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While common shares offer investors the potential for share price and dividend increases, investors generally look to preferred securities for their high-yielding, stable dividend payments.

# Digging Deeper Into the U.S. Preferred Market

## 1: INTRODUCTION TO PREFERRED STOCKS

### 1.1 What Are Preferred Stocks?

A preferred stock is a hybrid security, blending characteristics of both stocks and bonds. Like common stocks, preferreds represent ownership in a company and are listed as equity in a company's balance sheet. However, certain characteristics differentiate preferreds from common equity. First, preferreds provide income to investors in the form of dividend payments and typically have higher yields than common stocks. Preferred shareholders have seniority in a company's capital structure and have a higher claim to company assets in the situation of company liquidation (see Exhibit 1). Preferred shareholders are not privileged to vote on corporate matters, thus having less influence on corporate policy. While common shares offer investors the potential for share price and dividend increases, investors generally look to preferred securities for their high-yielding, stable dividend payments.

Similar to bonds, preferreds are issued at a fixed par value, with most preferreds paying scheduled, fixed dividends. Many preferred securities are rated by independent credit rating agencies with the rating generally lower than bonds since preferreds offer fewer guarantees and claims on assets. While a company risks defaulting if it misses a bond interest payment, it can withhold a preferred dividend payment without facing default risk.

Exhibit 1: General Creditor Standings		
Asset Type	Class	Seniority
Debt	Secured Debt	↓
	Unsecured Senior Debt	
	Unsecured Subordinate Debt	
Hybrid-Equity	Preferred Shares	
Equity	Common Shares	

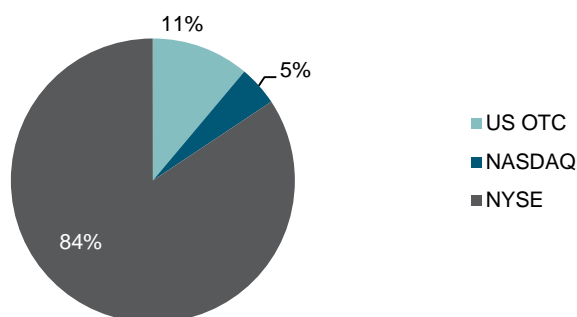
Source: S&P Dow Jones Indices LLC. Table is provided for illustrative purposes.

As of June 30, 2015, the market size of publicly traded preferred shares in the U.S. was estimated to be USD 241 billion, representing over 400% growth from USD 53 billion in 1990. Despite the impressive growth, the size of the preferred market remains relatively small compared to the USD 22.71 trillion equity market.<sup>1</sup>

In terms of trading venue, preferred securities trade in two kinds of markets: exchange listed and over-the-counter (OTC). Exhibit 2 breaks down the current preferred market by trading venue. The majority of preferreds are traded on the New York Stock Exchange (NYSE) and NASDAQ, with a combined market share of approximately 89%. The remaining portion is traded in the OTC market.

**Exhibit 2: Preferred Market Size by Exchange**

In terms of trading venue, preferred securities trade in two kinds of markets: exchange listed and over-the-counter (OTC).



Source: FactSet. Data as of June 30, 2015. Chart is provided for illustrative purposes.

## 1.2 Types of Preferred Stocks

There are many different kinds of preferreds in the market. A particular share class may include one or more of the following features.

- **Cumulative:** If the company board defers dividend payment, the dividend amount is accumulated and will be required to be paid in the future. The company is obligated to pay all outstanding dividend payments out to preferred shareholders before paying a dividend to common shareholders.
- **Non-cumulative:** If a preferred issue is non-cumulative, a company does not have to pay missed dividends. Due to the inherent dividend payment risk in these types of issues, yields are higher versus cumulative shares.
- **Convertible:** Includes an option for the preferred shareholder to exchange their shares for common shares at a predetermined conversion rate.
- **Callable:** This provision gives the issuer the right to buy back the shares after a certain date, usually at close to par value.

<sup>1</sup> The figure is based on the float-adjusted market capitalization of the S&P U.S. BMI as of June 30, 2015.

Since issuing preferred shares is normally cheaper than issuing common shares and avoids common ownership dilution, banks may issue preferred shares to meet the required capital ratio set by regulators.

- **Trust:** A hybrid security that is taxed like a debt obligation, while still being considered Tier 1 capital on accounting statements.
- **Fixed coupon:** Most preferred listings have fixed coupon payments, where the dividend amount remains the same for the life of the issuance.
- **Variable coupon:** The dividend rate is fixed for a time period and then at a reset date, it is changed based on a spread above LIBOR or a similar interest rate.
- **Floating coupon:** The dividend payment is adjusted on each payment date based on a spread above LIBOR or a similar interest rate. Floating rate preferreds usually have built-in floor and ceiling coupon rates.

*For more information on the types of preferred securities, please see [“The ABCs of U.S. Preferreds,”](#) S&P Dow Jones Indices, October 2013.*

### 1.3 Three Reasons Companies Issue Preferreds

Companies may issue preferred stocks for a variety of reasons. These are the three most common reasons.

