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August 17, 2015

Mr. Brent J. Fields
Secretary, U.S. Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: Request for Public Comment on Topics Related to the Listing and Trading of Exchange-Traded Products on National Securities Exchanges and Sales of These Products by Broker-Dealers (Release No. 34-75165; File No. S7-11-15 (“Release”))¹

Dear Mr. Fields:

On behalf of Eaton Vance Corp. (“Eaton Vance”)² and its subsidiaries Eaton Vance Management and Navigate Fund Solutions LLC (“Navigate”),³ I write in response to the request by the U.S. Securities and Exchange Commission (“Commission”) for public comment on topics related to exchange-traded products (“ETPs”) as set forth in the Release.

¹ Unless otherwise noted, capitalized terms used in this letter have the same meanings as in the Release.

² Eaton Vance is one of the oldest investment management firms in the United States, with a history dating back to 1924. Eaton Vance and its affiliates had consolidated assets under management of \$307.3 billion as of June 30, 2015, offering individuals and institutions a broad array of investment strategies and wealth management solutions. For more information about Eaton Vance, visit eatonvance.com.

³ Navigate is a wholly owned subsidiary of Eaton Vance formed to develop and commercialize NextShares™ exchange-traded managed funds (NextShares). NextShares are a proposed new type of actively managed ETP offering potential advantages over actively managed ETFs that include maintaining the confidentiality of fund trading information, providing trade execution cost transparency and quality control to fund investors, and facilitating tight bid-ask spreads and narrow premiums/discounts in secondary market trading by utilizing a new trading protocol called “NAV-based trading.” The Commission has granted exemptive relief to Eaton Vance Management and a number of other investment advisers to permit them to offer NextShares, and has approved a request by the NASDAQ Stock Market LLC to adopt rules governing the listing and trading of NextShares. As noted in footnote 10 of the Release, the launch of the initial NextShares funds is still pending. For more information about NextShares, see NextShares.com.

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Eaton Vance appreciates this opportunity to express our views, provide supporting documentation and offer recommendations about issues relating to the listing and trading of ETPs. Our comments are generally limited to consideration of ETFs, the oldest and largest category of ETPs. We do not discuss ETNs or Non-1940 Act Pooled Investment Vehicles. Within ETFs, we consider both index-based and actively managed funds, but exclude leveraged, inverse and inverse leveraged funds. Our response is organized into two sections: (a) observations about ETF listing and trading and (b) recommendations to improve the listing and trading of ETFs and their utility to investors.

Observations about ETF Listing and Trading

1. ETF investor trading costs are often economically significant.

An ETF is a pooled portfolio instrument that *derives* its value from the current value of the fund's underlying holdings. Accordingly, the cost to buy or sell an ETF's shares is appropriately measured by the difference between the investor's all-in purchase or sale price and the value per share of the fund's net assets at the time the trade price is determined. In addition to the commissions that apply, the *cost to buy an ETF includes the premium* to current value at which shares are acquired, and the *cost to sell an ETF includes the discount* from current value at which shares are sold.⁴

The best available measure of the value per share of an ETF's net assets at the end of each business day is its NAV. This is the price at which the ETF issues and redeems Creation Units of shares. ETFs are required to disseminate throughout regular market trading hours each business day intraday indicative values ("IIVs") that are intended to provide intraday *estimates* of the fund's then-current value. Due to significant deficiencies in how the disseminated IIVs are calculated and little or no availability of historical IIV data, *the only meaningful measure of ETF trading costs available today is the relationship between daily ETF NAVs and corresponding daily ETF closing prices.*⁵

⁴ Costs to trade an ETF can be positive or negative. To realize profits, an ETF market maker that creates and redeems shares in connection with its market making activity must, on average, incur trading costs that are sufficiently negative to offset its costs to create and redeem. Negative trading costs for ETF market makers translate into positive trading costs for the investors with whom they transact.

⁵ The cost to buy and sell an ETF's shares intraday can be determined in real-time only by market participants having continuous access to timely and accurate pricing information for all of the ETF's underlying holdings. This information is widely utilized by ETF market makers and professional traders in connection with their intraday ETF trading, but is not available at reasonable cost to other market participants. After the fact, measures of an ETF's intraday trading costs could be constructed by comparing the ETF's intraday prices to the then-current values of its portfolio determined using

Attached as Exhibit 1 are summaries of two measures of annual average ETF trading costs for the years 2008 to 2014 and the first half of 2015. For each category of ETFs as classified by Morningstar, we show in Exhibit 1 the average of the *absolute value of the daily closing premium/discount* and the average *volatility of the daily closing premium/discount* as measured based on the relationship between NAV and closing price for each ETF. The average absolute value of the daily closing premium/discount measures how far, on average, an ETF's closing price varies from NAV. The volatility of the daily closing premium/discount measures the average variability of observed premium/discount values for each ETF.⁶ In Exhibit 1, we separate index ETFs from actively managed ETFs and show period averages for each category based on (a) equally weighting all funds in the category (EW), (b) weighting funds based on their respective average net assets (AW) and (c) weighting funds based on their respective dollar trading volume (VW).

As can be seen in Exhibit 1, measures of ETF trading costs varied significantly over different market environments and across different categories of funds, primarily reflecting differences in the costs and risks of ETF market making. The more efficient the arbitrage process for a given ETF category in a given period, the lower the observed investor trading costs. At one extreme, in the generally benign market environment of 2014 and the first half of 2015, investors in large-cap blend index ETFs (a category dominated by funds indexed to the S&P 500) experienced average (absolute value) closing premiums/discounts of 2 basis points ("bps") and average premium/discount volatility of 3 bps. At the other extreme, *in the challenging 2008 market environment, investors in numerous ETF categories experience average (absolute value) closing premiums/discounts and average premium/discount volatility of more than 100 bps.*

Although average ETF trading costs have clearly declined from the highs of 2008, an inspection of the study result for the first half 2015 (Ex. 1-1) and 2014 (Ex. 1-2) reveals that economically significant trading costs remain in effect for numerous ETF categories, include categories with large assets. As an example, in the first half of 2015 investors in emerging market equity index ETFs experienced average (absolute value) closing premiums/discounts of 41 bps AW and 48 bps VW, and average premium/discount volatility of 49 bps AW and 59 bps VW. If those ranges are representative of the one-way trading costs that investors in these ETFs incur, they are indeed significant.

time-stamped trade and quote data for the ETF's holdings accessed through market data services. We are not aware of any historical analyses of intraday ETF trading costs.

⁶ Calculations of the volatility of the daily closing premiums/discounts are based on the actual (positive or negative) value, not the absolute value, of the closing premiums/discounts observed over each period.

The data on ETF premiums/discounts reflected in Exhibit 1 is consistent with the results of a recent academic study of ETF trading, which concluded that “the difference between [an ETF’s] share price and the value of the underlying portfolio is often economically significant, indicating that the unsophisticated investor may face an unexpected additional cost when trading ETFs.”⁷

2. *Actively managed ETFs generally trade less efficiently than corresponding index ETFs, resulting in higher investor trading costs.*

Attached as Exhibit 2 is a comparison of historical trading costs of actively managed ETFs versus index ETFs in the same Morningstar category over the period since the first active ETFs were introduced in 2008. The principal observation from Exhibit 2 is that the costs to buy and sell actively managed ETFs reflected in closing premiums/discounts are generally higher than the costs to buy and sell index ETFs in the same Morningstar category. In all periods studied (2008 – 1H 2015), most Morningstar categories including both active and index ETFs showed higher average trading costs for active ETF investors than experienced, on average, by index ETF investors in the same category. This holds true whether measuring trading costs based on the absolute value of the daily closing premium/discount or the volatility of the daily closing premium/discount, and whether basing the experience of the average ETF investor on fund size (AW) or fund share trading volume (VW). Observed active ETF trading costs were consistently higher across most equity categories; comparisons among income categories were more mixed.

We attribute the observed higher trading costs of active ETFs versus index ETFs to three primary factors: (a) active ETFs are generally smaller than index ETFs in the same category, reflecting greater scale economies in the management of index-based products and the relative newness of active ETFs; (b) adjusted for fund size, active ETFs often trade less actively than corresponding index ETFs since index products are generally more attractive for use as short-term market exposure vehicles; and (c) index ETFs are generally easier for market makers to arbitrage because, in addition to trading directly in the underlying fund holdings, a market maker in index ETFs can hedge its ETF positions intraday by transacting in corresponding index futures and options contracts, index swaps, similar index ETFs and other index portfolio instruments without incurring meaningful basis risk. On average, the more cumbersome process of hedging ETF share inventory positions makes active ETFs more difficult and costly to arbitrage, which is consistent with the observation from Exhibit 1 that active ETFs are generally more expensive to buy and sell than corresponding index products.

⁷ See Petajisto, Antti, 2013. “Inefficiencies in the Pricing of Exchange-Traded Funds.” Available at <http://www.petajisto.net/>. (“Petajisto Paper”).

3. *ETF investors do not have access to adequate information to measure and assess their trading costs.*

Investors seeking to understand and measure the costs they incur to buy and sell ETF shares face major obstacles. First, leading sponsors of ETFs have not consistently emphasized premiums/discounts as the appropriate measure of investor trading costs. In fact, more attention is often paid to bid-ask spreads than premiums/discounts in discussing ETF trading costs.⁸ While wide spreads between posted bids and offer prices can *contribute* to high investor trading costs, they are not an appropriate *measure* of ETF trading costs except in narrow circumstances.⁹

Even for those investors that are sophisticated enough to measure their ETF trading costs appropriately, a dearth of good ETF valuation data makes this a near-impossible task for most. IIVs as disseminated intraday for each ETF are notoriously poor indicators of current value – to the point that experts on ETF trading often counsel disregarding them. The Commission has recently expressed concerns about the reliability of IIVs in current practice,¹⁰ noting the absence

⁸ See, for example, the statement that “the cost of trading any security is predominantly the difference between the bid (the price offered by market makers at which investors can sell) and the ask (the price offered by market makers at which investors can buy)” at page 8 in *ViewPoint: Exchange Traded Products: Overview, Benefits and Myths* (June 2013), a BlackRock publication available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/viewpoint-etps-overview-benefits-myths-062013.pdf> (“BlackRock ViewPoint”).

⁹ As conventionally measured, the bid-ask spread of a traded security at any point in time is the difference between the highest posted bid and the lowest posted offer price for the security then in effect. As measures of ETF trading costs, bid-ask spreads suffer from at least two deficiencies: (a) the *depth* of the national best bid and offer quotes is often quite small (e.g., 100 shares), meaning that the cost to execute a trade of more than nominal size is usually greater than the indicated spread would suggest and (b) the *location* of an ETF’s bid-ask spread within the range of market makers’ estimated costs to create and redeem shares can be *highly unstable* as the balance of net investor demand for a particular ETF swings from positive to negative and back. When an ETF is experiencing positive investor demand (excess of natural buyers over natural sellers), market makers will position their offer prices above their estimated cost to acquire and deliver to the ETF the underlying securities, plus a margin for profit and risk. When an ETF shifts to net investor supply (excess of natural sellers over natural buyers), market makers will reposition their quoted prices so that the bid-side quote is below the estimated net proceeds to them of selling the securities to be distributed in a redemption of the ETF’s shares, less a margin for profit and risk. An ETF market maker that does not set its bid and offer prices in this manner will lose money and soon be out of the business. It follows that *investors in ETFs must, on balance, acquire shares at prices that exceed the cost to market makers of creating shares and must, on balance, sell ETF shares at prices below market makers’ cost to redeem*. Particularly for ETFs that trade at bid-ask spreads that are inside the average bid-ask spreads of the ETF’s underlying holdings (a key determinant of market makers’ costs to create and redeem), *the posted bid-ask spread of an ETF can be a highly misleading indicator of the true trading costs experienced by fund investors*.

¹⁰ See Precidian ETFs Trust, et al., Investment Company Act Release No. 31300 (Oct. 21, 2014) (notice) at pages 15-19.

of uniform calculation standards and the frequent reliance on stale pricing data. IIVs for ETFs holding securities that trade principally outside the U.S. are routinely *out of date for several hours* and, depending on the cycle of weekly trading and holidays, *may be stale for multiple days*.

Unfortunately, the NAVs upon which reported ETF closing premiums and discounts are based also frequently reflect stale prices for securities that trade principally outside U.S. market trading hours. Unlike mutual funds, not all ETFs routinely apply fair value pricing techniques to adjust their NAVs¹¹ to reflect market trading in the interim between the close of trading in foreign markets and 4:00 PM eastern time. For ETFs that create and redeem shares in kind, the potential dilution from transacting at NAVs that reflect stale prices is far less a concern than for mutual funds (and ETFs) that issue and redeem shares for cash. But sponsors of ETFs that do not update their NAVs to reflect post-local close market movements do a considerable disservice to their shareholders seeking to measure investor trading costs by evaluating the closing premiums/discounts reported for the fund.

