conflict Between PureShares' Chanin and ETFMG

In March and April 2017, the relationship between Nasdaq and ETFMG continued to spiral downward, even while two funds (HACK and IPAY) remained strongly profitable. There were several principal areas of conflict during this period.

a. The Reduction of the HACK Management Fee and ETFMG's Retention of HACK and IPAY Profits

On March 14, 2017, Nasdaq's outside counsel, K&L Gates, sent a letter to Masucci and others at ETFMG. The letter expressed concern about Masucci's remarks regarding the HACK management fee and the possibility that ETFMG would unjustifiably claim a breach of the contracts between Nasdaq and ETFMG. PX-189. After receiving this letter, Masucci forwarded it to ETFMG's two other board members. He wrote: "The bottom line is that the concerns we have expressed about the way Nasdaq has been maintaining our indexes and our threat of moving to another index provider has gotten their attention and should result in better products." PX-190 at 1–2; *see also* Tr. at 1587–88 (Masucci).

On March 22, 2017, based on ETFMG's recommendation, the Board of Trustees of the ETFMG Trust voted to reduce the management fee for HACK from 75 basis points to 60 basis points. PX-195. The stated basis for the fee reduction was competitive pressure from HACK's competitor, the CIBR ETF. DX-194. ETFMG did not propose to lower any of the fees it charged to operate the HACK ETF. Board member Loebs testified that he did not take into account Masucci's apparent personal frustration with Nasdaq when evaluating Masucci's and ETFMG's recommendation to lower the management fee. Tr. at 2392 (Loebs)

On March 30, 2017, ETFMG generated a P&L for IPAY for February 2017, reflecting profits of $11,130.74. PX-519. On March 31, 2017, ETFMG generated a P&L for HACK for February 2017, reflecting profits of $381,048.84. PX-436. These profits were never paid to Nasdaq. Flanagan Aff. ¶¶ 40–44; Freire Aff. ¶¶ 71, 73, 81; Tr. at 1246 (Flanagan), 1266 (Masucci), 1269–70 (Masucci).

On April 7, 2017, Nasdaq's Freire emailed ETFMG's Masucci and Flanagan, asking when they planned to pay Nasdaq the profits due it from HACK and IPAY. PX-192. Masucci did not respond to Freire's email. At trial, Masucci testified that by the time he received Freire's letter, he had made a deliberate decision that ETFMG would no longer pay HACK profits to Nasdaq, and instead would retain those profits for ETFMG. Tr. at 1447–48 (Masucci); *see also id.* at 1452 (testifying that he made a conscious decision not to pay the January and February HACK profits listed in the May 26 netting statement). Masucci, however, did not tell his CFO, Flanagan, that he had purposefully decided to stop paying IPAY and HACK profits to Nasdaq. *Id*. at 1189–90 (Flanagan). ETFMG's decision to stop paying profits to Nasdaq had the effect of denying PureShares, too, its portion of the profits from the ETFs. *See, e.g.*, PX-179 at 00025726 (December 12, 2016 email from Chanin to Masucci inquiring about late payments to Nasdaq).

On April 19, 2017, ETFMG's Karol emailed Wade to tell him that the reduction of the HACK fee would take effect May 1, 2017. PX-195. By the end of June 2017, HACK's AUM had grown more than 20 percent since the Board voted to change the fee. DX-848.

b. The Rupture of the Relationship Between Chanin and ETFMG and the Termination of the HACK PSA

During this same period, tension was mounting between PureShares' Chanin and ETFMG. On March 3, 2017, Masucci sent a letter to Chanin informing him that ETFMG Financial had been approved by FINRA as a broker-dealer on January 30, 2017, and that

effective April 1, 2017, ETFMG Financial would take over the role of statutory distributor for all ETFs issued by the ETF Managers Group Trust and all ETFs "contracted with ETFMG for wholesale marketing services." DX-190 at 2. Masucci's letter notified Chanin that, given ETFMG's new role, Chanin would need to obtain an appropriate securities license authorizing him to promote the PureShares ETFs and, given the ETFs' affiliation with ETFMG, transfer his license to ETFMG Financial. Chanin refused to do so. Although Chanin had been a registered representative of Alps, the prior statutory distributor, he testified that he was reluctant to entrust ETFMG Financial with his license because ETFMG was, in his view, inexperienced in that area and inattentive. Tr. at 194, 236 (Chanin). This, Chanin testified, would expose him to a high risk of adverse regulatory action. *Id*. at 194

On March 11, 2017, Chanin responded to Masucci, copying attorneys. He asserted that ETFMG had breached its agreement with PureShares by bringing portfolio management and statutory distribution services in-house. DX-195. In a letter dated March 14, 2017, Chanin called on Masucci to resign and accused ETFMG of failing to disclose the expiration of the Business Management Agreement. DX-202. Chanin informed ETFMG that, in connection with the transition to the use of ETFMG Financial, he would not be transferring his license. Masucci responded that because Chanin was now affiliated with a broker-dealer, if he were not to obtain an appropriate license, Chanin would have to stop all "discussion of any PureFunds ETFs in public." DX-203; *see also* Tr. at 1593 (Masucci).

On March 30, 2017, counsel for the Trust Board responded to Chanin's complaint about ETFMG's having brought the statutory distribution function in-house. The Board's counsel stated that PureShares "has no legal role in the selection of Fund service providers" and that "it is common industry practice to use a distributor that is an affiliate of the advisor, and this practice

complies with all applicable laws." DX-267. On April 1, 2017, ETFMG Financial assumed distribution responsibilities. Chanin did not transfer his securities license from Alps to ETFMG Financial. Tr. at 236 (Chanin).

On April 17, 2017, a podcast was released in which PureShares was identified as the "issuer of HACK and other funds, including IMED." PX-197; *see also* Tr. at 239 (Chanin). Chanin had recorded this podcast months earlier, at a time when Alps, of which he was a licensed representative, was still the funds' statutory distributor. *Id*. at 245–46 (Chanin). The next day, on April 18, 2017, a trade publication, MarketWatch, published an article that identified Chanin as CEO of "PureFunds which operates the funds" and stated that "PureFunds also operates what could be the greatest success of the thematic category, the PureFunds Cyber Security ETF HACK." PX-197 (citing PX-198).

On April 21, 2017, on the basis of the release of the podcast and the MarketWatch article, ETFMG sent a letter to Chanin accusing him of engaging in marketing in violation of the securities laws. Karol emailed Wade a copy of the letter Karol had sent to Chanin to this effect. Citing these purported violations, ETFMG stated that it was terminating the HACK, IMED, and IFLY PSAs. PX-197.

On April 27, 2017, ETFMG's Karol sent Chanin (cc'ing Wade and others, including ETFMG's litigation counsel) a second letter asserting that Chanin had violated the securities laws, this time in connection with IPAY. PX-200. It asserted that Chanin violated the securities laws because in a separate podcast, "PureFunds is identified as the issuer of IPAY," and Chanin "spoke at length about IPAY and its holdings." *Id*. In fact, Chanin had recorded this podcast, too, months earlier, while he was a licensed representative of Alps, and while Alps was still the distributor for the PureShares ETFs. Tr. at 245–46 (Chanin).

Notwithstanding its accusation to Chanin that his conduct violated the securities laws, ETFMG's quarterly compliance report did not recite any such alleged violations. *See* PX-249A at 295036–295042. At an unspecified time, ETFMG called FINRA to report Chanin for allegedly unlawful marketing. Tr. at 2059 (Karol). ETFMG later learned that its claims that Chanin's podcasts had violated the securities laws had been inaccurate insofar as the podcasts had been recorded while Chanin a licensed representative of the ETFs' statutory distributor, Alps. *Id*. at 2049–50 (Karol).

On May 1, 2017, the tensions between Chanin and ETFMG came to a head. Chanin, acting on his own and not on behalf of Nasdaq, filed a lawsuit in New Jersey state court against ETFMG, Masucci, Karol, and others. The suit brought breach of contract and related claims. *Id*. at 1609–10 (Masucci); 1248–49 (Chanin). Chanin alleged that ETFMG had unlawfully ceased paying PureShares (and Nasdaq) the profits from the PureShares ETFs. He sought emergency injunctive relief in the form of the appointment of a special fiscal agent. Chanin asked that the ETFMG Trust be enjoined from taking any action with respect to the PureShares ETFs absent the agent's approval. DX-701. ETFMG opposed the motion. It viewed Chanin's lawsuit as an act of improper interference with the operation of the ETFMG Trust's duties, and as an unlawful attempt to seize control of the Trust. Masucci Aff. ¶¶ 122–23. Ultimately, the New Jersey court denied Chanin's request for emergency relief. Tr. at 253 (Chanin). That litigation remains pending. *Id*. at 481 (Chanin)

In the course of the New Jersey litigation, ETFMG represented to the New Jersey court that it had paid all monies due to Nasdaq, and that if PureShares had not received its share of profits, the fault was Nasdaq's, not ETFMG's. PX-2040 at 15. As Masucci admitted at trial, this factual representation was untrue. In fact, by this point ETFMG had knowingly ceased paying

both HACK and IPAY profits to Nasdaq. Tr. at 1447–48 (Masucci); *see also id*. at 1452 (Masucci) (testifying that he made a conscious decision not to pay the January and February HACK profits listed in the May 26 netting statement).

5. May–June 2017: Termination of the ETFMG-Nasdaq Business Relationship

On May 24, 2017, ETFMG's Masucci sent a letter to Chanin and Wade regarding the "Cessation of HACK Profit-Sharing." PX-202. Masucci claimed that ETFMG was not obligated to pay HACK profits to Nasdaq and/or PureShares, and that he had chosen to do so only because it had hoped to build a relationship with Nasdaq. PX-202 at 1. Masucci wrote that ETFMG was going to cease paying Nasdaq and/or PureShares HACK profits because of various actions Chanin and/or Nasdaq had undertaken that eliminated "the basis for ETFMG's decision to make HACK payments to Nasdaq." PX-202 at 2. In this letter, ETFMG stated that it would nevertheless pay Nasdaq and PureShares HACK profits through June 30, 2017. PX-202 at 4.

Also on May 26, 2017, ETFMG sent Nasdaq a fourth and final netting statement (the "Fourth Netting Statement"). PX-224. It purported to credit Nasdaq for profits from the operation of HACK for January and February 2017, and from the operation of IPAY for December 2016, January 2017, and February 2017, netted against monies ETFMG claimed it was owed for expenses it had incurred between January to April 2017, and for the next quarter of expenses associated with eight PureShares ETFs. PX-224 at 4–5; Freire Aff. ¶ 54. Nasdaq again objected to this netting statement, including because it credited ETFMG with unapproved expenses and with approximately $200,000 that ETFMG had already used to net out profit. Wade Aff. ¶¶ 80, 100.

ETFMG did not, however, ultimately send Nasdaq the net figure owed. Freire Aff. ¶ 68. Masucci testified that the decision not to pay Nasdaq these funds, on his part, was intentional.

Tr. at 1452–53 (Masucci) ("I don't think the failure to pay it was inadvertent. I made a conscious decision not to pay it."). As to HACK, ETFMG failed to pay $370,436.82 for January 2017, PX-434; $381,048.84 for February 2017, PX-436; $418,557.92 for March 2017, PX-437; $421,147.07 for April 2017, PX-438; and $350,061.82 for May 2017, PX-439. After May 2017, ETFMG ceased providing Nasdaq with P&L statements.

As to IPAY, which had begun generating a profit in December 2016, ETFMG generated P&L statements to Nasdaq for the months from December 2016 to May 2017. But ETFMG never paid any IPAY profits to Nasdaq. It failed to pay $5,673.23 for December 2016, JX-287; $13,066.31 for January 2017, JX-288; $11,130.74 for February 2017, JX-289; $20,317.69 for March 2017, JX-290; $31,150.82 for April 2017, JX-291; and $43,016.46 for May 2017, JX-292. As with HACK, ETFMG ceased providing P&L statements to Nasdaq after May 2017.

On June 2, 2017, Masucci sent a letter to Chanin and Wade purporting to terminate the PSAs for HACK, IPAY, BIGD, GAMR, IFLY, FINQ, and IMED for the reasons listed in his letter of May 24, 2017. At the time ETFMG terminated the PSAs for the PureShares ETFs, it had not paid Nasdaq any profits from the operation of HACK for all of 2017, and it had not paid Nasdaq any profits from the operation of IPAY for December 2016 or any of 2017. These undistributed profits, by then, totaled more than $2 million. Freire Aff. ¶¶ 71, 73.

On June 16, 2017, in response to ETFMG's letter terminating the above PSAs and refusing to pay Nasdaq the profits from the operation of these ETFs, counsel for Nasdaq wrote to ETFMG contesting the termination of the PSAs for HACK and IPAY. PX-180A–B. However, counsel for Nasdaq assented to the termination of the PSAs for the other five funds subject to PSAs, none of which were yielding profits at the time. PX-177A–E. For these five funds,

counsel for Nasdaq "instruct[ed]" ETFMG, pursuant to each fund's PSA, "to terminate [each] fund because [it] has failed to meet" its AUM threshold.[16] *Id.*

Each PSA for the different PureShares ETFs provided, in the event of the termination of the PSA, that:

> Upon termination of this agreement, the parties agree to cooperate and provide the services necessary to wrap up and liquidate the Fund(s) in an orderly and timely fashion, including, but not limited to, the preparation and filing of required regulatory documents, financial statements, tax filings, and investor statements.

See, e.g., JX-5 § 9; JX-6 § 9.

However, after Nasdaq assented to the termination of the PSAs as to the five above funds, ETFMG did not liquidate the funds, despite its contractual obligation to cooperate in doing so. Instead, ETFMG continued to operate the ETFs—including HACK, IPAY, and SILJ—and to keep for itself the profits these ETFs generated. *See* PX-209; PX-2008.

On June 29, 2017, outside counsel for ETFMG and for the Trust Board wrote a letter to counsel for Nasdaq, requesting confirmation that, notwithstanding ETFMG's termination of the various PSAs, Nasdaq would continue to provide the underlying ISE indexes for the PureShares ETFs: SILJ, HACK, IPAY, BIGD, GAMR, and IFLY. DX-284. On July 11, 2017, counsel for ETFMG and for the ETFMG Trust Board sent another letter to counsel for Nasdaq regarding the indexes. PX-208. This letter asserted: "While the actions of PureShares LLC compelled ETF Managers Group to terminate the PSAs, the Sublicense Agreement dated December 2, 2015 remains in effect. We seek confirmation that Nasdaq will continue to honor the terms of the Sublicense Agreement and provide indexes for use by SILJ, HACK, IPAY, BIGD, GAMR, and IFLY." *Id.*

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[16] Nasdaq did not give ETFMG any instructions, at the time, as to SILJ, the remaining open fund, which was subject to the BMA, not a PSA.

That same day, Nasdaq, through outside counsel, responded. Nasdaq stated that it was terminating the Wholesaling Agreement because, in Nasdaq's view, ETFMG had breached various of its provisions. These alleged breaches included operating as a "distributor" for the funds on the wholesaling platform; charging Nasdaq for funds that had never been added to Exhibit B of the Wholesaling Agreement; charging for products that should have been automatically removed from the platform; and violating the expense provisions in the agreement by incurring and charging expenses to Nasdaq without Nasdaq's pre-approval and by exceeding the annual expense cap of $50,000 without written approval. PX-218.

On July 14, 2017, counsel for ETFMG sent another letter to counsel for Nasdaq stating that, as of August 1, 2017, all eight funds previously affiliated with ISE "will be 'Third Party' ETFs, rather than 'ISE-Supported.'" PX-209 at 1. Responding to Nasdaq's counsel's letter, counsel for ETFMG stated, among other things, that "ETFMG terminated the [PSA] in response to the breaches of contract by PureShares, rather than as an effort to end its relationship with Nasdaq." *Id.* at 3. That same day, counsel for ETFMG called counsel for Nasdaq and proposed a new license agreement for the PureShares ETFs. ETFMG proposed to pay Nasdaq a license fee to license the indexes for the PureShares ETFs. *Id.*; Gedeon Aff. ¶ 56. ETFMG's attorney David Mahaffey proposed that instead of paying Nasdaq and PureShares the profits from the PureShares ETFs, ETFMG henceforth would pay Nasdaq a fee of five basis points based on AUM. Tr. at 825 (Mahaffey). Nasdaq rejected ETFMG's offer. PX-209 at 3–4.

On July 31, 2017, ETFMG disclosed that it was renaming the PureShares ETFs and replacing Nasdaq as the index provider for HACK, IPAY, SILJ, GAMR, and IFLY, as of August 1, 2017, with Kris Monaco's company, Prime Indexes. Gedeon Aff. ¶ 59; PX-2008.[17]

6. The August 2017 Interruption of ETFMG's Access to Nasdaq's Index, Nasdaq's August 2017 Termination of the Sublicense Agreement, and Nasdaq's October 2017 Filing of This Lawsuit

After the notices of termination issued, Nasdaq continued to provide ETFMG access to information related to the indexes for the PureShares ETFs, including start-of-day files, the daily data feed, and end-of-day files. Gedeon Aff. ¶ 60. Nasdaq typically charges companies for access to this data. *Id*. On August 1, 2017, however, in light of ETFMG's representation that it would no longer convey to Nasdaq profits from the operation of the funds and was switching the indexes for the funds, Nasdaq terminated ETFMG's access to this data. *Id*. ¶ 61.

On August 4, 2017, ETFMG employees contacted Nasdaq employees, asking why ETFMG no longer had access to the data feed for the indexes underlying GAMR and IFLY. PX-274 at 4. These employees had been unaware of the business dispute between ETFMG and Nasdaq. Gedeon Aff. ¶ 62. A few hours later, after consultation with attorneys, Nasdaq re-connected ETFMG's data access for two funds—GAMR and IFLY—and tasked employees in its technical area with devising a way to give ETFMG access to the indexes for GAMR and IFLY only. By the end of the day on August 4, 2017, ETFMG's data access for those two indexes was

[17] Of the remaining three funds, two (BIGD and FINQ) ceased trading in July 2017 and the third (IMED) ceased trading in September 2017. *See* https://www.bloomberg.com/quote/BIGD:US (last visited December 3, 2019); https://www.bloomberg.com/quote/FINQ:US (last visited December 3, 2019); https://www.bloomberg.com/quote/IMED:US (last visited December 3, 2019); *see also Sharette v. Credit Suisse Int'l*, 127 F. Supp. 3d 60, 75 (S.D.N.Y. 2015) ("[C]ourt may take judicial notice of 'a fact that is not subject to reasonable dispute because it . . . can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned.'" (citing Fed. R. Evid. 201(b))). The record does not disclose that BIGD, FINQ, or IMED ever became profitable.

restored. *Id.* ¶ 63. During this time, Nasdaq supplied data files manually by e-mail until the access was restored. *See, e.g.*, DX-241; DX-246; DX-248.

On August 7, 2017, counsel for ETFMG confirmed by telephone to counsel for Nasdaq that ETFMG would no longer pay HACK profits. DX-298. The following day, Nasdaq informed ETFMG that, effective August 31, 2017, it was terminating the Sublicense Agreement. *Id.*

On October 26, 2017, Nasdaq initiated this lawsuit.[18]

7. Aftermath: ETFMG Uses Monaco to Assist It During Its Business Conflict with Nasdaq, and Later Selects Monaco's New Company, Prime Indexes, as the Successor Index Provider to Nasdaq

As noted, Monaco, ETFMG's point of contact at ISE, left ISE shortly after Nasdaq acquired ISE. In July 2016, Monaco and a partner formed a new index provider, named Prime Indexes. Tr. at 979–80 (Monaco).

In March 2017, Monaco emailed Masucci a presentation about Prime Indexes. PX-303. In the presentation, Monaco touted that he had been "Responsible for the creation of the industry's first Cyber Security ETF (HACK), which amassed over $1 billion in AUM within 9 months." *Id.* at 8. Monaco also claimed to have created the index for HACK and that "ISE retained the largest revenue stake." *Id.* at 15.

On April 11, 2017, while ETFMG's relationship with Nasdaq was disintegrating, ETFMG employee Tim Collins emailed Monaco (cc'ing ETFMG's Masucci and Karol) discussing "index issues" and thanking Monaco for his "involvement." PX-312. On April 24, 2017, Monaco emailed Masucci and Collins with responses to ETFMG's "request for additional

[18] During this lawsuit, ETFMG increased by four basis points the "operating expenses" investors in HACK would pay—from 60 basis points to 64 basis points—effective January 31, 2018, to account for "extraordinary legal expenses." Wade Aff. ¶ 141 (citing PX-24).

information" and with "questions to consider asking the index provider" for NQCYBR and HXR, which Monaco knew to be Nasdaq. PX-311 at 2.

On May 2, 2017, Collins emailed Monaco and indicated that ETFMG was seeking from Nasdaq information about the HXR and NQCYBR indexes. *Id.* at 1. Monaco responded to Collins, "I am under the impression that Nasdaq's management of the HXR methodology is different from how ISE managed it, so I suggest that Nasdaq disclose how they define it. Nevertheless, there should be a record of each component's classification." *Id.* at 1.

On May 4, 2017, Travis Trampe, an ETFMG employee, emailed Monaco the "Start of Day files for HXR and NQCYBR (Both Total Return) for the 3rd Friday going back to the quarter after the inception of the fund." *Id.* at 1. Trampe had acquired these proprietary "Start of Day" files from Nasdaq. Gedeon Aff. ¶ 48. ETFMG did not divulge to Nasdaq that it intended to, or that it had, passed along Nasdaq's proprietary information to Monaco, the CEO of a Nasdaq competitor. *Id*. This information, relating to HXR, NQCYBR, and SILJ, captured Nasdaq's "selection, compilation, coordination, arrangement and preparation[] of the Index(es)" and was proprietary. *Id*. ¶ 49; *see* JX-1 § 5(H).

On July 14, 2017, ETFMG's Trampe emailed Monaco and others, including ETFMG's outside litigation counsel. PX-307.[19] With the email, Trampe provided Monaco and Yeagley "files from the June Rebalance" for the SILJ ETF, which had been provided to ETFMG by Nasdaq. Gedeon Aff. ¶ 50.

As noted above, on July 31, 2017, after the relationship between Nasdaq and ETFMG had entirely broken down, ETFMG disclosed that it was renaming the PureShares ETFs and that,

[19] Although Monaco and Yeagley were outsiders to ETFMG, ETFMG labeled the email: "CONFIDENTIAL: Attorney/Client Privilege – June Rebalance Files." PX-307.

as of August 1, 2017, it was replacing Nasdaq as the index provider for HACK, IPAY, and SILJ with Monaco's company, Prime Indexes. Gedeon Aff. ¶ 59; PX-2008.

As of the May 2019 trial, ETFMG continued to operate HACK, IPAY, SILJ, GAMR, and IFLY using Prime Indexes as the index provider for these funds.

The following chart captures the recorded profits (or losses) obtained from the operation of HACK, IPAY, and SILJ from December 2016 through October 2018—the last month for which the trial record contains profit figures.[20] ETFMG did not transfer these profits to Nasdaq.[21]

Date	HACK	IPAY	SILJ
December 2016	Monthly profit paid to Nasdaq	$5,673; JX-287	*[22]
January 2017	$370,437; JX-204	13,066; JX-288	*
February 2017	381,049; JX-205	11,130; JX-289	*
March 2017	418,558; JX-206	20,318; JX-290	*

[20] GAMR and IFLY, the two remaining funds that ETFMG continued to operate after the July 31, 2017 termination date, were not profitable beforehand but became profitable later.

[21] The unpaid profits figure represents the "ETF Profit/(Loss)" reported in the cited exhibit plus the expense reflected in that exhibit for "index licensing fees"—*i.e.*, the monthly fee ETFMG paid to Prime Indexes after terminating its relationship with Nasdaq. Such expenses would not have been incurred but for ETFMG's substitution of Prime Indexes for Nasdaq.

[22] For the months marked with an asterisk, no SILJ P&L statements exist in the trial record. *See* Dkt. 184. The Court discusses Nasdaq's expert's calculation of retrospective SILJ profits and losses below.

Date	HACK	IPAY	SILJ
April 2017	421,147; JX-207	31,151; JX-291	*
May 2017	350,062; JX-208	43,016; JX-292	*
June 2017	330,272; JX-209	37,787; JX-293	*
July 2017	406,843; JX-210	39,944; JX-294	6,885; JX-332
August 2017	376,672; JX-211	55,853; JX-295	6,207; JX-333
September 2017	348,558; JX-212	52,214; JX-296	2,832; JX-334
October 2017	364,458; JX-213	66,525; JX-297	1,992; JX-335
November 2017	346,748; JX-214	80,122; JX-298	($13,339); JX-336
December 2017	284,749; JX-215	66,134; JX-299	($16,339); JX-337
January 2018	412,581; JX-216	119,806; JX-300	9,853; JX-338
February 2018	326,183; JX-217	93,496; JX-301	(15,172); JX-339
March 2018	442,225; JX-218	129,539; JX-302	3,635; JX-340
April 2018	444,487; JX-219	126,058; JX-303	9,059; JX-341
May 2018	521,632; JX-220	140,749; JX-304	10,974; JX-342
June 2018	530,770; JX-221	141,218; JX-305	5,362; JX-343

Date	HACK	IPAY	SILJ
July 2018	561,123; JX-222	149,091; JX-306	5,679; JX-344
August 2018	604,045; JX-223	193,431; JX-307	6,153; JX-345
September 2018	607,741; JX-224	206,598; JX-308	(5,191); JX-346
Monthly Average	**$421,445**	**$82,860**	**$1,239**

II. Findings of Fact: The Contractual Entitlement to HACK Profits

This section records the Court's factual findings as to a discrete but central issue in this litigation, one which frames the analysis of the parties' competing claims of breach: whether Nasdaq or ETFMG was contractually entitled to the profits from the HACK ETF.

As noted, HACK was, far and away, the most profitable of the PureShares funds. And ETFMG's decision in early 2017 to cease paying Nasdaq profits from HACK—and also from IPAY, the next most profitable ETF—was a pivotal event in the demise of Nasdaq's and ETFMG's relationship.

It is undisputed that Nasdaq (with PureShares) had a written contractual right to the profits from all PureShares funds except for HACK. It is also undisputed that, throughout ISE's tenure and until early 2017, ETFMG willingly provided the profits from HACK to ISE and its successor-in-interest, Nasdaq, without laying claim to these profits.

ETFMG, however, claims that ISE and Nasdaq did not have a written contractual right to HACK profits. Instead, it argues that these profits were the subject of an oral agreement reached between Masucci of ETFMG and Monaco of ISE, under which ETFMG had the right unilaterally to retain the HACK profits.

Because this issue of which party had a contractual right to HACK profits is foundational to the Court's ensuing analysis of breach, the Court resolves it here, in a stand-alone discussion, before analyzing each side's respective claims of breach. This section proceeds in three parts.

First, the Court reviews the business context for this dispute, in particular ISE and ETFMG's respective roles in connection with the PureShares ETFs, and the "white-label" model for ETF creation and management that ISE and ETFMG understood themselves to utilize, in general and specifically as to HACK. Under this model, the ETF originator, like ISE, is customarily entitled to the profits from the fund, with the fund manager—in this case, ETFMG—paid a fee set by contract.

