

# The Risks of Passive Investing: Trouble Ahead for PFF?

Nat Beebe, CFA  
Portfolio Manager  
Ulland Investment Advisors

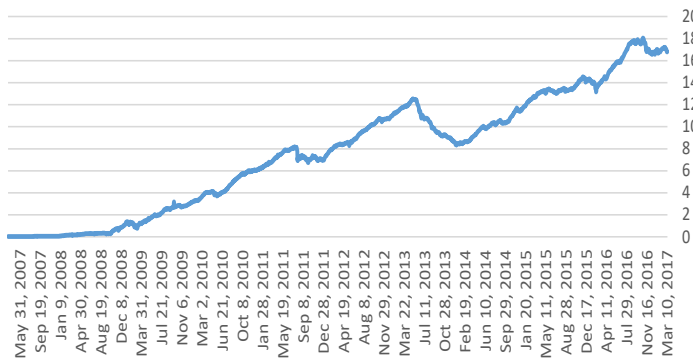
March 2017

Much has been written about the benefits of investing in passive exchange-traded funds (ETFs), namely market returns with a low management fee. However, investors need to consider the unique risks that arise when an ETF begins to dominate a niche space such as the preferred market.

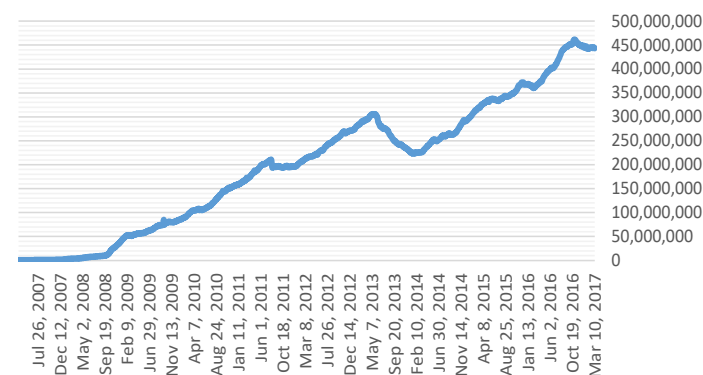
In this article we will evaluate the largest ETF in the U.S. preferred stock market, the iShares U.S. Preferred Stock ETF (Ticker: PFF), which currently holds nearly \$17 billion in assets. As an active preferred stock manager, Ulland Investment Advisors manages just over \$225 million in the preferred space. We can offer a unique insight into the hidden risks associated with the PFF ETF, specifically focusing on market size risk, liquidity (or lack thereof) and interest rate risk (duration).

First, a bit of background on the PFF. Launched in 2007 to replicate the US preferred market, the ETF has seen tremendous growth, rising to the 36th-largest ETF in the U.S. market. Today the PFF has nearly \$17 billion in assets, making it one of the largest ETFs in the fixed income space. In fact, the PFF now ranks ahead of the better known iShares iBoxx \$ High Yield Corporate Bond ETF (Ticker:HYG) and SPDR Barclays Capital High Yield Bond ETF (Ticker:JNK) in size.

PFF Net Assets  
(\$ In Billions)



Shares Outstanding



Largest U.S. Fixed Income ETFs

Name	Symbol	AUM
iShares Core U.S. Aggregate Bond ETF	AGG	\$42,205,280
Total Bond Market ETF	BND	\$31,997,827
iShares iBoxx \$ Investment Grade Corporate Bond ETF	LQD	\$29,406,096
iShares TIPS Bond ETF	TIP	\$22,512,182
Short-Term Bond ETF	BSV	\$21,781,318
Vanguard Short-Term Corporate Bond ETF	VCSH	\$17,671,505
<b>iShares U.S. Preferred Stock ETF</b>	<b>PFF</b>	<b>\$16,768,796</b>
iShares iBoxx \$ High Yield Corporate Bond ETF	HYG	\$16,360,124
Vanguard Intermediate-Term Corporate Bond ETF	VCIT	\$12,627,519
Intermediate-Term Bond ETF	BIV	\$12,300,065
SPDR Barclays Capital High Yield Bond ETF	JNK	\$12,047,592

Source: ETFdb.com as of 3/10/17

# The Risks of Passive Investing: Trouble Ahead for PFF?

## Do investors truly want passive management? Perhaps only when it works.

There is no such thing as a free lunch, so what exactly is the tradeoff for cheap passive market exposure? Sounds good, right? Who are we kidding; it sounds GREAT, as long as things are working. Who doesn't like to make money, especially when you don't have to pay a high fee for it.

