Third Quarter 2022 Market Review





Quarterly Market Review

Third Quarter 2022

This report features world capital market performance and a timeline of events for the past quarter. It begins with a global overview, then features the returns of stock and bond asset classes in the US and international markets.

Overview:

Market Summary

World Stock Market Performance

US Stocks

International Developed Stocks

Emerging Markets Stocks

Country Returns

Real Estate Investment Trusts (REITs)

Commodities

Fixed Income

Global Fixed Income



Quarterly Market Summary

Index returns

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US	
Q3 2022			CKS		BONDS		
	-4.46%	-9.20%	-11.57%	-11.12%	-4.75%	-2.21%	
Since Jan. 2001							
	2.1%	1.3%	2.4%	2.2%	0.9%	0.9%	
Average	2.1% 22.0%	1.3% 25.9%	2.4% 34.7%	2.2% 32.3%	0.9% 4.6%	0.9% 4.6%	
Average Quarterly Return Best							
Average Quarterly Return	22.0%	25.9%	34.7%	32.3%	4.6%	4.6%	

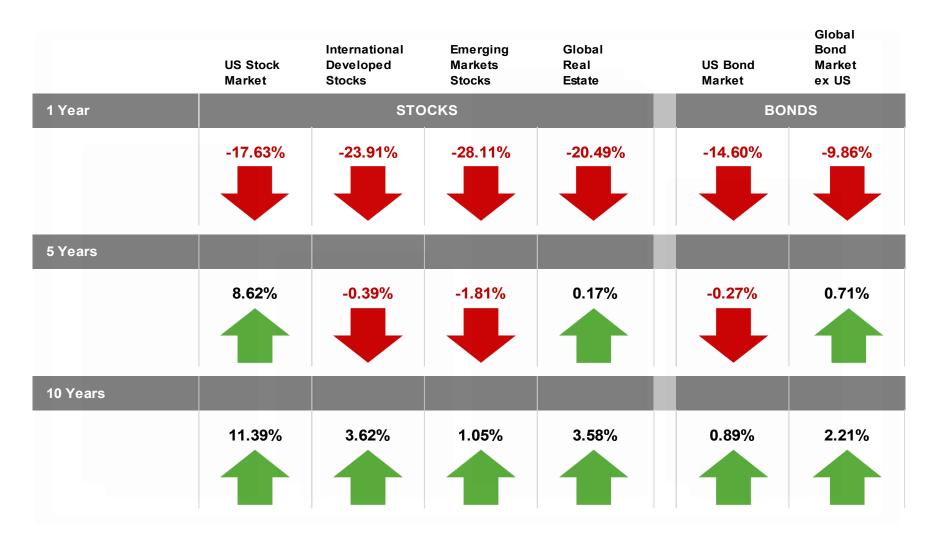
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net dividends]), Emerging Markets (MSCI Emerging Markets Index [net dividends]), Index [net dividends]), US Bond Market (Bloomberg US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Global Aggregate ex-USD Bond Index [net dividends]), S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2022, all rights reserved. Bloomberg data provided by Bloomberg.



Long-Term Market Summary

Index returns as of September 30, 2022



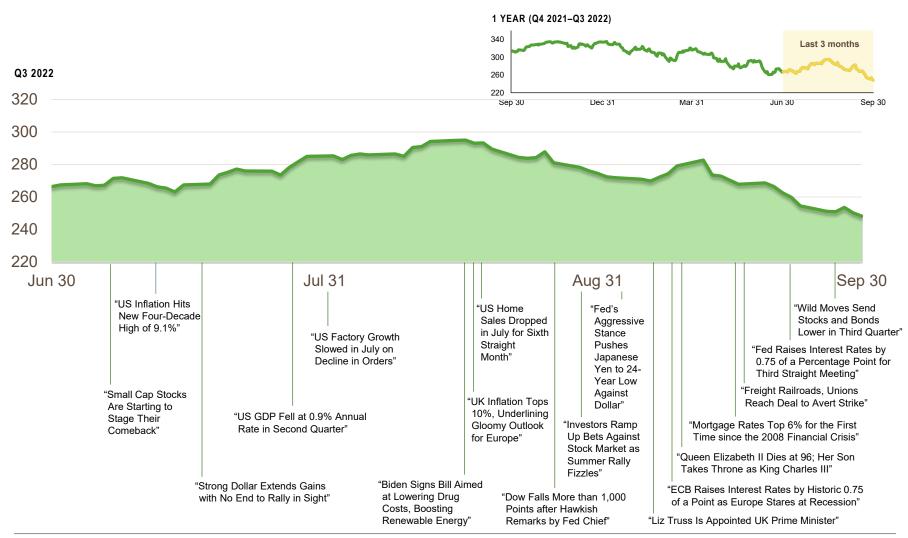
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World Stock Market Performance