1. Preferred stock issuances give companies a relatively cheap way to acquire additional capital. The preferred market is dominated by banks and related financial institutions, which are required by regulators to have adequate Tier 1 capital to support their liabilities. Tier 1 capital includes common equity, preferred equity and retained earnings. (Note that as per the recently passed Dodd-Frank Act, cumulative preferred and trust preferred securities will eventually be phased out of their Tier 1 capital status.<sup>2</sup>) Since issuing preferred shares is normally cheaper than issuing common shares and avoids common ownership dilution, banks may issue preferred shares to meet the required capital ratio set by regulators.
2. Preferred shares can be used in balance sheet management. Investors often prefer low debt-to-equity ratios, and issuing preferreds can better help to lower the debt-to-equity ratio than issuing debt. A company in need of additional financing may also be required to issue preferred shares instead of debt to avoid a technical default, which could trigger an immediate call on previously issued bonds or an increase in interest rates on those bonds. A technical default may occur when the debt-to-equity ratio breaches a limit set in a currently issued bond covenant.

<sup>2</sup> Source: United States. Office of the Comptroller of the Currency, Treasury, and the Board of Governors of the Federal Reserve System. 2013. “Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule.”

3. Preferreds give companies flexibility in making dividend payments. If a company is running into cash issues, it can suspend preferred dividend payments without risk of default. Depending on whether the preferred share class is cumulative or non-cumulative, a company may have to pay previously skipped dividend payments before restarting dividend payments in the future.

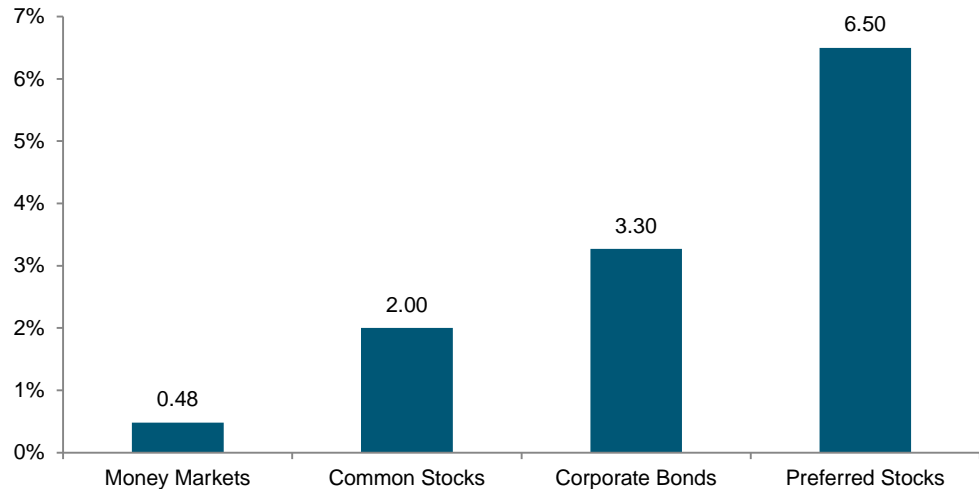
### 1.4 Benefits Offered by Preferred Securities

Preferred stocks can offer investors greater assurances than common shares in terms of both knowing that they will receive the dividend payment and knowing what the dividend amount will be. Since preferred securities are higher in seniority than common equities, dividends must be paid to preferred shareholders before common shareholders. Also, since most preferreds provide a fixed dividend payment, an investor will know what amount to expect at the next payment date. In times of poor performance, a company will be more likely to either cut the common dividend amount or cancel the dividend altogether, rather than cut the preferred dividend amount.

Historically, preferred stocks have offered higher yields than other asset classes including money market accounts, common stocks and corporate bonds (see Exhibit 3). Preferreds also have a tax advantage over bonds, as many preferred dividends are qualified to be taxed as capital gains as opposed to bond interest payments, which are taxed as ordinary income.

Since preferred securities are higher in seniority than common equities, dividends must be paid to preferred shareholders before common shareholders.

