GLOBAL X
by Mirae Asset

Global X Income Outlook

December 2021

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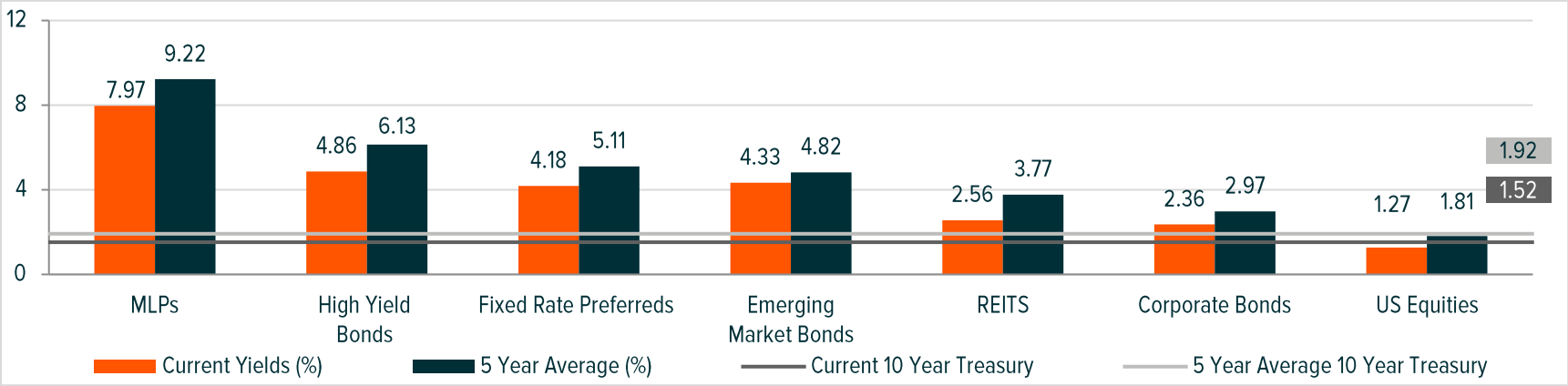
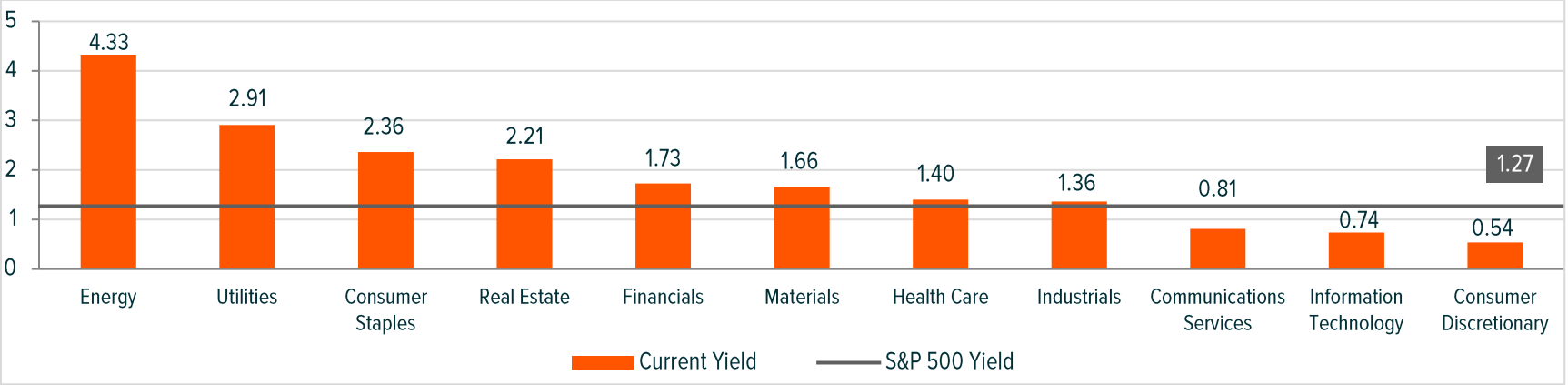
YIELD BY ASSET CLASS [1] (%)

Source: Bloomberg and Federal Reserve as of 12/31/2021



S&P 500 SECTOR YIELD (%)

Source: Bloomberg as of 12/31/2021



(1) Asset class representations are as follows, MLPs, S&P MLP Index; High Yield Bonds, Bloomberg US Corporate High Yield Total Return Index; Emerging Market (EM) Bonds, Bloomberg EM USD Aggregate Total Return Index; Corporate Bonds, Bloomberg US Corporate Total Return Index; REITs, FTSE NAREIT All Equity REITS Index; Equities, S&P 500 Index; and Preferreds, ICE BofA Fixed Rate Preferred Securities Index.

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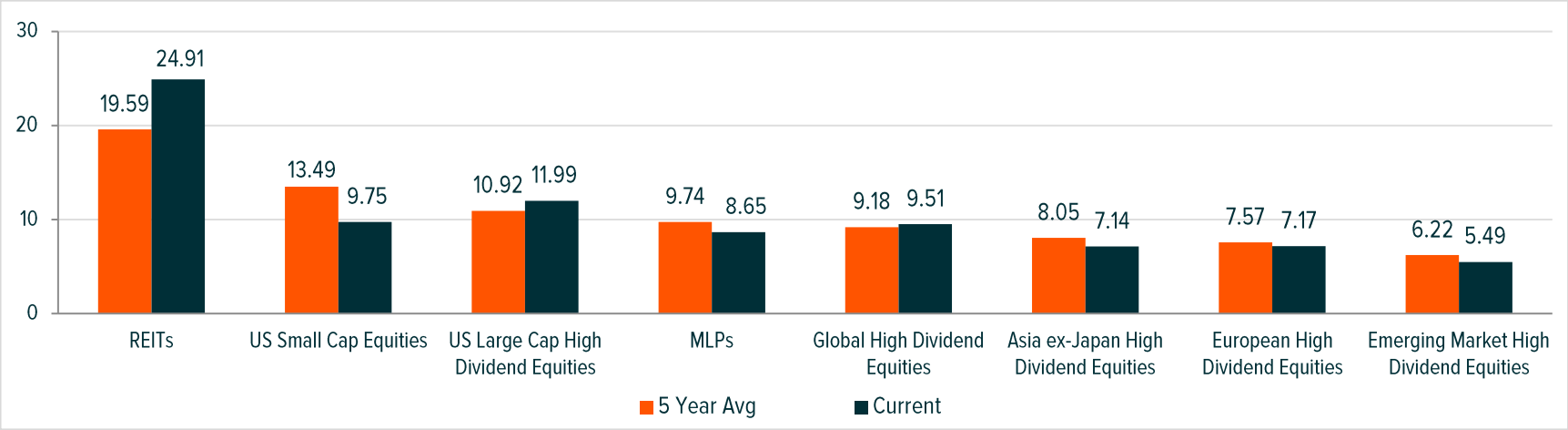
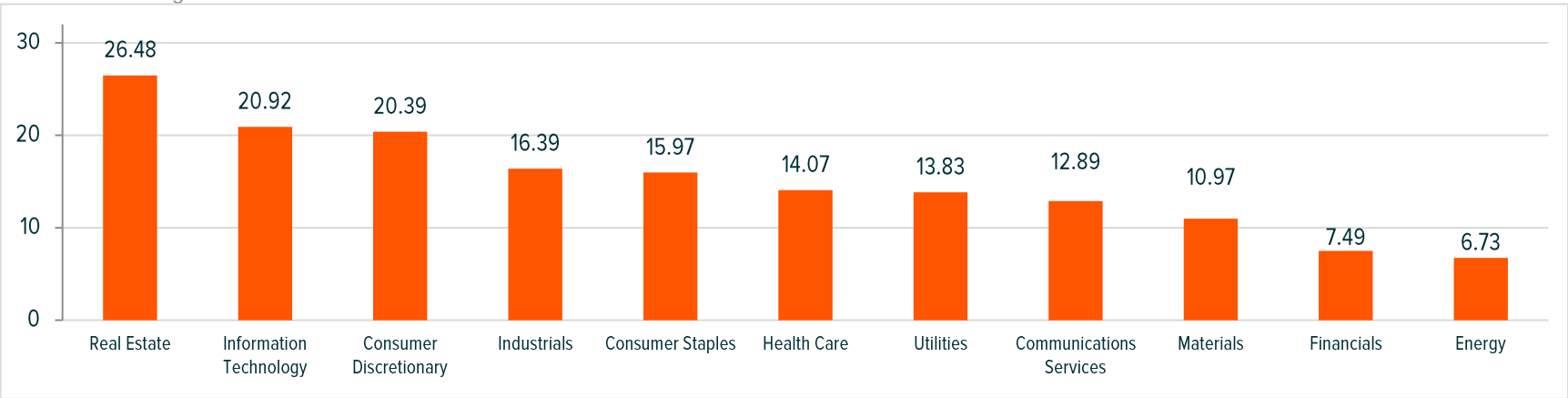
EQUITY VALUATIONS (EV/EBITDA) – 5 YEAR AVERAGE [2]