MSCI All Country World Index with selected headlines from Q3 2022

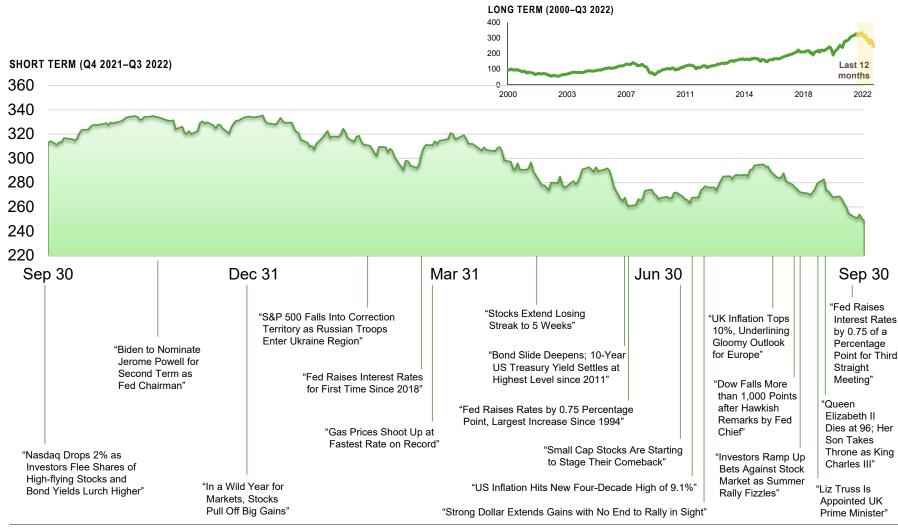


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



World Stock Market Performance

MSCI All Country World Index with selected headlines from past 12 months



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US Stocks

Third quarter 2022 index returns

The US equity market posted negative returns for the quarter and outperformed both non-US developed and emerging markets.

Value underperformed growth.

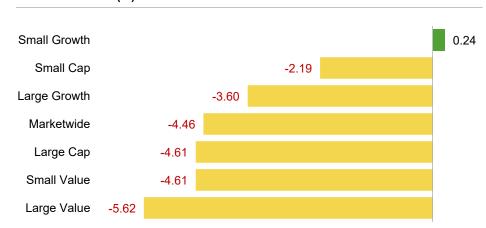
Small caps outperformed large caps.

REIT indices underperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



P	eriod Returns (%)					*	Annualized
	Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
	Small Growth	0.24	-29.28	-29.27	2.94	3.60	8.81
	Small Cap	-2.19	-25.10	-23.50	4.29	3.55	8.55
	Large Growth	-3.60	-30.66	-22.59	10.67	12.17	13.70
	Marketwide	-4.46	-24.62	-17.63	7.70	8.62	11.39
	Large Cap	-4.61	-24.59	-17.22	7.95	9.00	11.60
	Small Value	-4.61	-21.12	-17.69	4.72	2.87	7.94
	Large Value	-5.62	-17.75	-11.36	4.36	5.29	9.17

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International Developed Stocks

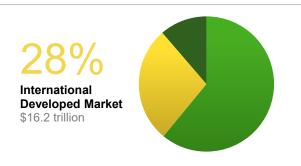
Third quarter 2022 index returns

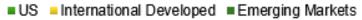
Developed markets outside of the US posted negative returns for the quarter and underperformed the US market, but outperformed emerging markets.

Value underperformed growth.

Small caps underperformed large caps.

World Market Capitalization—International Developed





Ranked Returns (%)



Period Returns	(%)				*	Annualized
Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Growth	-8.14	-32.33	-29.44	-1.14	0.85	4.46
Large Cap	-9.20	-26.23	-23.91	-1.21	-0.39	3.62
Small Cap	-9.46	-31.07	-30.80	-1.27	-1.24	4.78
Value	-10.22	-20.10	-18.58	-1.97	-2.08	2.53

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Market segment (index representation) as follows: Large Cap (MSCI World ex USA Index), Small Cap (MSCI World ex USA Small Cap Index), Value (MSCI World ex USA Value Index), and Growth (MSCI World ex USA Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI World ex USA IMI Index as the proxy for the International Developed market. MSCI data © MSCI 2022, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



Emerging Markets Stocks

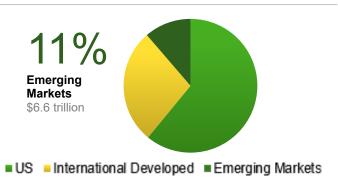
Third quarter 2022 index returns

Emerging markets posted negative returns for the quarter and underperformed both US and non-US developed markets.