**Exhibit 3: Asset Class Yields**

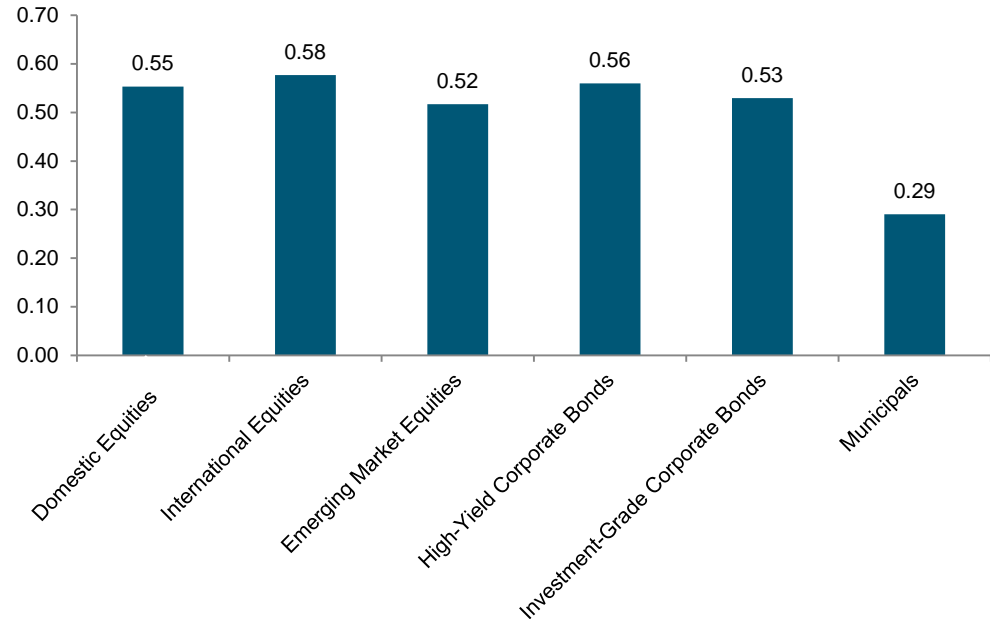


Source: S&P Dow Jones Indices LLC, FactSet. Money market yield refers to the 1-year cash deposit rate. Common stock yield is represented by S&P 500. Bond yield is represented by S&P 500 Bond Index. Preferred stock yield is represented by S&P U.S. Preferred Stock Index. Twelve-month asset class yields using data as of June 30, 2015. Chart is provided for illustrative purposes.

In addition to higher yields, preferred stocks have low correlations with other asset classes such as common stocks and bonds, thus providing potential portfolio-diversification and risk-reduction benefits. Exhibit 4 charts the 10-year correlation of preferred securities, as represented by the

S&P U.S Preferred Stock Index, to other asset classes. It is important to note that preferred securities exhibit higher correlation with high-yield bonds and equities, which are more sensitive to credit, and lower correlation with municipal bonds, which are more sensitive to interest rate risk.

**Exhibit 4: 10-Year Correlation With the S&P U.S. Preferred Stock Index**



In addition to higher yields, preferred stocks have low correlations with other asset classes such as common stocks and bonds, thus providing potential portfolio-diversification and risk-reduction benefits.

Source: S&P Dow Jones Indices LLC. Data from June 30, 2005 to June 30, 2015. Returns for domestic equities, international equities and emerging markets equities are represented by the total returns of the S&P 500, S&P Developed x US LargeMid BMI Index, and S&P Emerging Markets LargeMid BMI Index in USD. Returns for high yield corporate bonds, investment grade corporate bonds and municipals are represented by the total returns of the S&P 500 High Yield Corporate Bond Index, S&P 500 Investment Grade Corporate Bond Index and S&P National AMT-Free Municipal Bond Index in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

### 1.5 Potential Risks Involved With Investing in Preferreds

Due to their hybrid nature, the potential risks of preferred securities are related to the interest rate environment, issuer's credit quality and liquidity.

**Interest rate risk:** Due to their bond-like fixed dividend payments, preferreds are vulnerable to changes in interest rates. There is an inverse relationship between preferred prices and changes in interest rates. In a rising interest rate environment, preferred stock prices fall as the present value of future dividend payments decreases.

**Reinvestment risk:** A preferred investor who does not seek high current income in dividend payments would be faced with the risks and associated costs of reinvesting the regular dividend payments. Callable shares carry an even greater reinvestment risk, as there is the potential for the company to redeem the shares. This would force the investor to give up the shares at par, or a specified call price.

**Liquidity risk:** Preferred shares are less liquid than common shares. Therefore, trading these securities may involve higher market impact costs and bid-ask spread costs.

**Credit risk:** If a company is facing liquidity problems or poor performance, it may not be able to pay out the dividend to investors. Unlike bondholders, preferred shareholders have little recourse if a company does not pay the dividend.

**Sector concentration risk:** Financial companies are the primary issuers of preferreds in the U.S. A portfolio of preferred securities would be subject to the sector-specific risk factors of the financial sector.

## 2: THE S&P U.S. PREFERRED STOCK INDEX

### 2.1 About the S&P U.S. Preferred Stock Index

The S&P U.S. Preferred Stock Index is designed to serve the investment community's need for an investable benchmark representing the U.S. preferred stock market. The index comprises U.S.-traded preferred stocks that meet criteria relating to minimum size, liquidity, exchange listing and time to maturity.

With a market capitalization of USD 170 billion, the index represents approximately 71% of the publicly traded U.S preferred market.<sup>3</sup>

### 2.2 Index Highlights

- The index is rebalanced on a quarterly basis; changes are effective after the close of trading on the third Friday of January, April, July and October.
- The index is calculated using a modified capitalization-weighted scheme, with a maximum weight of 10% set per issuer.
- The index does not have a fixed number of securities. All eligible securities at each rebalancing date are included in the index. As of June 30, 2015, the index had 300 constituents.

