

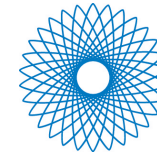


Gradient Capital
ADVISORS, LLC

Q4

Quarterly Market Review
Fourth Quarter 2024

Quarterly Market Review



Gradient Capital
ADVISORS, LLC

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

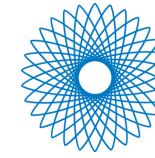
Real Estate Investment Trusts (REITs)

Commodities

Fixed Income







Global Fixed Income

Quarterly Topic: How to Feel About Consumer Feelings

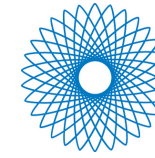


Quarterly Market Summary

Returns (USD), as of December 31, 2024

	Stocks				Bonds	
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
Q4 2024	2.63% 	-7.43% 	-8.01% 	-9.02% 	-3.06% 	0.74% 
Since January 2001						
Average Quarterly Return	2.4%	1.6%	2.5%	2.2%	0.9%	1.0%
Best Quarter	22.0% 2020 Q2	25.9% 2009 Q2	34.7% 2009 Q2	32.3% 2009 Q3	6.8% 2023 Q4	5.4% 2023 Q4
Worst Quarter	-22.8% 2008 Q4	-23.3% 2020 Q1	-27.6% 2008 Q4	-36.1% 2008 Q4	-5.9% 2022 Q1	-4.1% 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 © 2025 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 2025, all rights reserved. Bloomberg data provided by Bloomberg.

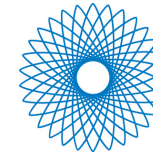


Long-Term Market Summary

Returns (USD), as of December 31, 2024

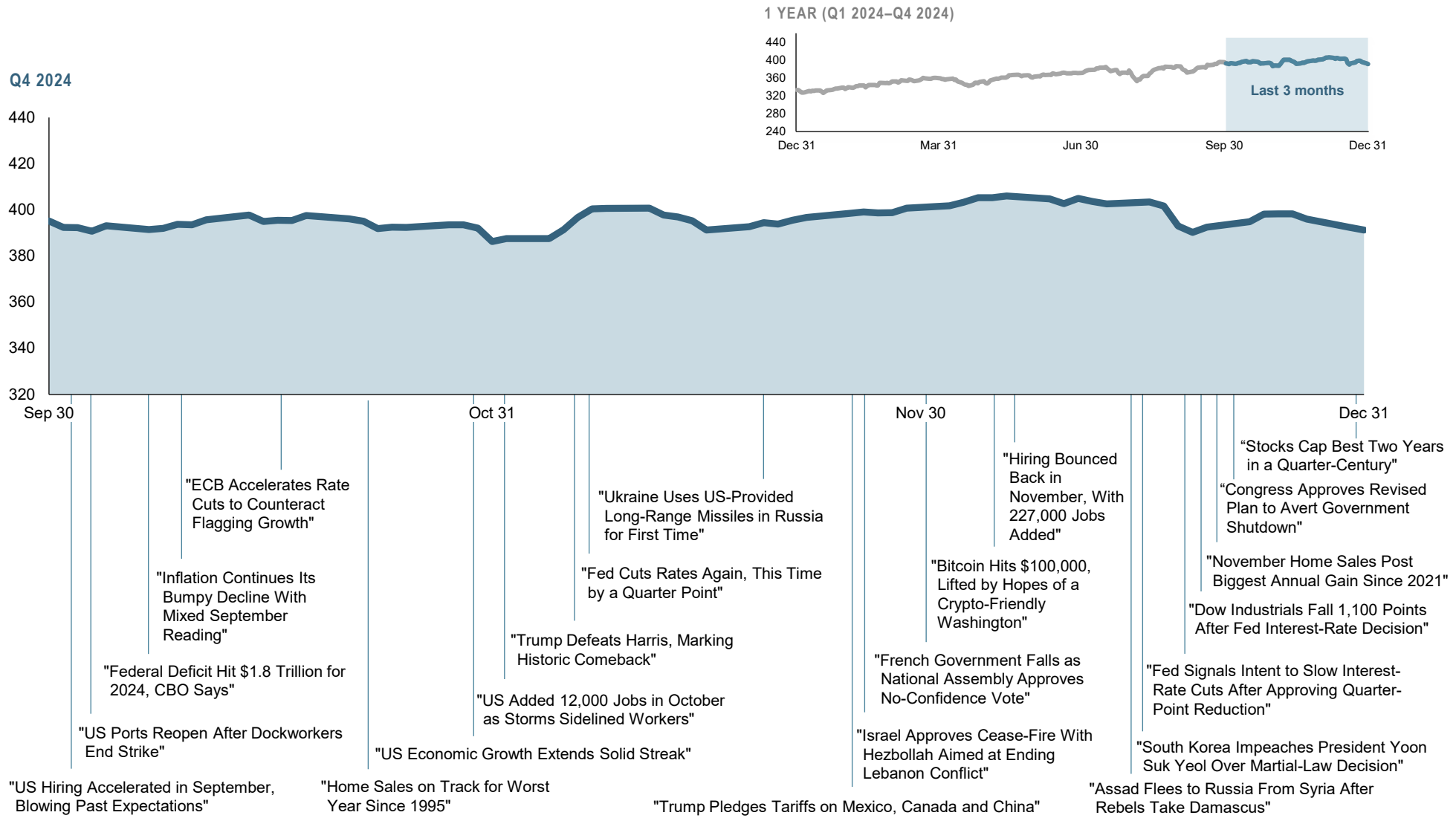
	Stocks				Bonds	
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
1 Year	23.81% ↑	4.70% ↑	7.50% ↑	2.77% ↑	1.25% ↑	4.97% ↑
5 Years	13.86% ↑	5.10% ↑	1.70% ↑	0.46% ↑	-0.33% ↓	1.01% ↑
10 Years	12.55% ↑	5.26% ↑	3.64% ↑	2.98% ↑	1.35% ↑	2.43% ↑
15 Years	13.56% ↑	5.25% ↑	3.01% ↑	6.28% ↑	2.37% ↑	3.18% ↑
20 Years	10.22% ↑	4.95% ↑	6.01% ↑	4.38% ↑	3.01% ↑	3.54% ↑

