# **Institutional Uses of ETFs**

Pennsylvania Association of Public Employee Retirement Systems November 19, 2015

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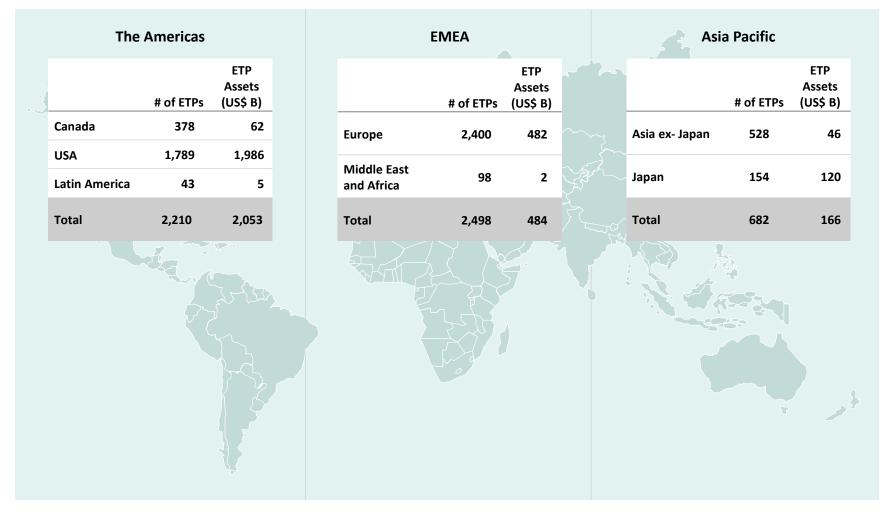


# **ETF Industry and Trends**



# The Global ETP Market Represents more than \$2.9 Trillion in Assets

Global: 5,438 ETPs and \$2.9 trillion in assets



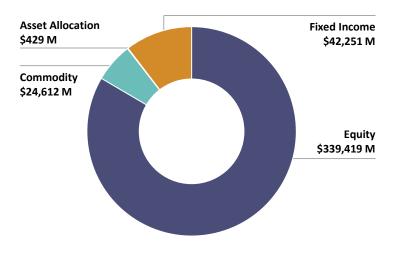
Source: Morningstar, SSGA, as of September 30,2015.



# SPDR Exchange Traded Funds — Global Family of SPDR ETFs

- State Street pioneered the ETF market in 1993 by launching the first US listed ETF
- SSGA is the 3rd largest global manager of ETFs with \$388.599 billion\* in US ETF assets and \$406.711 billion\* in total global ETF assets
- SPDR ETFs represent 242 global offerings in a variety of asset classes including US equity, international equity, commodities, fixed income and international fixed income

### \$406 Billion\* in Global ETF Assets Under Management



### **Global ETF Assets Under Management**

Sector	Assets (US \$M)	Number of ETFs
Asset Allocation	429	4
Commodity	24,612	1
Equity	339,419	176
Fixed Income	42,251	61
<b>Grand Total</b>	406,711	242

Source: Morningstar, SSGA, as of September 30, 2015.

Sectors are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.



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<sup>\*</sup> This AUM includes the assets of the SPDR Gold Trust (approx. \$24.6B (as of 9/30/2015) with respect to which State Street Global Markets, LLC (SSGM) serves as marketing agent. These figures also include the AUM of SPDR® S&P® MidCap 400 ETF (approx. \$14.2 billion as of 9/30/2015). Please note that AUM totals are unaudited.

## **How Institutions Use ETFs**

Application	Objective	Potential ETF Solution				
Cash Equitization	Remain fully invested while maintaining liquidity	ETFs are an attractive alternative solution to futures due to their transparency, lack of documentation and roll slippage				
Tactical Adjustments	Over or underweight certain market segments based on short term outlook	ETFs represent virtually every asset class and offer efficient vehicles for implementing a tactical idea				
Transitions	Maintain market exposure while searching for a new manager	Invest the proceeds of a manager liquidation in an ETF which tracks the appropriate benchmark until new manager has been selected				
Rebalancing	Increase the speed and efficiency of rebalancing across the asset allocation	ETFs can make rebalancing more efficient due to their intrada liquidity than moving assets from illiquid managers				
Asset Class Exposure	Establish exposure to a difficult to reach market segment	There are a variety of ETFs which provide potential exposure to difficult to reach asset classes				
Liquidity Management	Increase liquidity in overall asset allocation without changing allocation	Use ETFs for a given percentage of each asset class to provide a liquidity buffer across the asset allocation				
Portfolio Completion	Fill any asset allocation holes without engaging a new investment manager	Use an ETF to gain potential exposure to an asset class that is underrepresented in the asset allocation				
Fixed Income Duration and Credit Adjustments	Tweak duration and credit exposure to meet specified targets	Fixed Income ETFs seek to help provide an efficient means to adjust duration and credit exposure				
Taxable Institutional Plans	Implement desired asset allocation regardless of plan size	Implement an asset allocation efficiently using ETFs. Advantages include no minimum fees and simplified rebalancing.				

