



3CHOPT

INVESTMENT PARTNERS

# Quarterly Considerations

*Second Quarter 2022*



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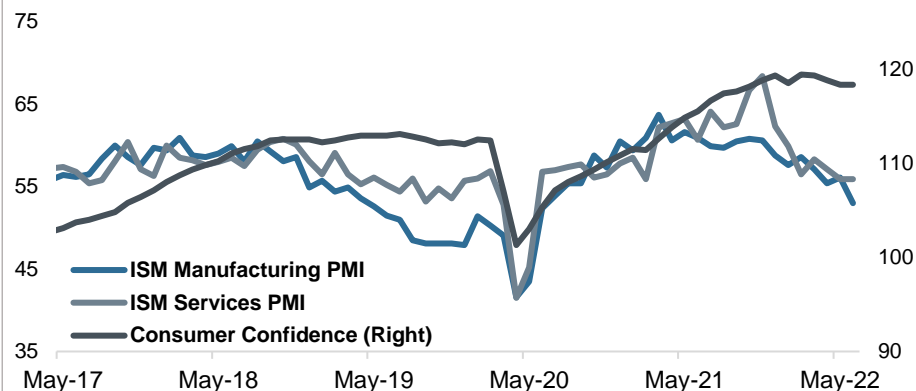
# Market Themes



1. Capital markets continued to exhibit high volatility as investors contend with the rising odds of a recession. Returns across asset classes were broadly negative for the quarter.
2. The Fed's more hawkish stance and intensified commitment to combat high inflation comes at the risk of accelerating the onset of an economic slowdown.
3. Recessions and the volatility that typically accompanies them often sets the stage for better forward-looking opportunities in the market with lower entry prices.

## Higher Recession Risk

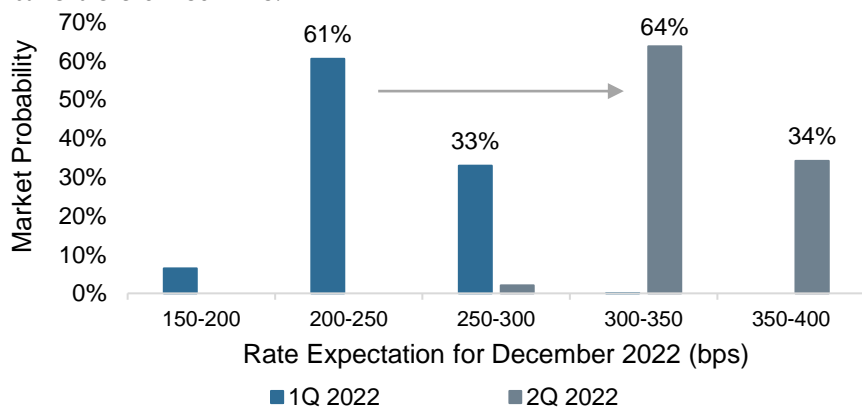
Softening economic data, including data from both producers and consumers, reveals the rising probability of an economic slowdown with the three-pronged challenge of high inflation, supply chain issues and an aggressive Fed.



Source: FactSet, ISM, Conference Board. As of June 30, 2022.

## Markets Moving Ahead of the Fed

Markets have moved quickly, reacting to the Fed's increasingly hawkish posture by adjusting their rate expectations for the Fed's final meeting of the year in December 2022. Markets have priced in significantly higher terminal rates for this year than the current level of 1.50 – 1.75%.



Source: CME FedWatch Tool, Fiducient Advisors. As of June 30, 2022.

## Staying Invested is Key

Although the probability of a recession may be rising, trying to predict its start date may prove to be a fool's errand. Equity markets see the most volatility before and during a recession; yet returns following the onset of a recession are typically strong given the forward-looking nature of markets.

S&P 500 Returns around a Recession				
Year	6 months before -			
	- Onset	Onset - End	Onset + 3yr	Onset + 5yr
1973	-1.2%	-33.1%	5.5%	33.1%
1980	7.7%	8.8%	87.0%	117.4%
1981	-1.0%	-1.3%	70.6%	221.9%
1990	3.1%	6.1%	49.6%	110.2%
2001	-17.7%	-11.8%	-3.3%	18.5%
2007	-2.3%	-33.9%	4.6%	46.4%
2020	9.3%	-23.1%	N/A	N/A
<b>Average</b>	<b>-0.3%</b>	<b>-12.6%</b>	<b>35.7%</b>	<b>91.3%</b>

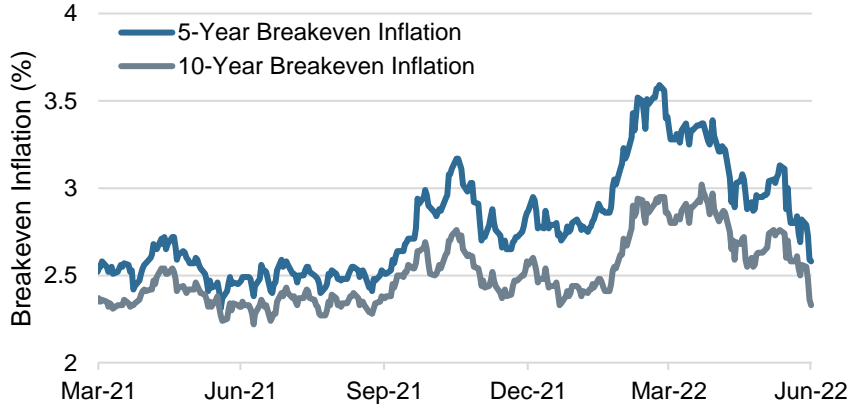
Source: Morningstar Direct, NBER, Fiducient Advisors. Returns shown are cumulative.

