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September 28, 2018

Mr. Brent J. Fields  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street NE  
Washington, DC 20549

Re: Exchange-Traded Funds Rule Proposal  
(Release Nos. 33-10515; IC-33140; File No. S7-15-18)

Dear Mr. Fields:

Nasdaq, Inc. (“Nasdaq”) appreciates the opportunity to comment on the proposed Exchange-Traded Funds Rule Proposal<sup>1</sup> (the “Proposal”) and to engage productively with the Securities and Exchange Commission (“Commission”) and with the exchange-traded fund (“ETF”) industry to help level the playing field for ETFs. Nasdaq has an expansive footprint in the ETF ecosystem, which includes ETF listings, trade execution and reporting platforms, ETF options and indexing services. Consequently, Nasdaq feels that it is vital to participate in any efforts to improve the ETF regulatory landscape.

Nasdaq strongly supports both the approval of proposed Rule 6c-11 of the Investment Company Act of 1940 (“1940 Act”) and with the Commission’s efforts to “create a consistent, transparent and efficient regulatory framework for the regulation of most ETFs”.<sup>2</sup> The elimination of the expense and delay associated with obtaining an exemptive order from the Commission under the Securities Exchange Act of 1934 (“Act”)<sup>3</sup> for ETFs that satisfy certain conditions is long overdue and will benefit many market participants.

However, there are several aspects of the Proposal that Nasdaq believes can be either modified or enhanced for the benefit and protection of investors, issuers and other market participants. The comments are categorized as those that: (i) promote the economics of market making; (ii) augment investor protections; (iii) improve the rule filing process; and (iv) enhance the regulation of ETFs.

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<sup>1</sup> Securities Exchange Act Release No. 33-10515; IC-33140 (June 28, 2018), 83 FR 37332 (July 31, 2018) (File No. S7-15-18).

<sup>2</sup> Id. at p. 37333.

<sup>3</sup> 15 U.S.C. 78s(b)(1).

## **I. Economics of Market Making**

Although most ETFs are similar to mutual funds in that they represent exposure to a diversified portfolio of securities, ETFs differ from mutual funds in that they trade in the secondary market like single company stocks. As with single company stocks, the continuous engagement by well-capitalized market makers is critical to the efficient and effective trading of ETFs. Opportunities exist within the Proposal to support market makers, which would increase the level of market maker participation and competition. Consequently, improving investors' experiences when trading ETFs.

There are certain elements addressed within the Proposal that would help reduce the risks and costs associated with market making in all ETFs, including thinly-traded ones. The items below concerning custom baskets and basket size flexibility would significantly and positively impact market making for ETFs. Taken together, allowing for custom baskets and increasing basket size flexibility should boost market maker participation and result in improved market quality.

### **A. Custom Baskets**

Custom baskets<sup>4</sup> may be used by authorized participants<sup>5</sup> ("APs") to create and redeem ETF shares. For both APs and issuers, custom baskets help improve ETF market quality by allowing market makers to trade more efficiently and cost effectively. This is especially true in asset classes such as fixed income where some bonds are relatively hard to source, or lot sizes are so large that the full portfolio cannot be bought for a creation unit value. Custom baskets are also critical to ensure continuity of trading where, for example, market makers need to trade securities that have become inaccessible to trade.

Additionally, custom baskets can be used as a tool to allow portfolio managers to benefit ETF shareholders beyond improving market quality. Shareholders would receive the dual benefits of improved liquidity, as well as providing portfolio managers with more tools to better manage their ETFs from tracking, performance and tax efficiency perspectives.

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<sup>4</sup> A "Custom Basket" is defined in Proposed Rule 6c-11(a) as "(i) Baskets that are composed of a non-representative selection of the exchange-traded fund's portfolio holdings; or (ii) Different baskets used in transactions on the same business day.