Due to their hybrid nature, the potential risks of preferred securities are related to the interest rate environment, issuer's credit quality and liquidity.

<sup>3</sup> Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2015.

## 2.3 Constituent Selection

To be eligible for inclusion in the S&P U.S. Preferred Stock Index, preferred shares must meet the following criteria.

- **Exchange listing:** The security must trade on the NYSE or NASDAQ stock exchange.
- **Type of issuance:** Preferred stocks issued by a company to meet its capital or financing requirements are eligible. These include floating and fixed-rate preferreds, cumulative and non-cumulative preferreds, preferred stocks with a callable or conversion feature and trust preferreds.
- **Maturity or conversion schedule:** The security must not have a scheduled maturity or mandatory conversion within the next 12 months.
- **Market capitalization:** The security must have a market cap of at least USD 100 million.
- **Volume:** The security must have a volume traded of more than 250,000 shares per month over the previous six months.
- **Different lines of the same issuer:** There is no limit to the number of lines of a single company's preferred stock that are allowed in the index.
- **Trust preferred issuer:** A minimum of 15 trust preferred issuers must be included in the index. In the event that fewer than 15 trust preferred issuers qualify based on the criteria above, the liquidity constraint is relaxed and the largest stocks are included until the count reaches 15.

Financial companies are the primary issuers of preferreds in the U.S.

## 2.4 Risk/Return Characteristics

It is worth noting that preferred stocks have generally shown little to no price appreciation potential historically, with the majority of total return coming from dividend payments. The S&P U.S. Preferred Stock Index has had a price return of -18% and a total return of nearly 68% on a cumulative basis over the past 10 years.<sup>4</sup>

Over the longer-term 10-year investment horizon, preferred securities' returns have been closer to those of bonds, while retaining higher equity-like volatility. This hybrid nature of the preferred asset class allows for potential diversification benefits which can be observed in its correlation with the traditional asset classes. Over the past 10 years, preferred securities have maintained low correlation (in the range of 0.5 -0.6) with both equities and bonds.

<sup>4</sup> Source: S&P Dow Jones Indices. Data as of June 30, 2015. The launch date of the S&P U.S. Preferred Stock Index is Sept. 1, 2006. Past performance is not a guarantee of future results. Some of the data referenced in this chart reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this paper for more information on the inherent limitations associated with back-tested performance.

<b>Exhibit 5: Historical Risk/Return Profiles of Preferred Securities</b>			
<b>Period</b>	<b>S&amp;P U.S. Preferred Stock Index</b>	<b>S&amp;P 500 Bond Index</b>	<b>S&amp;P 500</b>
<b>Annualized Return (%)</b>			
1-Year	4.89	1.19	7.42
3-Year	7.14	3.39	17.31
5-Year	8.69	5.19	17.34
10-Year	5.07	5.32	7.89
<b>Annualized Volatility (%)</b>			
3-Year	3.98	4.01	8.58
5-Year	6.48	3.94	12.26
10-Year	19.14	5.58	14.68
<b>Sharpe Ratio</b>			
3-Year	1.78	0.83	2.01
5-Year	1.33	1.30	1.41
10-Year	0.26	0.94	0.53
<b>Correlation</b>			
3-Year	-	0.71	0.29
5-Year	-	0.54	0.52
10-Year	-	0.56	0.55

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2015. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

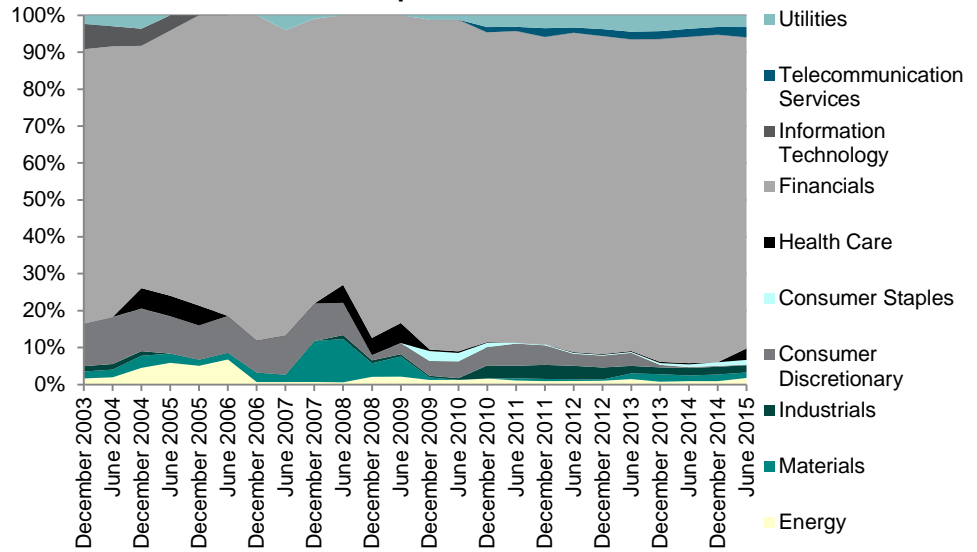
Over the longer-term 10-year investment horizon, preferred securities' returns have been closer to those of bonds, while retaining higher equity-like volatility.