# Economic Review



## U.S. Breakeven Inflation Levels

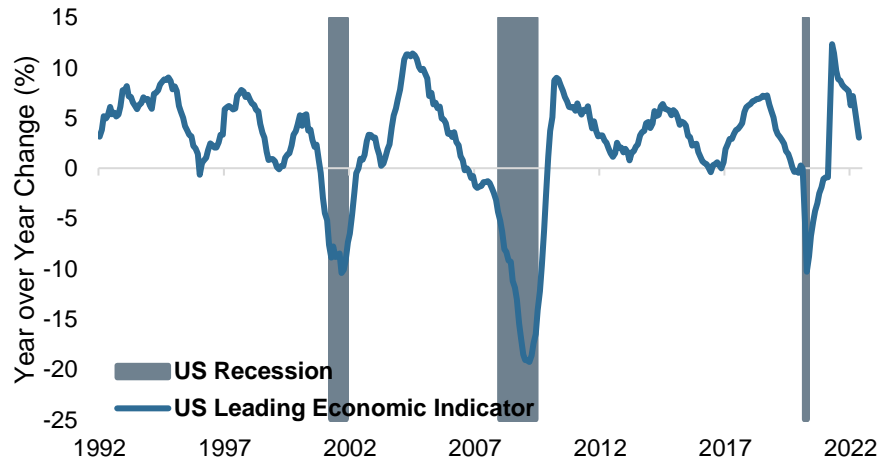
While current inflation levels remain elevated relative to history, expectations for inflation over the medium- and longer-term have come down significantly in recent months.



Source: FactSet. As of June 30, 2022.

## Leading Economic Indicators

Leading economic indicators have fallen from peak levels but remain in positive territory supporting a positive outlook for economic growth in the near-term.

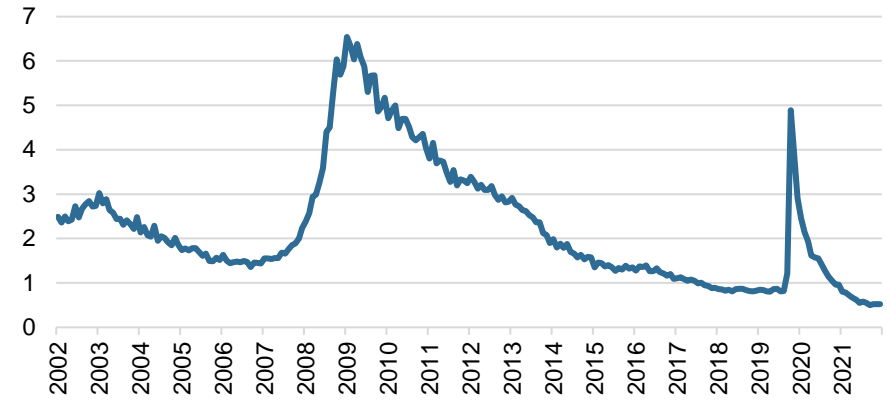


Source: FactSet, Conference Board. As of May 31, 2022.

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.

## U.S. Labor Market – Number of Unemployed per Job Opening

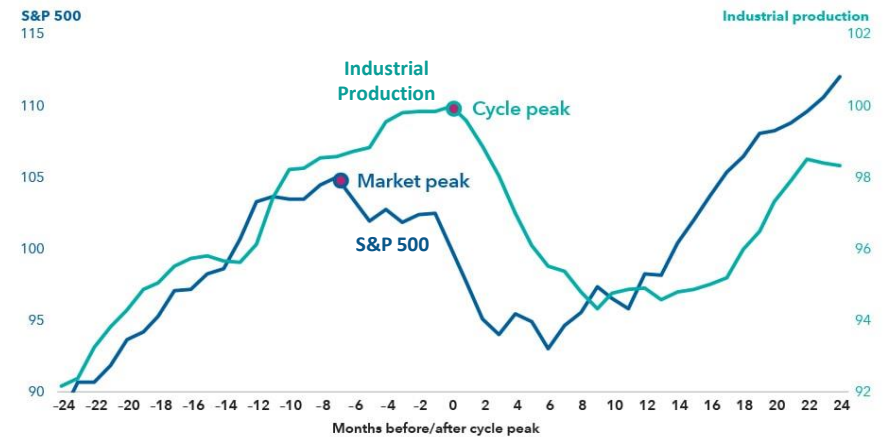
The U.S. labor market remains tight, with less than 1 job seeker for each job opening. This historic tightness in the job market may support wage growth.



Source: FactSet, DOL, BLS. As of June 30, 2022.

