

Gradient Capital
ADVISORS, LLC

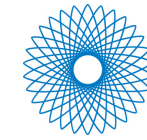
Q4

Quarterly Market Review
Fourth Quarter 2021

Quarterly Market Review

Fourth Quarter 2021

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 also features a quarterly topic.



Gradient Capital
ADVISORS, LLC

Overview:

Market Summary

World Stock Market Performance

US Stocks

International Developed Stocks

Emerging Markets Stocks

Country Returns

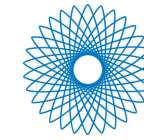
Real Estate Investment Trusts (REITs)

Commodities

Fixed Income







Global Fixed Income

Quarterly Topic: All-Time-High Anxiety

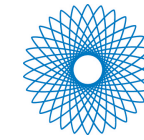


Quarterly Market Summary

Index Returns

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
4Q 2021	STOCKS				BONDS	
	9.28%	3.14%	-1.31%	12.35%	0.01%	0.07%
						
Since Jan. 2001						
Average Quarterly Return	2.5%	1.7%	2.9%	2.7%	1.1%	1.1%
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%	-3.4%	-2.7%
	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2021 Q1	2015 Q2

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 © 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.

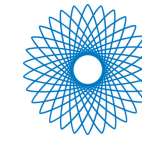


Long-Term Market Summary

Index Returns as of December 31, 2021

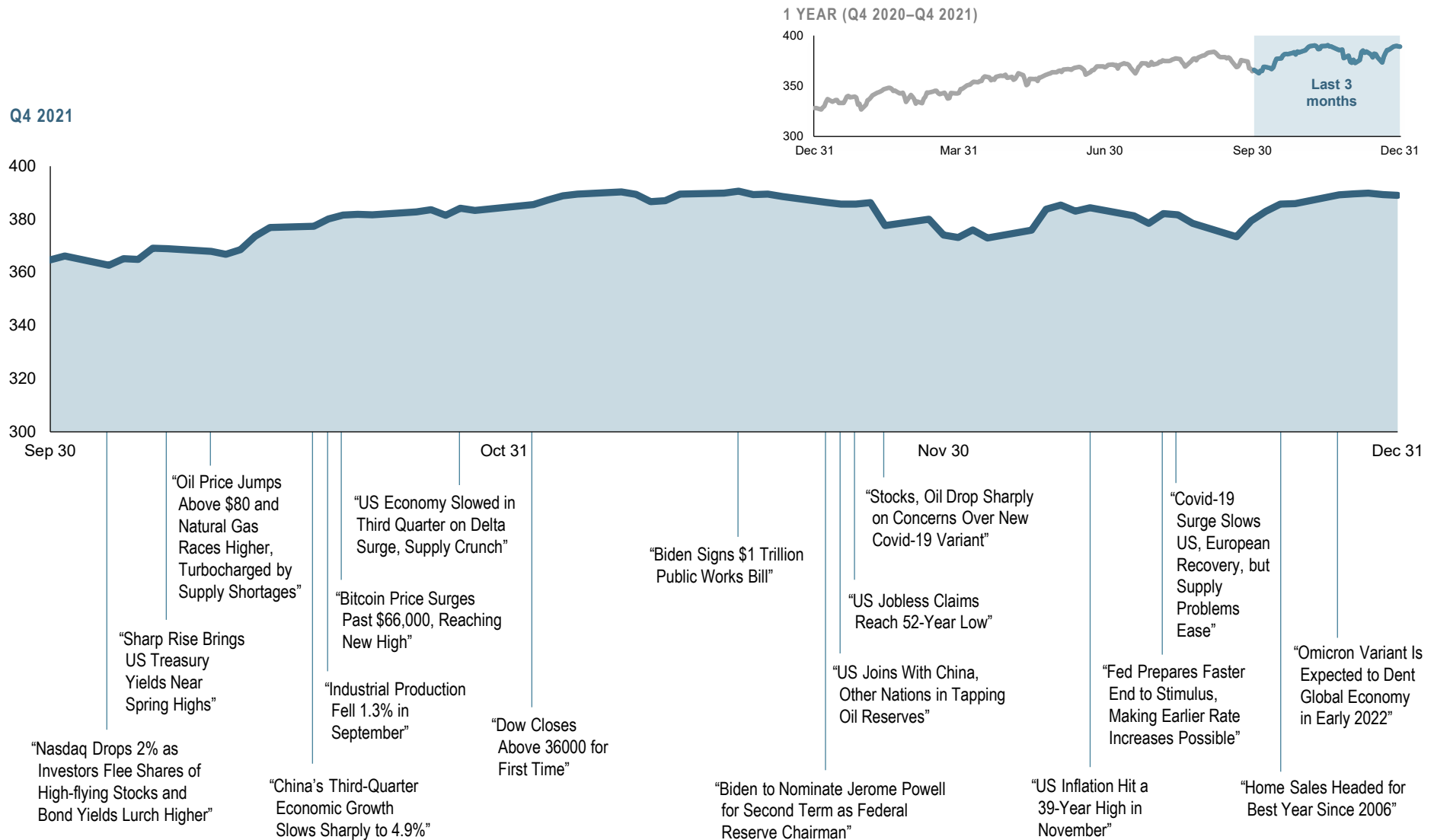
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
1 Year	STOCKS				BONDS	
	25.66%	12.62%	-2.54%	31.38%	-1.54%	-1.40%
5 Years						
	17.97%	9.63%	9.87%	8.25%	3.57%	3.11%
10 Years						
	16.30%	7.84%	5.49%	9.01%	2.90%	3.80%

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World Stock Market Performance

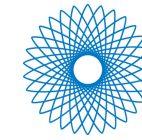
MSCI All Country World Index with selected headlines from Q4 2021



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.