The problem occurs when things are not working, and investors stop making money. Passive ETFs are just that, passive. They incorporate no analysis or view into the market in which they are investing clients' money. But to be fair, they fully disclose this fact: "The Fund invests in securities included in, or representative of, the Underlying Index, regardless of their investment merits.....(the fund) does not attempt to take defensive positions under any market conditions, including declining markets".

ETFs purchase underlying securities based on investor demand for the ETF. More money into the ETF, means more money chasing the same basket of securities. Is XYZ a "good company?". It doesn't matter, XYZ will be purchased by the ETF. Is security ABC a "good price"? Who cares. The ETF must purchase the security.

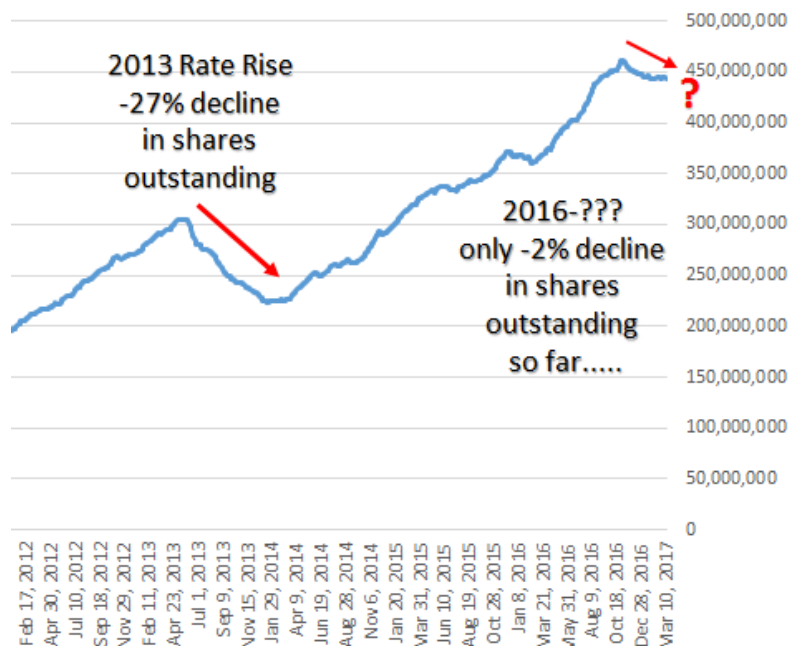
What happens when the tide turns? A good historical example is May-December 2013 when the yield on the 10-year U.S. Treasury note rose from 1.63% to 3.03%. During this same time period, the PFF experienced a -27% decline in the number of shares outstanding, while the PFF share price shed over 7.0%. As funds flowed from the PFF along with other preferred ETFs and mutual funds, preferred share prices became extremely volatile. A wide gap developed between "buyers and sellers".

For an active manager such as Ulland Investment Advisors, this created a substantial opportunity in the preferred market. During late 2013, we were able to spot dislocations in the market and added value for clients as the market "normalized" once the outflow pressure on the ETFs subsided.

Looking ahead to the rest of 2017, we see a similar opportunity to add alpha. We expect preferred ETF outflows to gain momentum in 2017. Since October 2016, the PFF outstanding shares have only declined 2%, despite an 80 bps increase in the yield on the 10-year U.S. Treasury note.

If 2013 is any example, the potential outflow could be dramatic.

In a niche market such as the preferred space this potential outflow risk is further magnified by the sheer market size of the PFF. Next we will examine just how large the PFF has become in this somewhat under-the-radar space.



# The Risks of Passive Investing: Trouble Ahead for PFF?

## Liquidity Risk - Don't be left holding the bag

One of key advantages to ETF investing is intra-day liquidity, meaning you can buy/sell an ETF throughout the day, unlike a mutual fund which only settles at the end of the trading day.

In most cases, the ETF has ample ability to purchase or liquidate underlying securities to meet the change in investor demand (inflow/outflow). For example, the SPY, which has over \$235 Billion in assets, represents only 1.10% of the market it replicates (SP 500). In addition, the daily trading volume in the individual securities it holds is sufficient to provide an orderly liquidation process.

