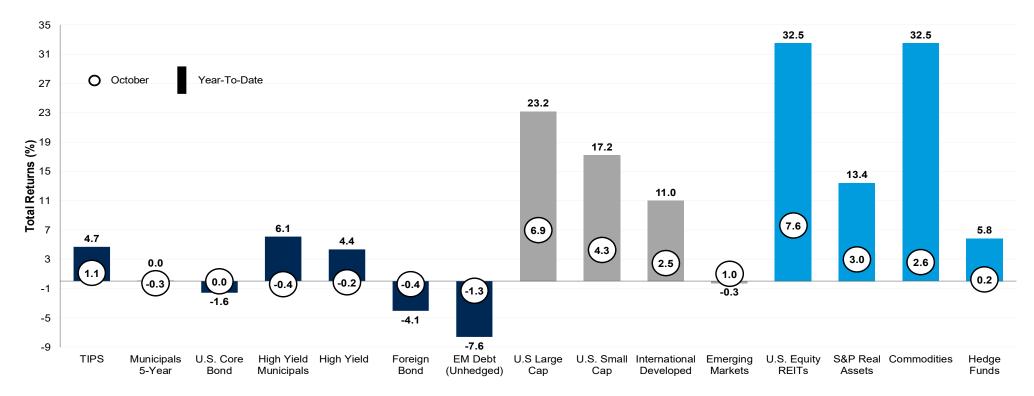


MARKET RECAP October 2021



Asset Class Performance



^{*}Hedge fund returns are lagged 1 month. Sources: FactSet, J.P. Morgan, Russell, MSCI, FTSE Russell, Alerian.

Fixed Income (October)

- + Rising inflation breakevens provided support to inflation-linked securities of all maturities.
- + Spreads continued to tighten for high yield corporates, offsetting the impact of rising rates.
- Increases in short-term rates in the US weighed on much of the market, while foreign and emerging markets were lower amid rising rates and geopolitical tensions.

Equity (October)

- + U.S. equities were driven higher by strong earnings growth, despite supply chain-related cost pressures. Markets broadly erased September's losses as volatility trended lower.
- International developed and emerging markets continued to lag their U.S. counterparts yet posted positive returns over the month.

Real Asset / Alternatives (October)

- + REITs continued their strong run year-to-date. Rental prices continue to move higher supporting the residential sector.
- + Commodities climbed higher, primarily driven by the energy sector.

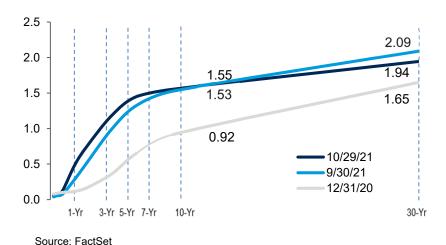
See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss.



Fixed Income Market Update

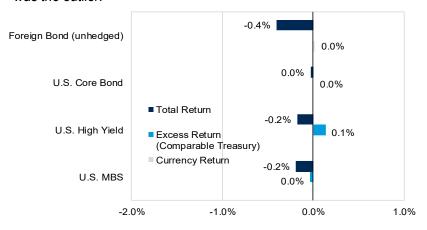
U.S. Treasury Yields Curve

Longer-term rates flattened while the short end of the curve steepened; the 10-year and 30-year fell 2bps and 15bps respectively.



Index Performance Attribution (October 2021)

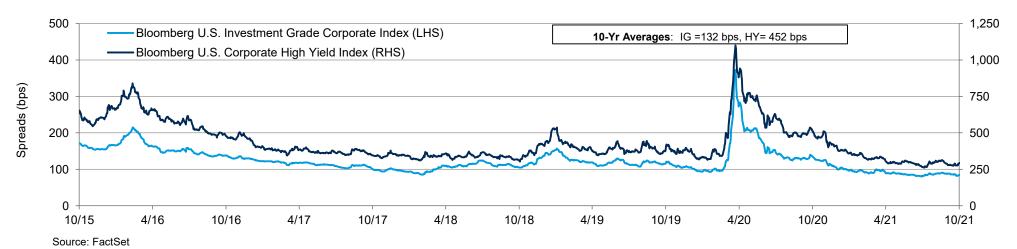
Rising short- and intermediate-term rates led to negative returns across the fixed income spectrum, while tightening spreads meant high yield was the outlier.