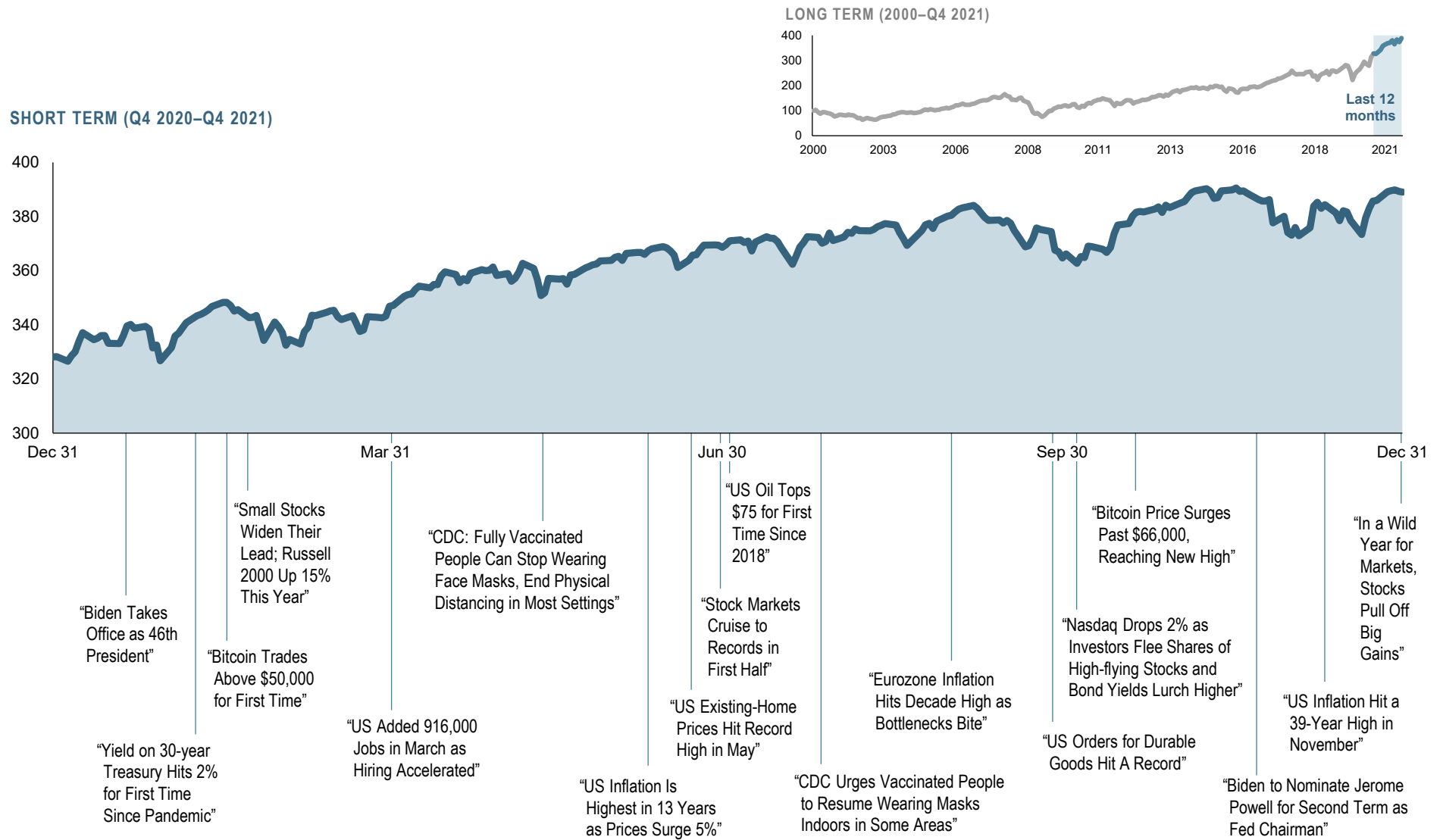
Graph Source: MSCI ACWI Index [net dividends]. MSCI data © MSCI 2022, all rights reserved.

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

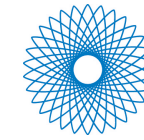
MSCI All Country World Index with selected headlines from past 12 months



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 2022, all rights reserved.

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US Stocks

Fourth Quarter 2021 Index Returns

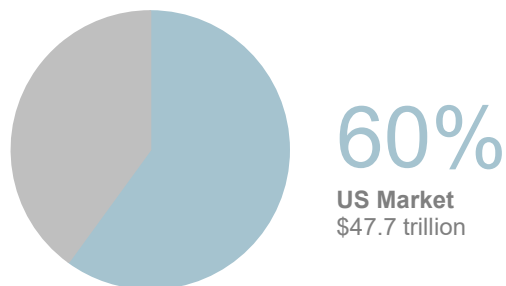
The US equity market posted positive returns for the year and outperformed non-US developed and emerging markets.