Second, the Court examines ETFMG's claim of an oral agreement entitling it to HACK profits. The evidence for this claim consists of the uncorroborated after-the-fact assertion by Masucci that there had been such an agreement. The Court rejects that claim as fictitious and as overwhelmingly disproven by the evidence at trial.

Third, the Court examines Nasdaq's claim that the written agreements among the parties gave it a right to HACK profits that is enforceable against ETFMG. As to this issue, the Court considers ETFMG's claim that the agreements relating to HACK uniquely deny Nasdaq such a right. The Court also considers Nasdaq's alternative contention that it had a right to profits from HACK that derived independently from two sets of contracts: (1) the Index License Agreement and the Sublicense Agreement, and (2) the HACK PSA, to which Nasdaq claims to have been a third-party beneficiary. The Court holds, with Nasdaq, that—consistent with the parties' longstanding course of dealings and numerous communications—Nasdaq had a clear right, anchored in these agreements, to profits from HACK, which ETFMG had no right to disturb.

A. The Business Context: The "White-Label" Business Model

The evidence at trial showed that ISE had two lines of business. First, ISE developed indexes to license to customers. These customers would then act as ETF sponsors. They would develop an ETF based on ISE's index and would make money by charging a management fee to investors in a given ETF. ISE's second line of business, relevant here, was centered in ISE's ETF Ventures division, headed by Monaco. As the name implies, ISE's ETF Ventures would act as an ETF venture partner and assume the role both of index provider and ETF sponsor.

Here, ISE's ETF Ventures and Chanin's PureShares agreed to partner together to launch a series of ETFs, under the PureShares brand name. They sought to develop "thematic" ETFs, which tracked companies in a distinct market segment or industry. Tr. at 465–66 (Chanin). In particular, ETF Ventures and PureShares intended to develop "pure play" thematic ETFs. A "pure play" thematic ETF involves an underlying index that tracks companies that primarily or exclusively focus on a given industry, as opposed to highly diversified companies whose connection to that industry is only tangential.

To bring these thematic ETFs to market, PureShares selected ETFMG. ETFMG held itself out as a "private-label" ETF manager. As ETFMG later described itself, its "business model is to launch ETF[s] based on third party investment ideas with the third party paying all of the costs until the fund reaches the break-even point." PX-72 at 00041188 (internal quotation marks omitted). Under this model, ETFMG, in return for providing services necessary to launch and operate the ETFs, receives a fee. ETFMG's fee was generally not contingent on the success of the ETF. *Id.* ("ETFMG thus is always earning fees and not supporting products."). In the event an ETF proved successful, then, under the private-label model, "most of the profit" would go to the third-party sponsor that had developed the idea for the ETF and paid the costs of starting and operating the funds. *Id.* As Masucci acknowledged at trial, it would be inconsistent

with the typical white-label business model for an advisor, like ETFMG, to retain the profits from the operation of an ETF. Tr. at 1330 (Masucci). Monaco concurred, explaining that in the white-label model, the advisor pays the profit generated by a successful ETF to the client that hired ETFMG to act as advisor. *Id*. at 749 (Monaco).

The trial testimony reflected the mutual understanding among the representatives of ISE's ETF Ventures, PureShares, and ETFMG that their trilateral collaboration tracked this model. ETF Ventures served as third-party sponsor (with its partner in developing investment ideas, PureShares, handling marketing activities), and ETFMG was the service provider that launched and operated the ETF. As noted earlier, Chanin understood that ETFMG's predecessor had decided to reorient its business model exclusively to serve "white-label" clients, with ISE and PureShares among the predecessor's first white-label clients. *Id*. at 120–26 (Chanin). Monaco agreed that, as he understood the business relationship, ETFMG unambiguously was a white-label provider, and that, under this model, the advisor (ETFMG) pays the profit from any ETF to the clients that engaged it (ISE and PureShares). *Id*. at 749–50 (Monaco). Monaco testified that, in explaining the ISE-ETFMG business, he "most likely" explained to Wade, of Nasdaq, that ETFMG was a white-label service provider to ISE. *Id*. at 975 (Monaco). Consistent with that testimony, Wade testified that ETFMG's business relationship with ISE was that of an ordinary white-label advisor and client. *Id*. at 613 (Wade).

For his part, Masucci resisted the notion that the relationship among the parties strictly followed the white-label model. *Id*. at 1330 (Masucci). But he agreed with Nasdaq's counsel that "ETFMG wouldn't have issued the HACK ETF but for ISE and PureShares choosing to hire ETFMG as the white-label service provider," testifying that "[i]f ISE didn't bring us the idea [for HACK], then, absolutely, we would not have launched HACK." *Id*. at 1673 (Masucci).

This economic arrangement is rational from the perspective of both the third-party sponsor (ISE) and the retained service provider (ETFMG). The service provider receives a fee for its services launching and operating the ETF. The third-party sponsor pays the launch and operation costs in the hopes an ETF succeeds, and, if it does, the sponsor reaps at least a portion of, if not the entire, profit. In contrast, as the trial testimony convincingly showed, an arrangement in which at least some of the profits from a successful ETF did *not* flow to the investor/sponsor would have dubious economic logic for that entity. Under such an arrangement, the investor would be obliged to pay potentially significant costs to launch and operate the fund but would not enjoy upside potential in return for the risk it took, the capital it contributed, and the investment ideas it developed.

This background is important context to ETFMG's claim that, with respect to HACK, the parties reached an oral agreement allowing service-provider ETFMG unilaterally to decide to keep all profits yielded by that ETF.

B. ETFMG's Claim of an Oral Agreement Entitling It to Hack Profits

At trial, ETFMG asserted that it lacked a written contractual duty to pay profits from HACK to ISE, and that it had done so solely pursuant to a stand-alone oral agreement that was terminable at will by ETFMG. This claim was articulated by Masucci, ETFMG's principal, in the written declaration that served at trial as his direct-examination testimony. There, Masucci attested that he and ISE's Monaco had reached an oral agreement to govern the payment of HACK profits. Under that oral agreement, Masucci testified, "ISE would provide HACK's index, support that index, and cover any Fund Shortfall with payments to ETFMG, and, in return, ETFMG would send any Fund Profit generated by HACK to ISE[,]" but "the obligations on the part of each party were contingent on the maintenance of a positive working relationship." Masucci Aff. ¶ 38.

For a variety of independent reasons, the Court emphatically rejects Masucci's claim of an oral agreement along these lines. The Court carefully assessed Masucci's credibility by all familiar means. These included by observation of his demeanor, by evaluation of whether his testimony was internally consistent, and how it did or did not align with the documentary record and the trial testimony of others. The Court likewise appraised the testimony of all other relevant witnesses. The Court paid close attention to Masucci's claim that ETFMG paid HACK profits to ISE and later Nasdaq pursuant to an oral agreement Masucci had reached with Monaco, under which ETFMG was at liberty to retain these profits for itself if ETFMG perceived other than a "positive working relationship" with ISE (or its successor in interest, Nasdaq). Regretfully, but firmly, the Court concludes that this testimony on Masucci's part was a falsehood, concocted after the fact to rationalize ETFMG's decision to retain the lucrative HACK profits and to deny them to Nasdaq, a business partner that Masucci had grown to resent and detest. There are five independent reasons for this conclusion.

First, there is a complete lack of contemporaneous documentary corroboration for this claim. Masucci appears to have first articulated the theory that ETFMG's theretofore transfer of profits to ISE and Nasdaq had been voluntary in his May 24, 2017 letter to Chanin and Wade regarding the "[c]essation of HACK [p]rofit-[s]haring." PX-202 at 1. There, Masucci wrote that ETFMG had not had a duty to pay Nasdaq the HACK profits, but that ETFMG had elected to do so to develop its business relationship with Nasdaq. *Id*. Masucci's letter accused Nasdaq and Chanin of acting in a way that "ruptured the cooperative relationship that previously existed between ETFMG and each of PureShares and NASDAQ—eliminating the basis for ETFMG's decision to make HACK payments to NASDAQ." *Id*. at 4. Masucci's May 24, 2017 letter, however, lacks any probative force as corroboration for his claim of entitlement to profits. The

letter was written months after Masucci, by his own account, had privately resolved to keep the HACK (and IPAY) profits for his company. And, by May 24, 2017, the relationship between ETFMG and Nasdaq was at the breaking point. Litigation had been threatened, and outside counsel were by then sparring on behalf of the participants—and presumably participating in the review of such correspondence. Prior to that date, despite HACK's exceptional profitability dating to December 2014, no reference had been made in any document, formal or informal, to any right on ETFMG's part to HACK's profits.

Second, numerous actions on the part of ETFMG and Masucci are inconsistent with the theory that ETFMG had, or believed it had, a right or potential right to HACK profits pursuant to an oral agreement. A few examples, among many, illustrate the point:

- In a prospectus filed with the SEC before HACK launched, ETFMG described its agreements with PureShares and ISE as it related to HACK. ETFMG wrote that PureShares had assumed "the obligation to pay all expenses of the Fund." PX-21 at 18. As to ISE, ETFMG wrote that it "has entered into a license agreement pursuant to which [it] pays a fee to use the ISE Index and the marketing name and licensed trademark of ISE." *Id*. at 11. ETFMG made no mention of any oral agreement governing entitlement to profits.
- In early 2016, during the period when Nasdaq began preparing to acquire ISE, ISE's Monaco met with various Nasdaq employees, including Wade, Gedeon, and Hughes, to discuss the ETF Ventures business. Monaco explained ISE's partnership with PureShares and the trilateral relationship among ISE, ETFMG, and PureShares. To illustrate the flow of money among these entities, Monaco gave Nasdaq copies of the contracts governing the PureShares ETFs, plus

statements and invoices sent by ETFMG. Wade Aff. ¶¶ 9–13. Monaco explained that ISE paid ETFMG the expenses covered by the ETF operating agreements, and that ETFMG sent the profits, if any, directly to ISE, which then split the profits with PureShares and any other party contractually entitled to a share. Tellingly, in describing ISE's business relationship with PureShares and ETFMG, Monaco—the person with whom Masucci purportedly entered into this agreement—never reported any oral agreement entitling ETFMG to HACK profits under any circumstances. *Id*. ¶ 17; Gedeon Aff. ¶ 22. Had an oral agreement governed the economically important issue of profits from HACK—by far the most profitable of the PureShares funds—it is not plausible that Monaco would have failed to disclose it to *anyone* from Nasdaq as Nasdaq was doing its diligence in preparation to acquire ISE.[23]

- During the period after Nasdaq's forthcoming acquisition of ISE had been disclosed, ETFMG President Karol, a trained lawyer who had joined ETFMG as an officer after HACK commenced, undertook his own analysis of the contractual relationships among ISE, ETFMG, and PureShares. Karol did so to "mirror the due diligence" that he expected Nasdaq was performing, to give himself an "overview" of the relationship. Tr. at 2087 (Karol). Karol shared multiple drafts of his analysis with Masucci. In these drafts, Karol expressed the understanding that ETFMG paid HACK profits to ISE pursuant to the HACK PSA, even though

[23] The Court fully credits the testimony, on this point and in general, of Nasdaq's personnel, including Wade and Gedeon. The Court found these witnesses highly credible. Their demeanors were forthright. And their testimony was convincing, internally consistent, and consistent with the documentary evidence and the other credible testimony at trial.

ISE was not a party to that PSA; that ETFMG had the authority to ask the Trust to reduce the HACK management fee; and that ETFMG could argue that the HACK PSA had been modified by conduct to allow ETFMG to pay ISE the HACK profits directly, instead of paying profits to PureShares as a middleman.[24] *See* PX-232A; PX-232B; PX-232C; PX-232D; PX-232E. These documents are silent as to the existence of an oral agreement giving ETFMG any right to HACK profits. And there is no evidence that Masucci, with whom Karol's drafts were shared, ever corrected these drafts to note the existence of such an agreement or ever contemporaneously mentioned such an agreement.

- In March 2016, ETFMG received a letter from the SEC asking the Trust Board to assess whether there existed any conflicts of interest as to the fee arrangement for SILJ and HACK. DX-413 at 48387; Tr. at 2023 (Karol). To enable the Board to assess this question, ETFMG was obliged to inform the Board fully as to the pertinent fee structure relating to, *inter alia*, HACK. ETFMG therefore requested from ISE copies of unredacted versions of the Index License Agreement and the HACK Supplement. PX-142. ISE provided those documents to ETFMG, which in turn provided them to the Trust Board. Conspicuously, the minutes from the March 2016 meeting, at which the Board discussed the issue, do not refer to any oral agreement governing the disposition of HACK profits, and there was no evidence at trial that the Board was notified of an oral agreement giving ETFMG a right to HACK profits. Had an oral agreement along these lines existed, it

[24] Karol testified that he did not know, at the time he wrote these drafts, that the HACK PSA was silent as to the payment of HACK profits. Tr. at 2088–89 (Karol).

would have been a glaring omission not to disclose it to the Trust Board, which was then considering how to respond to the SEC's inquiry regarding issues presented by the HACK payment arrangement.

- In July 2016, after Nasdaq acquired ISE, Masucci sent a letter to Nasdaq's Wade, describing, from ETFMG's perspective, the "several interrelated contracts" that "govern[]" ETFMG's relationship with Nasdaq. PX-147 at 1. Masucci described there, in detail, the various PSAs, the Wholesaling Agreement, and the Index License Agreement. Masucci did not mention any oral agreement regarding HACK profits. On the contrary, he told Nasdaq that "ISE rights to HACK profits, if any, *are governed only by the Index License Agreement*." *Id*. at 2 (emphasis added). This statement, too, is in conflict with the premise that an oral agreement governed the rights to HACK profits.[25]

[25] Attempting to downplay the July 2016 letter, Masucci testified at trial that this letter was "not meant to be comprehensive." Tr. at 1392–93 (Masucci). The Court rejects that testimony as untruthful. In fact, Masucci's letter thoroughly canvassed the operative written agreements among the various entities. Had HACK's profits belonged outright or (at ETFMG's election) to ETFMG, it is inconceivable that Masucci's letter to his new business partner would not have disclosed the oral agreement giving ETFMG rights to the vast HACK profit stream among the "interrelated contracts" that "govern[ed]" the relationship between ISE and ETFMG. Alternatively, Masucci sought at trial to depict his July 2016 letter as suggesting that ISE might not be entitled to HACK profits. Noting that the letter states that "ISE rights to HACK profits, *if any*, are governed only by the Index License Agreement," PX-147 at 2 (emphasis added), Masucci suggested that the term "if any" modified not the word "profits," to which it was contiguous, but the earlier word "rights." Tr. at 1385 (Masucci). Masucci thus suggested that he was—subtly—alerting Nasdaq that *if* Nasdaq had any right to profits, such a right arose out of the Index License Agreement—but that, in fact, for reasons unstated, Nasdaq might not have any such right to HACK profits at all. The Court rejects this tortured construction of Masucci's letter as uncommonly unpersuasive. The letter says nothing about an oral agreement or about who, if not Nasdaq, had a right to HACK profits, despite such being the subject of that portion of the letter. And by far the most natural reading of the phrase "rights to HACK profits, if any" is that Nasdaq had a right to monthly HACK profits under the Index License Agreement to the extent that there were such profits—a germane point insofar as various PureShares ETFs had proven

Third, Monaco, in his trial testimony, contradicted Masucci's claim of an oral agreement governing entitlement to HACK profits. And, insofar as Masucci claimed that ISE's Monaco had been the counterparty to the purported oral agreement governing the rights to HACK profits, Monaco's testimony was singularly relevant to this issue.

To be sure, Monaco agreed that an oral arrangement, of sorts, governed a related issue: the mechanics by which each of ISE, ETFMG, and PureShares received the monies to which they were entitled from all the PureShares ETFs. As explained above, the written agreements anticipated PureShares serving as an intermediary in the process by which expense payments and profits were transferred between ISE and ETFMG. Under the Index License Agreement, ISE agreed to pay PureShares the start-up and operation costs to finance the cost of operating the ETF. Tr. at 728–29 (Monaco). Under the Business Management Agreement and, later, the HACK PSA—to which ISE was not a party—PureShares was to pay ETFMG in turn for those same expenses. And, as to the flow of profits, under the Business Management Agreement and the HACK PSA, ETFMG agreed to pay PureShares the profits generated by a PureShares ETF. JX-12A at 093769. And, under the Index License Agreement, PureShares was then to pay ISE its share of the profits, in turn. Tr. at 728–29 (Monaco).

However, Monaco testified, the parties departed from this arrangement, in favor of a more efficient practice. As he explained, instead of following the two-step process anticipated by the contracts in which, as to expenses, ISE paid PureShares and PureShares paid ETFMG,

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either unprofitable or intermittently so. In other words, the clause "if any" modified the word "profits," not the word "rights." If indeed Masucci intended in his letter to convey that Nasdaq's right to profits was in fact governed by an oral agreement that ETFMG could unilaterally terminate, his locution was spectacularly unclear.

and, as to profits, ETFMG paid PureShares and PureShares remitted to ISE its share of profits, the parties agreed, in effect, to cut out the middleman, as to both expense and profits.[26] Accordingly, in practice, ISE would pay operation costs directly to ETFMG, and ETFMG would directly pay profits, if any, to ISE. Tr. at 757–58, 765–67 (Monaco). Then, ISE would pay PureShares its portion of the profits. As Monaco explained, this arrangement made sense because ISE's accounting operation was more sophisticated than PureShares', and Monaco did not wish to "chase" PureShares for money that ISE could receive directly from ETFMG. *Id*. at 767–68 (Monaco). Monaco further testified that, with respect to HACK, the parties agreed to use the same flow of money "to mirror the profit obligations and entitlement for the first three funds"—SILJ, MSXX, and GEMS—"and carry over that." *Id*. at 1054 (Monaco). As Monaco testified, the parties had agreed, for these funds, that "if the funds were ever profitable, then the profits would be sent directly to ISE," which would then "split them up" with PureShares. *Id*. at 1059 (Monaco). The Court credits Monaco that there was an oral understanding to this effect, which effectively overrode the payment mechanics implied in the written agreements among ISE, PureShares, and ETFMG. There was no contrary testimony. And Monaco's testimony to this effect was confirmed by the parties' demonstrated course of dealings.

Critically, however, Monaco did not testify that this oral arrangement altered any party's substantive *right to payment*, let alone that it permitted ETFMG unilaterally to withhold profits from ISE and to appropriate for itself the valuable six-figure monthly profit stream generated by HACK. Quite the contrary, and devastatingly to Masucci's claim, Monaco agreed in testimony that "whether or not there was an agreement in writing, it was clear to [him] that ISE was entitled

[26] Masucci likewise agreed that, notwithstanding the terms of the Business Management Agreement, the parties orally agreed to "cut out the middleman between ISE and ETFMG." Tr. at 1309 (Masucci).

to the funds from the percentage of the profit from HACK pursuant to the same formula as under the first three funds." *Id*. at 1061 (Monaco). He squarely testified it was not ISE's expectation that a "party could pull the rug out and say, no, I'm going to keep the profit." *Id*. And he agreed "there was nothing in the oral agreement [with Masucci] under which somebody from ETFMG could say, we're no longer satisfied with [ISE]; we're going to keep your profit." *Id*. Therefore, while Monaco's testimony supports an oral agreement of a different sort—as to the sequence and flow of payments among ISE, PureShares, and ETFMG—his testimony definitively contradicts Masucci's contention that he and Monaco agreed orally that ETFMG had any right to HACK profits.[27]

Fourth, circumstantially, Masucci's uncorroborated and never-memorialized claim of an oral agreement by ISE to abdicate HACK's profits to service provider ETFMG at ETFMG's election is extraordinarily improbable. It is at odds with the arrangement that ISE, PureShares, and ETFMG adopted with respect to all other PureShares funds. It is at odds with the course of dealing between Nasdaq and ETF regarding HACK until the broader relationship between

[27] The adversity of Monaco's testimony to ETFMG on this point was particularly notable in that Monaco's testimony, in general, bespoke some hostility to Nasdaq (which had not continued Monaco's employment after acquiring ISE) and alignment with ETFMG (which, after severing ties with Nasdaq, hired Monaco's company, Prime Ventures, as the index provider for the former PureShares funds). During trial, in fact, the Court designated Monaco a hostile witness to Nasdaq under Federal Rule of Evidence 611(c), permitting Nasdaq, which called Monaco on its case, to cross-examine him. In so ruling, the Court noted that (1) "there are more than a few indicators of identification by this witness strongly with the defense table as opposed to the plaintiff's table: The witness met with the defense before the deposition. The witness did not meet with the plaintiff. The witness met with the defense before trial. The witness didn't meet with the plaintiff[,]," Tr. at 741; (2) Monaco's financial interests are strongly aligned with ETFMG, in that Prime Ventures is a business partner of ETFMG and a competitor to Nasdaq, and, in 2018, "made 70 percent of its revenue from … ETFMG,[]" *id*. at 742; and (3) Monaco's demeanor when faced with questions from Nasdaq suggested hostility, in that, questioned by counsel for Nasdaq, he "clams up, he equivocates, he fences. There are long hesitations," *id*. at 743–44.

Nasdaq and ETFMG soured in early 2017. It is at odds with the "white-label" model involving specialty-focused ETFs that the PureShares ETFs adopted, under which, customarily, the fund manager receives a contractually negotiated fee (as ETFMG did here) and the index provider stands to receive profits, if any, in exchange for its idea, its capital, and its risk. And it is at odds with rational business stewardship. The record does not disclose any coherent reason why ISE, having (with PureShares) developed and put into action the idea of an ETF centered on cyber-security issuers, and having invested capital and time in that idea, would relinquish the right to profits from that creation to the fund manager it had hired.

Fifth, and finally, the Court finds incredible—and clearly false—Masucci's testimony that he entered into an oral agreement with ISE giving his company a right to keep the profits generated by the HACK ETF. *See, e.g.*, *id*. at 1385–86 (Masucci) ("Q: . . . [I]t's your testimony that any profit for HACK that was being paid to ISE prior to the acquisition was based on—only on an oral agreement between ETFMG and ISE? A: Yes, sir."); 1405–06; 1409 (oral agreement as to HACK profits were "based on a growing relationship where we would continue to expand the platform, wholesaling, marketing activities, [and] new products," with ISE's entitlement to HACK profits contingent on its continued efforts to expand the ETF business).

On its own terms, Masucci's testimony as to the purported oral agreement was threadbare and unconvincing. Masucci was unable to situate in time or place the alleged conversation in which Monaco agreed to these consequential terms, testifying only that "[i]t was prior to the launch of HACK." *Id*. at 1396 (Masucci). Nor were the terms of the purported oral agreement clear. As to the issue of when payments from ETFMG to ISE would be due, Masucci testified that there "were no timing discussions as to when payments would be made." *Id.* at 1398. It is implausible that the parties would neglect to discuss the essential term of when ETFMG would

be obligated to pay ISE fund profit. Moreover, Masucci's testimony on this point contradicts his deposition testimony that ETFMG was obligated to pay the monthly profit to ISE "as soon as the profit was received, it had been properly accounted for, and the bills were paid and the profit and loss statement was complete." Masucci Dep. at 167.

Masucci also testified that the oral agreement was premised on a "growing relationship where [the parties] would continue to expand the platform, wholesaling, marketing activities, [and] new products." Tr. at 1409 (Masucci). He testified that Nasdaq imperiled the oral agreement by "ma[king] it clear . . . that Nasdaq would not expand[] the ETF Ventures business as the ISE had promised [ETFMG]." *Id*. Not only was Masucci's sworn testimony on this point entirely uncorroborated, ETFMG abandoned this proposition at trial. *See* Dkt. 147 (setting forth ETFMG's position that the purported oral agreement comprised of only two components: ISE would fund the start-up and operating costs of HACK; and ETFMG would pay any HACK profits to ISE, even though, in ETFMG's view, it was not obligated to pay such profits under any written contract). Masucci's contention that the oral agreement was based on a "growth proposition" seems to have been fabricated only after Nasdaq signaled to ETFMG its lack of interest in building the PureShares ETF brand.

More broadly, the Court, having observed Masucci's comportment while testifying, found it, all too often, inconsistent with conscientious truth-telling, self-serving, and animated by his obvious resentment toward Nasdaq, which Masucci regarded as having disrespected both himself and ETFMG. At various points, Masucci's answers were evasive and argumentative, and the Court on multiple occasions was compelled to interject to direct Masucci to answer the question put to him. *See, e.g.*, Tr. at 1441–43. At trial, Masucci admitted having made false statements to his business partner, Nasdaq, as the Nasdaq/ETFMG relationship disintegrated.

For example, after Nasdaq's Wade complained about ETFMG's netting practice, Masucci falsely told Wade, on two separate occasions, that it was ETFMG's practice to net all client payments. PX-176; PX-183. In fact, ETFMG had never netted payments before Nasdaq acquired ISE. Tr. at 1442 (Masucci). And other aspects of Masucci's trial testimony were also demonstrably false. For instance, Masucci testified that, after Nasdaq acquired ISE, Nasdaq failed to prepay any ETF expenses. Masucci Aff. ¶ 112. In fact, the documentary evidence showed that Nasdaq prepaid expenses of more than $280,000 in September 2016, three months after it acquired ISE. PX-247 at 301765; Tr. at 1412–17 (Masucci). The Court, in the end, was not left with any confidence in the accuracy of any uncorroborated representation of fact made by Masucci, let alone an improbable claim of entitlement to a profit stream worth millions of dollars.

For all these reasons, the Court finds, as a matter of fact, that there was no oral agreement governing the entitlement to the profits from HACK, let alone an oral agreement under which, under any circumstances, ETFMG had the right to wrest these profits from ISE, or its successor, Nasdaq. The Court instead holds that this claim, by Masucci, was false—a transparent construct for purposes of litigation to justify, after the fact, ETFMG's act of self-help in appropriating these profits for itself. The uniform evidence, consistent with the parties' communications and their uniform course of dealings until ETFMG unilaterally ceased paying HACK (and IPAY) profits to Nasdaq in early 2017, is that all parties (including ETFMG) understood and expected that the profits from all the PureShares ETFs belonged to ISE/Nasdaq and PureShares, and that ETFMG would be separately compensated for its services by the contractually negotiated fee.

C. ETFMG's Claim That the Written Agreements Relating to HACK Profits Give It, And Deny Nasdaq, the Right to HACK Profits

The Court next considers ETFMG's arguments based on the written agreements relating to HACK. ETFMG acknowledges that as to all other PureShares ETFs, the agreements gave ISE

(later Nasdaq) the right, with PureShares, to the profits. Therefore, as to IPAY, whose profits (along with those of HACK) ETFMG refused to relinquish, ETFMG acknowledges that it did not have a contractual right to keep the profits, and that the written contracts give Nasdaq a basis on which to claim a breach of contract based on ETFMG's having done so.

ETFMG argues, however, that HACK is different. The written agreements as to HACK, it notes, were unique among the PureShares ETFs, in that the HACK PSA, which was entered into by PureShares and ETFMG only, does not itself (1) explicitly speak to entitlement to profits or (2) incorporate by reference any document reflecting *ISE*'s entitlement to profits. On this basis, ETFMG makes two distinct arguments. First, it argues that, as to HACK, ETFMG—not PureShares or ISE—was contractually entitled to the HACK profits. Second, it argues, even if the right to profits did not belong to ETFMG, only PureShares may sue ETFMG for wrongly refusing to relinquish those profits. Because ISE was not a party to the HACK PSA, ETFMG argues, it has no contractual basis to sue ETFMG for keeping the HACK profits.