Source: Bloomberg as of 12/31/2021



S&P 500 SECTOR VALUATIONS (EV/EBITDA)

Source: Bloomberg as of 12/31/2021



(2) Asset class representations are as follows, MLPs, S&P MLP Index; US Small Cap Equities, Russell 2000 Index; Emerging Market High Dividend Equities, MSCI Emerging Markets High Dividend Yield Index; Asia ex-Japan High Dividend Equities, MSCI AC Asia ex Japan High Dividend Yield Index; REITs, FTSE NAREIT All Equity REITS Index; US Large Cap High Dividend Equities, MSCI USA High Dividend Yield Index; and European High Dividend Equities, MSCI Europe High Dividend Yield Index; Global High Dividend Equities, MSCI ACWI High Dividend Yield Index.

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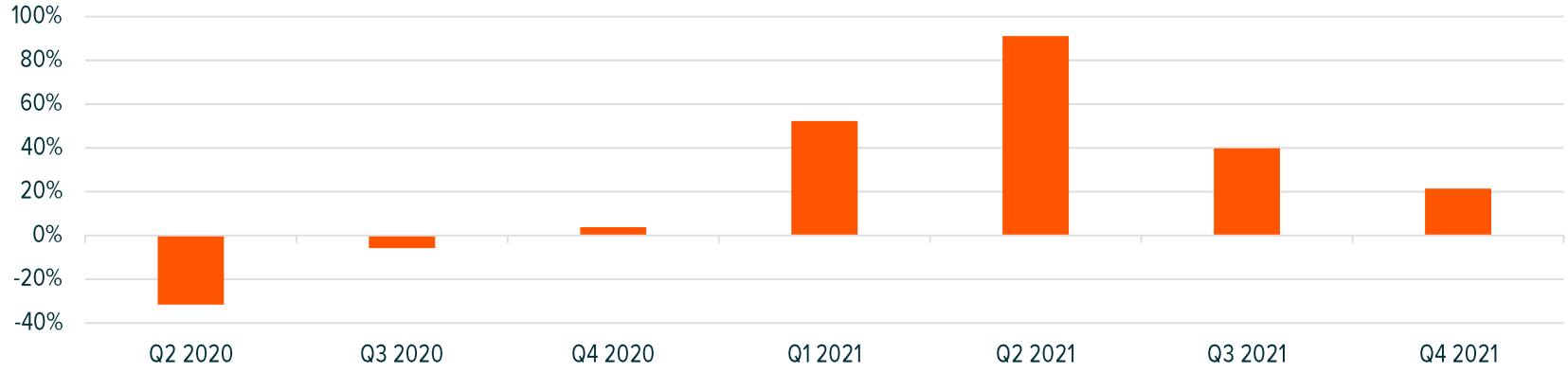
S&P 500 Earnings Growth

Source: Source: FactSet Earnings Insight. Data as of 12/31/21. Measured by S&P 500 Index, Forward Price to Earnings Ratio.



S&P 500 Forward P/E Multiple

Source: Bloomberg. Data as from 6/30/2020 to 12/31/21.

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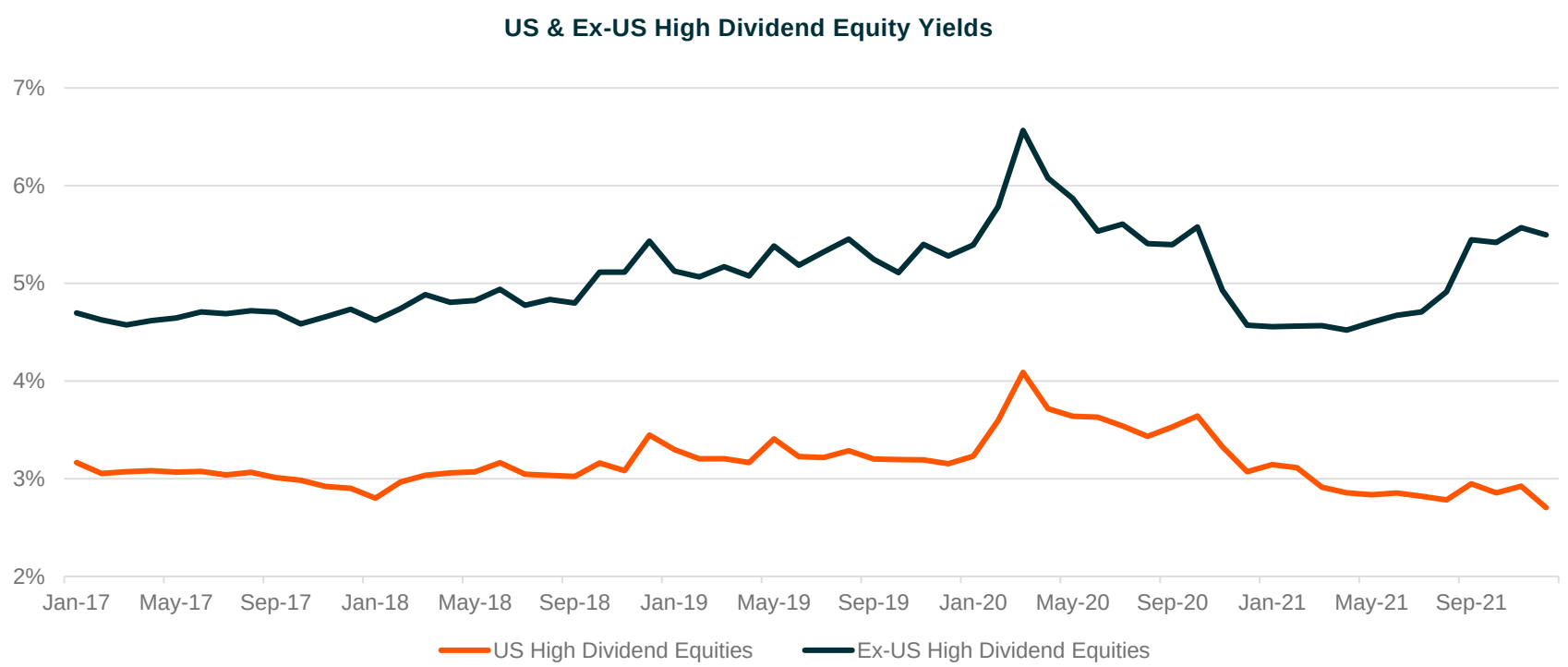
Dividend Yields by US & Ex-US High Dividend Equities[3]

Source: Bloomberg as of 12/31/2021

International high dividend equities offer meaningful yield spreads compared to their US counterparts. The slower international COVID-19 recovery and the underperformance of value stocks in Q4 likely kept spreads wide, but regional opportunities in international equities exist for income investors in Europe and Asia.