Value underperformed growth in large cap stocks but outperformed growth in small cap stocks.

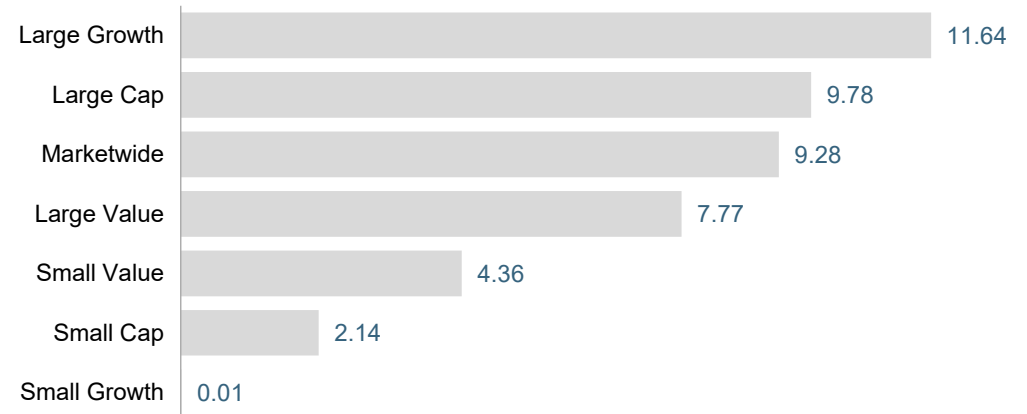
Small caps underperformed large caps.

REIT indices outperformed equity market indices.

World Market Capitalization—US



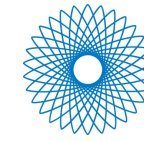
Ranked Returns (%)



Period Returns (%)

Asset Class	QTR	1 Year	* Annualized		
			3 Years*	5 Years*	10 Years*
Large Growth	11.64	27.60	34.08	25.32	19.79
Large Cap	9.78	26.45	26.21	18.43	16.54
Marketwide	9.28	25.66	25.79	17.97	16.30
Large Value	7.77	25.16	17.64	11.16	12.97
Small Value	4.36	28.27	17.99	9.07	12.03
Small Cap	2.14	14.82	20.02	12.02	13.23
Small Growth	0.01	2.83	21.17	14.53	14.14

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International Developed Stocks

Fourth Quarter 2021 Index Returns

Developed markets outside the US posted positive returns for the year, underperforming US equities but outperforming emerging markets equities.

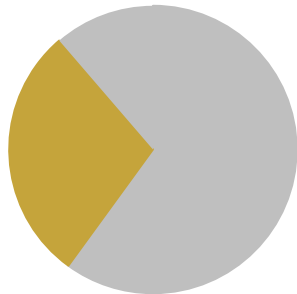
Value outperformed growth.

Small caps underperformed large caps.

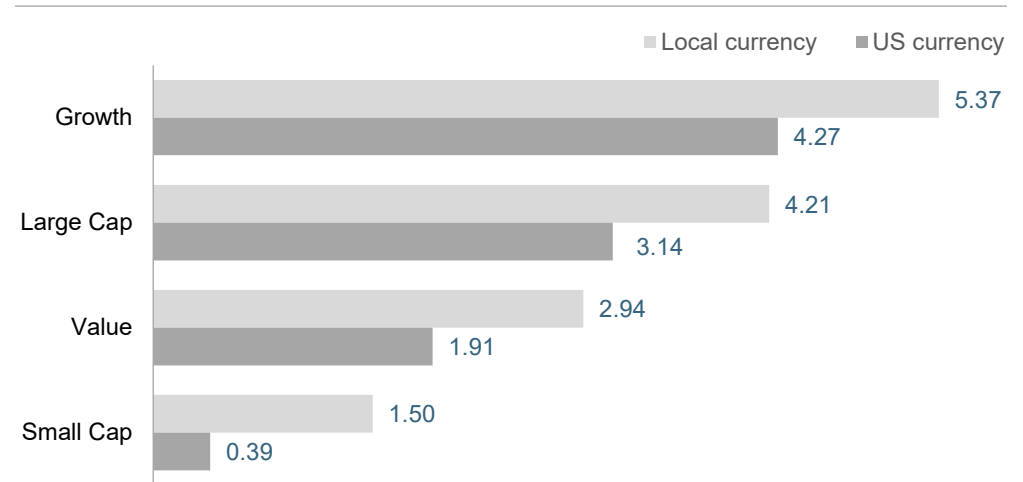
World Market Capitalization—International Developed

29%

International
Developed Market
\$22.8 trillion



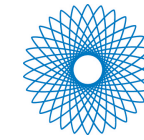
Ranked Returns (%)



Period Returns (%)

Asset Class	QTR	1 Year	* Annualized		
			3 Years*	5 Years*	10 Years*
Growth	4.27	11.57	19.11	13.37	9.66
Large Cap	3.14	12.62	14.07	9.63	7.84
Value	1.91	13.26	8.66	5.69	5.83
Small Cap	0.39	11.14	16.27	11.03	9.99

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Emerging Markets Stocks

Fourth Quarter 2021 Index Returns

Emerging markets fell 2.5% for the year, underperforming both US and non-US developed equity markets.