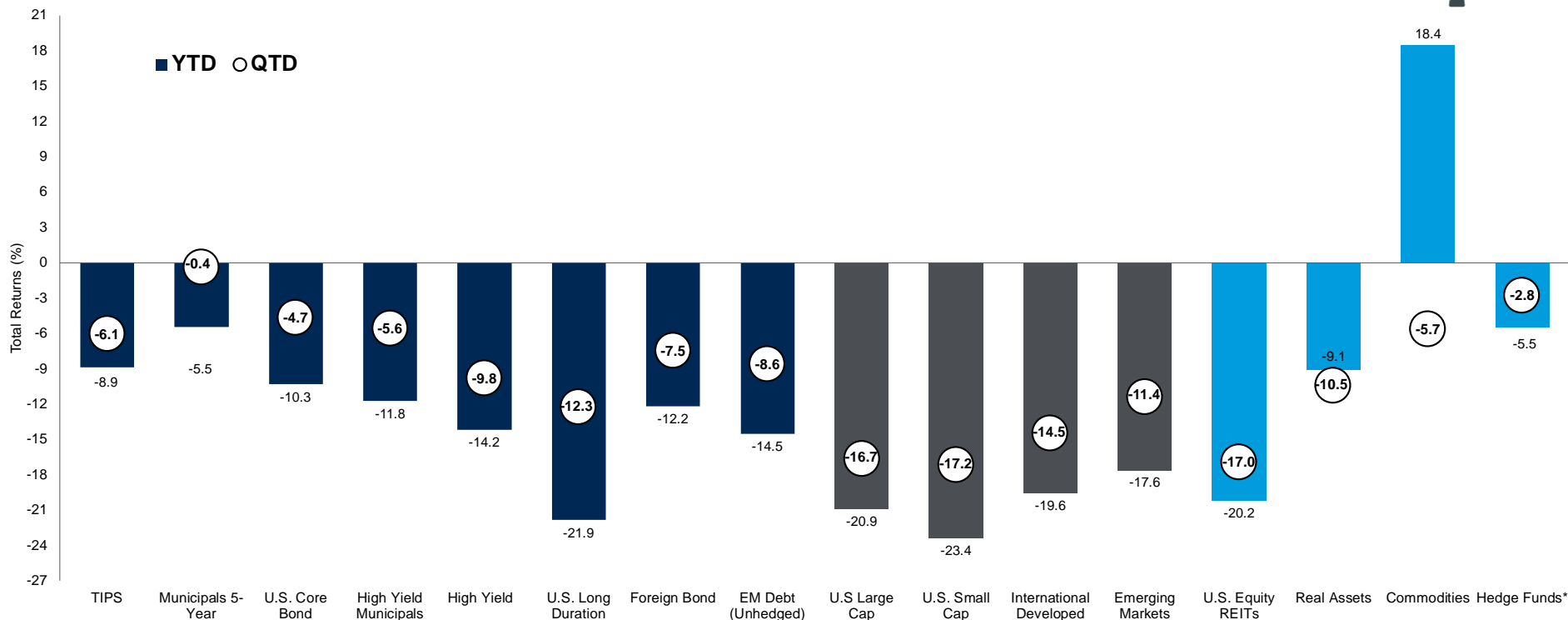
## Markets and Cycles

Historically, markets have led the economy as indicated by industrial production, lending credence to their forward-looking nature.



Source: Capital Group. Data from 1950 – 2019.

# Asset Class Returns



Source: Morningstar Direct. As of June 30, 2022. \*Hedge fund returns as of May 31, 2022.

## Fixed Income (2Q)

- The Federal Reserve raised its target rate by 75 basis points in June. Interest rates moved broadly higher in advance of the announcement and pushed bond returns negative.
- Spread sectors generally underperformed for the quarter, with notable weakness in the U.S. high yield market.
- In addition to suffering from a longer duration profile in the face of rising interest rates, a strengthening U.S. dollar was a drag on non-U.S. fixed income returns.

## Equity (2Q)

- Equity markets added to their first quarter losses as focus shifted to record-high inflation, the Fed's commitment to fighting it and evidence of a slowing global economy, in addition to the conflict in Ukraine.
- Although the rout was broad-based, discrepancies persisted with growth names losing to value names and major differences between sectors.
- Emerging markets and international developed names beat domestic ones, though were still lower. The former were buoyed by a late-quarter reopening in China.

## Real Asset / Alternatives (2Q)

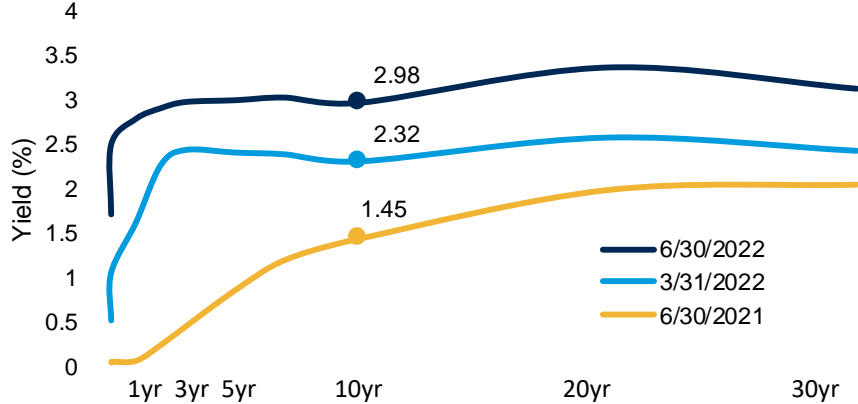
- + Energy markets continued to exhibit strength, though a late quarter June selloff reflects broader concerns of a slowing economy.
- Other commodities, including both industrial and precious metals, as well as REITs, were led lower over slowing growth concerns, political grandstanding and the potential investors are taking profits given 2022 returns.
- + Hedge funds continued to exhibit lower volatility than the market, albeit with some negative returns.

