



WILLOW CREEK

WEALTH MANAGEMENT

Q3

Quarterly Market Review

Third Quarter 2023



Quarterly Market Review

Third quarter 2023

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. The report concludes with a quarterly topic.

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 Topic: When Value Delivers



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 2023	STOCKS				BONDS	
	-3.25%	-4.10%	-2.93%	-6.49%	-3.23%	-0.78%
						
Since Jan. 2001						
Average Quarterly Return	2.2%	1.5%	2.4%	2.1%	0.9%	0.9%
Best Quarter	22.0%	25.9%	34.7%	32.3%	4.6%	4.6%
	2020 Q2	2009 Q2	2009 Q2	2009 Q3	2001 Q3	2008 Q4
Worst Quarter	-22.8%	-23.3%	-27.6%	-36.1%	-5.9%	-4.1%
	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2022 Q1	2022 Q1

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]), Global Real Estate (S&P Global REIT Index [net dividends]), US Bond Market (Bloomberg US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Global Aggregate ex-USD Bond Index [hedged to USD]). S&P data © 2023 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 2023, all rights reserved. Bloomberg data provided by Bloomberg.



Long-Term Market Summary

Index returns as of September 30, 2023

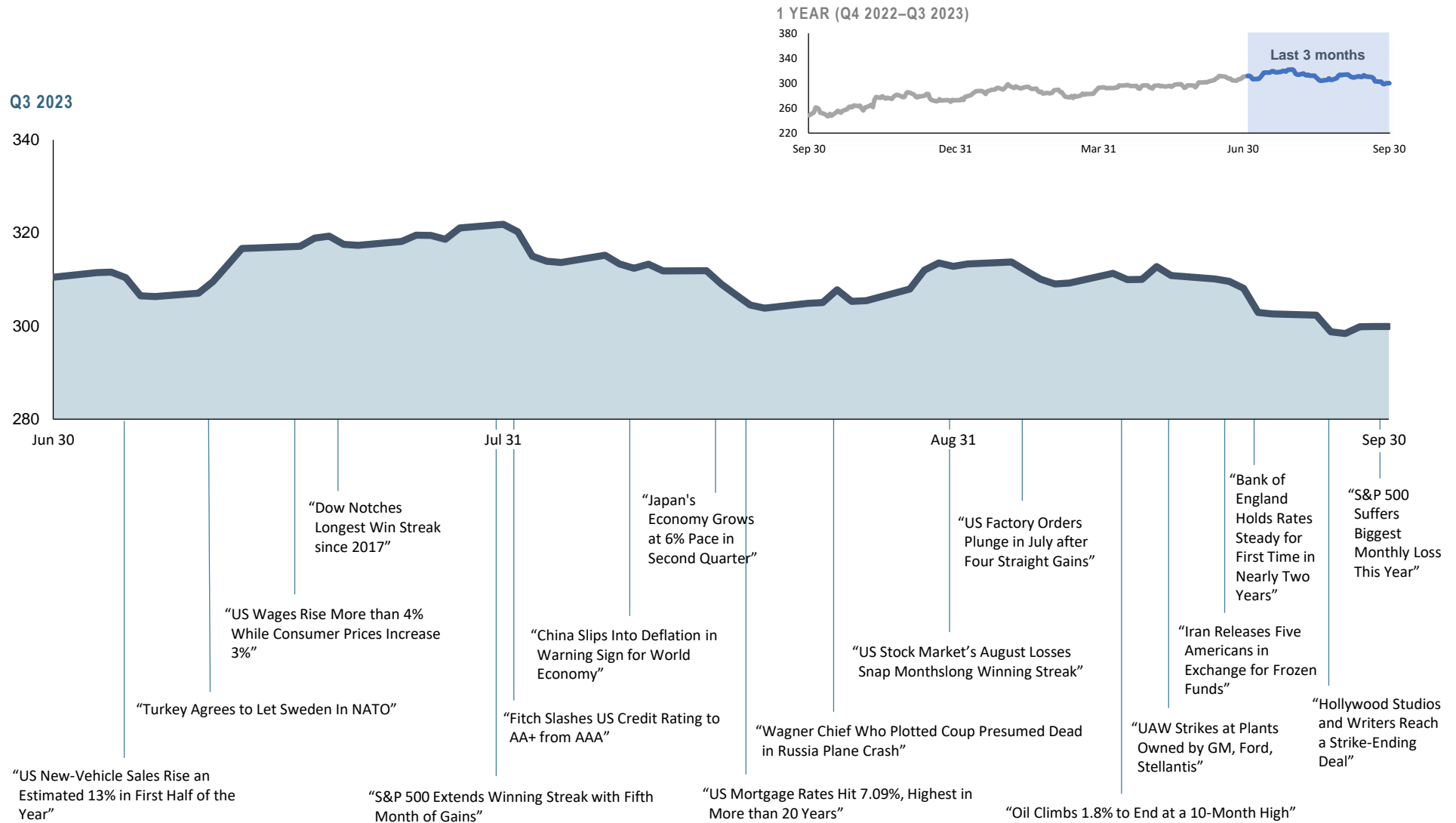
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
1 Year	STOCKS				BONDS	
	20.46%	24.00%	11.70%	2.03%	0.64%	2.99%
5 Years						
	9.14%	3.44%	0.55%	0.01%	0.10%	0.83%
10 Years						
	11.28%	3.84%	2.07%	3.12%	1.13%	2.30%

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World Stock Market Performance

MSCI All Country World Index with selected headlines from Q3 2023



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.