For discussion purposes only. The information provided does not constitute investment advice and it should not be relied on as such.

It should not be considered a solicitation to buy or an offer to sell a security.

It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon.

You should consult your tax and financial advisor. All material has been obtained from sources believed to be reliable.

There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information.

There can be no assurance that a liquid market will be maintained for ETF shares.



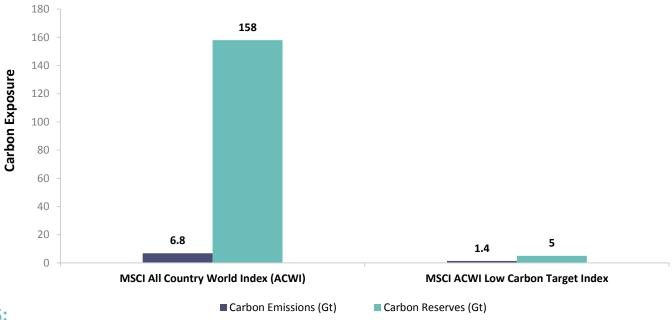
# **Institutional ETF Case Studies**



# **Low Carbon Global Equity Exposure**

CHALLENGE: Reducing carbon exposure without meaningfully altering return expectations

**SOLUTION:** Allocate to low carbon global equity ETF



### **ETF BENEFITS:**

- 81% reduction in current carbon emissions, 97% reduction in future fossil fuel reserves\*
- 30 bps tracking target to parent MSCI ACWI Index

ETF Name	Ticker	Assets Under Management**
SPDR MSCI ACWI Low Carbon Target ETF	LOWC	\$81.5 Million

Source: \* MSCI as of May 31, 2015.

The above targets are estimates based on certain assumptions and analysis made by SSGA. There is no guarantee that the estimates will be achieved. The information contained above is for illustrative purposes only. The information provided does not constitute investment advice and it should not be relied on as such.



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<sup>\*\*</sup> SSGA, as of September 30, 2015.

## **Multi-Factor Emerging Markets Exposure**

**CHALLENGE:** Accessing multi factor exposure to core emerging markets

**SOLUTION:** Allocate to **MSCI Emerging Markets Quality Mix ETF** 



### **ETF BENEFITS:**

• Liquid, transparent exposure to 3 underlying factors (quality, low volatility, value) in one trade

ETF Name	Ticker
SPDR MSCI Emerging Markets Quality Mix ETF	QEMM

Source: \* MSCL

Weights are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

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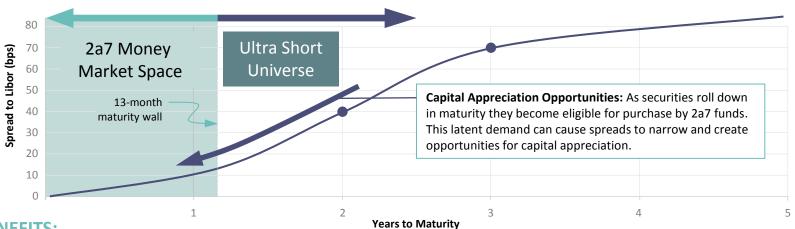


# **Adjust Duration, Credit Quality and Yield**

CHALLENGE: Managing Fixed Income in an uncertain rate environment

**SOLUTION:** Allocate to short term fixed income ETFs for potential yield enhancement

### Tier One Corporate FRN Spread Curve Illustrates Yield & Capital Gain Advantage of Maturity Extension



### **ETF BENEFITS:**

- Potential to provide intraday liquidity and T+3 settlement
- Seeks to offer greater diversification and potential trading efficiency over underlying bonds

ETF Name	Ticker	Adjusted Duration (Years)*	30 Day SEC Yield**		
SPDR Barclays Short Term Corporate Bond ETF	SCPB	1.97	1.68%		
SPDR SSGA Ultra Short Term Bond ETF	ULST	0.10	0.48%		

Source: \* Bloomberg, as of September 30, 2015.

