



First Quarter 2023



Quarterly Market Review

First 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 Headlines Worry You, Bank on Investment Principles



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
Q1 2023		STO	CKS		ВОІ	NDS
	7.18%	8.02%	3.96%	1.37%	2.96%	2.86%
Since Jan. 2001						
Average Quarterly Return	2.2%	1.5%	2.5%	2.2%	0.9%	0.9%
Best	22.0%	25.9%	34.7%	32.3%	4.6%	4.6%
Quarter	2020 Q2	2009 Q2	2009 Q2	2009 Q3	2001 Q3	2008 Q4
Worst	-22.8%	-23.3%	-27.6%	-36.1%	-5.9%	-4.1%
Quarter	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2022 Q1	2022 Q1



Long-Term Market Summary

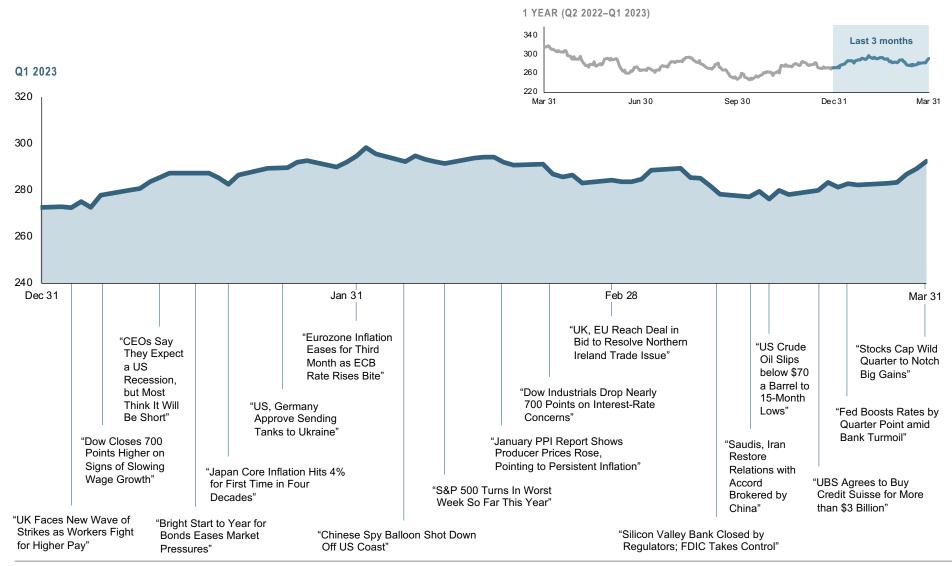
Index returns as of March 31, 2023

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
1 Year		STO	CKS		BOI	NDS
	-8.58%	-2.74%	-10.70%	-20.29%	-4.78%	-3.27%
5 Years						
	10.45%	3.80%	-0.91%	2.41%	0.91%	0.90%
10 Years						
	11.73%	4.91%	2.00%	3.26%	1.36%	2.28%



World Stock Market Performance

MSCI All Country World Index with selected headlines from Q1 2023



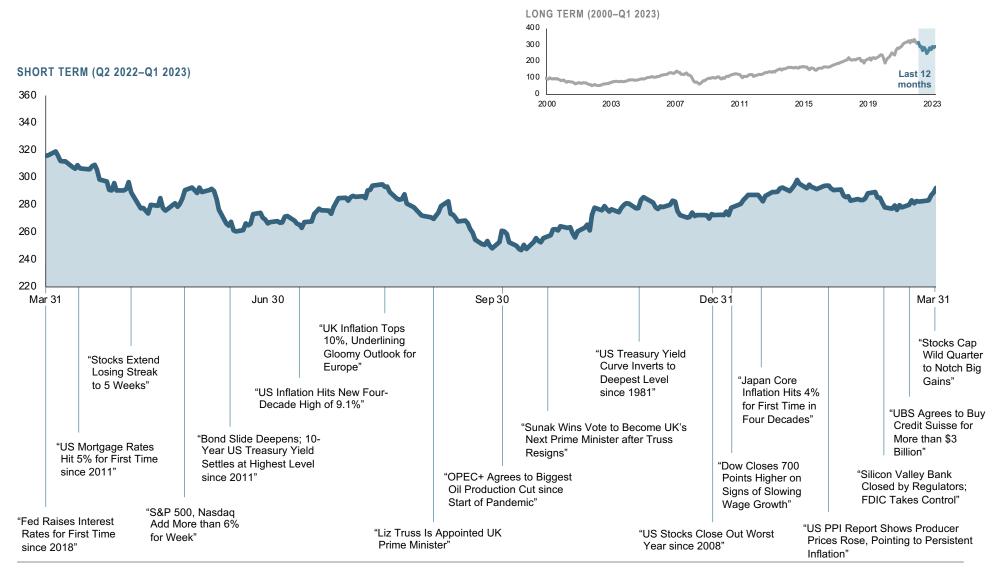
These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