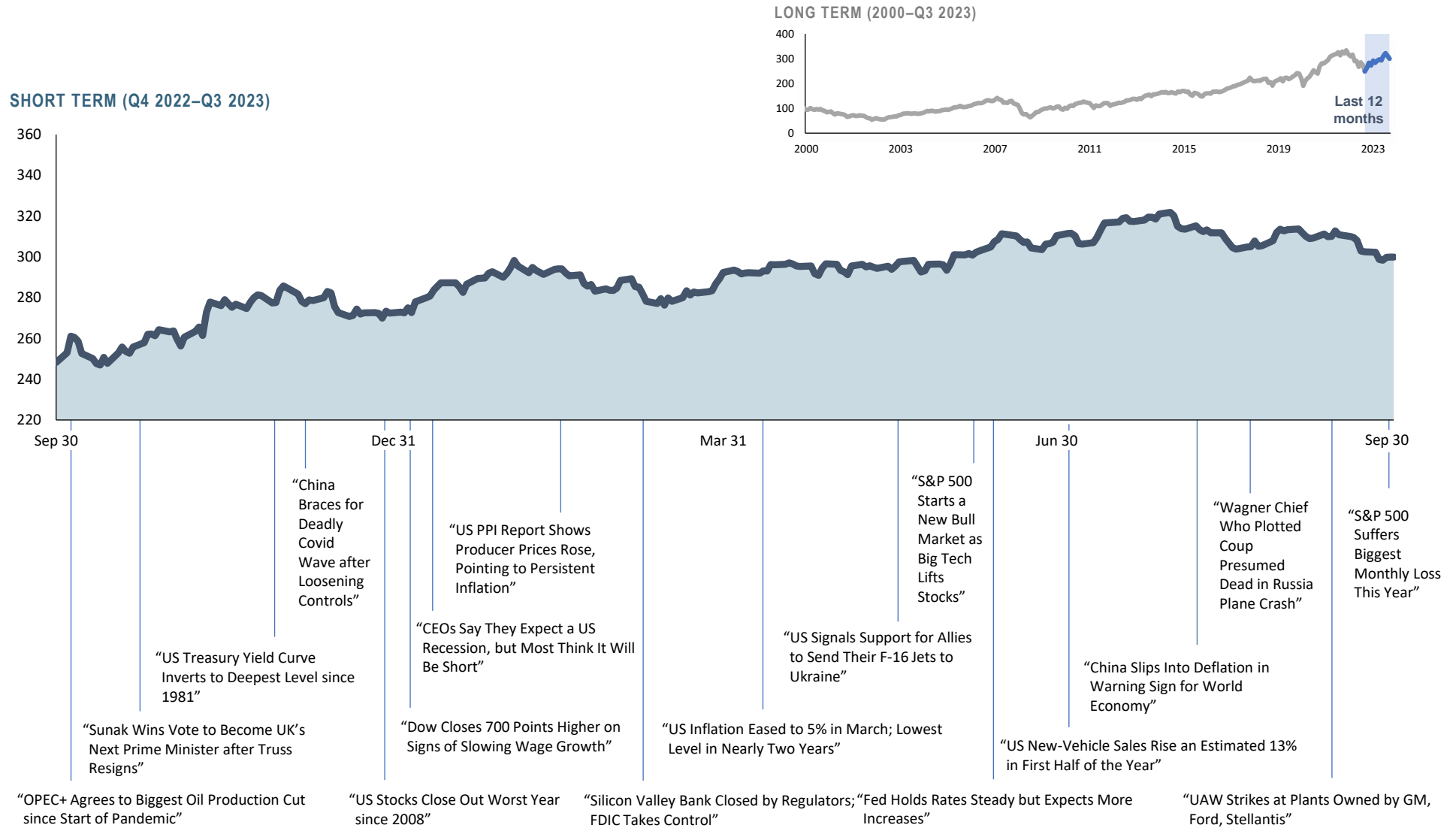
Graph Source: MSCI ACWI Index (net dividends), MSCI data © MSCI 2023, all rights reserved. Index level based at 100 starting January 2000.

It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**



World Stock Market Performance

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



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.

Graph Source: MSCI ACWI Index (net dividends), MSCI data © MSCI 2023, all rights reserved. Index level based at 100 starting January 2000. It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**



US Stocks

Third quarter 2023 index returns

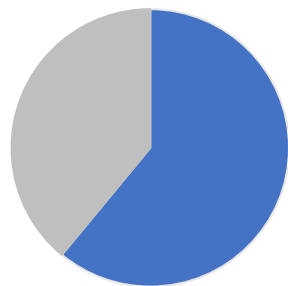
The US equity market posted negative returns for the quarter and outperformed non-US developed markets, but underperformed emerging markets.

Value underperformed growth within large caps and outperformed within small caps.