<sup>5</sup> There is often confusion around the usage of AP versus market maker. In this comment letter, APs are the firms that are contractually permitted to create and redeem blocks of ETF shares directly with the ETF issuer. Market makers are firms that are committing capital to provide liquidity directly to ETF investors by buying or selling ETF shares. APs are often, but not necessarily, market makers and market makers are not necessarily APs in the ETFs for which they provide liquidity. Some APs act as an agent to create or redeem ETF shares on behalf of a market maker who is not an AP. An "Authorized Participant" is defined in Proposed Rule 6c-11(a) as "a member or participant of a clearing agency registered with the Commission, which has a written agreement with the exchange-traded fund or one of its service providers that allows the authorized participant to place orders for the purchase and redemption of creation units."

Allowing for custom baskets increases market maker participation and reduces the costs of creations, which in turn benefits investors and shareholders. Consequently, Nasdaq strongly supports the Commission's efforts to level the playing field for all ETF issuers through the adoption of proposed Rule 6c-11, and thereby codifying such custom basket relief, to stimulate competition.

To address concerns expressed in the Proposal regarding the potentially harmful influence of APs "cherry picking" holdings delivered into and out of an ETF, it is Nasdaq's belief that those ETF issuers that currently enjoy exemptive relief for custom baskets already have in place processes to remain in compliance with the conditions of their exemptive relief. ETF issuer awareness of their fiduciary obligations, coupled with board oversight, should provide significant ETF shareholder protection when considering the potential overall impact of custom baskets on index tracking, overall performance and market quality. Cataloguing those compliance mechanisms in written policies and procedures should impose only limited costs.

A robust and written custom baskets policies and procedures system is an important element in the creation of custom baskets to protect shareholder interests. However, it is critical that there should be some grace period prior to implementation to allow issuers to be thoughtful in their handling of this change and to ensure a smooth transition that most benefits shareholders. Within the written custom baskets policies and procedures, some general flexibility is needed to allow for unforeseen usage cases is recommended when an unspecified opportunity to help both shareholders and market makers arises.

A once daily published basket that represents a pro rata slice of the ETFs holdings should be sufficient for investor transparency. Publishing each and every single custom basket would create confusion since each custom basket would likely be influenced by different sets of considerations based on the needs of the fund, as well as the market maker. Additionally, we recommend detailed records to be documented and kept by the ETF issuer for every custom basket in the event of a review.

There are valid reasons why multiple daily custom baskets as discussed above should not all be required to be posted on an ETF issuer website. First, AP/market maker inventory varies among firms where each firm may have a different basket need that could incorrectly be viewed as preferential treatment. Second, if an AP/market maker holds a large position that it must trade out of, but prior to executing the trade it has become known to the market, this could incentivize front-running by other market participants.

#### **B. Basket Size Flexibility to Help Thinly-Traded ETFs Grow**

Similar to the benefits of allowing more non-pro rata custom baskets, permitting variable creation sizes would help reduce the costs and risks of market making. This is particularly important for helping thinly-traded ETFs grow.

Current rules require creations in sizes closer to \$5 million per creation unit. For many new, thinly-traded ETFs, that can represent weeks, or even months, of average trading volumes.

Because average trades are small, market makers will need to create a whole basket, then hold and hedge the bulk of the position, over weeks or even months. A recent paper by Virtu Financial entitled “All About Wide ETF Spreads”<sup>6</sup> (January 2018) details how these costs add up. Importantly, it shows that for the majority of ETFs with spreads over 100 basis points, the wide spread can be accounted for by the costs of holding and hedging. It also illustrates that in most instances this is a problem that disproportionately affects new and thinly-traded ETFs. Unfortunately, these wider spreads often deter new investors, which slows the rate of adoption of these ETFs by investors and prolongs the period that these costs accrue to market makers. The appendices attached to this comment letter show simplified examples of how costs accrues to market makers holding thinly-traded ETFs, as well as how spreads fall once an ETF gain popularity, allowing market makers to achieve economies of scale.