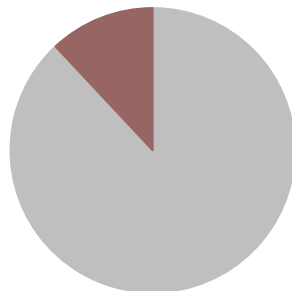
Value outperformed growth.

Small caps outperformed large caps.

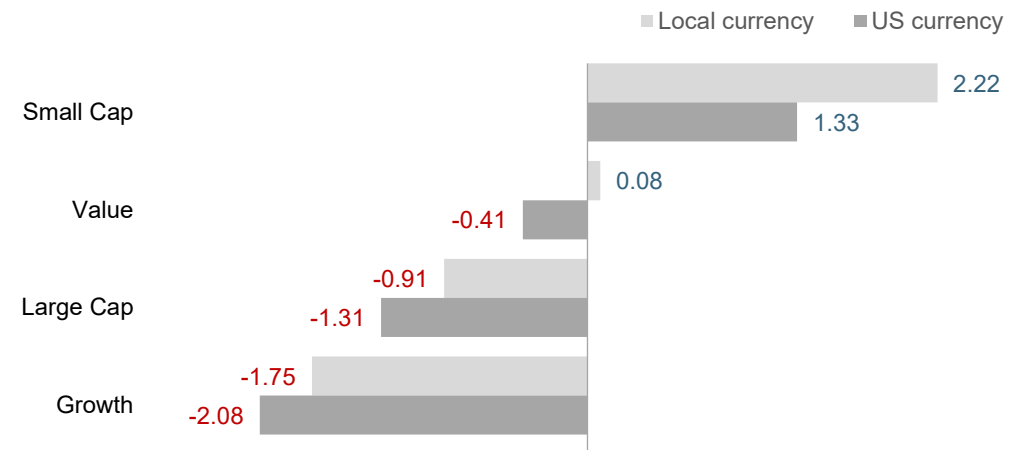
World Market Capitalization—Emerging Markets

11%

Emerging Markets
\$9.0 trillion



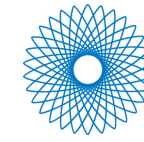
Ranked Returns (%)



Period Returns (%)

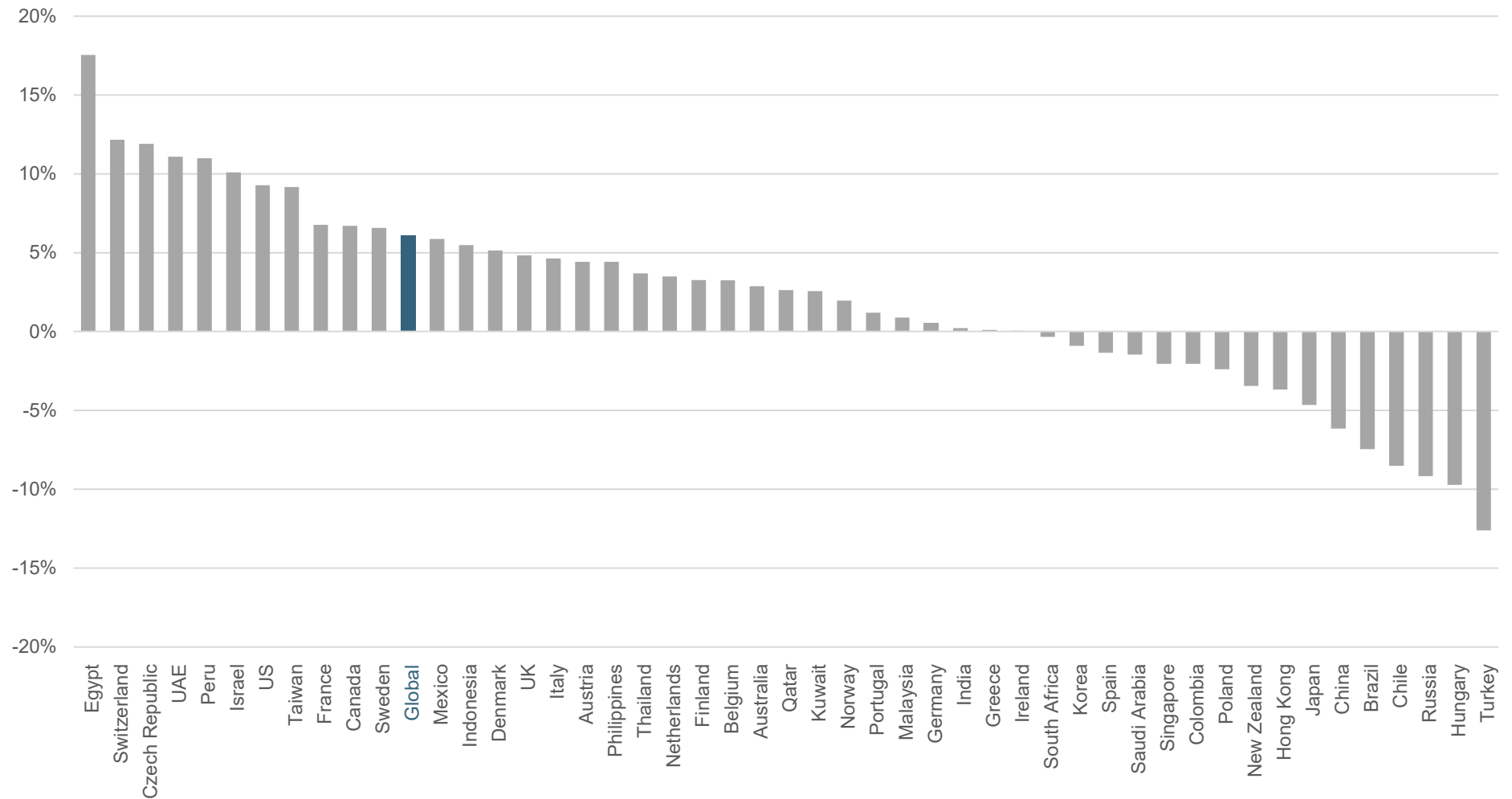
Asset Class	QTR	1 Year	* Annualized		
			3 Years*	5 Years*	10 Years*
Small Cap	1.33	18.75	16.46	11.47	7.42
Value	-0.41	4.00	7.08	7.02	3.31
Large Cap	-1.31	-2.54	10.94	9.87	5.49
Growth	-2.08	-8.41	14.60	12.55	7.52