1. ETFMG's Asserted Right to HACK Profits

The Court considers first ETFMG's claim that it was contractually entitled to the HACK profits. At the outset, the Court notes, this argument is based solely on a construction of the parties' writings developed by ETFMG's counsel in connection with this litigation. ETFMG notably does not argue that the parties ever subjectively intended or articulated to one another that HACK would differ from the other PureShares ETFs, whether as to the allocation of profits or as to any other aspect of the fund's operation. ETFMG does not argue that any representative of ISE or PureShares ever agreed to forego the profits from HACK or that these profits would belong to ETFMG, whom ISE and PureShares retained to perform the same services on HACK as on the other funds. On the contrary, as reviewed above, the evidence overwhelmingly shows that all parties intended and understood that the profits from *all* the PureShares ETFs would

belong to ISE and PureShares. And the Court has rejected as knowingly false the claim by ETFMG's Masucci of an undated oral agreement in which ISE, for unspecified reasons, agreed to cede HACK profits to ETFMG at ETFMG's election.

In any event, ETFMG's claim that the parties' writings are properly construed to give it the right to the profits from HACK is easily put to the side. No document says that. And the foundational document pursuant to which ETFMG was retained to perform services as to HACK, the HACK PSA, disposes of ETFMG's claim that it had a right to the fund's profits. The HACK PSA does so by comprehensively delineating the finite fees to which ETFMG would be entitled for the services it would render with respect to HACK. These fees emphatically do not include a right to profits.

Rather, the HACK PSA sets out two sets of fees to which ETFMG is entitled. Exhibit A provides for ETFMG to receive one-time fees totaling an estimated $57,500 for ETFMG's organizational services. JX-5, Ex. A. This figure is comprised of an estimated $35,000 for the "trust series/ prospectus" and legal and regulatory fees; $7,500 for "NYSE first year product list fee/product"; and $15,000 for "FINRA compliant website." *Id*. Exhibit B, in turn, details the ongoing services that ETFMG agrees annually to provide to the fund. These include regulatory services and the management of outside counsel; "[m]arketing and [s]ales [s]upport"; "[c]ompliance support"; "[p]ublic [a]ccounting support"; "[c]ustody, [t]ransfer [a]gency, [t]rustee, and [f]und [a]ccounting support"; "[s]tatutory distribution and compliance support"; and "[t]ax reporting." *Id*., Ex. B. As reviewed above, Exhibit B specifies the component fees that add up to ETFMG's overall annual fund platform operating fee. Some component fees (*e.g.*, for annual audit and tax work and for the NYSE annual listing fee) are expressed in fixed dollar amounts; others (*e.g.*, for annual fund legal support and for insurance) are expressed in estimated

dollar amounts; and others (such as fund administration and sub-advisory work) are expressed formulaically, as a function of the application of a specified number of basis points applied against HACK's AUM, subject in some instances to a minimum for that fee. ETFMG's fee for these annual services is calculated in Exhibit B as a minimum of $231,800, but potentially more depending on the application of the AUM-based formulas for certain component fees.

The HACK PSA's detailed recitation of ETFMG's fees for its organizational and operating services is inconsistent with ETFMG's present claim that ETFMG was, *sub silentio*, also contractually entitled to the profit from that fund. The HACK PSA fee schedules are comprehensive. They do not anywhere state or imply that ETFMG is entitled to additional compensation of any kind. They certainly do not state or imply that ETFMG was entitled to additional compensation in the form of all profits from HACK. And the profit stream from such an ETF had the potential in a month to vastly exceed ETFMG's delineated annual fees. Such, in fact, proved to be the case for HACK, whose monthly profits by June 2015 exceeded $300,000. The omission from the comprehensive fee schedules in the HACK PSA of any right by ETFMG to profits cannot be dismissed as an inadvertent oversight. Its omission from the document that engaged ETFMG to provide services with respect to HACK is dispositive of ETFMG's assertion of such a right.

Furthermore, in other ways, the fee schedules in the HACK PSA imply the absence of any such unstated right. Exhibit A identified two sources of potential added fees for ETFMG. One was for "legal and regulatory services based on the fee paid to third party legal counsel"; the other was for "additional Regulatory filing fees based on the number of the Fund shares registered." *Id.*, Ex. A. The logical implication of the listing of these avenues is that the parties did not envision other unspecified areas of extra compensation for ETFMG. Exhibit B supplies

an inference even more devastating to ETFMG's claim of a right to HACK's profits. Several of the component fees listed there are measured by the formulaic application to HACK's AUM of a specific number of basis points. *Id.*, Ex. B. This delineation would have been unnecessary if, in fact, ETFMG were entitled to 100% of all HACK revenue less expenses.

The HACK PSA between PureShares (which it terms the "Client") and ETFMG (which it tasks to perform defined services) thus necessarily anticipates that the profits from HACK—*i.e.*, the residue of management fee revenues left over after payment to ETFMG of all of its delineated fees—belong to the Client, PureShares. That is consistent, too, with the nature of the HACK PSA. It is in the form of an engagement agreement between a client (PureShares) and a compensated service provider (ETFMG). And PureShares' right as the "Client" to the profits from the new Fund is consistent with the white-label model and with other provisions in the PSA reflecting PureShares' status as the fund's creator. These include provisions stating that (1) the "Client" had "specified" the "new listed product," *id.* at 1; (2) the "Client" had the right to terminate the agreement before the new fund issued, *id.*; (3) the "Client" had consented to ETFMG's engaging third-party service providers; (4) the "Client" had consented to "pay any and all expenses as set forth herein not funded by Fund accruals" and that ETFMG was to "invoice Client for all shortfalls," *id.* at 2; (5) the "Client" covenanted to pay all expenses and fees required to be paid by ETFMG and the Trust; and (6) the "Client" had the authority to instruct ETFMG to terminate a fund after its second anniversary if the fund's AUM had not yet reached $50 million, *id.* at 5. ETFMG's claimed right to all profits, in contrast, would yield an outcome inconsistent with PureShares' contractual role and duties. Were the HACK PSA read *sub silentio* to give HACK's profits to ETFMG, "Client" PureShares would be left with only expense obligations, but no fees nor profits, from the new fund it had created, funded, and underwritten.

The HACK PSA therefore, fairly read, disposes of ETFMG's claim to HACK's profits. It cannot be discounted, as ETFMG proposes, as silent and inconclusive on this point.[28]

2. Nasdaq's Basis to Pursue Contract-Breach Claims as to HACK

The Court considers next ETFMG's claim that, because ISE was not a party to the HACK PSA, its successor-in-interest Nasdaq cannot bring breach of contract claims against ETFMG for retaining the HACK profits. Nasdaq counters that it can properly do so under the Index License Agreement and the Sublicense Agreement, to which ETFMG has bound itself, and which oblige ETFMG to pay the HACK profits to Nasdaq. Nasdaq separately argues that it is a third-party beneficiary of the HACK PSA, and on that basis, too, can pursue contract-breach claims against ETFMG.

For the reasons that follow, the Court holds, with Nasdaq, on each of the above grounds, that ETFMG was contractually obliged to pay HACK fund profits to Nasdaq.

a. The Index License and Sublicense Agreement

Nasdaq's principal argument is that the Index License Agreement, together with supplements to that agreement and the Sublicense Agreement, give it a right enforceable against ETFMG to the profits generated by PureShares ETFs, including HACK.

[28] At trial, ETFMG suggested that the Investment Advisory Agreement between itself and the ETFMG Trust supported its claim of a right to HACK profits. That is wrong. That agreement appointed ETFMG to serve as advisor to the Trust on behalf of the PureShares ETFs and to perform associated services. DX-8 (2014 Investment Advisory Agreement); DX-9 (2016 Investment Advisory Agreement). Under that agreement, the management fee for each PureShares ETF—*i.e.*, the ETF's revenues—was to be furnished, in the first instance, directly to ETFMG. But that agreement, to which ISE and PureShares were not parties, did not supervene ETFMG's contractual obligation to furnish fund profits, if any after payment of expenses, to those entities. Nothing in it conferred upon ETFMG a right to fund profits.

i. Applicable Law

The parties agree that New York law governs the Index License Agreement and Sublicense Agreement. *See* Dkt. 154 at 31; Dkt. 155 at 8. Under New York law, "[c]onstruction of an unambiguous contract is a matter of law, and the intention of the parties may be gathered from the four corners of the instrument and should be enforced according to its terms." *Beal Sav. Bank v. Sommer*, 8 N.Y.3d 318, 324 (2007) (citations omitted). "The fundamental, neutral precept of contract interpretation is that agreements are construed in accord with the parties' intent, [and that] [t]he best evidence of what parties to a written agreement intend is what they say in their writing." *Kasowitz, Benson, Torres & Friedman, LLP v. Duane Reade*, 950 N.Y.S.2d 8, 11 (1st Dep't 2012) (alterations in original) (internal quotation marks omitted) (quoting *Greenfield v. Philles Records*, 98 N.Y.2d 562, 569 (2002)); *see also Beal Sav. Bank*, 8 N.Y.3d at 324 ("[T]he intention of the parties may be gathered from the four corners of the instrument and should be enforced according to its terms."). Words and phrases are to be given their plain and ordinary meaning, and New York courts will commonly refer to dictionary definitions in order to determine that meaning. *See, e.g.*, *Mazzola v. County of Suffolk*, 533 N.Y.S.2d 297, 297 (2d Dep't 1988); *10 Ellicott Square Court Corp. v. Mountain Valley Indem. Co.*, 634 F.3d 112, 120 (2d Cir. 2011) (citing *Mazzola* and relying on a dictionary definition of a contractual term).

"[E]xtrinsic evidence may not be considered unless the document itself is ambiguous." *Duane Reade*, 950 N.Y.S.2d at 11 (quoting *S. Rd. Assocs., LLC v. Int'l Bus. Machs. Corp.*, 4 N.Y.3d 272, 278 (2005)); *see also W.W.W. Assocs., Inc. v. Giancontieri*, 77 N.Y.2d 157, 162 (1990) ("Evidence outside the four corners of the document as to what was really intended but unstated or misstated is generally inadmissible to add to or vary the writing."). "A contract is

unambiguous if the language it uses has 'a definite and precise meaning, unattended by danger of misconception in the purport of the [agreement] itself, and concerning which there is no reasonable basis for a difference of opinion.'" *Duane Reade*, 950 N.Y.S.2d at 11 (alteration in original) (quoting *Breed v. Ins. Co. of N. Am*., 46 N.Y.2d 351, 355 (1978)).

Conversely, a contract is ambiguous where its language is susceptible to multiple reasonable interpretations. *Brad H. v. City of New York*, 17 N.Y.3d 180, 186 (2011). When a contract is ambiguous and there is relevant extrinsic evidence as to the parties' intent, the proper interpretation of the disputed language becomes a question of fact for the factfinder. *Seiden Assocs., Inc. v. ANC Holdings, Inc*., 959 F.2d 425, 428 (2d Cir. 1992). Ambiguity will not be found "where one party's view strain[s] the contract language beyond its reasonable and ordinary meaning." *Id*. (alteration in original) (internal quotation marks and citation omitted).

ii. Pertinent Aspects of the Agreements

Paragraph 1(a) of the Index License Agreement provides that ISE is granting to PureShares a "royalty-bearing license (i) to use the Index(es) solely in connection with issuing and listing for trading of the Product(s) on or through a stock exchange . . . and (ii) to use and refer to the ISE Marks in connection with the marketing and promotion of the Product(s) . . . ." JX-1 at 1–2. The Index License Agreement also contains various "Schedules," discussed below.

Although the Index License Agreement at first applied only to the three original PureShares ETFs (GEMS, MSXX, and SILJ), through supplements to Schedule I, ISE and PureShares added HACK, IPAY, BIGD, and GAMR to the Index License Agreement. JX-3 (Hack Supplement); JX-3A (partially redacted HACK Supplement made available to ETFMG on October 10, 2014); JX-4 (IPAY/BIG Supplement); DX-6 (GAMR Supplement).

At the time it was entered into, the Index License Agreement imposed obligations on only ISE and PureShares. ETFMG was not a party and was not bound by it. Later, however, ISE, PureShares, and ETFMG entered into the Sublicense Agreement. *See* JX-2 (June 2012 Sublicense Agreement); JX-2A (fully executed December 2, 2015 Sublicense Agreement). Under that agreement, PureShares, as sublicensor to licensor ISE, granted to ETFMG a "non-exclusive and non-transferable sublicense to use the Intellectual Property in connection with the issuance, distribution, marketing and/or promotion of" PureShares ETFs. JX-2A § 1. Attached to the fully executed December 2015 Sublicense Agreement was "Appendix A," setting forth "Rate[s]" associated with each PureShares ETF, including SILJ, HACK, BIGD, IPAY, GAMR, and IFLY. *Id*. at 3. Significantly here, in the Sublicense Agreement, ETFMG "acknowledge[d] that it has received and read a copy of the [Index] License Agreement (excluding the Schedule setting forth the license fees) and agrees to be bound by all the provisions thereof, including, without limitation, those provisions imposing any obligations on PureShares." *Id.*

The original "Schedule I" to the Index License Agreement set out how ISE and PureShares would divide profits between themselves as to the three original PureShares ETFs: GEMS, MSXX, and SILJ. Schedule I stated that ISE would be solely responsible for the "listing, legal, and regulatory costs and expenses" associated with launching the products and the "costs and expenses associated with the on-going operation" of the products, while PureShares would be responsible for costs for "marketing, advertising, and distribution services" for the ETF products. JX-1 at 18–20 (GEMS), 22–23 (SILJ), 26–27 (MSXX). As to profits, Schedule I stated that the parties would divide up between them "all of the remaining profit, if any," according to a formula it set out in which ISE's share of profits ranged from 50% to 60% depending on the particular fund's average daily AUM, and PureShares' share ranged from 40%

to 50%. *Id.* at 20, 24, 28. Schedule I stated that ISE's share of the profit "shall be accompanied by a statement prepared by PureShares setting forth the calculations on which the payment is based and shall be paid to ISE within thirty (30) days after the end of each quarter." *Id.*

The version of Schedule I made available to ETFMG before it signed the Sublicense Agreement redacted some of these details. However, the unredacted language made clear that ISE would finance the start-up and operation costs for each PureShares ETF. *See, e.g.*, JX-1A at 22. Also unredacted was language stating that ISE and PureShares "agree that they shall each be entitled to share on a fixed basis all of the remaining profit, if any, generated from the PureFunds [ETFs]. ISE and PureShares shall be entitled to respective percentages of all such Shared Profit in accordance with the following tiered fee schedule." *See, e.g.*, *id.* at 24. The only portion of Schedule I that was redacted was (1) the tiered fee schedule itself, setting forth how ISE and PureShares would divide the fund profit amongst themselves as to the three original ETFs; (2) specific figures used to calculate ISE's minimum portion of the shared fund profit, and (3) a provision stating that "upon the launch" of the ETF at issue, PureShares shall "be entitled to receive an annual fee, payable on a monthly basis, of 0.05% of the average daily net assets in the [ETF] for supporting marketing and/or distribution services (the 'Supplemental Marketing Budget')." *Compare* JX-1 at 24 (unredacted), *with* JX-1A at 24 (redacted). ETFMG was therefore fully on notice that the profits from the PureShares ETFs contractually belonged to the original licensor (ISE) and its sublicensor (PureShares).

The HACK Supplement that added HACK to the Index License Agreement—formally called "Supplement 1 to Schedule 1"—was largely identical to the "Schedule I" that governed MSXX, GEMS, and SILJ, but contained slightly more redactions. The unredacted portion of the HACK Supplement stated that ISE would be responsible for, *inter alia*, financing start-up costs

and operation expenses, JX-3A at 2, and that PureShares agreed that "[e]ach quarterly payment of ISE's share of the Shared Profit shall be accompanied by a statement prepared by PureShares setting forth the calculations on which the payment is based and shall be paid to ISE within (3) days after the end of each quarter," *id*. at 4. The redacted portion stated as follows:

> (iii) Subject to the full reimbursement of ISE for all Start-Up Costs and Operational Costs . . . the parties agree that they shall each be entitled to share on a fixed basis, all of the remaining profit, if any, generated from [HACK] ("Shared Profit"). ISE and PureShares shall be entitled to respective percentages of all such Shared Profit in accordance with the following tiered fee schedule:
>
> | When Average Daily AUM in the PureFunds ISE Cyber Security ETF over the prior calendar quarter is: | ISE | PureShares |
> |---|---|---|
> | $0.00 - $75,000,000 | 80% | 20% |
> | $75,000,000.01-
$150,000,000.00 | 75% | 25% |
> | $150,000,000.01 and above | 70% | 30% |
>
> ; provided, however, that ISE's portion of the Shared Profit shall be no less than the equivalent annual amount of 0.16% of the average daily net assets in the Product while AUM is greater than or equal to $100,000,000 and ISE has been fully reimbursed . . . by applying different percentages to different portions of the Average Daily AUM over the prior percentages to different portions of the Average Daily AUM over the prior calendar quarter. "Average Daily AUM" shall mean the applicable custodian's end-of-day calculation (only one per day).

Compare JX-3 at 3–4, *with* JX-3A at 3–4.

The redacted Schedule 1 to the HACK Supplement was provided to ETFMG on October 10, 2014, PX-93, before execution of the December 2015 Sublicense Agreement. The full, unredacted versions were made available to ETFMG on March 16, 2016, after execution of the December 2015 Sublicense Agreement. PX-142.

iii. Nasdaq's Entitlement to HACK Profits Under the Index License Agreement and Sublicense Agreement

For two independent reasons, the Court concludes that ETFMG was contractually obligated, under the Index License Agreement and Sublicense Agreement, to pay HACK profits to Nasdaq.

First, the Court holds, the Schedule to the Index License Agreement and the HACK Supplement to the Schedule entitled ISE (later Nasdaq) to ETF fund profits, and ETFMG adopted and bound itself to these terms in entering into the Sublicense Agreement.

As noted, the original Schedule to the Index License Agreement explicitly described that ISE was to finance the launch and operation of the original PureShares ETFs—GEMS, MSXX, and SILJ—in return for a share of the Fund profit. Although the version of the Schedule that was made available to ETFMG redacted the specific "tiered fee schedule" that governed the division of profits, the *unredacted* portion of the Schedule furnished to ETFMG stated that ISE was "entitled to share" in the fund profit and, on a quarterly basis, was to receive its share of fund profit along with a statement from PureShares explaining how that fund profit was to be calculated. JX-1A at 20. These unredacted provisions unambiguously incorporated, and notified ETFMG of, ISE's entitlement, along with PureShares, to profits from MSXX, GEMS, and SILJ.

The HACK Supplement to the Schedule, although subject to heavier redactions, amply conveyed the same: that ISE and PureShares had contracted to share the fund's profits. The redacted HACK Supplement, like the Schedule governing the original ETFs, stated that "[e]ach quarterly payment of ISE's share of the Shared Profit shall be accompanied by a statement prepared by PureShares setting forth the calculations on which the payment is based and *shall be paid to ISE within thirty (30) days after the end of each quarter*. For the avoidance of doubt, the

respective percentages of Shared Profit shall be determined on a quarterly basis and applied to the previous calendar quarter." JX-3A at 4 (emphasis added).

In light of these provisions—which were made available, in unredacted form, to ETFMG before the parties executed the Sublicense Agreement—it was unavoidably clear that the Index License Agreement, together with the Schedule and HACK Supplement, entitled ISE to join with PureShares, its Index License Agreement counterparty, in HACK profits. ETFMG does not seriously dispute that such documents gave that understanding.

Instead, ETFMG argues that a textual provision of the Sublicense Agreement excludes from *ETFMG*'s obligations all obligations captured in the Schedule and HACK Supplement. Thus, ETFMG contends, even though it well knew that PureShares and ISE had again contracted to divide the ETF profits, as to HACK, it did not take on any obligations vis-à-vis ISE relating to such profits.

ETFMG's basis for this argument is paragraph 2 of the Sublicense Agreement. It provides that ETFMG "acknowledges that it has received and read a copy of the [Index] License Agreement (excluding the Schedule setting forth the license fees) and agrees to be bound by all the provisions thereof." JX-2 § 2. ETFMG argues that the language "excluding the Schedule setting forth the license fees" removed from the obligations that ETFMG undertook those contained in the entire Schedule, which contained the discussion of the profit-sharing agreement between ISE and PureShares.

The provision on which ETFMG seizes does not bear that weight. Quite the contrary, when viewed in its entirety, paragraph 2 of the Sublicense Agreement assists *Nasdaq*'s case. That is because it textually bound ETFMG to the provisions within the Index License

Agreement. It cinches the question of whether ETFMG meant to take on the obligations expressed in that agreement. ETFMG did.

The clause in paragraph 2 on which ETFMG relies—the one bounded by parentheses—is inelegantly written. Its construction was the source of considerable disagreement among counsel. However, viewed in the context of the overall Sublicense Agreement and the undisputed facts, the clause's function is clear. It is, as Nasdaq argues, an attempt to describe factually the portion of the Index License Agreement that ETFMG had not "received and read." That function is clear because these two verbs ("received and read") immediately precede the parenthetical clause. The clause thereby factually reports, as is undisputed, that although ETFMG had otherwise read the agreement, there was an exception: the parts of the Schedule that had been redacted.

The clause, however, is inexact in synopsizing that which was redacted. The clause can easily be read to suggest that ETFMG had not received or read any part of the Schedule to the Index License Agreement. In fact, as all parties agree, that was not so. ETFMG undisputedly had seen much of the Schedule, including the unredacted portions recounting the fact that PureShares and ISE would divide profits. The words "the Schedule setting forth the license fees" appear to have been an imperfect way to refer to the redactions, the heart of which was the tiered schedule within the Schedule that had been blacked-out so as to conceal the specific division of profits between ISE and PureShares. Viewed in context of the undisputed facts, therefore, the clause is best read as Nasdaq urges: to exempt from ETFMG's assumed obligations those contained only in the redacted, and hence unread, parts of the Index License Agreement.

So construing the parenthetical clause, as a shorthand for the material redacted from ETFMG's view, the clause does not avail ETFMG. That is because the unredacted provisions of the Schedule and the HACK Supplement that ETFMG received conveyed the essential point here: that Nasdaq had a contractual right to share with PureShares in fund profits. These included provisions stating that ISE and PureShares "agree that they shall each be entitled to share, on a fixed basis, all of the remaining profit, if any, generated from the PureFunds [ETFs]. ISE and PureShares shall be entitled to respective percentages of all such Shared Profit in accordance with the following tiered fee schedule." JX-1A at 24. And as to the HACK Supplement to the Index License Agreement, while it was more heavily redacted, ETFMG received a provision in which PureShares agreed that "[e]ach quarterly payment of ISE's share of the Shared Profit shall be accompanied by a statement prepared by PureShares . . . and shall be paid to ISE within thirty (30) days after the end of each quarter." JX-3A at 4.

These unredacted provisions made clear that, by entering into the Sublicense Agreement, ETFMG was acknowledging and adopting the contractual proposition that ISE shall "be entitled to share, on a fixed basis, all of the remaining profit," and that such profit "shall be paid to ISE within thirty (30) days after the end of each quarter." In other words, ETFMG embraced that—while it did not know the specific allocation of profits—Nasdaq had a contractual right to a share of HACK profits.

ETFMG's contrary construction of the clause to exclude the entire Schedule from the scope of its agreement is flawed. Textually, it does not seamlessly follow, because the word "provisions" in paragraph 2 modifies the Index License Agreement to the extent received and read by ETFMG. It does not modify the specific description of those materials contained in the parenthetical. And ETFMG's interpretation does not accord with the reality of the unredacted

documentation it was provided because, as ETFMG admits, it had received much of the Schedule in unredacted form.

The Court accordingly adopts, with Nasdaq, a construction of paragraph 2 to the effect ETFMG was "agree[ing] to be bound by all the provisions" of the Index License Agreement, save those that ETFMG had not received and read. On that construction, ETFMG was contractually bound to honor Nasdaq's entitlement to share with PureShares in HACK profits, because that entitlement appeared in the unredacted provisions of the agreement.

Second—independent of the analysis above—the Court holds that ETFMG is obligated to pay to Nasdaq HACK profits because such were the "royalty" to which ISE was entitled, as provided for in the Index License Agreement.

The Index License Agreement provides that ISE "grant[ed] to PureShares a non-transferable, non-exclusive, *royalty-bearing* license" in exchange for a license to use ISE's intellectual property. JX-1 at 1–2 (emphasis added). That term is not contained in the Schedule, and so there is no argument that paragraph 2 of the Sublicense Agreement excluded it from the obligations undertaken by ETFMG.

The plain meaning of the term "royalty-bearing" imposes an obligation on PureShares to make payments to ISE/Nasdaq. *See Royalty*, Black's Law Dictionary (11th ed. 2019) ("A payment . . . made to an author or inventor for each copy of a work or article sold under a copyright or patent. Royalties are often paid per item made, used, or sold, or per time elapsed."); *see also Summit Health, Inc. v. APS Healthcare Bethesda, Inc.*, 993 F. Supp. 2d 379, 390 (S.D.N.Y. 2014) ("Words and phrases are to be given their plain and ordinary meaning, and New York courts will commonly refer to dictionary definitions in order to determine that meaning." (citing *Mazzola*, 533 N.Y.S.2d at 297).

As Nasdaq argues, viewed in the context of the larger agreement, the payment obligation undertaken by PureShares that is captured by the phrase "royalty-bearing" can refer only to the PureShares obligation to pay ISE profits, if any, generated by successful ETFs. The Index License Agreement does not reference any other form of payment by PureShares to ISE, *e.g.*, a determinate fee. And this common-sense reading was confirmed by the trial evidence: The Schedule attached to the Index License Agreement demonstrates that the prospect of fund profit to ISE was the monetary benefit that ISE obtained from the PureShares ETF venture. And PureShares' Chanin and ISE's Monaco both testified that they so understood the reference to ISE's "royalties" in Index License Agreement to refer to such profits. Tr. at 117–18 (Chanin); *id*. at 746–47 (Monaco) ("Q: So, Mr. Monaco, you would agree that royalty means a portion of the revenue generated by the ETFs launched pursuant to this agreement? A: Yes."). The "royalty-bearing" provision of the Index License Agreement therefore entitles ISE (later Nasdaq) to a share of fund profits, the precise allocation of which was set forth in the Schedule.

ETFMG does not seriously dispute that the term "royalty-bearing" referred to the profits ISE stood contractually to gain from the PureShares ETFs. But it argues that the Sublicense Agreement did not bind it to that obligation, such that it was contractually at liberty to deny those profits to ISE. Specifically, ETFMG argues, although the Index License Agreement between ISE and PureShares refers to a "royalty-bearing" license, that phrase does not appear in the Sublicense Agreement, to which ETFMG *is* a party. The Sublicense Agreement, it notes, describes ETFMG as receiving a "non-exclusive and non-transferable sublicense."