As a further insult, ETF disclosures of historical closing premiums/discounts are usually based on the midpoint of the closing bid-ask spread, rather than the closing price. While a significant percentage of an ETF's daily trading volume frequently takes place at the official market closing price,¹² little or no trading likely takes place at the closing bid-ask midpoint. Using closing bid-ask midpoints to calculate an ETF's reported premiums/discounts not only reflects the actual experience of few, if any, ETF investors, but also *likely understates* the actual trading costs of many ETF investors. Retail investors accessing market liquidity almost invariably buy shares on the (higher) offer side of the bid-ask midpoint and sell shares on the (lower) offer side of the midpoint. As explained in footnote 8 above, net investor demand for an ETF's shares is consistent with the fund trading at a premium, meaning that investor purchases of shares at the bid price incur higher trading costs (premium to NAV) than reflected in the bid-ask midpoint. Similarly, net investor supply of an ETF's shares is consistent with fund shares

¹¹ Our understanding is that, among the largest sponsors of ETFs holding international securities, only Vanguard routinely adjusts fund NAVs to reflect changes in market levels between the local market close and the time NAV is determined. Because Vanguard's ETFs utilize a multi-class structure with corresponding mutual fund share classes that issue and redeem shares in cash on a daily basis, if they did not apply fair value pricing, Vanguard's ETFs could be subject to shareholder dilution from short-term trading by investors in the corresponding mutual funds seeking to take advantage of stale NAVs. Sponsors of index ETFs holding international securities may be reluctant to adjust fund NAVs to reflect post-local close market movements because doing so introduces differences in measured performance of an index ETF versus its reference index (tracking error), the performance of which is normally based on local market closing prices. See Vanguard publication *Fair-Value Pricing: Impact on Index Investing* (April 2015) available at <https://institutional.vanguard.com/iam/pdf/FVTRANSC.pdf?cbdForceDomain=true> .

¹² Market-on-close orders to buy or sell shares are effected at the closing price.

ask midpoint. Similarly, net investor supply of an ETF's shares is consistent with fund shares trading at a discount, meaning that investors selling at the offer price again incur higher trading costs (discount to NAV) than reflected in the bid-ask midpoint.

One of the distinctions of ETFs versus mutual funds is that the public can normally view an ETF's full holdings on a current daily basis, whereas mutual funds typically disclose their holdings monthly or quarterly with a lag. While required only for actively managed ETFs, most sponsors of index ETFs elect to disclose the complete list of fund holdings each business day prior to the open of market trading.¹³ This "transparency" is frequently cited as a key benefit of investing in ETF.

Yet, *ETFs fall far short in providing transparency of investor trading costs*—arguably far more important to ETF investors than knowing the exact composition of fund holdings on a current daily basis. To repeat the key observations and conclusions of this section, most ETF investors:

- may not know how to appropriately measure their ETF trading costs;
- do not have access to reliable fund valuation data required to measure their individual ETF trading costs; and
- do not have access to historical data and other information to provide needed context to evaluate the ETF trading costs they face.

We view the inability of ETF investors to readily measure and assess their trading costs as a critical failing of the product structure as it now stands. Investors who do not know the true costs of their trades are prone to making poor investment decisions, including trading too much. Shedding more light on ETF trading costs would not only support more informed investor decision-making, but also promote increased marketplace competition and enhanced efficiency of ETF trading. More than two decades into the life of ETFs, we have little confidence that market forces alone will soon correct the significant deficiencies in ETF investor trading cost transparency that now exist.

¹³ Among leading sponsors of index ETFs, Vanguard is a notable exception to the general practice of disclosing all current fund holdings on a daily basis, citing the potential harm to fund shareholders from "front-running" and "free-riding" if fund trading information is not protected. See <http://www.wsj.com/articles/why-vanguard-is-secrective-about-its-stock-etfs-1425870188> (March 8, 2015).

Recommendations to Improve ETF Listing and Trading and Their Utility to Investors

- 1. Require ETF sponsors to calculate and disseminate daily NAVs that are current as of 4:00 PM Eastern Time.*

As noted above, it is our understanding that not all ETF sponsors apply fair value pricing techniques to adjust the NAVs of ETFs holding foreign securities to reflect changes in market levels between local market closing times and 4:00 PM eastern time, when fund NAVs are determined. As a result, the utility of reported closing premiums/discounts as a measure of ETF investor trading costs is significantly compromised.

Use of fair value pricing of foreign holdings in determining daily fund NAVs is now common across the mutual fund industry. Commercial services to support fair value pricing of international securities are readily available to mutual fund and ETF sponsors alike. A move to fair value pricing for ETFs holding foreign securities is needed to ensure that fund investors have *at least one valid daily measure* of the trading costs borne by buyers and sellers of ETF shares.

- 2. Prohibit the dissemination of IIVs that are misleading indicators of current fund value.*

Current exchange listing standards require ETPs to publicly disseminate IIVs throughout U.S. market trading hours, typically at intervals of 15 seconds. As stated on page 13 of the Release, “IIVs are designed to provide investors with information on the value of the investment held by the ETP (or, in the case of an ETN, the reference assets).” As noted previously, due to reliance on stale prices and other deficiencies in how IIVs are calculated, *reported IIVs are frequently highly misleading as indicators of current fund value and investor trading costs*, particularly for ETPs holding portfolio instruments that do not actively trade during U.S. market hours.

In our view, ETP sponsors should not only be removed from the requirement to disseminate IIVs that are clearly misleading, but *should be prohibited from doing so*. Continued dissemination of IIVs that are known to be misleading risks harm to unwary investors that may rely upon them. Over time, access to better pricing data and improved calculation procedures may result in useful IIVs being available for more and more ETPs. While this happens, the dissemination of misleading IIVs should be banned.

- 3. Promote the development and application of improved calculation and reporting standards for IIVs.*

As acknowledged by the Commission and discussed above, IIVs as currently provided leave much to be desired as estimates of intraday fund values and proxies for measuring investor

trading costs. To our understanding, little progress has been made standardizing the calculation or increasing the utility of disseminated IIVs since the first ETF was introduced in 1993. Because they are usually based on the last sale price, IIVs are often stale at the time of release. Because dissemination is typically limited to intervals of 15 seconds, IIVs quickly grow out of date, particularly during periods of rapid market movement. IIVs may not always be based on an ETF's entire portfolio and may not be calculated in the same manner as NAVs. Moreover, IIV calculations are typically based on "commercially reasonable" liability standards, with no responsible party standing behind them. Real-time dissemination leaves no time or scope for evaluating inputs or checking calculations prior to release. Even when calculations are consistently timely and accurate, the utility of IIVs is limited by lack of investor access and little or no availability of historical IIV data.

While acknowledging all the shortcomings of IIVs as they exist today, we believe investors in ETFs have a critical need for what IIVs seek to provide—consistently high quality information about intraday fund values and investor trading costs. Achieving a higher standard of IIV performance is surely attainable, but does not appear likely without the Commission's encouragement.

4. Require ETFs to include more useful information about current and historical closing premiums and discounts on websites and in prospectuses.

Each ETF's website should be required to include the calculation of current daily premiums/discounts and charts showing the distribution frequency and range of values of premiums/discounts over time based on the relationship between the ETF's closing price and NAV. Fund websites should not be permitted to represent closing premiums/discounts based on closing bid-ask midpoints. Representations of trading performance included in ETF prospectuses should follow this same standard.

5. Require ETFs to disclose on their websites the transaction fees that currently apply to the purchase and redemption of Creation Units of shares.

The materials on each ETF's website should be supplemented to include daily disclosure of the schedule of transaction fees that currently applies to purchases and redemptions of Creation Units of shares. Website disclosure of transaction fees currently in effect would improve the transparency of ETF costs, helping investors assess the reasonableness of the trading costs they incur to buy and sell fund shares.

6. Require ETFs to provide suitably prominent prospectus disclosures of investor trading risks.

Each ETF should be required to include among the principal risks of investing set forth in its summary and full prospectus that the prices at which fund shares trade in the secondary market may be above, at or below the corresponding value of the fund's net assets, will fluctuate in relation to such value based on the supply and demand in the market for shares and other factors, and may vary significantly from the corresponding fund value during periods of market volatility. The principal risk disclosure should further state that returns earned by a fund shareholder will be reduced if the shareholder sells shares at a greater discount or narrow premium to the corresponding fund value than he or she acquired shares.

7. Require ETFs to provide suitably prominent prospectus disclosures of risks associated with current daily disclosure of fund holdings.

Any ETF that discloses its full holdings on a current daily basis should be required to include among the principal risks of investing as set forth in its summary and full prospectus that public dissemination of the fund's portfolio holdings on a daily basis may interfere with achieving the fund's investment objective by (a) increasing fund trading costs through the actions of predatory traders that use daily holdings disclosures to anticipate future fund trades and/or (b) constraining the fund's trading and investment activity to seek to circumvent the effects of predatory traders. While these risks are well understood by ETF sponsors and have been acknowledged by the Commission,¹⁴ ETF investors may not be aware of their potential impact on fund returns.

8. Treat claims about ETF "price discovery" with skepticism.

Proponents of ETF investing sometimes argue that the price of an ETF's shares is the best measure of current fund value.¹⁵ By this logic, observed premiums/discounts primarily reflect flaws in the valuation methodology used to determine fund NAVs due to use of stale prices, matrix pricing formulas and other deficiencies. Accordingly, the "true" cost to buy and sell ETFs is—always and everywhere—approximately zero! Of course, the worse the quality of an ETF's NAVs, the more compelling this argument becomes.

The Petajisto Paper referenced above tested the validity of this "price discovery" hypothesis across a broad universe of ETFs over the 2007-2010 period.¹⁶ Subject ETFs were grouped into categories based on having a common, or closely corresponding, underlying index. If each ETF holding the same underlying portfolio were to always trade at its true value, the

¹⁴ See Shareholder Reports and Quarterly Portfolio Disclosure of Registered Management Investment Companies, Securities Exchange Act Release No. 49333 (Feb. 27, 2004) at p.16.

¹⁵ See, for example, BlackRock ViewPoint at p. 14.

¹⁶ See Petajisto Paper at pp. 15-18 (methodology and conclusions) and 34-36 (data).

daily price performance of each ETF in a common grouping would always correspond. Contrary to the predictions of the price discovery hypothesis, the Petajisto study found wide swings in the daily premiums/discounts of individual ETFs measured against a baseline equal to the average price of the funds in the same group. Although the volatility of calculated premiums/discounts based on group price averages was less than the observed volatility of premiums/discounts based on NAVs calculated using (frequently stale) local market closing prices, the study results refute the notion that price discovery causes an ETF to always trade at approximately the true value of its underlying holdings.

Until compelling evidence to the contrary is produced, we believe the Commission should continue to: (a) treat NAVs determined in accordance with current accounting guidance and best industry practices (including fair value) as the single-best measure of an ETF's value and (b) view premiums/discounts based on the relationship between NAV and market closing prices as the single-best measure of ETF investor trading costs.

9. Continue to tread carefully in considering new actively managed ETF structures.

From at least the time of the November 2001 SEC Concept Release on Actively Managed Exchange-Traded Funds,¹⁷ the Commission has considered the introduction of ETFs that are actively managed, rather than index-based ("AETFs"). The Commission began approving AETF exemptive orders in February 2008 and has now issued a large number of such orders. A condition of all AETF exemptive orders approved to date has been that the applicants represent that, prior to the opening of exchange trading in fund shares each business day, the AETF will disclose on a free public website the identities and quantities of the portfolio securities and other assets held by the fund as of the close of the preceding business day. The Commission has deemed it necessary for AETFs to disclose their current daily holdings so that market makers have sufficient information to perform their arbitrage function effectively.

More recently, the Commission has considered, and thus far not approved, a number of proposed new AETF structures that would not meet the current AETF requirement to disclose all fund holdings each day. Like NextShares, these AETFs would seek to maintain the confidentiality of their portfolio trading information to protect against "front-running" and "free-riding" concerns. A key consideration for the Commission in evaluating "portfolio-protected" AETF concepts has been whether the proposed structure provides an adequate basis for ensuring that trading prices of fund shares will maintain consistently close alignment with NAV, including during periods of market stress or volatility. Other considerations include whether the proposed method of maintaining price-value alignment avoids discrimination among investors, whether the asserted portfolio protection benefits will be realized in practice and whether, on an overall

¹⁷ See SEC Release No. IC-25258; File No. S7-20-01(November 2001).

basis, the requested relief is necessary or appropriate in the public interest and consistent with the protection of investors.