Value outperformed growth.

Small caps outperformed large caps.

World Market Capitalization—Emerging Markets



Ranked Returns (%)



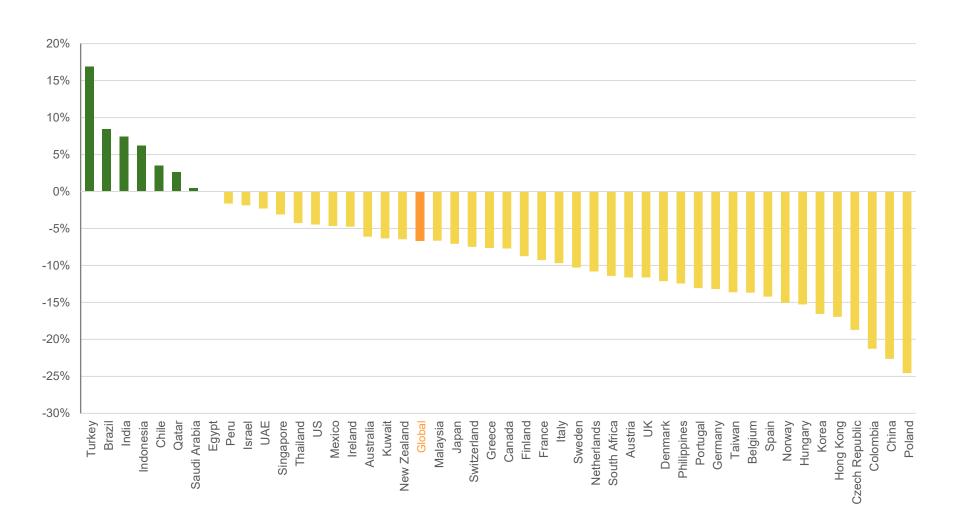
Period Returns	(%)				*	Annualized
Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Small Cap	-5.25	-24.23	-23.23	5.54	1.25	2.91
Value	-10.95	-23.32	-23.63	-2.57	-2.13	-0.41
Large Cap	-11.57	-27.16	-28.11	-2.07	-1.81	1.05
Growth	-12.13	-30.65	-32.09	-1.75	-1.64	2.38

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Country Returns

Third quarter 2022 index returns



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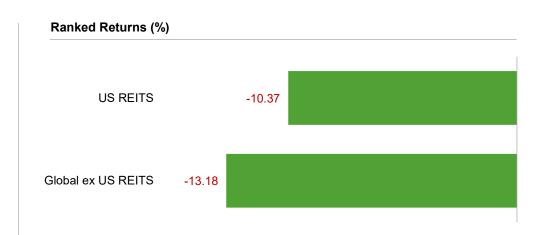
Country returns are the country component indices of the MSCI All Country World IMI Index for all countries except the United States, where the Russell 3000 Index is used instead. Global is the return of the MSCI All Country World IMI Index. MSCI index returns are net dividend. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Frank Russell Company is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. MSCI data © MSCI 2022, all rights reserved.



Real Estate Investment Trusts (REITs)

Third quarter 2022 index returns

US real estate investment trusts outperformed non-US REITs during the quarter.



Total Value of REIT Stocks 32% World ex US \$393 billion 298 REITs (25 other countries) 68% US \$844 billion 113 REITs

Pe	riod Returns (%)					*	Annualized
	Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
	US REITS	-10.37	-29.32	-17.15	-3.29	1.95	5.49
	Global ex US REITS	-13.18	-30.48	-27.32	-9.72	-3.01	1.12

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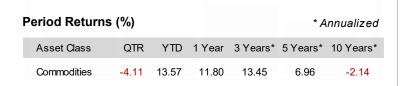


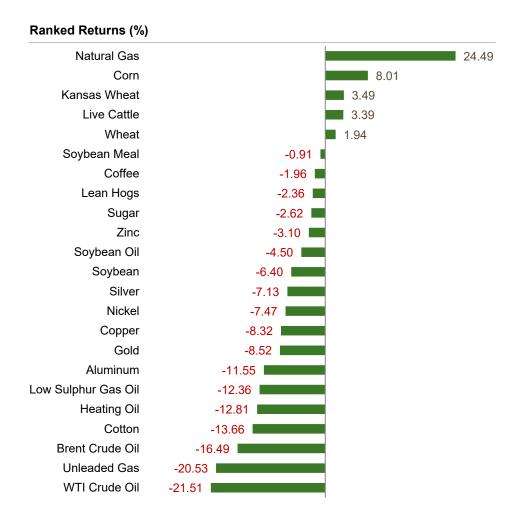
Commodities

Third quarter 2022 index returns

The Bloomberg Commodity Total Return Index returned -4.11% for the third quarter of 2022.

