ETF Observer

September 2014

Contents

ETF Insight

Back to School Rally

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As kids packed their pencil cases (styluses?) and protractors (is there an app for that now?) into their new backpacks in preparation for a new school year, markets rallied. The S&P 500 Index gained 4% and crossed the 2,000 mark for the first time ever. Long bonds also marched higher as the 10 year treasury yield declined over the course of the month. Investors took notice, and took on more risk. ETFs in Morningstar's long government bond and diversified emerging-markets equity categories topped the asset flows ranks, gathering $2.3 and $1.9 billion in new assets, respectively. Elsewhere, we saw evidence that investors' recent love affair with European stocks might have come to an end. After a twelve month streak of steady inflows that began in July 2013, European equity ETFs experienced a second consecutive month of outflows in August, amounting to some $2.2 billion. ETFs offering exposure to the utilities sector had record outflows, bleeding nearly $1.8 billion.

This month's installment of ETF Observer features four articles and two fund spotlights from our Passive Strategies research team. In the first article, Bob Goldsborough goes on the hunt for investment opportunities in U.S. Health Care. Tom Boccellari follows with an analysis of the Barclays Aggregate Bond Index. Alex Bryan bats clean up this month, providing a pair of articles on the topic of risk management. In the first, he provides a useful refresher course on investment risk and offers up some ways in which investors might seek to mitigate risk in their portfolios. In the second article, Alex explores a more unconventional approach to managing risk—trend following. As it so happens, it appears there may be some merit to the old adage "the trend is your friend". Lastly, this month we spotlight the Vanguard Telecommunications ETF (VOX) and PowerShares' Build America Bond ETF (BAB).

Finally, for the third and final time I'd like to plug our fifth annual Morningstar ETF Conference. This year's conference will be held from September 17-19 (next week!) at the Chicago Sheraton. You can find additional details and the full conference agenda here. This year's conference is shaping up to be our best yet—owing to a fantastic lineup of speakers and panelists. This year's keynote and general session speakers include Nobel Laureate Eugene Fama, BlackRock's Russ Koesterich, JP Morgan's Dr.David Kelly, PIMCO's Jerome Schneider, AQR's Ronen Israel, and Wesley Gray of Drexel University. We hope to see you in Chicago next week for three days packed with valuable insights and investment ideas.

Best,

U.S. Market Barometer

1 Month

US Market 4.19%

	Value	Core	Growth
	3.38%	4.17%	5.00%
Large Cap 3.92%	3.00%	3.97%	4.78%
Mid Cap 4.91%	4.38%	4.59%	5.76%
Small Cap 5.01%	4.68%	4.96%	5.38%

YTD

US Market 9.53%

	Value	Core	Growth
	9.21%	9.37%	10.07%
Large Cap 9.79%	8.97%	8.95%	11.46%
Mid Cap 10.22%	10.79%	11.98%	8.17%
Small Cap 4.74%	7.17%	6.41%	0.58%

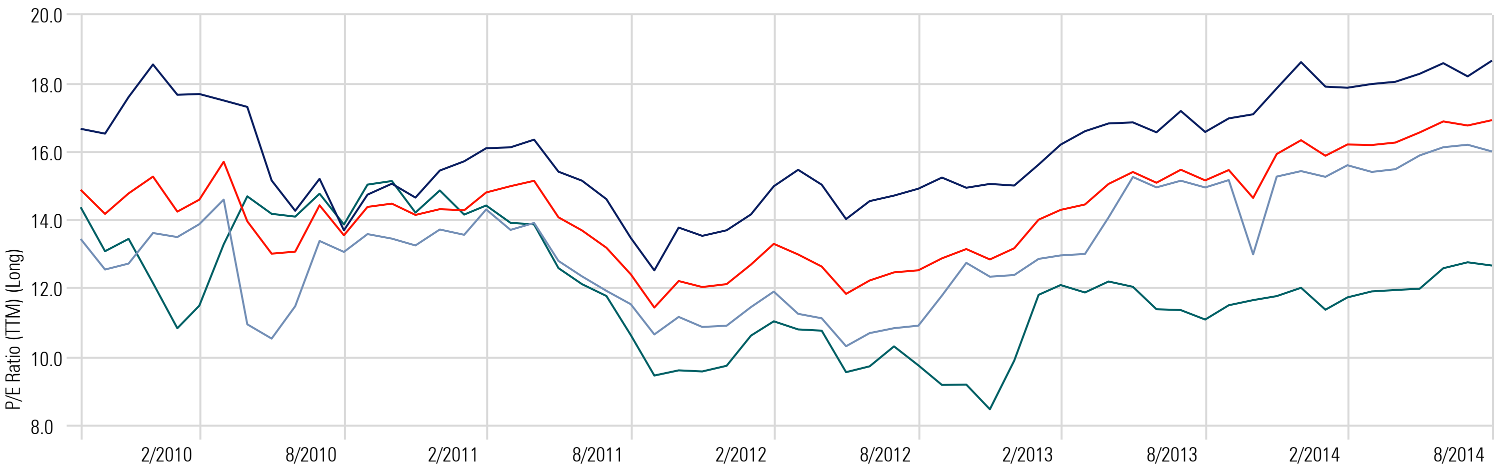
1 Year

US Market 24.91%

	Value	Core	Growth
	23.40%	23.51%	27.83%
Large Cap 25.08%	22.25%	22.28%	30.68%
Mid Cap 25.74%	27.31%	28.31%	22.04%
Small Cap 20.64%	23.83%	22.81%	15.34%

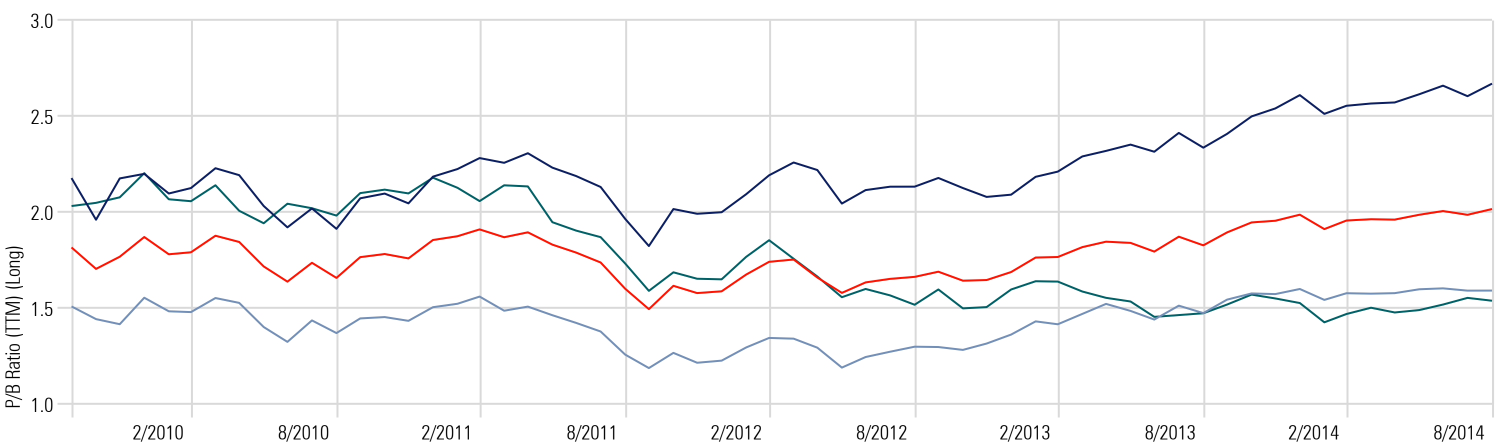
Price/Earnings

Time Period: 9/1/2009 to 8/31/2014



Price/Book Value

Time Period: 9/1/2009 to 8/31/2014



S&P 500 TR USD
MSCI ACWI NR USD
MSCI EAFE NR USD
MSCI EM NR USD

Top 10 ETF Providers

		Est. Net Flow ($Mil)			Market Share: Total Net Assets ($Bil)					
					Present			One Year Ago		
Name	# of ETFs	1-Mo	YTD	1-Yr	08-14	Mkt Sh%	Rank	08-13	Mkt Sh%	Rank
iShares	310	10,100.59	40,104.30	63,273.39	736.49	38.54	1	588.31	39.52	1
State Street	140	(2,201.42)	(10,692.09)	18,414.75	407.44	21.32	2	337.78	22.69	2
Vanguard	67	4,977.42	42,035.29	60,032.44	400.34	20.95	3	289.46	19.44	3
PowerShares	163	(432.53)	(169.31)	5,083.62	105.13	5.50	4	83.79	5.63	4
WisdomTree	68	289.44	(91.53)	2,901.75	35.72	1.87	5	29.02	1.95	5
First Trust	88	827.21	7,726.46	11,702.50	29.48	1.54	6	13.79	0.93	9
Guggenheim	68	440.96	5,243.61	9,180.26	28.39	1.49	7	16.12	1.08	8
ProShares	145	(113.78)	2,759.39	3,241.08	27.34	1.43	8	26.26	1.76	6
Van Eck	62	464.81	(183.81)	1,260.64	24.86	1.30	9	22.37	1.50	7
Schwab	21	472.44	4,575.03	6,706.86	22.95	1.20	10	13.38	0.90	10

Top 15 ETF Inflows in August

		Est. Net Flow ($Mil)			Market Share: Total Net Assets ($Bil)					
					Present			One Year Ago		
Name	Ticker	1-Mo	YTD	1-Yr	08-14	Mkt Sh%	Rank	08-13	Mkt Sh%	Rank
iShares 7-10 Year Treasury Bond	IEF	1,470.51	3,882.27	3,499.66	7.75	0.41	55	4.07	0.27	77
iShares Core S&P 500	IVV	1,257.00	2,968.81	7,483.32	61.31	3.21	2	43.45	2.92	3
iShares 1-3 Year Treasury Bond	SHY	1,192.07	795.40	659.99	9.02	0.47	48	8.34	0.56	38
Vanguard S&P 500 ETF	VOO	1,149.56	5,151.68	7,900.33	21.80	1.14	15	10.77	0.72	32
Consumer Staples Select Sector SPDR Fund	XLP	971.28	(88.95)	834.60	6.85	0.36	58	5.41	0.36	62
Health Care Select Sector SPDR ETF	XLV	951.64	985.10	1,421.59	10.88	0.57	37	7.24	0.49	46
iShares MSCI Emerging Markets	EEM	923.37	1,307.25	4,130.75	44.34	2.32	7	34.80	2.34	7
iShares MSCI Hong Kong	EWH	818.20	838.13	805.61	3.22	0.17	121	2.13	0.14	129
iShares 20+ Year Treasury Bond	TLT	802.74	1,573.23	889.89	4.28	0.22	92	2.97	0.20	101
iShares 3-7 Year Treasury Bond	IEI	765.74	1,135.04	1,271.65	3.88	0.20	103	2.52	0.17	110
Vanguard Total Stock Market ETF	VTI	717.44	3,971.74	6,163.36	46.63	2.44	6	32.62	2.19	8
iShares MSCI ACWI	ACWI	678.38	1,015.89	1,891.27	6.63	0.35	61	3.90	0.26	81
Consumer Discretionary Sel Sect SPDR ETF	XLY	672.51	(1,076.16)	(490.47)	6.53	0.34	62	6.02	0.40	53
iShares Russell 1000 Growth	IWF	608.24	513.06	538.91	25.10	1.31	9	19.82	1.33	10
Financial Select Sector SPDR ETF	XLF	581.61	523.25	1,075.53	18.51	0.97	18	14.89	1.00	17

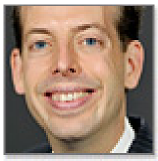
Top 15 ETF Outflows in August

		Est. Net Flow ($Mil)			Market Share: Total Net Assets ($Bil)					
					Present			One Year Ago		
Name	Ticker	1-Mo	YTD	1-Yr	08-14	Mkt Sh%	Rank	08-13	Mkt Sh%	Rank
SPDR S&P 500 ETF	SPY	(4,658.06)	(15,276.19)	9,048.02	172.70	9.04	1	135.73	9.12	1
iShares Core S&P Mid-Cap	IJH	(1,387.66)	(2,001.92)	(499.85)	21.99	1.15	14	18.80	1.26	11
iShares MSCI EMU	EZU	(1,343.89)	721.08	4,565.46	8.70	0.46	51	3.54	0.24	89
Vanguard FTSE Europe ETF	VGK	(687.44)	2,167.33	6,259.43	15.57	0.81	23	8.13	0.55	39
iShares US Utilities	IDU	(633.73)	482.76	(47.20)	1.14	0.06	229	1.12	0.08	193
Utilities Select Sector SPDR ETF	XLU	(580.20)	772.94	(221.58)	5.94	0.31	66	5.40	0.36	63
ProShares Ultra MidCap400	MVV	(538.68)	(1,406.47)	(1,126.57)	0.17	0.01	630	1.28	0.09	180
iShares S&P 100	OEF	(528.17)	(45.98)	(30.93)	4.54	0.24	88	3.79	0.25	84
ProShares Ultra Russell2000	UWM	(515.13)	278.98	(1,139.32)	0.18	0.01	615	1.39	0.09	172
iShares JPMorgan USD Emerg Markets Bond	EMB	(510.17)	967.40	542.43	4.69	0.25	84	3.81	0.26	83
SPDR Russell 3000 ETF	THRK	(421.60)	(407.52)	(407.52)	0.20	0.01	584	0.50	0.03	313
First Trust Utilities AlphaDEX® ETF	FXU	(408.82)	106.57	(7.40)	0.22	0.01	556	0.21	0.01	490
Energy Select Sector SPDR ETF	XLE	(397.92)	2,034.84	1,847.49	11.50	0.60	35	7.72	0.52	44
SPDR Gold Shares	GLD	(346.19)	58.50	(4,958.27)	32.85	1.72	8	41.29	2.77	5
PowerShares QQQ ETF	QQQ	(317.41)	(3,891.49)	(246.23)	46.75	2.45	5	35.80	2.40	6

ETF News

26 ETFs to Close in the Coming Weeks

iShares, PIMCO, and Emerging Global Advisors All Prepare to Shutter Thinly Traded Funds.