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World Stock Market Performance

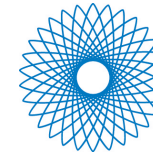
MSCI All Country World Index with selected headlines from Q4 2024



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.

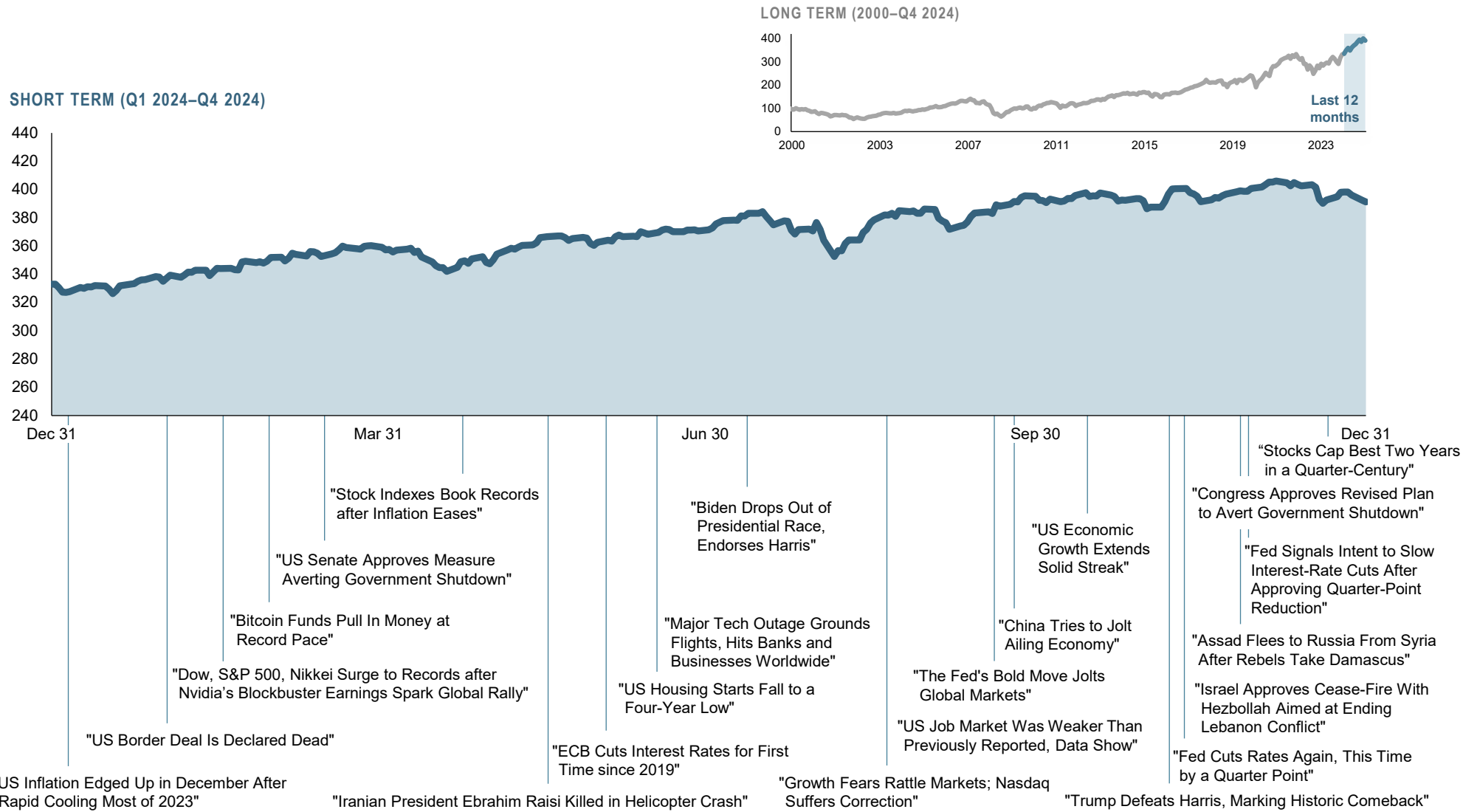
Graph Source: MSCI ACWI Index (net dividends). MSCI data © MSCI 2025, all rights reserved. Index level based at 100 starting January 2000.

