

MEMORANDUM

March 27, 2014

TO: File No. S7-07-08

FROM: Aidan O'Connor
Division of Investment Management

RE: Exchange-Traded Funds – Release No. IC-28193

On January 29, 2014, David Grim, Deputy Director, Elizabeth Osterman, Deputy Chief Counsel, Hunter Jones, Assistant Director, Barry Pershkov, Senior Special Counsel – ETFs, Aidan O'Connor, Senior Counsel and Marian Fowler, Senior Counsel, of the Division of Investment Management, and Tina Barry, Senior Special Counsel and Arun Manoharan, Financial Economist, of the Division of Trading and Markets met with Mortimer (Tim) Buckley, Joseph Brennan, Gregory Davis, John Hollyer, Natalie Bej and Barry Mendelson of Vanguard Group Inc. The purpose of the meeting was to discuss portfolio transparency and basket composition requirements in potential Commission rulemakings regarding exchange-traded funds.

On March 4, 2014, Elizabeth Osterman, Hunter Jones, Dalia Osman Blass, Assistant Director, Barry Pershkov, Richard Rodgers, Senior Special Counsel – Derivatives, David Bartels, Branch Chief, Aidan O'Connor and Matthew DeLesDernier, Senior Counsel, of the Division of Investment Management met telephonically with Barry Mendelson, Josh Barrickman and Brandon Clark of Vanguard Group Inc. The purpose of the meeting was to discuss basket composition requirements in potential Commission rulemakings regarding exchange-traded funds.

Materials made available by the participants are attached to this memorandum.

Attachment



Vanguard meeting with SEC staff Wednesday, January 29, 2014

Vanguard Participants

Tim Buckley	Managing Director and Chief Investment Officer
Joe Brennan	Principal, Equity Investment Group
Greg Davis	Principal, Fixed Income Group
John Hollyer	Principal, Risk Management Group
Natalie Bej	Principal, Legal Department
Barry Mendelson	Principal, Legal Department

Agenda

- Introductions
- ETF rulemaking issues
 - daily disclosure of portfolio holdings
 - custom baskets

Current SEC positions on portfolio holdings disclosure

- Mutual funds
 - Portfolio holdings disclosure required as of the end of every fiscal quarter on a 60-day lag.
- Index ETFs
 - Daily portfolio holdings disclosure is a representation or condition in many, but not all, exemptive orders for index ETFs.
- Actively managed ETFs
 - To date, daily portfolio holdings disclosure has been a condition of every exemptive order for actively managed ETFs.
 - There are several pending applications seeking relief for actively managed ETFs that will not require daily holdings disclosure.
- Proposed ETF Rule (Rule 6c-11, proposed 2008) would have required all ETFs to publish all portfolio holdings daily.

Vanguard's views on daily holdings disclosure for ETFs

- Daily holdings disclosure affirmatively and demonstrably hurts mutual fund and ETF performance by facilitating front running by professional traders (hedge funds, proprietary trading desks). [Slides 5-9]
- The benefits that daily holdings disclosure confer on ETFs (efficient pricing, hedging, and arbitrage) can all be achieved without daily holdings disclosure. [Slides 10-13]