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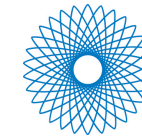
Country Returns

Fourth Quarter 2021 Index Returns



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 2022, all rights reserved.

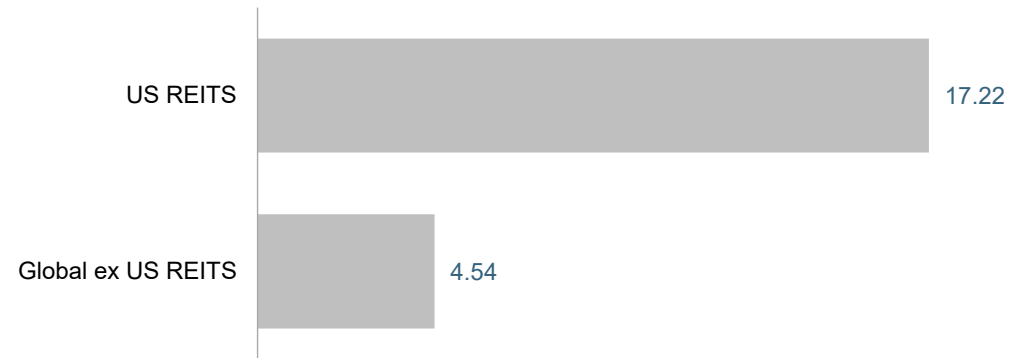


Real Estate Investment Trusts (REITs)

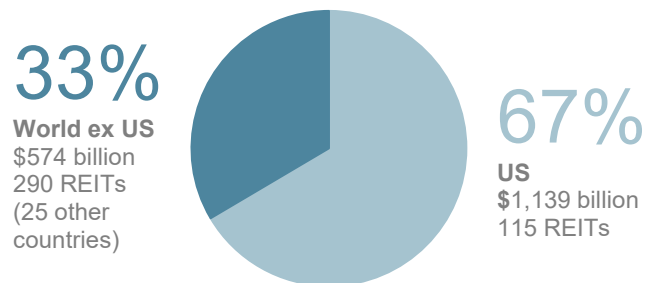
Fourth Quarter 2021 Index Returns

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

Ranked Returns (%)



Total Value of REIT Stocks

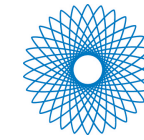


Period Returns (%)

Asset Class	QTR	1 Year	3 Years*	* Annualized	
				5 Years*	10 Years*
US REITS	17.22	45.91	16.84	9.65	10.70
Global ex US REITS	4.54	12.70	7.79	6.04	7.17

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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 © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



Commodities

Fourth Quarter 2021 Index Returns

The Bloomberg Commodity Index Total Return returned -1.56% for the fourth quarter of 2021.

Soybean Meal and Zinc were the best performers, advancing 20.86% and 19.57%, respectively.