Without discussing the merits of any particular proposal, we offer the following general observations regarding proposed new AETF structures that would not disclose their full holding on a daily basis:

- *AETFs with less-than-full portfolio transparency will exhibit wider, and more volatile, premiums/discounts (higher investor trading costs) than similar existing AETFs.* As stated recently by Commission staff, “an ETF which has something less than full portfolio transparency will always exhibit a greater and more persistent premium or discount and wider intraday price spread than an identical product with full portfolio transparency.”¹⁸
- *The premiums/discounts of AETFs with less-than-full portfolio transparency will be particularly susceptible to escalation during periods of market stress or volatility.* Market makers will almost certainly respond to the greater value uncertainty and/or reduced hedging control and flexibility of less-than-fully-transparent AETFs by widening (or withdrawing) their price quotes during difficult market environments.
- *As is, fully transparent AETFs generally trade with wider, and more volatile, premiums/discounts (higher trading costs) than similar index ETFs.* See Exhibit 2 and discussion on page 4 above.
- *AETFs with less-than-full portfolio transparency will provide less clarity of investor trading costs than current AETFs.* Sophisticated investors with access to current pricing information for an existing AETF’s underlying instruments can today calculate their trading costs. The same will not be possible for AETFs that do not disclose their full holdings. For these AETFs, the only available metric for measuring intraday trading costs will be the disseminated fund IIVs.
- *AETFs with less-than-full portfolio transparency offer little obvious benefit to investors over already approved ETP structures.* Today’s ETFs provide access to both index-based and active strategies across a broad range of investment categories. When introduced, NextShares will offer potential advantages over existing AETFs that include maintaining the confidentiality of fund trading

¹⁸ See SEC Staff Letter to W. John McGuire in re Precidian ETFs Trust, et al.: File No. 812-14405 (footnote 16 at p. 4), available at http://www.nextshares.com/regulatory-and-technical-documents.php#other_structures.

Mr. Brent J. Fields

August 17, 2015

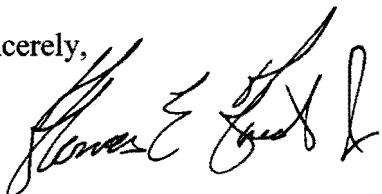
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information, built-in trading cost transparency and trading efficiency. NextShares are expected to be offered by a range of leading active fund sponsors and available across fund asset classes. If approved, AETFs with less-than-full portfolio transparency are likely to be limited to U.S. equity funds and may attract narrow sponsorship.

Permitting the introduction of new AETF structures that are understood to trade worse than existing AETFs that themselves exhibit trading deficiencies hardly seems consistent with investor protection or the best interests of investors, particularly given the lack of apparent non-trading benefits these new products would offer over approved ETP structures. We therefore urge the Commission to exercise continued caution in the consideration of proposed new AETF structures that would not provide full daily disclosure of fund holdings.

On behalf of Eaton Vance, I thank the SEC commissioners and staff for their consideration of these comments.

Sincerely,



Thomas E. Faust Jr.
Chairman and Chief Executive Officer
Eaton Vance Corp.

Exhibit 1-1: Measures of ETF Investor Trading Costs

2015 (First Half) Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW		AW		VW		EW		AW		VW	
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF
US EQUITY DIVERSIFIED	25	257	1,149	905,492	10	36,402	0.24	0.12	0.15	0.03	0.15	0.02	0.34	0.16	0.18	0.04	0.18	0.03
Mid-Cap Value	3	20	387	35,160	2	173	0.12	0.11	0.11	0.03	0.11	0.03	0.13	0.15	0.11	0.04	0.12	0.04
Mid-Cap Blend	5	24	423	77,310	3	778	0.18	0.09	0.11	0.04	0.11	0.03	0.21	0.12	0.12	0.07	0.13	0.05
Large Blend	5	69	110	431,948	1	25,941	0.29	0.14	0.25	0.02	0.19	0.02	0.47	0.19	0.36	0.03	0.28	0.03
Large Growth	5	26	82	113,718	3	3,521	0.32	0.10	0.29	0.03	0.17	0.03	0.46	0.14	0.40	0.07	0.16	0.04
Large Value	4	48	89	127,675	0	1,629	0.27	0.09	0.19	0.03	0.21	0.03	0.36	0.13	0.27	0.04	0.30	0.03
Small Blend	2	27	47	64,321	1	3,885	0.21	0.15	0.21	0.04	0.21	0.04	0.30	0.20	0.30	0.05	0.31	0.05
Mid-Cap Growth	1	16	11	21,328	0	134	0.25	0.11	0.25	0.04	0.25	0.04	0.25	0.14	0.25	0.04	0.25	0.04
Small Growth	11			16,143		173	0.10		0.05		0.05		0.15		0.08		0.07	
Small Value	16			17,889		169	0.11		0.04		0.04		0.13		0.05		0.05	
US EQUITY SECTORS	7	272	1,234	290,039	10	11,608	0.25	0.18	0.10	0.06	0.10	0.06	0.33	0.23	0.10	0.07	0.10	0.10
Equity Energy	1	22	1,140	25,066	9	2,341	0.08	0.15	0.08	0.04	0.08	0.05	0.08	0.18	0.08	0.08	0.08	0.12
Real Estate	1	17	51	43,482	0	1,299	0.23	0.14	0.23	0.04	0.23	0.04	0.37	0.16	0.37	0.05	0.37	0.05
Miscellaneous Sector	1	23	8	4,828	0	33	0.27	0.33	0.27	0.25	0.27	0.34	0.42	0.40	0.42	0.28	0.42	0.41
Technology	2	31	17	36,445	0	773	0.28	0.13	0.29	0.05	0.29	0.04	0.37	0.16	0.38	0.06	0.38	0.05
Energy Limited Partnership	1	8	10	9,734	0	83	0.36	0.21	0.36	0.07	0.36	0.07	0.37	0.23	0.37	0.10	0.37	0.10
Health	1	26	8	48,747	0	1,734	0.27	0.08	0.27	0.05	0.27	0.04	0.35	0.10	0.35	0.06	0.35	0.08
Communications	7			2,356		26	0.13		0.09		0.08		0.18		0.12		0.11	
Consumer Cyclical	18			21,883		996	0.11		0.04		0.03		0.13		0.04		0.04	
Consumer Defensive	12			15,921		424	0.12		0.04		0.03		0.15		0.05		0.04	
Equity Precious Metals	14			9,087		1,130	0.45		0.25		0.25		0.52		0.30		0.31	
Financial	30			32,156		1,125	0.17		0.05		0.04		0.25		0.08		0.07	
Industrials	20			15,382		628	0.12		0.03		0.03		0.15		0.04		0.03	
Natural Resources	29			13,909		316	0.25		0.12		0.06		0.31		0.14		0.11	
Commodities Industrial Metals	3			204		4	0.59		0.24		0.24		0.84		0.41		0.41	
Utilities	12			10,839		697	0.15		0.03		0.03		0.20		0.04		0.04	
INTERNATIONAL EQUITY	14	386	696	449,354	4	10,318	0.35	0.55	0.23	0.38	0.25	0.47	0.38	0.60	0.24	0.45	0.29	0.58
World Stock	8	27	556	17,864	3	151	0.22	0.37	0.17	0.18	0.16	0.18	0.24	0.33	0.18	0.19	0.17	0.20
Foreign Large Value	2	20	84	12,424	0	78	0.43	0.42	0.43	0.36	0.43	0.37	0.43	0.45	0.40	0.42	0.43	0.42
Foreign Large Blend	1	31	18	130,679	0	1,884	0.60	0.44	0.60	0.28	0.60	0.31	0.73	0.37	0.73	0.30	0.73	0.36
Foreign Large Growth	1	6	16	2,520	0	17	0.40	0.34	0.40	0.35	0.40	0.38	0.46	0.37	0.46	0.40	0.46	0.40
Foreign Small/Mid Value	1	8	11	1,379	0	9	0.63	0.47	0.63	0.49	0.63	0.48	0.39	0.47	0.39	0.49	0.39	0.49
China Region	1	33	11	20,005	0	1,254	0.62	0.72	0.62	0.66	0.62	0.72	1.03	0.94	1.03	0.85	1.03	0.92
Diversified Emerging Mkts	59			100,464		2,719	0.65		0.41		0.48		0.68		0.49		0.59	
Diversified Pacific/Asia	4			3,563		41	0.36		0.19		0.18		0.44		0.22		0.20	
Foreign Small/Mid Blend	8			8,037		57	0.62		0.45		0.46		0.54		0.37		0.37	
India Equity	9			7,694		223	0.69		0.65		0.64		0.79		0.74		0.73	
Japan Stock	24			34,891		723	0.53		0.60		0.59		0.63		0.72		0.72	
Latin America Stock	14			4,207		570	0.66		0.49		0.53		0.78		0.60		0.65	
Miscellaneous Region	91			35,569		1,267	0.60		0.45		0.53		0.68		0.58		0.69	
Europe Stock	26			50,395		1,143	0.39		0.28		0.28		0.40		0.35		0.35	
Global Real Estate	12			11,499		65	0.37		0.33		0.33		0.37		0.33		0.31	
Pacific/Asia ex-Japan Stk	14			8,164		115	0.61		0.51		0.53		0.62		0.62		0.63	
US BONDS - GENERAL	31	153	11,463	278,468	154	4,453	0.17	0.31	0.10	0.12	0.09	0.15	0.18	0.25	0.12	0.11	0.10	0.16
Intermediate-Term Bond	4	14	3,039	69,788	38	584	0.17	0.15	0.11	0.08	0.12	0.08	0.16	0.12	0.14	0.07	0.12	0.07
Ultrashort Bond	8	4	5,761	5,239	90	73	0.06	0.12	0.04	0.06	0.04	0.04	0.06	0.07	0.04	0.05	0.04	0.04
Bank Loan	3	2	904	5,974	8	59	0.20	0.16	0.17	0.19	0.16	0.19	0.19	0.16	0.20	0.15	0.20	
High Yield Bond	3	18	520	37,746	5	998	0.23	0.35	0.32	0.25	0.33	0.25	0.39	0.26	0.58	0.20	0.59	0.22
Short-Term Bond	4	13	425	41,664	5	233	0.23	0.27	0.17	0.08	0.21	0.08	0.24	0.16	0.27	0.06	0.21	0.06
Preferred Stock	1	8	175	18,073	3	122	0.21	0.26	0.21	0.09	0.21	0.10	0.12	0.27	0.12	0.09	0.12	0.09
Corporate Bond	2	40	51	41,108	0	502	0.20	0.51	0.20	0.20	0.18	0.20	0.22	0.32	0.22	0.18	0.22	0.20
Short Government	1	8	36	13,735	1	234	0.05	0.06	0.05	0.01	0.05	0.01	0.07	0.08	0.07	0.01	0.07	0.01
Nontraditional Bond	5	12	553	408	3	4	0.22	0.52	0.23	0.40	0.24	0.43	0.22	0.58	0.24	0.41	0.25	0.46
Inflation-Protected Bond	12			20,540		107	0.09		0.08		0.08		0.10		0.08		0.08	
Intermediate Government	9			6,800		91	0.11		0.05		0.05		0.13		0.06		0.06	
Long Government	9			15,086		1,416	0.16		0.12		0.15		0.17		0.15		0.20	
Long-Term Bond	4			2,308		29	0.58		0.43		0.41		0.59		0.45		0.43	
US BONDS - MUNIS	4	25	317	13,053	2	83	0.24	0.27	0.13	0.15	0.16	0.15	0.20	0.21	0.14	0.15	0.15	0.14
Muni National Interm	3	4	258	5,716	1	40	0.27	0.22	0.13	0.14	0.16	0.14	0.24	0.16	0.15	0.14	0.17	0.14
Muni National Short	1	10	59	4,260	0	22	0.14	0.25	0.14	0.11	0.14	0.11	0.09	0.15	0.09	0.12	0.09	0.11
Muni California Intermediate	1			383		2	0.27		0.27		0.27		0.15		0.15		0.15	
Muni National Long	5			2,267		16	0.32		0.20		0.19		0.28		0.20		0.18	
Muni New York Intermediate	1			171		1	0.29		0.29		0.29		0.18		0.18		0.18	
Muni New York Long	2			79		0	0.39		0.37		0.37		0.45		0.40		0.42	
Muni California Long	2			178		1	0.28		0.29		0.29		0.25		0.26		0.26	
INTERNATIONAL BONDS	12																	