Small caps underperformed large caps.

REIT indices underperformed equity market indices.

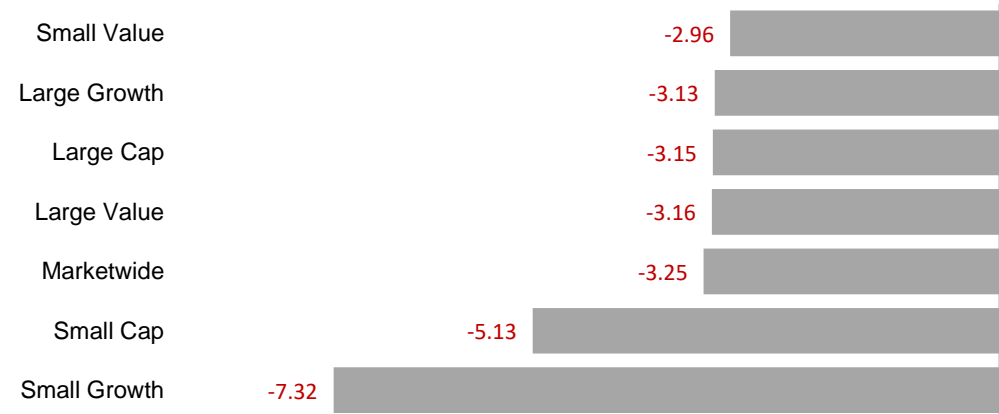
World Market Capitalization—US



61%_{US}

Market
\$41.8 trillion

Ranked Returns (%)



Period Returns (%)

Asset Class	QTR	YTD	1 Year	Annualized		
				3 Years	5 Years	10 Years
Small Value	-2.96	-0.53	7.84	13.32	2.59	6.19
Large Growth	-3.13	24.98	27.72	7.97	12.42	14.48
Large Cap	-3.15	13.01	21.19	9.53	9.63	11.63
Large Value	-3.16	1.79	14.44	11.05	6.23	8.45
Marketwide	-3.25	12.39	20.46	9.38	9.14	11.28
Small Cap	-5.13	2.54	8.93	7.16	2.40	6.65
Small Growth	-7.32	5.24	9.59	1.09	1.55	6.72

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International Developed Stocks

Third quarter 2023 index returns

Developed markets outside of the US posted negative returns for the quarter and underperformed both US and emerging markets.

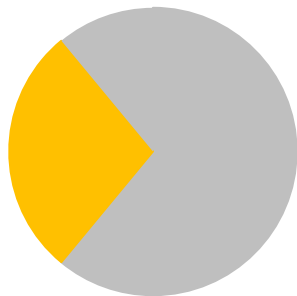
Value outperformed growth.

Small caps outperformed large caps.

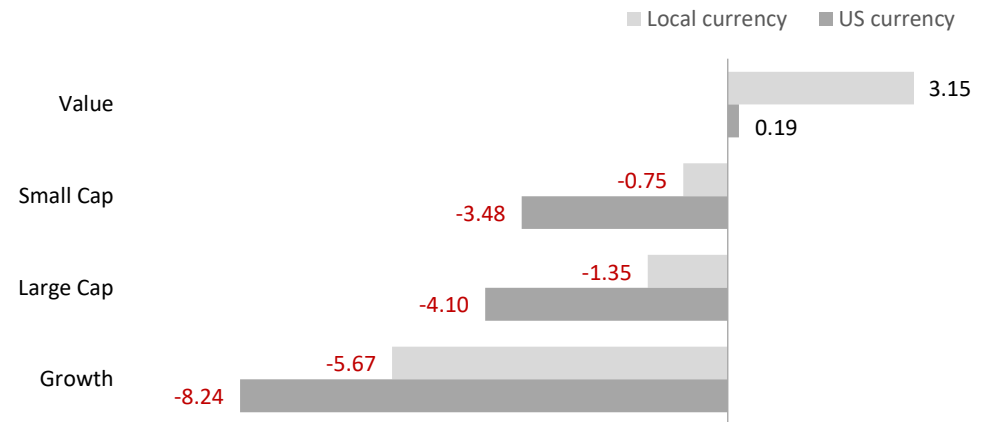
World Market Capitalization—International Developed

28%

International
Developed Market
\$19.1 trillion



Ranked Returns (%)



Period Returns (%)

Asset Class	QTR	YTD	1 Year	Annualized		
				3 Years	5 Years	10 Years
Value	0.19	9.13	28.89	11.64	3.05	3.05
Small Cap	-3.48	1.83	17.32	1.85	1.28	4.13
Large Cap	-4.10	6.73	24.00	6.07	3.44	3.84
Growth	-8.24	4.38	19.27	0.47	3.37	4.36

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Emerging Markets Stocks

Third quarter 2023 index returns

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

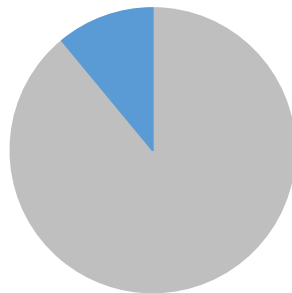
Value outperformed growth.