WTI Crude Oil and Unleaded Gas were the worst performers, returning -21.51% and -20.53% during the quarter, respectively. Natural Gas and Corn were the best performers, returning +24.49% and +8.01% during the quarter, respectively.







Fixed Income

Third quarter 2022 index returns

Interest rates increased across all bond maturities in the US Treasury market for the quarter.

The yield on the 5-Year US Treasury Note increased 105 basis points (bps) to 4.06%. The yield on the 10-Year US Treasury Note increased 85 bps to 3.83%. The yield on the 30-Year US Treasury Bond increased 65 bps to 3.79%.

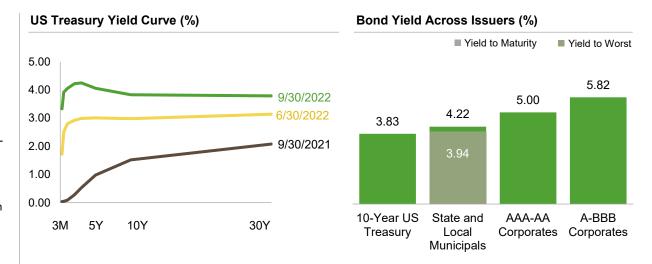
On the short end of the yield curve, the 1-Month US Treasury Bill yield increased 151 bps to 2.79%, while the 1-Year US Treasury Bill yield increased 125 bps to 4.05%. The yield on the 2-Year US Treasury Note increased 130 bps to 4.22%.

In terms of total returns, short-term corporate bonds returned -1.94% and intermediate-term corporate bonds returned -3.11%.¹

The total return for short-term municipal bonds was -1.88% and -2.65% for intermediate-term municipal bonds. Within the municipal fixed income market, general obligation bonds outperformed revenue bonds, returning -3.30% vs. -3.62%, respectively.²



^{2.} Bloomberg Municipal Bond Index.



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Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
ICE BofA US 3-Month Treasury Bill Index	0.46	0.61	0.62	0.59	1.15	0.68
ICE BofA 1-Year US Treasury Note Index	-0.50	-1.77	-1.95	0.18	0.94	0.67
Bloomberg U.S. High Yield Corporate Bond Index	-0.65	-14.74	-14.14	-0.45	1.57	3.94
FTSE World Government Bond Index 1-5 Years (hedged to USD)	-1.79	-5.03	-5.53	-0.87	0.63	0.96
Bloomberg Municipal Bond Index	-3.46	-12.13	-11.50	-1.85	0.59	1.79
Bloomberg U.S. Aggregate Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.89
FTSE World Government Bond Index 1-5 Years	-4.77	-12.10	-13.34	-3.33	-1.83	-1.74
Bloomberg U.S. TIPS Index	-5.14	-13.61	-11.57	0.79	1.95	0.98
Bloomberg U.S. Government Bond Index Long	-9.60	-28.77	-26.60	-8.48	-1.62	0.60

*Annualized

Period Returns (%)

One basis point (bps) equals 0.01%. Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Yield curve data from Federal Reserve. State and local bonds, and the Yield to Worst are from the S&P National AMT-Free Municipal Bond Index. AAA-AA Corporates represent the ICE BofA US Corporates, AA-AAA rated. A-BBB Corporates represent the ICE BofA Corporates, BBB-A rated. Bloomberg data provided by Bloomberg. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). FTSE fixed income indices © 2022 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2022 ICE Data Indices, LLC. S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Bloomberg data provided by Bloomberg.



Global Fixed Income

Third quarter 2022 yield curves

Interest rates generally increased within global developed markets for the quarter.

Realized term premiums were negative in global developed markets.

In Japan, short-term nominal interest rates remained negative. In Canada, the short-term segment of the yield curve inverted.

Changes in Yields (bps) since 6/30/2022

1Y	5Y	10Y	20Y	30Y
143.7	106.4	86.3	72.8	68.6
235.1	238.0	188.6	137.8	117.5
128.0	88.7	73.9	53.5	50.9
-1.1	4.4	2.6	12.1	15.7
90.6	18.6	-4.1	-0.6	-3.5
81.1	34.8	23.4	27.6	22.6
	143.7 235.1 128.0 -1.1 90.6	143.7 106.4 235.1 238.0 128.0 88.7 -1.1 4.4 90.6 18.6	143.7 106.4 86.3 235.1 238.0 188.6 128.0 88.7 73.9 -1.1 4.4 2.6 90.6 18.6 -4.1	143.7 106.4 86.3 72.8 235.1 238.0 188.6 137.8 128.0 88.7 73.9 53.5 -1.1 4.4 2.6 12.1 90.6 18.6 -4.1 -0.6