Front running: Holdings disclosure can hurt index funds

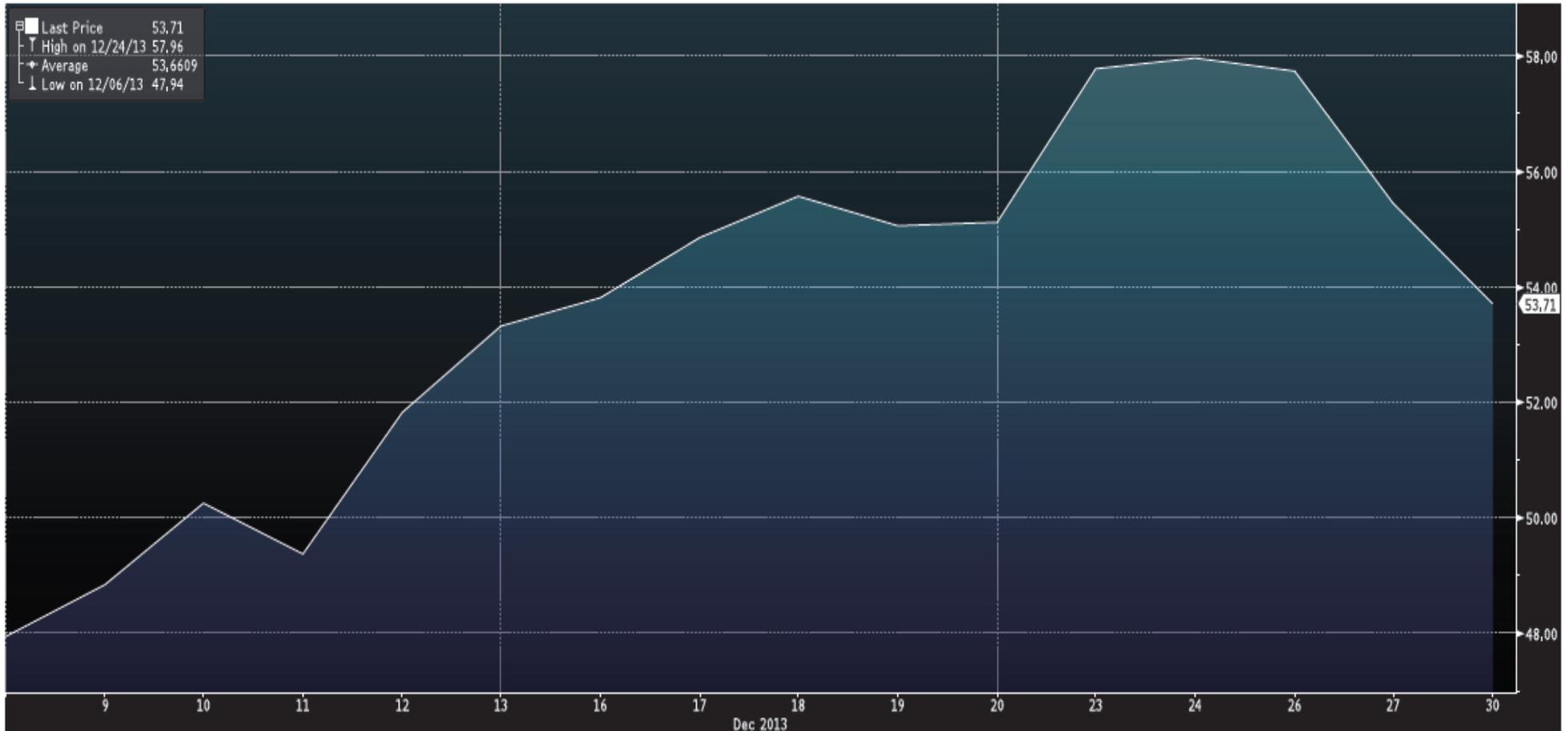
- Professional traders know that index funds have to buy and sell securities in response to publicly announced index reconstitutions and corporate actions.
- Vanguard's index portfolio managers work hard to trade securities in a manner that will thwart the efforts of professional traders to front-run the funds' trades.
- If ETFs were required to disclose holdings daily, professional traders would know precisely how much of a security the fund still has to buy or sell, leaving the funds significantly exposed to front running.

The SEC agrees that holdings disclosure can hurt index funds

- In 2004, the SEC required investment companies to disclose portfolio holdings quarterly rather than semi-annually. In the adopting release, the Commission said:
 - ✓ “We have determined to adopt the proposed requirement for quarterly disclosure of portfolio holdings with a 60-day delay. We are not requiring more frequent portfolio disclosure , or a shorter delay, because we take seriously concerns that frequent portfolio holdings disclosure and/or a shorter delay for the release of this information may expand the opportunities for predatory trading practices that harm fund shareholders.” *[emphasis added]*