(3) Asset class representations are as follows, US High Dividend Equities, MSCI USA High Dividend Yield Index; Ex US High Dividend Equities, MSCI ACWI Ex USA High Dividend Yield Gross Total Return USD Index

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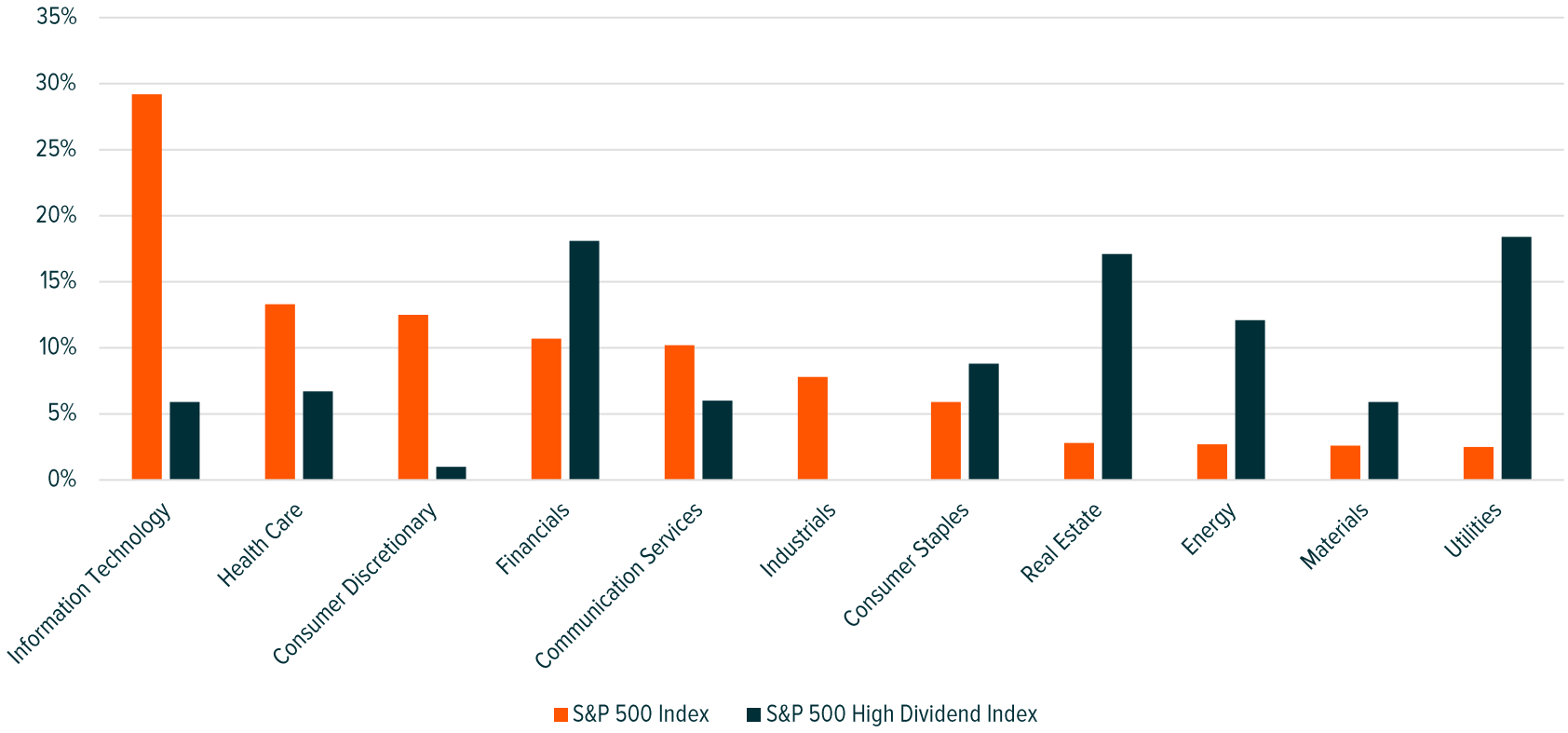
S&P 500 vs. S&P 500 High Dividend Index Sector Weightings

Source: S&P Global. Data as of 12/31/21.

Broader baskets of dividend paying stocks could be an attractive option for investors. Dividend paying strategies are often overweight value sectors like Financials, Energy, and Real Estate compared to broad market indices.



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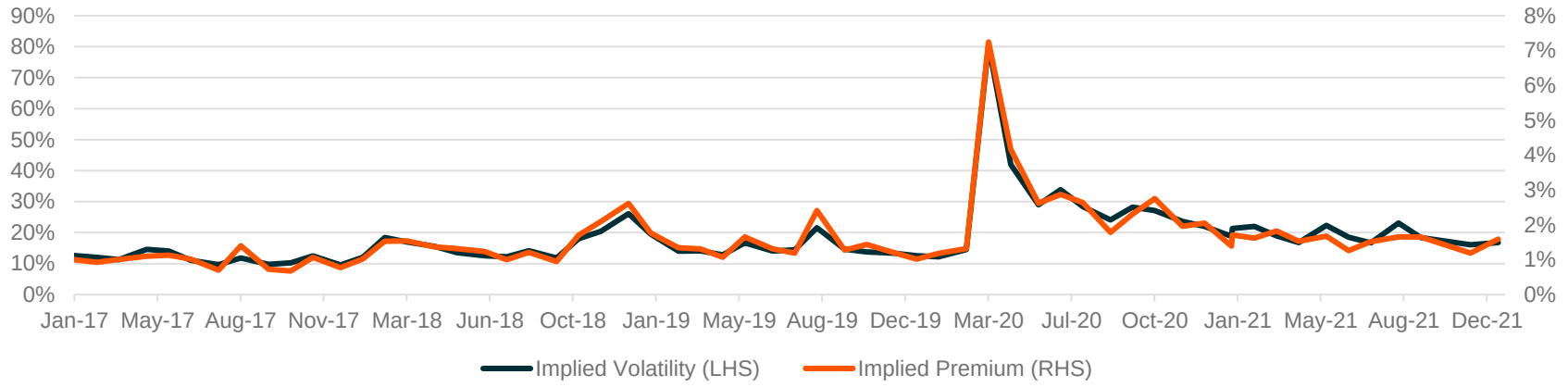
S&P 500 IMPLIED VOLATILITY VS IMPLIED 1-MONTH AT-THE-MONEY-OPTION PREMIUM

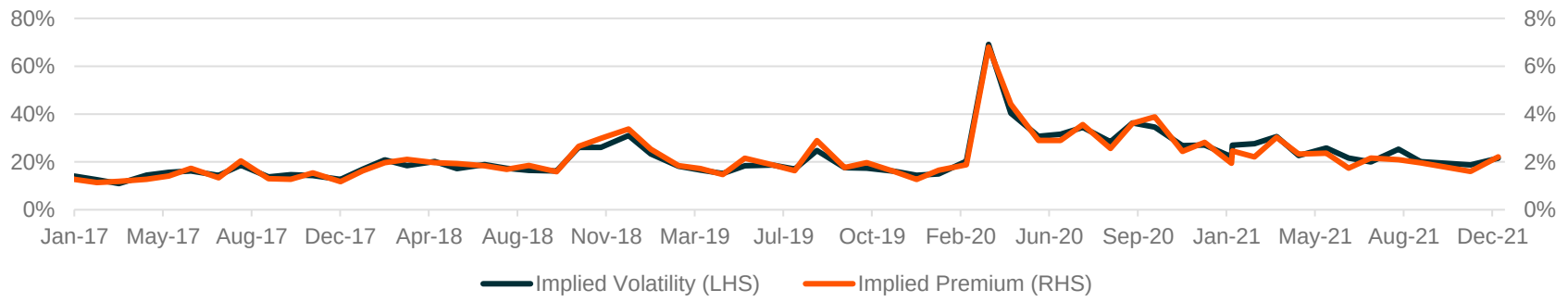
Source: Bloomberg & CBOE as of 12/31/2021. Premiums measured by Black Scholes model for an S&P 500 Index Option with 1-Month At-The-Money Vanilla European Call Option sold using standard index option dates of third Thursday closeout and third Friday open.