## 2.5 Index Characteristics

Any company is eligible to issue preferred securities, and doing so can give investors another way to invest in their company. However, because financial companies must comply with regulatory capital requirements, the preferred market is dominated by the financial sector. The sector composition breakdown of the S&P U.S. Preferred Stock Index shows the financial sector's prevalence in the market (see Exhibits 6 and 7). Utilities and consumer discretionary constitute the next largest issuing sectors; however, their share of the preferred market is miniscule compared to that of the financials sector.



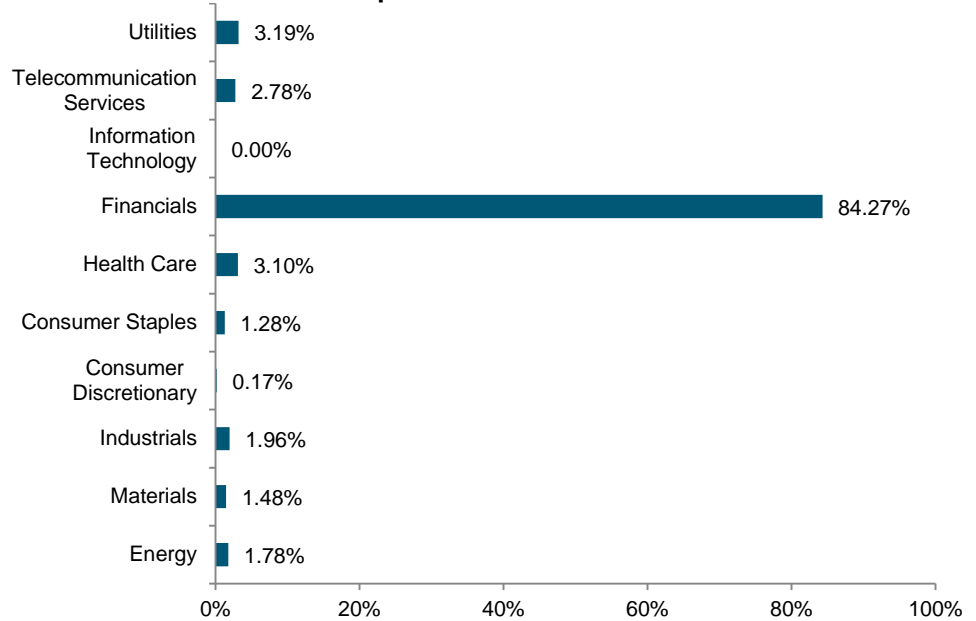
**Exhibit 6: Historical Sector Composition**



Source: S&P Dow Jones Indices LLC. Sector weight data as of December 31 each year. Chart is provided for illustrative purposes.

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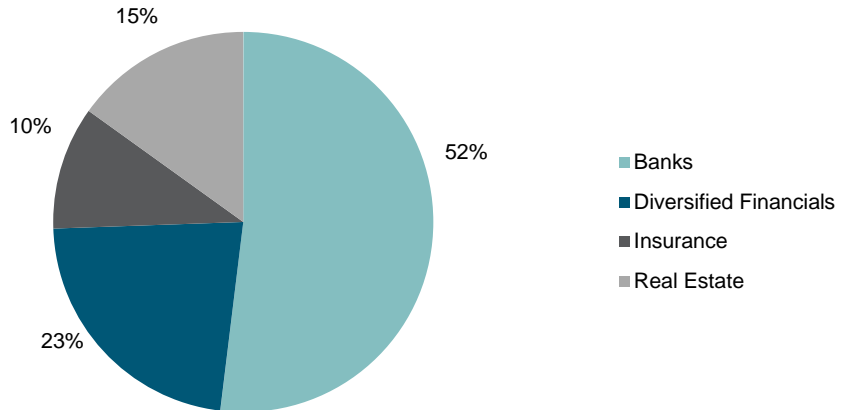
**Exhibit 7: Current Sector Composition**



Source: S&P Dow Jones Indices LLC. Weights as of June 30, 2015. Chart is provided for illustrative purposes.

Exhibit 8 details the composition of the companies issuing preferred shares within the financials sector. The banks and diversified financials industry groups are the largest issuers of preferred shares.