How daily holdings disclosure can hurt an ETF

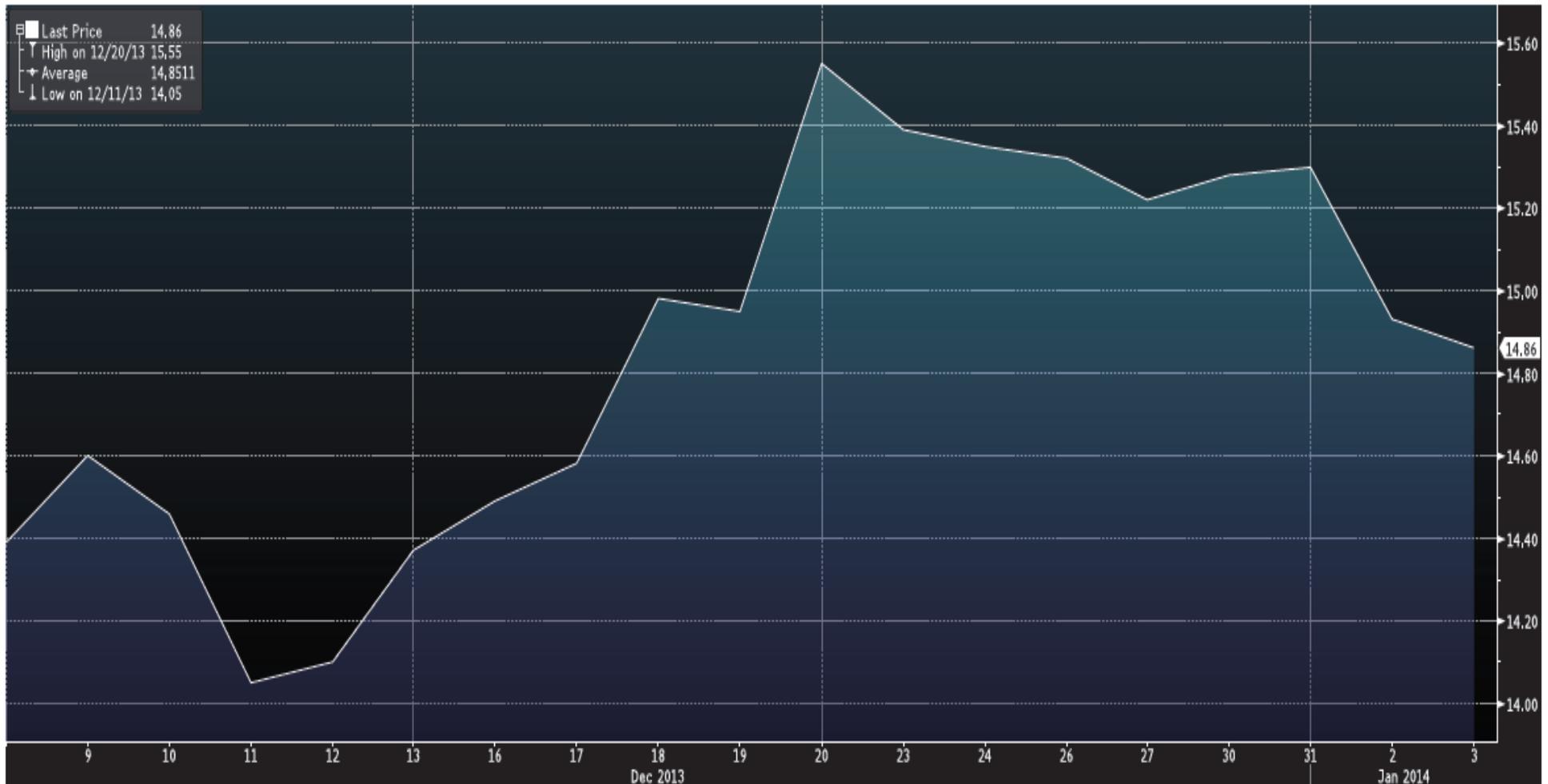
Example 1: FB addition to S&P 500 index



FB (Facebook) addition to the S&P 500 Index
Announced 12/11, added 12/20

How daily holdings disclosure can hurt an ETF

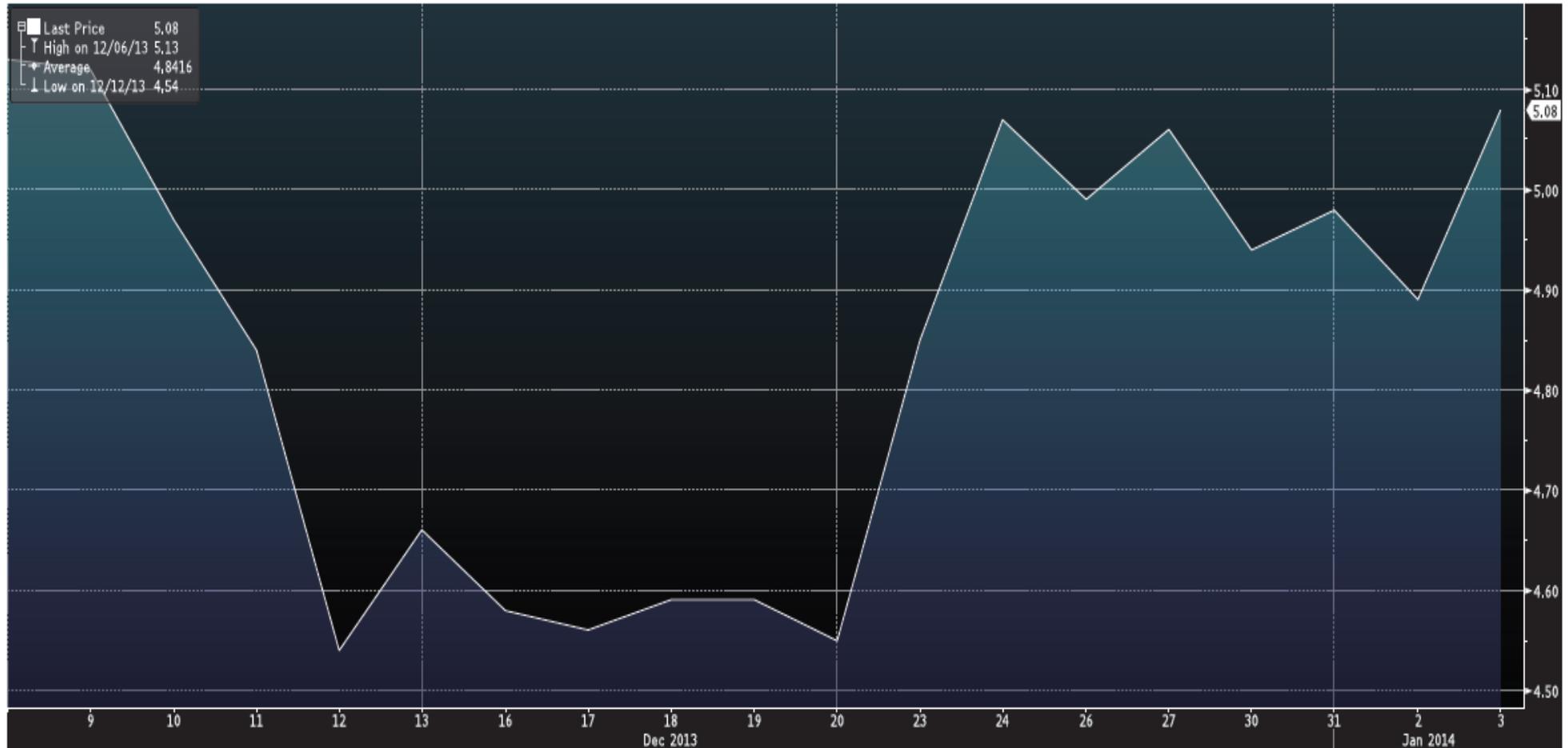
Example 2: ESRT addition to CRSP Small Cap Index



ESRT (Empire State Realty Trust) **addition** to the CRSP Small Cap Index
Announced 12/6/13, added 12/20/13

How daily holdings disclosure can hurt an ETF

Example 3: LINC deletion from S&P Small Cap Index



LINC (Lincoln Educational Services Corp.) deletion from S&P Small Cap Index

Announced 12/11, deleted 12/20

Efficient pricing, arbitrage, and hedging do not require daily holdings disclosure

- ETF market makers contend that daily holdings disclosure promotes efficient pricing, arbitrage, and hedging, which in turn promotes smaller premiums and discounts and narrower bid-ask spreads.
- Efficient pricing, arbitrage, and hedging can all be achieved without daily holdings disclosure. The experience of Vanguard ETFs proves this.