Small caps outperformed large caps.

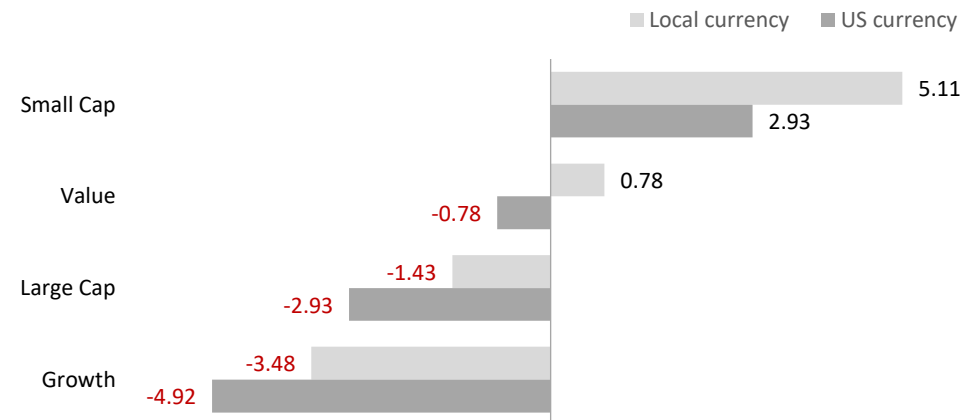
World Market Capitalization—Emerging Markets

11%

Emerging Markets
\$7.6 trillion



Ranked Returns (%)



Period Returns (%)

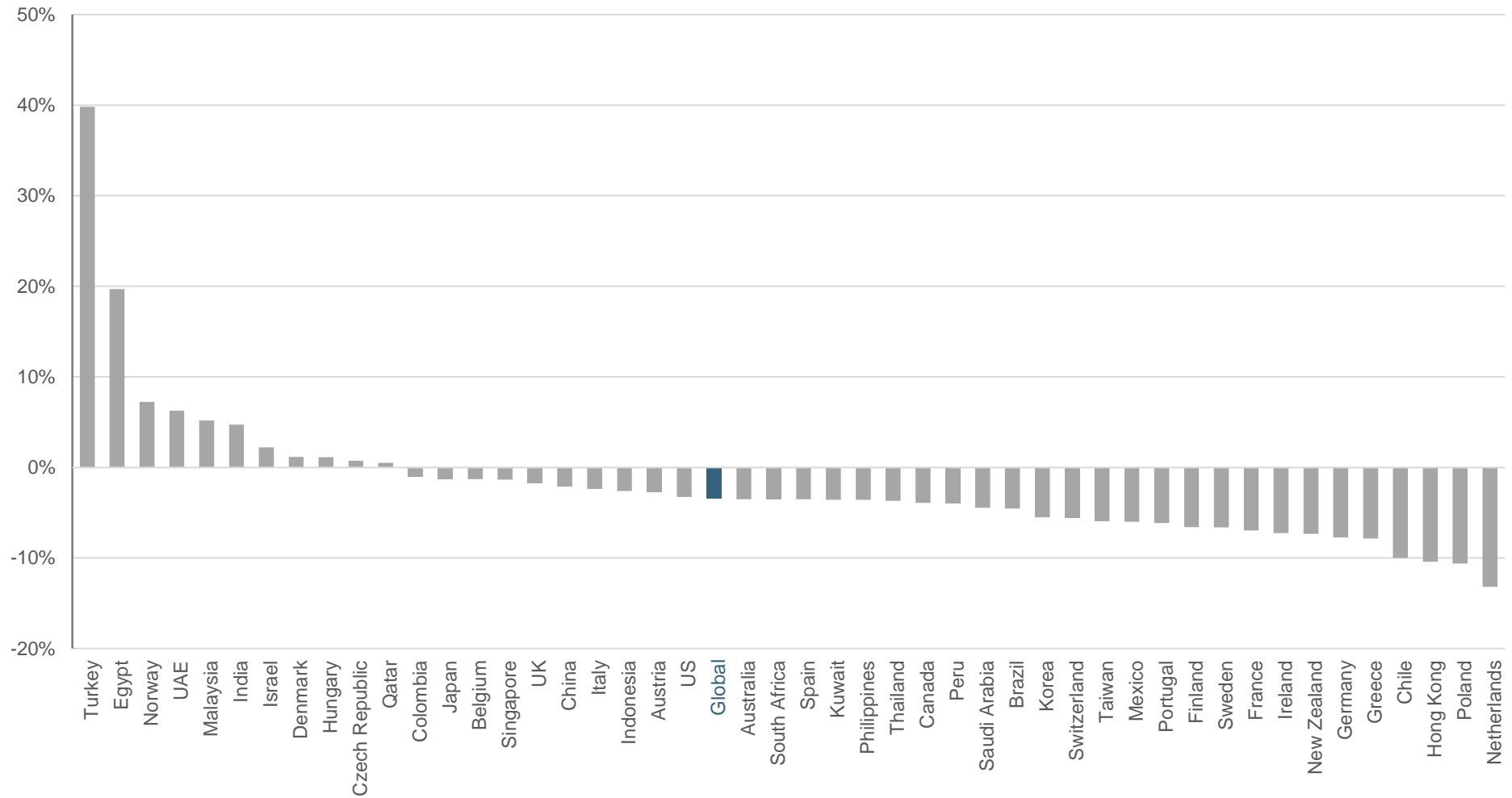
Asset Class	QTR	YTD	1 Year	Annualized		
				3 Years	5 Years	10 Years
Small Cap	2.93	13.74	23.06	10.61	6.45	4.57
Value	-0.78	5.70	16.03	4.40	0.38	1.21
Large Cap	-2.93	1.82	11.70	-1.73	0.55	2.07
Growth	-4.92	-1.76	7.71	-7.19	0.63	2.83

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Country Returns

Third quarter 2023 index returns



Past performance is no guarantee of future results.