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

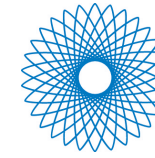
MSCI All Country World Index with selected headlines from past 12 months



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 2025, all rights reserved. Index level based at 100 starting January 2000.

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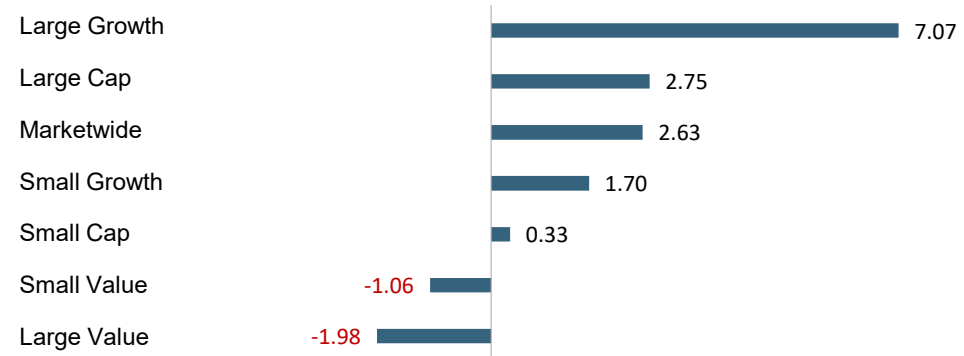


US Stocks

Returns (USD), 4th Quarter 2024

- The US equity market posted positive returns for the quarter and outperformed both non-US developed and emerging markets.
- Value underperformed growth.
- Small caps underperformed large caps.
- REIT indices underperformed equity market indices.

Ranked Returns (%)



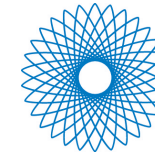
World Market Capitalization



Periodic Returns (%)

Asset Class	QTR	ANNUALIZED					
		1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Large Growth	7.07	33.36	10.47	18.96	16.78	16.45	12.56
Large Cap	2.75	24.51	8.41	14.28	12.87	13.79	10.39
Marketwide	2.63	23.81	8.01	13.86	12.55	13.56	10.22
Small Growth	1.70	15.15	0.21	6.86	8.09	10.92	8.32
Small Cap	0.33	11.54	1.24	7.40	7.82	10.33	7.79
Small Value	-1.06	8.05	1.94	7.29	7.14	9.46	7.01
Large Value	-1.98	14.37	5.63	8.68	8.49	10.75	7.89

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: Marketwide (Russell 3000 Index), Large Cap (Russell 1000 Index), Large Value (Russell 1000 Value Index), Large Growth (Russell 1000 Growth Index), Small Cap (Russell 2000 Index), Small Value (Russell 2000 Value Index), and Small Growth (Russell 2000 Growth Index). World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. Russell 3000 Index is used as the proxy for the US market. Dow Jones US Select REIT Index used as proxy for the US REIT market. MSCI data © MSCI 2025, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

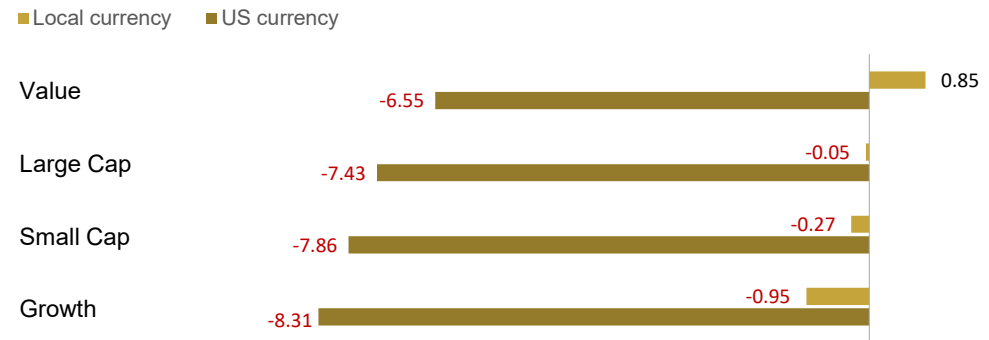


International Developed Stocks

Returns (USD), 4th Quarter 2024

- Developed markets outside of the US posted negative returns for the quarter and underperformed the US market, but outperformed emerging markets.
- Value outperformed growth.
- Small caps underperformed large caps.