Exhibit 1-2: Measures of ETF Investor Trading Costs

2014 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW		AW		VW		EW		AW		VW	
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF
US EQUITY DIVERSIFIED	22	239	821	774,265	12	34,958	0.27	0.11	0.14	0.03	0.18	0.03	0.40	0.14	0.19	0.04	0.25	0.03
Mid-Cap Value	3	18	326	30,827	3	150	0.10	0.09	0.09	0.03	0.10	0.04	0.12	0.12	0.11	0.04	0.12	0.04
Mid-Cap Blend	5	25	301	64,967	4	859	0.23	0.10	0.12	0.04	0.16	0.03	0.30	0.13	0.15	0.04	0.17	0.04
Large Blend	4	55	68	368,608	4	22,916	0.25	0.12	0.27	0.02	0.23	0.02	0.37	0.17	0.38	0.03	0.35	0.03
Large Growth	4	26	36	102,359	1	3,878	0.45	0.08	0.36	0.03	0.39	0.03	0.76	0.10	0.57	0.03	0.64	0.03
Large Value	4	49	69	107,422	1	1,581	0.26	0.09	0.17	0.03	0.21	0.03	0.40	0.12	0.24	0.04	0.32	0.03
Small Blend	1	24	13	55,147	0	5,110	0.23	0.14	0.23	0.04	0.23	0.04	0.30	0.20	0.30	0.05	0.30	0.05
Mid-Cap Growth	1	16	8	15,453	0	87	0.43	0.12	0.43	0.04	0.43	0.04	0.69	0.17	0.69	0.05	0.69	0.05
Small Growth	11			13,821		221	0.11		0.05		0.05		0.16		0.06		0.06	
Small Value	15			15,661		158	0.10		0.05		0.05		0.14		0.06		0.06	
US EQUITY SECTORS	7	286	795	251,880	9	10,480	0.29	0.23	0.13	0.06	0.16	0.07	0.40	0.27	0.12	0.08	0.19	0.09
Equity Energy	1	23	722	21,758	6	2,167	0.12	0.18	0.12	0.04	0.12	0.03	0.10	0.20	0.10	0.06	0.10	0.04
Real Estate	1	17	38	36,378	0	1,028	0.17	0.14	0.17	0.04	0.17	0.04	0.27	0.17	0.27	0.05	0.27	0.05
Miscellaneous Sector	1	25	14	4,977	3	48	0.24	0.37	0.24	0.24	0.24	0.32	0.35	0.41	0.35	0.28	0.35	0.38
Technology	2	31	12	32,212	0	603	0.41	0.18	0.43	0.04	0.42	0.04	0.63	0.23	0.65	0.06	0.64	0.06
Energy Limited Partnership	1	8	6	9,302	74		0.30	0.15	0.30	0.08		0.08	0.34	0.19	0.34	0.12		0.12
Health	1	26	3	33,541	0	1,213	0.33	0.12	0.33	0.04	0.33	0.04	0.47	0.16	0.47	0.06	0.47	0.05
Communications	8		2,071		22		0.22		0.09		0.10		0.29		0.12		0.13	
Consumer Cyclical	19		13,946		909		0.15		0.04		0.04		0.20		0.06		0.05	
Consumer Defensive	13		11,999		386		0.21		0.04		0.03		0.25		0.05		0.04	
Equity Precious Metals	14		10,004		1,180		0.51		0.29		0.29		0.63		0.39		0.40	
Financial	34		31,400		1,086		0.19		0.05		0.04		0.25		0.06		0.06	
Industrials	21		16,338		707		0.15		0.04		0.03		0.20		0.05		0.04	
Natural Resources	31		18,412		476		0.32		0.11		0.06		0.35		0.14		0.09	
Commodities Industrial Metals	3		302		5		0.59		0.19		0.24		0.64		0.25		0.30	
Utilities	13		9,240		577		0.24		0.04		0.03		0.31		0.05		0.04	
INTERNATIONAL EQUITY	14	363	569	389,932	9	9,722	0.33	0.54	0.18	0.37	0.22	0.44	0.39	0.64	0.22	0.47	0.27	0.58
World Stock	8	20	490	15,407	7	126	0.17	0.30	0.14	0.19	0.14	0.19	0.23	0.34	0.18	0.21	0.19	0.21
Foreign Large Value	2	19	38	11,151	1	68	0.61	0.41	0.44	0.38	0.55	0.39	0.64	0.42	0.41	0.42	0.56	0.42
Foreign Large Blend	1	26	18	104,664	0	1,437	0.42	0.38	0.42	0.28	0.42	0.32	0.49	0.37	0.49	0.32	0.49	0.39
Foreign Large Growth	1	6	13	2,393	0	12	0.42	0.35	0.42	0.32	0.42	0.32	0.53	0.42	0.53	0.43	0.53	0.42
Foreign Small/Mid Value	1	7	8	1,316	0	7	0.60	0.51	0.60	0.48	0.60	0.47	0.42	0.52	0.42	0.52	0.41	0.51
China Region	1	33	3	14,329	0	1,000	0.57	0.57	0.57	0.50	0.57	0.54	0.79	0.72	0.79	0.70	0.79	0.75
Diversified Emerging Mkts	60		102,815		3,283		0.52		0.40		0.45		0.61		0.52		0.59	
Diversified Pacific/Asia	4		2,904		30		0.39		0.19		0.20		0.49		0.24		0.26	
Foreign Small/Mid Blend	7		7,034		43		0.51		0.41		0.41		0.51		0.43		0.44	
India Equity	9		4,109		143		0.82		0.71		0.69		0.95		0.85		0.84	
Japan Stock	19		26,870		658		0.68		0.71		0.70		0.98		1.00		1.00	
Latin America Stock	15		5,952		978		0.50		0.38		0.41		0.60		0.49		0.53	
Miscellaneous Region	93		37,484		1,131		0.61		0.42		0.46		0.74		0.56		0.67	
Europe Stock	20		37,564		675		0.41		0.25		0.25		0.49		0.31		0.32	
Global Real Estate	11		9,157		48		0.35		0.34		0.34		0.40		0.39		0.38	
Pacific/Asia ex-Japan Stk	14		6,784		82		0.96		0.46		0.47		1.27		0.61		0.64	
US BONDS - GENERAL	29	146	11,045	236,479	167	3,533	0.17	0.25	0.09	0.12	0.10	0.13	0.18	0.22	0.13	0.10	0.15	0.13
Intermediate-Term Bond	4	14	3,283	52,932	34	437	0.27	0.14	0.10	0.09	0.11	0.09	0.18	0.13	0.11	0.06	0.11	0.06
Ultrashort Bond	8	4	5,426	5,604	103	75	0.06	0.10	0.03	0.06	0.04	0.03	0.06	0.11	0.03	0.07	0.04	0.04
Bank Loan	2	2	793	7,052	7	72	0.16	0.12	0.15	0.16	0.15	0.16	0.18	0.14	0.17	0.18	0.18	
High Yield Bond	3	19	833	34,663	18	766	0.27	0.33	0.35	0.24	0.35	0.25	0.48	0.31	0.81	0.23	0.82	0.25
Short-Term Bond	4	13	290	39,479	2	221	0.16	0.23	0.12	0.08	0.13	0.08	0.15	0.15	0.11	0.05	0.10	0.05
Preferred Stock	1	9	71	14,193	1	88	0.20	0.34	0.20	0.09	0.20	0.09	0.21	0.31	0.21	0.11	0.21	0.11
Corporate Bond	2	34	53	32,778	0	293	0.17	0.37	0.20	0.18	0.12	0.18	0.21	0.26	0.23	0.13	0.18	0.14
Short Government	1	8	28	12,746	0	265	0.07	0.05	0.07	0.01	0.07	0.01	0.08	0.13	0.08	0.02	0.08	0.02
Nontraditional Bond	3	8	247	293	2	5	0.21	0.46	0.21	0.48	0.21	0.44	0.24	0.62	0.23	0.49	0.24	0.50
Inflation-Protected Bond	12		19,539		100		0.08		0.07		0.07		0.10		0.07		0.07	
Intermediate Government	9		4,686		93		0.09		0.04		0.03		0.09		0.09		0.05	
Long Government	10		10,985		1,097		0.13		0.08		0.10		0.13		0.11		0.14	
Long-Term Bond	1	4	22	1,528	0	20	0.26	0.39	0.26	0.29	0.26	0.27	0.27	0.37	0.27	0.28	0.27	0.25
US BONDS - MUNIS	4	26	309	10,624	2	63	0.20	0.23	0.11	0.14	0.13	0.14	0.21	0.23	0.13	0.16	0.15	0.16
Muni National Interm	3	4	233	4,138	1	26	0.24	0.22	0.12	0.13	0.15	0.13	0.25	0.16	0.14	0.14	0.17	0.14
Muni National Short	1	11	75	4,036	0	21	0.09	0.17	0.09	0.09	0.09	0.09	0.09	0.13	0.09	0.09	0.09	0.09
Muni California Intermediate	1		281		2		0.32		0.32		0.32		1.23		1.23		1.23	
Muni National Long	5		1,823		11		0.27		0.23		0.24		0.27		0.17		0.17	
Muni New York Intermediate	1		141		1		0.22		0.22		0.22		0.24		0.24		0.24	
Muni New York Long	2		71		0		0.35		0.34		0.35		0.28		0.26		0.27	
Muni California Long	2		133		1		0.27		0.25		0.29		0.28		0.27		0.27	
INTERNATIONAL BONDS	12</b																	