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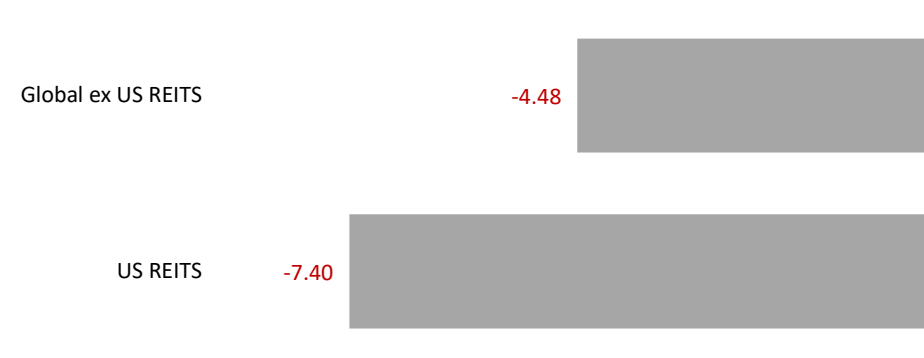


Real Estate Investment Trusts (REITs)

Third quarter 2023 index returns

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

Ranked Returns (%)



Total Value of REIT Stocks



Period Returns (%)

Asset Class	QTR	YTD	1 Year	Annualized		
				3 Years	5 Years	10 Years
Global ex US REITs	-4.48	-8.16	2.30	-2.67	-3.22	0.41
US REITs	-7.40	-2.05	2.61	6.12	1.56	5.28

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. Number of REIT stocks and total value based on the two indices. All index returns are net of withholding tax on dividends. Total value of REIT stocks represented by Dow Jones US Select REIT Index and the S&P Global ex US REIT Index. Dow Jones US Select REIT Index used as proxy for the US market, and S&P Global ex US REIT Index used as proxy for the World ex US market. Dow Jones and S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



Commodities

Third quarter 2023 index returns

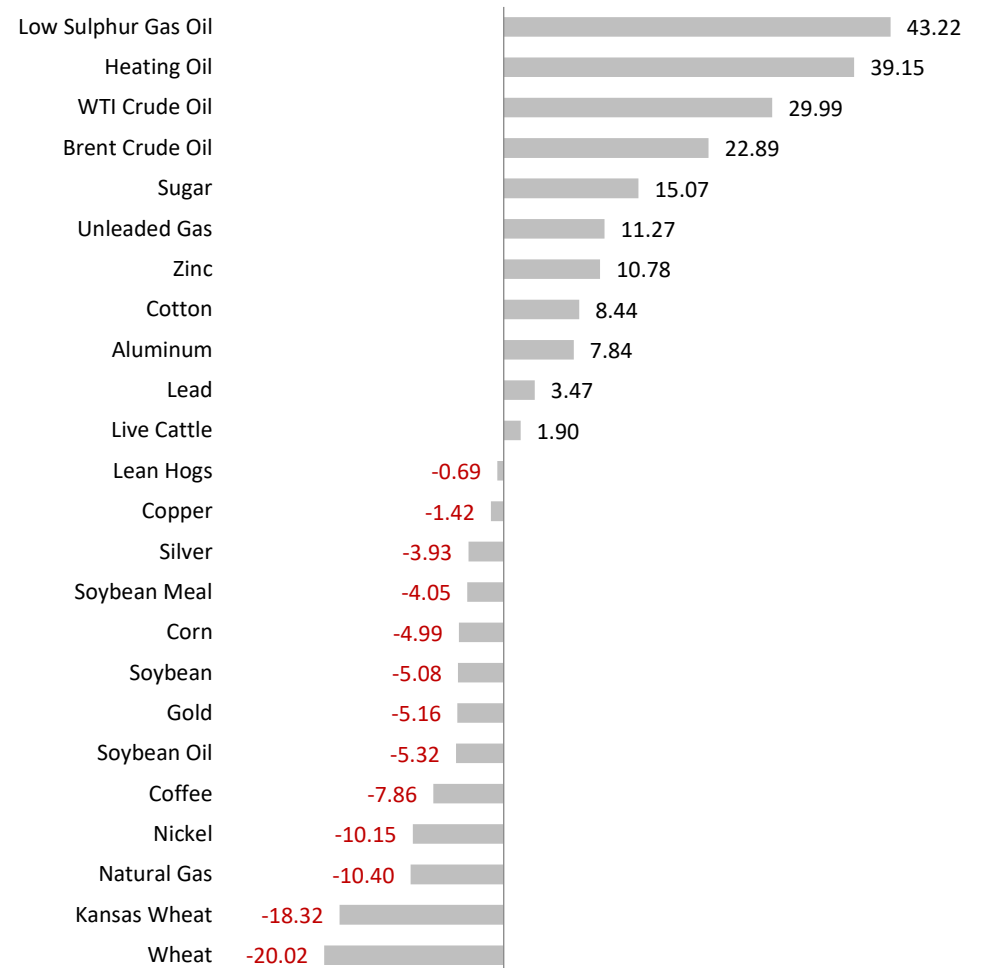
The Bloomberg Commodity Total Return Index returned +4.71% for the third quarter of 2023.