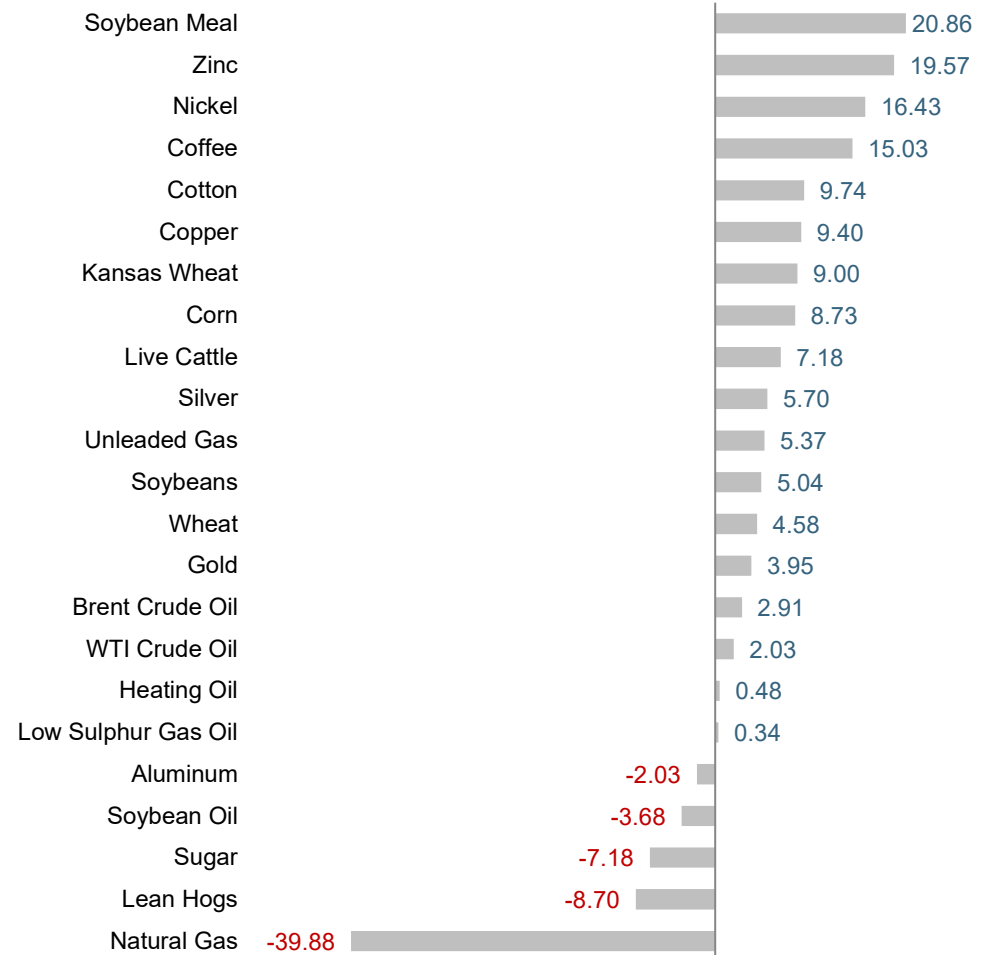
Natural Gas and Lean Hogs were the worst performers, declining 39.88% and 8.70%, respectively.

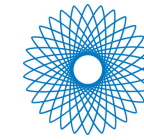
Period Returns (%)

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Commodities	-1.56	27.11	9.86	3.66	-2.85

* Annualized

Ranked Returns (%)





Fixed Income

Fourth Quarter 2021 Index Returns

Interest rate movements in the US Treasury fixed income market were mixed during the fourth quarter. The yield on the 5-year US Treasury note increased 28 basis points (bps) to 1.26%. The yield on the 10-year US Treasury note remained unchanged at 1.52%. The 30-year US Treasury bond yield decreased 18 bps to 1.90%.

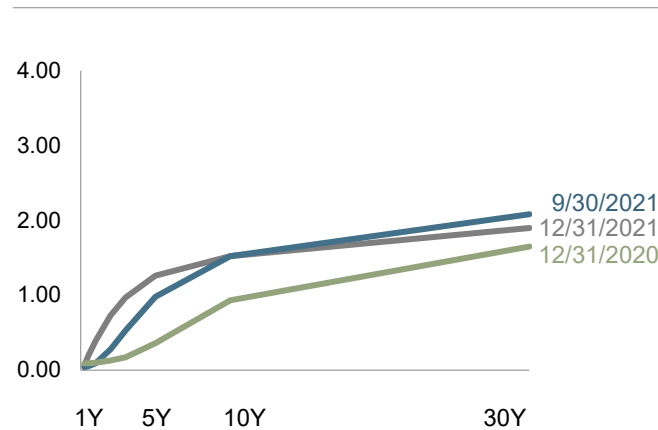
On the short end of the yield curve, the 1-month US Treasury bill yield decreased 1 basis point, ending at 0.06%, while the 1-year US Treasury bill yield increased 30 bps to 0.39%. The 2-year US Treasury note yield increased 45 bps to 0.73%.

In terms of total returns, short-term corporate bonds lost 0.68%.

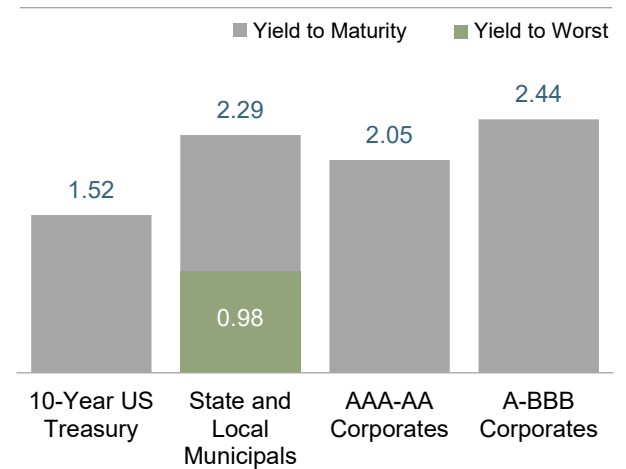
Intermediate-term corporate bonds declined 0.56%.