\*\* SSGA, as of September 30, 2015.

Diversification does not ensure a profit or guarantee against loss.

There can be no assurance that a liquid market will be maintained for ETF shares.

Past performance is not a guarantee of future results. The information contained above is for illustrative purposes only.

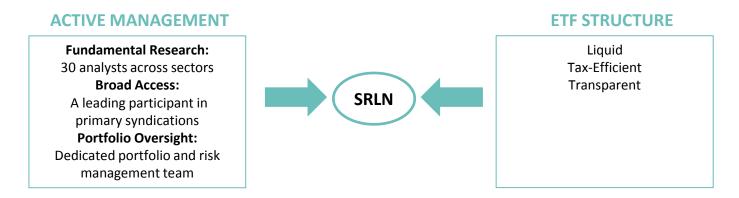
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## **Exposure to Difficult to Access Asset Classes**

CHALLENGE: Getting tactical exposure to inefficient, illiquid and operationally complex senior loans SOLUTION: Using an actively managed ETF to help gain efficient exposure to the senior loans



### **ETF BENEFITS:**

- Potential for T+3 settlement, transparent on screen markets and historically tight bid ask spreads
- Seeks to provide access to one of the largest senior loan investors in the world

		Gross Expense	Inception	Assets	20 Day ADV	Bid/Ask Spread
ETF Name	Ticker	Ratio*	Date*	(\$M)*	(\$)**	(\$)***
SPDR Blackstone/GSO Senior Loan ETF	SRLN	70 bps	4/3/2013	681.5	5,000,255	0.05

Source: \* SSGA, as of September 30, 2015.

There can be no assurance that a liquid market will be maintained for ETF shares.

Passive management and the creation/redemption process can help minimize capital gains distributions.

The information contained above is for illustrative purposes only. The information provided does not constitute investment advice and it should not be relied on as such.



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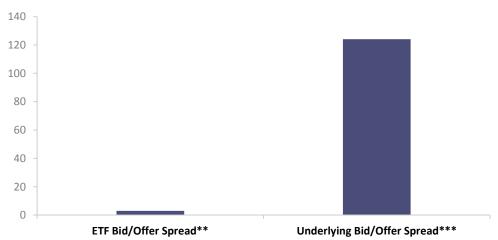
<sup>\*\*</sup> SSGA, as of September 30, 2015.

<sup>\*\*\*</sup> Arcavision, as of September 30, 2015.

### **Fixed Income Transition**

CHALLENGE: Client seeking liquid and cost efficient interim high yield beta during transition to an active manager

**SOLUTION:** Using a liquid high yield ETF to gain the exposure instead of illiquid bond market or onerous swap market



### **ETF BENEFITS:**

- Potential to achieve trading efficiency and able to fund active manager position via bonds through in-kind redemption
- May provide the opportunity to fund active manager position via bonds through in-kind redemption

ETF Name	Ticker	Assets (\$M)*	20 Day ADV (\$)**	Average Notional Size at Bid/Ask (\$)**
SPDR Barclays High Yield Bond ETF	JNK	8,961	343,520,012	1,285,559

Source: \* SSGA, as of September 30, 2015.

\* SSGA, as of September 30, 2015.

\*\* Bloomberg, as of September 30, 2015.

There can be no assurance that a liquid market will be maintained for ETF shares.

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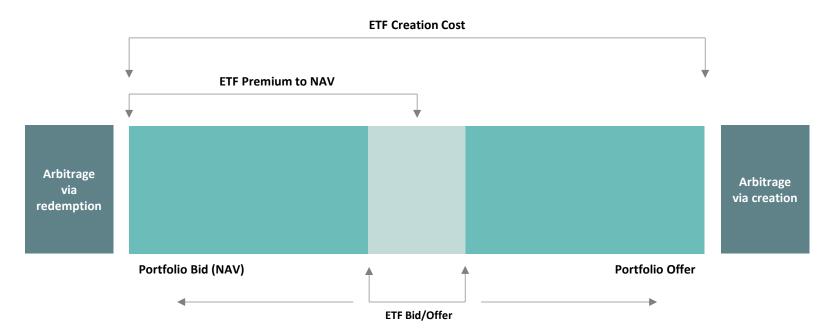