The COVID-19 pandemic drove volatility on major equity indices up, and options premiums stayed elevated with it. Higher implied volatility is positively correlated to higher options premiums. Implied volatility today remains higher than pre-pandemic levels for indexes like the Nasdaq 100 and Russell 2000.



NASDAQ 100 IMPLIED VOLATILITY VS IMPLIED 1-MONTH AT-THE-MONEY-OPTION PREMIUM

Source: Bloomberg & CBOE as of 12/31/2021. Premiums measured by Black Scholes model for a Nasdaq 100 Index Option with 1-Month At-The-Money Vanilla European Call Option sold using standard index option dates of third Thursday closeout and third Friday open.



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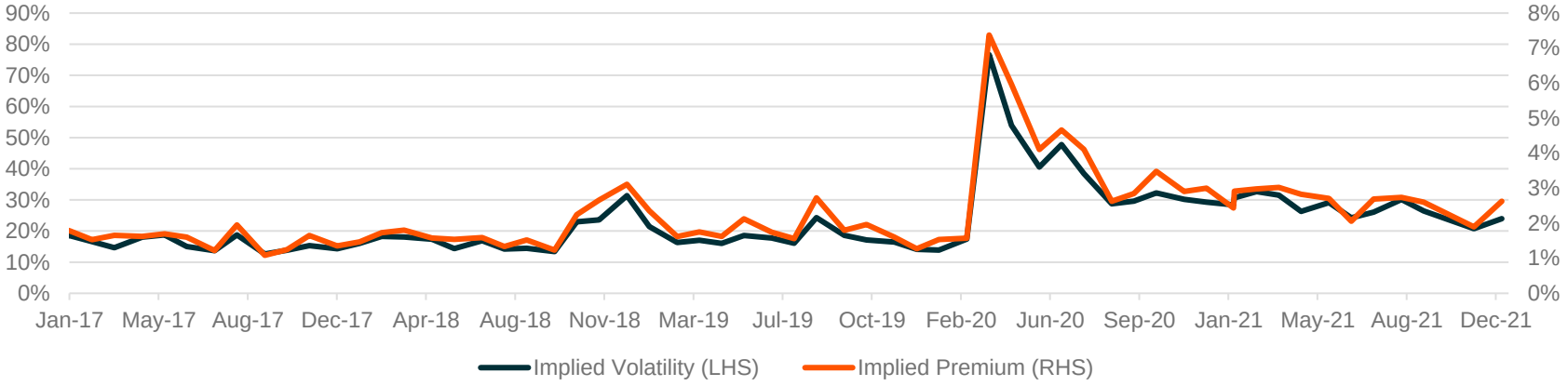
RUSSELL 2000 IMPLIED VOLATILITY VS IMPLIED 1-MONTH AT-THE-MONEY-OPTION PREMIUM

Source: Bloomberg & CBOE as of 12/31/2021. Premiums measured by Black Scholes model for a Russell 2000 Index Option with 1-Month At-The-Money Vanilla European Call Option sold using standard index option dates of third Thursday closeout and third Friday open.



INDEX CHARACTERISTICS

Source: Bloomberg as of 12/31/2021

Index	Dividend Yield (%)	Top 3 Sectors and Weights (%)
S&P 500 (SPX)	1.27%	1. Information Technology (29.17) 2. Health Care (13.29) 3. Consumer Discretionary (12.54)
NASDAQ 100 (NDX)	0.62%	1. Information Technology (50.97) 2. Communication Services (18.38) 3. Consumer Discretionary (16.13)
Russell 2000 (RUT)	1.15%	1. Health Care (18.02) 2. Financials (15.99) 3. Industrials (15.17)

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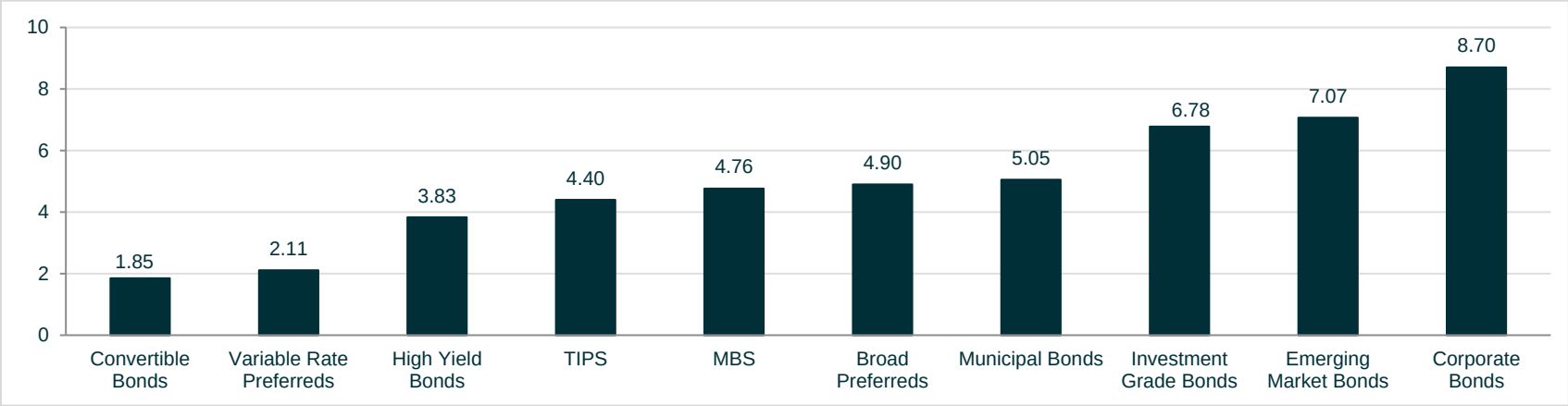
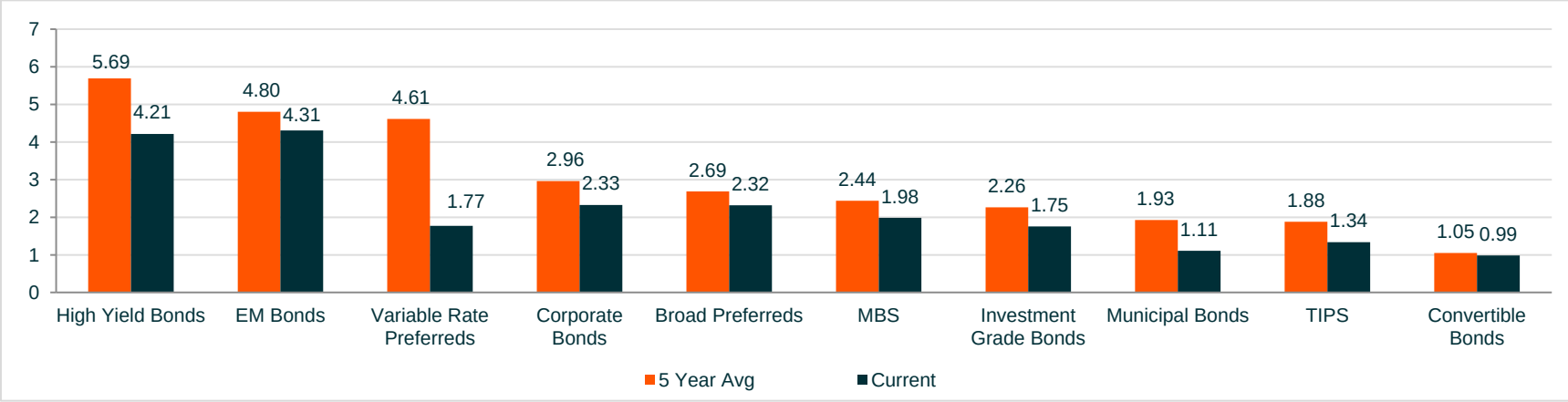
DURATION BY FIXED INCOME ASSET CLASS [4] (Years)