- Vanguard ETFs do not disclose their portfolio holdings daily, yet have discounts/premiums [Slide 11] and spreads [Slide 12] that in most cases are as good or better than comparable competitor ETFs.

Premiums/discounts: Vanguard ETFs vs. other ETFs

Vanguard	Avg Premium	Avg Discount
Domestic equity	0.07%	-0.06%
Fixed income	0.19%	-0.04%
International	0.26%	-0.15%
Sector	0.05%	-0.04%
BGI	Avg Premium	Avg Discount
Domestic equity	0.08%	-0.08%
Fixed income	0.25%	-0.24%
International	0.63%	-0.41%
Sector	0.07%	-0.07%
PIMCO	Avg Premium	Avg Discount
Fixed income	0.11%	-0.29%
SSGA	Avg Premium	Avg Discount
Domestic equity	0.14%	-0.15%
Fixed income	0.17%	-0.24%
International	0.54%	-0.32%
Sector	0.08%	-0.08%
PowerShares	Avg Premium	Avg Discount
Domestic equity	0.13%	-0.12%
Fixed income	0.21%	-0.21%
International	0.48%	-0.39%
Sector	0.15%	-0.14%
Source: Bloomberg		
Data for the period 10/1/2013 - 12/31/2013		
Each fund equal weighted, not asset weighted		