By permitting issuers to allow market makers to create and redeem ETF shares in smaller size, the Commission would allow market makers to better manage the fixed costs of creation against the estimated accrual of costs of holding inventory. This would also allow market makers to reduce the capital tied-up in products that are thinly traded. This, in turn, would encourage market makers to support more ETFs and new entrants, thereby fostering greater competition amongst ETFs and market makers and, consequently, improved liquidity.

Nasdaq believes that a specified creation unit size should not be defined, rather this flexibility should be given to the ETF issuer who, as a professional asset manager, can then determine what is in the best interests for shareholders and market makers.

### **C. Issuer Self-Seeding**

Nasdaq believes that issuer self-seeding should be permitted, provided that the Commission clarifies self-seeding rules to address any potential concerns. Where ETFs are self-seeded, the burden on market maker capital is lower and also the success of the ETFs are more closely aligned with the goals of the issuer. This should allow market makers to quote tighter spreads, and shift more of the costs of holding an unsuccessful ETF to the issuers who are best positioned to determine the appropriate level of investment.

### **D. Issuer Stock Loans to Market Makers**

As discussed in Section I.B above, holding and hedging costs are a key impediment for growing assets in new ETFs. A significant proportion of such costs comes from borrowing the ETF or underlying assets as part of the hedge of the residual of any created basket. Ways to better facilitate stock loans for new, thinly-traded ETFs with market makers holding the inventory will help reduce holding costs, allowing market makers to prolong the time between creations or offer tighter spreads.

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<sup>6</sup><https://webapps2.kcg.com/kresearch/do/research/getDownload?attachmentId=4809&username=8FEW5ecT13JTdHAY7Qm0TA>

## **II. Augment Investor Protections**

Nasdaq recommends requiring that the issuer of certain leveraged or inverse exchange-traded products (“ETPs”) (“Leveraged/Inverse ETPs”) be subject to certain disclosure requirements. Leveraged/Inverse ETPs have a place for sophisticated institutional investors, such as for short-term portfolio insurance to counterbalance concerns over a possible market correction. However, Leveraged/Inverse ETPs are not typically suitable for long term holders or unsophisticated retail investors given their inherent complexity and enhanced risk profile.

Nasdaq believes that significant confusion exists surrounding the single day investment horizon associated with many of these products. The Commission should require issuers of Leveraged/Inverse ETPs to include language on their website disclosing to investors that returns on the product are linked to the performance of the underlying reference asset or index for a single day and that holding these products for longer than one day can result in investment returns that may be significantly different than the target return. While websites for these products already typically contain legal disclaimers surrounding holding period risk, such disclosure does not appear to be mandated under existing securities laws.

The Commission should adopt website disclosure language to improve transparency and provide increased investor protections around Leveraged/Inverse ETPs. In keeping with this recommendation, Nasdaq has just filed with the Commission a proposed rule change to Nasdaq’s listing standards to require such website disclosure by issuers of certain Leveraged/Inverse ETPs listed on Nasdaq.

## **III. Improve the Rule Filing Process**

Nasdaq strongly believes that the Commission should allow for Managed Fund Share filings<sup>7</sup> to be submitted under Section 19(b)(3)(A) of the Act. In 2016, the Commission approved Nasdaq’s proposal to add “generic” listing standards for Managed Fund Shares.<sup>8</sup> This allowed Nasdaq to list Managed Fund Shares that met these generic standards pursuant to Commission Rule 19b-4(e) under the Act.

Actively managed ETFs that do not fall within the generic listing standards for Managed Fund Shares must submit a filing for Commission approval pursuant to the provisions of Section 19(b)(1) of the Act,<sup>9</sup> and Rule 19b-4 thereunder.<sup>10</sup> Nasdaq has found that many of the Managed Fund Share ETFs substantially met the generic standards, but for one set of criteria or a small percentage of the portfolio holdings. Additionally, there are Managed Fund Shares that invest in

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<sup>7</sup> See Nasdaq Rule 5735 (Managed Fund Shares).

<sup>8</sup> See Securities Exchange Act Release No. 78918 (Sept. 23, 2016), 81 FR 67033 (Sept. 29, 2016) (SR-NASDAQ-2016-104).