Source: FactSet

Credit Market Spreads – Trailing 5 Years

While high yield spreads closed 2bps tighter after an initial flare-up, investment grade spreads rose 4bps over the month.



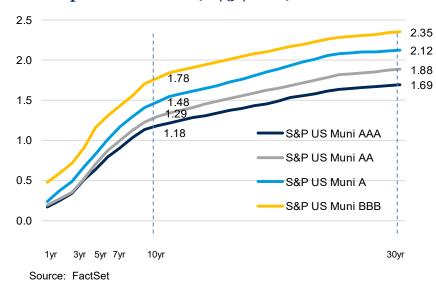
Past performance does not indicate future performance and there is a possibility of a loss.



Municipal Market Update

S&P U.S. Municipal AAA Yield Curves

U.S Municipal Yield Curves (10/31/2021)



Yield to Worst – Trailing 10 Years



Source: FactSet

Past performance does not indicate future performance and there is a possibility of a loss.



Equity Market Update

Market Capitalization and Style Performance (October 2021)

In October, large cap and growth beat small cap and value in all geographies, respectively. Performance was strongest in domestic markets, with international developed and emerging markets also in positive territory.

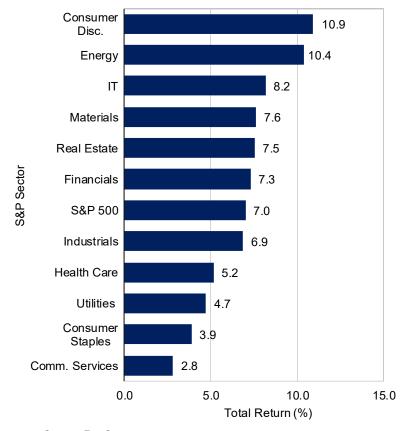
All Cap 6.8 Large Cap 6.9 Small Cap 4.3 U.S. Growth 8.4 Value 5.0 All Cap 2.5 Large Cap 2.7 International Small Cap 1.6 Developed Markets Growth 3.7 Value 2.2 All Cap 1.0 Large Cap 1.2 Small Cap 0.2 Emerging Markets Growth 1.7 Value 0.3 0.0 2.0 4.0 6.0 8.0 10.0 Total Return (%)

Source: FactSet

U.S. Equities – Returns by Sector (October 2021)

All S&P sectors generated positive returns over the month, while results were varied with consumer discretionary and energy being the big winners.

Consumer staples and communication services, though positive, fell behind.



Source: FactSet

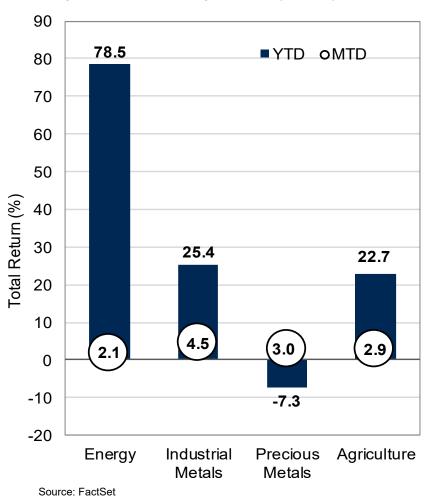
Past performance does not indicate future performance and there is a possibility of a loss.



Real Assets Market Update

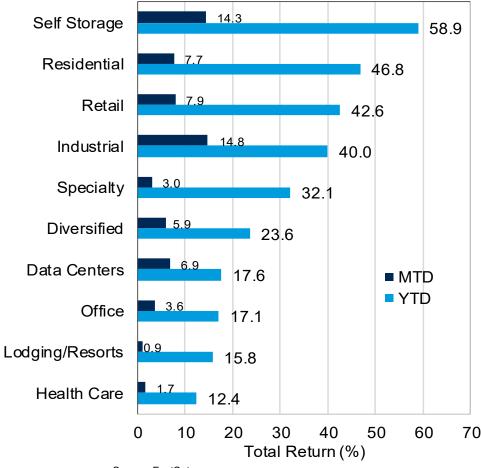
Real Assets Performance

A broad-based rally across real assets added to positive results for the year. Crude oil continued its upward trend, crossing \$80/barrel. Precious metals gained but remain in negative territory for the year.



REIT Sector Performance

REITs continue to be strong for the year. October saw some disparity between sectors: strength in self storage and industrial names contrasted with weakly positive results in lodging and health care sectors.