Ranked Returns (%)



World Market Capitalization

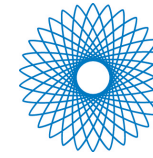


International Developed Market
\$21.1 trillion

Periodic Returns (%)

Asset Class	QTR	ANNUALIZED					
		1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Value	-6.55	6.65	6.04	5.50	4.54	4.53	4.36
Large Cap	-7.43	4.70	1.91	5.10	5.26	5.25	4.95
Small Cap	-7.86	2.76	-2.77	2.87	5.49	6.29	5.68
Growth	-8.31	2.82	-2.26	4.29	5.72	5.77	5.38

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: 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 is used as the proxy for the International Developed market. MSCI data © MSCI 2025, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



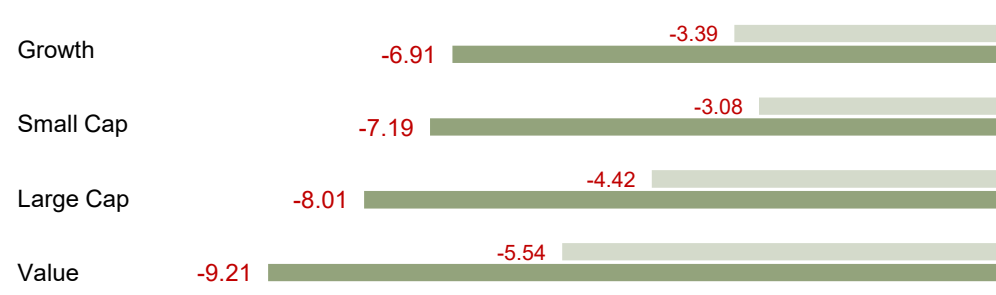
Emerging Markets Stocks

Returns (USD), 4th Quarter 2024

- Emerging markets posted negative returns for the quarter and underperformed both US and non-US developed markets.
- Value underperformed growth.
- Small caps outperformed large caps.

Ranked Returns (%)

Local currency US currency



World Market Capitalization

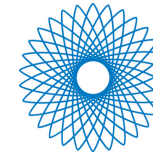


Emerging Markets
\$9.0 trillion

Periodic Returns (%)

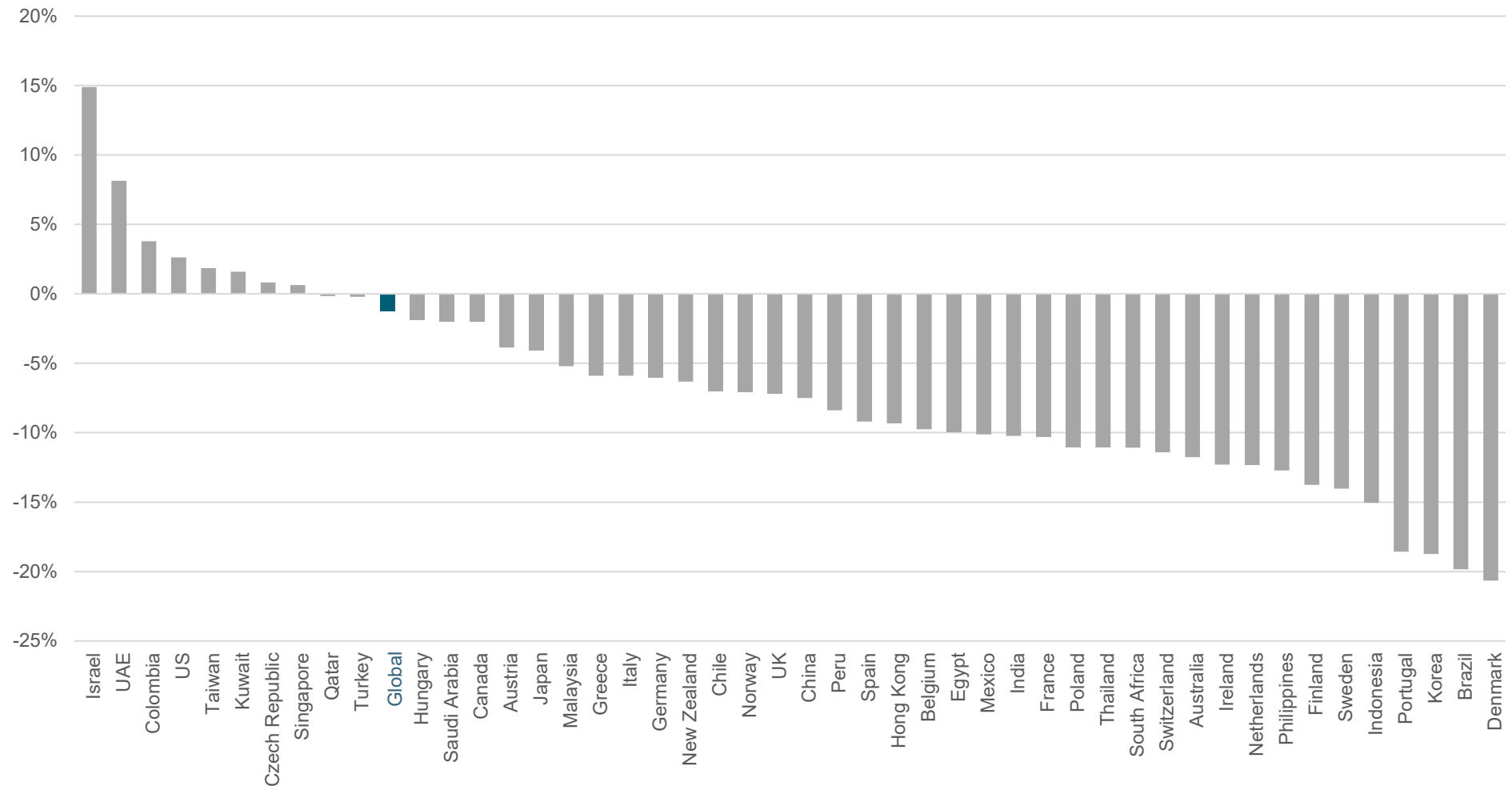
Asset Class	QTR	ANNUALIZED					
		1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Growth	-6.91	10.30	-3.90	1.32	4.34	3.89	6.26
Small Cap	-7.19	4.79	2.11	8.56	5.73	4.79	7.66
Large Cap	-8.01	7.50	-1.92	1.70	3.64	3.01	6.01
Value	-9.21	4.51	0.16	1.96	2.81	2.04	5.66