<sup>9</sup> 15 U.S.C. 78s(b)(1).

<sup>10</sup> 17 CFR 240.19b-4.

similar asset classes and have investment objectives that are substantially similar to funds that have been approved previously by the Commission.

Nasdaq believes that products that are either a “near miss” to the generic standards or substantially similar to a previously approved fund and do not raise additional investor protection concerns are non-controversial in nature and are therefore consistent with the requirements of Rule 19b-4(f)(6) promulgated under Section 19(b)(3)(A) of the Act.<sup>11</sup> By allowing Managed Fund Share filings to be submitted for immediate effectiveness under Section 19(b)(3)(A), the Commission would maintain the appropriate level of investor protection while benefiting both issuers and Commission Staff.

Moreover, a proposed rule change requiring the Commission’s approval of a new ETP, including ETFs other than Managed Fund Shares, often takes an extended period, which delays the product’s launch and thereby defers an investor’ investment opportunity. Nasdaq believes that requiring an exchange to seek Commission approval for ETF filings that do not qualify under the “generic” listing standards, even when the difference is inconsequential, is an inefficient use of Commission resources and works to the disadvantage of investors and other market participants. Importantly, under Rule 19b-4(f)(6) the Commission Staff can reject a filing prior to the proposal becoming operative. Therefore, Commission Staff retains the ability to review the filing for controversial asset classes or investment objectives.

The adoption by the Commission of these changes and the resulting reduction in the filing burden on Commission Staff should allow for the dedication of more resources to focus on products that raise material or novel policy issues. Issuers also would be able to bring non-controversial products to market in a more efficient and cost-effective manner, which benefits investors and the market as a whole.

#### **IV. Enhancements to the Regulation of ETFs**

##### **A. IOPV Requirement**

Maintaining the requirement for the Intraday Indicative Value (“IIV”)<sup>12</sup> daily indicative optimized portfolio value (“IOPV”) calculations is important, even though the IOPV is no longer a tool used by market makers to make markets in ETFs and that the IOPV methodology has shortcomings when trying to represent an intra-day proxy valuation in many fixed income and international equity ETFs. ETF issuers continue to publish an IOPV because it remains a useful and accessible data point for retail investors as part of their due diligence process for trading ETFs.

There remains an element of investor protection in allowing investors, at their own discretion, to have access to an intra-day reference price as a comparison to the ETF market

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<sup>11</sup> 17 CFR 240.19b-4(f)(6).

<sup>12</sup> Please note that within the ETF industry the terms IIV, IOPV, and iNAV are often used interchangeably.

price. This allows investors to screen for significant price deviations that could signal breakdowns in the market maker arbitrage process. However, in the retention of IOPV as a required element, the pricing methodology should be standardized whenever possible.

## **B. T-1 Creation/Redemption Orders Impacted by Pre-Disclosure of Fund Holdings**

A T-1 order window, which allows an AP to submit an order to create or redeem an ETF with overseas market exposure for the next day's NAV, benefits both market makers and the fund's shareholders in ETFs. This is because the current NAV pricing methodology often uses pricing of markets that close prior to the close of U.S. markets that trigger the process for that day's NAV strike.

This window improves the ability of market makers to minimize risk versus NAV and for ETF fund portfolio managers to trade any cash to target or align with NAV methodology, which minimizes market risk to shareholders. Nasdaq recommends that consideration be given that there should be a specific carve-out in place for a T-1 order window for ETFs with exposure to international holdings so that such ETFs do not fall under any portfolio holdings disclosure requirements before creations and redemptions can be accepted.

## **C. Website Disclosure Requirements**

Nasdaq strongly supports the efforts made by both the Commission and the ETF community to increase transparency that strengthens investor protections. However, given the myriad proposals regarding the elements of website disclosure, there are certain aspects and concerns that first need to be addressed.