That locution describing ETFMG's sub-license is of no moment. It does not repudiate that the license granted by ISE to PureShares was royalty-bearing. And as reviewed above, in the very next section of the Sublicense Agreement, Section 2, ETFMG "acknowledges that it has

received and read a copy of the [Index] License Agreement (excluding the Schedule setting forth the license fees) and agrees to be bound by all the provisions thereof, including, *without limitation*, those provisions imposing any obligations on PureShares." JX-2 § 2 (emphasis added). The "royalty-bearing" term of the Index License Agreement plainly bound PureShares, and ETFMG agreed to assume, "without limitation," all of the obligations the Index License Agreement imposed on PureShares. That necessarily included PureShares' obligation to make royalty payments to ISE, which, in the context of the Index License Agreement, meant ETF profit.

A contrary construction, enabling ETFMG to avoid the obligation to transmit payments of profit to ISE, would, for multiple reasons, render the Sublicense Agreement economically irrational. *See Lanmark Grp., Inc. v. N.Y.C. Sch. Constr. Auth.*, 50 N.Y.S.3d 349, 351 (1st Dep't 2017) ("A 'contract should not be interpreted to produce a result that is absurd, commercially unreasonable or contrary to the reasonable expectations of the parties.'" (quoting *Matter of Lipper Holdings v. Trident Holdings*, 766 N.Y.S.2d 561, 562 (1st Dep't 2003))). In the first place, ETFMG would be receiving a valuable product (a sublicense to intellectual property) for free, and ISE would be surrendering valuable rights with no return. Such a result would not make sense from the perspective of ISE, a principal business line of which involved licensing indexes in return for money. More fundamentally, ETFMG's argument that the parties intended to eliminate any entitlement to profits by ISE blinks the entire business structure between the parties. As reviewed above, and as well known to ETFMG, PureShares and ISE had joined together in the PureShares ETF business venture, with ISE to provide the capital to launch and operate the ETFs in return for a share of profits. ETFMG was the service provider that administered the ETFs in return for a fee. The Sublicense Agreement was intended to facilitate

the venture by providing ETFMG with the sublicense necessary to operate the ETFs. A construction that eliminated ISE's entitlement to profits—and/or that freed ETFMG to deny these to ISE—would fly in the face of the uniform expectation of the parties and "frustrate[] [ISE's] explicit central purpose of entering into the transaction." *IBM Credit Fin. Corp. v. Mazda Motor Mfg. (USA) Corp.*, 665 N.Y.S.2d 645, 645 (1st Dep't 1997).

The Court therefore holds that the Index License Agreement and Sublicense Agreement unambiguously entitle Nasdaq, as successor to ISE, to HACK fund profits from ETFMG.

But, even assuming that a material provision of either contract was ambiguous, Nasdaq identifies compelling extrinsic evidence that ETFMG had a payment obligation to ISE under the Index License Agreement and Sublicense Agreement. *Duane Reade*, 950 N.Y.S.2d at 11 ("[E]xtrinsic evidence may not be considered unless the document itself is ambiguous.").

First, Nasdaq points to the HACK Prospectus, which ETFMG filed with the SEC before HACK's launch. In this Prospectus—which was subject to antifraud securities laws[29]—ETFMG described the parties' roles, consistent with the private-label model. As to ISE, ETFMG wrote that "[t]he ISE [HACK Index] is a product of ISE. [ETFMG] has entered into a license agreement pursuant to which [*ETFMG*] *pays a fee to use the ISE Index* and the marketing name and licensed trademark of ISE." PX-21 at 11 (emphasis added). ETFMG made identical representations in the prospectuses filed in connection with the other funds covered by the Sublicense Agreement. *See* PX-22; PX-23. Insofar as the only payment due to ISE under the Index License Agreement was its share of fund profit, the reference, in the HACK and other

[29] *See* Section 17(a) of the Securities Act of 1933; Section 10(b) of the Securities Exchange Act of 1934.

prospectuses, to the payment of a "fee" for the use of ISE's index necessarily refers to HACK profits.

Second, Nasdaq points to ETFMG documents adduced in discovery in which ETFMG acknowledged it was obligated to pay ISE/Nasdaq under the Index License Agreement and Sublicense Agreement. On February 18, 2016, ETFMG received a letter from the SEC inquiring about a possible conflict of interest on the part of the ETFMG Trust Board in connection with ETFMG's fees for SILJ and HACK. The letter asked that "the [ETFMG] Trust immediately provide the Board with complete information regarding backstops made by ISE and the collection of Shared Profit and determine whether the Trust's relationship with such entities warrants further evaluation." PX-73 at 00157140. In response to this letter, ETFMG's Karol emailed Masucci and suggested that ETFMG provide an unredacted version of the Index License Agreement and HACK Supplement to the Trust Board. PX-142. Karol described those documents as "a simple contract with *duty to pay* and right to receive." *Id.* (emphasis added). Karol's admission lends further support for the conclusion that, to the extent the Index License Agreement or Sublicense Agreement are ambiguous, those contracts imposed a duty on ETFMG to pay ISE—and not retain—profits from HACK.

b. The HACK PSA

Even if the Index License Agreement and Sublicense Agreement did not oblige ETFMG to pay HACK profits to ISE as opposed to keeping them—and the Court has held that they did—the HACK PSA independently imposes such an obligation on ETFMG, because ISE was a

third-party beneficiary of that agreement.[30]

As the Court has explained above, the HACK PSA necessarily obliged ETFMG to remit fund profits to its counterparty, PureShares. *See supra* pp. 73–78. Although the HACK PSA did not contain an explicit such directive, that duty was necessarily implicit in the finite defined fees (organizational and monthly) that ETFMG, under the PSA, was to obtain in consideration for the services it provided to its client, PureShares.

In any event, even if the absence of a provision in the HACK PSA explicitly obliging ETFMG to relinquish and not retain fund profit were viewed as giving rise to an ambiguity, the extrinsic evidence on that point is conclusive. The parties' conduct and words and the overall business relationship all demonstrate a uniform understanding that HACK profits did not belong to ETFMG.

First, from the point that HACK became profitable, ETFMG regularly sent the fund's monthly profits to ISE, and later to Nasdaq. ETFMG did so until the business relationship broke down. Tr. at 793–94 (Monaco).

Second, responsible officers of all parties acknowledged that the profits did not belong to ETFMG. ISE's Monaco and PureShares' Chanin both testified that they would never have entered into the HACK PSA without the expectation that ETFMG would remit HACK profits. *Id*. at 724–25 (Monaco); 189–190 (Chanin). And ETFMG's president Karol, a trained lawyer, acknowledged that the HACK PSA obliged ETFMG to pay out profits to the fund's creators. In a June 2016 internal email analyzing, in light of the forthcoming acquisition of ISE by Nasdaq,

[30] While the Index License Agreement and Sublicense Agreement are governed by New York law, the HACK PSA is governed by Delaware law. Dkt. 154 at 34; Dkt. 155 at 13. The general principles of Delaware contract law are in accord with those of New York law reviewed above. *See Viking Pump, Inc. v. Century Indem. Co.*, 2 A.3d 76, 90 (Del. Ch. 2009) (New York and Delaware "apply the same general principles of contract interpretation").

the contracts governing the relationship between ISE, PureShares, and ETFMG, ETFMG's Karol mused on whether it should continue to send HACK profits to ISE or to send them instead to PureShares. He wrote: "[W]e have been paying HACK profits to ISE even though *the PSA states that payments should go to PureFunds*. . . . If it was in our interest to take away the payment from the ISE[,] we could pay PureFunds *as required by the PSA* . . . . [Or] we have a good argument under Delaware law . . . that the *PSA was modified by conduct*." PX-232D at 00098070 (emphasis added). Karol's email bespeaks a clear recognition that, whichever the recipient, ETFMG had a payment obligation with respect to HACK profits and could not keep these for itself.

And, third, ETFMG's payment obligation followed from the "white-label" model to which all parties understood they were operating. Under that model, as ETFMG put the point, it "launch[es] ETF[s] based on third party investment ideas with the third party paying all of the costs until the fund reaches the break-even point" and paying "most of the profit" to the third-party sponsor if the ETF succeeds. PX-72 at 00041188 (internal quotation marks omitted). *See Emerging Europe Growth Fund, L.P. v. Figlus*, C.A. No. 7936 (TMR), 2018 WL 6446467, at *5 (Del. Ch. Dec. 10, 2018) ("If a contract is ambiguous, a 'court may then look to extrinsic evidence to uphold to the extent possible the *reasonable shared expectations of the parties at the time of contracting*.'" (emphasis added) (quoting *Comrie v. Enterasys Networks, Inc.*, 837 A.2d 1, 13 (Del. Ch. 2003))).

The issue then is whether ISE, a non-party to the HACK PSA and Nasdaq's predecessor in interest, was a third-party beneficiary to that contract. The Court holds that ISE clearly was.

Under Delaware law, a party "qualifies as a third party beneficiary" with standing to pursue a contract claim if it is an "intended beneficiary," as opposed to an "indirect beneficiary."

Empire Fire & Marine Ins. Co. v. Miller, C.A. No. CPU4-09-005649 (AJS), 2012 WL 1151031, at *5 (Del. Com. Pl. Apr. 5, 2012). A beneficiary of a promise is an "intended beneficiary if recognition of a right to performance in the beneficiary is appropriate to effectuate the intention of the parties and either (a) the performance of the promise will satisfy an obligation of the promisee to pay money to the beneficiary; or (b) the circumstances indicate the promisee intends to give the beneficiary the benefit of the promised performance." *Comrie v. Enterasys Networks, Inc.*, C.A. No. 19254 (SPL), 2004 WL 293337, at *3 n.25 (Del. Ch. Feb. 17, 2004) (quoting Restatement (Second) of Contracts § 302 (1981)). Intended beneficiaries need not "be specified in the contract." *Willis v. City of Rehoboth Beach*, C.A. No. 03C-11-016 (RFS), 2004 WL 2419143, at *2 (Del. Super. Ct. Oct. 14, 2004).

These standards are comfortably met here with respect to ISE. As reviewed in detail above, the record shows that PureShares and ETFMG, the parties to the HACK PSA, intended and expected that ISE would benefit from the HACK PSA, in just the same way that ISE stood to benefit from the predecessor PureShares ETFs. At the time PureShares and ETFMG entered into the HACK PSA, all parties understood that ISE was PureShares' venture partner in the development of the thematic PureShares ETFs, of which HACK was the latest. Tr. at 760 (Monaco); 135–136 (Chanin); 1314 (Masucci). And, inherent in the structure of the business relationship and ETFMG's "private-label" business model, all the parties understood that ISE would provide capital to launch and operate the ETFs in return for a share of the profits. *Id*. at 757–58, 765–67 (Monaco); 1304–05 (Masucci); 195; 199–200 (Chanin). The record also demonstrates that, between the period when HACK became profitable and when its relationship with Nasdaq broke down, ETFMG sent HACK fund profit directly to ISE, rather than PureShares, the nominal counterparty on the HACK PSA.

The evidence, in sum, uniformly demonstrates ETFMG's recognition that PureShares and ISE were business partners as to all the PureShares ETFs and that it had obligations to both, not just to PureShares, including with respect to the provision of fund profits. ISE's non-signatory status with respect to the HACK PSA does not bespeak the contrary. As the evidence at trial made clear, ISE absented itself from that document for a reason of optics, not substance: ISE was reluctant to publicly identify itself as an ETF sponsor and investor. But ISE was enmeshed and integrated in HACK as much as on the other funds, and participated with PureShares and ETFMG in the negotiations surrounding the creation of the HACK PSA. *See* PX-80; PX-83; PX-87; PX-88; PX-88A; PX-88B.

The Court therefore holds that ISE was a third-party beneficiary of the HACK PSA. It, along with PureShares, had the right to sue ETFMG under that agreement for its refusal to relinquish HACK fund profits.

III. Findings of Fact: The Contractual Entitlement to SILJ and IPAY Profits

Although the dispute between Nasdaq and ETFMG centers principally around profits generated by the HACK ETF—far and away the most profitable of the PureShares ETFs—Nasdaq also claims that ETFMG breached its obligation to pay Nasdaq the profits from the two other ETFs, SILJ and IPAY, that had yielded monthly profits prior to July 2017, when Nasdaq and ETFMG parted ways.[31] It is thus necessary to review, as a predicate to Nasdaq's claim to the profits from these ETFs, the contractual rights to such profits. For the reasons set forth below, the Court finds that Nasdaq is entitled to profits generated from both SILJ and IPAY.

[31] As noted, two other funds, GAMR and IFLY, later became profitable, but only after Nasdaq, on June 16, 2017, had directed that each be terminated—a directive with which ETFMG did not comply. *See supra* pp. 50–51. Nasdaq claims that ETFMG's continued operation of these funds was a breach. The Court considers this claim of breach below, *see infra* pp. 112–14, and thereafter considers Nasdaq's theory that it is entitled, as damages, to keep the profits ETFMG made from its unauthorized operation of these funds, *see infra* pp. 152–54.

A. SILJ

Nasdaq argues that ETFMG wrongfully retained profits from SILJ. Because SILJ was one of the original PureShares ETFs, the trilateral relationship regarding SILJ was governed by the Index License Agreement and the BMA. As explained above with respect to HACK, the Index License Agreement and Sublicense Agreement obliged ETFMG to pay the profits generated by successful ETFs. However, the BMA, by its terms, stated that it would expire on October 18, 2015. JX-12B at 3. The BMA further provided that it could be renewed from year to year, "provided that such renewal shall be specifically approved at least annually (a) by the Trustees of the Fund, or by the vote of a majority of the outstanding voting securities . . . of the Fund, and (b) by a majority of the Trustees who are not parties to the agreement nor interested persons." *Id.*; Tr. at 329–30 (Chanin). SILJ first became profitable in July 2016, after the BMA's October 18, 2015 expiration date.

ETFMG contends that the BMA was not renewed in a manner consistent with the formal process set out in the BMA, that Nasdaq therefore is not entitled to profits from SILJ, and that ETFMG was therefore allowed to keep them. Nasdaq counters that the parties, through their conduct, mutually agreed to renew the BMA, such that Nasdaq retained a contractual right to seek profits from SILJ generated after October 2015. It argues that the parties, after the October 18, 2015 deadline, continued to act as though the BMA were in effect, and that this course of conduct either gave rise to an implied contract or bespoke an oral agreement with respect to SILJ.

A contract may be implied on the basis of the parties' conduct. *See Airday v. City of New York*, 310 F. Supp. 3d 399, 421 (S.D.N.Y. 2018) (citing *Parsa v. State of New York*, 64 N.Y.2d 143, 148 (1984)). "Whether an implied contract was formed involves factual issues regarding the parties' intent and the surrounding circumstances. The existence of an implied contract is

ordinarily determined by an objective test; that is, whether a reasonable person would think the parties intended to make a new binding agreement." *Id*. Further, "parties' conduct after the expiration of [a] written contract, including [a party's] continued rendition of services, [the other party's] acceptance of those services and . . . payment . . . in accordance with the terms of the written contract" can "establish a contract implied in fact with substantially the same terms and conditions as embodied in the expired written contract." *Watts v. Columbia Artists Mgmt. Inc.*, 591 N.Y.S.2d 234, 236 (3d Dep't 1992); *see also Martin v. Campanaro*, 156 F.2d 127, 129 (2d Cir. 1946) ("When an agreement expires by its terms, if, without more, the parties continue to perform as theretofore, an implication arises that they have mutually assented to a new contract containing the same provisions as the old." (footnote omitted)). When an agreement is of an indeterminate length, courts imply an agreement of "a reasonable time period." *Guilbert v. Gardner*, 480 F.3d 140, 149 (2d Cir. 2007).

Here, the evidence firmly establishes that after the October 18, 2015 deadline, the parties continued to perform as though the BMA remained in effect. It is true that on October 19, 2015, ETFMG filed with the SEC a Supplement stating that the Business Management Agreement with PureShares had expired. DX-50. However, after this date, ETFMG continued to send monthly statements to ISE for SILJ, without interruption, and ISE continued to pay expenses generated in connection with the operation of SILJ. *See* PX-552–60; Tr. at 462 (Chanin). Indeed, as late as May 2016—well after the October 18, 2015 termination date, and shortly before SILJ first generated a profit—ETFMG requested, and ISE paid, a $45,000 expense for SILJ. PX-131; Tr. at 965–67 (Monaco). And ETFMG continued to market SILJ as a PureShares ETF. It was only when SILJ first turned a profit in July and August 2016, and after relations with ISE successor Nasdaq began to sour, that ETFMG began to act as though the BMA were no longer in

effect. It ceased sending ISE/Nasdaq statements regarding SILJ's performance, and never sent Nasdaq or PureShares the profits generated by SILJ.

The parties' conduct in the wake of the October 18, 2015 deadline establishes that they intended to continue the terms of the BMA, and so formed an implied contract extending the terms of the BMA. Notwithstanding ETFMG's SEC filing, ETFMG affirmatively decided to continue with business as usual, sending statements, seeking approval for expenses, continuing to market SILJ as a PureShares product, and even requesting financial support to continue to operate the ETF. In light of these facts, the Court concludes that the parties "mutually assented to a new contract containing the same provisions as the old," *Martin*, 156 F.2d at 129, including those provisions obliging ETFMG to pay profits from this fund (as from the other PureShares ETFs) to ISE/Nasdaq.

B. IPAY

The contractual analysis with respect to the right to profits from IPAY is, in contrast, straightforward. The IPAY PSA expressly obliges ETFMG to pay fund profits to Nasdaq. Nasdaq's predecessor, ISE, was expressly included as a party to the IPAY PSA, because, by the time the parties entered into that agreement, ISE was no longer concerned about being publicly associated with the financing of ETFs. Tr. at 866–67 (Monaco). Therefore, unlike the HACK PSA, there is no dispute that Nasdaq is a party to the IPAY PSA. And, the IPAY PSA expressly states that ETFMG was to pay "all Fund Profits . . . within ten (10) days of such Fund Profit being made available to ETFMG or the administrator of the Funds." JX-6 § 8(d). The IPAY PSA also provides that ISE and PureShares had a "right to receive Fund Profit." *Id.* § 8(e). Accordingly, Nasdaq had a right to the profits generated by the IPAY ETF.

IV. Conclusions of Law: Breach of Contract

Having set out the facts, including the contractual arrangement between Nasdaq and ETFMG and Nasdaq's contractual rights to profits from the PureShares ETFs including HACK, IPAY, and SILJ, the Court turns next to the parties' claims of breach of contract. The Court first addresses Nasdaq's theories of breach, and then ETFMG's.

A. Nasdaq's Breach of Contract Claims

Nasdaq principally argues that ETFMG breached its contractual obligations with respect to the three profitable PureShares ETFs—HACK, IPAY, and SILJ—by keeping for itself the profits from these funds. For the reasons reviewed above, the Court has concluded that Nasdaq had a right to these profits: the Index License Agreement and Sublicense Agreement, governed by New York law, entitled Nasdaq to HACK and SILJ profits; the HACK PSA, governed by Delaware law, independently entitled Nasdaq to HACK profits; and the IPAY PSA, governed by Delaware law, independently entitled Nasdaq to IPAY profits. The Court considers first Nasdaq's argument that ETFMG's retention of HACK and IPAY profits was a breach of contract, and ETFMG's various counterarguments. The Court separately then considers the arguments and counterarguments as to whether ETFMG's retention of SILJ profits was a breach of contract.

The Court then considers Nasdaq's claim of breach in connection with GAMR and IFLY, to wit, that ETFMG's refusal to terminate those ETFs as directed in June 2017 was a breach of contract.

1. ETFMG Breached its Duty to Pay ETF Fund Profits

a. HACK and IPAY

Nasdaq argues that ETFMG breached its contractual duties as to HACK and IPAY in January 2017, when ETFMG ceased paying Nasdaq the profits generated by these funds.

ETFMG offers two counterarguments. Principally, ETFMG argues that any duty it had to pay fund profits to Nasdaq (at least as to HACK) was governed by a separate oral agreement, which ETFMG was permitted to and did terminate. The Court, above, has rejected that argument as fanciful. Secondarily, ETFMG argues that, assuming Nasdaq's rights to profits were governed by written contracts—as the Court has found—ETFMG, for various reasons, properly terminated those contracts effective July 31, 2017, entitling it to profits yielded from those funds thereafter.[32] In light of the Court's rejection of ETFMG's first argument, the Court focuses here on the second.

Under New York law, a cause of action for breach of contract requires "(1) the existence of an agreement, (2) adequate performance of the contract by the plaintiff, (3) breach of the contract by the defendant, and (4) damages." *Eternity Glob. Master Fund Ltd. v. Morgan Guar. Tr. Co. of N.Y.*, 375 F.3d 168, 177 (2d Cir. 2004); *accord Palmetto Partners, L.P. v. AJW Qualified Partners, LLC*, 921 N.Y.S.2d 260, 264 (2d Dep't 2011). A breach of contract "is the unexcused failure" to "carry[] out the contract by doing what it requires or permits." *D & N Boening, Inc. v. Kirsch Beverages, Inc.*, 63 N.Y.2d 449, 456 (1984). Delaware law is in accord with these general principles. *See Sorantino v. Newton*, C.A. No. N18C-10-022 (ALR), 2019

[32] Even if valid, ETFMG's argument that it was entitled to terminate its contracts as to these ETFs would not entitle ETFMG to retain the profits these ETFs generated prior to termination. Indeed, ETFMG conceded shortly before trial that, even under its oral agreement theory, it had been required to pay Nasdaq the HACK profits earned before the effective date of its purported termination, *i.e.*, June 30, 2017. As reflected above, ETFMG had retained profits for HACK dating to January 2017, and for IPAY dating to December 2016. ETFMG separately appears to concede that, were the Court to find (as it has) that Nasdaq's right to profits was governed by written agreement(s), then ETFMG would be contractually liable to Nasdaq for HACK and IPAY profits accrued before July 31, 2017. Dkt. 154 at 39, 56. In all events, whether or not such pre-termination liability is conceded, the Court's finding of a contractual entitlement by Nasdaq to the profits from HACK and IPAY makes ETFMG's pre-termination retention of these profits contractually indefensible.

WL 2355018, at *1 (Del. Super. Ct. June 4, 2019) (to establish breach of contract, plaintiff must show "(1) existence of an express or implied contract; (2) breach of an obligation imposed by the contract; and (3) damages incurred as a result of the breach. An action for damages is the most fundamental remedy for breach of contract. To recover damages in connection with the alleged breach of contract, the plaintiff must demonstrate substantial compliance with all provisions of the contract." (internal quotation marks and footnotes omitted)).

In defending against Nasdaq's claim for breach of contract, ETFMG argues that although it ceased to pay fund profits for HACK and IPAY—which, the Court finds, breached one of its core duties under the written contracts governing the parties' relationship—Nasdaq's and PureShares' conduct supplied grounds for ETFMG to terminate, to cease thereafter paying fund profits to Nasdaq, and to retain these profits for itself.

As to the HACK and IPAY PSAs, ETFMG contends that those agreements were terminable because, in ETFMG's view, Chanin, of PureShares, and Nasdaq engaged in behavior that threatened to disrupt or impair the operation of the ETFs.[33] Both PSAs state that the "Client," defined to include both PureShares and ISE/Nasdaq, "shall not take any action, or fail to take any action" that would reasonably be expected to "result in a material violation [of the PSA] or adversely affect the operations of the Trust or the Funds." JX-6–10. As to Chanin, ETFMG claims that he, in early 2017, engaged in three acts likely to "adversely affect the operations" of the funds. First, Chanin allegedly attempted to thwart the Board's decision to

[33] In its post-trial briefing, Nasdaq argues that Chanin's conduct is irrelevant to Nasdaq's ability to recover on its breach of contract claim. Dkt. 155 at 32. ETFMG responds that because the PSAs prohibit the "Client," defined to mean both PureShares and ISE/Nasdaq, from taking action that could adversely affect the Trust or the ETF funds, misconduct from one client—*i.e.*, Chanin of PureShares—would be grounds to terminate the PSAs with respect to both PureShares *and* Nasdaq. Because the Court concludes that Chanin's conduct did not give ETFMG grounds to terminate the PSAs, it need not resolve this dispute.

reduce the HACK management fee and to switch distributors, including by threatening to sue the Board and its Trustees. Second, Chanin purportedly engaged in marketing activity without legal authorization after refusing to transfer his securities sale license to the new statutory distributor. Finally, Chanin brought suit in New Jersey against ETFMG and the Trustees seeking injunctive relief.

As to Nasdaq, ETFMG contends that its conduct provided sufficient, independent grounds to terminate the PSAs. In particular, it argues that Nasdaq failed to address its purported conflict of interest, insofar as Nasdaq maintained a cybersecurity index that it licensed to a competitor product to HACK; that Nasdaq failed to address ETFMG's concerns about the implied liquidity of the HACK index; and that Nasdaq attempted to interfere with the Trust's decision regarding the HACK management fee and delayed making routine payments to ETFMG. ETFMG argues that it set forth these concerns in a June 2, 2017 letter to Nasdaq, that Nasdaq failed to cure its purported violations, and that this conduct justified ETFMG in terminating the PSAs and in keeping all profits from those PSAs generated after July 31, 2017.

ETFMG's arguments are unpersuasive.

In the first place, even if ETFMG had been justified in terminating the PSAs, which prohibit PureShares and ISE/Nasdaq from taking any action that would "adversely affect" the operations of the funds, it does not follow that ETFMG would be justified in terminating the Index License and Sublicense Agreements, which *independently* entitle Nasdaq to fund profits. ETFMG never asserted it could terminate the Index License and Sublicense Agreement based on

Chanin's or Nasdaq's behavior.[34] And no contract entitled ETFMG, a service provider whose compensation was contractually defined under the agreements, to keep the funds' profits, thereby augmenting its compensation (massively, in the case of HACK). ETFMG's claim to keep fund profits exploited the fact that, by virtue of its operational role administering the PureShares ETFs, it was in physical possession of monthly fund revenues. But no contract entitled it to engage in a game of "finders keepers" with fund profits in the event of a breach by Nasdaq or PureShares. Its doing so was a pure power play, with no contractual basis. By keeping for itself fund profits belonging to others without a contractual basis to do so, ETFMG breached the Index License and Sublicense Agreement.

In any event, the Court holds, ETFMG's allegations of misconduct by PureShares or Nasdaq, rising to the level of material breaches justifying terminating the PSAs, are unpersuasive and border on frivolous. First, although Chanin and Nasdaq opposed the HACK management fee reduction and argued against it, their opposition to that and other changes did not constitute interference with the operation of the funds so as to "adversely affect" the operation of the Trust or the funds. ETFMG points to a series of adversarial communications from Chanin and Nasdaq in March 2017, in which both objected to the Board's impending decisions to reduce the HACK management fee and to change statutory distributors. ETFMG takes particular offense at the fact

[34] ETFMG argues in passing that, to the extent the Index License and Sublicense Agreements gave Nasdaq (and PureShares) the right to HACK and IPAY profits—as the Court has found they do—then ETFMG was justified in terminating those contracts "as a necessary consequence of Nasdaq's anticipatory repudiation of its obligation to continue providing access to necessary fund indexes" and for "Nasdaq's outrageous conduct in cutting off . . . access during trading hours to crucial index files." Dkt. 154 at 39. But none of the termination letters sent by ETFMG mentioned the Index License and Sublicense Agreements. And ETFMG's letters purporting to terminate the parties' business relationship all *predate* the August 2017 interruption of ETFMG's access to Nasdaq's index files. ETFMG does not and cannot coherently explain how any termination of the Index License and Sublicense Agreements in May to June 2017 could be justified by Nasdaq's later conduct.

of direct communications by Chanin with Trust Board members. But there is no provision forbidding anyone from PureShares or Nasdaq communicating directly with Board members to comment on, or criticize, a course of action proposed by ETFMG or under consideration by the Trust. ETFMG fails to explain how these communications represent concrete interference with the Trust's duties or the funds' operation. To the contrary, the Court finds pretextual ETFMG's claim that Chanin or Nasdaq's communications with respect to aspects of the governance or operation of the funds, which they had developed and in which they had an interest, improperly interfered with the Trust's duties or independence or the funds' operation. For example, in ETFMG's letter purporting to terminate the PSAs, ETFMG described a March 14, 2017 letter from Nasdaq objecting to the lowering of the management fee as "inappropriately confrontational" and an "apparent attempt to intimidate us." PX-202. Earlier, however, Masucci had privately remarked to Board members that the same Nasdaq letter was "encouraging" because it suggested that ETFMG had "gotten [Nasdaq's] attention." PX-190; Tr. at 1481 (Masucci). The Court finds that ETFMG did not believe its own rhetoric that Nasdaq's letter was improper, a breach, or a genuine threat to the Trust or the operation of the funds.