Exhibit 1-3: Measures of ETF Investor Trading Costs

2013 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW		AW		VW		EW		AW		VW	
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF
US EQUITY DIVERSIFIED	11	228	254	602,855	5	30,466	0.30	0.11	0.19	0.03	0.20	0.03	0.43	0.15	0.26	0.04	0.26	0.04
Mid-Cap Value	1	15	118	24,542	2	133	0.12	0.09	0.12	0.04	0.12	0.04	0.13	0.11	0.13	0.05	0.13	0.05
Mid-Cap Blend	1	27	42	50,116	1	756	0.16	0.12	0.16	0.04	0.16	0.04	0.18	0.17	0.18	0.05	0.18	0.06
Large Blend	4	52	57	283,095	1	21,345	0.26	0.13	0.27	0.03	0.26	0.02	0.36	0.17	0.38	0.04	0.36	0.03
Large Growth	2	24	12	79,539	0	2,590	0.59	0.08	0.52	0.03	0.60	0.03	0.86	0.11	0.84	0.04	0.87	0.04
Large Value	2	46	22	84,819	0	1,441	0.27	0.10	0.23	0.04	0.25	0.03	0.49	0.13	0.46	0.04	0.47	0.04
Small Blend	1	23	3	45,089	0	3,853	0.25	0.14	0.25	0.05	0.25	0.05	0.33	0.19	0.33	0.06	0.33	0.06
Mid-Cap Growth	15		11,764		65		0.12		0.04		0.04		0.17		0.05		0.05	
Small Growth	11		11,220		155		0.12		0.05		0.05		0.16		0.06		0.06	
Small Value	15		12,672		129		0.12		0.05		0.05		0.15		0.06		0.06	
US EQUITY SECTORS	3	294	389	193,811	4	8,170	0.21	0.28	0.17	0.07	0.17	0.06	0.25	0.32	0.11	0.09	0.13	0.07
Equity Energy	1	25	348	17,187	3	1,375	0.16	0.22	0.16	0.05	0.16	0.04	0.09	0.25	0.09	0.06	0.09	0.05
Real Estate	1	16	28	30,178	0	1,003	0.20	0.14	0.20	0.05	0.20	0.05	0.28	0.18	0.28	0.06	0.28	0.07
Miscellaneous Sector	1	27	13	3,594	0	33	0.27	0.45	0.27	0.25	0.27	0.36	0.39	0.47	0.39	0.27	0.39	0.41
Technology	31		21,882		392		0.23		0.05		0.05		0.27		0.06		0.07	
Energy Limited Partnership	7		6,638		57		0.19		0.10		0.10		0.19		0.14		0.14	
Health	25		20,261		588		0.15		0.05		0.04		0.17		0.06		0.05	
Communications	9		1,761		23		0.34		0.11		0.10		0.39		0.14		0.12	
Consumer Cyclical	19		13,857		930		0.18		0.05		0.04		0.22		0.07		0.06	
Consumer Defensive	14		9,930		372		0.26		0.05		0.03		0.31		0.06		0.04	
Equity Precious Metals	13		9,222		901		0.60		0.23		0.14		0.73		0.31		0.20	
Financial	37		23,390		1,069		0.25		0.05		0.04		0.30		0.06		0.05	
Industrials	21		9,798		522		0.20		0.05		0.04		0.23		0.06		0.05	
Natural Resources	33		17,259		469		0.38		0.14		0.07		0.40		0.15		0.08	
Commodities Industrial Metals	3		301		4		1.02		0.24		0.25		1.07		0.31		0.33	
Utilities	14		8,552		431		0.28		0.04		0.04		0.33		0.05		0.04	
INTERNATIONAL EQUITY	6	303	56	328,958	1	8,997	0.34	0.63	0.34	0.45	0.31	0.52	0.50	0.70	0.49	0.56	0.45	0.66
World Stock	3	14	30	10,656	1	100	0.25	0.45	0.27	0.22	0.25	0.23	0.39	0.47	0.42	0.23	0.37	0.24
Foreign Large Value	19		7,770		50		0.52		0.45		0.46		0.44		0.47		0.46	
Foreign Large Blend	1	18	16	77,427	0	1,304	0.42	0.46	0.42	0.33	0.42	0.38	0.52	0.41	0.52	0.36	0.52	0.44
Foreign Large Growth	1	3	8	1,944	0	10	0.43	0.45	0.43	0.41	0.43	0.43	0.65	0.47	0.65	0.46	0.65	0.44
Foreign Small/Mid Value	6		860		6		0.71		0.63		0.72		0.66		0.59		0.74	
China Region	1	28	2	15,130	0	897	0.45	0.73	0.45	0.59	0.45	0.61	0.65	0.84	0.65	0.75	0.65	0.78
Diversified Emerging Mkts	55		113,931		3,537		0.70		0.48		0.52		0.75		0.61		0.69	
Diversified Pacific/Asia	3		2,308		25		0.40		0.20		0.20		0.48		0.23		0.23	
Foreign Small/Mid Blend	7		4,883		32		0.61		0.52		0.52		0.51		0.48		0.50	
India Equity	9		2,195		92		0.85		0.78		0.77		1.13		1.05		1.05	
Japan Stock	11		19,728		725		0.91		0.91		0.90		1.11		1.13		1.12	
Latin America Stock	16		8,492		749		0.48		0.38		0.41		0.55		0.50		0.55	
Miscellaneous Region	79		32,234		990		0.63		0.47		0.48		0.75		0.63		0.65	
Europe Stock	11		16,565		335		0.49		0.27		0.28		0.43		0.34		0.35	
Global Real Estate	11		7,520		53		0.45		0.44		0.44		0.50		0.50		0.49	
Pacific/Asia ex-Japan Stk	13		7,314		92		0.79		0.52		0.54		1.03		0.70		0.72	
US BONDS - GENERAL	17	130	9,168	217,082	121	3,366	0.20	0.28	0.09	0.14	0.09	0.17	0.19	0.26	0.09	0.14	0.10	0.18
Intermediate-Term Bond	3	11	4,275	45,405	54	331	0.33	0.16	0.11	0.08	0.11	0.08	0.35	0.16	0.12	0.09	0.13	0.10
Ultrashort Bond	5	5	3,877	3,909	50	71	0.06	0.18	0.03	0.14	0.03	0.11	0.05	0.11	0.04	0.08	0.04	0.07
Bank Loan	2	2	468	4,487	9	69	0.28	0.21	0.19	0.18	0.20	0.18	0.19	0.15	0.11	0.13	0.12	0.13
High Yield Bond	1	18	295	32,172	4	679	0.18	0.40	0.18	0.33	0.18	0.33	0.31	0.32	0.31	0.32	0.31	0.33
Short-Term Bond	1	11	84	32,195	1	232	0.14	0.28	0.14	0.14	0.14	0.14	0.13	0.21	0.13	0.07	0.13	0.08
Preferred Stock	1	8	58	15,214	1	113	0.25	0.29	0.25	0.11	0.25	0.12	0.30	0.31	0.30	0.14	0.30	0.15
Corporate Bond	28		33,831		374		0.41		0.17		0.18		0.41		0.20		0.21	
Short Government	2	6	33	12,443	0	177	0.14	0.05	0.09	0.01	0.10	0.01	0.11	0.06	0.08	0.01	0.08	0.01
Nontraditional Bond	1	8	46	111	1	2	0.55	0.44	0.55	0.62	0.55	0.72	0.37	0.34	0.37	0.38	0.37	0.41
Inflation-Protected Bond	11		23,076		159		0.08		0.07		0.07		0.09		0.10		0.10	
Intermediate Government	8		4,033		108		0.10		0.04		0.03		0.12		0.12		0.05	
Long Government	10		8,477		1,033		0.15		0.10		0.14		0.19		0.14		0.19	
Long-Term Bond	1	4	31	1,732	1	18	0.24	0.69	0.24	0.45	0.24	0.46	0.26	0.54	0.26	0.42	0.26	0.42
US BONDS - MUNIS	3	25	274	10,155	3	82	0.35	0.49	0.14	0.40	0.17	0.41	0.45	0.50	0.17	0.46	0.22	0.46
Muni National Interm	2	2	208	4,046	2	34	0.47	0.58	0.15	0.54	0.19	0.54	0.60	0.66	0.18	0.63	0.24	0.63
Muni National Short	1	12	66	3,388	1	26	0.09	0.25	0.09	0.14	0.09	0.14	0.14	0.24	0.14	0.18	0.14	0.18
Muni California Intermediate	1		277		2		0.72		0.72		0.72		0.83		0.83		0.83	
Muni National Long	5		2,053		18		0.76		0.45		0.45		0.71		0.45		0.46	
Muni New York Intermediate	1		135		1		0.90		0.90		0.90		0.97		0.97		0.97	
Muni New York Long	2		91		1		0.70		0.64		0.65		0.77		0.72		0.72	
Muni California Long	2		164		1		0.65		0.67		0.67		0.73		0.75		0.75	
INTERNATIONAL BONDS	10	34	2,579	15,353	26	215	1.10	0.63	0.37	0.38	0.39	0.38	0.76	0.62	0.45	0.42	0.46	0.42
World Bond	7	18	299	5,530														

Exhibit 1-4: Measures of ETF Investor Trading Costs

2012 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW	AW	VW	EW	IETF	AETF	IETF	AETF	IETF	EW	IETF	AETF
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF
US EQUITY DIVERSIFIED	8	237	57	434,426	1	30,277	0.59	0.18	0.52	0.04	0.51	0.03	0.64	0.25	0.56	0.05	0.53	0.04
Mid-Cap Value	13			18,493		132	0.13	0.04	0.04	0.04	0.05	0.05	0.50	0.23	0.50	0.06	0.50	0.05
Mid-Cap Blend	1	28	8	33,654	0	786	0.31	0.16	0.31	0.04	0.31	0.05	0.50	0.23	0.50	0.06	0.50	0.06
Large Blend	4	50	37	199,782	1	20,543	0.32	0.16	0.35	0.03	0.28	0.03	0.37	0.21	0.40	0.04	0.30	0.04
Large Growth	2	32	9	66,776	0	3,060	1.41	0.16	1.46	0.03	1.39	0.03	1.31	0.22	1.31	0.04	1.31	0.04
Large Value	1	46	3	59,881	0	1,165	0.35	0.17	0.35	0.04	0.35	0.03	0.50	0.22	0.50	0.05	0.50	0.04
Small Blend	19			29,985		1,029	0.17	0.06	0.06	0.06	0.06	0.06	0.24	0.07	0.07	0.07	0.07	0.07
Mid-Cap Growth	14			8,978		67	0.20	0.04	0.04	0.04	0.04	0.04	0.33	0.05	0.05	0.05	0.05	0.05
Small Growth	16			7,974		3,371	0.27	0.06	0.06	0.05	0.05	0.05	0.47	0.08	0.08	0.08	0.08	0.08
Small Value	19			8,903		124	0.25	0.06	0.06	0.06	0.06	0.06	0.35	0.08	0.08	0.08	0.08	0.08
US EQUITY SECTORS	3	294	100	146,358	2	7,199	0.29	0.30	0.26	0.08	0.26	0.06	0.35	0.35	0.26	0.10	0.24	0.08
Equity Energy	1	27	70	15,405	2	1,381	0.25	0.28	0.25	0.06	0.25	0.05	0.20	0.33	0.20	0.08	0.20	0.06
Real Estate	1	17	23	23,279	0	359	0.25	0.15	0.25	0.05	0.25	0.05	0.37	0.20	0.37	0.06	0.37	0.07
Miscellaneous Sector	1	25	7	2,929	0	20	0.37	0.43	0.37	0.27	0.37	0.32	0.49	0.37	0.49	0.27	0.49	0.35
Technology	31			17,304		399	0.26	0.05	0.10	0.10	0.30	0.07	0.11					
Energy Limited Partnership	3			3,532		34	0.21	0.10	0.10	0.10	0.20	0.11	0.12					
Health	25			12,513		323	0.16	0.06	0.05	0.05	0.21	0.08	0.07					
Communications	9			1,669		14	0.37	0.14	0.14	0.14	0.44	0.17	0.16					
Consumer Cyclical	19			8,276		777	0.20	0.06	0.06	0.06	0.24	0.07	0.07					
Consumer Defensive	15			8,318		228	0.28	0.05	0.04	0.04	0.35	0.06	0.05					
Equity Precious Metals	13			11,920		746	0.59	0.17	0.11	0.11	0.67	0.22	0.14					
Financial	35			12,379		1,331	0.27	0.06	0.07	0.07	0.37	0.08	0.09					
Industrials	24			5,497		742	0.29	0.06	0.04	0.04	0.33	0.07	0.05					
Natural Resources	35			14,239		537	0.37	0.14	0.06	0.06	0.43	0.16	0.08					
Commodities Industrial Metals	3			347		3	0.70	0.28	0.28	0.16	0.39	0.40	0.40					
Utilities	13			8,752		305	0.30	0.05	0.05	0.05	0.36	0.07	0.06					
INTERNATIONAL EQUITY	5	278	40	250,891	0	8,093	0.40	0.66	0.45	0.41	0.42	0.55	0.52	0.71	0.57	0.49	0.53	0.65
World Stock	3	13	19	6,575	0	31	0.33	0.54	0.34	0.29	0.32	0.26	0.47	0.50	0.47	0.30	0.45	0.26
Foreign Large Value	16			4,784		35	0.65	0.46	0.46	0.46	0.75	0.50	0.52					
Foreign Large Blend	1	18	14	56,331	0	402	0.68	0.66	0.68	0.35	0.68	0.35	0.76	0.54	0.76	0.38	0.76	0.37
Foreign Large Growth	1	4	7	1,356	0	840	0.34	0.39	0.34	0.39	0.34	0.39	0.45	0.45	0.45	0.47	0.45	0.47
Foreign Small/Mid Value	5			586		2	0.63	0.51	0.51	0.51	0.75	0.59	0.60					
China Region	25			12,117		752	0.95	0.66	0.75	0.75	1.03	0.85	0.90					
Diversified Emerging Mkts	50			101,336		1,420	0.74	0.40	0.41	0.41	0.73	0.49	0.47					
Diversified Pacific/Asia	3			1,594		12	0.41	0.12	0.13	0.13	0.41	0.15	0.15					
Foreign Small/Mid Blend	7			3,336		12	0.57	0.45	0.46	0.46	0.61	0.46	0.45					
India Equity	9			1,758		106	0.72	0.64	0.66	0.66	0.85	0.78	0.81					
Japan Stock	10			6,012		56	0.68	0.56	0.56	0.56	0.86	0.74	0.74					
Latin America Stock	17			11,385		542	0.50	0.29	0.39	0.39	0.61	0.40	0.49					
Miscellaneous Region	69			26,881		1,308	0.63	0.47	0.56	0.56	0.71	0.60	0.67					
Europe Stock	10			5,746		115	0.56	0.33	0.29	0.29	0.54	0.37	0.31					
Global Real Estate	10			4,903		48	0.47	0.45	0.48	0.48	0.52	0.49	0.55					
Pacific/Asia ex-Japan Stk	12			6,191		2,410	0.68	0.57	0.71	0.83	0.73	0.85						
US BONDS - GENERAL	9	108	4,180	197,162	72	3,379	0.24	0.32	0.07	0.23	0.08	0.27	0.26	0.23	0.08	0.16	0.08	0.21
Intermediate-Term Bond	3	11	2,057	42,880	47	859	0.44	0.21	0.09	0.13	0.10	0.26	0.47	0.15	0.09	0.08	0.10	0.15
Ultrashort Bond	3	5	1,967	1,742	23	36	0.05	0.45	0.03	0.11	0.03	0.03	0.05	0.30	0.04	0.07	0.04	0.03
Bank Loan	2					712	0.57	0.46	0.47	0.47	0.28	0.26						
High Yield Bond	1	15	108	28,751	2	481	0.28	0.44	0.28	0.49	0.28	0.49	0.27	0.34	0.27	0.41	0.27	0.41
Short-Term Bond	8			22,607		148	0.31	0.17	0.19	0.19	0.24	0.10	0.10					
Preferred Stock	8			13,071		36	0.26	0.10	0.14	0.14	0.26	0.11	0.11					
Corporate Bond	21			33,160		526	0.60	0.44	0.47	0.47	0.33	0.26	0.27					
Short Government	1	6	8	12,825	0	157	0.25	0.03	0.25	0.01	0.25	0.01	0.23	0.04	0.23	0.01	0.23	0.01
Nontraditional Bond																		
Inflation-Protected Bond	10			26,424		66	0.11	0.10	0.10	0.10	0.09	0.09	0.10					
Intermediate Government	8			3,825		54	0.13	0.05	0.04	0.04	0.13	0.05	0.04					
Long Government	10			9,273		989	0.17	0.11	0.15	0.15	0.19	0.13	0.13					
Long-Term Bond	1	4	40	1,892	1	15	0.19	0.38	0.19	0.28	0.19	0.29	0.26	0.40	0.26	0.28	0.26	0.29
US BONDS - MUNIS	3	24	211	9,085	2	118	1.17	0.30	0.22	0.37	0.20	0.52	1.92	0.24	0.28	0.38	0.26	0.49
Muni National Interm	2	2	166	3,552	1	61	1.71	0.47	0.25	0.65	0.22	0.68	2.82	0.47	0.33	0.70	0.29	0.74
Muni National Short	1	12	45	2,928	0	19	0.11	0.29	0.11	0.17	0.11	0.17	0.12	0.21	0.12	0.15	0.12	0.15
Muni California Intermediate	1					237	1	0.61	0.61	0.61	0.61	0.43	0.43	0.43				
Muni National Long	4			2,027		14	0.19	0.16	0.16	0.16	0.21	0.16	0.16					
Muni New York Intermediate	1			109		20	0.61	0.61	0.61	0.61	0.31	0.31	0.31					
Muni New York Long	2			87		1	0.17	0.17	0.16	0.16	0.19	0.18	0.18					
Muni California Long	2			144		1	0.18	0.19	0.19	0.19	0.22	0.25	0.25					
INTERNATIONAL BONDS	8	30	1,862	12,583	15	121	1.10	0.75	0.25	0.45	0.31	0.47	1.00	0.65	0.27	0.28	0.31	0.41
World Bond	5	17	122	4,330</td														