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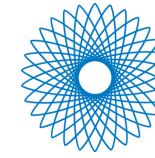
Country Returns

Returns (USD), 4th Quarter 2024



Past performance is no guarantee of future results.

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 2025, all rights reserved.



Real Estate Investment Trusts (REITs)

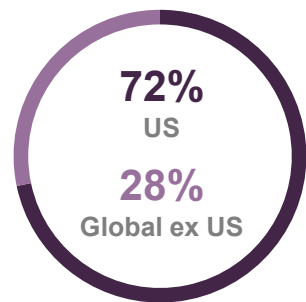
Returns (USD), 4th Quarter 2024

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

Ranked Returns (%)



Total Value of REIT Stocks



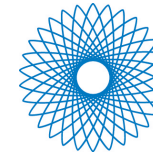
US
\$1,037 billion
103 REITs

Global ex US
\$409 billion
268 REITs
(25 other countries)

Periodic Returns (%)

Asset Class	QTR	ANNUALIZED					
		1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
US REITS	-5.93	8.10	-3.02	3.40	4.89	8.78	6.49
Global ex US REITS	-15.37	-7.83	-9.00	-5.25	0.05	3.22	2.15

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 © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



Commodities

Returns (USD), 4th Quarter 2024

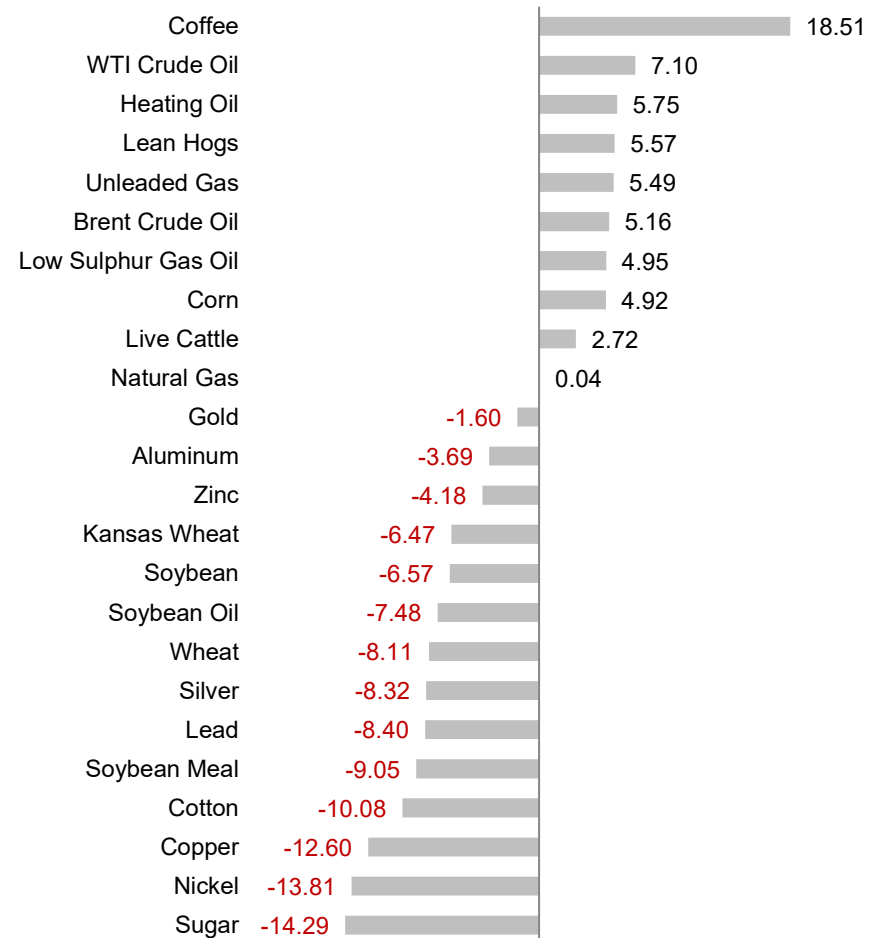
The Bloomberg Commodity Total Return Index returned -0.45% for the fourth quarter of 2024.