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

First quarter 2023 index returns

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

Value underperformed growth.

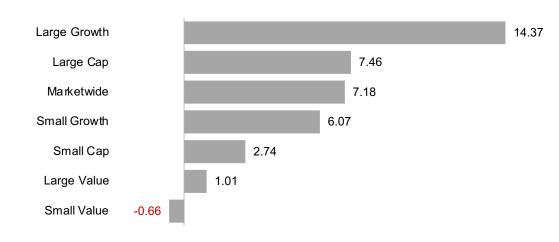
Small caps underperformed large caps.

REIT indices underperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



				Annualized	
Asset Class	QTR	1 Year	3 Years	5 Years	10 Years
Large Growth	14.37	-10.90	18.58	13.66	14.59
Large Cap	7.46	-8.39	18.55	10.87	12.01
Marketwide	7.18	-8.58	18.48	10.45	11.73
Small Growth	6.07	-10.60	13.36	4.26	8.49
Small Cap	2.74	-11.61	17.51	4.71	8.04
Large Value	1.01	-5.91	17.93	7.50	9.13
Small Value	-0.66	-12.96	21.01	4.55	7.22



International Developed Stocks

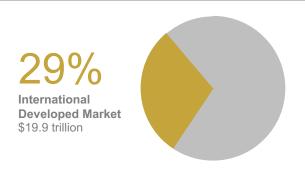
First quarter 2023 index returns

Developed markets outside of the US posted positive returns for the quarter and outperformed both US and emerging markets.

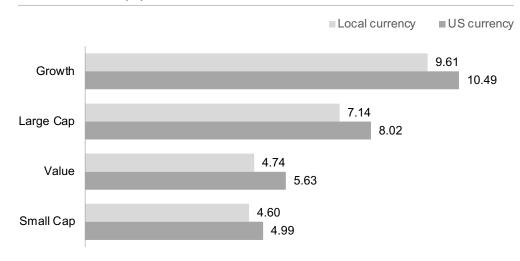
Value underperformed growth.

Small caps underperformed large caps.

World Market Capitalization—International Developed



Ranked Returns (%)



				Annualized	
Asset Class	QTR	1 Year	3 Years	5 Years	10 Years
Growth	10.49	-4.04	11.15	4.96	5.77
Large Cap	8.02	-2.74	13.49	3.80	4.91
Value	5.63	-1.85	15.32	2.18	3.80
Small Cap	4.99	-10.13	13.43	1.54	5.54



Emerging Markets Stocks

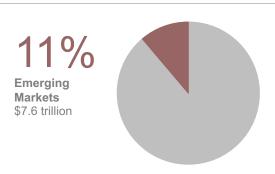
First quarter 2023 index returns

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

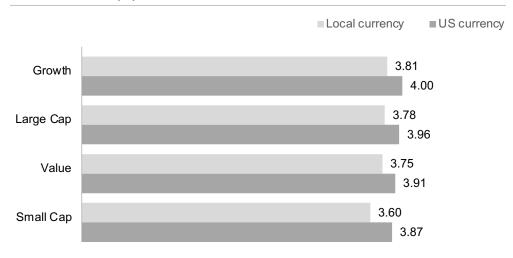
Value underperformed growth.

Small caps underperformed large caps.