The Court finds similarly unpersuasive and pretextual ETFMG's characterization of Chanin's allegedly unlawful marketing activity as a breach of contractual duty. In the first place, ETFMG's allegations as to this point, made without factual diligence, were factually inaccurate. As reviewed above, on April 17, 2017, a podcast was released in which PureShares was identified as the "issuer of HACK and other funds, including IMED." PX-197; *see also* Tr. at 239 (Chanin). Although ETFMG faulted Chanin for unlawful marketing insofar as he was not a licensed representative of ETFMG, in fact, Chanin had recorded this podcast months earlier, at a time when Alps, of which he was a licensed representative, was still the funds' statutory

distributor. Tr. at 247 (Chanin). There was no impropriety in his having spoken on the podcast about the funds. The next day, on April 18, 2017, a trade publication published an article that identified Chanin as CEO of "PureFunds which operates the funds" and stated that "PureFunds also operates what could be the greatest success of the thematic category, the PureFunds Cyber Security ETF HACK." PX-197 (citing PX-198). ETFMG argued that, in the MarketWatch interview, Chanin was unlawfully marketing a separate PureShares ETF, IFLY. But, as ETFMG concedes, Chanin did not actually name that ETF during the interview. Dkt. 154 at 38. On April 21, 2017, on the basis of the release of the podcast and the MarketWatch article, ETFMG sent a letter to Chanin accusing him of engaging in marketing in violation of the securities laws. Citing these purported violations, ETFMG stated that it was terminating the HACK, IMED, and IFLY PSAs. PX-197. On April 27, 2017, ETFMG's Karol sent Chanin (cc'ing Wade and others, including ETFMG's litigation counsel) a second letter asserting that Chanin had violated the securities laws, this time in connection with IPAY. PX-200. It asserted that Chanin violated the securities laws because, in a separate podcast, "PureFunds is identified as the issuer of IPAY," and Chanin "spoke at length about IPAY and its holdings." *Id*. But once again, Chanin had recorded this podcast months earlier while he was a licensed representative of Alps, and while Alps was still the distributor for the PureShares ETFs. Tr. at 245–46 (Chanin).

The record makes clear that, independent of the inaccuracy of ETFMG's allegations with respect to Chanin's conduct, ETFMG did not sincerely believe its claim to Chanin that his acts had presented a material compliance issue. As part of its duties as investment advisor, ETFMG prepared quarterly compliance reports for the ETFMG Trust Board. PX-249A at 295036–295042. The purpose of these reports was to identify compliance issues. Although ETFMG claimed in its April 2017 letters that Chanin had violated various securities laws, and that

Chanin's conduct had adversely affected the Trust and the funds, ETFMG did not report these purportedly serious violations in its quarterly compliance report. *Id*. And at trial, when pressed by the Court, ETFMG's Karol admitted that "[there had been] no harm to the trust or the funds" at the time he wrote the letters accusing Chanin of wrongdoing. Tr. at 2058–59 (Karol).

Finally, ETFMG's claim that PureShares' New Jersey lawsuit against ETFMG breached the PSAs, or furnished grounds to terminate them, fails as well. PureShares, in the New Jersey lawsuit, brought breach of contract and related claims. As Chanin testified, PureShares sought to recover the unpaid fund profits withheld by ETFMG and sought emergency relief for the appointment of a special fiscal agent. *Id*. at 455–56 (Chanin). ETFMG argues that the appointment of such an agent would have prohibited the Board Trustees and ETFMG from carrying out their duties. Chanin testified that he sought this relief out of concern that ETFMG's accounting practices were inadequate and because, in his view, ETFMG was failing to pay PureShares the money it owed and was misleading PureShares. *Id*. at 249, 457 (Chanin). Although Nasdaq did not join Chanin in this lawsuit, no contractual provision barred Chanin from pursuing his claims through formal legal channels.

And, although ETFMG faults Chanin for seeking such relief, it is now clear that a core claim in his lawsuit—alleging that Masucci and ETFMG were wrongfully withholding HACK fund profits—was well founded. At the time the lawsuit was filed, in May 2017, ETFMG told PureShares that it had paid all fund profits to Nasdaq, and if PureShares had not received its share of the profits, then PureShares' quarrel was with Nasdaq, not ETFMG. In fact, this representation was false. It is now undisputed that, at the time of the Chanin lawsuit, ETFMG, per Masucci, had privately and deliberately decided to cease paying HACK and IPAY profits, and had wrongfully withheld such profits for months. Indeed, ETFMG acknowledged in this

litigation that the profits generated from HACK through the end of June 2017 belonged to Nasdaq and PureShares, and that it had had no right to retain them. *See supra* note 32.

ETFMG's argument as to Chanin's New Jersey lawsuit appears to be that the act of seeking legal recourse so "adversely affects" the Trust or the Funds that it provided grounds for ETFMG to terminate the business relationship, to assume ownership of the funds, and to keep all profits going forward. ETFMG's position would functionally eliminate PureShares' ability to seek legal recourse against ETFMG for misdeeds, including theft. In any event, the trial record supplied no evidence that the New Jersey action adversely affected the operation of the Trust or the Funds. Chanin's bid for preliminary relief was denied, and HACK and IPAY continue to operate profitably. To the extent that ETFMG has incurred legal costs in that litigation, which is ongoing, these do not supply a contractual basis for termination, let alone retention of another party's profits.

Finally, ETFMG argues that it was justified in terminating the PSAs because Nasdaq failed to address its purported conflict of interest with regard to a competitor ETF to HACK, and because Nasdaq failed to address ETFMG's concerns about the implied liquidity of the HACK index. Once again, the record demonstrates that these concerns on ETFMG's part did not justify termination. Simply put, no provision in any of the agreements precluded Nasdaq from licensing its separate (and differently designed) cyber-security index to another fund that might compete for customers in the cyber-security space. Nor did any provision of law or securities regulation bar such business activity.[35] Further, although ETFMG raised questions about this subject with

[35] It is, in any event, unclear why, even if legally cognizable, a claim of divided loyalties on Nasdaq's part would belong to ETFMG, whose compensation was set by contract. PureShares, which did have a substantial interest in fund profits in its role as Nasdaq's business partner in the PureShares ETFs, notably did not raise any such concerns.

Nasdaq from time to time after Nasdaq's casual regard for ETFMG became apparent in summer 2016, ETFMG's invocation of the purported conflict as a basis for termination was, the Court finds, pretextual. Shortly after ETFMG purported to terminate the PSAs and retain fund profit for itself, ETFMG sent a letter to Nasdaq seeking assurances that it would still enjoy uninterrupted access to those same indexes. On June 29, 2017, ETFMG's counsel wrote a letter to Nasdaq's counsel stating its expectation that "Nasdaq will continue to provide the ISE Indexes to ETF Managers Group for use in the Funds . . . . ETF[MG] looks forward to the index discussions Nasdaq proposed in its letters of March 14, 2017 and April 3, 2017." PX-205. Weeks later, on July 14, 2017, counsel for ETFMG contacted counsel for Nasdaq to work out a new agreement to license the indexes for the PureShares ETFs. PX-209 at 3. ETFMG's eagerness to continue, on a long-term basis, to use Nasdaq's indexes for the PureShares ETFs is in considerable tension with its grievance that Nasdaq's other business lines jeopardized HACK's growth.

In the end, the Court finds, ETFMG blatantly violated its written contracts with Nasdaq by breaching a core contractual obligation: to relinquish to Nasdaq the fund profits it owed to Nasdaq and PureShares. While cloaked initially in the language of grievance and entitlement, this act of self-help was, the Court finds, little more than an act of theft. In the case of HACK, ETFMG failed to pay profits for the month of January 2017 and every month thereafter; in the case of IPAY, ETFMG failed to pay for the month of December 2016 and every month thereafter.

To the extent that ETFMG attempts to confine its liability to the period through July 31, 2017 and not thereafter, by arguing that it properly terminated the HACK and IPAY contracts, the Court rejects that claim. ETFMG has failed to identify any conduct by either Nasdaq or

PureShares that materially violated the PSAs or "adversely affect[ed] the operations of the Trust or the Funds." JX-5 § 7(d). It offers no basis for failing to discharge its duty to pay fund profits to Nasdaq.

b. SILJ

Nasdaq next argues that ETFMG breached its obligation to pay SILJ profits immediately after Nasdaq acquired ISE, in July 2016, when SILJ first became profitable. As reviewed above, although the BMA, which governs SILJ, expired by its terms on October 18, 2015, the Court has held that the parties impliedly contracted to extend their agreement. The parties continued with business as usual, with ETFMG going so far as to request approval and financial support for the ETF as late as May 2016.

In defense of its retention of SILJ profits, ETFMG argued that the BMA expired by its terms and was not renewed. It does not otherwise make any defense of its retention of SILJ profits independent of its arguments regarding the HACK and IPAY profits, which arguments the Court has found unworthy. Accordingly, the Court holds that ETFMG's failure to pay SILJ profits breached its contractual obligations.

2. ETFMG Breached Its Duty to Liquidate GAMR and IFLY

Nasdaq also claims that ETFMG breached its contractual obligations by continuing to operate two other PureShares ETFs—GAMR and IFLY—which Nasdaq had instructed ETFMG to terminate as of July 31, 2017. Although these ETFs had never been profitable during the ETFMG-Nasdaq business relationship, their performance later improved. As damages for the breach it claims, Nasdaq seeks these ETFs' post-termination and projected future profits.

The Court first reviews the contractual relationship governing GAMR and IFLY, as well as Nasdaq's assent to the termination of that relationship. The Court then determines whether

ETFMG's continued operation of GAMR and IFLY, despite Nasdaq's direction to liquidate and wind down the ETFs, constitutes a breach of contract.

a. Relevant Contractual Obligations as to GAMR and IFLY

Prior to the July 31, 2017 termination date, Nasdaq had a clear-cut contractual right to profits, if any, generated by GAMR and IFLY. The GAMR and IFLY PSAs, each executed on November 4, 2015, expressly obliged ETFMG to pay fund profits to Nasdaq. ISE was a party to each of the two PSAs, which each expressly required that ETFMG "distribute all Fund Profits to [ISE and PureShares] within ten (10) days of such Fund Profit being made available to ETFMG or the administrator of the Funds." JX-8 § 8(d); JX-9 § 8(d). The PSAs each also provided that ISE and PureShares had a "right to receive Fund Profit." JX-8 § 8(e); JX-9 § 8(e).[36]

As reviewed above, on June 2, 2017, ETFMG sent a letter to Nasdaq purporting to terminate the PSAs for seven PureShares ETFs, including GAMR and IFLY. PX-204. At the time the letter was sent, neither GAMR nor IFLY had ever yielded a profit.

With regard to HACK and IPAY, counsel for Nasdaq replied to ETFMG, noting that these funds, "generate[] substantial monthly profits for Nasdaq and its partners who share in [fund] profits," demanding that ETFMG "rescind the termination notification[s] for [HACK and IPAY]," and warning that "Nasdaq will take all necessary legal action to enforce its rights" to those funds. PX-180A–B. By contrast, in its June 16, 2017 letters, counsel for Nasdaq acceded to the termination of the GAMR and IFLY PSAs, as well as those for FINQ, BIGD, and IMED. PX-177A–E. Although Nasdaq "disagree[d] with [ETFMG's] factual recitation" that Nasdaq

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[36] On December 2, 2015, GAMR and IFLY were also added to the list of funds covered by the Sublicense Agreement. PX-71; JX-2A. ISE and PureShares also added GAMR to the Index License Agreement by executing "Supplement 3 to Schedule I" (the "GAMR Supplement") of that agreement. DX-6 (GAMR Supplement). The Court is unaware of record evidence that IFLY was ever added to that agreement.

had breached the PSAs for these funds, counsel for Nasdaq stated that "Nasdaq will not contest your termination of the [GAMR and IFLY PSAs], and based on your termination will cease performing under [the PSAs] as of July 31, 2017."[37] PX-177C–D.

Significant here, the GAMR and IFLY PSAs each gave Nasdaq "authority to Instruct ETFMG to terminate the Fund," if that fund's AUM fell under a certain threshold level. JX-8 § 9; JX-9 § 9. As reviewed above, each fund's PSA further required that "[u]pon termination of this Agreement, the parties agree to cooperate and provide the services necessary to wrap up and liquidate the Fund(s) in an orderly and timely fashion." *Id.* In its letter replies to ETFMG, Nasdaq cited these provisions, "instruct[ing]" ETFMG "pursuant to Section 9 of [the PSAs], to terminate the IFLY [and GAMR] fund[s] because IFLY [and GAMR] ha[d] failed to meet" their AUM thresholds. PX-177C–D.

b. ETFMG's Breach as to GAMR and IFLY

Nasdaq argues that ETFMG breached the GAMR and IFLY PSAs by continuing to operate those ETFs after the agreements had been terminated and Nasdaq had instructed ETFMG to liquidate the funds. Specifically, Nasdaq claims that ETFMG breached by (i) withholding from Nasdaq the profits that GAMR and IFLY generated post-termination; and (ii) failing to wind down those two funds.

The Court rejects Nasdaq's first theory of breach. Neither IFLY nor GAMR ever yielded a monthly profit prior to the July 31, 2017 termination date of their PSAs. Before that date, ETFMG could not have breached its obligations by wrongfully withholding profits, because

[37] Nasdaq represents that it contested the termination of all seven funds. Dkt. 155-7 ¶ 269; Dkt. 97 ¶ 154. However, the letters it cites in support of that position clearly demonstrate its assent to the termination of the five funds that had not produced profits as of June 2017, including GAMR and IFLY. Nasdaq's assent is unsurprising given the evidence, reviewed above, that it intended to wind down, fund by fund, its non-profitable agreements with ETFMG to the extent it was contractually permitted to do so. *See supra* pp. 32–36.

there were none to withhold. And, as reviewed above, Nasdaq assented to the termination of these funds—and its contractual right to their profits—in its June 16, 2017 letters to ETFMG. *See* PX-177C–D. By the time that IFLY and GAMR's financial performance later improved in late 2017 and early 2018, Nasdaq had already disclaimed its contractual entitlement to the proceeds of the newly profitable ETFs. The Court therefore holds that ETFMG's failure, beginning in November 2017, to remit IFLY and GAMR profits did not breach a contractual obligation to Nasdaq. Simply put, because Nasdaq assented to the termination of the GAMR and IFLY PSAs, ordered the funds liquidated, and ceased its performance with respect to these ETFs as of July 31, 2017, Nasdaq cannot claim a contractual entitlement to profits generated by those funds after the termination date.

Nasdaq's second claim of breach—that ETFMG breached its obligations under the GAMR and IFLY PSAs by continuing to operate those funds after the termination date of July 31, 2017—is, however, persuasive. Nasdaq had a contractual right to instruct ETFMG to terminate and liquidate the GAMR and IFLY ETFs if their AUMs fell under a certain threshold level, and each fund's PSA required ETFMG (and Nasdaq) to "cooperate and provide the services necessary to wrap up and liquidate the Fund(s) in an orderly and timely fashion," in the event that the PSA governing that fund was terminated. JX-8 § 9; JX-9 § 9. Nasdaq expressly invoked that right in its letter replies to ETFMG. There, in acceding to the termination of the GAMR and IFLY PSAs, Nasdaq also "instruct[ed]" ETFMG "pursuant to Section 9 of [the PSAs], to terminate the IFLY [and GAMR] fund[s] because IFLY [and GAMR] ha[d] failed to meet" their AUM thresholds. PX-177C–D. Nevertheless, ETFMG continued to operate GAMR and IFLY.

The Court holds that the continued operation of GAMR and IFLY, after Nasdaq had assented to their termination and ordered their liquidation, breached ETFMG's contractual obligations under the funds' respective PSAs. The PSAs do not speak to the damages that might follow from a breach of this nature. The Court addresses potential damages for such a breach below. *See infra* pp. 152–54.

3. The Wholesaling Agreement

Nasdaq separately alleges that ETFMG breached the Wholesaling Agreement in various ways. Specifically, Nasdaq argues that ETFMG violated that agreement by netting unapproved or unnecessary expenses, exceeding contractual expense caps, selecting an ETFMG subsidiary to act as the statutory distributor, and, finally, by purporting to terminate ISE/Nasdaq's interest in the PureShares ETFs.

The Court's analysis focuses on Nasdaq's first theory of breach, *i.e.*, that ETFMG impermissibly engaged in netting unapproved expenses and so violated Nasdaq's preapproval rights. Three aspects of the Wholesaling Agreement are relevant here. First, the Wholesaling Agreement provides that Nasdaq must reimburse ETFMG for certain wholesaling expenses, but "[a]ll such expenses shall be agreed by ISE and [ETFMG] in advance of those expenses being incurred." JX-11 at 11. Second, Nasdaq was obligated to pay only "reasonable expenses" related to "a Wholesaler's sales and marketing duties." *Id*. Finally, the Wholesaling Agreement provided that Nasdaq would pay wholesaler compensation expenses only one month in advance at a time. *Id.* at 14. Nasdaq argues that by engaging in netting—*i.e.*, unilaterally deducting expenses from amounts owed to Nasdaq—ETFMG was able to charge Nasdaq for expenses incurred months in advance, and for expenses that Nasdaq did not preapprove. Nasdaq points to the following examples, among others, of allegedly impermissible netting activity:

- On October 18, 2016, ETFMG sent the First Netting Statement, which deducted, *inter alia*, an expense of $17,750 for a trade conference that Nasdaq had not approved. PX-221. Also in the first netting statement, ETFMG deducted a $5,731 expense that Nasdaq had already paid. *Compare* PX-221, *with* PX-121.
- On December 9, 2016, ETFMG sent the Second Netting Statement, which unilaterally netted out three months of advance wholesaler compensation, despite the contractual provision permitting it to charge only one month at a time for the upcoming month. PX-173.
- On February 28, 2017, ETFMG sent the Third Netting Statement, which charged $40,000 in unapproved wholesaler expenses and charged ETFMG for expenses that had already been paid. PX-223. ETFMG also charged for expenses that Nasdaq maintains were not covered by the agreement, including costs to market ETFs that had been removed from the wholesaling platform. Freire Aff. ¶ 52.
- On May 26, 2017, ETFMG sent the Fourth Netting Statement, which netted unapproved expenses, including $43,727 in legal expenses and other unapproved expenses for Masucci. PX-224.

Nasdaq vigorously objected to ETFMG's netting practice in real time. Indeed, the practice was a chief source of friction between Nasdaq and ETFMG in the months leading up to the final rupture of the business relationship. On October 25, 2016, shortly after receiving the First Netting Statement, Wade emailed a letter to ETFMG. Protesting the netting statement, he reiterated that Nasdaq would pay only those wholesaling expenses expressly detailed in the Wholesaling Agreement. DX-123. After the Second Netting Statement, Nasdaq again complained that the practice deprived Nasdaq of its contractual right to pre-approve wholesaling

expenses and created accounting difficulties, including to the extent that ETFMG combined multiple time periods into a single invoice. Wade Aff. ¶¶ 88, 107. Masucci responded that ETFMG's policy had long been to net payments involving different contracts. PX-176 at 24561. As explained above in the Court's factual discussion, however, this statement was false. Masucci, in fact, admitted at trial that ETFMG had never netted payments to ISE. Tr. at 1442–43 (Masucci).

Just weeks before ETFMG sent the Third Netting Statement, Nasdaq's Wade again met with Masucci and Karol of ETFMG to demand they cease netting payments and that they discuss marketing expenses with Nasdaq before incurring them. Wade Aff. ¶¶ 88, 107. On February 21, 2017, Wade sent Masucci an email summarizing important points from the meeting. These included: (a) "HACK will be brought up to date no later than Friday 2/24"; (b) ETFMG will avoid "netting," and Nasdaq will promptly pay ETFMG for billed expenses; (c) ETFMG will provide a "marketing report to Nasdaq . . . spelling out marketing activity . . . for the current month" to give Nasdaq an opportunity to weigh in; (d) ETFMG will provide a proposal to restructure the "wholesaler agreement"; and (e) Nasdaq will provide "index research around indexes that it supplies." PX-183 at 2. Masucci responded that same day; he refused to stop netting. He stated, falsely, that the netting practice "has been our policy with all of our ETF clients." *Id*. at 1.

ETFMG's practice of netting unapproved wholesaling expenses was a flagrant violation of the Wholesaling Agreement, which explicitly required preapproval of expenses. ETFMG's protestations that netting was for some reason justified are entirely unconvincing. As discussed above, at trial, Masucci defended his decision to net ETFMG's expenses against profits owed to Nasdaq on the grounds that, in his opinion, Nasdaq was a "deadbeat partner." Masucci Aff.

¶ 116. However, ETFMG's CFO Flanagan repudiated this claim, testifying that he had never been told by ETFMG that ETFMG was netting because Nasdaq had failed to make any payment required by the Wholesaling Agreement. Tr. at 1201 (Flanagan). And at trial, ETFMG did not identify any bill for an expense undisputedly covered by the Wholesaling Agreement that Nasdaq had failed to pay. The Court therefore rejects as, again, untrue Masucci's testimony as to this ostensible factual justification for netting. Instead, the Court finds that ETFMG's netting was contractually unjustified and was in square conflict with the Wholesaling Agreement, under which ISE, and later Nasdaq, had a right to approve expenses in advance. The Court finds that Masucci commenced netting out of frustration and as an act of retaliation and pique and to get Nasdaq's attention; it was, the Court finds, a crude means of expressing his discontent with Nasdaq, and of gaining extra-contractual leverage over the PureShares ETFs that ETFMG operated. Masucci testified that he had resorted to netting in part because "[i]t was very difficult to reach anybody at Nasdaq." *Id*. at 1435 (Masucci). This is not a defense to breach of contract.

ETFMG argues that the act of netting did not inherently breach the contract because "[s]etoff rights arise under the common law of equity and allow . . . entities that owe each other money to apply their mutual debts against each other." *In re Garden Ridge Corp.*, 368 F. App'x 41, 43 (3d Cir. 2010) (internal quotation marks omitted). That is no answer. The problem with ETFMG's netting practice was not the mere fact that ETFMG offset legitimate expenses against profits due to Nasdaq; it is that ETFMG offset *unapproved* expenses, thereby arrogating to itself the power to decide unilaterally, in violation of the Wholesaling Agreement, what expenses were and were not justified.

ETFMG also argues that Nasdaq's complaint, that it was deprived of the opportunity to challenge disputed charges, is groundless because most of the disputed items were of the type

that "ISE customarily approved without question." Dkt. 154 at 41–42. To the extent ETFMG is arguing that ISE and/or Nasdaq waived their preapproval rights, that argument is unavailing. Although ISE's Monaco did not require preapproval in all cases, especially "if [ISE] approved them in a prior matter," Tr. at 1100 (Monaco), there is no evidence that ISE or Nasdaq intended a blanket waiver of their preapproval rights, let alone the "clear and convincing evidence" required to show waiver of a contractual right. *Weyerhaeuser Co. v. Domtar Corp.*, 204 F. Supp. 3d 731, 740 (D. Del. 2016) (quotation omitted). To the contrary, Monaco testified that ETFMG did not have "carte blanche" authority to incur expenses, and that if ISE received an invoice it "didn't like, [it] certainly would have complained." Tr. at 1105–06 (Monaco). For its part, Nasdaq insisted on its right to preapprove expenses—a demand that ETFMG repeatedly flouted.

Accordingly, the Court holds, with Nasdaq, that ETFMG breached the Wholesaling Agreement in 2016, when it first began netting out unapproved expenses. Neither ISE nor Nasdaq waived their general preapproval rights at any time, nor was ETFMG's netting practice justified by any of Nasdaq's business practices. Rather, it was a blatant power grab by Masucci in an attempt to gain leverage over a partner that, Masucci felt, was ignoring and slighting him. Because the Court concludes that ETFMG breached the Wholesaling Agreement by netting, it need not consider Nasdaq's arguments that other, later conduct on ETFMG's part further breached the Wholesaling Agreement.

B. ETFMG's Counterclaims

ETFMG brings two counterclaims. First, it alleges that Nasdaq improperly terminated, and breached, the Wholesaling Agreement. Second, it alleges that Nasdaq breached the Index License Agreement and Sublicense Agreement by supporting a competing ETF to HACK. The Court addresses these in turn.

1. The Alleged Breach of the Wholesaling Agreement

On July 17, 2017, Nasdaq sent a letter to ETFMG stating that it was terminating the Wholesaling Agreement. ETFMG's principal counterclaim is that this termination was wrongful.

In Nasdaq's view, ETFMG had already violated the Wholesaling Agreement in multiple ways by the time Nasdaq sent its July 17, 2017 letter. Indeed, in the July 17, 2017 letter, Nasdaq alleged that ETFMG violated the agreement by operating as a distributor for funds on the platform; charging Nasdaq for funds that were never added as an exhibit to the Wholesaling Agreement; incurring and charging Nasdaq expenses without pre-approval; exceeding the annual expense cap of $50,000 without written approval; charging Nasdaq for unreasonable expenses unrelated to the Wholesaling Platform; charging Nasdaq for wholesaler salaries in excess of the annual cap set forth in an exhibit to the Wholesaling Agreement; failing to provide necessary invoices; and netting unauthorized and excessive expenses against money owed to Nasdaq for HACK profits. PX-218.

ETFMG argues, essentially, that each of these purported bases for Nasdaq's termination was pretextual. ETFMG contends that Nasdaq terminated the Wholesaling Agreement as payback for ETFMG's exercising its purported right to keep HACK profits,[38] but, in ETFMG's view, the Wholesaling Agreement was independent of any agreement regarding the payment of fund profits. Rather, ETFMG argues, the Wholesaling Agreement should "continue in full force and effect for as long as the Wholesaling Platform is in operation." JX-11 § 9(a).

ETFMG's argument rises and falls with the Court's conclusion, above, that ETFMG's practice of netting unapproved expenses violated the Wholesaling Agreement. As explained,

[38] As explained at length above, there was no such right. Nasdaq was entitled to such profits, either under the Index License Agreement and Sublicense Agreement, or under the HACK PSA.