# Fixed Income Market Update



## U.S. Treasury Yields Curve

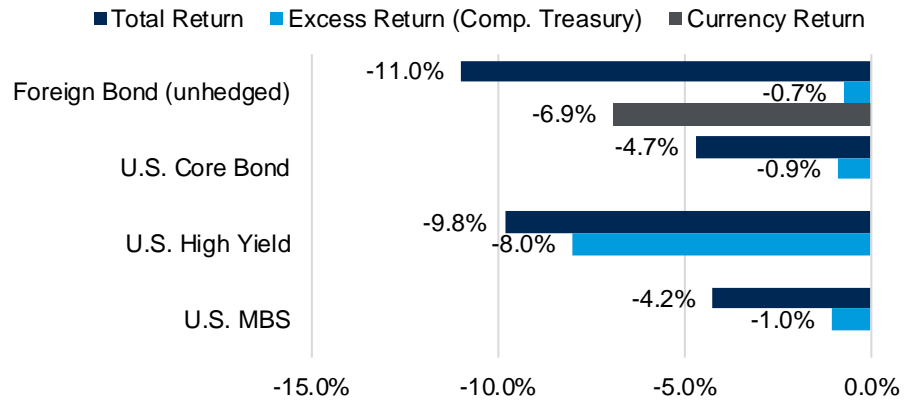
Interest rates jumped in anticipation of the Fed's decision to raise the Fed Funds rate by 75 basis points in June but retreated late in the quarter on increasing concerns of an economic slowdown. The 1-year yield spiked from 1.1% to 2.5%, while the 10-year ended 66 basis points higher.



Source: FactSet. As of June 30, 2022.

## Index Performance Attribution (2Q 2022)

Spread sectors generally lagged Treasuries during the second quarter. Foreign bonds were more susceptible to higher interest rates and a strengthening U.S. dollar, while high yield came under pressure over growing fears of recession.



Source: FactSet. As of June 30, 2022.

## Corporate Market Spreads – Trailing 5 Years

Despite a relatively favorable earnings season, growing fears of an economic slowdown have investors shunning riskier areas of the fixed income market. As a result, both investment grade and high yield corporate bond spreads widened and moved back above their respective 10-year averages to levels last seen in summer 2020.



Source: FactSet. As of June 30, 2022.

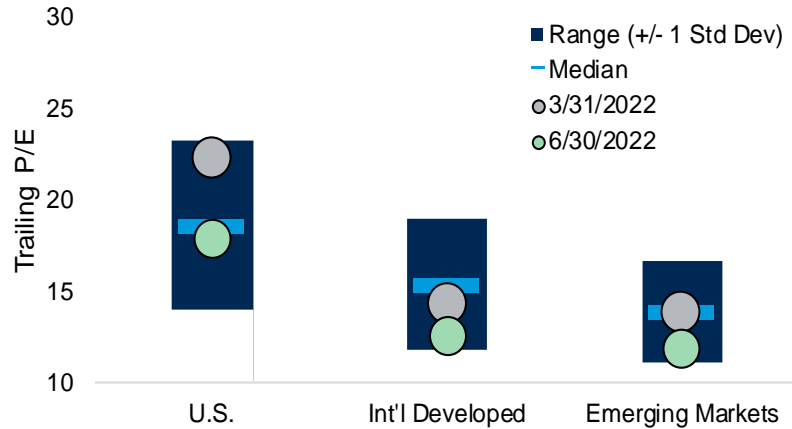
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# Equity Market Update



## Equity Valuations (Trailing PE – Last 15 Years)

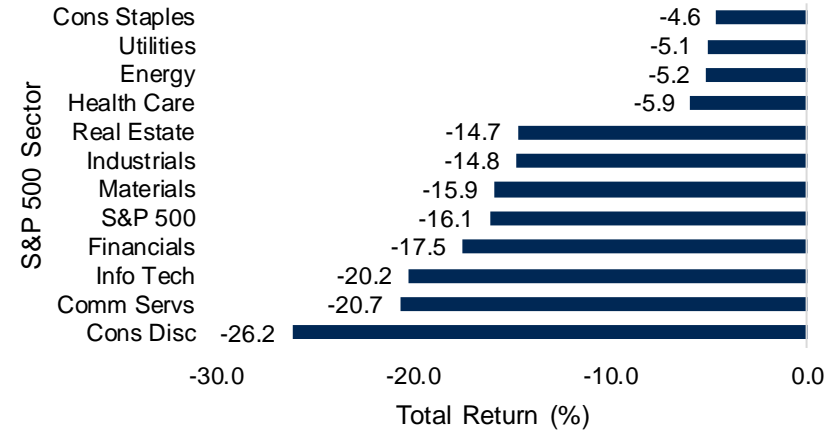
During the quarter, prices fell significantly and pushed multiples below historic averages. Despite growth concerns, analysts' second-half 2022 EPS estimates remained steady.



Source: FactSet. As of June 30, 2022.

## U.S. Equities – Return by Sector (2Q 2022)

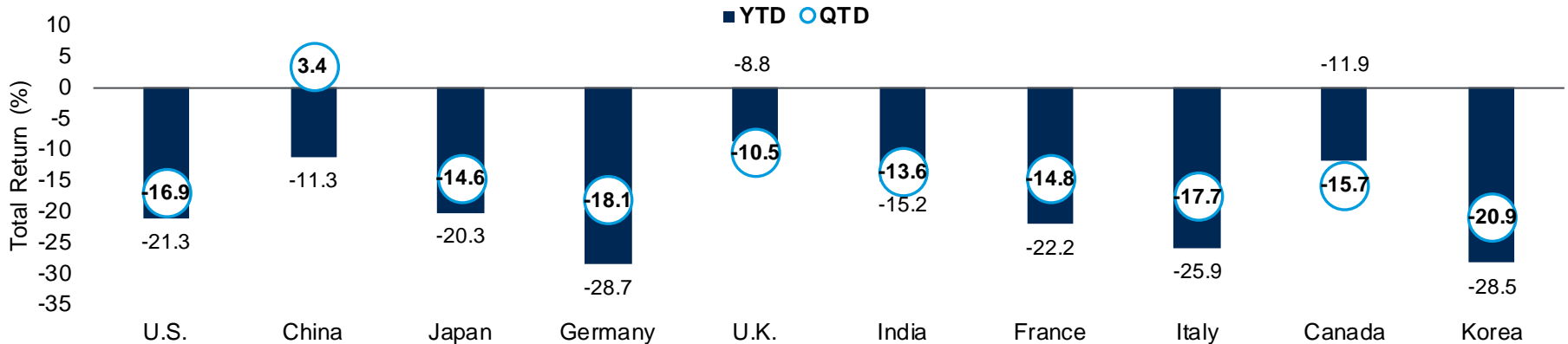
While all sectors were negative for the quarter, defensive names fared better than their cyclical and highly-valued peers as investors adopted a risk-off stance.