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One big story of the past month has been a raft of ETF closures announced by three different fund issuers.Year to date, 38 exchange-traded products have liquidated thus far, almost all because they had trouble gaining traction with investors and as a result had minimal asset levels. (There are exceptions: iShares delisted a 2014 AMT-Free municipal bond ETF that matured.)

Now, three major ETF issuers have announced plans to pare their portfolios. The biggest reduction comes from iShares, which announced plans to close 18 ETFs in October. The move, which includes the closing of 10 target-date ETFs, comes on the heels of iShares' decision earlier this year to delist 10 foreign equity sector ETFs. In addition to the 10 target-date ETFs, iShares will liquidate a hodgepodge of other funds, including several emerging-markets-themed funds, an Asian financials ETF, a pair of real estate funds, a global nuclear energy ETF, and two broad ETFs: iShares NYSE 100 ETF NY and iShares NYSE Composite ETF NYC.

Meanwhile, PIMCO has announced plans to delist four ETFs on Sept. 26: PIMCO Australia Bond Index ETF AUD, PIMCO Canada Bond Index ETF CAD, PIMCO Germany Bond Index ETF BUND, and PIMCO Build America Bond ETF BABZ. None of the funds has more than $24 million in assets.

Finally, Emerging Global Advisors plans to close four ETFs at the end of September. Three of the ETFs to be closed are the trio of investment-grade bond funds that the firm launched in early January as part of a partnership with TCW: EGShares TCW EM Short Term Investment Grade Bond ETF SEMF, EGShares TCW EM Intermediate Term Investment Grade Bond ETF IEMF, and EGShares TCW EM Long Term Investment Grade Bond ETF LEMF. Emerging Global also plans to shutter its EGShares China Infrastructure ETF CHXX. None of the ETFs has more than $7 million in assets.

Direxion Launches 'iBillionaire' ETF

On Aug. 1, Direxion rolled out the much-ballyhooed, passively managed Direxion iBillionaire Index ETF IBLN, which first was filed with regulators back in November, to much media attention. IBLN is the latest in a series of coattail-riding, "guru"-themed exchange-traded funds that seek to offer ordinary investors access to high-conviction picks from successful managers. In IBLN's case, it tracks an equally-weighted, 30-stock "iBillionaire" index that contains the top 30 large-cap equities listed on the S&P 500 Index in which billionaire investors have allocated the most assets, based on federal 13F filings.

The company behind the index, www.iBillionaire.me, draws picks for its index from billionaires like Bruce Berkowitz, Ray Dalio, Warren Buffett, George Soros, John Paulson, Daniel Loeb, Eddie Lampert, Bill Ackkman, Carl Icahn, and Seth Klarman. This similar guru-following strategy can also be found in Global X Top Guru Holdings ETF GURU and AlphaClone Alternative Alpha ETF ALFA. IBLN charges 0.65%, which is less than the 0.95% that ALFA charges and the 0.75% levied by GURU.

ProShares Launches Pair of CDS ETFs

On Aug. 5, ProShares rolled out two actively managed ETFs devoted to credit default swaps, making them the first ETPs of their kind. ProShares CDS North American HY Credit ETF TYTE and ProShares CDS Short North American HY Credit ETF WYDE offer long and short exposure, respectively, to a basket of financial swap agreements that speculate on loan defaults or other credit events. While not insurance, credit default swaps function similarly. The buyer (frequently the loan's issuer) makes regular payments to the seller, and if the loan defaults, the buyer receives compensation.

TYTE aims at increasing in value as the North American high-yield credit market improves, while its corresponding short ETF, WYDE, has the opposite goal. The two ETFs charge 0.50%.

U.S. ETF Industry Data Dashboard

Morningstar data as of September 1, 2014

Industry Vitals

Total # of ETPs currently listed	1,645
ETFs	1,438
Total ETF Assets	$1.884 trillion
ETNs	207
Total ETN Assets	$27.46 billion
Total ETP Assets	$1.912 trillion

Active ETFs

Actively Managed ETFs	107
Total Assets	$17.96 billion
% of Total ETP Assets	0.94%
New Active ETFs Launched in August	13

Coming and Going	August	YTD
New Launches	18	136
Delistings/Closures	5	38
Net Change	13	98
Pending Closures	26	--

Notable ETF Filings in August

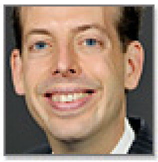
- First Trust Eurozone AlphaDEX ETF
- Market Vectors Emerging Markets Corporate Bond ETF
- FlexShares Credit-Scored U.S. Corp. Bond Index ETF
- Cambria Global Asset Allocation ETF
- Global X | JPMorgan U.S. Sector Rotator Index ETF
- Global X FTSE Luxury Consumer ETF
- EMQQ Emerging Markets Internet Index ETF
- Deutsche X-trackers High Yield Corporate Bond - Interest Rate Hedged ETF
- Deutsche X-trackers Investment Grade Bond - Interest Rate Hedged ETF
- Deutsche X-trackers U.S. Aggregate Bond - Interest Rate Hedged ETF
- Deutsche X-trackers Emerging Markets Bond - Interest Rate Hedged ETF

Perspective

Where Are the Opportunities in U.S. Health Care?

As the sector has continued to best the broader market, a look both at the dynamics that would drive further outperformance by the sector and at funds that investors can use to tap those themes.

August 27, 2014



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Since the start of 2014, the U.S. health-care sector has continued its recent track record of outpacing the broader U.S. equity market, topping the S&P 500 Index by more than 400 basis points. Over the past three years, health-care stocks have in aggregate bested the broad benchmark by 500 to 600 basis points each year.

There are several reasons for the health sector's strong performance over the past few years. Some of it relates to low valuations in 2010 of pharmaceutical stocks--which make up anywhere from 40% to 45% of the sector--as a result of investor fears in advance of U.S. health-care reform and a wave of major patent losses. Ultimately, the drug companies adapted to both headwinds better than expected. In addition, drug companies have enjoyed benefits from a shift in focus that they implemented between seven and 10 years ago after payers decided to reimburse less for slight enhancements to approved drugs, which up to that point had been a big focus of the majority of pipelines. That prompted drugmakers to shift their pipeline focus toward unmet medical needs such as cancer and hepatitis C. Now, those drugs are coming to the market now, and pharmaceutical firms are seeing the fruits of those innovations. That has resulted in an improved growth outlook for drug and biotech firms.

At this time, Morningstar's equity analysts now consider health-care firms to largely meet our analysts' fair value estimates in aggregate. However, even this late into the five-year-plus bull market, we see opportunities for investors both in the broader health-care sector but also within several specific pockets.

Instead, one key theme that we believe that investors should watch closely is the U.S. health-care sector's still-low utilization rates, which have been hampered by a slow-to-recover economy and the time lag between recession and health-care usage, along with a new business model that entails greater cost-sharing with patients. (More favorable volume numbers have begun to appear at hospitals, diagnostic labs, and device firms, both due to the addition of newly insured patients from U.S. health-care reform, as well as from the continued recovery from the recession.) Some other key themes that merit monitoring are the relatively attractively valued pharmacy benefit manager space, ongoing merger and acquisition activity in the biotech subsector, long-term growth in China, which could help drive pharmaceutical and device firms, and corporate inversions, which could reduce drugmakers' tax rates and boost profitability. Exchange-traded funds that can help investors make specific bets on these dynamics include broad funds such as Health Care Select Sector SPDR ETF (XLV), Vanguard Health Care ETF (VHT), and iShares US Healthcare (IYH), as well as targeted ETFs such as iShares US Healthcare Providers (IHF), SPDR S&P Health Care Services ETF (XHS), iShares Nasdaq Biotechnology (IBB), SPDR S&P Biotech ETF (XBI), iShares US Pharmaceuticals (IHE), SPDR S&P Pharmaceuticals ETF (XPH), Market Vectors Pharmaceutical ETF (PPH), iShares US Medical Devices (IHI), and SPDR S&P Health Care Equipment ETF (XHE).

An Overview of Market-Cap-Weighted Health-Care ETFs

There are three large and liquid cap-weighted health-care ETFs: Health Care Select Sector SPDR, Vanguard Health Care, and iShares US Healthcare. All seek to replicate broad indexes of the largest U.S. health-care stocks, including pharmaceutical companies, biotech firms, health-care providers, health-care equipment makers, and life sciences firms. And all devote between 39% and 40% of assets to pharmaceutical firms, another 20% to 25% to biotech firms and then another 14% to 18% to health-care providers and services firms.

The tables on the following page contain details on the three funds, as well as two large strategic-beta funds:

Large Market-Cap-Weighted U.S. Health-Care ETFs	Holdings	Assets in Pharma (%)	Assets in Biotech (%)	Assets in Providers (%)
Health Care Select Sector SPDR XLV	54	44.4%	20.7%	15.8%
Vanguard Health Care ETF VHT	311	39.0%	21.0%	17.2%
iShares US Healthcare ETF IYH	110	42.8%	22.1%	14.4%
Guggenheim S&P 500 Equal Weight Health Care RYH	54	23.3%	14.3%	25.9%
First Trust Health Care AlphaDEX FXH	75	18.3%	15.4%	39.5%

Source: Morningstar Direct

Data as of Aug. 22, 2014.

	Assets in Large Caps (%)	Assets in Mid-Caps (%)	Assets in Small Caps (%)	Expense Ratio (%)
Health Care Select Sector SPDR XLV	95.0	5.0	0.0	0.16
Vanguard Health Care ETF VHT	80.9	12.0	4.6	0.14
iShares US Healthcare ETF IYH	85.9	11.5	2.4	0.43
Guggenheim S&P 500 Equal Weight Health Care RYH	74.0	25.9	0.0	0.40
First Trust Health Care AlphaDEX FXH	43.8	47.1	9.0	0.70

Source: Morningstar Direct

Data as of Aug. 22, 2014.

	Holdings in Wide Moat (%)	Holdings in Narrow Moat (%)	Holdings in No Moat (%)	Price/Fair Value Ratio (%)
Health Care Select Sector SPDR XLV	66.8	30.0	3.1	102
Vanguard Health Care ETF VHT	56.1	28.7	5.0	102
iShares US Healthcare ETF IYH	58.8	30.6	5.2	102
Guggenheim S&P 500 Equal Weight Health Care RYH	45.4	46.5	8.1	105
First Trust Health Care AlphaDEX FXH	22.4	38.5	12.7	105

Source: Morningstar Direct

Data as of Aug. 22, 2014.

Note: Percentages do not add up to 100% because Morningstar's equity analysts do not cover all companies held in each ETF.

PowerShares S&P SmallCap Health Care ETF (PSCH) is another market-cap-weighted ETF devoted to the health-care sector. As its name suggests, PSCH tracks an index of small-cap U.S. health-care companies. It takes its holdings from the S&P SmallCap 600 Index. In the Morningstar Style Box, PSCH falls within the high-growth segment, between micro-cap and small cap. Morningstar does not compute a price/fair value ratio or an Economic Moat Rating for PSCH. The ETF has lagged cap-weighted financial ETFs during the past one- and three-year periods. PSCH's expense ratio is 0.50%.

As we look at still-relatively low utilization rates in the health-care industry--they still aren't back to where they were in 2007--we think that investors with a bullish view toward increasing utilization rates should consider a broad cap-weighted health-care ETF. Historically, there's a lag of a couple of years after a recession before health-care spending returns. During this most recent recovery, however, the magnitude of the downturn and increased cost-sharing with patients have conspired to hold back any kind of sharp rebound in health-care use. That said, Morningstar's equity analysts anticipate gradual increases in demand for health care going forward. For investors seeking to exploit the theme of increased utilization, the two most suitable options are Health Care Select Sector SPDR and Vanguard Health Care ETF.

For investors seeking exposure to health-care firms outside of the U.S., one market-cap-weighted ETF is iShares Global Healthcare (IXJ), which devotes 63% of its assets to U.S. companies. Most of the remaining assets are invested in companies based in developed foreign markets (largely Europe), such as Novartis (NVS), Roche, Sanofi (SNY), GlaxoSmithKline (GSK), and Bayer. Exposure to these names does not offer investors much in the way of added exposure to emerging markets, given that European and U.S. companies sell into the same channels. Performance trends bear this out, as IXJ's performance is highly correlated with the three large U.S.-only financial-services ETFs (95%-96% during the past five years). And IXJ charges 0.47%, which means that cost-conscious investors looking for financial-services sector exposure might prefer XLV or VHT, which carry expense ratios of 0.16% and 0.14%, respectively.

