

CONTRIBUTOR

Jason Giordano
Director
Fixed Income Indices
jason.giordano@spglobal.com

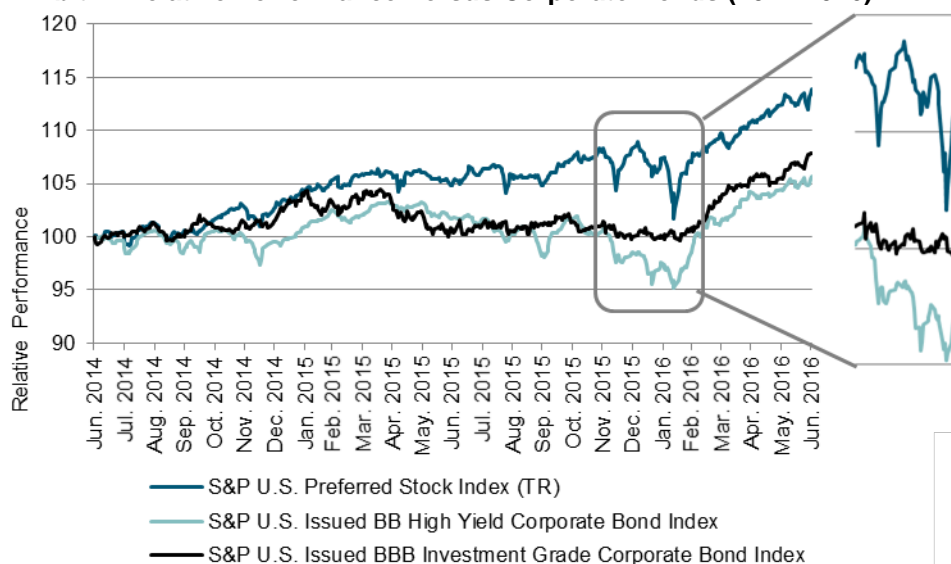
FIXED INCOME 101

U.S. Preferred Stock

Preferred stock is a hybrid security that reflects characteristics of both stocks and bonds. Typically, the dividends paid by preferred shares generate higher yields than common stock and investment-grade corporate bonds (see Exhibit 1). Therefore, preferred shares could serve as a potential source of significant current income.¹ 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. In Exhibit 1, the highlighted period from June 2014 to June 2016 reflects the turmoil in the high-yield markets and interest rate hike during that time. Note the interest rate sensitivity (similar to debt) and volatility (similar to equity) of the S&P U.S. Preferred Stock Index (TR).

Typically, the dividends paid by preferred shares generate higher yields than common stock and investment-grade corporate bonds.

Exhibit 1: Relative Performance Versus Corporate Bonds (2014-2016)



Source: S&P Dow Jones Indices LLC. Data from June 2014 to June 2016. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

In low-interest-rate environments with narrow credit spreads, preferred stocks behave similarly to bonds. In periods of high volatility, they behave more like stocks. When used as a complement to traditional fixed income asset classes, preferred securities may provide an opportunity for enhanced total return, while potentially reducing overall volatility.

In the capital structure, preferred shares are subordinate to bank loans and senior corporate bonds, but they are senior to common stock. In the event

¹ Many preferred shares are qualified; additional tax benefits could exist.

EDUCATION

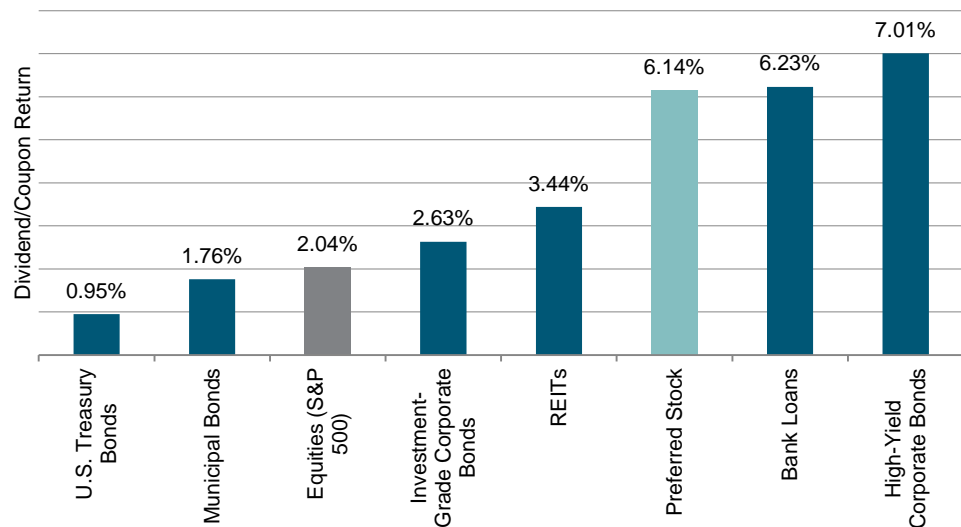
that a company files for bankruptcy and its assets are liquidated, preferred shareholders get paid after bond holders and before common stock holders. This leads to higher recovery rates than common stock and lower default rates compared with high-yield bonds.