# Fixed Income ETFs



# **Premium/Discount Mechanics**

The premium or discount of the ETF market price to the Net Asset Value (NAV) of the underlying basket will help drive the create/redeem process



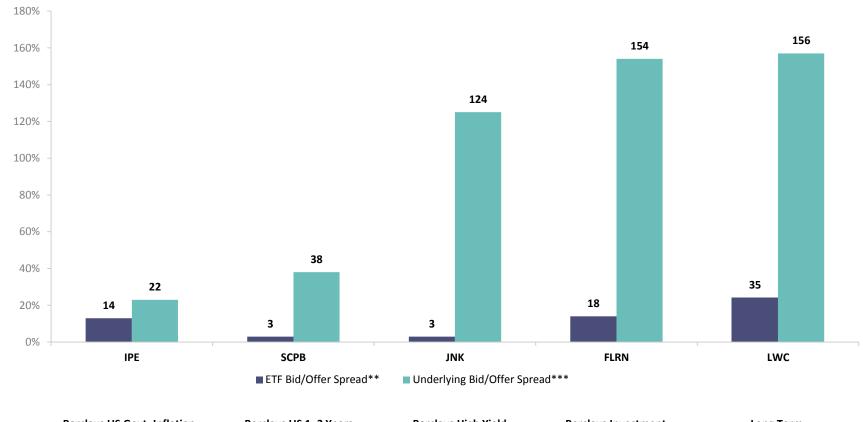
As the ETF decreases in value relative to the portfolio, arbitrageurs are incented to buy the ETF, redeem units in the ETF and sell the bonds for a profit

As the ETF increases in value relative to the portfolio, arbitrageurs are incented to aggregate bonds, create units in the ETF and sell the ETF for a profit

The information contained above is for illustrative purposes only.



# **ETF Liquidity versus Underlying**



Index	Barclays US Govt. Inflation-	Barclays US 1–3 Years	Barclays High Yield	Barclays Investment	Long Term
	Linked Bond Index	Corporate Bond Index	Very Liquid Bond Index	Grade Floating Rate Index	US Corporate Index
SPDR ETF AUM*	\$639.97M	\$3.91B	\$8.96B	\$386.48M	\$218.64M

Sources: \* SSGA, as of September 30, 2015.

Barclays Liquidity Cost Scores are used as approximations for underlying bid/offer spreads.



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<sup>\*\*</sup> Arcavision, as of September 30, 2015.

<sup>\*\*\*</sup>Barclays, as of September 30, 2015.

# **Appendix A: Standard Performance**



### SPDR Barclays Short Term Corporate Bond ETF (SCPB)

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	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 12/16/2009
NAV	9/30/2015	0.37%	0.25%	0.97%	1.02%	1.20%	1.68%	N/A	1.91%
Market Value	9/30/2015	0.35	0.20	0.80	0.89	1.06	1.65	N/A	1.91
Barclays US 1–3 Years Corporate Bond Index	9/30/2015	0.39	0.30	1.15	1.29	1.52	2.06	3.80	2.49

Gross Expense Ratio: 0.12%

### SPDR SSGA Ultra Short Term Bond ETF (ULST)

#### **Annualized**

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	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 10/9/2013
NAV	9/30/2015	0.01%	-0.03%	0.18%	0.10%	N/A	N/A	N/A	0.32%
Market Value	9/30/2015	0.01	0.01	0.26	0.12	N/A	N/A	N/A	0.35
Barclays US Treasury Bellwether 3 Month	9/30/2015	0.02	0.03	0.04	0.05	0.07%	0.09%	1.38%	0.06

Gross Expense Ratio: 0.20%

Source: spdrs.com, as of September 30, 2015.

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Index performance does not reflect charges and expenses associated with the fund or brokerage commissions associated with buying and selling a fund. Index performance is not meant to represent that of any particular fund.

The gross expense ratio is the fund's total annual operating expenses ratio. It is gross of any fee waivers or expense reimbursements.