Strategic-Beta Health-Care ETFs

There are two good-sized ETFs devoted to the health-care sector that seek to improve their return profile relative to traditional market benchmarks. Morningstar terms this category of funds "strategic beta." The first, Guggenheim S&P 500 Equal Weight Health Care ETF (RYH), tracks an equal-weighted index of 54 stocks, which means that smaller health-care firms sit shoulder to shoulder with mega-cap companies. As is the case with other equally weighted funds, RYH offers slightly more of a small- and mid-cap tilt than its market-cap-weighted peers. For example, 25% of RYH's portfolio consists of mid-cap names, compared with just 5% of XLV and 12% of VHT. RYH is only slightly more volatile than its cap-weighted counterparts. RYH has meaningfully outperformed its cap-weighted brethren over the trailing one- and five-year periods and has lagged over the past three-year period. RYH's position in the style box is almost identical to that of VHT; both funds fall between medium and large and are squarely in core growth. RYH also invests in a significant number of high-quality health-care firms, devoting 45% of assets to wide-moat companies, 46% to narrow-moat firms, and just 8% to companies with no economic moat. RYH charges 0.40% and trades at 105% of fair value.

First Trust Health Care AlphaDEX ETF (FXH) tracks a fundamental index that uses a proprietary stock-selection methodology to rank financials firms on both growth and value factors. As a result, FXH's portfolio differs meaningfully from many of its sector-ETF peers. The index rebalances quarterly and takes valuation into account when rebalancing. FXH is closer to the high-growth band in the style box, while the cap-weighted financials ETFs--and RYH--all are a little closer to core growth. FXH's portfolio also has more of a small- and mid-cap tilt than its competitors, with fully 47% of assets invested in mid-cap firms and another 9% devoted to small-cap companies. FXH has meaningfully outperformed the cap-weighted U.S. financials ETFs over one-, three-, and five-year periods, albeit with slightly more volatility than the cap-weighted funds. FXH has a slightly lower tilt toward quality companies than its market-cap-weighted brethren; some 22% of FXH's assets are invested in wide-moat firms, and another 39% are invested in narrow-moat companies. FXH charges 0.70%. Morningstar's analysts do not cover enough of the firms held in FXH to develop an estimate of fair value.

Subsector-Level Health-Care ETFs

Investors with a strong conviction about an individual subsector within the U.S. health-care sector can consider ETFs devoted to pharmaceutical firms, device firms, biotech companies, and health-care providers and services companies. Some fundamental trends that investors can consider exploiting through a subsector-level ETF are the aging of China (which over the next eight years can be expected to drive significant health-care spending, particularly in drugmakers and med-tech and device firms), continued strength from biotech firms (which are continuing to enjoy rich valuations, significant merger and acquisition activity, a generally attractive regulatory environment, strong sales of already-approved drugs, key drug approvals, and successful integrations of previous acquisitions), a trend toward corporate inversions (which could benefit pharmaceutical firms), and relatively attractive valuations at present of pharmacy benefits managers (which are held in health-care providers and services ETFs).

Outside of cap-weighted ETFs, some of the funds with the highest percentages of companies with economic moats are pharmaceutical ETFs, whose portfolios have anywhere from 49% to 70% of assets devoted to wide-moat firms, and another 21% to 30% of assets invested in narrow-moat companies. Biotech ETFs, which often invest in firms with no approved drugs yet, tend to have lower percentages of assets invested in companies with economic moats (15% to 40% of assets in wide-moat companies, and 30%-35% in narrow-moat firms). Health-care provider ETFs also have lower percentages of assets invested in companies with economic moats.

No subsector ETFs currently trade at below 100% of fair value. In general, pharmaceutical ETFs trade at slightly more attractive valuations than other subsector-level ETFs, as do biotech ETFs.

After assessing the above dynamics, some funds worth considering include the ETFs listed below:

Health-Care Subsector ETFs

	Holdings	Assets in Wide Moat (%)	Price/Fair Value Ratio (%)	Expense Ratio (%)
Market Vectors Pharmaceutical ETF PPH	25	69.5	101%	0.35
iShares Nasdaq Biotechnology IBB	120	25.6	101%	0.48
Market Vectors Biotech ETF BBH	25	38.3	101%	0.35
iShares US Medical Devices ETF IHI	48	42.0	101%	0.43
PowerShares Dynamic Pharmaceuticals PJP	30	49.0	102%	0.63
iShares US Healthcare Providers IHF	47	10.2	104%	0.43

Source: Morningstar data.

Data as of Aug. 22, 2014.

Flow Trends

A look at where fund flows have been going often can help give investors some insight into what other investors are thinking. Recent fund-flow data for health care show several noteworthy dynamics. First, flows have been very strong into the health-care sector over the past year. Over the past year, more than $4.8 billion has flowed into passively managed health-care funds, making it the sector that has attracted the second-most flows in the passive space after real estate. (The story is similar among actively managed funds, where health-care funds have drawn more flows than all but one other sector.) In addition, strategic-beta ETFs devoted to the health industry have enjoyed strong inflows during the past year, owing to their track records of outperformance and a generally increased focus from investors and advisors on strategic-beta funds.

Please see the tables on the following page for more detail on flow trends for strategic-beta health-care ETFs.

Inflows into Strategic Beta Health-Care ETFs in 2014

	Estimated Net Flow ($Mil)				
	YTD	1 Month	1 Year	Assets ($Mil)	1 Yr Organic Growth Rate
Top-Flowing Funds					
First Trust Health Care AlphaDEX FXH	524	140	842	2,209	85.81
Vanguard Health Care Index VHT*	471	57	785	3,229	35.89
iShares US Healthcare IYH	438	32	676	2,611	43.73
iShares Nasdaq Biotechnology IBB	211	-108	376	5,296	10.06
First Trust NYSE Arca Biotech Fund FBT	181	12	36	1,440	51.62
Bottom-Flowing Funds					
PowerShares S&P SmallCap HealthCare PSCH	-40	-14	-3	157	-1.99
Market Vectors Pharmaceutical ETF PPH	-24	-61	-26	381	-11.33
Market Vectors Biotech ETF BBH	-15	-24	42	520	11.31
PowerShares DWA Healthcare Momentum PTH	-5	0	9	78	12.66
SPDR S&P International Hlth Care Sector ETF IRY	3	5	-1	68	-2.54

*Includes mutual fund share class.

Source: Morningstar data.

Inflows into Strategic Beta Health-Care ETFs in 2014

	Estimated Net Flow ($Mil)		
	YTD	1 Year	1 Yr Organic Growth Rate
Top-Flowing Funds			
First Trust Health Care AlphaDEX FXH	524	842	85.81
Guggenheim S&P 500 Eq Wt HC ETF RYH	57	45	32.43

Source: Morningstar data.

Flows data as of July 31, 2014.

Perspective

Is the Aggregate Index Too Heavy in Treasuries?

Record Treasury issuances during the past decade have made the index more conservative than most intermediate-term bond funds.

August 20, 2014

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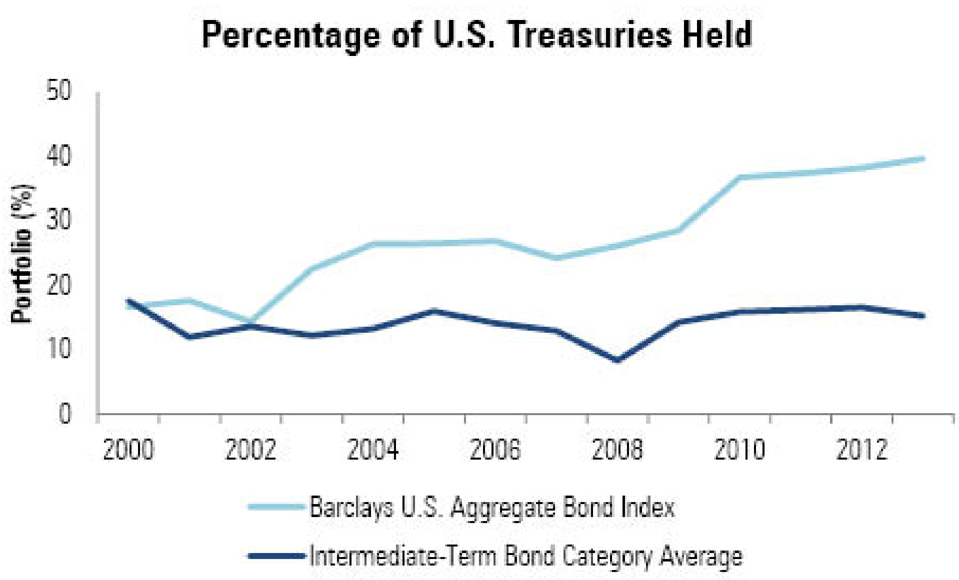
In many markets, index investing is appealing because it takes a free ride on the collective efforts of active investors, offering comparable exposure at a fraction of the cost. As long as the index is representative of what active managers in the fund world are doing, it's a good bet that a low-cost index fund will beat the average manager in the category.

However, the Barclays U.S. Aggregate Bond Index has increasingly diverged from actively managed funds in the intermediate-term bond Morningstar Category during the past five years. At the beginning of 2000, funds that tracked the Aggregate Index held bonds that were similar to the category average in duration, credit quality, and performance. But that has changed during the past several years.

Following the global economic crisis, the federal government issued more debt at a more rapid pace than corporations in order to cover the growing deficit. Because the Aggregate Index weights its holdings by market capitalization, it has increasingly devoted a greater part of its portfolio to U.S. Treasuries. During the past 14 years, the percentage of U.S. Treasuries in the Aggregate Index increased to more than 40% from 16%.



Source: Morningstar Direct; Data as of July 31, 2014.

Actively managed funds in the intermediate-term bond category were not constrained in this way and did not follow suit. On average, they devote only slightly more of their portfolios to U.S. Treasury bonds than they did in 2000. As a result, the Aggregate Index's yield declined relative to the category average.

Foreign governments, banks, and insurance companies tend to overweight Treasuries relative to the average active fund manager in the intermediate-term bond category. But they do not usually do so to generate more attractive performance. Banks hold Treasuries to meet capital requirements. Insurance companies and pension funds may use them to match the duration of their assets and liabilities and to maintain a conservative risk profile. Similarly, foreign governments finance Uncle Sam's spending spree because the U.S.

dollar is the world's reserve currency, and Treasuries represent a relatively low-risk way for them to preserve capital.

Investors, on the other hand, may not find Treasuries to be the most compelling option. Currently, the yield of the 10-year Treasury is 2.4%. That's not much compensation for its interest-rate risk. Investment-grade corporate bonds are only offering a little more. The Bank of America Merrill Lynch U.S. Corporate BBB Bond Index, whose holdings have an average maturity of 10.5 years, is yielding 1.0% over the 10-year Treasury. But that extra yield can be appealing in a low-rate environment, despite the added risk.

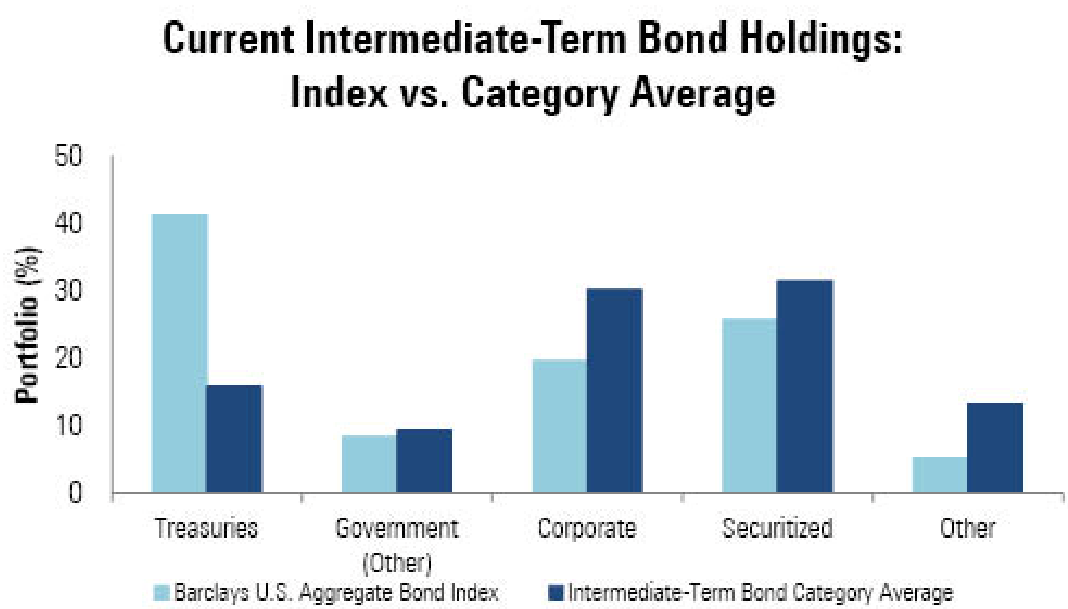
Treasuries and government-backed bonds have historically provided poorer risk-adjusted returns (as measured by the Sharpe ratio) than investment-grade corporate bonds of similar duration. The table below shows that corporate investment-grade bonds have offered better bang for the buck over the trailing one-, three-, five-, 10- and 15-year periods.

Annualized Sharpe Ratios: U.S. Treasuries Vs. Investment-Grade Corporate Bonds

	1-Year	3-Year	5-Year	10-Year	15-Year
Barclays U.S. Treasury TR USD	0.85	0.72	0.95	0.67	0.70
Barclays U.S. Corp IG TR USD	2.33	1.21	1.69	0.70	0.77

Source: Morningstar Direct; data as of July 31, 2014.

Since 2000, active managers have held lower-quality investment-grade bonds than the Aggregate Index has held because of their larger allocations to corporate bonds. Active managers have the flexibility to buy a variety of different bonds and can purchase a greater number of investment-grade corporate bonds that may provide greater returns over the business cycle than Treasuries. The chart below shows the current portfolio composition of the Aggregate Index and the average intermediate-term bond fund.