Low Sulphur Gas Oil and Heating Oil were the best performers, returning +43.22% and +39.15% during the quarter, respectively. Wheat and Kansas Wheat were the worst performers, returning -20.02% and -18.32% during the quarter, respectively.

Period Returns (%)

Asset Class	QTR	YTD	1 Year	Annualized		
				3 Years	5 Years	10 Years
Commodities	4.71	-3.44	-1.30	16.23	6.13	-0.75

Ranked Returns (%)





Fixed Income

Third quarter 2023 index returns

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

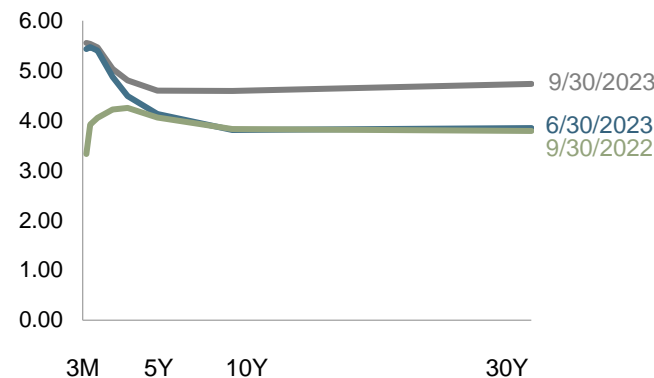
On the short end of the yield curve, the 1-Month US Treasury Bill yield increased 31 basis points (bps) to 5.55%, while the 1-Year US Treasury Bill yield increased 6 bps to 5.46%. The yield on the 2-Year US Treasury Note increased 16 bps to 5.03%.

The yield on the 5-Year US Treasury Note increased 47 bps to 4.60%. The yield on the 10-Year US Treasury Note increased 78 bps to 4.59%. The yield on the 30-Year US Treasury Bond increased 88 bps to 4.73%.

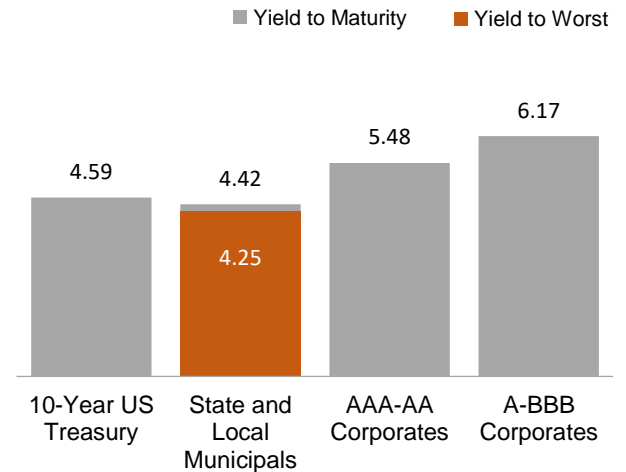
In terms of total returns, short-term US treasury bonds returned +0.17% while intermediate-term US treasury bonds returned -0.81%. Short-term corporate bonds returned +0.25% and intermediate-term corporate bonds returned -0.96%.¹

The total returns for short- and intermediate-term municipal bonds were -0.94% and -2.96%, respectively. Within the municipal fixed income market, general obligation bonds returned -4.10% while revenue bonds returned -4.04%.²

US Treasury Yield Curve (%)



Bond Yield Across Issuers (%)



Period Returns (%)

Asset Class	QTR	YTD	1 Year	Annualized		
				3 Years	5 Years	10 Years
ICE BofA US 3-Month Treasury Bill Index	1.31	3.60	4.47	1.70	1.72	1.11
ICE BofA 1-Year US Treasury Note Index	1.21	2.90	3.68	0.60	1.46	1.00
FTSE World Government Bond Index 1-5 Years (hedged to USD)	0.56	2.10	2.68	-1.05	1.03	1.15
Bloomberg U.S. High Yield Corporate Bond Index	0.46	5.86	10.28	1.76	2.96	4.24
FTSE World Government Bond Index 1-5 Years	-1.01	-0.15	3.68	-3.80	-0.84	-1.00
Bloomberg U.S. TIPS Index	-2.60	-0.78	1.25	-1.98	2.12	1.74
Bloomberg U.S. Aggregate Bond Index	-3.23	-1.21	0.64	-5.21	0.10	1.13
Bloomberg Municipal Bond Index	-3.95	-1.38	2.66	-2.30	1.05	2.29
Bloomberg U.S. Government Bond Index Long	-11.79	-8.50	-9.04	-15.66	-2.78	0.75