### **1. Standardization**

A primary concern is around the standardization of any calculated and displayed data so that ETF issuers do not have to make inferences on the proper calculation, or be incentivized to interpret calculation terminology to gain a competitive advantage over similar ETFs. Standardization would also be beneficial for daily portfolio and basket holdings because this allows investors to better understand and more easily compare the data when analyzing ETFs.

### **2. Heightened Premium-Discount to NAV Disclosure**

The suggested specific requirements for posting premiums and discounts, and consideration for required notices for extended periods of premiums and discounts, must be carefully studied. For example, fixed income funds may vary NAV calculation through either bid or mid-strike methodology and different calculation agents have different methods to calculate non-trading bonds. This could lead to the same bond held by two different ETFs having different marks or attributed prices assigned. Standardization of the calculation methodology for NAVs and premium and discount measures is essential. The 2% premium/discount seven day standard and one year public notice as proposed could be too narrow as well since there are countries or securities that have historically closed for holidays or

halted for periods of a week or more.

Nasdaq does not oppose the creation of a premium/discount disclosure methodology, but believes that a better methodology to protect investors should be designed. For example, if a higher level of premium/discount such as 5% or 10% is sustained over a shorter period of trading days, this may be a better disclosure measure for investor protection. Compare this to a 2% premium/discount over seven days that may not be a sufficiently high enough threshold and could generate false positive warnings. Seven days also may not be a quick enough notification trigger where an issue impacting the arbitrage process and creating a significant premium and discount should be disclosed earlier.

**3. Improved Collaboration Between Division of Investment Mangement and Division of Trading and Markets**

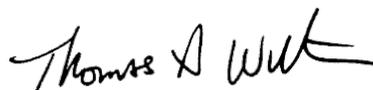
As a general comment, increased collaboration and coordination between the Divisions of Investment Mangement and Trading and Markets is strongly encouraged for establishing ETF rules, because ETFs operate, and are treated by investors, as both a portfolio and a trading vehicle. A closer working relationship between these Divisions would go a long way towards making the entire listings process more efficient, as well as smooth the path for Rule 19b-4 filings.

\* \* \*

Nasdaq strongly supports the approval of proposed Rule 6c-11 and looks forward to working closely with both the Commission and the ETF industry to promote much needed regulatory reforms pertaining to the ETF ecosystem. Nasdaq is a passionate advocate for a healthy and vibrant ETF industry and believes that the Proposal affords an excellent opportunity for the Commission to make the additional changes enumerated within this comment letter. Specifically, to promote the economics of market making, to augment investor protections, to improve the rule filing process, and to enhance the regulation of ETFs.

Nasdaq also requests that the Commission encourage greater collaboration, not only between the Divisions of Investment Management and Trading and Markets, but also among the members of the ETF ecosystem to help ensure that all continue to work towards a transparent and efficient market that benefits both investors and other market participants. Ultimately, the success of the ETF industry depends upon it.

Sincerely,



Thomas A. Wittman  
Executive Vice President  
Nasdaq, Inc.

Brent J. Fields  
September 28, 2018  
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cc: Chairman Jay Clayton  
Commissioner Robert J. Jackson, Jr.  
Commissioner Hester M. Peirce  
Commissioner Elad L. Roisman  
Commissioner Kara M. Stein  
Director Dalia Blass, Division of Investment Management

## **APPENDIX 1**

### **Examples of How Costs Accrue to Market Makers (Especially in Thinly-Traded ETPs)**

Expanding on the work done by Virtu Financial in their report referenced in the comment letter, the table and chart below is a simplistic model that illustrates how holding and hedging costs impact the costs incurred by market makers, which are in turn reflected in the spread costs investors pay.