**Exhibit 8: Financials Sector Breakdown**

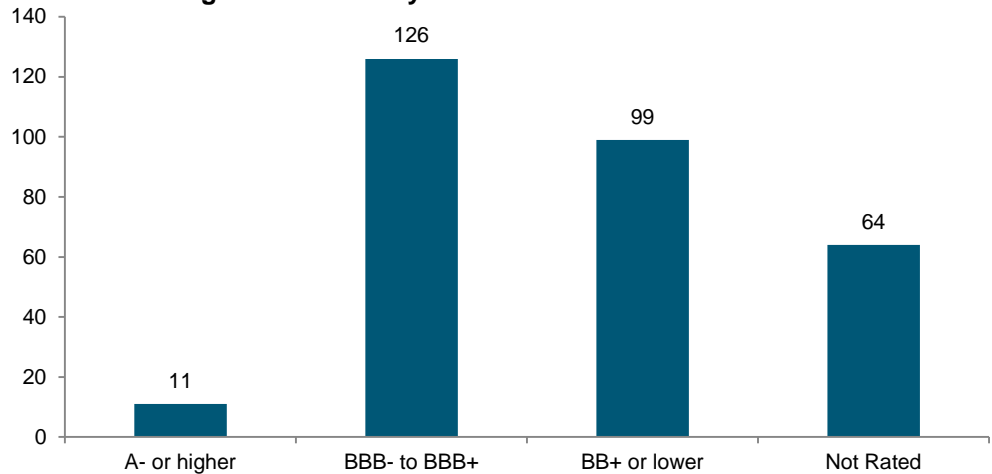


Source: S&P Dow Jones Indices LLC. Relative weights within the financial sector as of June 30, 2015. Chart is provided for illustrative purposes.

The coupon offered by preferred securities is a function of not only market interest rates but also its credit quality; the lower the quality of a preferred, the higher the yield.

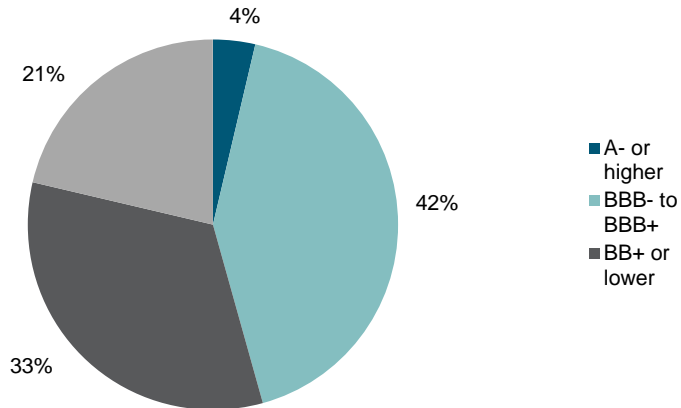
The coupon offered by preferred securities is a function of not only market interest rates but also its credit quality; the lower the quality of a preferred, the higher the yield. It is important to note that preferred securities may receive lower credit ratings, despite the higher quality of the issuing companies, simply due to their lower placement in the capital structure compared to bonds. While the S&P U.S. Preferred Stock Index does not have a minimum rating requirement, nearly half of all securities in the index are rated at investment grade ('BBB-') or higher, as rated by Standard & Poor's Ratings Services (see Exhibits 9 and 10). The median rating for those preferred shares rated by Standard & Poor's Rating Services is 'BBB-', indicating that more than half of the index constituents are investment grade.

**Exhibit 9: Ratings Breakdown by Count**



Source: Standard & Poor's Ratings Services. Ratings as of June 30, 2015. Chart is provided for illustrative purposes.

**Exhibit 10: Ratings Breakdown by Weight**

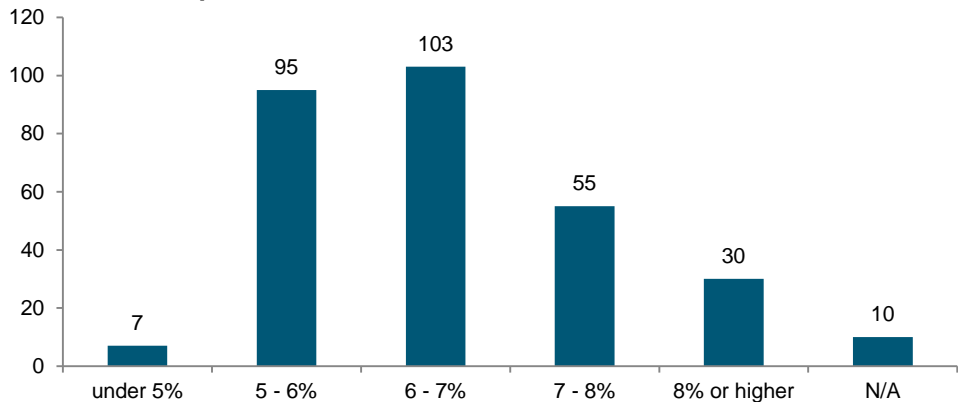


Source: Standard & Poor's Ratings Services. Ratings as of June 30, 2015. Chart is provided for illustrative purposes.

The median rating for those preferred shares rated by Standard & Poor's Rating Services is 'BBB-', indicating that more than half of the index constituents are investment grade.

The coupon rate distribution breakdown of the preferred securities shows that over one-third of the index constituents lie within the 6-7% range. The median dividend coupon rate in the index is 6.45% as of June 30, 2015.