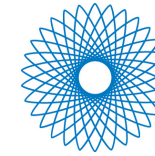
Sugar and Nickel were the worst performers, returning -14.29% and -13.81% during the quarter, respectively. Coffee and WTI Crude Oil were the best performers, returning +18.51% and +7.10% during the quarter, respectively.

Commodities Periodic Returns (%)

QTR	ANNUALIZED					
	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
-0.45	5.38	4.05	6.77	1.28	-1.04	-0.30

Commodities Ranked Returns (%)





Fixed Income

Returns (USD), 4th Quarter 2024

Within the US Treasury market, interest rates generally increased during the quarter.

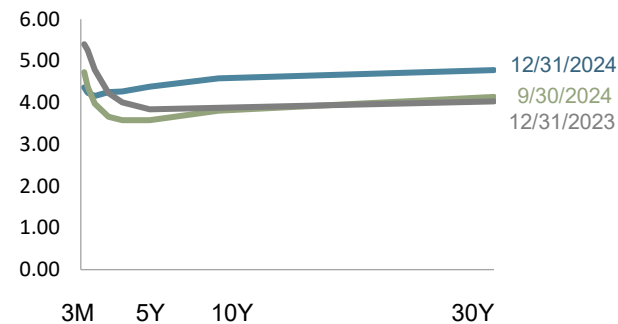
On the short end of the yield curve, the 1-Month US Treasury Bill yield decreased 53 basis points (bps) to 4.40%, while the 1-Year US Treasury Bill yield increased 18 bps to 4.16%. The yield on the 2-Year US Treasury Note increased 59 bps to 4.25%.

The yield on the 5-Year US Treasury Note increased 80 bps to 4.38%. The yield on the 10-Year US Treasury Note increased 77 bps to 4.58%. The yield on the 30-Year US Treasury Bond increased 64 bps to 4.78%.

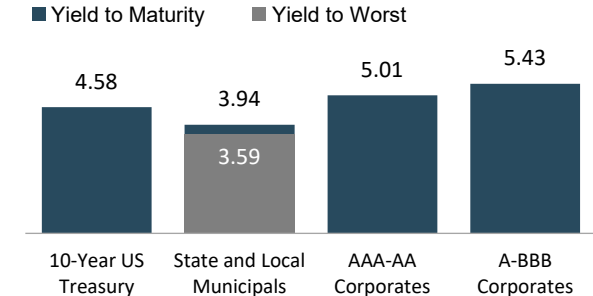
In terms of total returns, short-term US treasury bonds returned -0.83% while intermediate-term US treasury bonds returned -1.70%. Short-term corporate bonds returned -0.40% and intermediate-term corporate bonds returned -1.40%.¹

The total returns for short- and intermediate-term municipal bonds were -0.40% and -1.30%, respectively. Within the municipal fixed income market, general obligation bonds returned -1.18% while revenue bonds returned -1.25%.²

US Treasury Yield Curve (%)



Bond Yield Across Issuers (%)



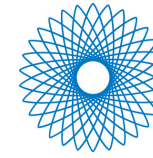
Periodic Returns (%)

Asset Class	QTR	ANNUALIZED					
		1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
ICE BofA US 3-Month Treasury Bill Index	1.17	5.25	3.89	2.46	1.77	1.20	1.66
ICE BofA 1-Year US Treasury Note Index	0.70	4.75	2.78	2.01	1.63	1.22	1.82
Bloomberg U.S. High Yield Corporate Bond Index	0.17	8.19	2.92	4.21	5.17	6.44	6.45
FTSE World Government Bond Index 1-5 Years (hedged to USD)	0.15	4.31	1.59	1.43	1.67	1.71	2.39
Bloomberg Municipal Bond Index	-1.22	1.05	-0.55	0.99	2.25	3.21	3.49
Bloomberg U.S. TIPS Index	-2.88	1.84	-2.30	1.87	2.24	2.86	3.30
Bloomberg U.S. Aggregate Bond Index	-3.06	1.25	-2.41	-0.33	1.35	2.37	3.01
FTSE World Government Bond Index 1-5 Years	-3.38	0.11	-1.44	-0.52	0.11	-0.05	1.00
Bloomberg U.S. Government Bond Index Long	-8.60	-6.37	-11.91	-5.17	-0.61	2.76	3.35

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&BBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld). FTSE fixed income indices © 2025 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2025 ICE Data Indices, LLC. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Bloomberg data provided by Bloomberg.