Source: FactSet

Past performance does not indicate future performance and there is a possibility of a loss.



Financials Markets Performance

Total return as of October 31, 2021 Periods greater than one year are annualized All returns are in U.S. dollar terms

Global Fixed Income Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg Barclays 1-3-Month T-Bill	0.0%	0.0%	0.0%	1.0%	1.1%	0.8%	0.6%	0.9%
Bloomberg Barclays U.S. TIPS	1.1%	4.7%	7.1%	8.4%	4.7%	3.9%	3.1%	4.5%
Bloomberg Barclays Municipal Bond (5 Year)	-0.3%	0.0%	1.0%	3.8%	2.4%	2.3%	2.6%	3.5%
Bloomberg Barclays High Yield Municipal Bond	-0.4%	6.1%	10.7%	7.7%	6.2%	6.0%	6.7%	5.2%
Bloomberg Barclays U.S. Aggregate	0.0%	-1.6%	-0.5%	5.6%	3.1%	3.1%	3.0%	4.1%
Bloomberg Barclays U.S. Corporate High Yield	-0.2%	4.4%	10.5%	7.4%	6.4%	5.7%	6.8%	7.2%
Bloomberg Barclays Global Aggregate ex-U.S. Hedged	-0.4%	-1.8%	-1.2%	3.7%	2.9%	3.3%	3.9%	4.0%
Bloomberg Barclays Global Aggregate ex-U.S. Unhedged	-0.4%	-6.3%	-2.0%	3.5%	1.9%	1.3%	0.6%	2.8%
Bloomberg Barclays U.S. Long Gov / Credit	1.6%	-3.0%	0.2%	12.0%	6.2%	6.1%	6.0%	7.0%
JPMorgan GBI-EM Global Diversified	-1.3%	-7.6%	0.8%	3.9%	2.0%	0.1%	0.4%	3.9%
Global Equity Markets	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	7.0%	24.0%	42.9%	21.5%	18.9%	14.7%	16.2%	10.6%
Dow Jones Industrial Average	5.9%	18.8%	37.7%	15.1%	17.2%	13.5%	14.3%	10.3%
NASDAQ Composite	7.3%	20.9%	43.0%	29.7%	25.7%	20.1%	20.5%	14.5%
Russell 3000	6.8%	22.8%	43.9%	21.6%	18.9%	14.6%	16.1%	10.7%
Russell 1000	6.9%	23.2%	43.5%	22.0%	19.2%	14.8%	16.3%	10.8%
Russell 1000 Growth	8.7%	24.2%	43.2%	29.4%	25.5%	19.5%	19.4%	13.7%
Russell 1000 Value	5.1%	22.0%	43.8%	13.9%	12.4%	9.7%	12.8%	7.6%
Russell Mid Cap	5.9%	22.0%	45.4%	19.9%	16.5%	12.6%	14.8%	10.4%
Russell Mid Cap Growth	7.0%	17.3%	39.4%	26.2%	21.9%	16.1%	16.9%	12.2%
Russell Mid Cap Value	5.3%	24.5%	48.6%	15.0%	12.3%	9.9%	13.2%	8.9%
Russell 2000	4.3%	17.2%	50.8%	16.5%	15.5%	11.5%	13.5%	9.1%
Russell 2000 Growth	4.7%	7.6%	38.5%	18.6%	17.9%	13.0%	14.6%	10.5%
Russell 2000 Value	3.8%	27.6%	64.3%	13.4%	12.6%	9.7%	12.1%	7.4%
MSCI ACWI	5.1%	16.8%	37.3%	17.5%	14.7%	10.6%	11.3%	7.3%
MSCI ACWI ex. U.S.	2.4%	8.4%	29.7%	12.0%	9.8%	6.2%	6.7%	4.3%
MSCI EAFE	2.5%	11.0%	34.2%	11.5%	9.8%	6.4%	7.4%	4.0%
MSCI EAFE Growth	3.3%	10.4%	30.0%	16.8%	13.1%	9.3%	9.4%	5.8%
MSCI EAFE Value	1.6%	11.4%	38.3%	6.0%	6.2%	3.3%	5.2%	2.1%
MSCI EAFE Small Cap	1.6%	11.7%	35.8%	13.4%	11.4%	9.7%	10.1%	6.2%
MSCI Emerging Markets	1.0%	-0.3%	17.0%	12.3%	9.4%	5.6%	4.9%	5.4%
Alternatives	MTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	0.4%	4.8%	5.4%	2.8%	2.6%	2.1%	1.9%	2.0%
FTSE NAREIT Equity REITs	7.6%	32.5%	51.8%	13.9%	9.7%	8.7%	10.6%	6.6%
S&P Real Assets	3.0%	13.4%	26.6%	9.5%	7.1%	4.7%	5.6%	5.6%
TSE EPRA NAREIT Developed	6.2%	29.2%	44.3%	9.9%	6.8%	7.8%	10.7%	5.3%
FTSE EPRA NAREIT Developed ex U.S.	3.5%	10.3%	31.3%	8.0%	6.9%	4.8%	6.9%	3.3%
Bloomberg Commodity Total Return	2.6%	32.5%	43.9%	8.6%	5.2%	-1.0%	-3.0%	-2.3%
HFRI Fund of Funds Composite*	0.2%	5.8%	14.4%	6.5%	5.8%	4.2%	4.5%	3.1%
HFRI Fund Weighted Composite*	-0.2%	9.7%	21.7%	8.4%	7.2%	5.6%	5.8%	4.9%
Alerian MLP	5.0%	46.3%	85.7%	0.0%	-0.6%	-5.6%	0.7%	5.0%