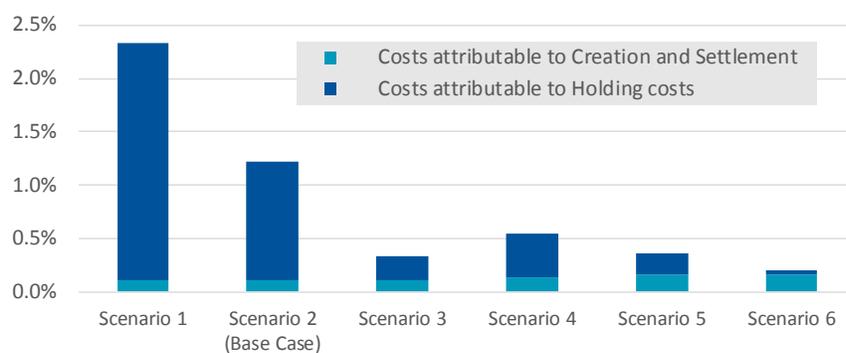
The model computes an expected market maker's cost based on an initial trade that leads to a creation and hedge for the residual. The costs are itemized, and separated between holding and trading costs. Holding costs are significantly higher for thinly-traded ETPs (low Average Daily Volume) as the expectation is that the market maker will need to stand in the market and wait for natural volume to reduce their position and hedge over time. The less liquid the ETP, the longer this hedge takes to reduce, which in turn means the more expenses accrue for the single creation trade (compare Scenarios 1, 2 and 3).

Reducing the creation unit size allows the market maker to reduce the size of their trade and hedge. By reducing the market maker's position, smaller basket sizes reduce underlying spread costs paid and also reduce the time to liquidate the position. This in turn reduces the accrued holding charges (compare Scenario 2, 4 and 5). Importantly, this does not reduce the creation and ticket costs of the trading. The fact that these are fixed costs should ensure the fund is not disadvantaged by smaller creations, and incentivize the market maker to only create in a size that is economic for the market maker given the expected turnover of the ETP.

Finally, this shows the impact of a reducing the holding costs in other ways, via reduced stock loan or subsidized management expenses, which were the basis of some responses to FINRA's Rule 5250 proposal (compare Scenarios 2 and 6).

	Scenario 1	Scenario 2 (Base Case)	Scenario 3	Scenario 4	Scenario 5	Scenario 6
<b>TRADE DATA</b>						
Customer trade size	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Customer trades/create	50	50	50	20	10	10
ETP Average daily volume	\$10,000	\$20,000	\$100,000	\$20,000	\$20,000	\$20,000
Creation size	\$5,000,000	\$5,000,000	\$5,000,000	\$2,000,000	\$1,000,000	\$1,000,000
Required inventory (create residual + hedge)	\$9,800,000	\$9,800,000	\$9,800,000	\$3,800,000	\$1,800,000	\$1,800,000
Estimated inventory hold time (Weeks)	196	98	20	38	18	18
<b>HOLDING COSTS</b>						
Management expense ratio (MER per annum)	0.70%	0.70%	0.70%	0.70%	0.70%	0.10%
Stock loan costs (% per annum)	0.50%	0.50%	0.50%	0.50%	0.50%	0.10%
MM inventory costs (per annum/2)	\$ 110,815	\$ 55,408	\$ 11,082	\$ 8,331	\$ 1,869	\$ 312
Invenotry costs per trade						
<b>TRADE &amp; SETTLEMENT COSTS</b>						
Basket Spread costs	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Basket Spread costs (\$)	\$5,000	\$5,000	\$5,000	\$2,000	\$1,000	\$1,000
Number of stocks in basket	100	100	100	100	100	100
Custoidal costs per ticker	\$2	\$2	\$2	\$2	\$2	\$2
Hedging ticket costs	\$200	\$200	\$200	\$200	\$200	\$200
Creation costs	\$500	\$500	\$500	\$500	\$500	\$500
Total settlement costs	\$5,700	\$5,700	\$5,700	\$2,700	\$1,700	\$1,700
<b>Total costs per Creation trade</b>	<b>\$116,515</b>	<b>\$61,108</b>	<b>\$16,782</b>	<b>\$11,031</b>	<b>\$3,569</b>	<b>\$2,012</b>
Total costs per customer as % of customer trade	2.33%	1.22%	0.34%	0.55%	0.36%	0.20%
Costs attributable to Creation and Settlement	0.11%	0.11%	0.11%	0.14%	0.17%	0.17%
Costs attributable to Holding costs	2.22%	1.11%	0.22%	0.42%	0.19%	0.03%