Global Fixed Income

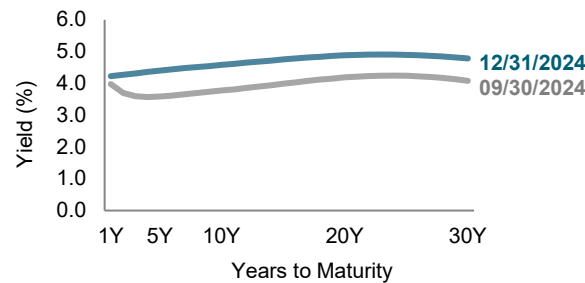
Yield curves, 4th Quarter 2024

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

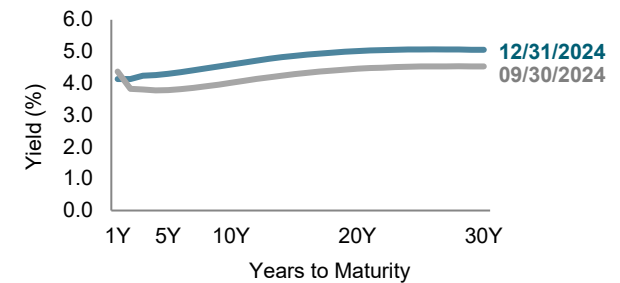
Realized term premiums were generally negative across global developed markets, as longer-term bonds generally underperformed shorter-term bonds.

In the UK, Germany, Canada and Australia, the short-term segment of the yield curve remained inverted.

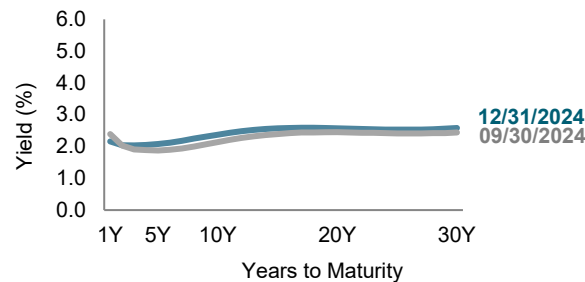
US



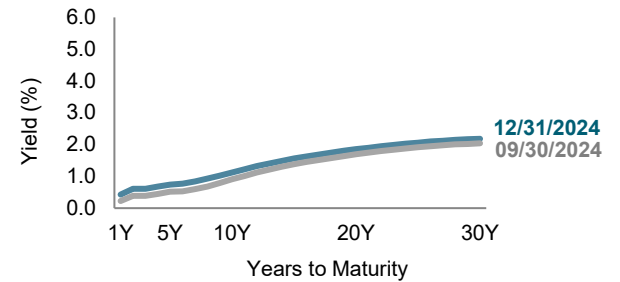
UK



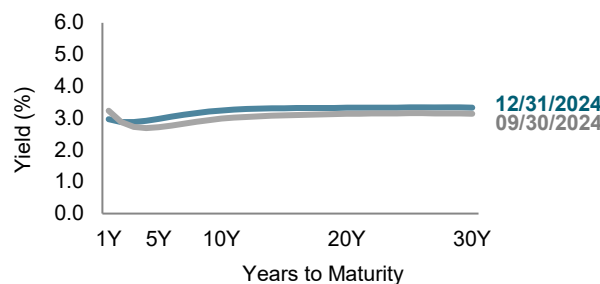
Germany



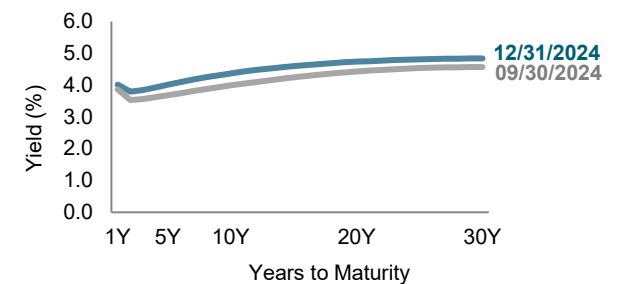
Japan



Canada

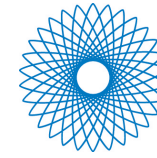


Australia



Changes in Yield (bps) Since 09/30/2024

	1Y	5Y	10Y	20Y	30Y
US	24.9	81.7	80.8	69.5	70.1
UK	-23.5	51.2	57.5	55.8	52.2
Germany	-23.0	20.2	23.5	12.8	14.7
Japan	20.2	22.6	22.0	16.1	14.1
Canada	-26.4	26.6	25.8	19.1	19.0
Australia	14.7	32.9	38.0	30.9	27.1