Exhibit 1-5: Measures of ETF Investor Trading Costs

2011 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW	AW	VW	AETF	IETF	AETF	IETF	EW	AW	VW	AETF	IETF
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF
US EQUITY DIVERSIFIED	8	227	64	364,536	1	40,351	0.58	0.25	0.53	0.04	0.54	0.04	0.91	0.40	0.82	0.07	0.84	0.07
Mid-Cap Value	13			14,109		126	0.15	0.05	0.05	0.05	0.05	0.05	0.66	0.43	0.66	0.08	0.66	0.07
Mid-Cap Blend	1	28	5	32,903	0	786	0.45	0.25	0.45	0.05	0.45	0.05	0.66	0.43	0.66	0.08	0.66	0.07
Large Blend	2	51	19	166,662	0	28,288	0.63	0.23	0.70	0.04	0.73	0.03	0.92	0.36	1.00	0.06	1.04	0.07
Large Growth	3	30	34	52,494	1	4,002	0.65	0.26	0.45	0.04	0.44	0.03	1.08	0.39	0.76	0.05	0.75	0.04
Large Value	1	39	3	44,248	0	1,353	0.51	0.17	0.51	0.04	0.51	0.04	0.75	0.25	0.75	0.06	0.75	0.05
Small Blend		19		28,441		5,329	0.25		0.07		0.07		0.40		0.40		0.10	0.09
Mid-Cap Growth	1	14	3	8,923	0	100	0.49	0.28	0.49	0.05	0.49	0.05	0.81	0.43	0.81	0.07	0.81	0.07
Small Growth	15			8,214		216	0.48		0.08		0.08		0.78		0.78		0.12	0.11
Small Value	18			8,542		152	0.37		0.08		0.09		0.57		0.57		0.12	0.12
US EQUITY SECTORS	1	297	20	135,323	0	10,757	0.30	0.33	0.30	0.12	0.30	0.09	0.59	0.47	0.59	0.17	0.59	0.15
Equity Energy	26			20,568		2,812	0.27		0.07		0.04		0.35		0.10		0.06	
Real Estate	1	17	20	16,580	0	714	0.30	0.26	0.30	0.07	0.30	0.07	0.59	0.42	0.59	0.10	0.59	0.09
Miscellaneous Sector	24			4,600		48	0.42		0.36		0.41		0.51		0.43		0.51	
Technology	36			16,200		753	0.27		0.10		0.29		0.45		0.16		0.53	
Energy Limited Partnership	1			1,187		13	0.10		0.10		0.10		0.12		0.12		0.12	
Health	27			11,121		505	0.22		0.09		0.06		0.32		0.14		0.09	
Communications	11			1,771		21	0.37		0.19		0.16		0.56		0.28		0.24	
Consumer Cyclical	20			5,994		1,080	0.31		0.12		0.14		0.52		0.26		0.38	
Consumer Defensive	15			6,341		296	0.34		0.07		0.05		0.45		0.10		0.07	
Equity Precious Metals	9			11,160		846	0.47		0.21		0.15		0.59		0.28		0.20	
Financial	35			11,342		1,572	0.37		0.08		0.06		0.54		0.12		0.09	
Industrials	25			5,840		802	0.33		0.07		0.04		0.48		0.10		0.06	
Natural Resources	35			14,921		1,006	0.43		0.20		0.10		0.57		0.26		0.12	
Commodities Industrial Metals	2			540		6	0.46		0.44		0.44		0.63		0.61		0.61	
Utilities	14			7,159		281	0.33		0.06		0.05		0.44		0.08		0.06	
INTERNATIONAL EQUITY	3	231	31	244,592	1	10,827	0.58	0.84	0.62	0.63	0.71	0.75	0.80	1.01	0.84	0.82	0.96	0.98
World Stock	1	11	11	4,820	0	49	0.33	0.54	0.33	0.41	0.33	0.38	0.47	0.64	0.47	0.45	0.47	0.43
Foreign Large Value	15			3,779		33	0.77		0.68		0.70		0.87		0.84		0.84	
Foreign Large Blend	1	14	12	53,642	0	1,378	1.04	0.71	1.04	0.56	1.04	0.62	1.38	0.82	1.38	0.70	1.38	0.79
Foreign Large Growth	1	4	8	1,494	0	9	0.38	0.71	0.38	0.66	0.38	0.64	0.54	0.82	0.54	0.84	0.54	0.81
Foreign Small/Mid Value	4			679		3	0.75		0.72		0.77		0.89		0.91		0.96	
China Region	23			13,779		1,049	1.34		0.97		1.01		1.51		1.37		1.45	
Diversified Emerging Mkts	34			89,996		3,989	0.77		0.56		0.67		0.88		0.76		0.93	
Diversified Pacific/Asia	2			1,583		10	0.26		0.19		0.19		0.34		0.23		0.23	
Foreign Small/Mid Blend	7			3,459		26	0.65		0.67		0.67		0.80		0.82		0.84	
India Equity	7			2,013		83	0.88		0.82		0.83		1.19		1.14		1.15	
Japan Stock	11			7,654		332	0.87		0.88		0.88		1.16		1.22		1.22	
Latin America Stock	15			15,029		1,167	1.03		0.67		0.72		1.02		0.66		0.68	
Miscellaneous Region	55			31,460		1,183	0.85		0.71		0.74		1.12		0.98		1.03	
Europe Stock	10			5,235		1,398	0.61		0.47		0.49		0.78		0.58		1.12	
Global Real Estate	10			3,220		26	0.64		0.70		0.68		0.76		0.83		0.80	
Pacific/Asia ex-Japan Stk	9			6,750		92	0.89		0.85		0.85		1.23		1.21		1.22	
US BONDS - GENERAL	7	86	1,338	142,277	18	2,614	0.39	0.33	0.07	0.23	0.07	0.25	0.52	0.29	0.09	0.23	0.09	0.30
Intermediate-Term Bond	2	10	11	29,301	0	249	0.81	0.19	0.76	0.15	0.85	0.15	0.96	0.16	0.90	0.12	1.02	0.12
Ultrashort Bond	2	5	1,249	1,693	17	68	0.06	0.39	0.05	0.06	0.05	0.03	0.06	0.27	0.05	0.04	0.05	0.02
Bank Loan	1			149		3	0.55		0.55		0.55		0.48		0.48		0.48	
High Yield Bond	1	8	41	16,728	1	320	0.38	0.53	0.38	0.66	0.38	0.66	0.59	0.47	0.59	0.73	0.59	0.73
Short-Term Bond	8			16,875		128	0.36		0.16		0.17		0.21		0.13		0.13	
Preferred Stock	6			10,369		75	0.30		0.12		0.12		0.31		0.15		0.15	
Corporate Bond	13			19,989		188	0.67		0.43		0.45		0.48		0.37		0.37	
Short Government	1	6	10	13,073	0	175	0.24	0.05	0.24	0.02	0.24	0.02	0.45	0.05	0.45	0.02	0.45	0.02
Nontraditional Bond																		
Inflation-Protected Bond	9			23,072		132	0.14		0.13		0.13		0.16		0.14		0.14	
Intermediate Government	6			2,522		34	0.09		0.06		0.06		0.10		0.08		0.07	
Long Government	10			7,374		1,231	0.21		0.15		0.20		0.26		0.22		0.30	
Long-Term Bond	1	4	27	1,130	0	11	0.34	0.58	0.34	0.40	0.34	0.42	0.55	0.71	0.55	0.56	0.55	0.55
US BONDS - MUNIS	3	24	124	6,787	1	47	0.23	0.45	0.12	0.37	0.13	0.36	0.42	0.52	0.18	0.44	0.19	0.44
Muni National Interm	2	2	95	2,382	1	19	0.30	0.35	0.13	0.38	0.13	0.38	0.56	0.49	0.19	0.50	0.20	0.50
Muni National Short	1	12	29	2,511	0	16	0.11	0.36	0.11	0.25	0.11	0.24	0.14	0.43	0.14	0.33	0.14	0.31
Muni California Intermediate	1			197		1	1.00		1.00		1.00		1.10		1.10		1.10	
Muni National Long	4			1,443		9	0.44		0.41		0.41		0.49		0.41		0.41	
Muni New York Intermediate	1			84		1	0.88		0.88		0.88		0.96		0.96		0.96	
Muni New York Long	2			63		0	0.66		0.56		0.61		0.63		0.55		0.59	
Muni California Long	2			108		1	0.47		0.56		0.55		0.49		0.58		0.57	
INTERNATIONAL BONDS	6	21	1,437	7,976	24	84	0.63	0.84	0.32	0.44	0.32	0.45	0.78	0.67	0.39	0.39	0.39	0.38
World Bond	4	12	58	3,531	1	30	0.80	0.66	0.56	0.39	0.54	0.40	0.99	0.61	0.73	0.44	0.71	0.45
Emerging Markets Bond	2	9	1,379	4,445	23	54	0.29	1.09	0.31	0.47	0.30	0.48	0.35	0.74	0.37	0.34	0.37	0.34
ALLOCATION	3	14	169	702	2	6												