Source: Bloomberg as of 12/31/2021



FIXED INCOME YIELDS (YIELD TO WORST) – 5 YEAR AVERAGE [4]

Source: Bloomberg as of 12/31/2021



(4) Asset class representations are as follows, Convertible Bonds, Bloomberg US Convertible Bond Index; Variable Rate Preferreds, ICE US Variable Rate Preferred Securities Index; MBS, Bloomberg US MBS Index; High Yield Bonds, Bloomberg US Corporate High Yield Total Return Index; Broad Preferreds, ICE BofA Diversified Core US Preferred Securities Index; Municipal Bonds; Bloomberg Municipal Bond Index; Investment Grade Bonds, Bloomberg US Aggregate Bond Index; Emerging Market (EM) Bonds, Bloomberg EM USD Aggregate Total Return Index; TIPS, Bloomberg US Treasury Inflation Notes TR Index; Corporate Bonds, Bloomberg US Corporate Total Return Index

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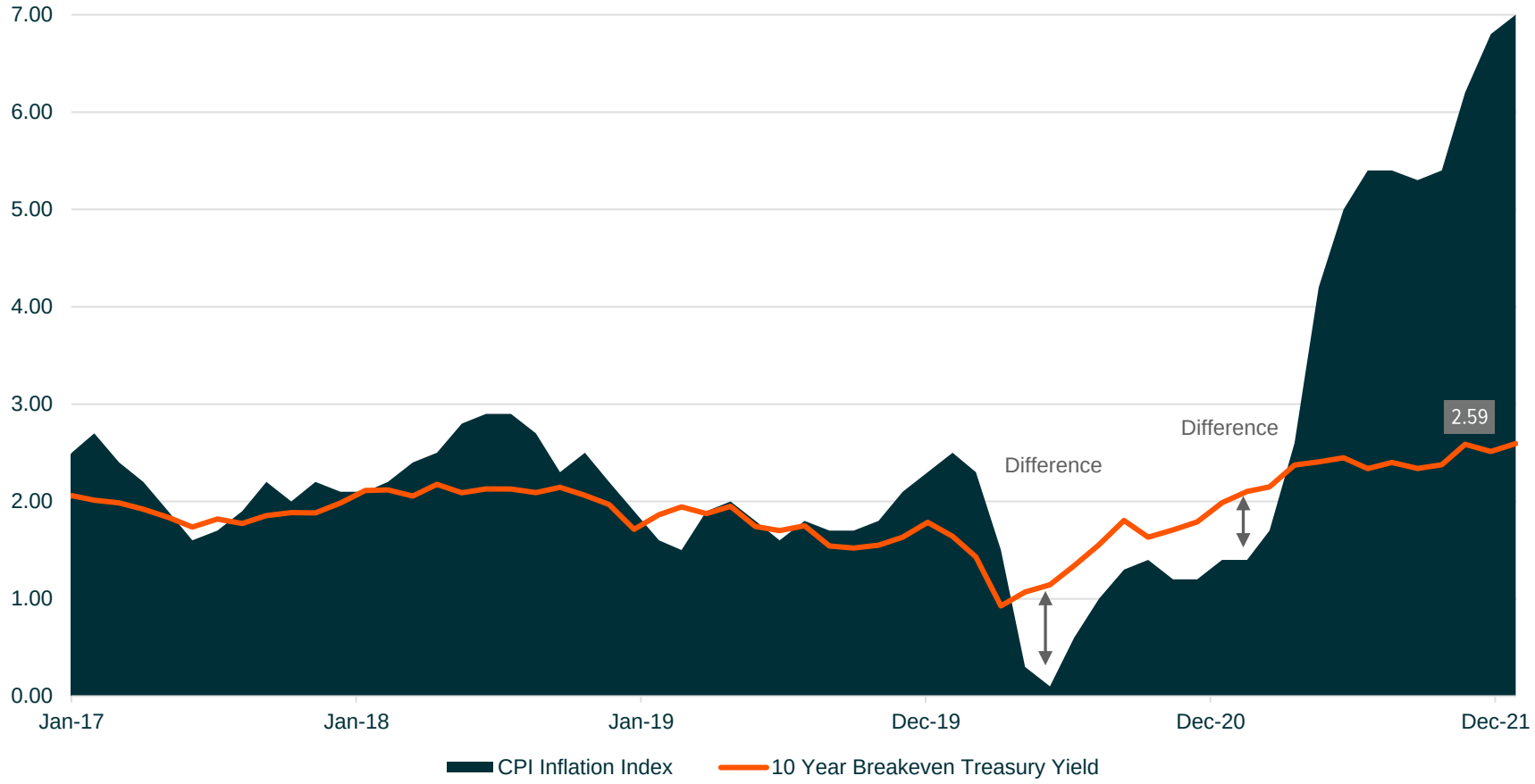
US 10-YEAR BREAKEVEN TO CONSUMER PRICE INDEX (%)

Source: Bloomberg as of 12/31/2021

Breakeven Treasury yields measure the market's inflation expectations based on the difference between nominal bond yields and inflation protected bond yields of the same maturity. Q4 CPI numbers were significantly higher due to supply chain and labor market issues.



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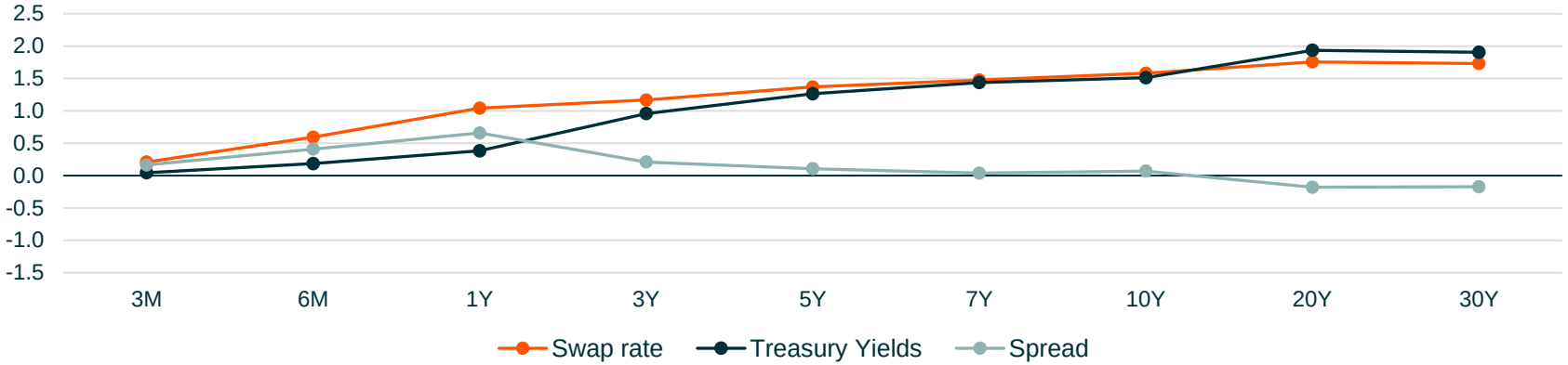
SWAP SPREAD TO TREASURY YIELDS

Source: Bloomberg as of 12/31/2021

Swap spreads are the difference between the fixed-rate payment on a swap and the yield on government bonds of the same maturity. Short and mid duration yields are expected to rise modestly, while long duration yields are forecasted to fall, implying a flattening of the yield curve.