### SPDR MSCI Emerging Markets Quality Mix ETF (QEMM)

#### **Annualized**

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	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 6/4/2014
NAV	9/30/2015	-2.97%	-16.31%	-14.43%	-18.29%	N/A	N/A	N/A	-14.55%
Market Value	9/30/2015	-4.40	-15.84	-13.28	-17.61	N/A	N/A	N/A	-14.03
MSCI Emerging Markets (EM) Quality Mix Index	9/30/2015	-2.85	-16.15	-13.81	-17.47	N/A	N/A	N/A	-13.45

Gross Expense Ratio: 0.30%

### **SPDR Barclays TIPS ETF (IPE)**

#### **Annualized**

	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 5/25/2007
NAV	9/30/2015	-0.68%	-1.25%	-1.22%	-1.00%	-2.07%	2.44%	N/A	4.40%
Market Value	9/30/2015	-0.58	-1.06	-1.36	-1.02	-2.07	2.40	N/A	4.40
Barclays U.S. Government Inflation-linked Bond Index	9/30/2015	-0.68	-1.22	-1.09	-0.85	-1.90	2.62	N/A	4.56

Gross Expense Ratio: 0.15%

Source: spdrs.com. as of September 30, 2015.

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### SPDR Barclays High Yield Bond ETF (JNK)

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	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 11/28/2007
NAV	9/30/2015	-3.10%	-5.87%	-4.29%	-5.87%	1.92%	4.89%	N/A	5.07%
Market Value	9/30/2015	-3.11	-5.76	-3.99	-5.82	1.96	4.85	N/A	5.12
Barclays High Yield Very Liquid Index	9/30/2015	-2.90	-5.33	-3.23	-4.35	2.93	5.97	N/A	7.43

Gross Expense Ratio: 0.40%

### SPDR Barclays Long Term Corporate Bond ETF (LWC)

### **Annualized**

	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 3/10/2009
NAV	9/30/2015	0.75%	1.11%	-3.66%	0.17%	1.93%	5.46%	N/A	9.59%
Market Value	9/30/2015	0.98	1.44	-4.60	-0.87	1.66	5.35	N/A	9.60
Barclays Long US Corporate Index	9/30/2015	0.75	1.10	-3.67	0.16	2.04	5.85	6.36%	10.84

Gross Expense Ratio: 0.12%

Source: spdrs.com, as of September 30, 2015.

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### SPDR Barclays Investment Grade Floating Rate ETF (FLRN)

#### **Annualized**

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	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 11/30/2011	
NAV	9/30/2015	-0.17%	-0.22%	0.09%	-0.12%	0.64%	N/A	N/A	1.26%	
Market Value	9/30/2015	0.12	-0.56	0.20	-0.14	0.31	N/A	N/A	1.25	
Barclays Global HY ex-US Domiciled 350mn+ Cash Pay Index	9/30/2015	-0.20	-0.21	0.21	0.07	0.83	1.08%	1.98%	1.51	

Gross Expense Ratio: 0.15%

Source: spdrs.com, as of September 30, 2015.

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### SPDR Blackstone/GSO Senior Loan ETF (SRLN)

#### **Annualized**

	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 4/4/2013
NAV	9/30/2015	-1.13%	-2.04%	0.85%	0.85%	N/A	N/A	N/A	1.42%
Market Value	9/30/2015	-0.75	-1.90	0.88	1.35	N/A	N/A	N/A	1.48
Markit iBoxx USD Liquid Leveraged Loan Index (Primary Index)	9/30/2015	-0.70	-2.39	-0.67	-0.64	2.13%	3.90%	N/A	1.23
S&P/LSTA US Leveraged Loan 100 Index (Secondary Index)	9/30/2015	-0.97	-2.23	-0.52	-0.98	2.21	4.01	N/A	1.30

Gross Expense Ratio: 0.70%

Source: spdrs.com, as of September 30, 2015.

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The gross expense ratio is the fund's total annual operating expenses ratio. It is gross of any fee waivers or expense reimbursements.

It can be found in the fund's most recent prospectus.



### SPDR MSCI ACWI Low Carbon Target (LOWC)

#### **Annualized**

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	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception 11/25/2014
NAV	9/30/2015	-3.51%	-9.24%	-6.32%	N/A	N/A	N/A	N/A	-8.25%
Market Value	9/30/2015	-1.20	-8.88	-5.85	N/A	N/A	N/A	N/A	-7.87
MSCI ACWI Low Carbon Target Index	9/30/2015	-3.59	-9.38	-6.54	N/A	N/A	N/A	N/A	-8.46

Gross Expense Ratio: 0.30% Net Expense Ratio\*: 0.20%

### SPDR Russell 2000 (TWOK)

#### **Annualized**

									Since Inception
	As of	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	07/08/2013
NAV	9/30/2015	-4.84%	-11.81%	-7.69%	1.25%	N/A	N/A	N/A	5.35%
Market Value	9/30/2015	-5.08	-12.03	-7.80	1.08	N/A	N/A	N/A	5.28
Russell 2000 Index	9/30/2015	-4.91	-11.92	-7.73	1.25	11.02%	11.73%	6.55%	5.34

### Gross Expense Ratio: 0.12%

Source: spdrs.com, as of September 30, 2015.