Example Market Maker Costs as % of Customer Trade



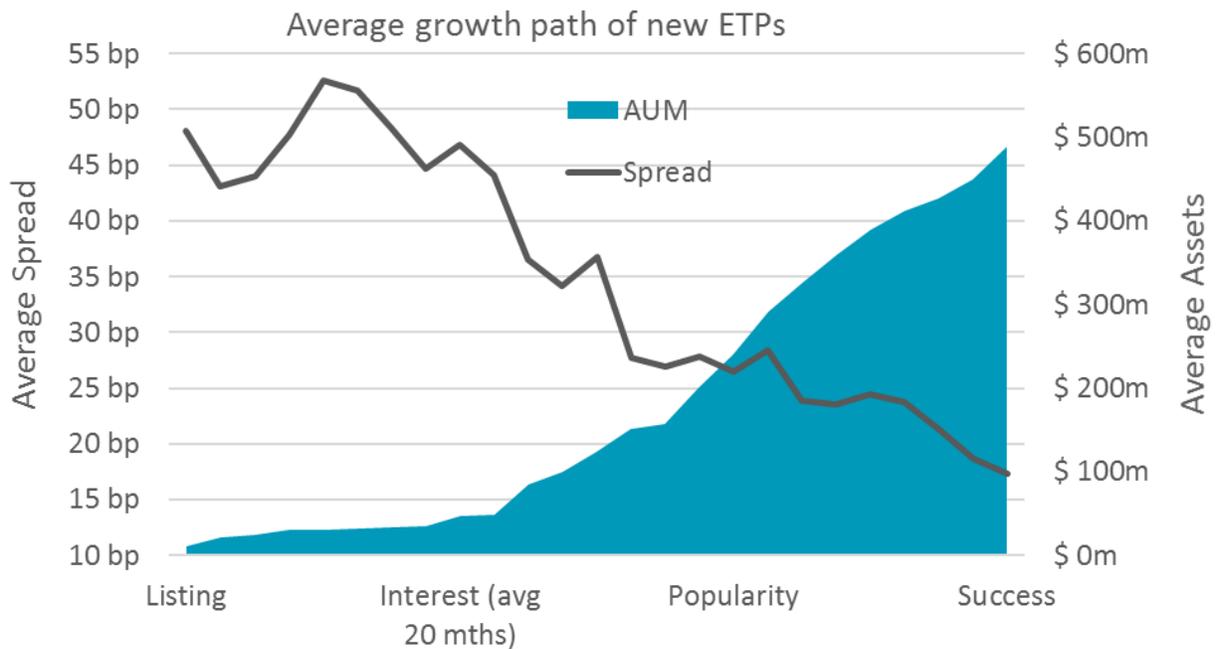
Source: Nasdaq Economic Research Estimates

## APPENDIX 2

### Visualization of How Spreads Fall Once an ETP Gains Popularity

Data for a selection of nine Nasdaq-listed ETPs shows a fairly typical pattern of success for ETP issuers.

These are all ETPs that have become popular over time. Although the path and time to success varies for each ETP, the average results are indicative of the early life of many ETPs. These ETPs were listed for between 10 - 36 months, averaging 20 months, before investor interest and assets started to grow. What this data highlights is that growth of assets creates a positive feedback loop – it causes trading volumes to increase, which reduces inventory hold times for market makers, in turn reducing their costs, which contributes to lower spreads that help asset to grow even more. Ultimately, as these ETPs reach a level of success, the data shows that higher volumes and assets allow more market makers to keep tight spreads in these products going forward.



Source: Nasdaq Economic Research (tickers: ALTY, DWFI, IBUY, KWEB, MPCT, RFAP, RFDI, ROBO, SRET)