Source: Morningstar Direct; Data as of June 30, 2014.

Duration

The index also sports a longer duration than the intermediate-term bond category. Once again, active managers' flexibility is an asset here. They can change their duration profile to take advantage of their interest-rate forecasts. Index funds that track the Aggregate Index, however, lack this luxury. Because the government increasingly issued intermediate- and long-term debt while interest rates fell, the duration of the Aggregate Index increased nearly one-year during the past decade.

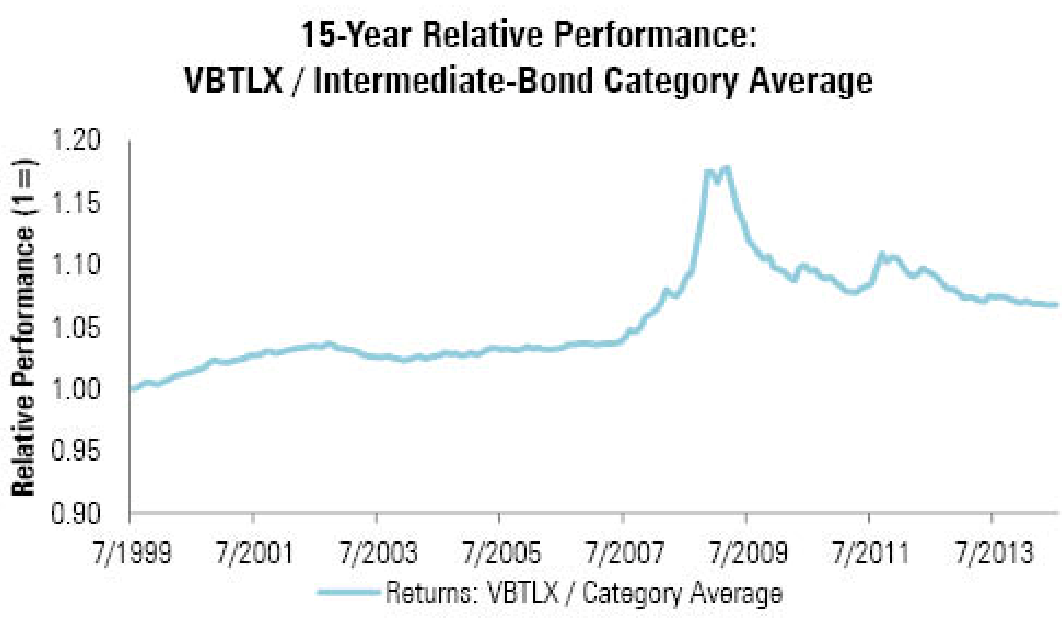
During that time, interest rates have fallen. Active managers in the top third of the intermediate-term bond category over the most recent 15 years were able take advantage by changing the durations of their portfolios. As the threat of interest-rate increases looms, active managers have, on average, reduced their duration profile to limit losses. In contrast, the Aggregate Index's duration has increased. It could be at a disadvantage to its active counterparts if rates increase.

Not All Bad

During periods of market turbulence, like 2008, exchange-traded funds that track the Barclays U.S. Aggregate Bond Index, like iShares Core U.S. Aggregate Bond (AGG) and Vanguard Total Bond Market (BND) **(1)**, were among the top performers because of their greater exposure to Treasuries--one of the only asset classes with positive performance that year. The index's lower risk profile could help when investors need it the most.

In a low-interest environment where bond yields are near all-time lows, rock-bottom fees can make a big difference. Currently, the yield to maturity of the average intermediate-term bond fund is 3.1%. Vanguard Total Bond Market Index (VBTLX) offers a lower 2.7% yield. However, it more than makes up the difference with its 0.08% expense ratio, which is 0.77% less than the category average (0.85%).

The chart below shows the relative monthly performance of Vanguard Total Bond Market Index against the intermediate-term bond category average. As expected, the fund performed well in the aftermath of the tech bubble in 2000-01 and provided superior relative returns during the global economic crisis in 2008. However, following the economic crisis, Vanguard Total Bond Market Index has underperformed the broader market because of its more conservative credit-risk profile and lower yield.



Source: Morningstar Direct; Data as of July 31, 2014.

If interest rates increase in the future, active funds with lower duration and greater exposure to corporate bonds will likely continue to outperform the Aggregate Index.

Gold-rated actively managed bond funds, such as Metropolitan West Total Return Bond (MWTIX) and Loomis Sayles Investment Grade Bond (LSIIX), may be a better choice for long-term investors than an Aggregate Index fund. Their ability to change with the market puts them at an advantage to the more constrained index because they can buy a greater variety of bonds to maximize returns in different markets, such as low-yield and rising interest-rate environments.

BND's more conservative risk profile may make it a better choice for the shorter term because of its 40% investment in stable-coupon and low-volatility U.S. Treasury bonds. Then again, funds that track a Treasury index, like iShares Core U.S. Treasury Bond (GOVT), may be an even better choice because of their lower volatility and greater potential downside protection during periods of market stress.

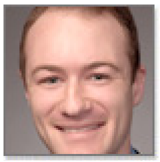
(1) Vanguard Total Bond Market BND and Vanguard Total Bond Market Index VBTLX began tracking the Barclays U.S. Aggregate Float Adjusted Index in July 2010. The new bogy is similar to the Barclays U.S. Aggregate Bond Index, except it does not hold securities held by the Federal Reserve.

Perspective

How to Be Smarter About Risk Management

Investors should only take risks that the market rewards--and that they can live with.

August 13, 2014



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In isolation, risk is neither good nor bad. Finance 101 teaches that the market must offer higher expected returns as an asset's probability of declining in value or the potential magnitude of losses increases. Otherwise, given the choice between two investments, no one would hold the riskier one. Investors tend to compete away high-return, low-risk opportunities, so that risk is usually the primary source of investment returns. This is why risky asset classes, such as stocks, have historically offered higher returns than Treasuries over the long run. But large drawdowns at inopportune times, coupled with investors' tendency to buy high and sell low, can create a significant challenge for wealth accumulation. Managing risk effectively is one of the most important aspects of successful investing. There are several ways to do this.

The first step is to avoid or eliminate unnecessary sources of risk--those that the market does not reward. On average, investors should not receive any compensation for risk that they can eliminate through diversification. This was the central insight of the capital asset pricing model, which predicts that assets' sensitivity to market movements (measured by beta)--a risk that investors cannot diversify--is the only type of risk that the market rewards. As long as assets are not perfectly correlated, combining them in a portfolio reduces risk relative to the weighted average risk of the individual holdings. Because it is easy to diversify, only an asset's contribution to a diversified portfolio's risk should determine its expected return. While a portfolio's risk is less than the sum of its parts, its return is simply the weighted average of its holdings' returns. Therefore, to the extent that assets are uncorrelated, investors can reduce risk through diversification without sacrificing return.

To illustrate, consider Lexicon Pharmaceuticals (LXRX), a small-cap biotech firm that does not currently have any drugs on the market. It has two drugs in the late stages of development that still need FDA approval, without which the company will remain unprofitable. Morningstar equity analyst Karen Andersen estimates that each drug has a 60% chance of receiving approval. This represents a huge risk for investors in that stock. But because the FDA's decisions to approve these drugs would be uncorrelated with the health of the economy or the performance of other companies, investors can virtually eliminate their exposure to this risk by holding this stock in a diversified portfolio. Therefore, the market should not compensate investors for taking it. In the absence of special information, it is good practice to avoid concentrated portfolios.

Equity Strategies to Reduce Risk

It is still possible for a diversified portfolio to offer an unfavorable risk/reward profile. Contrary to the predictions of the capital asset pricing model, there is little empirical relationship between an asset's sensitivity to market movements (beta) and its returns. In fact, assets with the highest betas have historically offered the lowest returns relative to their volatility. This might create an opportunity for investors to reduce risk without sacrificing much return by overweighting low-volatility stocks. Low-volatility stocks tend to lag during bull markets. Investors who are unwilling or unable to use leverage to boost their performance may be drawn to riskier stocks, causing them to become overvalued relative to their risk. Investors may also overpay for volatile stocks because they could offer a small chance of a large payoff--much like a lottery ticket. Please reference this article for a more in-depth discussion of the low-volatility strategy.

Volatility itself can create a drag on performance. For example, the table on the following page illustrates the performance of two stocks. Stock B is twice as volatile as stock A. Even though they have the same simple (arithmetic) average annual return, stock B has a lower compound return. The compounded rate of return is always equal to or less than the simple average holding-period return. As volatility increases, so does the gap between the simple and compounded rate of return. This is called volatility drag.

Volatility Drag

	Stock A		Stock B	
	Return	Growth of $10	Return	Growth of $10
Year 1	5%	$10.50	10%	$11.00
Year 2	-5%	$9.98	-10%	$9.90
Year 3	5%	$10.47	10%	$10.89
Year 4	-5%	$9.95	-10%	$9.80
Simple average	0%	—	0%	—
Compound return	-0.13%	—	-0.50%	—

Source: Morningstar analyst calculations.

Low-volatility funds, such as PowerShares S&P 500 Low Volatility (SPLV) and iShares MSCI USA Minimum Volatility (USMV), allow investors to reduce volatility drag. There is a cost to holding these funds. They will likely lag in bull markets but shine during market downturns. Over a full market cycle, that may allow investors to earn returns that are comparable to the market's, with less risk. However, this strategy could become less effective as more investors attempt to take advantage of it.

Investors may obtain a similar improvement in performance during market downturns by targeting quality stocks, those with strong profitability, sustainable competitive advantages, and stable earnings. While there is some overlap between quality and low-volatility stocks, not all quality stocks exhibit low volatility (Google (GOOG), for example), nor are all low-volatility stocks highly profitable (such as most utilities).

During the past decade, the MSCI USA Quality Index exhibited slightly lower volatility than the Russell 1000 Index and tended to outperform during bear markets. However, it also tended to lag a bit when times were good. The quality index tracks companies with stable earnings, low debt/capital, and high return on equity (a measure of profitability). Investors can access it through iShares MSCI USA Quality Factor (QUAL). Stocks representing about two thirds of the assets in that index also carry wide economic moats, Morningstar's assessment that a firm enjoys a sustainable competitive advantage. These competitive advantages may help protect these firms' profits and contribute to their relative earnings stability.

3M (MMM) is a good example of a quality stock. The firm makes a wide array of consumer and industrial products, including adhesives and tape (Scotch tape), sealants, and filtration devices. It enjoys a strong patent portfolio and cost advantage relative to many of its peers, and it invests aggressively in product development to maintain its edge. This gives the firm a wide economic moat. 3M's products tend to make up a small part of its customers' overall expenses. Keith Schoonmaker, Morningstar's director of equity research responsible for covering the industrials sector, argues that this means customers are more likely to look elsewhere to cut costs before switching from 3M products. This gives the firm some flexibility to increase prices. During recessions, quality companies like 3M are likely to experience smaller declines in earnings than their less advantaged competitors, which may have to rely more heavily on price cuts and may struggle with higher costs. As a result, quality companies tend to carry less business risk and may help investors better preserve their wealth during market downturns.

Portfolio Strategies

While investors may be able to reduce risk in their equity portfolios by overweighting quality and low-volatility stocks, it may still be necessary to limit exposure to stocks. The best course of action is to only take risks you are comfortable with. Generally, the probability of loss in volatile asset classes is greatest over short horizons.

Therefore, it is good practice to keep any money you need in the near term (less than three years) in less risky assets, such as cash and short-term investment-grade bonds. But even investors with long time horizons could do well to reduce their exposure to stocks if they do not have the stomach for large market fluctuations. Many investors panic and sell when the pain of loss becomes too great, only to jump back in the market when times are good and valuations are inflated. This may explain why investor returns tend to lag the returns of the funds they invest in. For example, during the past decade, Vanguard 500 Index's (VFIAX) investor returns lagged the fund by nearly 1.4% annualized.

Limiting exposure to stocks can create high opportunity costs. Protective puts may be a viable though expensive alternative. Put options act as insurance against a decline in the value of an asset, such as SPDR S&P 500 (SPY), and give investors the right to sell an asset at a predetermined price, which allows investors who hold that asset to cap their potential losses while participating in any upside. But like insurance, investors must pay a premium for that protection, which can erode returns. Investors can reduce the cost of this protection by purchasing put options with lower strike prices, thereby accepting greater risk and only insuring against big losses. Put options allow investors to stay in the market even after the market price drops below the strike price (investors can sell the option to recognize the offsetting gain).

Stop-loss orders serve a similar function as put options and do not carry an explicit cost. However, unlike put options, these orders kick investors out of the market when they are triggered, which may result in capital gains taxes and missed opportunities. A spike in market volatility can trigger a stop-loss order even if the decline in value was only temporary.

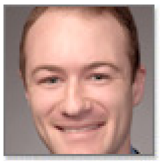
There is no silver bullet to manage the trade-off between risk and returns. However, it is imperative to only take risks that the market compensates and that you are comfortable with. Investors' capacity to withstand losses, rather than their return objectives, should govern the amount of risk they take.

Perspective

An Unconventional Risk-Management Tool

Trend-following may help reduce volatility and losses during market downturns.

August 15, 2014



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Fear and greed make most investors awful market-timers. It's easy to get excited about an investment after a period of good performance when valuations become stretched, only to turn around and dump it after the pain of a market downturn becomes too much to bear. This behavior is not entirely irrational. Large drawdowns at inopportune times can create a serious threat to investors' goals. It's sad to recall stories of investors who had to liquidate a significant portion of their investments in 2008 and 2009 to finance a large purchase or living expenses in retirement. The right time to plan for market downturns is before they happen. Trend-following may be an effective strategy to reduce the risk of large losses and volatility in a tax-sheltered account.