How to Feel About Consumer Feelings

4th quarter 2024

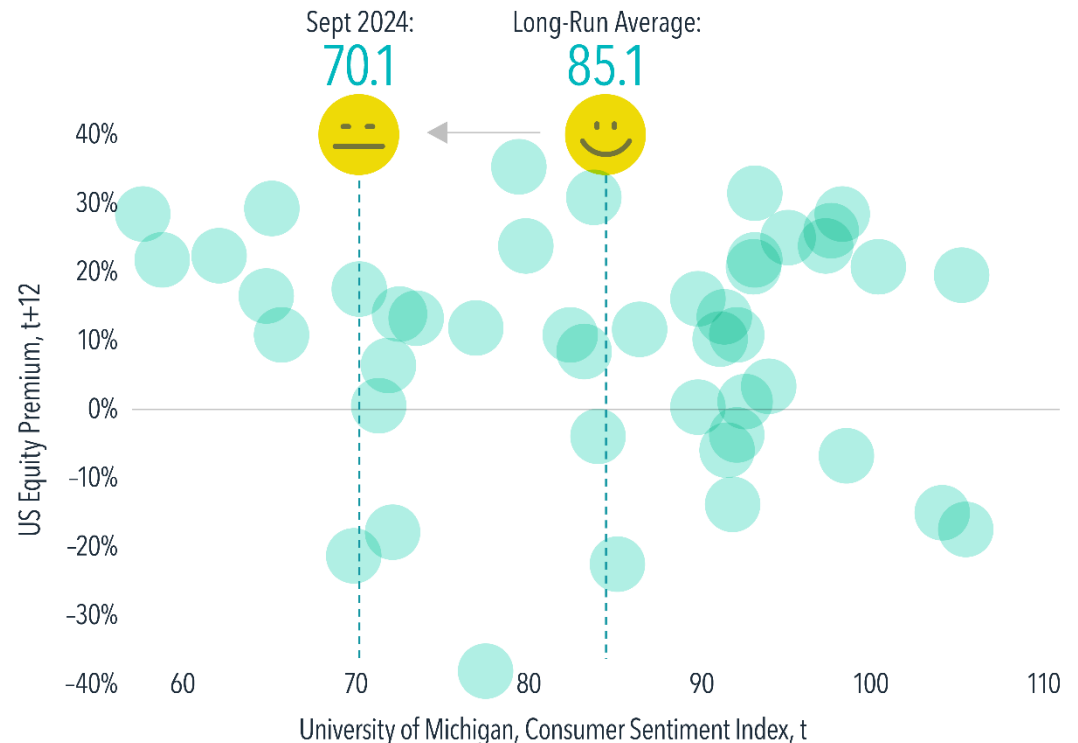
Matt Lipps, CFA, Investment Strategist, Dimensional Fund Advisors

Does your neighbor know where the economy is headed in the next 12 months? Since the 1960s, the University of Michigan has published the popular Consumer Sentiment Index, which asks everyday folk questions like: “Are you better off or worse off financially than you were a year ago?” or “Do you think that a year from now you will be better off financially, worse off financially, or just about the same as now?”¹ This index is sometimes viewed as a beacon of how investors feel about the direction of the economy.

As of September 30, 2024, the index sat at 70.1, pessimistic relative to its long-run average of 85.1.² Investors interpreting this as an ominous sign for markets may not have anything to fear though, as the data show this index has not been great at predicting future returns. Plotting the level of the Consumer Sentiment Index against subsequent 12-month stock market returns shows no discernible pattern, except that stocks tend to go up more often than they go down. Out of the 226 months where the sentiment index was below the long-run average, the average equity premium over the next year was 10.6%.

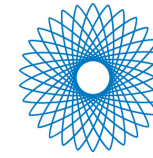
If your neighbor is feeling sour, that doesn't necessarily mean *you* should be changing your outlook or your investment portfolio. Markets tend to price in the latest views on the economy, including consumer optimism.

NEXT 12-MONTH US EQUITY PREMIUM AGAINST UNIVERSITY OF MICHIGAN CONSUMER SENTIMENT INDEX
December 1978–December 2023



1. “Surveys of Consumers,” The Regents of the University of Michigan, 2024. All rights reserved.

2. Current index level as of September 30, 2024. The date range for the long-run monthly average is December 1978–December 2023.



How to Feel About Consumer Feelings

(continued from page 15)

Past performance is no guarantee of future results.

Index Descriptions

Fama/French Total US Market Research Index: July 1926–present: Fama/French Total US Market Research Factor + One-Month US Treasury Bills. Source: Ken French website.

Results shown during periods prior to each index's inception date do not represent actual returns of the respective index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains.

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