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Performance quoted represents past performance, which is no guarantee of future results. Investment return and principal value will fluctuate, so you may have a gain or loss when shares are sold. Current performance may be higher or lower than that quoted. All results are historical and assume the reinvestment of dividends and capital gains. Visit www.spdrs.com for most recent month-end performance.

\* The Adviser has contractually agreed to waive its advisory fee and reimburse certain expenses, until January 31, 2017, so that the Net annual Fund operating expenses of the Fund will be limited to 0.20% of the Fund's average daily net assets before application of any fees and expenses not paid by the Adviser under the Investment Advisory Agreement. Such fees and expenses paid by the Adviser are limited to certain direct operating expenses of the Fund and, therefore, do not include the Fund's acquired fund fees and expenses, if any. The contractual fee waiver does not provide for the recoupment by the Adviser of any fees the Adviser previously waived. The Adviser may continue the waiver from year to year, but there is no guarantee that the Adviser will do so and after January 31, 2017, the waiver may be cancelled or modified at any time. The market price used to calculate the Market Value return is the midpoint between the highest bid and the lowest offer on the exchange on which the shares of the Fund are listed for trading, as of the time that the Fund's NAV is calculated. If you trade your shares at another time, your return may differ.



# Appendix B: Important Disclosures



## **Important Disclosures**

#### FOR INVESTMENT PROFESSIONAL USE ONLY. Not for use with the public.

### Important Risk Information:

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value.

Brokerage commissions and ETF expenses will reduce returns.

Frequent trading of ETFs could significantly increase commissions and other costs such that they may offset any savings from low fees or costs.

Diversification does not ensure a profit or guarantee against loss.

While the shares of ETFs are tradable on secondary markets, they may not readily trade in all market conditions and may trade at significant discounts in periods of market stress.

Risk associated with equity investing include stock values which may fluctuate in response to the activities of individual companies and general market and economic conditions.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

The views expressed are the current views of the State Street Global Advisors Intermediary Business Group through the period of September 30, 2015, only and are subject to change based on market and other conditions. These views should not be relied upon as investment advice, as securities recommendations, or as an indication of trading intent on behalf of any State Street investment product. It does not take into account any investors particular investment objectives, strategies, tax status or investment horizon. We encourage you to consult your tax or financial advisor. Individual securities mentioned are for illustrative purposes only and may not be relied upon as investment advice or as an indication of trading intent on behalf of any State Street product.

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Further limitations and important information that could affect investors' rights are described in the prospectus for the applicable product.

Investing involves risk including the risk of loss of principal.



This document may contain certain statements deemed to be forward-looking statements. All statements, other than historical facts, contained within this document that address activities, events or developments that SSGA expects, believes or anticipates will or may occur in the future are forward-looking statements. These statements are based on certain assumptions and analyses made by SSGA in light of its experience and perception of historical trends, current conditions, expected future developments and other factors it believes are appropriate in the circumstances, many of which are detailed herein. Such statements are subject to a number of assumptions, risks, uncertainties, many of which are beyond SSGA's control. Please note that any such statements are not guarantees of any future performance and that actual results or developments may differ materially from those projected in the forward-looking statements.

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Passive management and the creation/redemption process can help minimize capital gains distributions.

Investments in small/mid-sized companies may involve greater risks than in those of larger, better known companies.

Investments in Senior Loans are subject to credit risk and general investment risk. Credit risk refers to the possibility that the borrower of a Senior Loan will be unable and/or unwilling to make timely interest payments and/or repay the principal on its obligation. Default in the payment of interest or principal on a Senior Loan will result in a reduction in the value of the Senior Loan and consequently a reduction in the value of the Portfolio's investments and a potential decrease in the net asset value ("NAV") of the Portfolio.