World Market Capitalization—Emerging Markets



Ranked Returns (%)

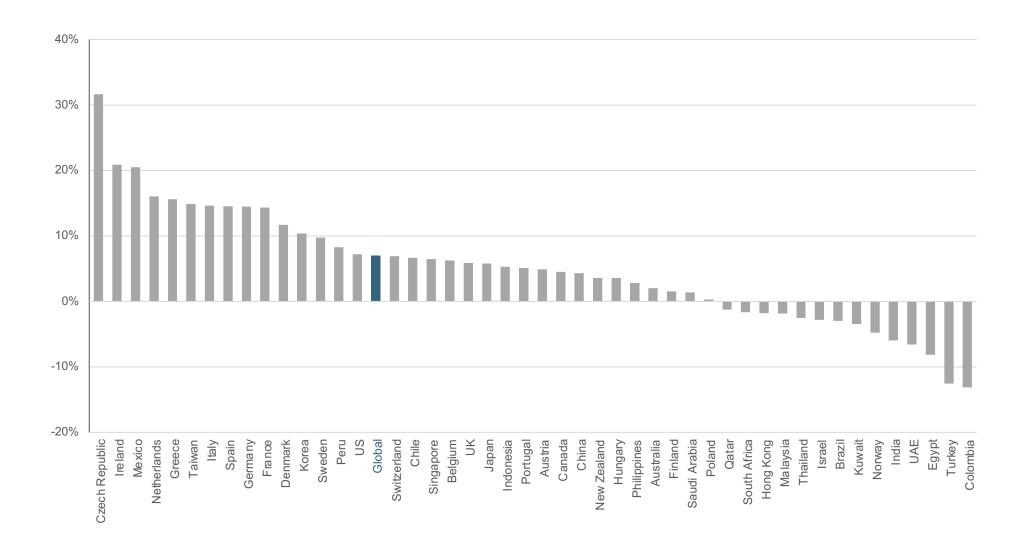


				Annualized	
Asset Class	QTR	1 Year	3 Years	5 Years	10 Years
Growth	4.00	-11.87	5.65	-0.79	3.18
Large Cap	3.96	-10.70	7.83	-0.91	2.00
Value	3.91	-9.44	10.04	-1.15	0.69
Small Cap	3.87	-10.99	20.68	1.80	3.18



Country Returns

First quarter 2023 index returns





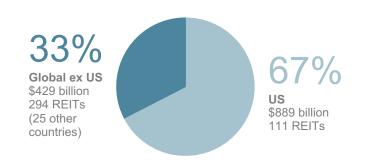
Real Estate Investment Trusts (REITs)

First quarter 2023 index returns

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



Total Value of REIT Stocks



				Annualized	
Asset Class	QTR	1 Year	3 Years	5 Years	10 Years
US REITS	2.77	-20.98	11.32	4.66	5.31
Global ex US REITS	-0.90	-20.93	4.83	-2.06	0.79



Commodities

First quarter 2023 index returns

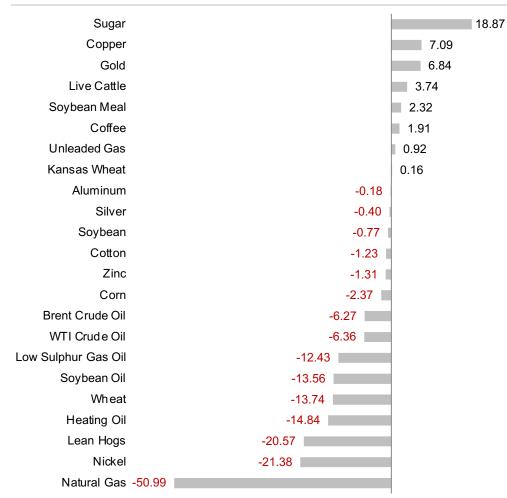
The Bloomberg Commodity Total Return Index returned -5.36% for the first quarter of 2023.

Natural Gas and Nickel were the worst performers, returning -50.99% and -21.38% during the quarter, respectively. Sugar and Copper were the best performers, returning +18.87% and +7.09% during the quarter, respectively.