However, this dynamic changes dramatically when we look at a niche market such as preferreds.

Due to the dramatic growth PFF has experienced over the last 9 years, and the small market size it replicates, the PFF now holds over 10% of overall issue size of the preferreds used in the ETF. For example the largest weighting in the PFF is a Wells Fargo preferred that has a total issue size of \$4 Billion, the PFF owns \$488 million, roughly 10% of the entire issue.

Ownership size is one issue, and actually providing liquidity is an equally important one.

One way to evaluate liquidity is to compare the underlying security issue size relative to the average trading volume for each security (30 Day Average Volume ). Assuming the PFF was 100% of the daily trading volume, the number of days needed to liquidate only 10% of each security would be 1-13 days. Remember that we are using trading days, so 13 days is nearly 3 weeks. ETF share sales require that the underlying securities be sold as the ETF shares are sold. If this exceeds the average daily volume, prices could drop precipitously.

Keep in mind that during the 2013 rate rise the PFF saw a 27% reduction in outstanding shares, so a 10% redemption assumption may prove to be conservative.

Using this framework, it is clear that the PFF faces severe challenges in providing an orderly liquidation for investors.

ETF Name	Ticker	Assets in ETF	Total Issue Size of Underlying Securities Owned	ETF As % of Market
iShares US Preferred Stock	PFF	\$17.20 Billion	\$170.50 Billion	10.09%
iShares iBoxx High Yield Corp. Bond	HYG	\$18.59 Billion	\$263.4 Billion	7.06%
SPDR S&P 500	SPY	\$235.23 Billion	\$21.35 Trillion	1.10%

PFF Top Holdings			
Name	PFF \$ Value Owned	% Owned of total issue	Days to Liquidate (Based on 30 day vol. Avg)
WELLS FARGO	\$488,888,583	10.1%	3.41
ALLERGAN PLC	\$428,227,291	10.0%	1.45
HSBC HOLDINGS PLC	\$395,624,837	10.0%	8.85
BARCLAYS BANK PLC	\$275,440,128	10.1%	8.17
GMAC CAPITAL TRUST	\$277,872,035	10.2%	3.98
WELLS FARGO	\$235,863,929	9.8%	7.09
CITIGROUP CAPITAL	\$239,199,634	10.1%	5.39
HSBC HOLDINGS	\$240,357,641	10.2%	13.27

# The Risks of Passive Investing: Trouble Ahead for PFF?

## Interest Rate Risk

The PFF’s sensitivity to interest rates, also called duration, is a significant risk in a rising interest rate environment. In fact, the ETFs prospectus does a beautiful job of describing this risk: *“Because many preferred stocks pay dividends at a fixed rate, their market price can be sensitive to changes in interest rates in a manner similar to bonds. That is, as interest rates rise, the value of the preferred stocks held by the Fund are likely to decline. To the extent that the Fund invests a substantial portion of its assets in fixed rate preferred stocks, rising interest rates may cause the value of the Fund’s investments to decline significantly.”*

As a fixed income manager, the last line is almost painful to read: **“rising interest rates may cause the value of the Fund’s investments to decline significantly”**. To be blunt, that is like saying if you touch a fire you may get burned.

The interest rate risk in the PFF is substantial. Because the PFF is forced to buy the entire market of preferred securities, this include lower coupon securities that were issued in the last 2-3 years, when interest rates were at almost unimaginably low levels.

For example, some preferred securities issued in 2015 and 2016 were issued with a 5.5% fixed rate coupon or less, a low-water mark never seen before. Today over 10% of the PFF is made up of securities that have a 5.5% fixed-rate coupon or lower. The investment returns on this low-coupon preferred have been marginal at best, trading at a 3% discount to par (par is the price at which it was issued). As interest rates continue to rise, we would expect the fixed rate coupons below 6.0% to be hit the hardest.

Our models suggest that a 1.0% rise in interest rates would result in a 6-8% decline in the PFF ETF share price.