Exhibit 1-6: Measures of ETF Investor Trading Costs

2010 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW	AW	VW	AETF	IETF	AETF	IETF	EW	AW	VW	AETF	IETF
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF
US EQUITY DIVERSIFIED	6	188	40	293,388	0	35,642	0.82	0.19	0.59	0.05	0.59	0.04	1.34	0.30	0.94	0.06	0.97	0.06
Mid-Cap Value	15			10,850		117	0.17	0.05	0.06					0.25	0.07	0.07		
Mid-Cap Blend	22			26,794		680	0.24	0.05	0.05					0.40	0.08	0.10		
Large Blend	1	46	3	134,992	0	24,521	0.85	0.25	0.85	0.04	0.85	0.03	1.41	0.39	1.41	0.05	1.41	0.05
Large Growth	3	22	31	42,488	0	4,271	0.85	0.13	0.53	0.04	0.51	0.04	1.33	0.20	0.83	0.06	0.79	0.07
Large Value	1	30	2	31,778	0	1,252	0.80	0.11	0.80	0.05	0.80	0.04	1.50	0.16	1.50	0.06	1.50	0.05
Small Blend	18			24,921		4,384		0.20		0.07		0.07		0.31		0.09		0.08
Mid-Cap Growth	1	13	3	6,898	0	77	0.71	0.17	0.71	0.05	0.71	0.05	1.16	0.30	1.16	0.07	1.16	0.08
Small Growth	10			6,510		176	0.21	0.07	0.07					0.31	0.08	0.08		
Small Value	12			8,157		164	0.16	0.07	0.07					0.23	0.09	0.09		
US EQUITY SECTORS	3	242	19	96,096	0	8,173	1.03	0.35	0.67	0.12	0.68	0.08	1.52	0.50	1.00	0.15	1.03	0.11
Equity Energy	21			11,680		1,304	0.29	0.09	0.07					0.41	0.12	0.09		
Real Estate	1	13	13	12,152	0	915	0.38	0.29	0.38	0.08	0.38	0.09	0.60	0.52	0.60	0.12	0.60	0.14
Miscellaneous Sector	24			4,684		43	0.33	0.29	0.32					0.40	0.34	0.39		
Technology	1	23	3	10,056	0	330	1.08	0.24	1.08	0.07	1.08	0.07	1.61	0.34	1.61	0.09	1.61	0.09
Energy Limited Partnership	1			293		10	0.10	0.10	0.10					0.09	0.09	0.09		
Health	22			7,904		337	0.22	0.08	0.07					0.32	0.11	0.10		
Communications	8			1,379		18	0.44	0.17	0.17					0.59	0.21	0.21		
Consumer Cyclical	17			4,618		915	0.31	0.10	0.08					0.46	0.13	0.10		
Consumer Defensive	12			4,229		196	0.33	0.07	0.06					0.51	0.10	0.08		
Equity Precious Metals	8			8,262		645	0.55	0.18	0.16					0.61	0.24	0.21		
Financial	1	31	3	10,377	0	1,819	1.62	0.45	1.62	0.08	1.62	0.07	2.35	0.70	2.35	0.11	2.35	0.09
Industrials	21			5,086		575	0.47	0.10	0.06					0.71	0.13	0.09		
Natural Resources	29			9,936		839	0.41	0.19	0.11					0.51	0.24	0.16		
Commodities Industrial Metals	1			431		8	0.47	0.47	0.47					0.61	0.61	0.61		
Utilities	11			5,010		219	0.31	0.07	0.06					0.44	0.11	0.09		
INTERNATIONAL EQUITY	2	197	11	206,613	0	9,127	0.24	0.80	0.24	0.54	0.24	0.60	0.33	0.84	0.33	0.67	0.32	0.76
World Stock	1	11	5	3,117	0	30	0.15	1.14	0.15	0.35	0.15	0.34	0.19	1.16	0.19	0.37	0.19	0.38
Foreign Large Value	13			2,921		21	0.56	0.58	0.60					0.71	0.75	0.74		
Foreign Large Blend	13			46,483		1,256	0.65	0.53	0.58					0.83	0.65	0.73		
Foreign Large Growth	1	3	6	1,377	0	9	0.34	0.59	0.34	0.58	0.34	0.58	0.47	0.69	0.47	0.75	0.47	0.74
Foreign Small/Mid Value	4			646		3	0.69	0.63	0.66					0.80	0.82	0.82		
China Region	20			15,039		1,297	1.31	0.75	0.79					0.96	0.98	1.03		
Diversified Emerging Mkts	23			75,141		3,629	0.68	0.43	0.46					0.70	0.51	0.58		
Diversified Pacific/Asia	2			1,460		9	0.19	0.21	0.21					0.24	0.25	0.25		
Foreign Small/Mid Blend	7			2,258		20	0.62	0.67	0.67					0.68	0.72	0.71		
India Equity	6			1,673		59	0.83	0.74	0.77					0.79	0.90	0.93		
Japan Stock	8			5,205		227	0.77	0.73	0.73					1.07	0.97	0.96		
Latin America Stock	10			14,150		1,424	1.33	0.70	0.76					0.60	0.83	0.92		
Miscellaneous Region	48			23,490		940	0.72	0.61	0.61					0.87	0.81	0.81		
Europe Stock	11			5,053		89	0.55	0.41	0.38					0.73	0.54	0.50		
Global Real Estate	10			1,980		15	0.65	0.70	0.68					0.71	0.81	0.73		
Pacific/Asia ex-Japan Stk	8			6,620		99	0.94	0.68	0.68					1.24	0.91	0.90		
US BONDS - GENERAL	8	69	493	115,651	9	1,777	0.46	0.28	0.09	0.23	0.09	0.22	0.61	0.25	0.12	0.21	0.12	0.23
Intermediate-Term Bond	2	9	11	24,585	0	180	1.44	0.19	1.80	0.16	1.60	0.16	1.90	0.18	2.36	0.14	2.11	0.14
Ultrashort Bond	2	3	426	988	7	26	0.05	0.33	0.04	0.03	0.04	0.02	0.06	0.18	0.04	0.02	0.04	0.02
Bank Loan																		
High Yield Bond	1	3	12	10,908	0	186	0.09	0.61	0.09	0.71	0.09	0.71	0.11	0.64	0.11	0.69	0.11	0.69
Short-Term Bond	7			12,210		99	0.39	0.27	0.27					0.18	0.18	0.18		
Preferred Stock	4			7,488		66	0.17	0.16	0.15					0.18	0.16	0.16		
Corporate Bond	11			17,108		142	0.53	0.42	0.43					0.40	0.38	0.38		
Short Government	2	5	23	11,990	0	144	0.15	0.04	0.14	0.02	0.14	0.02	0.22	0.03	0.18	0.02	0.18	0.02
Nontraditional Bond																		
Inflation-Protected Bond	7			21,142		110	0.12	0.10	0.11					0.12	0.10	0.10		
Intermediate Government	6			1,866		23	0.09	0.06	0.05					0.12	0.07	0.06		
Long Government	10			6,594		790	0.23	0.12	0.14					0.28	0.15	0.19		
Long-Term Bond	1	4	21	772	1	12	0.30	0.42	0.30	0.32	0.30	0.32	0.40	0.58	0.40	0.30	0.40	0.31
US BONDS - MUNIS	3	23	59	6,722	1	51	0.17	0.44	0.10	0.24	0.11	0.23	0.29	0.52	0.17	0.40	0.17	0.38
Muni National Interm	2	2	42	2,123	1	16	0.20	0.27	0.10	0.27	0.11	0.27	0.31	0.39	0.14	0.49	0.16	0.48
Muni National Short	1	12	16	2,596	0	22	0.10	0.54	0.10	0.16	0.10	0.16	0.24	0.56	0.24	0.23	0.24	0.22
Muni California Intermediate	1			221		1	0.53	0.53	0.53					0.77	0.77	0.77		
Muni National Long	3			1,541		10	0.27	0.27	0.27					0.45	0.48	0.48		
Muni New York Intermediate	1			70		0	0.79	0.79	0.79					0.60	0.60	0.60		
Muni New York Long	2			63		0	0.25	0.24	0.23					0.40	0.36	0.36		
Muni California Long	2			107		1	0.25	0.27	0.27					0.43	0.49	0.47		
INTERNATIONAL BONDS	3	10	372	5,065	10	57	0.43	0.47	0.57	0.47	0.58	0.49	0.41	0.42	0.31	0.42	0.31	0.41
World Bond	2	7	33	2,563	0	20	0.35	0.42	0.35	0.40	0.35	0.40	0.46	0.44	0.45	0.48	0.44	0.48
Emerging Markets Bond	1	3	339	2,503	9	36	0.59	0.60	0.59	0.54	0.59	0.54	0.30	0.39	0.30	0.36	0.30	0.36
ALLOCATION	2	14	70	423	3	5	0.18	0.38	0.15	0.24	0.11	0.20	0.22	0.62	0.18	0.31 </td		

Exhibit 1-7: Measures of ETF Investor Trading Costs

2009 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW	AW	VW	AETF	IETF	AETF	IETF	EW	AW	VW	AETF	IETF
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF
US EQUITY DIVERSIFIED	6	173	20	232,818	1	34,114	0.67	0.40	0.68	0.09	0.71	0.08	1.01	0.62	1.03	0.15	1.10	0.12
Mid-Cap Value	14			7,979		120	0.34		0.11		0.11		0.60		0.15		0.16	
Mid-Cap Blend	17			18,471		766	0.35		0.10		0.09		0.55		0.14		0.15	
Large Blend	1	42	2	114,656	0	23,503	0.59	0.32	0.59	0.08	0.59	0.07	0.90	0.48	0.90	0.12	0.90	0.11
Large Growth	3	21	9	34,388	0	4,606	0.67	0.32	0.68	0.10	0.68	0.08	0.97	0.49	1.00	0.15	1.00	0.14
Large Value	1	29	3	24,456	0	1,704	0.76	0.24	0.76	0.10	0.76	0.07	1.22	0.48	1.22	0.24	1.22	0.11
Small Blend	15			16,862		3,059	0.37		0.15		0.14		0.59		0.20		0.19	
Mid-Cap Growth	1	16	5	4,919	0	82	0.67	0.96	0.67	0.11	0.67	0.11	1.02	1.31	1.02	0.15	1.02	0.15
Small Growth	9			5,096		146	0.81		0.14		0.14		1.12		0.18		0.19	
Small Value	10			5,991		129	0.31		0.18		0.19		0.49		0.24		0.25	
US EQUITY SECTORS	3	204	10	66,859	0	8,017	1.13	0.48	1.28	0.21	1.31	0.18	1.78	0.69	2.07	0.31	2.14	0.26
Equity Energy	18			8,656		1,390	0.40		0.14		0.10		0.56		0.18		0.13	
Real Estate	1	11	4	6,903	0	1,291	1.94	0.70	1.94	0.22	1.94	0.23	3.36	1.20	3.36	0.34	3.36	0.35
Miscellaneous Sector	24			4,289		41	0.55		0.46		0.53		0.69		0.59		0.68	
Technology	1	22	3	6,299	0	206	0.72	0.42	0.72	0.16	0.72	0.16	1.03	0.63	1.03	0.23	1.03	0.22
Energy Limited Partnership																		
Health	20			6,696		266	0.28		0.14		0.13		0.40		0.20		0.19	
Communications	7			950		16	0.49		0.25		0.22		0.65		0.33		0.30	
Consumer Cyclical	15			2,842		682	0.50		0.22		0.16		0.79		0.30		0.22	
Consumer Defensive	10			3,219		147	0.35		0.15		0.14		0.57		0.34		0.20	
Equity Precious Metals	3			4,919		461	0.59		0.24		0.25		0.81		0.37		0.38	
Financial	1	24	3	9,381	0	2,396	0.72	0.54	0.72	0.21	0.72	0.19	0.96	0.81	0.96	0.33	0.96	0.30
Industrials	17			2,856		337	0.48		0.20		0.17		0.74		0.27		0.23	
Natural Resources	23			6,336		559	0.56		0.27		0.19		0.70		0.37		0.25	
Commodities Industrial Metals	1			285		7	0.66		0.66		0.66		0.81		0.81		0.81	
Utilities	9			3,229		218	0.42		0.15		0.13		0.62		0.24		0.19	
INTERNATIONAL EQUITY	-	175	-	139,639	-	7,155	1.06	0.74	0.77	1.29	0.96	1.03						
World Stock	11			1,766		27	0.86		0.46		0.49		1.05		0.54		0.56	
Foreign Large Value	13			2,258		19	0.84		0.81		0.82		1.09		1.03		1.03	
Foreign Large Blend	12			38,012		1,141	1.08		0.69		0.74		1.36		0.88		0.96	
Foreign Large Growth	3			1,164		9	0.82		0.77		0.78		1.08		0.99		1.00	
Foreign Small/Mid Value	4			511		3	1.05		0.92		0.94		1.24		1.11		1.12	
China Region	15			13,661		1,162	0.88		1.20		1.25		1.05		1.62		1.67	
Diversified Emerging Mkts	17			41,629		2,631	0.93		0.59		0.61		0.96		0.74		0.78	
Diversified Pacific/Asia	2			1,286		12	0.25		0.29		0.29		0.37		0.39		0.39	
Foreign Small/Mid Blend	6			976		13	0.82		0.91		0.87		0.99		1.00		0.92	
India Equity	3			588		18	0.88		1.08		1.12		1.09		1.36		1.40	
Japan Stock	9			5,439		271	1.26		1.15		1.15		1.64		1.54		1.54	
Latin America Stock	5			10,277		1,121	0.99		0.50		0.52		0.96		0.75		0.81	
Miscellaneous Region	37			12,306		604	0.95		0.89		0.91		1.14		1.14		1.18	
Europe Stock	17			4,452		49	1.57		0.53		0.56		1.99		0.68		0.73	
Global Real Estate	11			1,153		9	1.23		1.04		1.05		1.59		1.22		1.25	
Pacific/Asia ex-Japan Stk	10			4,162		66	1.72		1.06		1.06		2.14		1.34		1.34	
US BONDS - GENERAL	5	55	66	75,191	3	1,175	1.49	0.63	0.63	0.74	0.22	0.64	0.93	0.49	0.42	0.53	0.16	0.50
Intermediate-Term Bond	1	9	5	17,765	0	135	6.57	0.51	6.57	0.53	6.57	0.53	3.60	0.39	3.60	0.35	3.60	0.35
Ultrashort Bond	2	1	39	907	2	24	0.05	0.03	0.06	0.03	0.06	0.03	0.04	0.04	0.04	0.04	0.04	0.04
Bank Loan																		
High Yield Bond	3			5,244		97	1.97		2.03		2.03		1.95		1.76		1.75	
Short-Term Bond	4			4,700		65	1.08		1.41		1.44		0.43		0.68		0.67	
Preferred Stock	4			3,626		53	0.50		0.52		0.50		0.56		0.62		0.60	
Corporate Bond	8			12,988		147	1.30		1.57		1.57		0.74		1.04		1.03	
Short Government	2	4	22	9,231	0	119	0.38	0.04	0.26	0.04	0.30	0.04	0.48	0.04	0.34	0.04	0.39	0.04
Nontraditional Bond																		
Inflation-Protected Bond	5			14,222		120	0.28		0.39		0.38		0.22		0.29		0.29	
Intermediate Government	5			1,209		14	0.17		0.11		0.12		0.16		0.11		0.12	
Long Government	9			5,087		395	0.38		0.15		0.19		0.48		0.20		0.25	
Long-Term Bond	3			213		6	0.59		0.62		0.51		0.45		0.55		0.43	
US BONDS - MUNIS	1	17	11	4,062	0	37	0.13	0.64	0.13	0.43	0.13	0.38	0.06	0.62	0.06	0.41	0.06	0.35
Muni National Interm	1	2	11	1,347	0	10	0.13	0.54	0.13	0.58	0.13	0.58	0.06	0.54	0.06	0.56	0.06	0.56
Muni National Short	6			1,396		18	0.48		0.26		0.26		0.39		0.22		0.21	
Muni California Intermediate	1			157		1	1.17		1.17		1.17		0.97		0.97		0.97	
Muni National Long	3			997		8	0.32		0.24		0.24		0.38		0.26		0.26	
Muni New York Intermediate	1			50		0	2.16		2.16		2.16		1.79		1.79		1.79	
Muni New York Long	2			46		0	0.81		0.65		0.71		1.04		0.82		0.89	
Muni California Long	2			70		1	0.49		0.53		0.52		0.60		0.64		0.64	
INTERNATIONAL BONDS	2	7	23	2,396	0	29	0.52	1.09	0.51	0.94	0.57	1.08	0.78	0.84	0.77	0.78	0.84	0.90
World Bond	2	5	23	1,737	0	18	0.52	0.76	0.51	0.59	0.57	0.62	0.78	0.53	0.77	0.47	0.84	0.48
Emerging Markets Bond	2			658		11	1.92		1.86		1.86		1.63		1.60		1.60	
ALLOCATION	1	14	20	169	1	2	0.34	1.16	0.34	1.01	0.34	0.61	0.69	1.24	0.69	1.13	0.69	0.79
World Allocation	1	1		20	6	1	0	0.34	0.35	0.34	0.35	0.35	0.69	0.47	0.69	0.47	0.69	0.47
Aggressive Allocation	2			27		0	0.51		0.45		0.38		0.73		0.66		0.59	
Conservative Allocation	3			54		1	0.47											