Period Returns (%)

			Annualized				
Asset Class	QTR	1 Year	3 Years	5 Years	10 Years		
Commodities	-5.36	-12.49	20.82	5.36	-1.72		

Ranked Returns (%)





Fixed Income

First quarter 2023 index returns

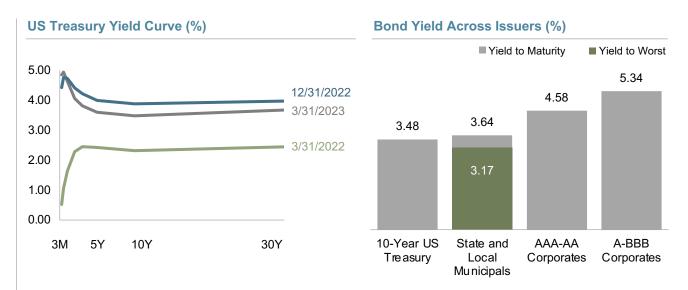
Within the US Treasury market during the first quarter of 2023, interest rates generally increased in the ultrashort-term segment and decreased in the short- to long-term segment.

On the short end of the yield curve, the 1-Month US Treasury Bill yield increased 62 basis points (bps) to 4.74%, while the 1-Year US Treasury Bill yield decreased 9 bps to 4.64%. The yield on the 2-Year US Treasury Note decreased 35 bps to 4.06%.

The yield on the 5-Year US Treasury Note decreased 39 bps to 3.60%. The yield on the 10-Year US Treasury Note decreased 40 bps to 3.48%. The yield on the 30-Year US Treasury Bond decreased 30 bps to 3.67%.

In terms of total returns, short-term US treasury bonds returned +1.87% while intermediate-term US treasury bonds returned +2.27%. Short-term corporate bonds returned +1.68% and intermediate-term corporate bonds returned $+2.50\%.^{1}$

The total returns for short- and intermediateterm municipal bonds were +1.37% and +2.35%, respectively. Within the municipal fixed income market, general obligation bonds returned +2.59% while revenue bonds returned +2.96%.2



				Annualized	
Asset Class	QTR	1 Year	3 Years	5 Years	10 Years
Bloomberg U.S. Government Bond Index Long	6.16	-15.94	-11.25	-0.36	1.44
Bloomberg U.S. High Yield Corporate Bond Index	3.57	-3.34	5.91	3.21	4.10
Bloomberg U.S. TIPS Index	3.34	-6.06	1.75	2.94	1.49
Bloomberg U.S. Aggregate Bond Index	2.96	-4.78	-2.77	0.91	1.36
Bloomberg Municipal Bond Index	2.78	0.26	0.35	2.03	2.38
FTSE World Government Bond Index 1-5 Years	2.08	-3.38	-1.99	-1.06	-0.71
FTSE World Government Bond Index 1-5 Years (hedged to USD)	1.81	-0.40	-0.89	1.06	1.14
ICE BofA 1-Year US Treasury Note Index	1.25	1.02	0.08	1.29	0.85
ICE BofA US 3-Month Treasury Bill Index	1.07	2.50	0.89	1.41	0.87

^{1.} Bloomberg US Treasury and US Corporate Bond Indices.

^{2.} Bloomberg Municipal Bond Index



Global Fixed Income

First quarter 2023 yield curves

Except for ultrashort-term government bonds in the German and UK markets, interest rates generally decreased within global developed markets for the quarter.

Realized term premiums were positive in global developed markets.

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

US UK 5.0 5.0 4.0 4.0 03/31/2023 03/31/2023 3.0 3.0 Yield (%) Yield (%) 2.0 2.0 1.0 1.0 0.0 0.0 -1.0 -1.0 1Y 5Y 10Y 20Y 30Y 1Y 5Y 10Y 20 Y 30Y Years to Maturity Years to Maturity Germany Japan 5.0 5.0 4.0 4.0 3.0 3.0 12/31/2022 Yield (%) Yield (%) 2.0 03/31/2023 2.0 1.0 1.0 0.0 0.0 -1.0 -1.0 5Y 10Y 20 Y 30 Y 5Y 10Y 20Y 30 Y 1Y **Years to Maturity** Years to Maturity Canada **Australia** 5.0 5.0 4.0 4.0 03/31/2023 12/31/2022 3.0 3.0 03/31/2023 Yield (%) 2.0 2.0 Yield (%) 1.0 1.0 0.0 0.0 -1.0 -1.0 10Y 20Y 30Y 10Y 20 Y 30 Y 1Y 5Y 1Y 5Y

Changes in Yields (bps) since 12/31/2022

	1Y	5Y	10Y	20Y	30Y
US	-11.4	-37.9	-34.8	-31.3	-32.2
UK	44.6	-13.5	-24.6	-17.0	-8.8
Germany	56.9	-15.6	-19.5	-11.5	-8.0
Japan	-13.0	-15.9	-15.5	-25.7	-27.0
Canada	-20.3	-39.9	-38.8	-22.7	-22.5
Australia	-19.4	-65.3	-73.3	-61.7	-54.6

One basis point (bps) equals 0.01%. Source: ICE BofA government yield. ICE BofA index data © 2023 ICE Data Indices, LLC.