Trend-following is a rules-based market-timing strategy that attempts to take advantage of momentum in asset prices. Where traditional momentum strategies target assets that have recently outperformed their peers, trend-following is based on time series momentum. For instance, this strategy might buy assets that have exceeded their moving averages and sell those that have dropped below. It could work if investors under-react to new information, such as improving or deteriorating fundamentals, or pile into a trade once a trend is established.

Mebane Faber, co-founder and chief investment officer at Cambria Investment Management, investigated a simple trend-following strategy in a study updated last year **(1)**. At the end of each month, he compared the price of the S&P 500 Index with its 10-month simple moving average. The strategy bought the S&P 500 when the index's value exceeded its moving average and moved into 90-day T-bills when its value fell below the moving average. In order to avoid excessive trading, the strategy ignored all price movements during the month.

Using data from 1901 through 2012, he found that this strategy offered a slightly higher return than the S&P 500 Index, with lower volatility and significantly better returns during market downturns. This is because the market's worst periods tend to persist for many months. The trend-following strategy often kicked investors out of the market before things got really bad. However, it also underperformed during strong bull markets. This strategy appeared to work across several different asset classes and with moving average signals ranging from three to 12 months. Faber argued that the success of this strategy was due to its lower volatility, which reduces drag on returns.

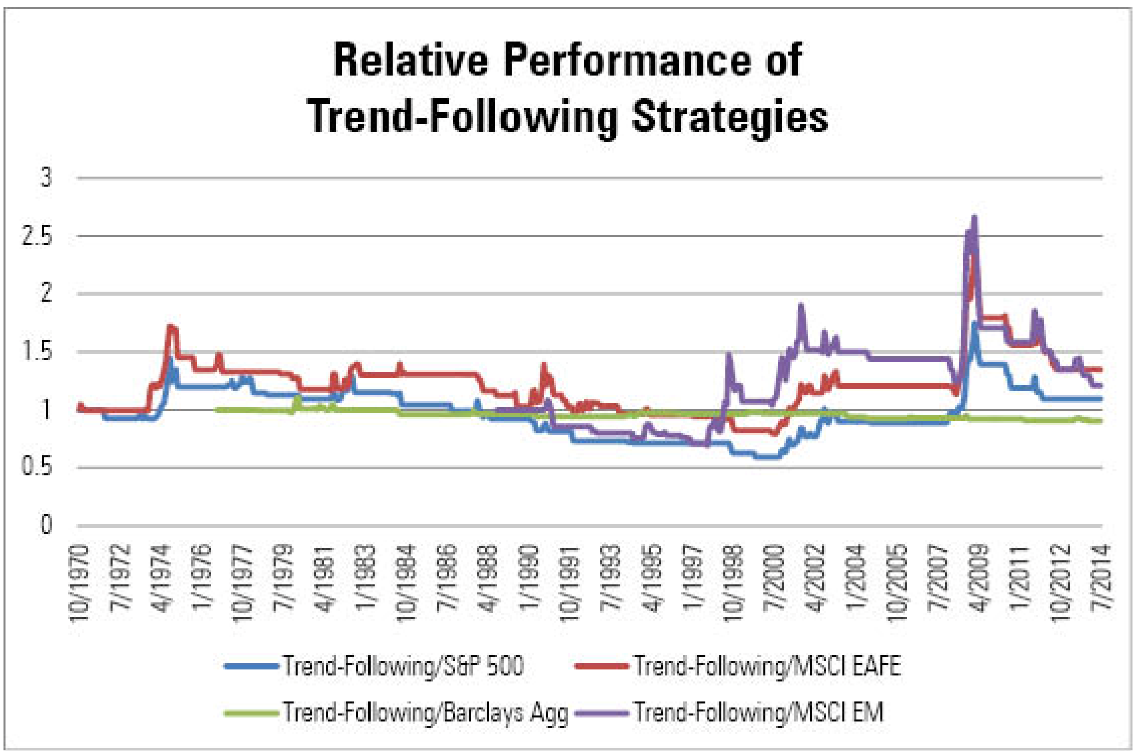
As a check, I tested the 10-month moving-average strategy using the total-return versions of the S&P 500 and the MSCI EAFE Index (which represents developed-markets stocks) from January 1970 through July 2014. However, I substituted the 30-day T-bill for the 90-day. I ran the same strategy with the Barclays U.S. Aggregate Bond and MSCI Emerging Markets Indexes using data starting in December 1975 and 1987, respectively. Consistent with Faber's findings, all four trend-following strategies I constructed exhibited less volatility and lower maximum drawdowns--the largest peak to trough loss--than their corresponding indexes. This reduction in volatility was significant because the market tends to be more volatile when it is below its moving average. These hypothetical trend-following strategies moved to T-bills during those periods. However, each strategy was invested in its respective index most of the time because the market has tended to appreciate over time.

Performance Summary

	Trend-Following (S&P 500)		Trend-Following (MSCI EAFE)		Trend-Following (MSCI EM)		Trend-Following (Barclays Agg)	
	Strategy	Index	Strategy	Index	Strategy	Index	Strategy	Index
Return (%)	11.02	10.78	11.14	10.39	11.98	11.15	7.51	7.79
Standard deviation (%)	11.65	15.31	12.52	17.19	16.70	23.61	4.71	5.52
Sharpe ratio	0.50	0.36	0.47	0.30	0.52	0.33	0.54	0.51
Percentage of time invested	74.86	—	71.24	—	66.77	—	87.44	—
Avg trades per year	1.10	—	1.26	—	1.48	—	0.96	—
Max drawdown (%)	-23.61	-50.95	-25.49	-56.40	-35.73	-61.44	-10.43	-12.74
Standard deviation (below moving avg, %)	—	19.93	—	22.03	—	29.11	—	8.29
Standard deviation (above moving avg, %)	—	13.40	—	14.77	—	20.30	—	5.01

Sources: Morningstar Direct and analyst calculations.

The S&P 500 strategy generated a comparable return to the index, while the MSCI EAFE and Emerging Market strategies both outperformed by about 0.8% annualized. However, these single-point estimates mask variation in their relative performance. The chart below illustrates the returns of each trend-following strategy against its index. When a line is upward sloping, the strategy is outperforming, when it is downward sloping, it is underperforming. As the chart shows, the equity strategies tended to fare well during bear markets, particularly after the dot-com bubble burst and during the global financial crisis. The emerging-markets trend-following strategy also did well during the 1997-98 currency crisis. It moved to T-bills at the end of August 1997 and stayed there until the end of March 1999. As a result, it avoided the worst of the crisis.



Sources: Morningstar Direct and analyst calculations.

While the equity strategies tended to fare well during market downturns, they had trouble keeping up during some of the bull markets. As late as 2007, the S&P trend-following strategy would have underperformed the index itself since its inception. In other words, these strategies do not represent a free lunch. Rather, they may serve as useful risk-management tools.

The bond trend-following strategy did little to improve performance. This may be because U.S. investment-grade bonds have benefited from a secular decline in interest rates over the past 30 years and have exhibited very low volatility. However, trend-following may be more appealing for riskier asset classes. While it may not be significant, it is interesting to note that the more volatile the underlying index was, the more the trend-following strategy improved risk-adjusted returns, as measured by the Sharpe ratio.

Practical Considerations

As a practical matter, trend-following is most suitable for tax-sheltered accounts. Although trend-following usually requires few trades, and most of its realized gains tend to be long term, these strategies' turnover is routinely more than 100%. In a taxable account, that means virtually all gains would be taxed each year, which can create a significant drag on performance relative to a buy-and-hold approach. That said, the strategy is very manageable in a retirement account, where protecting against large drawdowns could make a big difference, especially for investors approaching retirement.

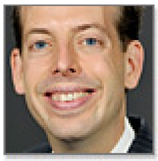
Investors can implement a trend-following strategy with virtually any fund. Schwab U.S. Aggregate Bond ETF (SCHZ) (0.06% expense ratio), Vanguard S&P 500 ETF (VOO) (0.05%), iShares MSCI EAFE (EFA) (0.34%), and iShares MSCI Emerging Markets (EEM) (0.67%) offer exposure to the indexes mentioned in this article. iShares Core MSCI EAFE (IEFA) (0.14%) and iShares Core MSCI Emerging Markets (IEMG) (0.18%) offer very similar exposure to EFA and EEM, respectively, at a fraction of the price.

(1) Faber, Mebane. "A Quantitative Approach to Tactical Asset Allocation." *The Journal of Wealth Management*, Spring 2007 (February 2013 Update): http://www.ffplan.com/docs/gtaa_paper.pdf

ETF Spotlights

Spotlighting a Telecom ETF & Taxable Municipal Bonds

Morningstar analyst insight, plus two complimentary full-length ETF research reports.



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Vanguard Telecommunications ETF VOX

The United States telecommunications industry is in flux, from the top down. For quite some time, AT&T (T) and Verizon (VZ) had consolidated much of the telecom space, to the point that the sector more or less consisted of those two heavyweights, and then everyone else. Recently, however, a new round of consolidation has been taking place, driven by a desire for greater economies of scale, more telecom spectrum, and a bulwark against cable operators' incursions onto what historically has been telecom firms' turf. Deals in the past 24 months have included T-Mobile (TMUS) buying MetroPCS, AT&T acquiring Leap Wireless, Sprint (S) bringing Clearwire under direct control, and Verizon buying Vodafone's (VOD) 45% stake in Verizon Wireless.

Most recently, the long-rumored pairing of Sprint and T-Mobile--which many observers had expected to be announced by the end of July 2014, despite likely antitrust challenges--turned out to be a mirage. French telecom Iliad SA recently made a surprise $15 billion offer for T-Mobile, which T-Mobile thus far has not accepted. In the wake of that offer, Sprint, which now is controlled by SoftBank and still operating in the red, abandoned its plans this week to pursue T-Mobile and also announced that it would replace its CEO and try to turn its business around.

For the most part, further mergers and acquisitions activity is a positive for the industry itself. For industry investors, however, we see consolidation as a mixed bag. AT&T and Verizon currently have industry-leading margins by a wide amount. As the players in the next tier consolidate and strengthen, it could be a modest negative for those two titans. At the same time, consolidation would help those smaller firms improve their cost structures and move up toward acceptable profitability over the long term.

All this recent industry upheaval obscures the basic fact that despite changes in technology and residential customers' secular shift from fixed-line telephone service to wireless service, the telecom industry is, somewhat paradoxically, a fairly mature industry. Much of the basic infrastructure needed for services already is in place, capital spending as a percentage of sales has declined meaningfully for many telecom carriers, and many firms now generate hefty cash flows and have used their excess cash to boost their dividends, make acquisitions, or even buy back shares. And some smaller firms that have had heavier debt loads have worked successfully to pay down their debt.

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PowerShares Build America Bond ETF BAB

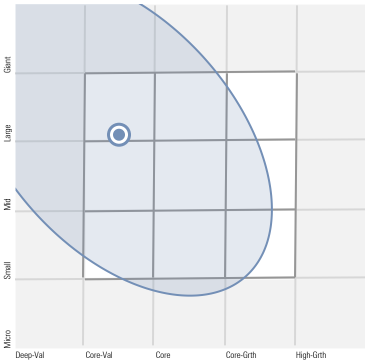
The recent credit troubles in Detroit and Puerto Rico should not scare investors away from the municipal bond market. Many of these securities offer similar--or better--yields than corporate bonds, with comparable credit risk. However, they do tend to carry greater interest-rate risk. PowerShares Build America Bond ETF (BAB) may be an ideal offering for investors who can accept this risk.