Bid-ask spreads: Vanguard ETFs vs. other ETFs

Sponsor	AUM (billion) <small>(as of 12/31/2013)</small>	Number of ETFs	Bid-ask spread less than 5 bps	Bid-ask spread less than 10 bps	Bid-ask spread greater than 10 bps
BGI	\$ 660.4	299	25% (76)	48% (143)	52% (156)
SSgA	\$ 390.2	125	22% (27)	34% (43)	66% (82)
Vanguard	\$ 333.9	67	51% (34)	90% (60)	10% (7)
PowerShares	\$ 96.9	131	6% (8)	24% (31)	76% (100)
WisdomTree	\$ 34.9	61	2% (1)	15% (9)	85% (52)
ProShares	\$ 27.1	144	13% (18)	30% (43)	70% (101)
Van Eck	\$ 22.1	53	8% (4)	21% (11)	79% (42)
Guggenheim	\$ 21.7	69	12% (8)	30% (21)	70% (48)
First Trust	\$ 19.8	79	0% (0)	20% (16)	80% (63)
Schwab	\$ 17.0	21	19% (4)	67% (14)	33% (7)

Source: Vanguard and Bloomberg
Data for month of December 2013

How can market makers price, arbitrage, and hedge efficiently without daily holdings disclosure?

- An ETF's creation/redemption basket can be used as a proxy for its portfolio, so long as the basket is constructed to track the portfolio closely.
 - A market maker can efficiently price and arbitrage the ETF by calculating intra-day NAVs based on the contents of the basket.
 - A market maker can efficiently hedge any long exposure to the ETF by hedging the contents of the basket.
 - Vanguard's baskets typically track the fund within a few basis points per day.
- The same results can be obtained by using the ETF's target index as the proxy for its portfolio.
 - Vanguard index funds typically track their index within a few basis point per day.

Current SEC position on composition of ETF creation/redemption baskets

- General rule: An ETF's creation/redemption basket must correspond *pro rata* to the positions in the fund's portfolio (including cash positions), with minor exceptions that
 - avoid fractional shares, odd lots, and minimum bond size requirements; and
 - allow for portfolio changes to reflect an index rebalancing.
- Exception: An ETF can use a sampled basket, but only if the sample
 - is designed to generate performance highly correlated to the Fund's portfolio;
 - consists entirely of instruments that are already included in the Fund's portfolio; and
 - is the same for all APs on a given business day.

Benefits of custom baskets

- Accommodate market makers who are restricted from dealing in certain securities or can not source a particular bond.
- Help manage portfolio and track index at lower cost.
 - If there is significant creation or redemption activity on a given day, an ETF using a non *pro rata* basket (especially a bond ETF) may find itself over- or underweight certain component securities.
 - ETF would then have to incur transaction costs to rebalance its portfolio.

[Slides 16-17]

Custom redemption basket example: Vanguard Long Term Corporate Bond ETF

- Vanguard Long Term Corporate Bond ETF (VCLT)
 - Has more than 1200 bonds in its portfolio (index has \approx 1400).
 - Publishes an optimized basket of approximately 50 bonds, which allows market makers to keep spreads and premiums/discounts reasonably narrow.
 - Published basket is good for a specified number of units each day.
 - For redemptions beyond specified number of units, the PM decides what bonds will be delivered to the redeeming AP.
- How this practice helps VCLT
 - In April 2013, VCLT received redemption orders totaling 21% of the fund (31 units valued at \$282 million).
 - Using the published basket, VCLT would have been short 52 bonds and \$200 million par (about 20% of the fund).
 - Would have cost the fund 20 bps to buy the shorts and at least 20 bps to rebalance the fund.
 - Instead, the PM was able to substitute other bonds of equivalent value that kept the portfolio in line with the index.

Custom creation basket example: Vanguard Intermediate Term Corporate Bond ETF

- Vanguard Intermediate Term Corporate Bond ETF (VCIT): more than 1400 bonds in portfolio (index \approx 1600); published basket \approx 50 bonds
- In February 2013, VCIT took in 5 custom creation units (\$8.7 million each). All of the basket securities were in the index, and the custom basket had similar risk characteristics to the fund.
- Ex-ante tracking error declined after accepting custom baskets

			Published		Fund After Custom Basket
	Fund	Benchmark	Create Basket	Custom Basket	
# Securities	1314	1528	43	49	1315
Duration	6.37	6.38	6.39	6.33	6.37
Spread Duration	6.27	6.28	6.28	6.23	6.27
Yield	2.82	2.85	2.91	2.73	2.82
% Securities	99.20%	100.00%	99.45%	99.46%	99.22%
% Cash	0.80%	0%	0.55%	0.54%	0.78%
Ex-ante Tracking Error (Annualized)	5.01				4.98

Questions?