^{*}One month lag.

Source: FactSet & Morningstar as of October 31, 2021. Periods greater than 1 year are annualized. All returns are in U.S. dollar terms.



Disclosures and Definitions

All material and information is intended for MPS LORIA business only. Any use or public dissemination outside firm business is prohibited. Information is obtained from a variety of sources which are believed though not guaranteed to be accurate. Any forecast represents future expectations and actual returns, volatilities and correlations will differ from forecasts. Past performance does not indicate future performance. This presentation does not represent a specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice.

When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise notes. Each index is unmanaged, and investors can not actually invest directly into an index:

TIPS: Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Total Return Index Unhedged

Municipals 5-Year: Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return Index Unhedged USD

Core Bond: Bloomberg Barclays US Agg Total Return Value Unhedged USD

High Yield Municipals: Bloomberg Barclays Muni High Yield Total Return Index Value Unhedged USD High Yield: Bloomberg Barclays US Corporate High Yield Total Return Index Value Unhedged USD

Foreign Bond: Bloomberg Barclays Global Aggregate ex-USD Total Return Index Value USD (50/50 blend of hedged and unhedged)

EM Debt (unhedged): J.P. Morgan GBI-EM Global Diversified Composite Unhedged USD

U.S. Large Cap: S&P 500 Total Return Index U.S. Small Cap: Russell 2000 Total Return Index

International Developed: MSCI EAFE Net Total Return USD Index Emerging Markets: MSCI Emerging Markets Net Total Return USD Index

World: MSCI ACWI Net Total Return USD Index

U.S. Equity REITs: FTSE Nareit Equity REITs Total Return Index USD

Commodities: Bloomberg Commodity Total Return Index Midstream Energy: Alerian MLP Total Return Index

Hedge Funds: Hedge Fund Research HFRI Fund of Funds Composite Index

Event Driven: Hedge Fund Research HFRI Event-Driven Total Index

Relative Value: Hedge Fund Research HFRI Relative Value Fixed Income-Convertible Arbitrage Index

Equity Hedge: Hedge Fund Research HFRI Equity Hedge Total Index

Direct Fund Composite: Hedge Fund Research HFRI Fund Weighted Composite Index Fund of Funds Composite: Hedge Fund Research HFRI Fund of Funds Composite Index

Macro: Hedge Fund Research HFRI Macro Total Index

International, 7% Emerging Markets, 5% U.S. Equity REITS, 6% MLPs

U.S.: MSCI USA Net Total Return USD Index
China: MSCI CHINA Net Total Return USD Index
Japan: MSCI Japan Net Total Return USD Index
Germany: MSCI Germany Net Total Return USD Index
India: MSCI India Net Total Return USD Index
United Kingdom: MSCI UK Net Total Return USD Index
France: MSCI France Net Total Return USD Index
Italy: MSCI Italy Net Total Return USD Index
Brazil: MSCI Brazil Net Total Return USD Index

Canada: MSCI Canada Net Total Return USD Index