PFF \$25 Fixed Rate Coupon Exposure			
Fixed Rate Coupon	Weight of PFF	Avg Price	Premium/Discount
Under 5.5% Coupon	13.3%	\$24.21	-3.2%
5.5-6.0% Coupon	16.7%	\$25.30	1.2%
6.0-6.5% Coupon	18.3%	\$25.59	2.4%
Over 6.5% Coupon	36.2%	\$26.25	5.0%

Ulland Investment Advisors				
Historical Fixed Income Returns & 2017 Outlook				
Year	Ulland Fixed Income (Gross)	PFF	Barclay Aggregate Bond Index	Change in U.S. 10 Year Treasury
2017 Projection	+4.0 to +6.0%	-1.0% to +4.0%	-0.50% to +1.50%	+40 to +60 bps
2016	5.54%	1.26%	2.65%	+18 bps
2015	2.17%	4.62%	0.55%	+10 bps
2014	5.83%	13.45%	5.97%	-86 bps
2013	4.24%	-0.59%	-2.03%	+127 bps



# The Risks of Passive Investing: Trouble Ahead for PFF?

## What about the low cost fee?

A major explanation of the ETF's boom in popularity is the low-fee cost structure. With regard to equity ETFs this is clearly the case. Most equity ETFs now charge an annual fee below 0.20%. However the preferred market is one of the last pockets of "higher" fees for the ETF providers.

In fact, the annual fee charged by the PFF of 0.47% ranks #2 for all iShare ETFs with over \$16 billion in assets.

Paying an active management type fee for a passive

## There Must Be A Better Way

Active management offers investors access to the preferred market, while reducing some of the major risks associated with the PFF. Analysis and response to liquidity, market size, and duration risks can play an important role in reducing risk and maximizing returns. Furthermore, an active manager can capitalize on market "mispricing" that may occur when passive ETF instruments are forced to liquidate securities to meet redemption needs. In our view active management will continue to significantly outperform the PFF in a rising interest rate environment.

Name	Symbol	AUM (in \$1,000)	Fee
iShares MSCI Emerging Markets ETF	EEM	\$27,849,139	0.72%
<b>iShares U.S. Preferred Stock ETF</b>	<b>PFF</b>	<b>\$16,768,797</b>	<b>0.47%</b>
iShares Select Dividend ETF	DVY	\$17,091,430	0.39%
iShares MSCI EAFE ETF	EFA	\$63,863,859	0.33%
iShares TIPS Bond ETF	TIP	\$22,512,182	0.20%
iShares Russell 2000 ETF	IWM	\$35,748,906	0.20%
iShares Russell 1000 Growth ETF	IWF	\$33,805,434	0.20%
iShares Russell 1000 Value ETF	IWD	\$36,682,310	0.20%
iShares S&P 500 Growth ETF	IVW	\$16,074,926	0.18%
iShares iBoxx \$ High Yield Corporate Bond ETF	HYG	\$16,360,125	0.18%
iShares iBoxx \$ Investment Grade Corp Bond ETF	LQD	\$29,406,096	0.15%
iShares Russell 1000 ETF	IWB	\$17,700,478	0.15%
iShares Core MSCI Emerging Markets ETF	IEMG	\$23,848,838	0.14%
iShares Core MSCI EAFE ETF	IEFA	\$20,031,270	0.08%
iShares Core S&P Small-Cap ETF	IJR	\$29,244,093	0.07%
iShares Core S&P Mid-Cap ETF	IJH	\$38,250,496	0.07%
iShares Core U.S. Aggregate Bond ETF	AGG	\$42,205,280	0.05%
iShares Core S&P 500 ETF	IVV	\$100,664,845	0.04%

Source: Morningstar

## PFF Right Asset Class, Wrong Product

As a fixed income manager with substantial assets in the preferred space, Ulland Investment Advisors clearly agrees with investors that see preferreds as an attractive investment opportunity. However, the risks in the PFF product design should be strongly considered before investing in the passive ETF route.

## Bottomline: PFF Right Asset Class, Wrong Product



### About the Author

Nat Beebe, CFA is a portfolio manager at Ulland Investment Advisors (UIA). UIA is a Registered Investment Advisors (RIA), located in Minneapolis, MN, specializing in preferred stock. UIA currently manages \$300 million, with \$225 million in preferred stocks. Ulland Investment Advisors' account minimum is \$500,000. UIA clientele includes institutional clients as well as high net worth individuals. The firm was founded in 1997 by James Ulland, President/CEO of the firm. For more information please contact the Nat Beebe at [nat.beebe@ullandinvestment.com](mailto:nat.beebe@ullandinvestment.com) or 612.312.1400