ETFMG repeatedly ignored Nasdaq's preapproval rights under that Agreement, defied Nasdaq's repeated demands that it stop engaging in netting, and stated—falsely—that ETFMG's policy was always to net. Nasdaq thus had a proper basis to terminate the Wholesaling Agreement. ETFMG's counterclaim for breach of that Agreement therefore fails.

The Court holds, with Nasdaq, that by the time of Nasdaq's July 17, 2017 termination letter, ETFMG had already breached the Wholesaling Agreement, repeatedly and deliberately. In consequence, ETFMG's claim for breach of the Wholesaling Agreement fails.

2. The Alleged Breach of the Sublicense Agreement

ETFMG next argues that, in the weeks after ETFMG terminated the PSAs, the Sublicense Agreement remained in effect. According to ETFMG, Nasdaq violated that agreement on August 4, 2017—after ETFMG stated that it would cease paying fund profits—when ETFMG's access to information related to the indexes for GAMR and IFLY, including start-of-day files, the daily data feed, and end-of-day files, was interrupted.[39] This interruption, ETFMG contends, violated ETFMG's right, under the Sublicense Agreement, to a license to use Nasdaq's intellectual property.

Like its argument with respect to the Wholesaling Agreement, ETFMG's argument as to the Sublicense Agreement must fail because, by the time its access to index files was interrupted,

[39] In its post-trial briefing, ETFMG describes the interruption of access to index files as a breach of the Sublicense Agreement, Dkt. 154 at 24, and also as a "breach of the duty of good faith and fair dealing that denied ETFMG the benefit of its bargain under the Sublicense Agreement," *id.* at 43. The Court understands ETFMG to argue that its access to index files was guaranteed by the Sublicense Agreement. As such, it cannot sustain a separate claim for the breach of good faith and fair dealing. *See Alter v. Bogoricin*, No. 97 Civ. 0662 (MBM), 1997 WL 691332, at *7 (S.D.N.Y. Nov. 6, 1997) (dismissing good faith and fair dealing claim because "the covenant of good faith and fair dealing is not distinct from the underlying contract, and therefore, as a general rule, the cause of action alleging breach of good faith is duplicative of a cause of action alleging breach of contract" (citations and internal quotation marks omitted)).

ETFMG had already breached the Sublicense Agreement. More than a month before ETFMG's access to trading files was cut off, ETFMG had advised Nasdaq that it would keep the PureShares fund profits for itself. As the Court has explained, those funds did not belong to ETFMG. Nasdaq (and PureShares) were entitled to them under the Index License and Sublicense Agreement. *See supra* pp. 84–92. Having months earlier materially breached the Sublicense Agreement, ETFMG had no right to claim a breach of that agreement based on Nasdaq's post-breach conduct.

3. The Alleged Breach of the Duty of Good Faith and Fair Dealing

Finally, ETFMG claims that Nasdaq breached the implied covenant of good faith and fair dealing by failing to address ETFMG's concerns about Nasdaq's purported conflict of interest, given its dual roles with HACK and a competitor ETF, CIBR.[40] At the time Nasdaq was preparing to acquire ISE, Nasdaq served as the index provider for another cybersecurity ETF, CIBR. Nasdaq's cyber-security index, NQCYBR, differed from the ISE index on which HACK was based. In particular, NQCYBR did not permit the inclusion of cyber-security companies with smaller market capitalizations, whereas such companies were key components of ISE's index. Gedeon Aff. ¶ 7. ETFMG argues that Nasdaq's simultaneous affiliation with both HACK and CIBR created a conflict of interest *vis-a-vis* HACK. Such a conflict, ETFMG asserts, could have been resolved by segregating the HACK and CIBR chain of command within Nasdaq, and by working with ETFMG to address its concern that CIBR had greater implied liquidity than—and therefore a competitive advantage over—HACK. By refusing to take any

[40] The Court has previously addressed a similar claim arising out this conduct, insofar as ETFMG invokes it as a purported defense to the claim that ETFMG breached its contracts with Nasdaq by retaining fund profits. *See supra* pp. 108–109.

action with regard to HACK's indexes, ETFMG argues, Nasdaq preserved CIBR's competitive advantage over HACK, and breached a duty to ETFMG.

Under New York law, "a covenant of good faith and fair dealing is implicit in all contracts during the course of contract performance." *Tractebel Energy Mktg. v. AEP Power Mktg.*, 487 F.3d 89, 98 (2d Cir. 2007). A claim for breach of this covenant may succeed "only where one party's conduct, though not breaching the terms of the contract in a technical sense, nonetheless deprived the other party of the benefit of its bargain." *Pearce v. Manhattan Ensemble Theatre, Inc.*, 528 F. Supp. 2d 175, 180–81 (S.D.N.Y. 2007) (internal quotation marks omitted); *see also, e.g.*, *Bd. of Trs. ex rel. Gen. Ret. Sys. of Detroit v. BNY Mellon, N.A.*, No. 11 Civ. 6345 (RJS), 2012 WL 3930112, at *4, (S.D.N.Y. Sept. 10, 2012) ("Such a covenant is violated when a party promises commissions or profits and then does not act in good faith to permit such commissions or profits to be earned, thereby depriving the other party of the benefit of the bargain." (internal quotation marks and citation omitted)). Because a "breach of the implied covenant of good faith and fair dealing is merely a breach of the underlying contract . . . there can be no breach . . . without a valid governing contract." *Kapsis v. Am. Home Mortg. Serv. Inc.*, 923 F. Supp. 2d 430, 452 (E.D.N.Y. 2013) (internal quotation marks, citations, and alterations omitted). "An implied covenant of good faith and fair dealing, however, arises out of the known reasonable expectations of the other party which arise out of the agreement entered into. The covenant does not create duties which are not fairly inferable from the express terms of that contract." *Interallianz Bank AG v. Nycal Corp.*, No. 93 Civ. 5024 (RPP), 1994 WL 177745, at *8 (S.D.N.Y. May 6, 1994). Likewise, "the covenant of good faith and fair dealing . . . cannot be construed so broadly as effectively to nullify other express terms of a contract, or to create

independent contractual rights." *Peter R. Friedman, Ltd. v. Tishman Speyer Hudson L.P.*, 968 N.Y.S.2d 41, 41 (1st Dep't 2013).

ETFMG does not argue that the mere fact of Nasdaq's involvement with two competing cybersecurity ETFs breached the implied covenant of good faith and fair dealing. Dkt. 154 at 42. Nor could it. It is not uncommon for index license companies to license the same or similar indexes to different issuers; Masucci conceded as much at trial. Tr. at 1664–65 (Masucci) ("Q: Mr. Masucci, isn't it true that it's common in this industry for index providers to provide the same index to multiple ETF issuers? A: Yes. Q: Isn't it true that it's common in this industry for index providers to provide even similar indexes to multiple ETF issuers? A: Yes."). Rather, ETFMG argues that Nasdaq violated its implied duties by failing to engage on "issues with maintenance of the HACK index." Dkt. 154 at 42. In particular, in ETFMG's view, Nasdaq was required to "make . . . improvements," as defined by ETFMG, to the HACK index, so as to make it more competitive with CIBR.

To accept ETFMG's theory of breach, therefore, one would have to conclude that Nasdaq was required to, at a minimum, engage with ETFMG on the issue of whether to take some action to alter the composition of the index underlying HACK. This, however, runs contrary to the express terms of the Index License Agreement. The Index License Agreement provides that the "[i]ndexes and their compilation and composition, and any changes therein, are and will be in the *complete control and sole discretion of ISE*." JX-1 at 2 (emphasis added). ETFMG recognized as much in the HACK Prospectus, acknowledging that "[t]he ISE Index is compiled and calculated by ISE. ISE has no obligation to take the needs of the Adviser or the owners of the Fund into consideration in determining, composing or calculating the ISE Index." PX-21 at 11. ETFMG's claim based on the duty of good faith and fair dealing thus effectively would write

that provision out of the Index License Agreement. It would impermissibly "nullify" the express terms of the Index License Agreement by giving ETFMG an "independent contractual right[]," *Peter R. Friedman, Ltd.*, 968 N.Y.S.2d at 41, to direct the composition of the HACK index. Thus, ETFMG's breach of covenant claim fails as well.

C. Summary

In sum, the Court holds, with Nasdaq, that ETFMG breached the Index License and Sublicense Agreements, as well as the ETF-specific PSAs, by ceasing to pay ETF fund profits from HACK, SILJ, and IPAY. ETFMG further breached the GAMR and IFLY PSAs by failing to liquidate the GAMR and IFLY ETFs. ETFMG also breached the Wholesaling Agreement by repeatedly and flagrantly ignoring Nasdaq's preapproval rights. ETFMG's counterclaims, for breach of the Wholesaling Agreement, for breach of the Sublicense Agreement, and for breach of the covenant of good faith and fair dealing, in contrast, all lack merit.

V. Conclusions of Law: Damages

Having found that ETFMG breached its contractual obligations to pay Nasdaq profits from HACK, IPAY, and SILJ, its obligation to liquidate GAMR and IFLY, and its contractual obligations under the Wholesaling Agreement, the Court must determine the damages due to Nasdaq. Under New York law, Nasdaq is entitled to damages in the "amount necessary to put the plaintiff in the same economic position he would have been in had the defendant fulfilled his contract." *Indu Craft, Inc. v. Bank of Baroda*, 47 F.3d 490, 495 (2d Cir. 1995) (citations omitted). There are seven components to the Court's damages analysis.

First, the Court determines the retrospective profits wrongly withheld by ETFMG between December 2016 and October 2018. ETFMG largely does not challenge Nasdaq's damages expert's tabulation of these profits, instead arguing that the damages are capped by a limitation on liability provision in the Index License Agreement. The Court rejects ETFMG's

interpretation of that provision and accepts Nasdaq's expert's calculation of retrospective damages for this period.

Second, the Court determines damages in the form of expected fund profits from HACK, SILJ, and IPAY from November 2018 into the future.[41] Aided by the reports and testimony of each party's damages expert, the Court analyzes: (i) the expected lifespan of the funds; (ii) the discount rate used to find the present value of the funds' future cash flows; (iii) the funds' expected future profits—*i.e.*, their rate of expected AUM growth and the potential for fee compression; and (iv) whether Nasdaq's model understated the replacement cost of ETFMG's marketing efforts.

Third, the Court addresses ETFMG's argument that Nasdaq is barred from seeking damages for profits generated by GAMR and IFLY. The Court concludes that no damages are available for ETFMG's breaches with respect to these two funds.

Fourth, the Court addresses the remedies available to Nasdaq as a result of ETFMG's breach of the Wholesaling Agreement. Specifically, the Court determines that, although Nasdaq is entitled to forego performance under the Wholesaling Agreement, Nasdaq is not entitled to rescission or rescissory damages on top of its recovery for prospective profits. Nasdaq is,

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[41] Nasdaq seeks retrospective damages for the period from November 2018 through July 2019 in the amount of $5,379,885. Unlike the period from December 2016 through October 2018, however, this damages figure is not directly based on the recorded profits and losses of the relevant ETFs, as no such evidence is in the record. Instead, Nasdaq estimated this amount based on the monthly average profits of HACK, IPAY, SILJ, GAMR, and IFLY between October 2017 and September 2018. The Court finds this method of projecting profits no more reliable than those used by the parties' experts to model prospective damages, which the Court discusses at length below. Because the prospective damages models begin in November 2018, the Court can and does use these models to calculate damages for the period from November 2018 through July 2019. The Court does not also award Nasdaq the $5,379,885 it seeks for this period based on monthly average profits, as doing so would give Nasdaq an improper double recovery.

however, entitled to compensation for the specific expense items that ETFMG's practice of "netting" caused it to pay but which Nasdaq was not contractually obliged to cover.

Fifth, the Court rejects Nasdaq's request for punitive damages.

Sixth, the Court rejects Nasdaq's requests for equitable relief, including for the imposition of a constructive trust.

Seventh, and finally, the Court determines the prejudgment interest owed by ETFMG to Nasdaq.

A. Retrospective Damages

Nasdaq seeks retrospective damages of $10,908,711 for profits wrongfully withheld by ETFMG between December 2016 and October 31, 2018. Nasdaq's expert, Dr. Vinita Juneja, calculated this figure primarily using each fund's Monthly Profit and Loss reports. *See* Juneja Rpt, Exs. 2 (listing materials considered), 6 (tabulating damages).[42] For months in which no P&L statement was generated for a particular fund—*e.g.*, for SILJ from January 2017 through June 2017—Nasdaq's expert calculated profits using AUM data and the unitary fee and expense

[42] These calculations arguably understate Nasdaq's retrospective damages, insofar as they include hundreds of thousands of dollars in losses incurred by BIGD, FINQ, IFLY, and IMED. But because Nasdaq has neither sought a higher valuation nor provided the Court with the tools necessary to extract reliably these losses from this aggregated calculation and thereby calculate a higher damages figure, the Court will not independently generate a higher calculation. The Court's methodological conservatism on this point reinforces its conclusion that $10,908,711 is a reasonable, not excessive, estimate of Nasdaq's damages for this period.

figures set forth in the agreements governing each fund.[43] *See id.*, Exs. 6–7 (providing formulas used).

ETFMG did not contest this figure at trial or in its post-trial briefing. However, in response to a post-trial evidentiary inquiry from the Court, which explicitly did not invite argument, Dkt. 183, ETFMG, for the first time, challenged whether Nasdaq's expert had a sufficient basis for its calculation of $28,147 in retrospective SILJ profits, Dkt. 185.[44] ETFMG there argued that Nasdaq's expert had "no basis to calculate whether SILJ had any actual profits" because her calculation "is based on the fee schedule contained in the long-expired Business Management Agreement from 2011 . . . which was allowed to expire without renewal in October 2015." Dkt. 185. However, because the Court has held, above, that the parties had renewed the BMA by their conduct, ETFMG's argument with respect to damages does not hold water. Nasdaq's expert was therefore correct to look to the BMA to find the fee and expense rates applicable to SILJ throughout this period.

The Court accordingly finds that Nasdaq's expert's calculation of $10,908,711 in wrongfully withheld profits estimates the damages suffered by Nasdaq to a reasonable degree of economic certainty. *See* Juneja Aff. ¶¶ 30–31; Juneja Rpt., Exs. 6–7.

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[43] To calculate the final $10,908,711 figure, Nasdaq's expert also present-valued the profits for each month to August 1, 2017 using a risk-free discount rate—the 3-month U.S. Treasury Bill rate as of August 1, 2017. This adjustment compounded the present value of profits for months before August 1, 2017 and discounted profits for months thereafter, with the overall effect of reducing Nasdaq's claimed damages by approximately $67,000. The Court finds this adjustment appropriate. If anything, it modestly understates Nasdaq's retrospective damages, in that Nasdaq would have been justified in present-valuing its damages as of January 2017.

[44] In fairness, ETFMG's unsolicited argument came in response to an equally unsolicited argument by Nasdaq in response to the same inquiry. *See* Dkt. 184.

ETFMG argues that, arithmetic aside, its liability for such damages is capped by Section 7(E) of the Index License Agreement between ISE (now Nasdaq) and PureShares. JX-1 § 7(E). That provision states, in full:

> In no event will the aggregate liability of either party, whether in contract (including under any indemnity), in tort (including negligence), under a warranty, under statute or otherwise, for any claim, direct or otherwise, arising out of or in connection with this Agreement, exceed the total amount of fees actually paid to such party during the twelve (12) month period immediately preceding the act or omission giving rise to the loss, regardless of the cause or form of action.

Id. Even assuming, *arguendo*, that this provision applies to ETFMG, it is clear that the limitation of liability does not speak to a continuing breach of contract such as the one that ETFMG has committed, and continues to commit, here. Section 7(E), by its terms, limits liability to "the total amount of fees actually paid . . . during the twelve (12) month period immediately preceding the act or omission giving rise to the loss." *Id.* But, here, ETFMG's act or omission of breach in retaining Nasdaq's profits occurred on a monthly basis, giving rise to new losses to Nasdaq each time ETFMG pocketed the profits due Nasdaq monthly. Section 7(E) simply did not contemplate a circumstance under which a party to the agreement would or could hijack the PureShares ETFs and wrongfully retain their continuing stream of profits on an indefinite basis. The provision thus cannot provide ETFMG the protection it seeks here.[45]

ETFMG's argument based on § 7(E) further fails because, for each of the three funds as to which the Court has held Nasdaq may recover damages—HACK, IPAY, and SILJ—the Court found an alternate basis for contractual liability supporting the recovery of damages. Specifically, ETFMG breached the HACK PSA, the IPAY PSA, and the SILJ BMA by wrongfully retaining fund profits to which Nasdaq was entitled. Therefore, even if ETFMG's

[45] In any event, because Nasdaq seeks retrospective profits for fewer than 12 sequential months, the provision, even if applicable, would not preclude it from recouping nine consecutive months of unpaid profits.

damages exposure under the Index License Agreement was temporally capped—which it is not—Nasdaq's recovery under the other agreements would be unimpaired.

The Court therefore holds that ETFMG owes Nasdaq damages of $10,908,711 for the period between January 2017 (or December 2016, in the case of IPAY) and October 2018.

B. Prospective Damages from HACK, IPAY, and SILJ

Nasdaq also seeks prospective damages of up to $85,731,792, for future profits Nasdaq reasonably could have expected to receive from HACK, IPAY, and SILJ, but for ETFMG's breach.

Under New York law, "[i]t is well settled that in breach of actions the nonbreaching party may recover general damages which are the natural and probable consequence of the breach." *Bi-Economy Mkt., Inc. v. Harleysville Ins. Co. of N.Y.*, 10 N.Y.3d 187, 192 (2008) (internal quotation marks and citation omitted). "Damages are intended to return the parties to the point at which breach arose and to place the nonbreaching party in as good a position as it would have been had the contract been performed." *Seidman v. Industrial Recycling Props., Inc.*, 967 N.Y.S.2d 77, 79 (2d Dep't 2013) (citing Restatement (Second) of Contracts §§ 344, 347 cmt. a). The standard for proving damages "is not one of mathematical certainty but only reasonable certainty." *E.J. Brooks Co. v. Cambridge Sec. Seals*, 31 N.Y.3d 441, 449 (2018); *see generally* 36 N.Y. Jur. 2d Damages §§ 12–13, 32.

Here, Nasdaq is entitled to future profits generated by HACK, IPAY, and SILJ in order to receive the benefit of its bargain. However, the parties dispute the most appropriate method for calculating these prospective profits. Nasdaq and ETFMG's damages experts each presented a range of estimated future profits for the ETFs based on various assumptions and scenarios. The Court first briefly reviews the qualifications and credibility of each party's expert, and then addresses the key assumptions driving the experts' respective projections, including their

estimates of: (a) the lifespan of the ETFs, (b) an appropriate discount rate, (c) the expected rate of AUM growth (and fee compression), and (d) expected marketing costs.

1. The Damages Experts

Each party offered expert testimony on the topic of damages. Nasdaq offered the testimony of Dr. Juneja. Juneja is a managing director at NERA Economic Consulting ("NERA") and the Chair of NERA's Global White Collar, Investigations & Enforcement Practice. Juneja has a B.A. with Honors in economics from the University of Western Ontario, as well as an M.A. and a Ph.D. in economics from Harvard University. Juneja has extensive experience in financial and securities-related disputes, including authoring papers on the subject, serving as an arbitrator for FINRA, and appearing as an expert witness in numerous trials and arbitrations. Frequent subjects of Juneja's testimony and reports include: issues related to statistical analyses, financial valuation, costs, damages, and issues related to various kinds of funds. Juneja Aff. ¶¶ 1–3. The Court found Juneja to be highly qualified, her report and direct testimony affidavit to be careful and well-reasoned, and her demeanor and testimony on cross-examination and redirect to be professional and credible.

On November 20, 2018, Juneja submitted her initial report. Juneja Rpt.[46] Juneja calculated Nasdaq's prospective economic damages by estimating the present value of the ETFs' future cash flows from November 2018 going forward. *Id.* ¶ 32. Juneja initially presented two approaches for calculating Nasdaq's damages, each of which provided a range of valuations depending on several variables, which the Court reviews at length below. The first approach assumed the ETFs would maintain a constant level of AUM going forward—*i.e.*, that the funds would achieve zero growth. The second approach used a "Monte Carlo" method using historical

[46] Juneja submitted her rebuttal report on December 14, 2018. PX-2030 ("Juneja Rebuttal Rpt.")

growth of the ETFs to simulate likely future growth of the funds' AUM. *Id.* ¶¶ 32–38. During trial, Juneja submitted two more ranges of valuations. These used the same two approaches, but now—drawing on the premise of "fee compression" that ETFMG pursued—added an assumption that HACK's management fee would decrease from 60 bps to 47 bps, which would significantly decrease the most profitable fund's cash flows. PX-2050.

ETFMG sponsored the testimony of Dr. Donald M. May. May is managing partner of DMA Economics, a New York based consulting and litigation support firm. May Aff. ¶ 1. May received a B.S. in Business Administration from Roosevelt University, as well as an MBA in statistical methods and finance and a Ph.D. in finance and economics from the University of Chicago Graduate School of Business (now the Booth School of Business). May was formerly a professor of Accounting, Finance and Economics at the Massachusetts Institute of Technology Sloan School of Management, and he currently teaches a class on economic damages for the Practicing Law Institute, a non-profit continuing legal education organization. Like Juneja, May has extensive experience in statistical analysis and valuation in both litigation and non-litigation contexts. May Rpt. ¶¶ 4–6 & App'x A. May has strong credentials relevant to the valuation of Nasdaq's damages here. While in the main less detailed and convincing than Juneja's, May's

analysis in his report and testimony was that of a serious professional, meriting careful consideration.[47]

May's initial assignment from counsel for ETFMG was "to calculate future damages to ETFMG," assuming that Nasdaq had breached its contractual obligations. May Rpt. ¶ 1. May addressed the valuation of *Nasdaq*'s prospective damages only as a rebuttal to Juneja's models. May thus offered critiques of Juneja's assumptions and inputs—which, if accepted, would reduce the valuation of Nasdaq's damages—while largely utilizing the same valuation framework as Juneja.

The Court accordingly begins its analysis with Juneja's principal (and highest-value) set of projections. Where the Court credits May's assumptions or methodology over Juneja's, the Court reduces Juneja's figures accordingly, drawing on May's valuation.

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[47] The Court found May's analysis and expertise worthy of consideration on the merits notwithstanding his prior federal felony conviction or, more disquieting, May's deliberately misleading statements in both his *curriculum vitae* and his deposition testimony with regard to his whereabouts and his activities during the period of his incarceration. *See* Dkts. 90–93 (Nasdaq's motion *in limine* to introduce evidence of May's prior conviction); Dkt. 103 at 2 n.2 (ETFMG's response, noting that it "was of course also unaware and understandably unhappy to learn of" May's prior conviction and "would not have retained [him] had this information been aired earlier"); *see also, e.g.*, Tr. at 2412–20 (May) (conceding deliberately misleading statements made in CV and at deposition, including describing his work address as "New York, NY" when, in fact, May was in federal custody elsewhere); *id.* at 2422–23 ("Q: You recall at your deposition that I asked you if you'd ever been party to a court case? . . . And the honest answer was that you were a defendant [in a criminal case]? A: Correct, yes. Q: But instead, you answered falsely, 'not that I'm aware of'? . . . A: Yes, I interpreted the question as civil litigation, not criminal. . . ."). Given the nature of his testimony as a damages expert, the Court found that May's prior conviction and related deception did not disable the Court from critically assessing his economic reasoning and critique of Juneja's calculations.

2. Damages for HACK, IPAY, and SILJ's Future Profits

Juneja presented a range of estimates of HACK, IPAY, and SILJ's future profits beginning in November 2018, based on alternative scenarios.[48] For each projected scenario, Juneja used the same basic model, while varying certain inputs. First, she projected the rate of each fund's future AUM growth to estimate the AUM of each fund on a monthly basis; second, she calculated the fund's monthly profits based on the funds' estimated AUM, the management fee she expected each fund to charge investors, and contractually set formulas for the funds' expenses; and third, she calculated the present value of the funds' future monthly profits by applying a discount rate. *See* Juneja Aff. ¶ 52; Juneja Rpt., Exs. 7–9. For each projection, Juneja supplied estimates of the funds' profits assuming, alternatively, 5, 10, and 14-year lifespans of the funds.

At the low end—in a scenario where Juneja's inputs assumed zero AUM growth, significant fee compression, and that the funds would shut down after 5 years—Juneja projected $21,452,014 in prospective damages. *See* PX-2050. At the high end—in which Juneja assumed AUM growth based on the funds' historical returns, no fee compression, and a 14-year future timespan—Juneja projected $85,731,792 in future profits for the three funds.[49] *See* Juneja Rpt., Ex. 9.

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[48] Juneja similarly projected profits for GAMR and IFLY. However, for the reasons stated below, the Court holds that Nasdaq cannot recover prospective damages from those two ETFs, and thus confines its discussion here to the projected profits of HACK, IPAY, and SILJ only.

[49] The exhibits cited for the low- and high-end valuations list each fund's projected profits and the projected collective profit for the five profitable funds—HACK, IPAY, SILJ, GAMR, and IFLY. In light of the Court's judgment that profits are not due for GAMR and IFLY, the Court has calculated total prospective damages figures for HACK, IPAY, and SILJ by adding the individual values listed in these exhibits for these three funds.

The Court's analysis takes as its starting point Juneja's high-end projection of $85,731,792, which she and Nasdaq present as the most likely scenario. The Court first accepts, in separate sub-sections, two of Juneja's assumptions that May and ETFMG challenged only minimally: her assumption of a 14-year remaining lifespan for the funds and her selection of a discount rate of approximately 18% to calculate the present value of the ETFs' future cash flows. *See, e.g.*, May Aff. ¶ 4 (timespan and discount rate not in list of reasons why Juneja's projections overstate damages). The Court next analyzes whether Juneja's assumptions regarding AUM growth and fee compression—the principal drivers of expected future cash flows in her model—were reasonable. On these related issues, the Court credits some of May and ETFMG's critiques of Juneja's valuation, concluding that the most likely outcome lies between those proffered by each side's expert. Finally, the Court addresses whether Juneja understated the replacement cost of ETFMG's marketing efforts, finding that she did not.

a. Lifespan of the Funds

Juneja projected the ETFs' future profits for 5, 10, and 14-year periods, each beginning in November 2018. She explained that, among them, the 14-year scenario was the most likely outcome; even that longest period, in her view, underestimated the funds' probable timespan. Juneja Aff. ¶ 55. The 14-year period was keyed to SILJ, the oldest of the PureShares ETFs, which was six years old as of November 2018. Juneja's selection of a 14-year period assumed a 20-year total expected lifespan for SILJ; in the interest of simplicity, she assumed a slightly shorter lifespan for the newer funds, so as to have a common end-date for each fund. *Id.* ¶¶ 55–56; Tr. at 2234–35 (Juneja).

In his report, ETFMG's expert, May, did not challenge Juneja's selection of a 14-year period for calculating the funds' future profits. *See, e.g.*, May Aff. ¶ 4; May Rebuttal ¶¶ 31–49 (criticizing other assumptions but not the 14-year horizon). ETFMG, in its post-trial brief,

indirectly criticized Juneja's lifespan assumption, stating in passing that other purported problems with Juneja's valuation are "exacerbated by the fourteen-year horizon Dr. Juneja selected." Dkt. 154 at 47. ETFMG does not, however, develop why the assumption of a 14-year horizon is itself faulty. On the contrary, when ETFMG discussed the damages it would be owed on its claims had the Court found Nasdaq liable for breach, ETFMG repeatedly suggested that funds like HACK, IPAY, and SILJ would exist in perpetuity. *See, e.g.*, Dkt. 154 at 45 n.20 ("Dr. Juneja's testimony that funds surviving at least a few years tend to go on indefinitely . . . support[s] the reasonableness of Dr. May's perpetuity analysis.").