The total return for short-term municipal bonds was -0.05%, while intermediate-term municipal bonds gained 0.27%. Revenue bonds performed in line with general obligation bonds.

US Treasury Yield Curve (%)



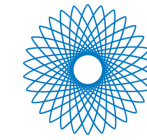
Bond Yield Across Issuers (%)



Period Returns (%)

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Bloomberg US Government Bond Index Long	3.05	-4.57	8.78	6.53	4.53
Bloomberg US TIPS Index	2.36	5.96	8.44	5.34	3.09
Bloomberg Municipal Bond Index	0.72	1.52	4.73	4.17	3.72
Bloomberg US High Yield Corporate Bond Index	0.71	5.28	8.83	6.30	6.83
Bloomberg US Aggregate Bond Index	0.01	-1.54	4.79	3.57	2.90
ICE BofA US 3-Month Treasury Bill Index	0.01	0.05	0.99	1.14	0.63
ICE BofA 1-Year US Treasury Note Index	-0.18	-0.07	1.55	1.42	0.86
FTSE World Government Bond Index 1-5 Years (hedged to USD)	-0.52	-0.80	2.07	1.89	1.66
FTSE World Government Bond Index 1-5 Years	-1.41	-4.43	1.38	1.79	-0.33

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 © 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.



Global Fixed Income

Fourth Quarter 2021 Yield Curves

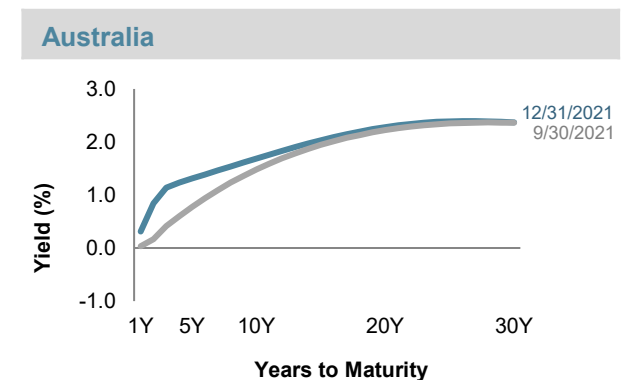
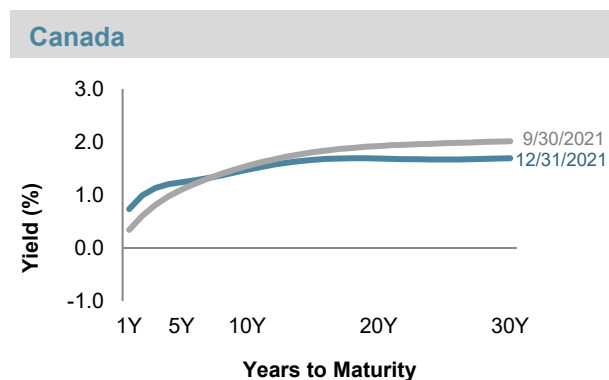
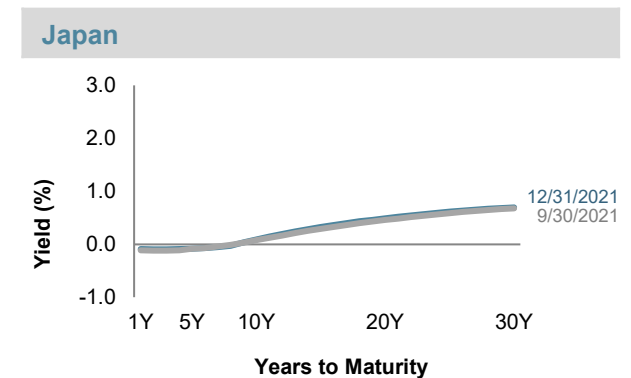
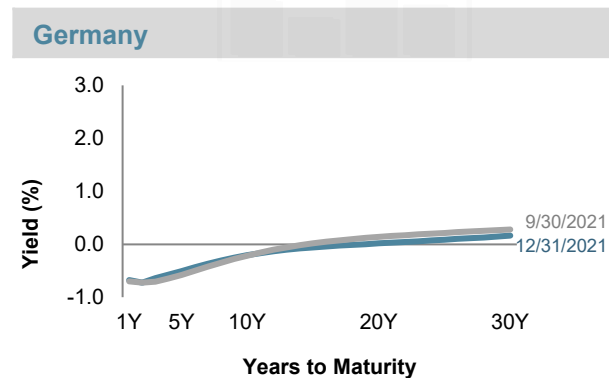
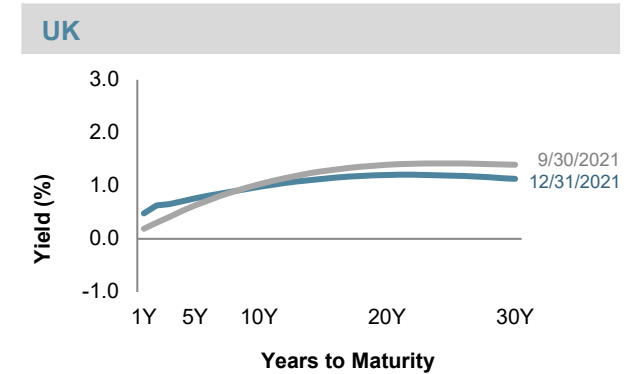
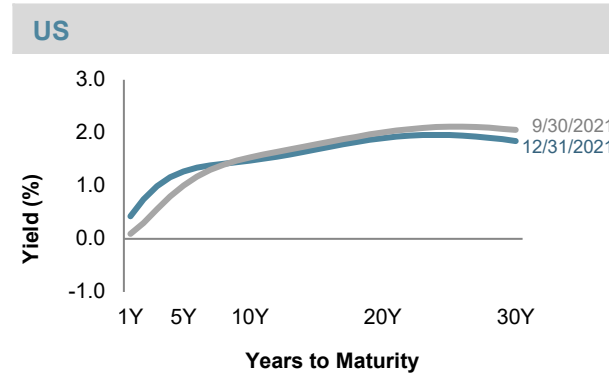
Government bond yield movements in the global developed markets were mixed for the quarter. Interest rates in many global developed markets increased along the shorter end but decreased along the longer end of their respective curves.