Years to Maturity

Years to Maturity



When Headlines Worry You, Bank on Investment Principles

First quarter 2023
Dimensional Fund Advisors

On Friday, March 10, regulators took control of Silicon Valley Bank as a run on the bank unfolded. Two days later, regulators took control of a second lender, Signature Bank. With increasing anxiety, many investors are eyeing their portfolios for exposure to these and other regional banks.

Rather than rummaging through your portfolio looking for trouble when headlines make you anxious, turn instead to your investment plan. Hopefully, your plan is designed with your long-term goals in mind and is based on principles that you can stick with, given your personal risk tolerances. While every investor's plan is a bit different, ignoring headlines and focusing on the following time-tested principles may help you avoid making shortsighted missteps.

1. Uncertainty Is Unavoidable

Remember that uncertainty is nothing new and investing comes with risks. Consider the events of the last three years alone: a global pandemic, the Russian invasion of Ukraine, spiking inflation, and ongoing recession fears. In other words, it may have seemed as if there were plenty of reasons to panic. Despite these concerns, for the three years ending February 28, 2023, the Russell 3000 Index (a broad market-capitalization-weighted index of public US companies) returned an annualized 11.79%, slightly

outpacing its average annualized returns of 11.65% since inception in January 1979. The past three years certainly make a case for weathering short-term ups and downs and sticking with your plan.

2. Market Timing Is Futile

Inevitably, when events turn bleak and headlines warn of worse to come, some investors' thoughts turn to market timing. The idea of using short-term strategies to avoid near-term pain without missing out on long-term gains is seductive, but research repeatedly demonstrates that timing strategies are not effective. The impact of miscalculating your timing strategy can far outweigh the perceived benefits.

3. "Diversification Is Your Buddy"

Nobel laureate Merton Miller famously used to say, "Diversification is your buddy." Thanks to financial innovations over the last century in the form of mutual funds, and later ETFs, most investors can access broadly diversified investment strategies at very low costs. While not all risks—including a systemic risk such as an economic recession—can be diversified away (see Principle 1 above), diversification is still an incredibly effective tool for reducing many risks investors face.



When Headlines Worry You, Bank on **Investment Principles**

(continued from page 15)

In particular, diversification can reduce the potential pain caused by the poor performance of a single company, industry, or country. 1 As of February 28, Silicon Valley Bank (SIVB) represented just 0.04% of the Russell 3000, while regional banks represented approximately 1.70%.² For investors with globally diversified portfolios, exposure to SIVB and other US-based regional banks likely was significantly smaller. If buddying up with diversification is part of your investment plan, headline moments can help drive home the long-term benefits of your approach.

When the unexpected happens, many investors feel like they should be doing something with their portfolios. Often, headlines and pundits stoke these sentiments with predictions of more doom and gloom. For the longterm investor, however, planning for what can happen is far more powerful than trying to predict what will happen.

^{1.} Consider that a study of single stock performance in the US from 1927 to 2020 illustrated that the survival of any given stock is far from guaranteed. The study found that on average for 20-year rolling periods, about 18% of US stocks went through a "bad" delisting. The authors note that delisting events can be "good" or "bad" depending on the experience for investors. For example, a stock delisting due to a merger would be a good delist, as the shareholders of that stock would be compensated during the acquisition. On the other hand, a firm that delists due to its deteriorating financial condition would be a bad delist since it is an adverse outcome for investors. Given these results, there is a good case to avoid concentrated exposure to a single company. Source: "Singled Out: Historical Performance of Individual Stocks" (Dimensional Fund Advisors, 2022).

^{2.} Regional banks weight reflects the weight of the "Regional Banks" GICS Sub-Industry. GICS was developed by and is the exclusive property of MSCI and S&P Dow Jones Indices LLC, a division of S&P Global.