Unlike common stock dividends, preferred dividends are cumulative, meaning that dividend payments accrue even if not paid when scheduled. If a firm suspends paying dividends, it must pay preferred shareholders in full before paying any dividends to common shareholders.

The current interest rate environment has made it challenging to generate sufficient income from a portfolio of core bonds. Identifying various yield opportunities across asset classes not only diversifies risk, but it also helps diversify sources of income generation. The yield of preferred stock as of June 30, 2016, was slightly lower than yields offered by bank loans and high-yield corporate bonds; however, on a risk-adjusted basis, preferred stock returns were significantly more favorable (see Exhibit 2).

Unlike common stock dividends, preferred dividends are cumulative.

Exhibit 2: Diversification of Income

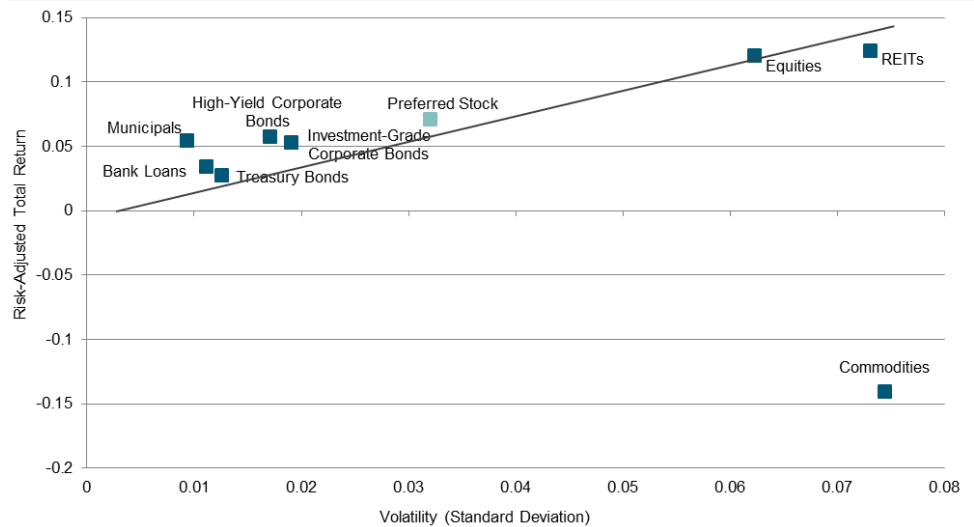


Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Looking at the five-year period from June 2011 to June 2016, preferred stock as an asset class offered high annualized returns with considerably less volatility than equities (as represented by the S&P 500®). Compared with investment-grade and high-yield corporate bonds, preferred stock has been slightly more volatile (see Exhibit 3), but the asset class has compensated for the additional risk with higher returns. The hybrid nature of preferred stock could provide upside opportunities during risk-on market periods, while the fixed dividend payments could help buoy stable returns and mitigate volatility during risk-off environments.

Preferred securities experienced negative correlations to U.S. Treasuries and commodities over the period studied.

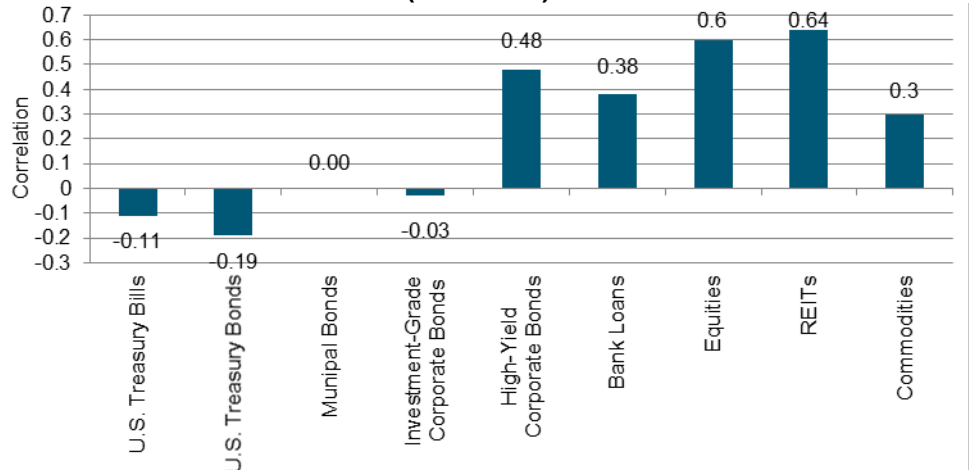
Exhibit 3: Volatility of Total Returns (2011-2016)



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Looking at the same five-year period, preferred stock had low correlations with most core asset classes (see Exhibit 4), which can provide potential portfolio-diversification and risk-reduction benefits. Preferred securities experienced negative correlations to U.S. Treasuries and investment-grade corporate bonds over the period studied. Among the other fixed income classes, high-yield corporate bonds had the strongest correlation, at 0.48, while municipal bonds exhibited no correlation. REITs had the highest correlation of any asset class over the period, however at only 0.64. Somewhat surprisingly, preferred stocks only experienced a 0.60 correlation with equities—further evidence of the strong diversification benefits that preferred stock could offer.