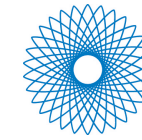
Term premiums were mixed in developed markets. Long-term bonds were generally the best performers, and intermediate-term bonds were generally the worst performers.

Short- and intermediate-term nominal interest rates were negative in Japan and Germany.

Changes in Yields (bps) since 9/30/2021

	1Y	5Y	10Y	20Y	30Y
US	33.3	26.5	-6.0	-10.8	-20.8
UK	28.9	13.3	-5.1	-19.2	-26.4
Germany	2.2	7.3	0.8	-12.1	-12.0
Japan	2.1	0.1	1.2	3.3	1.8
Canada	39.3	14.0	-7.4	-23.6	-32.0
Australia	28.3	53.6	20.6	5.7	1.0





Quarterly Topic: All-Time-High Anxiety

Fourth Quarter 2021

Weston Wellington
Vice President

Investors are often conflicted about record-high stock prices. They are pleased to see their existing equity holdings gain in value but apprehensive that higher prices somehow foreshadow a dramatic downturn in the future. And they may be reluctant to make new purchases since the traditional “buy low, sell high” mantra suggests committing funds to stocks at an all-time high is a surefire recipe for disappointment.

Financial journalists periodically stoke investors’ record-high anxiety by suggesting the laws of physics apply to financial markets—that what goes up must come down. “Stocks Head Back to Earth,” read a headline in the *Wall Street Journal* in 2012.¹ “Weird Science: Wall Street Repeals Law of Gravity,” *Barron’s* put it in 2017.² And a *Los Angeles Times* reporter had a similar take last year, noting that low interest rates have “helped stock and bond markets defy gravity.”³

Those who find such observations alarming will likely shy away from purchasing stocks at record highs. But shares are not heavy objects kept aloft through strenuous effort. They are perpetual claim tickets on companies’ earnings and dividends. Thousands of business managers go to work every day seeking projects that appear to offer profitable returns on capital while providing goods and services people desire. Although some new ideas and the firms behind them end in failure, history offers abundant evidence that investors around the world can be rewarded for the capital they provide.

Whether at a new high or a new low, today’s share price reflects investors’ collective judgment of what tomorrow’s earnings and dividends are likely to be—and those of all the tomorrows to come. And every day, stocks must be priced to deliver a positive expected return for the buyer. Otherwise, no trade

would take place. It’s difficult to imagine a scenario where investors freely invest in stocks with the expectation of losing money.

Investors should treat record high prices with neither excitement nor alarm, but rather indifference. If stocks have a positive expected return, reaching record highs with some frequency is exactly the outcome we would expect. Using month-end data over the 94-year period ending in 2020, the S&P 500 Index produced a new high in ending wealth in more than 30% of those monthly observations. Moreover, purchasing shares at all-time records has, on average, generated similar returns over subsequent one-, three-, and five-year periods to those of a strategy that purchases stocks following a sharp decline, as **Exhibit 1** shows.

EXHIBIT 1

All Rise

Average annualized returns for S&P 500 Index after market highs and declines

	1 year later	3 years later	5 years later
After new market high	13.9%	10.5%	9.9%
After 20% market decline	11.6%	9.9%	9.6%

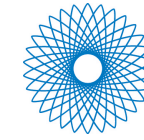
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1. Jonathan Cheng and Christian Berthelsen, “Stocks Head Back to Earth,” *Wall Street Journal*, February 11, 2012.

2. Kopin Tan, “Weird Science: Wall Street Repeals Law of Gravity,” *Barron’s*, August 7, 2017.

3. Russ Mitchell, “Tesla’s Insane Stock Price Makes Sense in a Market Gone Mad,” *Los Angeles Times*, July 22, 2020.



Quarterly Topic: All-Time-High Anxiety

(continued from page 15)

Humans are conditioned to think that after the rise must come the fall, tempting us to fiddle with our portfolios. But the data suggest such signals only exist in our imagination and that our efforts to improve results will just as likely penalize them.

Investors should take comfort knowing that share prices are not fighting the forces of gravity when they move higher and have confidence that record highs only tell us the system is working just as we would expect—nothing more.

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