Source: Morningstar Direct. As of June 30, 2022.

## Country Total Returns (%) – Top 10 Largest Economies

Concerns over slowing growth, high inflation, and aggressive central banks were common themes globally. Equity markets, both developed and emerging, were lower. Germany remains under pressure given its reliance on Russian natural gas and recent measures such as a shift back to coal-based power plants to address concerns. China was a positive outlier: investors had been concerned about the economic impact of severe COVID restrictions; the lifting of restriction was viewed in positive light.



Source: Morningstar Direct. As of June 30, 2022.

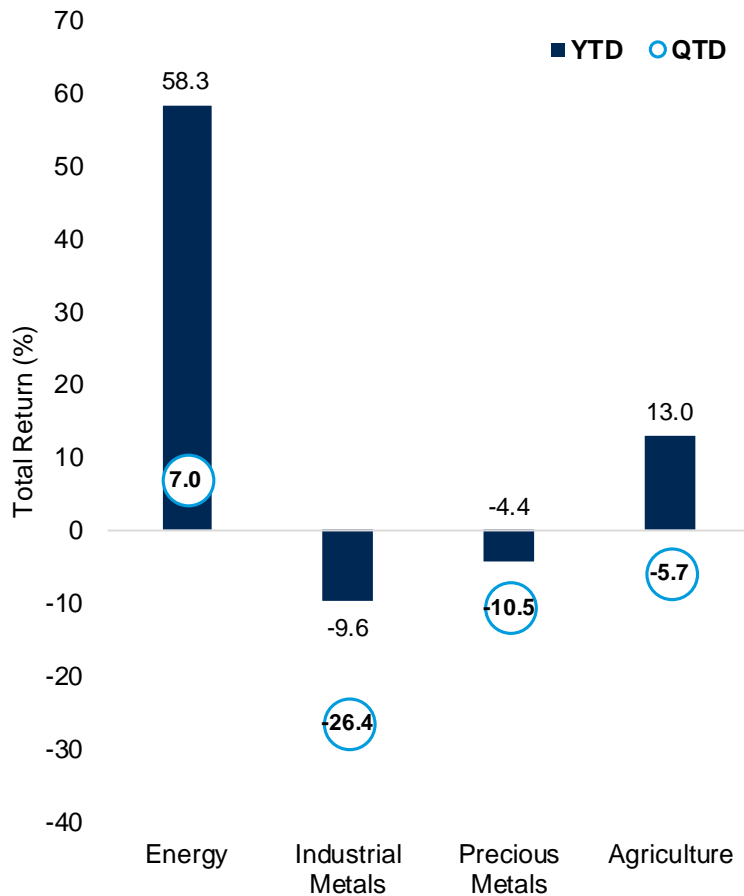
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# Real Assets Market Update



## Commodity Performance

Energy commodities soared early in the quarter with strong demand and further sanctions on Russia; however, prices retreated in the second half of the quarter as recession concerns impacted demand and markets priced in potential export bans and taxes on excess profits. Metals and agricultural commodities similarly saw prices fall as countries sought to find suppliers besides Russia and Ukraine.