CENTRAL BANKS POLICY RATES AND FUTURE PROJECTIONS

Source: Bloomberg as of 12/31/2021

Region		Implied Policy					Total Change (bps)				
	Rate	3M	6M	1Y	2Y	3Y	3M	6M	1Y	2Y	3Y
United States	0.13	0.29	0.51	0.88	1.46	1.56	0.16	0.38	0.75	1.33	1.43
Eurozone	-0.50	-0.49	-0.48	-0.37	-0.06	0.09	0.01	0.02	0.13	0.44	0.59
Switzerland	-0.75	-0.67	-0.64	-0.48	-0.13	0.02	0.08	0.11	0.27	0.62	0.77
United Kingdom	0.25	0.53	0.85	1.23	1.40	1.26	0.28	0.60	0.98	1.15	1.01
Australia	0.10	0.27	0.24	0.95	1.63	2.21	0.17	0.14	0.85	1.53	2.11
Japan	-0.02	-0.04	-0.04	-0.03	0.06	-0.04	-0.02	-0.02	-0.01	0.08	-0.02
China	2.20	2.22	2.24	2.30	2.48	2.72	0.02	0.04	0.10	0.28	0.52

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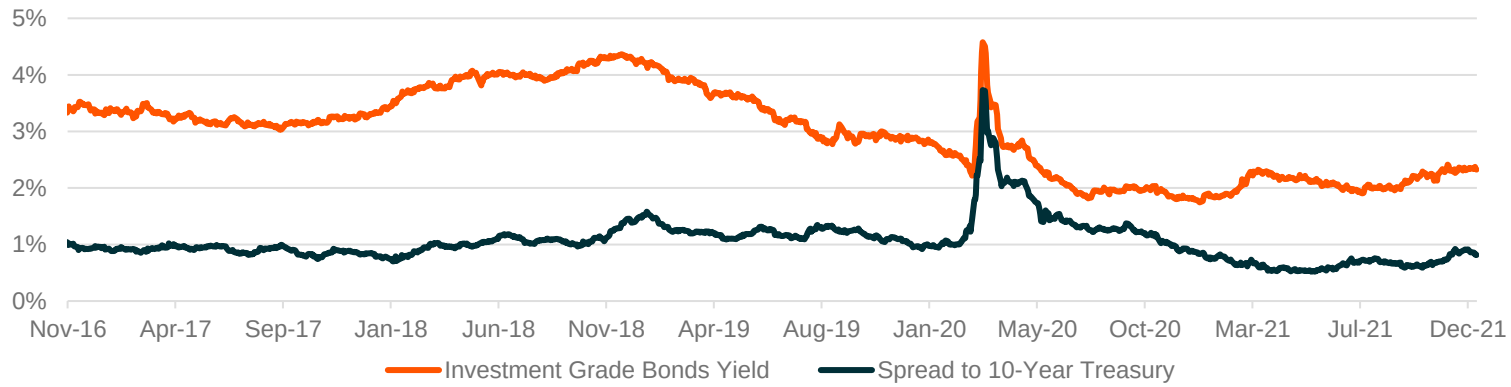
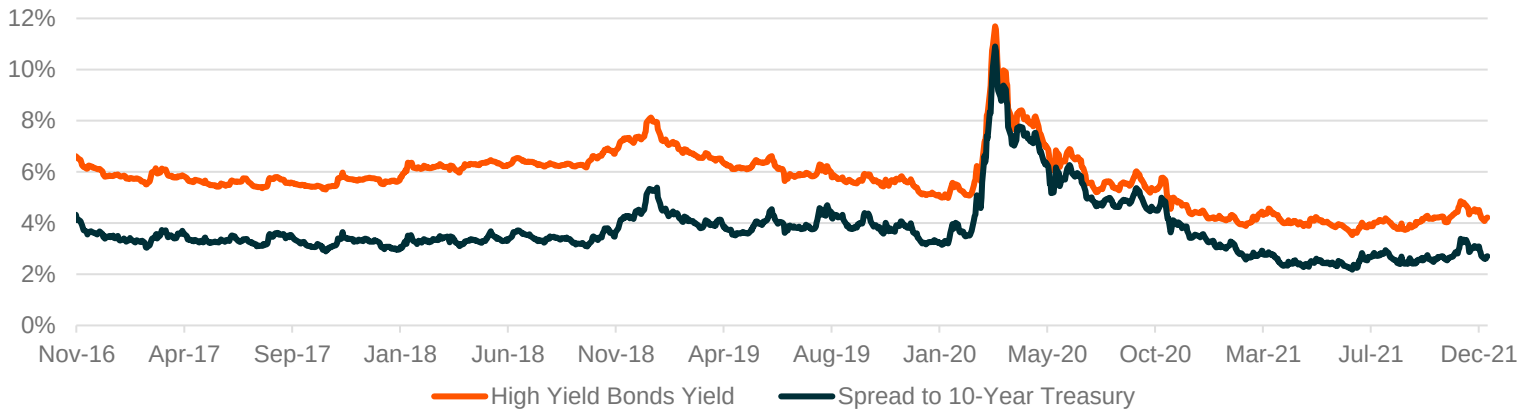
CREDIT SPREAD TO 10-YEAR TREASURY YIELD [5]

Source: Bloomberg as of 12/31/2021

Credit spreads have been tightening considerably after the initial COVID-19 induced spike. Supported by low interest rates and investor euphoria surrounding the re-opening economy, high yield spreads against the 10-year have remained low in Q4 2021.





(5) Asset class representations are as follows, High Yield Bonds, Bloomberg US Corporate High Yield Total Return Index; Investment Grade Bonds, Bloomberg US Corporate Total Return Index;10 Year Treasuries, United States Government Bond 10Y. Investment Grade and High Yield represented by Yield to Worst metric.

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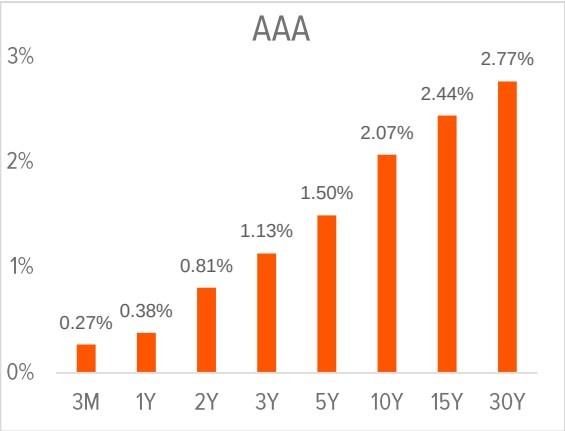
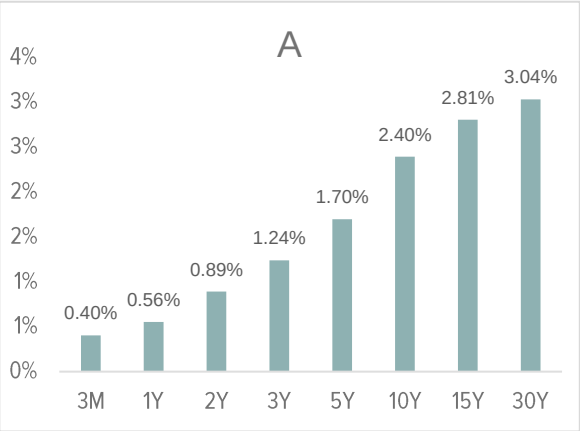
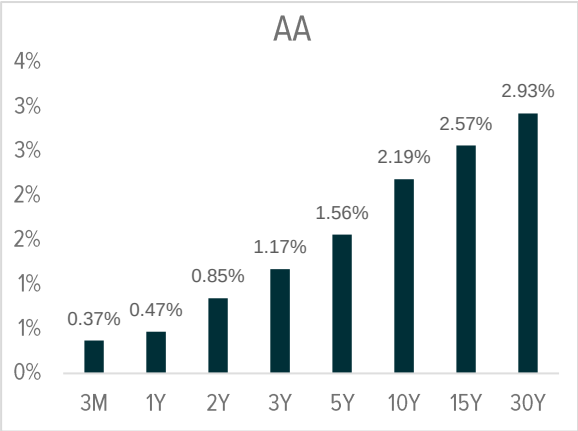
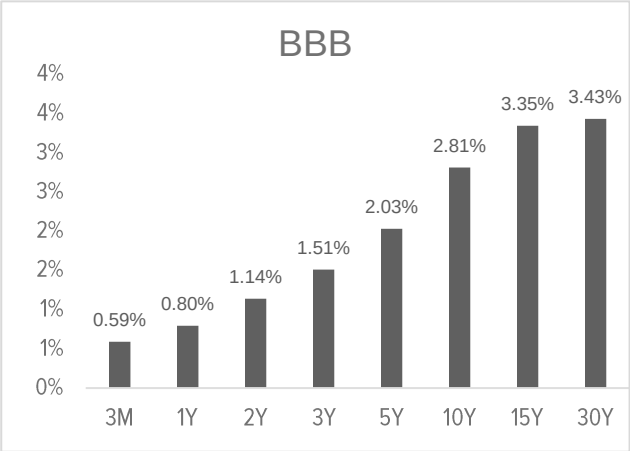
YIELD BY CREDIT-RATING COMPARISON [6]