**Exhibit 11: Coupon Rate Distribution**

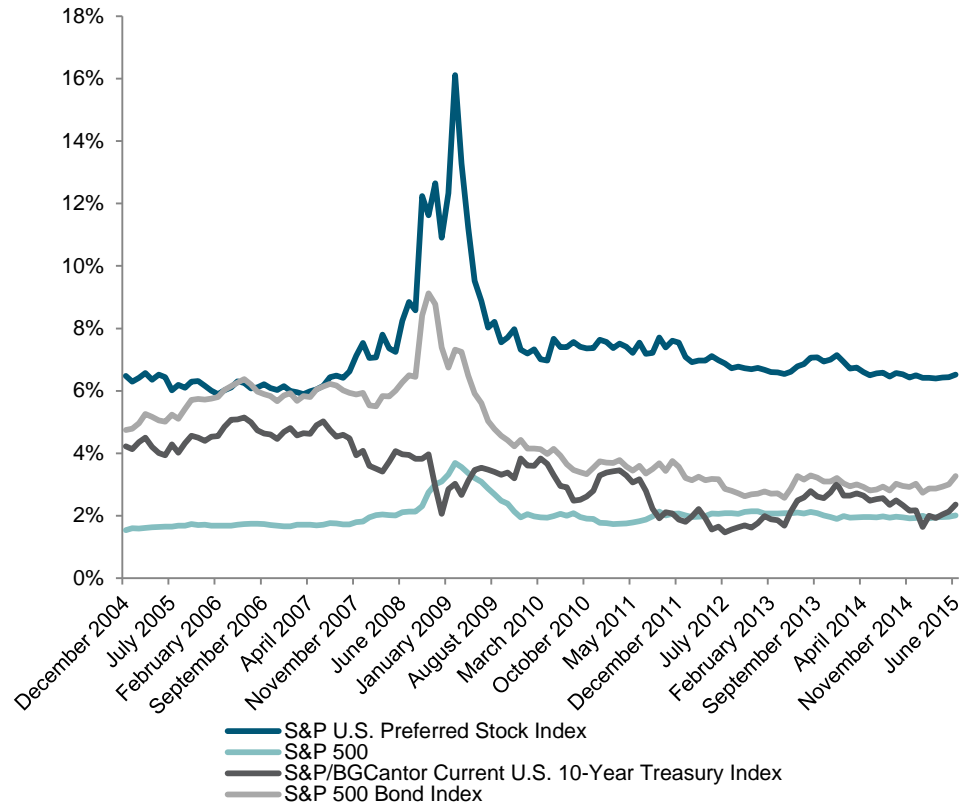


Source: FactSet. Data as of June 30, 2015. Charts are provided for illustrative purposes.

As of June 30, 2015, the S&P U.S. Preferred Stock Index's yield was 6.52%. With the market downturn in 2008-2009, the index yield rose significantly due to declines in share prices, to a maximum of 16.11% in February 2009. Excluding that time period, the index yield has remained relatively stable between approximately 6% and 8%. The S&P U.S. Preferred Stock Index has consistently had a higher yield than the S&P 500, the S&P 500 Bond Index, and the S&P/BGCantor Current 10-Year U.S. Treasury Index, which yielded 2.01%, 3.27%, and 2.35% as of June 30, 2015, respectively.

While fixed-rate and investment-grade preferred securities display a fixed-income-like level of volatility, floating-rate and high-yield preferred stocks exhibit significantly higher equity-like volatility.

**Exhibit 12: Historical 12-Month Trailing Yield**



Source: S&P Dow Jones Indices LLC, FactSet. Data from Dec. 31, 2004, to June 30, 2015. Past performance is not a guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

### 3: DETAILED ANALYSIS OF PREFERRED SECURITIES BY RATING AND COUPON TYPE

As we noted in an earlier section, preferred securities can be further broken down by the type of coupon payment and the credit quality. Each type of preferred stock displays distinct risk/return properties. While fixed-rate and investment-grade preferred securities display a fixed-income-like level of volatility, floating-rate and high-yield preferred stocks exhibit significantly higher equity-like volatility. During the financial crisis of 2008, preferred securities experienced higher peak-to-trough drawdowns than equities. Within the asset class, floating-rate and high-yield preferreds suffered the worst with the drawdown levels exceeding 65% or more.

Depending on the investor's view on the interest rate and credit cycle, the various types of preferred securities can be used to achieve the desired level of credit and duration risk.