The Court agrees with Juneja that HACK, IPAY, and SILJ are highly likely to survive for at least a 20-year aggregate lifespan and, therefore, adopts Juneja's assumption that these funds would survive 14 years after November 2018. Juneja's reasoning is persuasive. As she explains, although ETFs can operate indefinitely, about 5% of existing funds liquidate each year. Juneja Aff. ¶ 53. However, once an ETF has become established, it is far less likely to liquidate, and about 75% of all ETFs that have been created are still operating. *Id.* Most liquidations occur in the first few years after inception—a period that HACK, IPAY, and SILJ have all cleared. *Id.* As Juneja explained, if 5% of ETFs fail per year, the average ETF—even assuming all funds are equally likely to liquidate in any given year—would have an expected lifetime of 20 years. *Id.* ¶ 54 (calculating expected lifetime with the formula 1/.05 = 20); *see* Tr. at 2235 (Juneja). Given that the PureShares ETFs have attracted AUMs that are orders of magnitude above the average AUM for an ETF that liquidates and that they continue to grow, HACK, SILJ, and IPAY are less likely to fail than the average ETF and more likely to outlive the average. Juneja Aff. ¶ 56. An overall 20-year lifespan for these funds—corresponding to the 14-year period of future profits

after November 2018 promoted by Juneja—is thus not only a reasonable forecast, but a conservative one.

The Court therefore finds that Juneja's 14-year time horizon represents the most likely scenario of those presented and will use it for estimating the future profits of HACK, IPAY, and SILJ.

b. Discount Rate

To calculate the present value of the ETFs' projected profits, Juneja had to determine an appropriate discount rate. Cash flows in the future are worth less than cash flows today because, at a minimum, cash today can be invested in risk-free assets earning a positive rate of return; this concept is sometimes referred to as the time value of money. In addition, future cash flows are subject to various risks: the ETFs' cash flows might not materialize if, for example, the indexes underlying the ETFs were to perform poorly, leading to an outflow of funds. A discount rate adjusts future cash flows both for the time value of money and for the risk that future cash flows may not materialize. Juneja Aff. ¶ 49. The higher the discount rate used, the lower the projected value of a set of future cash flows will be. Tr. at 2229–30 (Juneja).

To estimate a discount rate, Juneja evaluated the weighted average cost of capital ("WACC") of publicly traded asset management companies that focus on managing ETFs. WACC is a blended discount rate, based on a weighted combination of an entity's cost of equity and its cost of debt, that is commonly used as a discount rate. WACC is a measure of the overall riskiness associated with the cash flows of a company. Juneja Aff. ¶ 50; Tr. at 2229 (Juneja). Juneja identified the 10 largest publicly traded ETF issuers by AUM as of June 30, 2017, and analyzed their publicly reported WACCs, which they use to project their own revenue. Juneja Aff. ¶ 51; Tr. at 2229 (Juneja). The average WACC for these 10 ETF issuers was 8.63%. Juneja Aff. ¶ 51.

Juneja identified only one publicly traded ETF manager, WisdomTree Investments, Inc. ("WisdomTree"), that generates revenue solely by operating ETFs. *Id.* ¶¶ 50–51. WisdomTree had a WACC of 18.0252% as of June 30, 2017, significantly higher than the average WACC of the 10 largest publicly traded ETF issuers. *Id.*; *see* Juneja Rpt., Ex. 9 n.6; Tr. at 2228 (Juneja) ("If you look at [ETF issuers] in general, the discount rate it varies from about 8 to 10 percent . . . . But if you look at a pure play ETF company like WisdomTree, its discount rate is 18 percent.").

Juneja nevertheless selected the WisdomTree WACC of 18.0252% as her discount rate for valuing future HACK, IPAY, and SILJ profits, because the other ETF issuers have products and businesses other than ETFs. Juneja Aff. ¶ 51; *see* Tr. at 2229 (Juneja) (in choosing discount rate for future ETF cash flows, "it made sense to try to incorporate the risks that are extant for a company that is selling ETFs and only ETFs"). Juneja's choice to use a relatively high WACC was conservative; a lower discount rate would have increased her estimate of the present value of Nasdaq's prospective damages. Juneja Aff. ¶ 50; Tr. at 2230 (Juneja) ("Q: What would happen, generally, had you chosen a smaller discount rate, to your damages number? A: You can see here that the damages number goes up with the smaller discount rates.").

ETFMG has not seriously challenged Juneja's use of an 18% discount rate, and the Court finds that the use of WisdomTree's WACC appropriately accounts for the broad economic risks facing HACK, IPAY, and SILJ, as well as the time value of those funds' profits. The Court therefore holds that an 18% discount rate was a reasonable—indeed, conservative—assumption for the valuation of Nasdaq's prospective damages.

The parties do dispute the impact of Juneja's use of a high discount rate on other aspects of her model, specifically, whether the discount rate accounts for the risk that competition among

ETFs may force the PureShares ETFs to reduce their management fees, thus decreasing revenue. Juneja testified that her use of a high discount rate did so, in that it "capture[d] a number of risks"—including that other competitors would enter "the market for those same funds"; "that fees might go down"; and "that [the] company may go out of business at some point." Tr. at 2230 (Juneja); *see id.* at 2139 ("[I] use[d] a discount rate that would incorporate the risk of something like the fees going down over time."); Juneja Aff. ¶ 49 (high discount rate accounts for risk that "the index performs poorly leading to outflows from the ETF" and "the risk of the [management] fee decreasing"). May, by contrast, opined that discount rates "are appropriately employed to measure only systematic risk—risks endemic in the economy as a whole, such as recession or inflation—and not to account for risks specific to individual companies or industries." May Aff. ¶ 8. Accordingly, May testified, "the selection of a high discount rate does not account for fee compression risk." *Id.*

Juneja's use of a high, and conservative, discount rate means that profits in the later years during the 14-year period are worth relatively less. Thus, a negative development—*e.g.*, fee compression—late in the 14-year period would have a relatively small impact on the Court's overall calculation of the discounted value of the funds' future profits. The Court agrees with May, however, that a high discount rate is alone insufficient to account for the specific risk of fee

compression.[50] The Court therefore addresses the factor of fee compression separately, in the following section.

c. Future Profits: AUM Growth and Fee Compression

An ETF's revenues derive primarily from the management fee charged to investors who hold shares of the ETF. For example, if an ETF has $1 billion in AUM and charges a fee of 60 bps (0.60%), that ETF will charge its collective investors a total of $6 million in management fees per year.[51] Unsurprisingly, then, HACK, IPAY, and SILJ's expected AUM growth and management fees are the primary drivers of profit in Juneja's model—and the area of sharpest dispute between the parties' damages experts.[52]

The AUM of an ETF depends on many factors. These include the desirability of the sector the ETF targets, the future investment returns of the fund and its underlying holdings, and general economic conditions. Juneja Aff. ¶ 35. ETFs like HACK, IPAY, and SILJ may achieve AUM growth as a result of either a net inflow of funds from investors or positive overall returns for the underlying equities in the ETFs' indexes. Fee compression, in turn, is a term commonly

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[50] May, however, overstates the point. A discount rate based on WACC takes into account a company's cost of capital—its cost of raising debt or equity—which in turn reflects the market's view of the overall risks facing that company. By using WisdomTree's high discount rate, which reflects the cost of capital of a pureplay ETF company, Juneja necessarily took into account some risks specific to the PureShares ETFs' future performance. Nevertheless, the Court is unpersuaded by Nasdaq's argument that a high discount rate entirely accounts for the specific risk of fee compression.

[51] An ETF manager deciding whether to reduce a fund's management fee, to the extent seeking to maximize revenues, thus would consider whether a gain in AUM as a result of a fee reduction would outweigh the loss in per-share revenue caused by that reduction. Accordingly, the Court addresses these related components of an ETF's revenues together. *Cf.* DX-610; DX-612.

[52] HACK, IPAY, and SILJ's expenses are contractually either tied to AUM or fixed, such that projecting future AUM allowed Juneja to project future expenses (and thus profits). *See* Juneja Rpt. ¶ 38 & Ex. 7.

used to describe a general trend in the ETF industry toward reduced management fees charged to investors as a result of competition among ETFs. *See* Tr. at 2136–37 (Juneja).

The following chart presents projections of HACK, IPAY, and SILJ's expected profits following November 2018 under different AUM and fee compression scenarios presented by each side's expert. Each projection uses the assumptions that the Court has found reasonable: a time period of 14 years and a discount rate of approximately 18%.

Expert and Scenario	**Damages Projection**
Juneja – AUM Growth with No Fee Compression	$85,731,792; Juneja Rpt., Ex. 9.
Juneja – Constant AUM with No Fee Compression	$42,297,995; Juneja Rpt., Ex. 8.
Juneja – AUM Growth with Fee Compression	$68,505,648; PX-2050.
Juneja – Constant AUM with Fee Compression	$33,756,713; PX-2050.
May – Limited AUM Growth with No Fee Compression	$42,369,211; May Rebuttal ¶ 49.[53]

Juneja's high-end valuation projects that the funds will achieve significant AUM growth without any reduction in fees, yielding an estimated $85,731,792 in discounted future profits. May argues that Juneja significantly overstates the funds' likely AUM growth. In his proposed correction for that overstatement, May estimates $42,369,211 in discounted future profits. This figure, he argues, must be further reduced, by an unspecified amount, to account for future fee compression. Notably, May's damages estimate is less than $100,000 above Juneja's estimate of damages assuming "Zero AUM Growth" (*i.e.*, constant AUM), an assumption the Court finds improbably conservative.

[53] This figure is calculated by subtracting May's estimate of the amount by which Juneja's AUM growth scenario overstates the funds' future profits, $43,362,581, from Juneja's estimate of $85,731,792 in future profits. Despite criticizing Juneja's failure to account for fee compression, May never attempted to quantify the potential impact of fee compression. The Court accordingly has not included such a projection in this chart. As a point of reference, subtracting May's same estimate of Juneja's overstatement of profits from Juneja's fee-compression-inclusive estimate of $68,505,648 in profits would yield a total estimate of $25,143,067 in prospective damages from HACK, IPAY, and SILJ.

The Court first addresses May's critiques specific to Juneja's estimate of AUM growth, crediting these in part, so as to justify a damages projection below Juneja's high-end estimates, but rejecting May's low alternative projection. The Court then addresses the parties' arguments with regard to management fees, finding that, although there is a general trend toward fee compression in the ETF industry, the record in this case does not support making an additional reduction to Nasdaq's prospective damages on this basis.

i. AUM Growth

Juneja testified convincingly that HACK, IPAY, and SILJ are likely to experience at least *some* growth in AUM going forward. *See, e.g.*, Juneja Aff. ¶ 37 (constant AUM is "inconsistent with the history of the funds' varying growth in AUM from month to month," and "interest in cybersecurity and mobile payments is increasing[,] which bodes well for ongoing growth for some time in these sectors"); Tr. at 2146 (Juneja) (for successful ETFs, "[o]nce they get big enough, they tend to stay and actually keep growing even faster. So if you look historically you're not seeing these big funds being driven out or, you know, coming down in terms of their growth rates"); *id.* at 2157 ("it's not unusual for funds," like HACK, "that are this big . . . and have lasted this long" to grow at several times the rate of growth in the economy for an extended period of years). The Court finds—based on Juneja's testimony, the historical growth of the funds, and the general ETF growth trends presented by Juneja—that the PureShares ETFs are highly likely to continue to increase their AUM during the 14-year period for which Juneja estimated future profits. The principal issue is projecting *how much* the funds are likely to grow.

To simulate likely future growth of the funds' AUMs, Juneja employed a "Monte Carlo" method using historical growth of the ETFs.[54] For each ETF, Juneja noted the monthly historical growth in AUM from inception to October 31, 2018.[55] Juneja Aff. ¶¶ 41–42. Juneja then reviewed historical AUM data from FactSet Research Systems ("FactSet") for a universe of 2,464 ETFs across all industries to extrapolate general trends of AUM growth over time. She found that the median annual growth rate of AUM declines from more than 100 percent in the first year to 9.37 percent in the fifth year from inception. After five years, the median growth rate steadies, and, by years eight through 10, it has decreased from about 9 percent to an average of 3.98 percent. Put differently, on average, an ETF generally began to reach a steady state of annual AUM growth, which was lower than its initial growth rate, by the end of its fifth year. *Id.* ¶¶ 42–43.

For HACK and IPAY, which had not yet been in operation for five years, Juneja used a Monte Carlo analysis to forecast AUM growth through their fifth year—essentially using the funds' historical growth to project a fifth year of results prior to their reaching a steady state of growth. *Id.* ¶ 44. As a result of these funds' significant historical growth, this approach yielded high estimated fifth-year growth rates. *See, e.g.*, Tr. at 2175 (Juneja) ("[T]he Monte Carlo analysis yielded approximately a growth rate of about 25 percent for . . . the fifth year [for HACK]."). For SILJ, Juneja did not apply this approach because it had already been operating more than five years. Juneja Aff. ¶ 44.

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[54] Monte Carlo methods use computers to generate random draws from a known distribution and parameters, which in turn creates a series of possible outcomes. Juneja Aff. ¶¶ 38–39.

[55] For example, if an ETF increased its assets from $1 million to $2 million over a one-month period, its asset growth would be $1 million. Juneja used numerical dollar changes rather than percentage changes because small numerical changes in a brand-new ETF can represent a large percentage change, which thus might bias the model. Juneja Aff. ¶ 41.

Beyond the five-year mark, Juneja applied a fund-specific steady-state growth rate to each ETF because "it appears that (on average) ETF growth (for ETFs in general) starts to slow and starts approaching a steady state in about five years or in the few years thereafter." *Id.* ¶ 45. Her process for doing so is at the heart of ETFMG's challenge to her growth projections.

Juneja began by calculating the ratio between: (i) the median fifth-year AUM growth rate in the FactSet data, 9.37%; and (ii) the average of the median AUM growth rates for years 8 through 10 from inception, 3.98%. The resulting ratio of 2.35 attempts to measure the average decrease in an ETF's rate of AUM growth between its fifth year, when it may not have reached a steady state of growth, and its eighth through 10th years, when it will have done so. Juneja then applied this ratio to the fifth-year growth rates obtained via her Monte Carlo analysis for HACK and IPAY—and to the actual fifth-year growth rate for SILJ—in order to calculate a steady-state growth rate for each fund. For example, if the Monte Carlo analysis for HACK predicted a fifth-year AUM growth rate of approximately 25%, the steady state growth rate for HACK would be 25/2.35, or a little less than 11%. *See id.* ¶ 47; May Rebuttal ¶¶ 44–45. Juneja's approach yielded steady-state AUM growth rates of approximately 11% for HACK; 10% for IPAY; and negative 6% for SILJ. *See* May Rebuttal ¶ 44.

Juneja used this process to calculate a steady-state growth rate specific to each ETF, rather than simply applying the median AUM growth rates of 9.37% (fifth year) and 3.98% (years 8–10) she obtained from the FactSet data. Juneja testified that doing so was necessary to account for fund-specific growth patterns, because all ETFs have unique attributes and grow at different rates. In particular, she reasoned, the "historically high growth rates" of HACK, IPAY, and, to a lesser extent, SILJ, "as well as the rapid development of and increasing investment in relevant industries like cybersecurity and mobile payments, support the projection that the

PureFunds ETFs' AUM may grow at a faster pace than [the average ETF] over the next 14 years." Juneja Aff. ¶ 46.

May and ETFMG argue that this approach drastically overstates the funds' likely future AUM levels, and thus their expected profits. May testified that Juneja was wrong to assume that the "ratio between fifth year and later steady-state growth implied by the FactSet data will apply regardless of how high the growth rate is in year five." May Aff. ¶ 23; *see* Tr. at 2511 (May) (arguing Juneja overstates future AUM growth "because she's using [growth rates] that happen when a fund is young to forecast things that happen when a fund is mature"); *id.* at 2512–13 ("[S]he should not have incorporated . . . the first year of the funds' ETF AUM dollar growth . . . . [In that early period,] it's a hot new product [without] competitors. That's not indicative of what happens after year five."). May calculates that Juneja's methodology actually yielded AUM growth rates approximately 2.6 times the average growth rates in the FactSet database. He called this a "red flag that her assumed AUM growth rates and hence damages estimates are too high." May Aff. ¶ 24; *see* May Rebuttal ¶¶ 44–46.

The Court agrees that Juneja's approach leads to an inflated estimate of AUM growth in her high-end scenario, especially given Juneja's additional assumption that the funds will never reduce management fees during the 14-year projection period. Despite HACK and IPAY's clear advantages over the average ETF, which the Court finds will likely allow those funds to continue to outperform the FactSet average, the combination of Juneja's most aggressive AUM growth and her assumption of no fee compression in her primary projection yields an unrealistically high projection of Nasdaq's prospective damages.

To correct for the problem he identified with Juneja's AUM growth calculation, May presented an alternative calculation of the funds' future profits. May selected, as his AUM

growth rate for all three funds for all years after year five, 3.98%—the figure cited by Juneja as the average ETF's average annual growth in years eight through 10 after inception. May Rebuttal ¶ 47; *see* May Aff. ¶ 27. Because the funds have already surpassed, or will soon surpass, the five-year mark, May used the 3.98% annual growth rate for virtually all of his AUM projections. Using this low growth assumption, May projects $42,369,211 in discounted future profits for the three ETFs. *See* May Rebuttal ¶ 49 (subtracting $43,362,581 from Juneja's high-end valuation of HACK, IPAY, and SILJ). This profit estimate—which May claims must be further reduced by an unspecified amount to account for fee compression—is barely greater than Juneja's projection of $42,297,995 in discounted profits in her "Zero AUM Growth" scenario. *See* Juneja Rpt., Ex. 8.

There are meritorious points to be drawn from each expert's assessments. The Court credits Juneja's testimony that greater than average steady-state growth can be expected of HACK and IPAY over the next 14 years, thus warranting the use of fund-specific growth rates that take into account the historical and likely future success of these specialty ETFs.[56] The Court, however, also credits May's critique that Juneja's particular methodology allowed the tremendous historical success of HACK and IPAY to bias excessively upward her projection of those funds' future growth. Especially in light of the fact that Juneja's scenario assumes that management fees will not be reduced—enhancing the risk that some fee-focused investors might choose or decamp to competing funds, eating into HACK's and IPAY's AUM growth—the Court finds that Juneja's growth rates result in a somewhat excessive estimate of prospective damages.

[56] As noted above, Juneja applied a negative growth rate to SILJ. May's criticism is therefore inapplicable to that fund.

However, May's alternative projection—using an average fund's median growth rate for its eighth through 10th years—significantly overcorrects for the problem he identified. As noted, the testimony and evidence uniformly suggested that HACK and IPAY's historical success and market advantages as established ETFs in growth industries must be taken into account in considering their likely future growth. Juneja presented her Zero AUM Growth scenario as an overly conservative "floor," above which fund profits will likely rise; the Court agrees that this floor reflects unduly conservative assumptions. That May's estimate so closely approximates that of Juneja's zero-growth scenario is a "red flag" that his assumed growth rate and hence damages estimates are too low.

On balance, the Court thus finds aspects of both experts' analyses persuasive, but finds Juneja's projection to be, on the record of this case, somewhat more likely. Accordingly, the Court holds that a reasonable estimate of AUM growth would yield a prospective damages valuation in between Juneja's $85,731,792 figure and May's $42,369,211 figure—but closer to Juneja's figure. For reasons explained further below, after the Court's discussion of the related issue of fee compression, the Court finds that $67 million is a reasonable—and neither excessive nor speculative—estimate of such damages.[57]

ii. Fee Compression

The Court does not find that a further deduction is required from Juneja's valuations to account specifically for the possibility that HACK, IPAY, and SILJ may be compelled to reduce their management fees at some point during the 14 years beginning in November 2018.

ETFMG argued that Juneja's most aggressive projection overstates Nasdaq's prospective damages because it fails to account for either (1) the general trend toward fee compression in the

[57] This figure represents a deduction of $18,731,792 from Juneja's primary estimate of the combined future profits of HACK, IPAY, and SILJ.

ETF industry or (2) the specific threat to HACK's business posed by the recent entry of a new cybersecurity-focused ETF sponsored by iShares, a large ETF issuer backed by BlackRock. *See* May Aff. ¶¶ 14–16; Masucci Aff. ¶ 89; DX-613 (iShares registration statement excerpt). Nasdaq disagrees.[58]

While the Court appreciates that fee-based competition in the ETF industry is fierce, *see* DX-609–612, the record in this case does not non-speculatively support ETFMG's prediction that HACK, IPAY, and SILJ will have to cut their fees in the near future to achieve the AUM growth discussed above. As to the general trend toward lower fees, Juneja credibly testified that fee compression mainly occurs "not for the specialty ETFs, not for the niche ETFs," but rather for "the plain vanilla . . . the lower cost type of ETFs" that track broad, widely followed indexes like the S&P 500. Tr. at 2144 (Juneja). She explained that "while there had been a lot of fee compression, the median fees had not changed very much because the higher-end products had stayed pretty much the same." *Id.* And, indeed, at least 25 percent of the 2,464 ETFs in the FactSet dataset charged fees of 75 basis points or higher. *See id.* at 2140. Thus, on the record developed in this case, the Court finds that, insofar as they are niche pureplay ETFs with

[58] In responding to ETFMG's arguments based on fee-compression, Nasdaq also contended that: (i) Juneja's use of a high discount rate adequately accounts for any fee compression that might occur; and (ii) May's testimony regarding fee compression was procedurally improper under Federal Rules of Civil Procedure 26(a) and 37(c), Dkt. 118. The Court rejected the former argument above and rejected the latter argument in a bench ruling at the final pretrial conference. Dkt. 143 at 36–38 (denying motion *in limine* seeking to bar evidence relating to fee compression, including May's expert testimony, Masucci's lay testimony, and articles in industry publications on the subject).

first-mover advantages in fast-growing sectors of the economy, HACK and IPAY are likely to be largely insulated from the general trend toward fee compression.[59]

As to the specific threat posed by the new iShares cybersecurity ETF, IHAK, which charges a lower fee of 47 basis points, the record similarly does not support a prediction that HACK will have to reduce its fee. Juneja explained that even when HACK's first competitor, the CIBR fund, entered the market with a fee 15 points below HACK's, "HACK didn't lower its fees for a couple of years." Tr. at 2139 (Juneja). Similarly, as of trial, iShares's new IHAK "registration statement ha[d] been out there for at least six months and neither CIBR or HACK ha[d] changed their fees." *Id.*; *see also* DX-419 at 20 (no reduction in HACK fee for almost two years after CIBR entry).

Further, the Court notes that HACK has already reduced its fee, from 75 to 60 basis points, presumably alleviating some downward fee pressure. And the evidence regarding that fee reduction, effective in May 2017, does not persuasively establish that it mainly bespoke concerns about competitive fee pressure. While Masucci articulated that concern in advocating for the HACK fee reduction to the Trust Board, which followed his recommendation, the evidence at trial indicated that ETFMG explored that step predominantly to get Nasdaq's attention and ultimately took that step to punish Nasdaq for perceived slights. The evidence did not persuade the Court that ETFMG (and Masucci in particular) principally acted out of a

[59] ETFMG's fee compression argument also ignores entirely the salient fact, presented in the industry publication articles it submitted as evidence, that fund managers have successfully offset fee reductions, at least in part, by lending out their ETFs' underlying securities. *See* DX-610 (noting "the cost offset that the fund manager delivers . . . by lending securities to short sellers"); DX-612 (ETF managers that have reduced fees seek to make up for lost fee revenue "in volume [and] securities lending"). This offset further bolsters the Court's conclusion that fee compression will have only a marginal impact, if any, on the funds' discounted future profits.

genuinely held view that a 15 basis point fee reduction was a competitive necessity in light of CIBR's lower fee. This decision therefore cannot be taken as evidence of durable irresistible pressure that might compel further reductions in HACK's fee.[60]

Casting further doubt on ETFMG's theory of near-inevitable fee compression is the fee history regarding other PureShares ETFs, as managed by ETFMG itself. The record reflects that many of the PureShares ETFs have faced competition from ETFs sponsored and managed by large issuers—including multiple competitor funds issued by iShares—that charged significantly lower management fees than did the PureShares ETFs. DX-194. Yet, with the exception of the reduction of the HACK fee discussed above, the ETFMG Trust did not lower the management fees in response to such competition. *See* Tr. at 2140 (Juneja) ("[ETFMG documents] listed various comparables to different niche funds that ETFMG had. And some of those were iShares funds. And you could see that the fees for the iShares funds were much, much lower. And yet none of the [fees for the] other ETFMG funds were changed and they were still higher."). Also notable, in January 2018, in recognition of expenses attributable to this litigation, the Trust effectively raised the fee charged to HACK shareholders to 64 basis points. PX-24 at 8–9. The Trust, notably, did not regard it as a competitive necessity to maintain the 60 basis point fee.

In the end, the Court concludes that, although fee compression may have a marginal impact on at least some of the funds at some point in the future, ETFMG has not established that

[60] It is, in any event, far from clear the extent to which a fee reduction would result in drops in fee revenue. A possible outcome, which May's critique did not satisfactorily ventilate, is that a drop in fees may yield an increase in AUM. Although purely anecdotal, the evidence regarding HACK following the fee reduction is consistent with this. By the end of June 2017, less than four months after the board had voted to reduce HACK's fee, its AUM had grown more than 20 percent. DX-848. While this increase could well have resulted from factors independent of the fee reduction, it underscores the methodological inadequacy of May's rebuttal-report critique that the future fee reduction he hypothesized would result in reduced revenues.

this scenario is likely. It is too conjectural to justify further reduction in the Court's estimate of Nasdaq's damages.

* * *

The Court therefore finds that $67 million represents a reasonable estimate of HACK, IPAY, and SILJ's discounted future profits. This figure, the Court finds, neither over- nor understates the likely AUM growth those funds will achieve while maintaining a constant management fee. In selecting this estimate, the Court has not pretended to a false level of precision. All in, this figure sets damages somewhat but not dramatically above the midpoint between Juneja and May's estimates for the scenario in which AUM grows and fees maintain their current levels. This reflects the Court's assessment that May raised legitimate issues with Juneja's estimate but that his own calculations significantly overcorrected for those deficiencies. The $67 million figure accounts, in particular, for May's legitimate points regarding future AUM growth. After careful review, the Court is persuaded that a projection of HACK, IPAY, and SILJ future profits at $67 million is neither excessive nor speculative.[61]

d. Replacing Marketing Efforts

ETFMG next argues that a further reduction must be made from Juneja's projections to account for the expenses Nasdaq would incur in replacing ETFMG's marketing efforts.