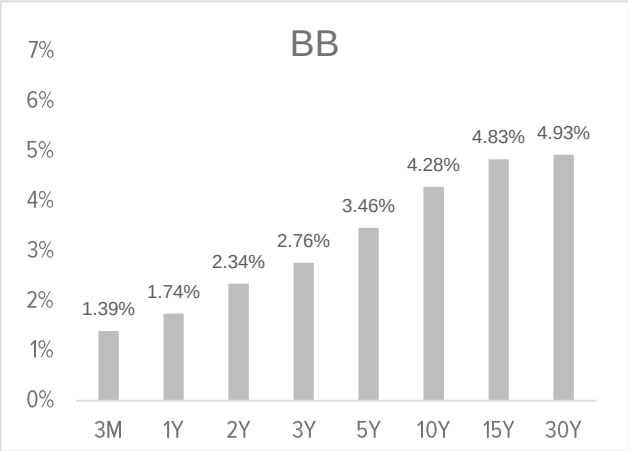
Source: Bloomberg as of 12/31/2021











(6) Ratings are based on the composite average of the three rating agencies that is Moody's, S&P, & Fitch and are measured on a scale that generally ranges from AAA (highest) to D (lowest). Yield rates are for US senior unsecured bonds denominated in USD with Bloomberg composite rating that have BVAL prices at the market close. BVAL prices are as per Bloomberg Valuation Service (BVAL) which is an evaluated pricing service for measuring, monitoring and managing the value of existing fixed income positions.

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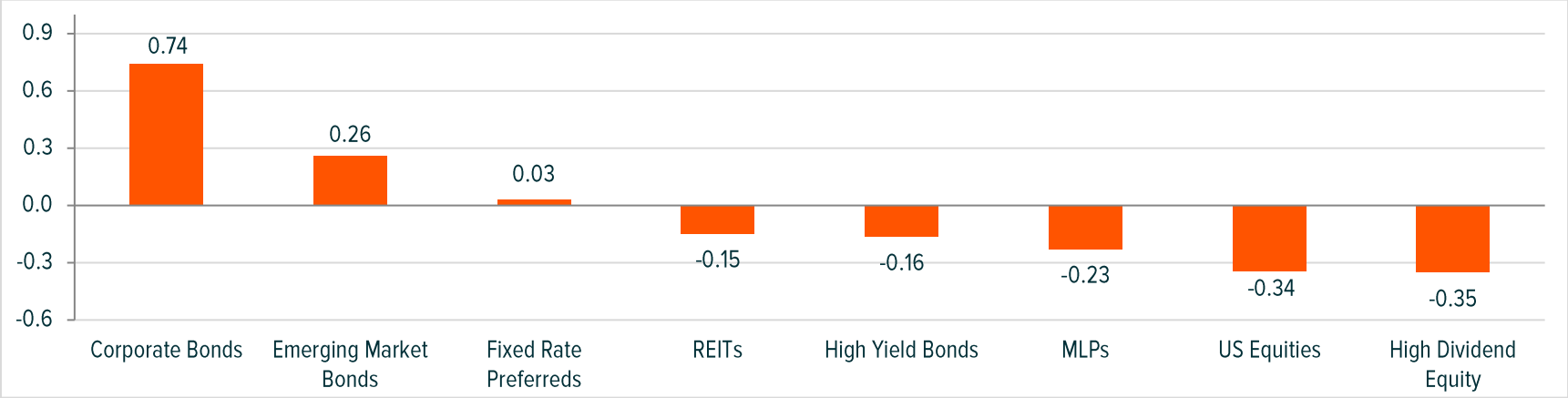
CORRELATION BY ASSET CLASS TO 7-10 YEAR TREASURY [7] (5-Year)

Source: Bloomberg as of 12/31/2021



ASSET CLASS CORRELATION [7] (5-Year)

Source: Bloomberg as of 12/31/2021

Asset Class	High Yield Bonds	Fixed Rate Preferreds	Emerging Market Bonds	REITS	Corporate Bonds	US Equities	High Dividend Equity	MLPs
High Yield Bonds	1.00	0.99	0.91	0.48	0.89	0.87	0.68	0.17
Fixed Rate Preferreds	0.99	1.00	0.96	0.37	0.94	0.77	0.59	0.05
Emerging Market Bonds	0.91	0.96	1.00	0.09	0.99	0.58	0.35	-0.22
REITS	0.48	0.37	0.09	1.00	0.03	0.77	0.97	0.95
Corporate Bonds	0.89	0.94	0.99	0.03	1.00	0.57	0.28	-0.30
US Equities	0.87	0.77	0.58	0.77	0.57	1.00	0.88	0.54
High Dividend Equity	0.68	0.59	0.35	0.97	0.28	0.88	1.00	0.83
MLPs	0.17	0.05	-0.22	0.95	-0.30	0.54	0.83	1.00

(7) Asset class representations are as follows, MLPs, S&P MLP Index; High Yield Bonds Bloomberg US Corporate High Yield Total Return Index; Emerging Market (EM) Bonds, Bloomberg EM USD Aggregate Total Return Index; Corporate Bonds, Bloomberg US Corporate Total Return Index; REITs, FTSE NAREIT All Equity REITS Index; High Dividend Equities, MSCI USA High Dividend Yield Index; US Equities, S&P 500 Index; 7 - 10 Year Treasuries, Bloomberg U.S. Treasury: 7-10 Year Index; and Preferreds, ICE BofA Fixed Rate Preferred Securities Index.

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Offering solutions for investors seeking to increase or diversify the yield potential of their portfolio, the Income family offers dividend strategies – including our SuperDividend® ETFs – as well as products targeting MLPs and renewable energy, preferreds, covered calls, Risk Managed Income, and our Emerging Market Bonds ETFs.

Dividend

SDIV	SuperDividend® ETF
DIV	SuperDividend® U.S. ETF
SRET	SuperDividend® REIT ETF
SDEM	MSCI SuperDividend® Emerging Markets ETF
ALTY	Alternative Income ETF
EFAS	MSCI SuperDividend® EAFE ETF
QDIV	S&P 500® Quality Dividend ETF

Covered Call

QYLD	Nasdaq 100 Covered Call ETF
XYLD	S&P 500 Covered Call ETF
RYLD	Russell 2000 Covered Call ETF
QYLG	S&P 500 Covered Call & Growth ETF
XYLG	Nasdaq 100 Covered Call & Growth ETF

MLPs & Energy

MLPA	MLP ETF
MLPX	MLP & Energy Infrastructure ETF

Preferreds

SPFF	SuperIncome™ Preferred ETF
PFFD	U.S. Preferred ETF
PFFV	Variable Rate Preferred ETF

Risk Managed Income

QRMI	Nasdaq 100 Risk Managed Income ETF
XRMI	S&P 500 Risk Managed Income ETF

Fixed Income

EMBD	Emerging Markets Bonds ETF

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Definitions

For more information on high income strategies, please visit: www.globalxetfs.com/income-etfs

S&P MLP Index provides investors with exposure to the leading partnerships that trade on the NYSE and NASDAQ. The index includes both master limited partnerships (MLPs) and publicly traded limited liability companies (LLCs), which have a similar legal structure to MLPs and share the same tax benefits.