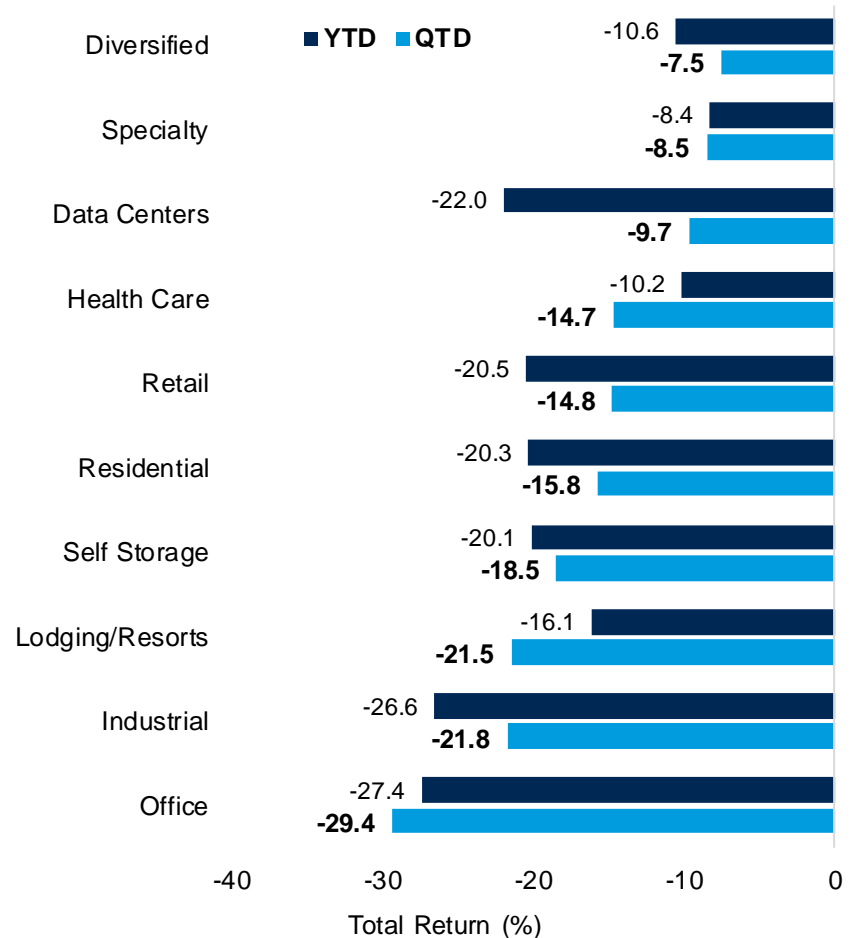


Source: Morningstar Direct. As of June 30, 2022.

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## REIT Sector Performance

Long-duration assets in the industrial and office sectors were hit hard by higher interest rates, while highly-priced sectors such as data centers and specialty segments saw prices come down amid a market-wide repricing.



Source: Morningstar Direct. As of June 30, 2022.



# The Case for Diversification



2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years (Ann)
Emerging Markets 18.2	U.S. Small Cap 38.8	U.S. Equity REITs 30.1	U.S. Equity REITs 3.2	U.S. Small Cap 21.3	Emerging Markets 37.3	High Yield Munis 4.8	U.S. Large Cap 31.5	U.S. Small Cap 20.0	U.S. Equity REITs 43.2	Commodities 18.4	U.S. Large Cap 12.8
High Yield Munis 18.1	U.S. Large Cap 32.4	High Yield Munis 13.8	Municipals 5-Year 2.4	High Yield 17.1	International Dev. 25.0	Municipals 5-Year 1.7	U.S. Equity REITs 26.0	U.S. Large Cap 18.4	Commodities 27.1	Hedge Funds -5.5	U.S. Small Cap 9.4
U.S. Equity REITs 18.1	International Dev. 22.8	U.S. Large Cap 13.7	High Yield Munis 1.8	U.S. Large Cap 12.0	U.S. Large Cap 21.8	Foreign Bond 0.5	U.S. Small Cap 25.5	Emerging Markets 18.3	US Large Cap 26.5	Municipals 5-Year -5.5	U.S. Equity REITs 7.4
International Dev. 17.3	Balanced 12.2	Core Bond 6.0	U.S. Large Cap 1.4	Commodities 11.7	EM Debt (unhedged) 15.2	Core Bond 0.0	International Dev. 22.5	TIPS 11.0	US Small Cap 14.8	TIPS -8.9	International Developed 5.4
EM Debt (unhedged) 16.9	Hedge Funds 9.0	Balanced 5.1	Core Bond 0.6	Emerging Markets 11.2	U.S. Small Cap 14.6	TIPS -1.3	Emerging Markets 18.4	Balanced 8.8	International Dev. 11.3	U.S. Core Bond -10.3	Balanced 5.0
U.S. Small Cap 16.3	High Yield 7.4	U.S. Small Cap 4.9	Hedge Funds -0.3	EM Debt (unhedged) 9.9	Balanced 13.6	High Yield -2.1	Balanced 17.5	International Dev. 7.8	Balanced 9.8	High Yield Municipals -11.8	High Yield 4.5
U.S. Large Cap 16.0	U.S. Equity REITs 2.5	TIPS 3.6	International Dev. -0.8	U.S. Equity REITs 8.5	High Yield Munis 9.7	Hedge Funds -4.0	High Yield 14.3	Core Bond 7.5	High Yield Munis 7.8	Foreign Bond -12.2	High Yield Municipals 4.4
High Yield 15.8	Municipals 5-Year 0.8	Hedge Funds 3.4	TIPS -1.4	Balanced 7.6	Hedge Funds 7.8	U.S. Large Cap -4.4	EM Debt (unhedged) 13.5	Hedge Funds 7.1	TIPS 6.0	High Yield -14.2	Hedge Funds 3.8
Balanced 11.5	Foreign Bond -1.0	Municipals 5-Year 3.2	Foreign Bond -2.3	TIPS 4.7	High Yield 7.5	U.S. Equity REITs -4.6	High Yield Munis 10.7	High Yield 7.1	Hedge Funds 5.7	EM Debt (unhedged) -14.5	Emerging Markets 3.1
TIPS 7.0	Core Bond -2.0	Foreign Bond 2.9	Balanced -3.3	Foreign Bond 3.2	Foreign Bond 6.5	Balanced -5.8	Core Bond 8.7	Foreign Bond 7.0	High Yield 5.3	Balanced -14.9	TIPS 1.7
Foreign Bond 5.3	Emerging Markets -2.6	High Yield 2.5	U.S. Small Cap -4.4	High Yield Munis 3.0	U.S. Equity REITs 5.2	EM Debt (unhedged) -6.2	TIPS 8.4	High Yield Munis 4.9	Municipals 5-Year 0.3	Emerging Markets -17.6	Municipals 5-Year 1.6
Hedge Funds 4.8	High Yield Munis -5.5	Emerging Markets -2.2	High Yield -4.5	Core Bond 2.6	Core Bond 3.5	U.S. Small Cap -11.0	Hedge Funds 7.8	Municipals 5-Year 4.3	Core Bond -1.5	International Developed -19.6	U.S. Core Bond 1.5
Core Bond 4.2	TIPS -8.6	International Dev. -4.9	Emerging Markets -14.9	International Dev. 1.0	Municipals 5-Year 3.1	Commodities -11.2	Commodities 7.7	EM Debt (unhedged) 2.7	Emerging Markets -2.5	U.S. Equity REITs -20.2	Foreign Bond 0.8
Municipals 5-Year 3.0	EM Debt (unhedged) -9.0	EM Debt (unhedged) -5.7	EM Debt (unhedged) -14.9	Hedge Funds 0.5	TIPS 3.0	International Dev. -13.8	Foreign Bond 6.3	Commodities -3.1	Foreign Bond -4.2	U.S. Large Cap -20.9	Commodities -0.8
Commodities -1.1	Commodities -9.5	Commodities -17.0	Commodities -24.7	Municipals 5-Year -0.4	Commodities 1.7	Emerging Markets -14.6	Municipals 5-Year 5.4	U.S. Equity REITs -8.0	EM Debt (unhedged) -8.7	U.S. Small Cap -23.4	EM Debt (unhedged) -1.5