1. Bloomberg US Treasury and US Corporate Bond Indices.

2. Bloomberg Municipal Bond Index.

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 (S&B) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld). FTSE fixed income indices © 2023 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2023 ICE Data Indices, LLC. S&P data © 2023 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 2023 yield curves

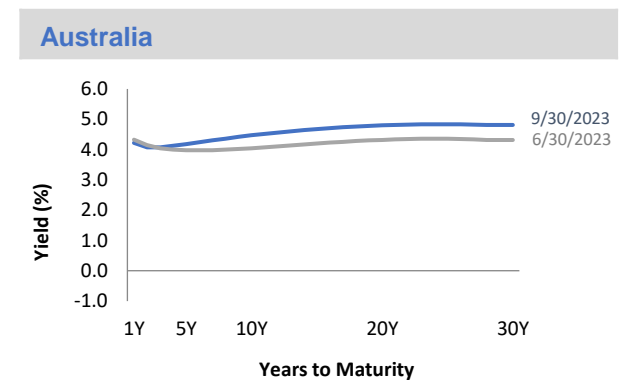
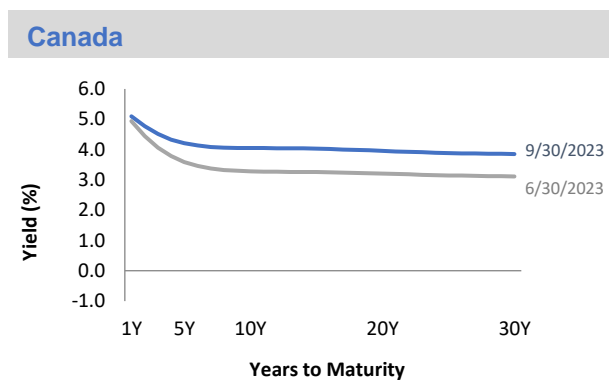
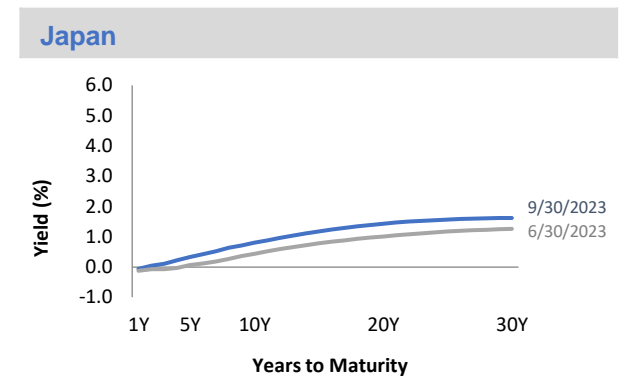
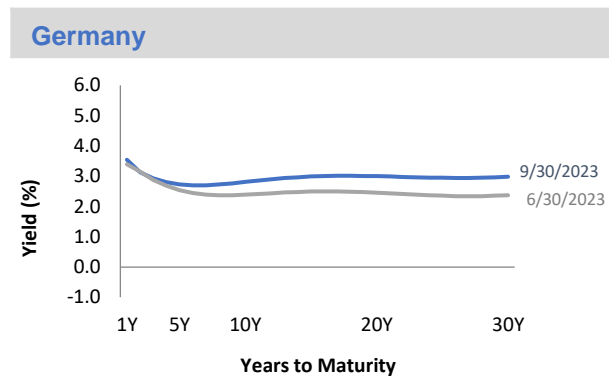
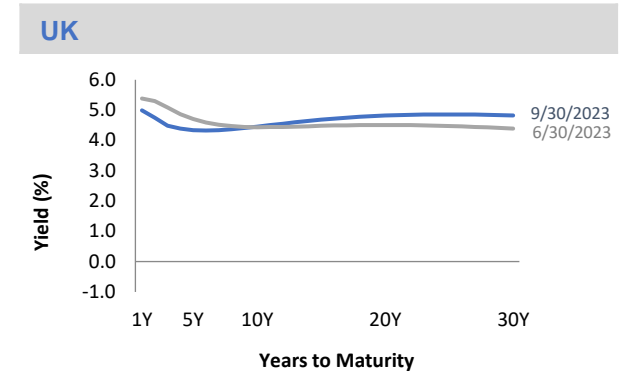
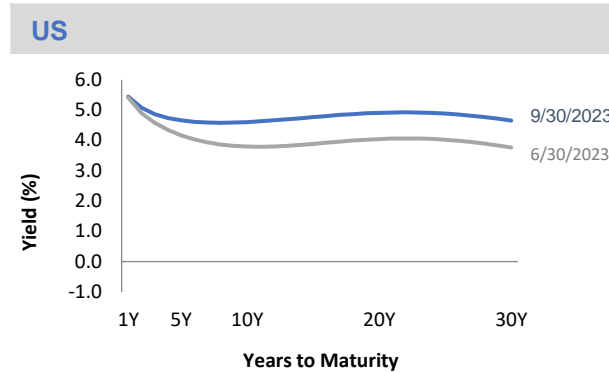
With the exception of the UK and Australia, interest rates generally increased across global developed markets for the quarter. In the UK, short-to intermediate-term rates decreased. In Australia, ultrashort-term rates decreased.