Bloomberg US Corporate High Yield Total Return Index measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on the indices' EM country definition, are excluded.

Bloomberg EM USD Aggregate Total Return Index is a flagship hard currency Emerging Markets debt benchmark that includes fixed and floating-rate USD dollar-denominated debt issued from sovereign, quasi-sovereign, and corporate EM issuers.

FTSE NAREIT All Equity REITS Index is a free float adjusted market capitalization weighted index that includes all tax qualified equity REITs listed in the NYSE, AMEX, and NASDAQ National Market.

The Bloomberg US Corporate Total Return Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

MSCI USA High Dividend Yield Index is based on the MSCI USA Index, its parent index, and includes large and mid cap stocks. The index is designed to reflect the performance of equities in the parent index (excluding REITs) with higher dividend income and quality characteristics than average dividend yields that are both sustainable and persistent. The index also applies quality screens and reviews 12-month past performance to omit stocks with potentially deteriorating fundamentals that could force them to cut or reduce dividends.

S&P 500 Index tracks the performance of 500 leading U.S. stocks and captures approximately 80% coverage of available U.S. market capitalization. It is widely regarded as the best single gauge of large-cap U.S. equities.

ICE BofA Fixed Rate Preferred Securities Index tracks the performance of fixed-rate U.S. dollar-denominated preferred securities issued in the U.S. domestic market.

MSCI ACWI Index captures large and mid cap representation across 23 Developed Markets (DM) and 25 Emerging Markets (EM) countries. The index covers approximately 85% of the global investable equity opportunity set. DM countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the UK and the US. EM countries include: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The Bloomberg US Treasury: 7-10 Year Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury with 7-9.9999 years to maturity.

At-The-Money (ATM) is when an option's strike price is equal to the current market price of the underlying security.

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Definitions Continued

Correlation is a measure that shows how two securities move in relation to each other. A correlation of 1 implies that the securities will exhibit the same price movements. A correlation of 0 means the securities demonstrate completely unrelated price movements.

Dividend Yield is a financial ratio that measures the quantum of cash dividends paid out to shareholders relative to the market value per share.

Dividend Growth rate is the annualized percentage rate of growth that a particular stock's dividend undergoes over a period of time.

Return on Equity is the amount of net income returned as a percentage of shareholders equity. It measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Price to Earnings is a ratio for valuing a company that measures its current share price relative to its per-share earnings

Forward Price to Earnings (P/E): Represents the price of a share of a security divided by its per share expected earnings. It is used to determine whether a stock is cheap or expensive.

Price to Earnings (P/E) Multiple: Multiple used for valuating a company that measures its current share price by its per share expected earnings.

Dividend Coverage is the ratio of company's earnings (net income) over the dividend paid to shareholders, calculated as net profit or loss attributable to ordinary shareholders by total ordinary dividend.

Earnings Growth is the percentage change in a firm's earnings per share (EPS) in a period, as compared with the same period from the previous year

Leverage (Debt to EBITDA) ratio is a measurement of leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its EBITDA. EBITDA is the earnings before interest, taxes, depreciation, and amortization.

US Composite AAA BVAL yield rates for US senior unsecured bonds denominated in USD with Bloomberg composite rating AAA that have BVAL prices at the market close.

US Composite AA BVAL yield rates for US senior unsecured bonds denominated in USD with Bloomberg composite rating AA that have BVAL prices at the market close.

US Composite A BVAL yield rates for US senior unsecured bonds denominated in USD with Bloomberg composite rating A that have BVAL prices at the market close.

US Composite BBB BVAL yield rates for US senior unsecured bonds denominated in USD with Bloomberg composite rating BBB that have BVAL prices at the market close.

US Composite BB BVAL yield rates for US senior unsecured bonds denominated in USD with Bloomberg composite rating BB that have BVAL prices at the market close.

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Risk Information

Carefully consider the fund's investment objectives, risk factors, charges, and expenses before investing. This and additional information can be found in the fund's full or summary prospectus, which may be obtained by calling (1.888.493.8631), or by visiting globalxetfs.com. Read the prospectus carefully before investing.

Investing involves risk, including possible loss of principal. International investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. Investments in securities of MLPs involve risk that differ from investments in common stock including risks related to limited control and limited rights to vote on matters affecting the MLP. MLP common units and other equity securities can be affected by macro-economic and other factors affecting the stock market in general, expectations of interest rates, investor sentiment towards MLPs or the energy sector, changes in a particular issuer's financial condition, or unfavorable or unanticipated poor performance of a particular issuer (in the case of MLPs, generally measured in terms of distributable cash flow). Investments in the energy industry, entail significant risk and volatility.

High yielding stocks are often speculative, high-risk investments. These companies can be paying out more than they can support and may reduce their dividends or stop paying dividends at any time, which could have a material adverse effect on the stock price of these companies.

The Covered Call suite engages in options trading. An option is a contract sold by one party to another that gives the buyer the right, but not the obligation, to buy (call) or sell (put) a stock at an agreed upon price within a certain period or on a specific date. A covered call option involves holding a long position in a particular asset, in this case U.S. common equities, and writing a call option on that same asset with the goal of realizing additional income from the option premium. By selling covered call options, the funds limit their opportunity to profit from an increase in the price of the underlying index above the exercise price, but continue to bear the risk of a decline in the index. A liquid market may not exist for options held by the funds. While the funds receive premiums for writing the call options, the price they realize from the exercise of an option could be substantially below the indices current market price.

Bonds and bond funds will decrease in value as interest rates rise. High yield bonds involve greater risks of default or downgrade and are more volatile than investment grade securities, due to the speculative nature of their investments. In addition to the normal risks associated with investing, real estate and REIT investments are subject to changes in economic conditions, credit risk and interest rate fluctuations. Emerging markets involve heightened risks related to the same factors as well as increased volatility and lower trading volume. Preferred stock is subject to many of the risks associated with debt securities, including interest rate risk. In addition, preferred stock may not pay a dividend, an issuer may suspend payment of dividends on preferred stock at any time, and in certain situations an issuer may call or redeem its preferred stock or convert it to common stock.

Variable and Floating Rate Securities may have limits on the maximum increases in coupon rates and may lag behind changes in market rates. A downward adjustment in coupon rates may decrease the Fund's income as a result of its investment in variable or floating rate securities. Performance of companies in the Financials sector may be adversely impacted by many factors, including, among others, government regulations, economic conditions, credit rating downgrades, changes in interest rates, and decreased liquidity in credit markets.

EMBD is actively managed, which could increase its transaction costs (thereby lowering its performance) and could increase the amount of taxes you owe by generating short-term gains, which may be taxed at a higher rate.

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Risk Information Continued

U.S. Treasury securities are considered to be of high credit quality and are backed by the full faith and credit of the U.S. government. U.S. Treasury securities, if held to maturity, guarantee a return of principal while no other securities mentioned in this material offer such a guarantee.

Shares of ETFs are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Brokerage commissions will reduce returns. The information provided is not intended for trading purposes, and should not be considered investment advice.

Indices are unmanaged and do not include the effect of fees, expenses or sales charges. One cannot invest directly in an index. Past performance is not a guarantee of future results.

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GLOBAL X
by Mirae Asset

Thank you.