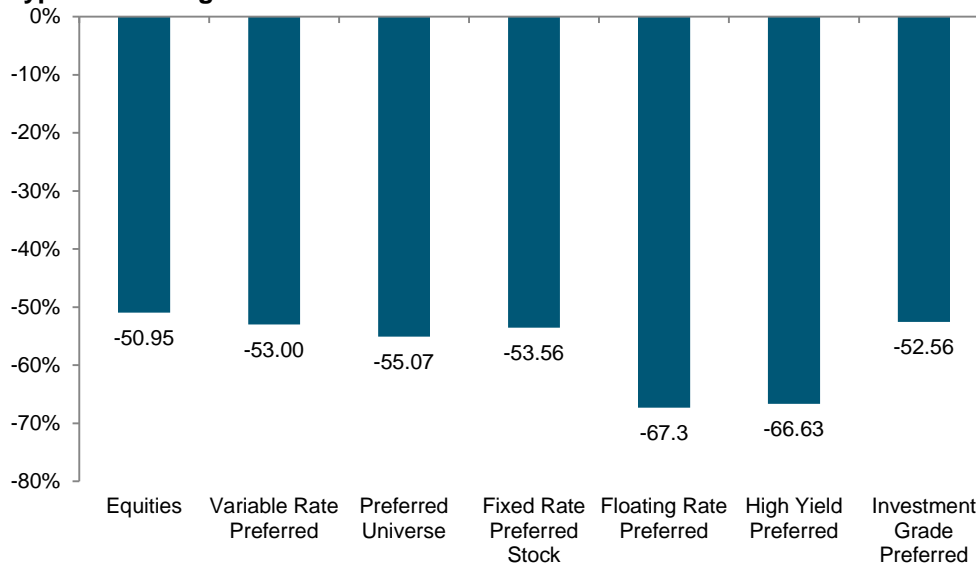
Depending on the investor’s view on the interest rate and credit cycle, the various types of preferred securities can be used to achieve the desired level of credit and duration risk.

**Exhibit 13: Risk/Return Profiles of Preferred Securities by Rating and Coupon Type**

Period	S&P US Preferred Stock Index	S&P U.S. Fixed Rate Preferred Stock Index	S&P U.S. Floating Rate Preferred Stock Index	S&P U.S. Variable Rate Preferred Stock Index	S&P U.S. High Yield Preferred Stock Index	S&P U.S. Investment Grade Preferred Stock Index
<b>Annualized Return (%)</b>						
1-Year	4.89	5.00	4.78	4.44	5.14	5.44
3-Year	7.14	7.15	7.57	7.37	9.18	4.90
5-Year	8.69	8.71	8.32	8.41	10.07	7.33
10-Year	5.07	5.29	3.05	-	5.66	3.80
<b>Annualized Volatility (%)</b>						
3-Year	3.90	3.88	8.74	3.48	3.51	4.81
5-Year	6.53	6.36	13.12	6.08	9.44	5.48
10-Year	19.22	18.68	27.70	-	25.07	19.11
<b>Risk/Reward Ratio</b>						
3-Year	1.83	1.85	0.87	2.12	2.62	1.02
5-Year	1.33	1.37	0.63	1.38	1.07	1.34
10-Year	0.26	0.28	0.11	-	0.23	0.20
<b>Correlation</b>						
3-Year	-	0.99	0.80	0.88	0.97	0.96
5-Year	-	0.99	0.90	0.95	0.96	0.91
10-Year	-	0.99	0.86	-	0.69	0.97

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2015. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

**Exhibit 14: Peak-to-Trough Drawdowns of Preferred Securities by Payment Type and Rating**



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2015. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

## **CONCLUSION**

Since gaining popularity in the early 1990s, the preferred share market has undergone significant growth. With the tendency to produce higher yields than other income asset classes, preferred shares could serve as a potential source of significant current income. In addition, their relatively low correlations with traditional asset classes such as common stocks and bonds may provide potential portfolio-diversification and risk-reduction benefits. However, preferred shares are not without risk. Due to their bond-like features, preferred prices exhibit an inverse relationship to changes in interest rates. Furthermore, in a low interest rate environment, investors may face call risk as well as reinvestment risk. When contemplating using a preferred stock index, such as the S&P U.S. Preferred Share Index, it may be wise to also consider other characteristics such as sector composition and the issuers' credit quality.

## PERFORMANCE DISCLOSURES

The S&P 500 High Yield Corporate Bond Index was launched on July 8, 2015. The S&P 500 Investment Grade Corporate Bond Index was launched on May 6, 2004. The S&P National AMT-Free Municipal Bond Index was launched on Aug. 31, 2007. The S&P U.S. Preferred Stock Index was launched on Sept. 15, 2006. The S&P 500 Bond Index was launched on July 8, 2015. The S&P U.S. Fixed Rate Preferred Stock Index, S&P US Variable Rate Preferred Stock Index, and the S&P U.S. Floating Rate Preferred Stock Index were launched on Oct. 25, 2013. The S&P U.S. Investment Grade Preferred Stock Index and the S&P US High Yield Preferred Stock Index were launched on July 21, 2014. All information for an index prior to its launch date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect on the launch date. Complete index methodology details are available at [www.spdji.com](http://www.spdji.com).

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency on their products. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live; index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public Web site or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of Introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at [www.spdji.com](http://www.spdji.com) for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities (or fixed income, or commodities) markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

Additionally, it is not possible to invest directly in an Index. The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. For example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US\$ 10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US\$ 1,650), the net return would be 8.35% (or US\$ 8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US\$ 5,375, and a cumulative net return of 27.2% (or US\$ 27,200).

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