Vanguard Telecommunication Services ETF VOX

Morningstar Rating™
★★★

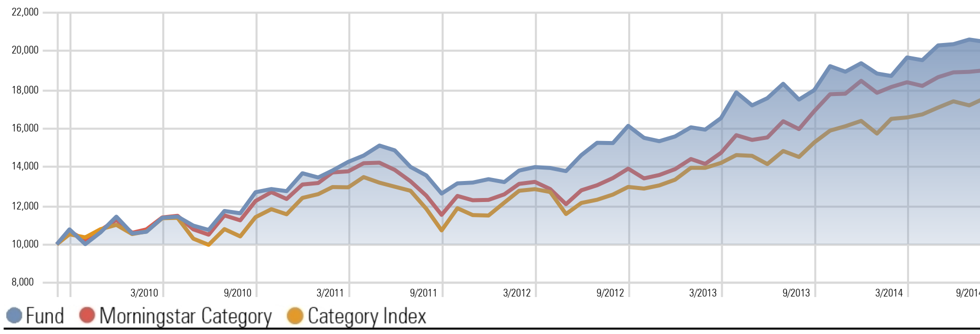
Morningstar Category	Category Index	Prospectus Benchmark
US ETF Communications	MSCI ACWI NR USD	MSCI US IMI/Telecom Svc 25-50 GR USD

Style Map



Performance

Time Period: 9/6/2009 to 9/5/2014



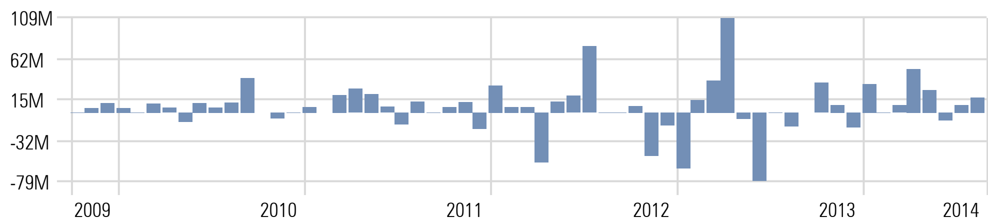
Snapshot

Inception Date	9/23/2004
Expense Ratio %	0.14
Assets (millions)	745
Avg Dly Vol (3 Mo)	43,638
12 Month Yield %	3.67
Portfolio Date	7/31/2014
Distribution Freq	Annually
ETN	No
Replication Method	Physical-Full
Fund Lgl Structure	Open Ended Investment Company

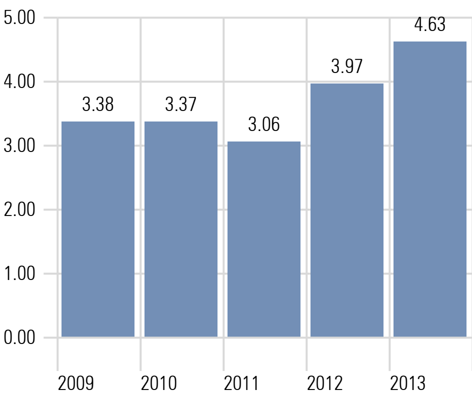
Annual Returns %

	2009	2010	2011	2012	2013	YTD
Vanguard Telecommunication Services ETF	29.65	19.65	-2.25	16.54	24.32	6.18
MSCI ACWI NR USD	34.63	12.67	-7.35	16.13	22.80	7.45
US ETF Communications	29.51	16.26	-6.09	12.94	32.88	3.29

Monthly Fund Flows (millions)



Annual Income Return %



Risk/Return Analysis (3 years)

	ETF	Cat Index	Cat Avg
Standard Deviation %	11.82	13.40	14.11
Arithmetic Mean %	1.21	1.18	1.22
Sharpe Ratio	1.22	1.05	1.04
R-Squared	34.61	—	55.59
Beta	0.52	—	0.79
Alpha %	7.13	—	3.52
Treynor Ratio	28.24	—	19.29
Sortino Ratio	2.35	1.68	1.89

Suitability

By Robert Goldsborough 7/25/2014

Investors seeking relatively concentrated exposure to the U.S. telecom industry can consider Vanguard Telecommunication Services ETF VOX, which is the largest U.S. telecom exchange-traded fund, as a tactical investment for the satellite portion of a portfolio. This ETF holds 30 U.S.-domiciled telecom companies, consisting of telecom service providers, one tower operator, and an IT services firm (inContact SAAS). This fund is very top-heavy; the top-10 holdings account for 70% of the portfolio. Its top two holdings (AT&T T and Verizon VZ) make up 44% of the portfolio.

One reason some investors are drawn to telecom firms relates to dividends, as some large, best-in-class telecom firms have offered above-average dividend yields and have had the capital and cash-generating ability to meet their near-term obligations and maintain dividend payments. This fund's dividend yield and annual payout have displayed some volatility during the past decade. Some telecom firms, such as AT&T and Verizon and their predecessors, have had stable or rising dividends for decades. However, dividend payouts have been less consistent among some of the smaller players, owing mostly to high amounts of financial leverage. Big dividend cuts have occurred at firms such as CenturyLink CTL and Frontier FTR, and Sprint S outright eliminated its dividend a few years ago.

Although many large telecom firms are not especially volatile, this fund also holds telecom firms across all parts of the market-cap spectrum. In fact, large-cap telecoms make up 51.5% of this fund's assets, while mid-cap telecoms comprise another 15% of assets. Of the nearly 30% of VOX's assets that are devoted to small-cap companies, a clear majority (some 25% of the fund's total assets) is invested in micro-cap names. That has had the effect of making VOX more volatile than one might expect--and slightly more volatile than the typical large-cap fund. During the past five years, VOX has had a volatility of return of 14.3% compared with 13.4% for the S&P 500 and 16.2% for a competing iShares ETF.

Vanguard Telecommunication Services ETF VOX

Morningstar Rating™
★★★

Morningstar Category	Category Index	Prospectus Benchmark
US ETF Communications	MSCI ACWI NR USD	MSCI US IMI/Telecom Svc 25-50 GR USD

Fundamental View

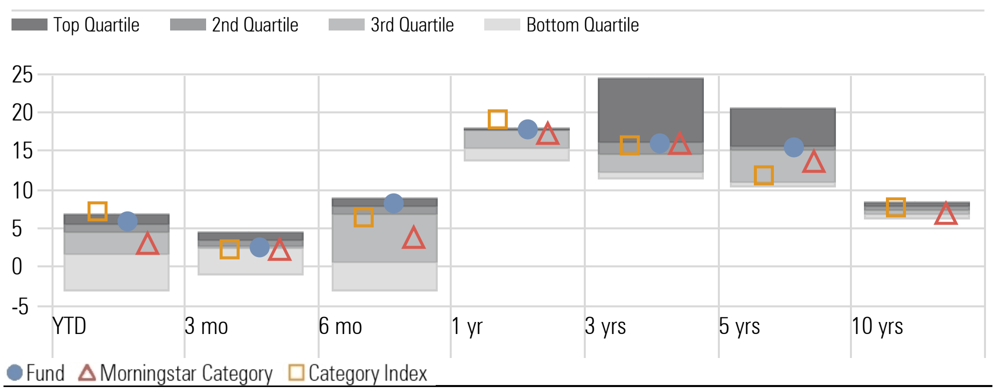
The U.S. telecom sector continues to evolve. Residential customers continue to ditch their fixed-line service and shift to wireless only, and the cable companies continue to move in on telecom firms' turf, providing Internet access, television service, and even phone service. Cable consolidation--Comcast CMCSA in February 2014 announced plans to acquire Time Warner Cable TWC--continues apace, with big cable companies (which are not held in this ETF) boosting network quality and trying to steal share from telecom rivals in the less-attractive residential fixed-line portion of the market. Meanwhile, wireless customers increasingly are using their phones for data instead of voice, although voice is where telecom firms up to now have reaped the most revenue. Among telecom providers, it's become a hypercompetitive environment, as large players like AT&T and Verizon offer tiered data pricing while other providers are just offering straight unlimited data plans. Meanwhile, business fixed-line telecom service remains a stable revenue source--at least for now--for telecom firms.

Despite all these changes, the telecom industry is, paradoxically, a fairly mature industry. Much of the basic infrastructure needed for services already is in place, capital spending as a percentage of sales has declined meaningfully for many telecom carriers, and many firms now generate hefty cash flows and have used their excess cash to boost their dividends, make acquisitions, or even buy back shares. Some smaller firms that have had heavier debt loads have worked successfully to pay down their debt.

One of the most significant catalysts affecting many of the smaller U.S. telecom firms relates to deal activity. While AT&T and Verizon previously had consolidated much of the industry, a new round of consolidation has been taking place. Driving this latest round of consolidation, we believe, is a desire for greater economies of scale--particularly among the midsize players--and with it a push to be able to better compete with Verizon and AT&T. In addition, we believe a desire for more telecom spectrum also is behind the heightened consolidation, as spectrum licenses remain scarce and expensive. Most recently, the blockbuster deal was Verizon's $130 billion acquisition of Vodafone's VOD 45% stake in Verizon Wireless. And AT&T is expanding the boundaries of its offerings as well, with the recent announcement of its $48.5 billion deal to acquire satellite TV provider DirecTV DTV. But the telecom space has been filled with smaller deals over the past few months as well. T-Mobile TMUS last year closed on its acquisition of MetroPCS, while Sprint S finally shook free of Dish Network DISH and brought its on-again-off-again partner Clearwire under direct control. And AT&T in March 2014 acquired wireless telecom provider Leap Wireless. We would not be surprised to see more consolidation activity among the companies held in this ETF, including Sprint finally announcing its acquisition of T-Mobile (or if not Sprint, then perhaps America Movil AMX), as well as some kind of deal that might bring Dish Network into the fold (possibly with T-Mobile). For the most part, further M&A activity is a positive for the industry. For industry investors, however, we see consolidation as a mixed bag for industry investors as a whole and, as a result, probably neutral. AT&T and Verizon currently have industry-leading margins by a wide amount. As the players in the next tier consolidate and strengthen, it could be a modest negative for those two titans as smaller firms would be less likely to be sources of easy market share gains. At the same time, consolidation would help those smaller firms improve their cost structures and move up toward acceptable profitability over the long term.

Trailing Returns Relative to Peer Group %

Peer Group (5-95%): Exchange Traded Funds - U.S. - Communications



	YTD	3 mo	6 mo	1 yr	3 yrs	5 yrs	10 yrs
Vanguard Telecommunication Services ETF	6.18	2.60	8.30	17.91	16.12	15.52	—
MSCI ACWI NR USD	7.45	2.43	6.61	19.16	15.97	11.99	7.81
US ETF Communications	3.29	2.41	4.08	17.32	16.23	13.78	7.12

Morningstar Fundamental Analysis

Fair Value Estimate	84.83
Valuation Rating	Fairly Valued
Price/Fair Value	1.05
# of Holdings Covered	11
# of Holdings	32

Economic Moat %

Wide Moat	—
Narrow Moat	59.90
No Moat	8.27

Fundamental Ratios

	ETF	Cat Index	Cat Avg
Net Margin %	9.25	13.89	12.80
Return on Equity %	25.12	18.04	20.18
Return on Assets %	4.87	7.07	6.50
Debt to Capital %	63.05	34.09	48.46

Value and Growth Measures

	ETF	Cat Index	Cat Avg
Price/Proj. Earnings	13.97	16.93	12.69
Price/Book	2.69	2.02	2.42
Price/Sales	1.27	1.36	1.61
Price/Cash Flow	5.73	9.92	6.31
LT Earnings Growth %	6.73	10.71	5.04
Sales Growth %	2.83	-22.69	5.78
Cash Flow Growth %	-0.89	4.08	0.70
Book Value Growth %	1.76	-23.40	0.46

Market Performance Statistics

Time Period: 9/24/2004 to 9/5/2014

	ETF	Cat Index	Cat Avg
Up Capture Ratio %	89.17	100.00	92.53
Down Capture Ratio %	87.09	100.00	92.76
Max Drawdown %	-57.08	-58.38	-55.68
Max Gain %	210.02	183.03	178.80
Best Month %	9.38	11.80	10.58
Worst Month %	-15.99	-19.82	-20.22

Total Return Percentile Rank in Category

Vanguard Telecommunication Services ETF VOX

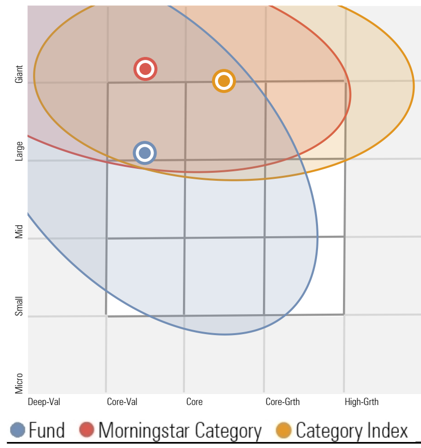
Morningstar Rating™
★★★

Morningstar Category	Category Index	Prospectus Benchmark
US ETF Communications	MSCI ACWI NR USD	MSCI US IMI/Telecom Svc 25-50 GR USD

Portfolio Construction

VOX tracks the MSCI US Investable Market Telecommunication Services 25/50 Index, which contains both fixed-line and wireless telecom service provider stocks plus a pair of tower operators. Integrated telecom services operators represent 63% of the index; the remainder is devoted to wireless telecom service providers (18% of the index) and alternative carriers (18%). VOX's index weights its holdings by market cap, which results in very low turnover. The index also caps its largest holdings' weightings. Its top two holdings are not permitted to exceed 22.5% of the index each.