Source: FactSet, Morningstar Direct, as of June 30, 2022. Periods greater than one year are annualized. All returns are in U.S. dollar terms. One month lag for Hedge Funds.

# Financial Markets Performance



**Total Return as of June 30, 2022**  
**Periods greater than one year are annualized**  
**All returns are in U.S. dollar terms**

<b>Global Fixed Income Markets</b>	<b>QTD</b>	<b>YTD</b>	<b>1YR</b>	<b>3YR</b>	<b>5YR</b>	<b>7YR</b>	<b>10YR</b>	<b>15YR</b>
Bloomberg 1-3-Month T-Bill	0.1%	0.2%	0.2%	0.6%	1.1%	0.8%	0.6%	0.7%
Bloomberg U.S. TIPS	-6.1%	-8.9%	-5.1%	3.0%	3.2%	2.8%	1.7%	3.9%
Bloomberg Municipal Bond (5 Year)	-0.4%	-5.5%	-5.3%	0.2%	1.2%	1.5%	1.6%	3.0%
Bloomberg High Yield Municipal Bond	-5.6%	-11.8%	-10.4%	1.1%	3.6%	4.4%	4.4%	4.2%
Bloomberg U.S. Aggregate	-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.4%	1.5%	3.3%
Bloomberg U.S. Corporate High Yield	-9.8%	-14.2%	-12.8%	0.2%	2.1%	3.5%	4.5%	5.8%
Bloomberg Global Aggregate ex-U.S. Hedged	-4.0%	-7.9%	-7.7%	-1.4%	1.3%	2.0%	2.7%	3.4%
Bloomberg Global Aggregate ex-U.S. Unhedged	-11.0%	-16.5%	-18.8%	-5.1%	-1.8%	-0.3%	-1.1%	1.4%
Bloomberg U.S. Long Gov / Credit	-12.3%	-21.9%	-20.1%	-2.3%	1.0%	2.7%	2.6%	5.3%
JPMorgan GBI-EM Global Diversified	-8.6%	-14.5%	-19.3%	-5.8%	-2.3%	-0.5%	-1.5%	1.8%
<b>Global Equity Markets</b>	<b>QTD</b>	<b>YTD</b>	<b>1YR</b>	<b>3YR</b>	<b>5YR</b>	<b>7YR</b>	<b>10YR</b>	<b>15YR</b>
S&P 500	-16.1%	-20.0%	-10.6%	10.6%	11.3%	11.1%	13.0%	8.5%
Dow Jones Industrial Average	-10.8%	-14.4%	-9.1%	7.2%	10.0%	10.8%	11.7%	8.4%
NASDAQ Composite	-22.3%	-29.2%	-23.4%	12.2%	13.5%	13.1%	15.4%	11.2%
Russell 3000	-16.7%	-21.1%	-13.9%	9.8%	10.6%	10.4%	12.6%	8.4%
Russell 1000	-16.7%	-20.9%	-13.0%	10.2%	11.0%	10.8%	12.8%	8.5%
Russell 1000 Growth	-20.9%	-28.1%	-18.8%	12.6%	14.3%	13.5%	14.8%	10.7%
Russell 1000 Value	-12.2%	-12.9%	-6.8%	6.9%	7.2%	7.7%	10.5%	6.1%
Russell Mid Cap	-16.8%	-21.6%	-17.3%	6.6%	8.0%	8.0%	11.3%	7.8%
Russell Mid Cap Growth	-21.1%	-31.0%	-29.6%	4.3%	8.9%	8.3%	11.5%	8.2%
Russell Mid Cap Value	-14.7%	-16.2%	-10.0%	6.7%	6.3%	7.2%	10.6%	6.9%
Russell 2000	-17.2%	-23.4%	-25.2%	4.2%	5.2%	5.9%	9.4%	6.3%
Russell 2000 Growth	-19.3%	-29.5%	-33.4%	1.4%	4.8%	5.0%	9.3%	6.8%
Russell 2000 Value	-15.3%	-17.3%	-16.3%	6.2%	4.9%	6.4%	9.1%	5.6%
MSCI ACWI	-15.7%	-20.2%	-15.8%	6.2%	7.0%	7.0%	8.8%	4.8%
MSCI ACWI ex. U.S.	-13.7%	-18.4%	-19.4%	1.4%	2.5%	2.9%	4.8%	1.6%
MSCI EAFE	-14.5%	-19.6%	-17.8%	1.1%	2.2%	2.7%	5.4%	1.4%
MSCI EAFE Growth	-16.9%	-26.8%	-23.8%	1.3%	3.5%	3.9%	6.3%	2.5%
MSCI EAFE Value	-12.4%	-12.1%	-11.9%	0.2%	0.5%	1.2%	4.2%	0.1%
MSCI EAFE Small Cap	-17.7%	-24.7%	-24.0%	1.1%	1.7%	3.7%	7.2%	2.8%
MSCI Emerging Markets	-11.4%	-17.6%	-25.3%	0.6%	2.2%	2.8%	3.1%	2.0%
<b>Alternatives</b>	<b>QTD</b>	<b>YTD</b>	<b>1YR</b>	<b>3YR</b>	<b>5YR</b>	<b>7YR</b>	<b>10YR</b>	<b>15YR</b>
Consumer Price Index*	1.3%	4.6%	8.5%	4.5%	3.6%	3.0%	2.5%	2.3%
FTSE NAREIT Equity REITs	-17.0%	-20.2%	-6.3%	4.0%	5.3%	6.7%	7.4%	5.8%
S&P Real Assets	-10.5%	-9.1%	-4.9%	3.5%	4.5%	4.2%	4.4%	4.4%
FTSE EPRA NAREIT Developed	-17.2%	-20.4%	-12.7%	-0.2%	2.9%	4.0%	5.6%	2.8%
FTSE EPRA NAREIT Developed ex U.S.	-17.5%	-20.1%	-20.6%	-4.4%	0.4%	1.4%	3.9%	0.6%
Bloomberg Commodity Total Return	-5.7%	18.4%	24.3%	14.3%	8.4%	2.8%	-0.8%	-1.8%
HFRI Fund of Funds Composite*	-2.8%	-5.5%	-3.8%	4.9%	3.9%	2.7%	3.8%	1.9%
HFRI Fund Weighted Composite*	-1.9%	-2.9%	-2.3%	8.0%	5.8%	4.6%	5.3%	3.9%
Alerian MLP	-7.4%	10.0%	4.3%	0.1%	-0.3%	-2.1%	0.7%	3.7%