Realized term premiums were generally negative across global developed markets.

In Japan, ultrashort-term nominal interest rates were negative. In the UK, Germany, Canada, and Australia, the short-term segment of the yield curve was inverted.

Changes in Yields (bps) since 06/30/2023

	1Y	5Y	10Y	20Y	30Y
US	3.4	49.2	81.2	86.5	89.4
UK	-39.4	-36.3	1.7	31.2	43.4
Germany	14.7	18.7	42.1	54.6	60.4
Japan	6.0	26.1	36.2	41.9	36.3
Canada	15.6	61.8	76.7	75.2	73.7
Australia	-11.0	20.5	42.8	47.8	49.7





When Value Delivers

Third quarter 2023

Wes Crill, PhD, Senior Investment Director and Vice President, Dimensional Fund Advisors

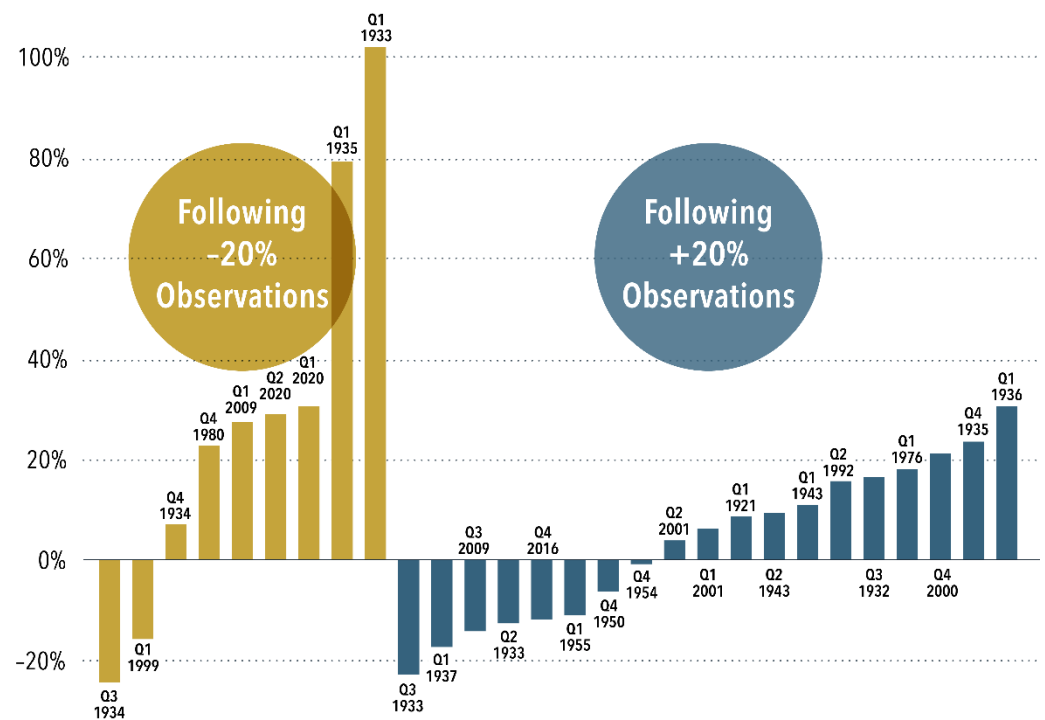
The first half of 2023 marks the tenth time since 1926 that value stocks have underperformed growth stocks by more than 20 percentage points over a two-quarter period. More often than not, value has responded like the hero in an action movie, beating growth over the following four quarters in seven of the nine previous instances and averaging a cumulative outperformance of nearly 29 percentage points.

The sample size may be small, but a positive average value premium following a large negative period is not too surprising. In fact, looking at the other side of the value performance distribution, there have been 19 two-quarter periods with the value premium exceeding positive 20%. In 11 of these, value outperformance continued over the next four quarters. The average premium across all 19 was 3.6%.

It's notoriously challenging to find an indicator that consistently predicts negative value premiums. Regardless of value's recent performance, investors should expect positive value premiums going forward. That's a strong incentive for investors to maintain a disciplined stance to asset allocation, so they can capture the outperformance when value stocks deliver.

Comeback Kid

Cumulative return difference for value minus growth in US stocks over the four quarters following two-quarter periods during which value underperformed by -20% or outperformed by +20%.





When Value Delivers—Disclosures

(continued from page 15)

Past performance is no guarantee of future results.

In USD. July 1926–June 2023. Quarterly returns for value and growth based on the Fama/French US Value Research Index and the Fama/French US Growth Research Index, respectively. Data provided by Fama/French. The Fama/French indices represent academic concepts that may be used in portfolio construction and are not available for direct investment or for use as a benchmark. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. See “Index Descriptions” for descriptions of the Fama/French index data.

Index Descriptions: Fama/French US Value Research Index: Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973). Fama/French US Growth Research Index: Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

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