Holdings Based Style Map



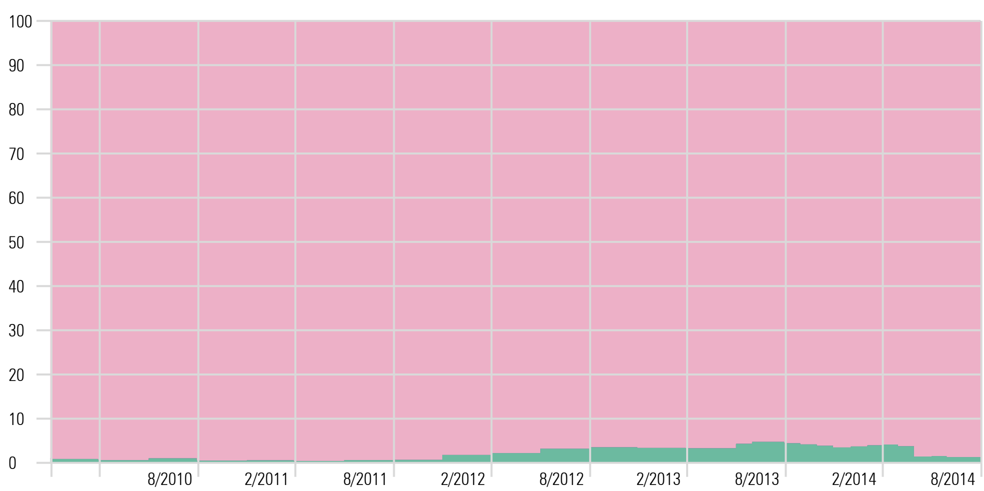
	ETF	Cat Index	Cat Avg
Avg Market Cap (mil)	18,424	45,332	78,572
12 Month Yield %	3.67	—	—
Market Price	88.66	193.87	—

	ETF	Cat Index	Cat Avg
Turnover Ratio %	19.00	—	39.20
% Asset in Top 10	71.09	8.39	71.98
# of Holdings	32	2,446	408

Market Cap %

	ETF	Cat Index	Cat Avg
Giant	45.83	52.78	72.05
Large	7.98	34.61	16.38
Mid	16.67	12.49	6.33
Small	4.87	0.06	1.82
Micro	24.66	0.07	3.42

Equity Sector Breakdown History



Current Equity Sector Breakdown %

	ETF	Cat Index	Cat Avg
Basic Materials	0.00	6.31	0.00
Consumer Cyclical	0.00	10.39	6.29
Financial Services	0.00	19.06	0.03
Real Estate	0.00	2.81	1.57
Consumer Defensive	0.00	9.61	0.01
Healthcare	0.00	10.72	0.02
Utilities	0.00	3.20	0.00
Communication Services	98.57	4.94	83.57
Energy	0.00	9.85	0.01
Industrials	0.00	10.32	0.20
Technology	1.43	12.78	8.30

Top 10 Holdings

Portfolio Date: 7/31/2014

	Ticker	Portfolio Weighting %
Verizon Communications Inc	VZ	22.34
AT&T Inc	T	22.20
CenturyLink Inc	CTL	4.64
SBA Communications Corp	SBAC	4.39
T-Mobile US Inc	TMUS	3.12
Windstream Holdings, Inc.	WIN	3.07
Level 3 Communications Inc	LVLT	3.03
Frontier Communications Corp Class B	FTR	2.88
tw telecom inc	TWTC	2.83
Sprint Corp Series 1	—	2.59

Equity Region %

	ETF	Cat Index	Cat Avg
North America	98.60	52.11	90.49
Latin America	0.00	1.97	0.47
Japan	0.00	7.57	0.58
Australasia	0.00	2.99	0.16
Asia Developed	0.00	4.80	0.80
Asia Emerging	0.00	3.70	2.43
United Kingdom	0.00	8.10	2.56
Europe Developed	0.00	16.64	2.15
Europe Emerging	0.00	0.95	0.22
Africa/Middle East	1.40	1.18	0.14

Vanguard Telecommunication Services ETF VOX

Morningstar Rating™ ★★★

Morningstar Category	**Category Index**	**Prospectus Benchmark**
US ETF Communications	MSCI ACWI NR USD	MSCI US IMI/Telecom Svc 25-50 GR USD

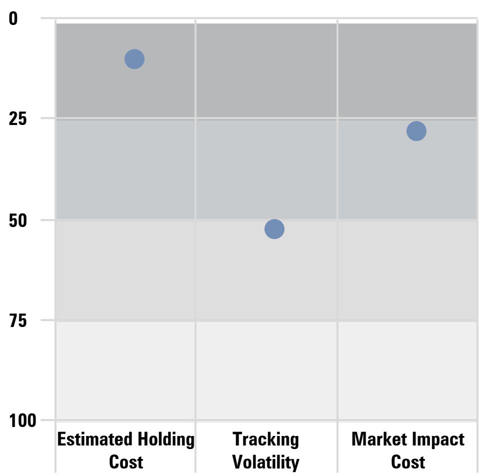
Fees

VOX's 0.14% expense ratio is less than one third the fee of the competing telecom ETF iShares US Telecommunications ETF IYZ. However, investors should note that IYZ is much more liquid than the Vanguard fund. VOX's performance has been good relative to its index, which indicates that this fund has done a very good job of tracking its index and that fund shareholders also have benefited from significant share lending. While investors shouldn't necessarily expect that to continue, it speaks to the fact that Vanguard is managing this fund in a very shareholder-friendly manner.

Expenses

	ETF	Cat Avg
Gross Expense Ratio %	0.14	0.38
Net Expense Ratio %	0.14	0.38
Expense Waiver	—	—
Expense Waiver Expiration Date	—	—
Expense Waiver Type	—	—
Prospectus Date	12/23/2013	—

Percentile Rank Relative to ETF Universe



Total Cost Analysis Data Points

Estimated Holding Cost %	-0.07
Tracking Volatility %	0.25
Market Impact Cost %	0.01

Estimated Holding Cost is essentially the difference between the ETF return and the benchmark return and represents the realized cost of replicating the benchmark. Lower costs indicate that the ETF is doing a better job of matching its benchmark while minimizing costs.

Tracking Volatility measures the uncertainty with which an ETF tracks a benchmark. A higher tracking error indicates a wider confidence interval for expected performance around the benchmark. Lower numbers and ranks are better.

Market Impact Cost represents the liquidity of the ETF and is based on the average market price movement in percent caused by a $100,000 trade in the ETF. Calculated as the residual volatility unexplained by movements in NAV and the previous day's premium or discount, scaled by average dollar volume traded. Lower numbers and ranks are better.

Alternatives

For similar broad-based domestic exposure to the telecom sector, investors could consider iShares U.S. Telecommunications ETF IYZ (0.43% expense ratio). IYZ charges much more than VOX, but it also has much smaller weightings in top holdings AT&T and Verizon than VOX does.

One critical aspect of the difference between IYZ and VOX relates to the weightings in AT&T and Verizon. Both the Dow Jones index that IYZ tracks and the MSCI index that VOX tracks cap the weightings of their largest constituents for diversification. However, the caps are much higher in the MSCI index, which is why AT&T and Verizon's weightings are so much higher in the Vanguard ETF. Those two companies make up between 13% and 14% each of IYZ's assets. The Vanguard fund's index, by contrast, follows a strategy of capping the individual weightings of the top two securities at a maximum of 22.5%. Because AT&T and Verizon's market caps are so much larger than the other companies in VOX, they routinely bump up against (and often temporarily exceed) that 22.5% cap in VOX. We note that IYZ's structure makes it slightly more of a mid-cap-oriented fund relative to VOX. As a result, IYZ is slightly more volatile.

A recently launched and very inexpensive option is Fidelity MSCI Telecommunication Services Index ETF FCOM, which charges 0.12%. However, FCOM has minimal assets and is thinly traded. FCOM tracks a slightly different index from VOX; FCOM tracks the MSCI USA IMI Telecommunication Services 25/50 Index, while VOX tracks the MSCI US Investable Market Telecommunication Services 25/50 Index. Fidelity customers with a minimum balance of $2,500 can buy FCOM commission-free, although they are subject to a short-term trading fee by Fidelity.

Another option is SPDR S&P Telecom ETF XTL, which is a modified equal-weight portfolio of 57 U.S.-based companies that make up a select industry index of the S&P Total Market Index. Unlike VOX, however, XTL also holds equipment makers such as Qualcomm QCOM and JDS Uniphase JDSU. XTL charges 0.35% but is thinly traded.

Those interested in gaining exposure to global telecom titans such as Vodafone and Telefonica TEF should consider iShares Global Telecommunications IXP (0.48% expense ratio). Verizon comprises 16.5% of IXP's assets, and AT&T makes up another 14.5% of assets. Apart from U.S. companies, which make up about 34% of IXP's assets, IXP focuses most on developed foreign markets, with emerging-markets companies comprising about 10% of its assets. Investors may find appealing IXP's lower historical volatility than U.S.-only telecom ETFs.

In general, the major domestic telecom ETFs have highly correlated performance. VOX's performance has shown a 96% correlation to IYZ's performance during the past five years. However, VOX's performance has been less correlated (80%) to IXP's performance during the past five years.

Operations

Longest Tenured Manager	Ryan E. Ludt
Manager Tenure (Longest)	10.00
Manager Tenure (Average)	10.00
Exchange	NYSE ARCA
Web Address	www.vanguard.com

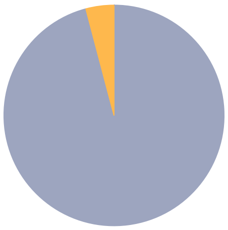
PowerShares Build America Bond ETF BAB

Morningstar Rating™ ★★★★★

Morningstar Category	**Category Index**	**Prospectus Benchmark**
US ETF Long-Term Bond	Barclays US Agg Bond TR USD	BofAML Build America TR USD

Fixed Income Asset Allocation

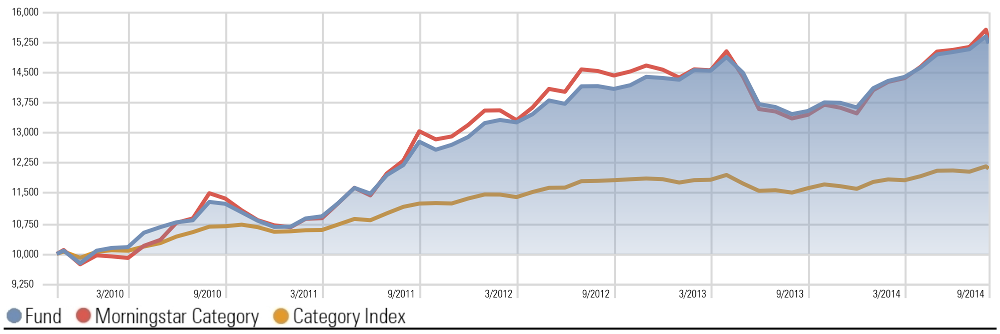
Portfolio Date: 8/31/2014



	%
Government	0.1
Municipal	95.8
Corporate	0.0
Securitized	0.0
Cash & Equivalents	4.1
Derivative	0.0

Performance

Time Period: 11/18/2009 to 9/5/2014



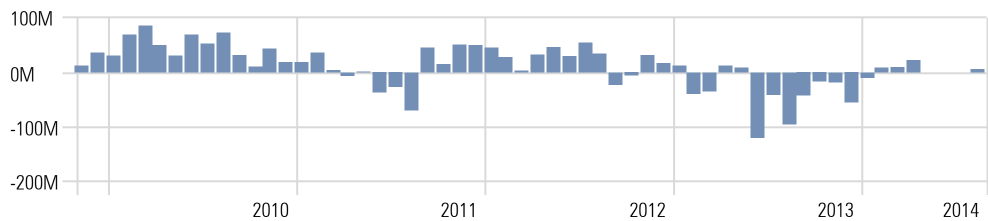
Snapshot

Inception Date	11/17/2009
Expense Ratio %	0.28
Assets (millions)	686
Avg Dly Vol (3 Mo)	108,077
12 Month Yield %	4.70
Portfolio Date	9/5/2014
Distribution Freq	Monthly
ETN	No
Replication Method	Physical-Sample
Fund Lgl Structure	Open Ended Investment Company

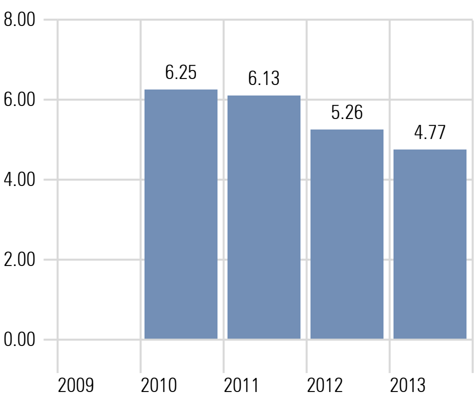
Annual Returns %

	2009	2010	2011	2012	2013	YTD
PowerShares Build America Bond ETF	—	9.26	20.94	11.36	-5.09	11.64
Barclays US Agg Bond TR USD	5.93	6.54	7.84	4.21	-2.02	4.32
US ETF Long-Term Bond	1.78	9.94	23.27	10.40	-7.45	13.44

Monthly Fund Flows (millions)



Annual Income Return %



Risk/Return Analysis (3 Years)

	ETF	Cat Index	Cat Avg
Standard Deviation %	6.37	2.63	8.12
Arithmetic Mean %	0.67	0.24	0.68
Sharpe Ratio	1.24	1.08	1.01
R-Squared	72.04	—	76.41
Beta	2.06	—	2.70
Alpha %	2.06	—	0.40
Treynor Ratio	3.90	—	3.05
Sortino Ratio	2.12	1.83	1.74

Suitability

By Thomas Boccellari 8/20/2014

PowerShares Build America Bond ETF BAB offers diversified market-cap-weighted exposure to U.S.-dollar-denominated Build America Bonds issued by U.S. state and territory municipalities. Build America Bonds are taxable municipal bonds that were issued as part of the American Recovery and Reinvestment Act of 2009. While these bonds are not tax-exempt at the federal level, they may be tax-exempt at the state level for investors residing in the jurisdiction of the issuer. When these bonds were first issued, the federal government subsidized 35% of the issuers' interest cost. However, the government has since reduced this subsidy to 27.7% of the issuers' interest expenses because of the sequestration.

Municipalities stopped issuing new Build America Bonds after funding for the program dried up in 2011. Because the secondary market is relatively thin, portfolio turnover is low. If interest rates rise, the fund will be unable to buy new issuances with higher interest rates to offset principal losses from current holdings.

The fund's current yield to maturity (4.7%) is higher than the average traditional long-term-bond exchange-traded fund (4.2%). However, the fund's yield is less than the tax-equivalent yield of tax-exempt municipal-bond funds (7.7%). This could limit its usefulness in a taxable account relative to traditional municipal-bond funds. However, it may be a suitable satellite holding for investors who want exposure to taxable U.S. municipals with a long duration.

PowerShares Build America Bond ETF BAB

Morningstar Rating™
★★★★★

Morningstar Category	Category Index	Prospectus Benchmark
US ETF Long-Term Bond	Barclays US Agg Bond TR USD	BofAML Build America TR USD

Fundamental View

Build America Bonds were issued between 2009 and 2010 after the traditional tax-exempt municipal-bond market froze during the financial crisis, to help municipal issuers raise capital to fund public projects. During the life of the program, more than $180 billion in Build America Bonds were issued. While Build America Bonds are no longer issued, the fund's asset base of $680 million should allow the fund the ability to grow to meet investor demand going forward using the secondary market.