Source: Morningstar, FactSet. As of June 30, 2022. \*Consumer Price Index and HFRI indexes as of May 31, 2022.

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.

# Disclosures and Definitions



All material and information is intended for 3Chopt Investment Partners 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 unmanaged index returns assume reinvestment of any and all distributions and do not reflect our fees or expenses. Indices cannot be invested in directly:

TIPS: Bloomberg US Treasury US TIPS TR USD

Municipals 5-Year: Bloomberg Municipal Bond 5 Year (4-6) TR USD

U.S. Core Bond: Bloomberg US Aggregate Bond TR USD

High Yield Municipals: Bloomberg HY Muni TR USD

High Yield: Bloomberg US Corporate High Yield TR USD

U.S. Long Duration: Bloomberg U.S. Long Government/Credit TR USD

Foreign Bond: Bloomberg Global Aggregate ex-USD TR USD (50/50 blend of hedged and unhedged)

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

U.S. Large Cap: Russell 1000 TR USD

U.S. Small Cap : Russell 2000 TR USD

International Developed: MSCI EAFE NR USD

Emerging Markets: MSCI Emerging Markets NR USD

U.S. Equity REITs: FTSE Nareit Equity REITs TR USD

Real Assets: S&P Real Assets TR USD

Commodities: Bloomberg Commodity TR USD

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

Foreign Bond Unhedged: Bloomberg Global Aggregate ex USD TR USD unhedged

U.S. MBS: Bloomberg US MBS (30Y) TR USD

Balanced: 18% U.S. Large Cap, 6% U.S. Small Cap, 5% U.S. Equity REITs, 16% International Developed, 4% High Yield, 8% Emerging Markets, 3% TIPS, 33% U.S. Core Bond, 2% Foreign Bond, 3% Commodities, 2% EM Debt (unhedged).

Equity valuations are based on trailing 12-month P/E ratios for S&P 500 Index (U.S.), MSCI EAFE Index (Int'l Developed), and MSCI EM Index (Emerging Markets)

S&P 500 sector performance based on the following indices: S&P 500 Sec/Commun Services TR USD, S&P 500 Sec/Financials TR USD, S&P 500 Sec/Energy TR USD, S&P 500 Sec/Industrials TR USD, S&P 500 TR USD, S&P 500 Sec/Health Care TR USD, S&P 500 Sec/Cons Disc TR USD, S&P 500 Sec/Utilities TR USD, S&P 500 Sec/Cons Staples TR USD, S&P 500 Sec/Materials TR USD, S&P 500 Sec/Information Technology TR USD, S&P 500 Sec/Real Estate TR USD

Equity country returns based on the following indices: U.S.: MSCI USA NR USD, China: MSCI CHINA NR USD, Japan: MSCI Japan NR USD, Germany: MSCI Germany NR USD, United Kingdom: MSCI NR USD, India: MSCI India NR USD, France: MSCI France NR USD, Italy: MSCI Italy NR USD, Canada: MSCI Canada NR USD, Korea: MSCI Korea NR USD, Energy:

Commodity Performance based on the following indices: Energy: Bloomberg Sub Energy TR USD, Industrial Metals: Bloomberg Sub Industrial Metals TR USD, Precious Metals: Bloomberg Sub Precious Metals TR USD, Agriculture: Bloomberg Sub Agriculture TR USD

REIT sector performance is based on the following indices: FTSE Nareit Equity Health Care TR, FTSE Nareit Equity Lodging/Resorts TR, FTSE Nareit Equity Office TR, FTSE Nareit Equity Data Centers TR, FTSE Nareit Equity Diversified TR, FTSE Nareit Equity Specialty TR, FTSE Nareit Equity Retail TR, FTSE Nareit Equity Residential TR, FTSE Nareit Equity Industrial TR, FTSE Nareit Equity Self Storage TR