Exhibit 1-8: Measures of ETF Investor Trading Costs

2008 Results

Category	No of Funds		Average		Average		Avg Abs Premium/Discount (%)						Volatility of Premium/Discount (%)					
			Market Cap (\$MM)		Volume (\$MM)		EW	AW	VW	AETF	IETF	AETF	IETF	EW	AW	VW	AETF	IETF
	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF	IETF	AETF
US EQUITY DIVERSIFIED	3	168	11	248,798	0	60,751	1.35	0.63	1.40	0.19	1.37	0.23	1.92	1.01	1.91	0.33	1.94	0.37
Mid-Cap Value	14			10,630		603	0.70	0.18	1.06				1.10	0.32	1.64			
Mid-Cap Blend	19			16,971		1,365	0.79	0.22	0.24				1.12	0.45	0.58			
Large Blend	1	35	2	121,228	0	39,529	1.22	0.66	1.22	0.21	1.22	0.23	2.01	1.04	2.01	0.33	2.01	0.35
Large Growth	1	19	3	39,760	0	7,858	1.28	0.47	1.28	0.17	1.28	0.13	1.83	0.80	1.83	0.30	1.83	0.26
Large Value	28			26,315		3,719	0.49	0.19	0.41				0.85	0.33	0.68			
Small Blend	15			16,205		6,674	0.64	0.17	0.19				1.00	0.26	0.29			
Mid-Cap Growth	1	17	6	6,346	0	48	1.55	0.78	1.55	0.18	1.55	0.20	1.93	1.31	1.93	0.37	1.93	0.34
Small Growth	9			5,198		740	0.62	0.19	0.16				1.00	0.31	0.28			
Small Value	12			6,143		215	0.63	0.21	0.21				1.00	0.33	0.32			
US EQUITY SECTORS	1	214	3	70,350	0	15,814	5.26	0.85	5.26	0.36	5.26	0.37	5.62	1.26	5.62	0.57	5.62	0.63
Equity Energy	17			9,112		7,371	0.67	0.26	0.41				1.07	0.48	0.63			
Real Estate	1	11	3	7,417	0	1,060	5.26	0.96	5.26	0.30	5.26	0.36	5.62	1.62	5.62	0.53	5.62	0.62
Miscellaneous Sector	23			5,487		81	0.81	0.52	0.72				1.09	0.72	0.95			
Technology	23			5,757		213	0.71	0.25	0.24				1.17	0.41	0.39			
Energy Limited Partnership																		
Health	40			7,545		290	0.92	0.25	0.24				1.36	0.47	0.49			
Communications	7			1,115		19	0.72	0.41	0.35				1.08	0.64	0.56			
Consumer Cyclical	15			2,503		542	0.80	0.28	0.27				1.23	0.48	0.46			
Consumer Defensive	10			3,666		138	0.56	0.26	0.25				0.93	0.51	0.52			
Equity Precious Metals	2			1,794		168	0.99	0.25	0.25				1.39	0.44	0.44			
Financial	21			12,328		4,450	0.84	0.38	0.38				1.38	0.76	0.75			
Industrials	16			3,356		434	0.81	0.26	0.22				1.26	0.45	0.40			
Natural Resources	19			6,789		787	1.38	0.78	0.32				1.56	0.76	0.50			
Commodities Industrial Metals	1			58		2	0.56	0.56	0.56				0.82	0.82	0.82			
Utilities	9			3,425		260	0.64	0.25	0.21				0.97	0.40	0.33			
INTERNATIONAL EQUITY	-	154	-	135,999	-	13,543	1.36	1.16	1.37	1.90	1.76	2.05						
World Stock	12			1,443		31	1.25	0.61	0.65				1.62	0.87	0.88			
Foreign Large Value	13			2,187		26	1.15	1.10	1.11				1.64	1.65	1.67			
Foreign Large Blend	10			43,781		1,163	1.19	1.09	1.11				1.67	1.69	1.73			
Foreign Large Growth	3			1,256		13	1.25	1.09	1.10				1.77	1.64	1.64			
Foreign Small/Mid Value	4			604		6	1.17	1.15	1.15				1.65	1.64	1.64			
China Region	8			10,999		1,422	1.90	2.08	2.31				2.58	2.86	3.17			
Diversified Emerging Mkts	14			29,704		2,808	1.20	1.06	1.17				1.59	1.61	1.83			
Diversified Pacific/Asia	2			1,558		14	0.24	0.29	0.29				0.38	0.45	0.45			
Foreign Small/Mid Blend	5			450		8	1.19	1.27	1.31				1.76	1.82	1.86			
India Equity	2			247		11	1.53	1.74	1.76				1.97	2.30	2.32			
Japan Stock	9			7,816		4,843	1.60	1.63	1.54				2.24	2.39	2.25			
Latin America Stock	4			9,599		1,222	1.38	0.58	0.65				2.01	1.11	1.28			
Miscellaneous Region	30			15,103		886	1.27	1.23	1.31				1.86	1.87	1.98			
Europe Stock	17			6,677		1,026	1.46	0.75	0.98				2.16	1.16	1.55			
Global Real Estate	11			1,035		14	1.53	1.21	1.25				2.06	1.73	1.76			
Pacific/Asia ex-Japan Stk	10			3,539		50	1.76	1.73	1.72				2.42	2.45	2.40			
US BONDS - GENERAL	5	38	83	43,293	0	703	0.37	0.78	0.15	0.51	0.23	0.42	0.82	0.94	0.32	0.67	0.53	0.54
Intermediate-Term Bond	1	7	5	12,255	0	93	1.01	0.60	1.01	0.57	1.01	0.56	2.27	0.74	2.27	0.89	2.27	0.83
Ultrashort Bond	2	1	55	556	0	10	0.15	0.07	0.09	0.07	0.15	0.07	0.49	0.09	0.18	0.09	0.47	0.09
Bank Loan																		
High Yield Bond	3			1,208		22	1.87	1.82	1.90				2.19	2.24	2.32			
Short-Term Bond	2			1,254		14	0.93	0.86	0.88				0.97	0.92	0.93			
Preferred Stock	3			737		17	1.53	1.34	1.31				1.71	1.60	1.54			
Corporate Bond	3			4,235		48	1.35	1.34	1.34				1.31	1.56	1.55			
Short Government	2	4	23	10,125	0	116	0.27	0.40	0.13	0.07	0.18	0.07	0.42	0.45	0.24	0.07	0.30	0.07
Nontraditional Bond																		
Inflation-Protected Bond	2			7,357		64	0.44	0.43	0.43				0.66	0.63	0.64			
Intermediate Government	4			757		15	0.44	0.12	0.13				0.70	0.18	0.19			
Long Government	8			4,705		304	0.56	0.17	0.20				0.80	0.23	0.28			
Long-Term Bond	1			104		1	0.66	0.66	0.66				0.65	0.65	0.65			
US BONDS - MUNIS	-	15	-	1,500	-	19	0.76	0.70	0.67	1.10	0.93	0.89						
Muni National Interm	2			603		7	0.77	0.82	0.82				1.09	1.04	1.04			
Muni National Short	4			293		4	0.35	0.36	0.34				0.48	0.55	0.46			
Muni California Intermediate	1			91		1	1.06	1.06	1.06				1.23	1.23	1.23			
Muni National Long	3			420		5	0.70	0.58	0.60				1.00	0.81	0.83			
Muni New York Intermediate	1			28		0	1.29	1.29	1.29				1.91	1.91	1.91			
Muni New York Long	2			27		0	1.03	1.02	1.00				1.58	1.58	1.58			
Muni California Long	2			37		0	0.94	0.95	0.94				1.53	1.55	1.55			
INTERNATIONAL BONDS	2	4	21	1,205	0	14	0.68	1.47	0.47	0.85	0.54	0.91	1.02	2.16	0.68	1.29	0.80	1.37
World Bond	2	2	21	1,047	0	12	0.68	0.78	0.47	0.64	0.54	0.67	1.02	1.19	0.68	1.00	0.80	1.04
Emerging Markets Bond	2			157		2	2.16	2.21	2.08				3.12	3.23	2.96			
ALLOCATION	-	12	-	108	-	3	1.85	1.42	1.78	2.64	2.18	2.70						
World Allocation																		
Aggressive Allocation	2			14		1	1.66	1.66	1.76				2.48	2.48	2.53			
Conservative Allocation	3			35		1	1.15	0.98	1.17				1.85	1.59	1.88			
Tactical Allocation																		
Moderate Allocation	4			33		1	1.69	1.71	2.18				2.70	2.75	3.40			
Retirement Income	3			26		0	2.90	1.52	1.									

Exhibit 2-1: Comparison of Active ETF (AETF) vs Index ETF (IETF) Trading Costs. Asset-Weighted (AW) within overlapping fund categories.

Exhibit 2-2: Comparison of Active ETF (AETF) vs Index ETF (IETF) Trading Costs, Volume-Weighted (VW) within overlapping fund categories.