Because of the lack of new bond issuances, the fund's duration should decline over time, until bonds in the portfolio begin to mature. The portfolio's average maturity is 19.8 years, and its duration is 8.8 years.

The fund weights its holdings by market capitalization, which means that the most heavily indebted issuers receive the largest weights in the portfolio. This weighting approach could increase credit risk because issuers with the heaviest debt burdens, like California and Illinois, may be the most susceptible to ratings downgrades. However, the fund's focus on investment-grade bonds helps mitigate credit risk.

In California, the largest issuer represented in the fund's portfolio, the unemployment rate reached a high of 12.0% in 2008. High unemployment led to reduced tax revenue and increased the state's debt burden. This created fear in the municipal-bond market that California would have a tough time raising tax revenue to meet increased interest payments.

Over the past two years, however, heavily indebted states like Illinois and California have slowed the amount of debt they issued and boosted tax revenue. At the same time, unemployment in these states has declined toward the national average. This has helped stabilize the municipal-bond market in these heavily indebted states because they are now better able to pay their interest obligations.

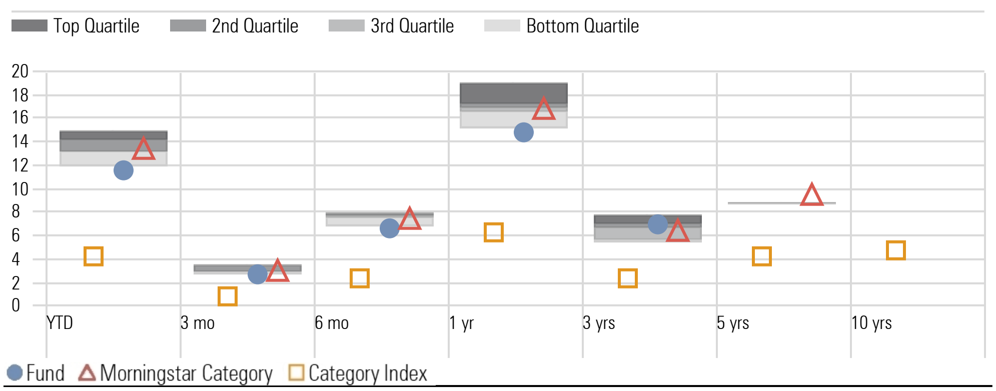
Going forward, however, many states may face an uphill battle. A recent report by the Nelson Rockefeller Institute of Government shows that, after three years of improving fundamentals, 2014 may be a tough year for state governments. The Institute estimates that tax revenue will likely decline in 42 states, including California and Illinois, where it estimates tax revenue will fall by 11.9% and 10.3%, respectively.

In 2013, the federal government cut the Build America Bond subsidy (35%) by 8.7% to 26.3%. For 2014, the subsidy is 27.7%. Cuts are expected to remain in effect through 2024. While this has not had a significant impact on the Build America Bonds, further sequestration could have a negative impact on this segment and could negate the benefit of using Build America Bonds over traditional tax-exempt municipal bonds.

California currently has an average credit rating of A, while Illinois has an average credit rating of A-. Texas, the third-largest issuer represented in the fund's portfolio, has an average credit rating of AAA.

Trailing Returns Relative to Peer Group %

Peer Group (5-95%): Exchange Traded Funds - U.S. - Long-Term Bond



	YTD	3 mo	6 mo	1 yr	3 yrs	5 yrs	10 yrs
PowerShares Build America Bond ETF	11.64	2.71	6.72	14.81	6.99	—	—
Barclays US Agg Bond TR USD	4.32	0.91	2.42	6.33	2.49	4.39	4.74
US ETF Long-Term Bond	13.44	3.10	7.60	16.99	6.60	9.53	—

Fund Credit Quality

	ETF	Cat Avg
AAA %	12.30	36.69
AA %	41.19	16.62
A %	40.99	20.06
BBB %	5.24	20.33
BB %	0.28	2.78
B %	0.00	1.79
Below B %	0.00	0.71
Not Rated %	0.00	1.02

Coupon Range

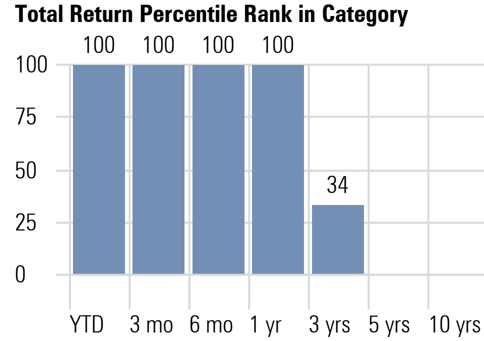
	ETF	Cat Avg
0 to 1 %	0.00	-1.27
1 to 2 %	0.00	2.74
2 to 3 %	0.00	5.14
3 to 4 %	1.14	14.10
4 to 5 %	4.69	7.78
5 to 6 %	27.12	10.88
6 to 7 %	38.21	45.99
7 to 8 %	19.09	6.94
8 to 9 %	5.72	1.79
9 to 10 %	0.00	0.10
10 to 11 %	0.00	0.08
11 to 12 %	0.00	-3.28
12 to 15 %	0.00	0.00
15+ %	0.00	0.00

Market Performance Statistics

Time Period: 11/18/2009 to 9/5/2014

	ETF	Cat Index	Cat Avg
Up Capture Ratio %	191.72	100.00	256.35
Down Capture Ratio %	185.54	100.00	263.49
Max Drawdown %	-11.23	-4.87	-13.42
Max Gain %	59.33	23.10	60.95
Best Month %	4.75	1.59	4.15
Worst Month %	-5.36	-1.78	-3.67

Total Return Percentile Rank in Category



PowerShares Build America Bond ETF BAB

Morningstar Rating™
★★★★★

Morningstar Category	Category Index	Prospectus Benchmark
US ETF Long-Term Bond	Barclays US Agg Bond TR USD	BofAML Build America TR USD

Portfolio Construction

The fund employs representative sampling to track the Bank of America Merrill Lynch Build America Bond Index, which measures the U.S.-dollar-denominated Build America Bonds publicly issued by U.S. states and territories of varying maturities. The index weights its holdings by market capitalization and rebalances at the end of each month. California (22.1%), Illinois (12.4%), and Texas (10.1%) are the three largest issuers in the fund's portfolio. The bonds are issued by state and local governments and finance a variety of projects like transportation, education, and utilities.

Morningstar Fixed Income Style Box™

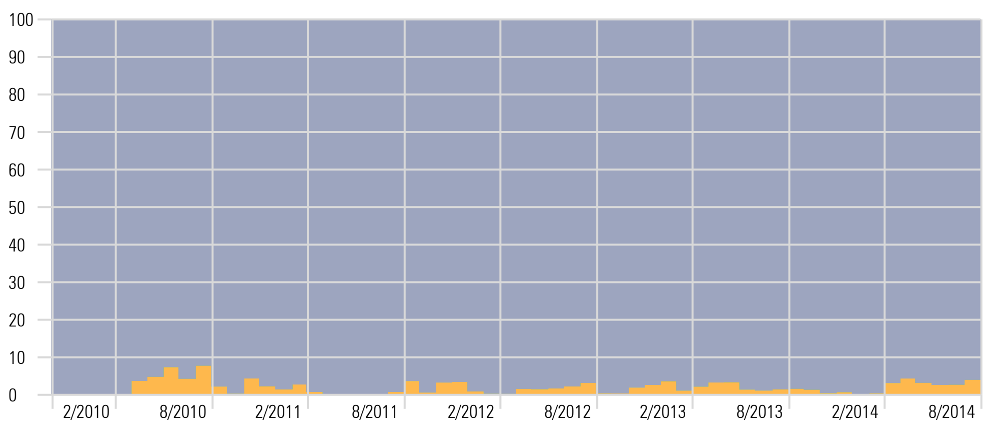
Not Available

	ETF	Cat Avg		ETF	Cat Avg
Yield to Maturity %	4.81	3.55	Turnover Ratio %	5.00	33.14
12 Month Yield %	4.70	4.71	% Asset in Top 10	19.11	43.97
SEC Yield %	4.11	—	# of Holdings	258	557

Fixed Income Portfolio Statistics

	ETF	Cat Avg
Average Eff Duration (yrs)	—	8.76
Average Eff Maturity (yrs)	—	15.03
Average Coupon %	6.43	5.52
Average Price	118.19	—
Average Credit Quality	A	BBB

Fixed Income Super Sector Breakdown History



Current Fixed Income Sub Sector Breakdown

	ETF	Cat Avg
Government %	—	—
Government Related %	—	—
Municipal Taxable %	—	—
Municipal Tax-Exempt %	—	—
Bank Loan %	—	—
Convertible %	—	—
Corporate Bond %	—	—
Preferred Stock %	—	—
Agency Mortgage-Backed %	—	—
Non-Agency Residential MBS %	—	—
Commercial Mortgage-Backed %	—	—
Covered Bond %	—	—
Asset-Backed %	—	—
Cash & Equivalents %	—	—

Top 10 Holdings

Portfolio Date: 9/5/2014

	Maturity Date	Portfolio Weighting %
Invesco Treasurer's Ser Tr Prem Instl	—	3.67
North Tex Twy Auth 8.91%	2/1/2030	2.85
Illinois St Go Bds 5.563%	2/1/2021	2.40
California St Go Bds 7.5%	4/1/2034	2.32
California St Go Bds 6.509%	4/1/2039	1.91
Chicago Ill Brd Ed Go Bds 6.138%	12/1/2039	1.81
California St Go Bds 7.6%	11/1/2040	1.75
Univ Tex Univ Revs Fing Sys 4.644%	8/15/2030	1.64
Illinois St Go Bds 6.9%	3/1/2035	1.52
Municipal Elec Auth 7.055%	4/1/2057	1.47

Bond Maturity Breakdown

	ETF	Cat Avg
1 to 3 Years %	—	—
3 to 5 Years %	—	—
5 to 7 Years %	—	—
7 to 10 Years %	—	—
10 to 15 Years %	—	—
15 to 20 Years %	—	—
20 to 30 Years %	—	—
30+ Years %	—	—

PowerShares Build America Bond ETF BAB

Morningstar Rating™
★★★★★

Morningstar Category	**Category Index**	**Prospectus Benchmark**
US ETF Long-Term Bond	Barclays US Agg Bond TR USD	BofAML Build America TR USD

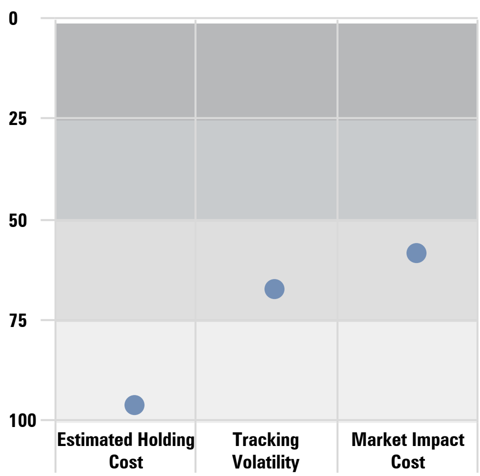
Fees

The fund has an expense ratio of 0.28%, which is the lowest among Build America Bond ETFs. When compared with the long-term bond Morningstar Category average, however, it is above average (0.26%). The fund has done a good job tracking its benchmark. Since its inception, it has outperformed its bogy by 0.01% a year.

Expenses

	ETF	Cat Avg
Net Expense Ratio %	0.28	0.24
Expense Waiver	—	—
Expense Waiver Expiration Date	—	—
Expense Waiver Type	—	—
Prospectus Date	7/8/2014	—

Percentile Rank Relative to ETF Universe



Total Cost Analysis Data Points

Estimated Holding Cost %	1.32
Tracking Volatility %	0.48
Market Impact Cost %	0.04

Estimated Holding Cost is essentially the difference between the ETF return and the benchmark return and represents the realized cost of replicating the benchmark. Lower or even negative costs indicate that the ETF is doing a better job of matching its benchmark while minimizing costs.

Tracking Volatility measures the uncertainty with which an ETF tracks a benchmark. A higher tracking error indicates a wider confidence interval for expected performance around the benchmark. Lower numbers and ranks are better.

Market Impact Cost represents the liquidity of the ETF and is based on the average market price movement in percent caused by a $100,000 trade in the ETF. Calculated as the residual volatility unexplained by movements in NAV and the previous day's premium or discount, scaled by average dollar volume traded. Lower numbers and ranks are better.

Alternatives

SPDR Nuveen Barclays Build America Bond ETF BABS is the second-largest Build America Bond ETF. BABS, however, only has $75 million in assets and is thinly traded. Further, it has a higher fee (0.35%) and a longer duration of 12.5 years.

BlackRock Build America Bond BBN--a closed-end fund--may also be an interesting alternative. It has a total expense ratio of 1.10% and a leverage-adjusted duration of 13.4 years.

Vanguard Long-Term Bond BLV is the largest and cheapest long-term bond ETF. It has a rock-bottom 0.10% fee and a duration of 14.2 years.

Management

Longest Tenured Manager	Multiple
Manager Tenure (Longest)	4.83
Manager Tenure (Average)	3.55
Exchange	NYSE ARCA
Web Address	www.invescopowershares.com

Passive Strategies
Research Team

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Director

John Gabriel
Strategist

Patricia Oey
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