Investing in high yield securities, otherwise known as "junk bonds", is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

Actively managed ETFs do not seek to replicate the performance of a specified index.

The Fund is actively managed and may underperform its benchmarks. An investment in the fund is not appropriate for all investors and is not intended to be a complete investment program. Investing in the fund involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

These investments may have difficulty in liquidating an investment position without taking a significant discount from current market value, which can be a significant problem with certain lightly traded securities.



Passively managed funds invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund to experience tracking errors relative to performance of the index.

Non-diversified funds that focus on a relatively small number of securities tend to be more volatile than diversified funds and the market as a whole.

Although subject to the risks of common stocks, low volatility stocks are seen as having a lower risk profile than the overall markets. However, a portfolio comprised of low volatility stocks may not produce investment exposure that has lower variability to changes in such stocks' price levels.

Certain funds employ a "quality" style of investing emphasizes companies with high returns, stable earnings, and low financial leverage. This style of investing is subject to the risk that the past performance of these companies does not continue or that the returns on "quality" equity securities are less than returns on other styles of investing or the overall stock market.

Certain funds employ a value style of investing that emphasizes undervalued companies with characteristics for improved valuations, which may never improve and may actually have lower returns than other styles of investing or the overall stock market.

Investments in asset backed and mortgage backed securities are subject to prepayment risk which can limit the potential for gain during a declining interest rate environment and increases the potential for loss in a rising interest rate environment.

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Index performance does not reflect charges and expenses associated with the fund or brokerage commissions associated with buying and selling a fund. Index performance is not meant to represent that of any particular fund.

Because the SPDR SSGA Active Asset Allocation ETFs are actively managed, they are therefore subject to the risk that the investments selected by SSGA may cause the ETFs to underperform relative to their benchmarks or other funds with similar investment objectives.

The value of the debt securities may increase or decrease as a result of the following: market fluctuations, increases in interest rates, inability of issuers to repay principal and interest or illiquidity in debt securities markets; the risk of low rates of return due to reinvestment of securities during periods of falling interest rates or repayment by issuers with higher coupon or interest rates; and/or the risk of low income due to falling interest rates. To the extent that interest rates rise, certain underlying obligations may be paid off substantially slower than originally anticipated and the value of those securities may fall sharply. This may result in a reduction in income from debt securities income.



Information represented in this piece does not constitute legal, tax, or investment advice. Investors should consult their legal, tax, and financial advisors before making any financial decisions.

Derivative investments may involve risks such as potential illiquidity of the markets and additional risk of loss of principal.

Increase in real interest rates can cause the price of inflation-protected debt securities to decrease. Interest payments on inflation-protected debt securities can be unpredictable.

Asset Allocation is a method of diversification which positions assets among major investment categories. Asset Allocation may be used in an effort to manage risk and enhance returns. It does not, however, guarantee a profit or protect against loss.

All the index performance results referred to are provided exclusively for comparison purposes only. It should not be assumed that they represent the performance of any particular investment.

Commodities investing entail significant risk as commodity prices can be extremely volatile due to wide range of factors. A few such factors include overall market movements, real or perceived inflationary trends, commodity index volatility, international, economic and political changes, change in interest and currency exchange rates.

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Investing in futures is highly risky. Futures positions are considered highly leveraged because the initial margins are significantly smaller than the cash value of the contracts. The smaller the value of the margin in comparison to the cash value of the futures contract, the higher the leverage.

There are a number of risks associated with futures investing including but not limited to counterparty credit risk, currency risk, derivatives risk, foreign issuer exposure risk, sector concentration risk, leveraging and liquidity risks.

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# **Appendix C: Biography**



# **Biography**



### **Robert S. Melton**

Rob is a Vice President with State Street Global Advisors and a member of the Asset Owner ETF Sales Team. Rob is responsible for developing relationships with institutional investors in the Mid-Atlantic and Midwest regions including pension funds, endowments, foundations, insurance companies and investment consultants with an emphasis on providing education regarding institutional ETF applications, trading dynamics and SSGA's comprehensive range of SPDR ETF solutions.

Prior to joining SSGA, Rob represented MSCI's equity index business to leading institutional investors in the US and Canada. His professional experience also includes Institutional Fixed Income Sales roles with Legg Mason, Jefferies and Morgan Stanley.

Rob is a graduate of The Villanova University School of Business with a BS in Business Administration with a concentration in Finance. He holds FINRA Series 7 and 63 licenses.