Exhibit 4: Five-Year Correlation (2011-2016)

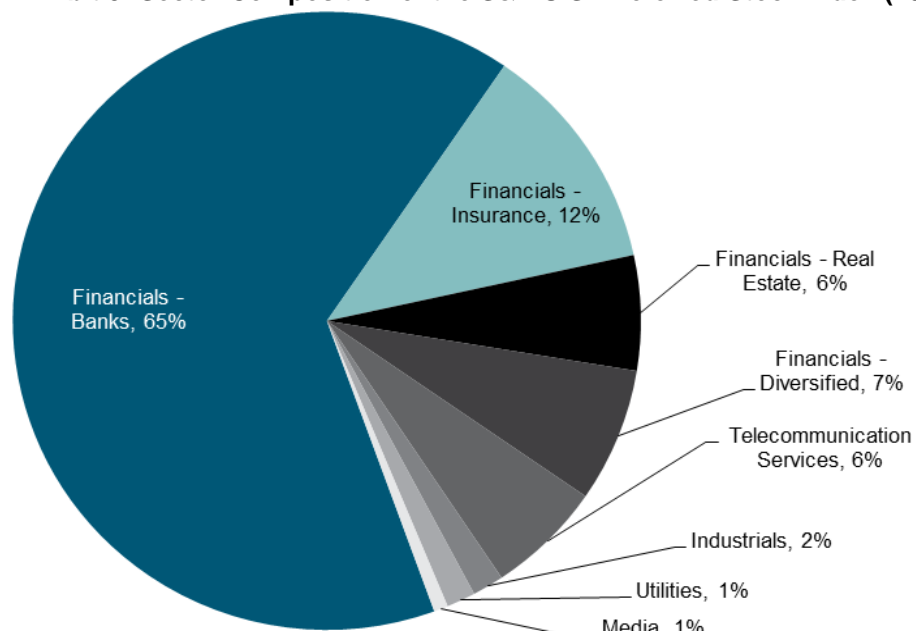


Source: S&P Dow Jones Indices LLC. Data as of June 30, 2015. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding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

Financial institutions issue preferred stock because the capital that is raised is classified as equity on the balance sheet and, therefore, does not contribute to the firm's financial leverage.

Finally, financial institutions issue preferred stock because the capital that is raised is classified as equity on the balance sheet and, therefore, does not contribute to the firm's financial leverage. However, regulatory changes implemented after the financial crisis in 2008 have forced banks and insurance companies to hold more capital to offset potentially negative systemic events. The balance sheets of domestic banks and insurance firms are stronger and offer more liquidity than before the crisis. As a result, many of the downside risks that existed previously have been mitigated. As shown, the sector composition of the S&P U.S. Preferred Stock Index contains heavy exposure to the financial industry. Approximately 84% of the index is in the banks, insurance, and real estate sub-sectors.

Exhibit 5: Sector Composition of the S&P U.S. Preferred Stock Index (2016)



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. Chart is provided for illustrative purposes.

CONCLUSION

In the current interest rate environment, asset class diversification has become increasingly important. Preferred stock is an effective portfolio construction tool given its low correlation to both common stocks and fixed income. An allocation to preferred securities may provide an opportunity for enhanced total returns while potentially reducing overall volatility.

PERFORMANCE DISCLOSURE

The S&P U.S. Issued BBB Investment Grade Corporate Bond Index and the S&P U.S. Issued BB High Yield Corporate Bond Index were launched July 22, 2013. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. Complete index methodology details are available at www.spdji.com.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. 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 website 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 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, 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.

The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices LLC 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. As a simple 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).

GENERAL DISCLAIMER

Copyright © 2016 by S&P Dow Jones Indices LLC, a part of S&P Global. All rights reserved. Standard & Poor's®, S&P 500® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"), a subsidiary of S&P Global. Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). Trademarks have been licensed to S&P Dow Jones Indices LLC. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, Dow Jones, S&P or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. All information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties. Past performance of an index is not a guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other vehicle. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Dow Jones Indices keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P Dow Jones Indices may have information that is not available to other business units. S&P Dow Jones Indices has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.