Juneja projected expenses using formulas specified in the contracts governing each fund. Some expenses, such as the advisory fee, are based on AUM. Other fees, such as custodian fees,

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[61] Although not the basis of the Court's result, the reasonableness of this projection is reinforced by the fact that its estimate of $67 million in prospective damages is approximately $1.5 million less than Juneja's estimate for a scenario in which two disputed inputs are changed, one in each side's favor: (1) AUM grows at a faster clip than the Court has assumed, but (2) HACK's management fee is reduced to 47 bps. The proximity of these two outcomes reinforces that $67 million is a reasonable estimate of the funds' expected profits under multiple scenarios.

are based on a fixed dollar amount per month. Juneja Aff. ¶ 35; *see generally* Juneja Rpt., Ex. 7 (listing expenses and formulas for calculating each one). For each scenario she modeled, Juneja did not assume any further marketing costs beyond those already in place. The reason she did not assume any additional marketing costs, she testified, was that "under the Index License Agreement, PureShares agreed that it would 'provide, or cause another party on its behalf to provide marketing and advertising services in connection with the promotion of the Product(s),' and Schedule I to that agreement dictated that PureShares would be 'solely responsible' for 'marketing, advertising, and distribution services for the products.'" Juneja Aff. ¶ 40 (citing JX-1; JX-3).

ETFMG counters that Nasdaq's damages should be offset by the amounts Nasdaq would have to spend to replace the marketing for the PureShares ETFs arranged by ETFMG through the Wholesaling Platform from which Nasdaq has (permissibly) withdrawn. In support, ETFMG notes that, while in place, Nasdaq "rationally spent more than $2.8 million to support the Wholesaling Platform." Dkt. 154 at 49. ETFMG argues that such marketing costs would amount, at a minimum, to $6.8 million for a five-year period.

ETFMG's argument is easily put to one side.

First, as noted, the evidence established that, well before its relationship with ETFMG collapsed, Nasdaq had decided to eliminate its future expenditures with respect to the PureShares ETFs to the fullest extent possible consistent with its contractual obligations. ETFMG has not pointed to a contractual obligation of Nasdaq's to incur future marketing expenses (and, had one existed, Nasdaq's performance would have surely been excused as a result of ETFMG's material breaches). Juneja reasonably estimated that Nasdaq's future expenditures for these funds would not entail expenses beyond those already contractually in place.

Second, ETFMG and May have not provided any reason to conclude that future spending of the sort undertaken by ETFMG through the Wholesaling Platform would be efficacious in enhancing fund AUMs, including of the funds relevant here. Conceivably, there could have been persuasive evidence (perhaps from an expert) demonstrating that such spending to date had boosted, or that future spending along the same lines predictably stood to boost, the assets under management of HACK, IPAY, and/or SILJ. There was, however, none. And the evidence at trial regarding ETFMG's supervision of the Wholesaling Platform—including its hiring of at least one relative of an ETFMG insider as a wholesaler and its breach of the Wholesaling Agreement with Nasdaq, as reviewed earlier—does not inspire confidence in the efficacy of the platform. Nor was there evidence about industry standards as to marketing of such funds following their early years. Therefore, even assuming that ISE and Nasdaq's spending on wholesaler marketing of these funds in their early fledgling years was productive, it does not follow that such spending would predict the marketing expenses an established and well-known niche ETF would incur after it had matured, including after it had reached consistent profitability.

The Court therefore does not find, based on the trial record, that a reduction in Nasdaq's future-profits damages is required to account for non-contractual marketing expenses. Nasdaq is, therefore, entitled to $67 million in prospective damages to reflect profits it would have earned on HACK, IPAY, and SILJ.

C. Nasdaq Cannot Recover GAMR or IFLY Profits

1. Recovery in Contract

The Court has found that ETFMG breached the GAMR and IFLY PSAs by failing to terminate those funds as contractually obligated. Nasdaq argues that, as damages, it is entitled to the profits thereafter earned from those funds. ETFMG counters that Nasdaq cannot recover

GAMR and IFLY profits generated after July 31, 2017, because Nasdaq agreed to the termination of those funds.[62]

The Court finds that Nasdaq is not entitled to recover, in contract, such damages. "It is a basic principle of contract law that remedy for a breach should seek to give the non-breaching party the benefit of its bargain by putting that party in the position it would have been but for the breach." *Genencor Int'l, Inc. v. Novo Nordisk A/S*, 766 A.2d 8, 11 (Del. 2000) (citing Restatement (Second) of Contracts § 344).

Here, Nasdaq's expectation, but for ETFMG's failure to liquidate GAMR and IFLY, was the orderly and timely termination of these funds. This termination would have been complete months before either fund ever generated a profit. Payment to Nasdaq of the profits later yielded by these funds would therefore over-compensate Nasdaq, which had no expectation of profits from either fund as of the date that it ordered the termination of the funds. Having acceded to the termination of the funds and having ceased to perform with respect to them, Nasdaq can hardly be said to have had an expectation interest in the future profits of ETFs that it believed worthless and worthy of closure. Indeed, the evidence at trial was clear that Nasdaq had decided, as a

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[62] The Court has already rejected other theories of potential breach relating to these two funds. Unlike HACK (and IPAY and SILJ), GAMR and IFLY did not generate any profits prior to July 2017, and therefore ETFMG did not breach contract with respect to these funds by appropriating their profits.

matter of business strategy, to terminate the unprofitable PureShares ETFs where it had the contractual right to do so. *See supra* pp. 32–36.[63]

To be sure, had Nasdaq incurred expenses as a result of GAMR or IFLY's continued existence following the termination date, it would have been entitled to recover damages to compensate it for those expenses. The record, however, does not reflect evidence of such expenses.

As a matter of contract law, therefore, the Court finds that, notwithstanding ETFMG's breach in failing to terminate the two funds, Nasdaq is not entitled to recover GAMR or IFLY profits generated after July 31, 2017.

2. Recovery in Quasi-Contract or Tort

A separate question is presented by whether Nasdaq can recover in quasi-contract (or related tort doctrines) for ETFMG's retention of profits from GAMR and IFLY yielded after the point at which, had ETFMG complied with the PSAs, the funds would have been closed. Nasdaq claimed that, as an alternative to its contract claims, ETFMG is liable for conversion, unfair competition, unjust enrichment, or under a theory of *quantum meruit*.

Conceptually, the Court agrees with Nasdaq that, on a proper record, a recovery in quasi-contract could have been justified. The PSAs for GAMR and IFLY did not address—they were silent as to—remedies for the breach of ETFMG's duty to terminate these funds, leaving room for potential recovery in quasi-contract. And the quasi-contract doctrines of unjust

[63] Relatedly, Nasdaq also brought a claim for breach of the duty of good faith and fair dealing. Nasdaq, however, did not address this claim in its post-trial brief, other than in a passing reference in its discussion of prejudgment interest. Even assuming *arguendo* that Nasdaq satisfactorily preserved this claim, it would apply, at most, in areas where relief in express contract is unavailable. Even assuming that ETFMG's continued operation of GAMR and IFLY after the date on which these were to have been terminated constituted a breach of that duty, the absence of any expectation on Nasdaq's part of receiving the profits of IFLY and GAMR after that date would bar recovery on that claim with regard to those ETFs.

enrichment and conversion, in particular, had the potential to afford a recovery to Nasdaq keyed to the extent of any unjustified benefit reaped by ETFMG for its decision to operate funds that it contractually had managed but to whose profits it did not have a contractual entitlement.

Beyond establishing the fact that these funds eventually proved profitable, Nasdaq at trial did not develop the factual record necessary to substantiate reliably any such quasi-contract recovery. Indeed, in its post-trial submissions, Nasdaq presented no evidence or argument specific to GAMR or IFLY in support of any quasi-contract claim, instead largely restating the general facts underlying its breach of contract claims. *See* Dkt. 155 at 39–40.

Without such evidence, recovery under these non-contract theories largely would be precluded by the existence of the GAMR and IFLY PSAs, which governed the parties' obligations as to those funds.[64] Nasdaq's quasi-contract and tort claims could only have arisen subsequent to the termination of those contracts, and thus necessarily would have entailed close examination of the operation of these funds following the termination date. For example: To what degree did the funds use and benefit from inputs by or assets of Nasdaq or ISE (*e.g.*, prior research, intellectual property)? To what degree did the funds use and benefit from independent

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[64] *See, e.g.*, *Fesseha v. TD Waterhouse Investor Servs., Inc.*, 761 N.Y.S.2d 22, 24 (1st Dep't 2003) ("A cause of action for conversion cannot be predicated on a mere breach of contract. . . . Here, plaintiff's conversion claim alleged no independent facts sufficient to give rise to tort liability and, thus, was nothing more than a restatement of his breach of contract claim." (internal quotation marks and citations omitted)); *Dorset Indus., Inc. v. Unified Grocers, Inc.*, 893 F. Supp. 2d 395, 414 (E.D.N.Y. 2012) (unfair competition claim dismissed "where, as here, the unfair competition claim is also premised on the same factual allegations underlying a claim for breach [of contract]" and defendant had no independent legal duty other than its contractual obligations); *In re Chateaugay Corp.*, 10 F.3d 944, 958 (2d Cir. 1993) ("[Plaintiff's] successful assertion of its contractual right . . . even though its recovery has been impaired, is fatal to any quasi contractual claim: '[t]he existence of a valid and enforceable written contract governing a particular subject matter ordinarily precludes recovery in quasi contract for events arising out of the same subject matter.'" (quoting *Clark-Fitzpatrick, Inc. v. Long Island R.R. Co.*, 70 N.Y.2d 382, 388 (1987))).

inputs (*e.g.*, from a successor index provider)? Critically, what accounted for the newfound profitability of the funds well after the termination date, as of which each had still been unprofitable? To what degree, if any, was this turn of events traceable to Nasdaq's efforts and contributions? *See, e.g.*, *Razzak v. Juno, Inc.*, No. 656428/2017 (BRO), 2019 WL 316719, at *9–10 (Sup. Ct. N.Y. Cty. Jan. 24, 2019) (analyzing the value of plaintiffs' unpaid contributions to defendants' success and noting that additional proof would be required on quasi-contract claims at later stages of litigation); *Crespo v. Biyombo*, No. 651616/2014 (SS), 2015 WL 5222872, at *4–5 (Sup. Ct. N.Y. Cty. Sept. 4, 2015) (analyzing in detail the value of plaintiff's services and factually distinguishing between contributions for which plaintiff could and could not recover under theory of unjust enrichment claim); *Corsello v. Verizon N.Y., Inc.*, 18 N.Y.3d 777, 790 (2012) (rejecting unjust enrichment claim where facts pled made it simply a "catchall cause of action to be used when others fail"); *Tasini v. AOL, Inc.*, 851 F. Supp. 2d 734, 740–41 (S.D.N.Y. 2012) (denying recovery for unjust enrichment where plaintiffs could not prove expectation of compensation); *Sebastian Holdings, Inc. v. Deutsche Bank AG*, 912 N.Y.S.2d 13, 15–16 (1st Dep't 2010) (analyzing independent facts that allowed conversion and unjust enrichment claims to proceed despite existence of contract).

The Court cannot rule out that, had Nasdaq elected to present evidence on and mount a close analysis as to such questions, recovery of some sum in quasi-contract could have been developed, perhaps keying recovery to the share of eventual profits fairly traceable to expenditures and efforts by Nasdaq. These nuanced showings, however, were neither attempted nor made. No attempt at trial, in fact, was made to examine closely the finances and operation of these funds after July 2017. And, given the intervening assumption of control by ETFMG over of these funds, the substitution of a successor company for Nasdaq as index provider, and the

passage of time, Nasdaq's bid for all eventual profits of these funds cannot be assumed to measure accurately a proper quasi-contract recovery.

The Court therefore holds that Nasdaq has failed to meet its burden to show that it is entitled to recovery of damages from GAMR or IFLY profits, whether in contract or otherwise.

D. Damages for Breach of the Wholesaling Agreement

Nasdaq separately seeks damages for ETFMG's breach of the Wholesaling Agreement. As reviewed above, ETFMG materially breached that agreement through its "netting" practice. This enabled ETFMG effectively to award itself expense reimbursement from Nasdaq's coffers and deprived Nasdaq of its contractual right to approve expenses. Nasdaq seeks rescission and rescissory damages for the $2,878,893 in expenses associated with its performance under the Wholesaling Agreement.[65]

Nasdaq cannot recover the full $2,878,893 it seeks. The Wholesaling Agreement is interwoven with Nasdaq and ETFMG's operation of the PureShares ETFs. Its principal purpose was to promote those funds. Nasdaq stood to gain from the expenses that it incurred under that agreement, insofar as the expenses were undertaken to promote these funds. Because the Court has awarded Nasdaq its proven actual and expected profits from the PureShares ETFs as to which a breach has been established, allowing Nasdaq to recoup, as part of a broad rescission remedy, all expenses it properly was charged under the Wholesaling Agreement would put Nasdaq in a *better* position than it would have been in assuming performance and no breach by ETFMG. *See* 12A C.J.S. *Cancellation of Instruments* § 4 (2019) ("The rescission of a written instrument is inconsistent with a claim for [contract] damages as a damage claim is based on enforcement of the contract. The purpose of an action for rescission, as distinguished from one

[65] Nasdaq also sought a ruling that it was entitled to forego performance under the Wholesaling Agreement. The Court addressed this issue, ruling in Nasdaq's favor. *See supra* pp. 119–20.

for damages, is to permit the defrauded party to obtain restitution of the benefits conferred by him or her."); *see also Detroit Med. Ctr. v. Provider Healthnet Servs.*, 269 F. Supp. 2d 487, 495 (D. Del. 2003) (rescissory damages "restor[e] the plaintiff to its *original* condition by awarding money or other property of which [it] had been deprived" (emphasis added)).

In contrast, however, Nasdaq can properly recover for specific expenses that ETFMG's improper practice of "netting" caused Nasdaq to pay, where such expenses were outside the scope of Nasdaq's obligations under the Wholesaling Agreement. These expenditures would not have been incurred but for ETFMG's breach. And the award of past and future fund profits provides Nasdaq no redress for such outlays.

Informed by a post-trial exchange of letters in which counsel helpfully directed the Court to trial evidence bearing on particular expense items that Nasdaq contends it unjustifiably was made to cover as a result of ETFMG's practice of netting, *see* Dkts. 187–88, the Court finds the following expense items to have been improperly charged to Nasdaq, and therefore finds the corresponding sums recoverable in contract damages[66]:

- $17,750 in trade conference expenses. PX-221 (First Netting Statement, dated October 18, 2016).

[66] The Court's identification of these expenses as improperly billed to Nasdaq reflects its close assessment of the evidence as to each of the expense items that Nasdaq has claimed ETFMG wrongly obliged it to cover. As to a number of expenses, ETFMG concedes improperly billing Nasdaq. To the extent the Court has found in Nasdaq's favor on disputed items, it has generally determined that ETFMG's netting practice deprived Nasdaq of its contractual entitlement to pre-approve expenses. Where the Court has not so found, it has done so because either (1) the Court is unpersuaded that Nasdaq or its predecessor ISE did not approve the particular expenditure; (2) the expenditure (*e.g.*, broker registration fees for an approved wholesaler) appears implicit in the Wholesaling Agreement arrangement; or (3) Nasdaq did not demonstrate with the necessary precision the scale of ETFMG's overcharge.

- $5,731.10 for a July 2016 wholesaler invoice that ETFMG now concedes Nasdaq had already paid. *Id.*
- $24,811.31 in unapproved wholesaler expenses, including one expense that ETFMG now concedes Nasdaq had already paid. PX-173 (Second Netting Statement, dated December 9, 2016).
- $66,000 in ETF conference fees. *Id.*
- $3,099.12 in hotel expenses for an ETF conference. *Id.*
- $7,854 in marketing expenses incurred in connection with an ETF conference. *Id.*
- $19,222.84 for eight broker registration fees, which ETFMG concedes were wrongfully charged to Nasdaq. *Id.*
- $19,820.26 in wholesaler travel and entertainment expenses incurred in December 2016 and January 2017. PX-223, PX-223A (Third Netting Statement, dated February 28, 2017).
- $19,117.81 in marketing expenses incurred in connection with an ETF conference, including expenses for marketing funds not covered by the Wholesaling Agreement and more than $200 spent at a liquor store. *Id.*
- $35,682.28 in November 2016 wholesaling fees, which ETFMG concedes Nasdaq had already paid. *Id.*
- $43,727.85 in legal expenses improperly charged to Nasdaq. PX-224 (Fourth Netting Statement, dated May 26, 2017).
- $204,100 in expense reimbursements, which ETFMG concedes Nasdaq had already paid in 2016. *Id.*

- $21,906.54 and $1,788.25 in miscellaneous wholesaler travel and entertainment expenses. *Id.*
- $3,850 for webinar, email, graphics, and advertising expenses, which ETFMG concedes were incurred for products not on the wholesaling platform. *Id.*

Nasdaq therefore is entitled to $494,461.36 in damages for ETFMG's breach of the Wholesaling Agreement. This additional award returns Nasdaq to the position it would have been in but for ETFMG's breach.

E. Punitive Damages

Nasdaq also seeks punitive damages from ETFMG for its breach of the PureShares PSAs. Dkt. 155 at 57. These agreements are governed by Delaware law. Under Delaware law, as a general matter, "damages for breach of contract have been limited to the non-breaching parties' expectation interest," and "punitive damages are not recoverable for breach of contract unless the conduct also amounts independently to a tort." *E.I. DuPont de Nemours & Co. v. Pressman*, 679 A.2d 436, 445 (Del. 1996); *see id.* at 445–46 (reviewing justifications for rule rooted in traditional contract doctrine and modern theory of efficient breach).

The Court cannot find, on the record here, that ETFMG's conduct independently amounted to a tort.[67] Nasdaq argues that Delaware law allows for the award of punitive damages for breach of contract where the breaching party acts in bad faith. Dkt. 155 at 57. But the case Nasdaq cites for this proposition explicitly circumscribes this exception to an insurer's bad faith denials of coverage. *Pressman*, 679 A.2d at 446; *see id.* at 448 (holding that "punitive damages are not available for any breach of the [non-insurance] contract"). The Court therefore finds that Nasdaq is not entitled to punitive damages, even to the extent that ETFMG's breaches of the PSAs can be viewed as in bad faith.

F. Injunctive Relief

Nasdaq further requests injunctive relief either in lieu of, or in addition to, an award of Nasdaq's prospective damages. Nasdaq invites the Court to impose a constructive trust, to direct ETFMG to cause the ETFMG Trust to transfer oversight of the funds to another trust identified by Nasdaq, or to enter a permanent injunction barring ETFMG and its principals from further involvement in the PureShares ETFs.

These proposed forms of injunctive relief suffer from two fatal flaws.

First, the securities laws governing the funds either preclude such relief or, at minimum, in operation ensure that the equities disfavor the entry of such relief. In particular, under the

[67] Because Nasdaq does not appear to seek punitive damages for breach of contract under New York law, the Court has no occasion to address such a request for relief. For the avoidance of doubt, however, the Court notes that Nasdaq could not recover punitive damages under New York law. *See N.Y. Univ. v. Cont'l Ins. Co.*, 87 N.Y.2d 308, 315–16 (1995) ("Punitive damages are available only in those limited circumstances where it is necessary to deter defendant and others like it from engaging in conduct that may be characterized as 'gross' and 'morally reprehensible,' and of 'such wanton dishonesty as to imply a criminal indifference to civil obligations.' . . . [T]he pleading elements required to state a claim for punitive damages as an additional and exemplary remedy when the claim arises from a breach of contract . . . are: (1) defendant's conduct must be actionable as an independent tort; (2) the tortious conduct must be of the egregious nature . . . ; (3) the egregious conduct must be directed to plaintiff; and (4) it must be part of a pattern directed at the public generally." (internal citations omitted)).

1940 Act, ETFMG, as fund advisor, works for and serves at the pleasure of the Trust, not the other way around. Whatever the extent of its informal influence, ETFMG does not have the formal authority to direct the Trust's decision-making. Chambers Rept. ¶¶ 22–29. And Nasdaq chose not to sue the Trust or the independent Trustees, whose votes would be required to approve a transfer of any PureShares ETF to a different trust or any change in investment advisor. Indeed, Section 15 of the 1940 Act would require, for a change in investment advisor for any of the funds, the vote of a majority of that fund's outstanding voting securities. 15 U.S.C. § 80a-15.

Thus, the injunctive relief Nasdaq seeks, such as the imposition of a constructive trust, would require the Court to order extraordinary equitable remedies against, or cause action on the part of, non-party fiduciaries over whom the Court has not exercised personal jurisdiction, to achieve a result in tension, if not conflict, with the securities laws. *See* Fed. R. Civ. P. 65(d) (limiting scope of persons bound by any federal injunction). Even were such a result permissible, the balance of equities would weigh strongly against such relief. It would unhelpfully entangle the Court, potentially for years, in the supervision of complex securities investment vehicles with whose stewardship the securities laws task qualified fiduciaries.

Second, "it is basic that equitable relief will not be granted where an adequate remedy at law exists," and that "[m]oney damages if determinable with a reasonable degree of certainty constitute such an adequate remedy." *SCM Corp. v. Xerox Corp.*, 507 F.2d 358, 363 (2d Cir. 1974); *see also, e.g.*, *Soley v. Wasserman*, No. 08 Civ. 9262 (KMW), 2013 WL 5780814, at *1 (S.D.N.Y. Oct. 24, 2013) ("Money damages are the favored disposition in the law, such that money damages determinable with a reasonable degree of certainty constitute . . . an adequate remedy." (internal quotation marks and citations omitted)); 1 James W. Moore et

al., *Moore's Federal Practice* § 2.03[3] (3d ed. 2013) ("While a complaint may seek both legal and equitable relief, a court may not *grant* equitable relief unless it first determines that the party seeking equitable relief has no adequate legal remedy." (emphasis added)).

Here, the Court has found that money damages are determinable with a reasonable degree of certainty, and has tabulated substantial such damages due to Nasdaq. And the imposition of a constructive trust enabling Nasdaq to keep future profits generated by the PureShares ETFs would, if awarded alongside the imposition of money damages aimed to compensate Nasdaq for the loss of those same profits, give Nasdaq an unjustified double recovery. The money damages awarded here are an adequate legal remedy for Nasdaq's injury. They preclude the equitable relief Nasdaq seeks.

G. Prejudgment Interest

Nasdaq is entitled to prejudgment interest under New York law for its damages from ETFMG's breach of the Index License and Sublicense Agreement, and under Delaware law for its damages from ETFMG's breach of the Wholesaling Agreement.

Under New York law, "prejudgment interest is normally recoverable as a matter of right in an action at law for breach of contract," *Graham v. James*, 144 F.3d 229, 239 (2d Cir. 1998) (internal quotation marks and citations omitted), and "accrues from the date of the breach," *Aristocrat Leisure Ltd. v. Deutsche Bank Trust Co. Ams.*, 727 F. Supp. 2d 256, 295 (S.D.N.Y. 2010) (citing *Brushton-Moira Cent. Sch. Dist. v. Fred H. Thomas Assocs., P.C.*, 91 N.Y.2d 256, 262 (1998)). Prejudgment interest prevents the breaching party "from attempting to enjoy an interest-free loan for as long as it can," at the expense of the non-breaching party. *Gierlinger v. Gleason*, 160 F.3d 858, 874 (2d Cir. 1998). Interest on damages incurred after the initial breach is calculated from the date those damages occurred. *Aristocrat Leisure*, 727 F. Supp. 2d at 295–96. The Court, however, has "wide discretion" to determine a reasonable

date from which to calculate interest where "damages are incurred at various times after the cause of action accrues." *Id.* at 296 (quoting *Conway v. Icahn & Co.*, 16 F.3d 504, 512 (2d Cir. 1994)).

Nasdaq is entitled to prejudgment interest for its retrospective damages from ETFMG's breach of the Index License Agreement and Sublicense Agreement, which is governed by New York law. The New York prejudgment interest rate for such damages is 9%. *See* N.Y. C.P.L.R. § 5004. Accordingly, the Court awards Nasdaq prejudgment interest of 9% on its retrospective damages of $10,908,711, *i.e.*, those that accrued between December 2016 and October 31, 2018. In the interest of selecting a single date from which reasonably to measure prejudgment interest on this sum, the Court directs that such interest is to be measured as of November 1, 2017, the approximate mid-point of the period during which these damages accrued.[68]

Similarly, under Delaware law, "[p]re-judgment interest is awarded as a matter of right in a[n] action based on breach of contract or debt." *Delphi Petroleum, Inc. v. Magellan Terminal Holdings, L.P.*, 177 A.3d 610, 2017 WL 6371162, at *2 (Del. 2017) (Table). "Generally, pre-judgment interest accumulates from the date payment was due to a party, or alternatively when the plaintiff first suffered a loss at the hands of the defendant." *Id.* (internal quotation marks and citation omitted).

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[68] Nasdaq is not entitled to prejudgment interest for its prospective damages, which have not yet materialized. As to the damages that accrued between November 1, 2018, and the date of this decision, the Court, in its discretion, declines to award prejudgment interest. Such an award would present challenging calculative questions, insofar as the methodology the Court has used to find $67 million in damages due for the 14-year period beginning November 1, 2018 has not entailed making monthly calculations of Nasdaq's lost profits. Nasdaq, notably, in its post-trial brief, calculated prejudgment interest based solely on the $10,908,711 it is due in retrospective damages. *See* Dkt. 155 at 53 & n.14.

Nasdaq is thus also entitled to prejudgment interest for its damages from ETFMG's practice of "netting" expenses, in breach of the Wholesaling Agreement, which is governed by Delaware law. *See* JX-11 at 9. The Delaware prejudgment interest for such damages is 5% over the Federal Reserve discount rate, including any surcharge thereon. *See* 6 Del. C. § 2301; *Valeant Pharm. Int'l v. Jerney*, 921 A.2d 732, 755–56 (Del. Ch. 2007).

Accordingly, the Court awards Nasdaq prejudgment interest of 5% over the Federal Reserve discount rate on the $494,461.36 damages incurred as a result of ETFMG's breach of the Wholesaling Agreement, accruing from May 26, 2017, the date of ETFMG's fourth, and final, "netting" statement.

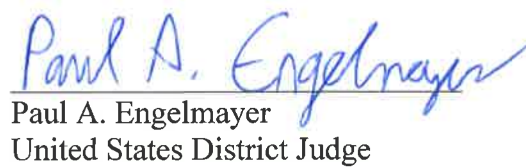
CONCLUSION

For the reasons set forth in the foregoing, the Court holds that Nasdaq has established, in multiple respects, its claims for breach of contract against ETFMG. Nasdaq, however, has not established its claims for breach of the duty of good faith and fair dealing, conversion, unfair competition, unjust enrichment, or *quantum meruit*. The Court also holds that ETFMG has failed to establish any of its counterclaims.

The Court further finds that Nasdaq is entitled to an award of the following in compensatory damages: (i) $10,908,711 in retrospective damages, with prejudgment interest of 9% thereon to be measured as of November 1, 2017; (ii) $67 million in prospective damages; and (iii) $494,461.36 in damages under the Wholesaling Agreement, with prejudgment interest of 5% over the Federal Reserve discount rate thereon to be measured as of May 26, 2017. The Court declines to award punitive damages or equitable relief.

The Clerk of Court is respectfully directed to prepare a judgment in accordance with the foregoing.

SO ORDERED.



Paul A. Engelmayer
United States District Judge

Dated: December 20, 2019
New York, New York