

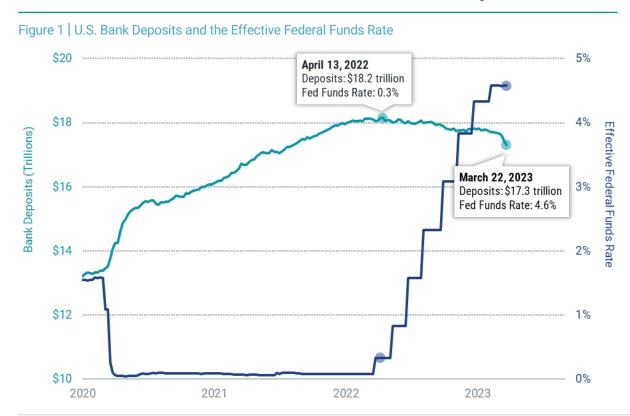
Q1

Quarterly Market Review
First Quarter 2023



Over the last month, basketball fans have enjoyed the "madness" of the NCAA tournament, which has certainly lived up to its branding. At the same time, the banking industry delivered "madness" and uncertainty of its own.

With the recent and widely reported fall of Silicon Valley Bank and Signature Bank, we are now seeing, perhaps, the first real challenges to emerge from the Federal Reserve's (the Fed's) rate campaign against inflation. In **Figure 1**, we observe that U.S. bank deposits soared after the onset of the COVID-19 pandemic in early 2020, spurred by a combination of factors that included government stimulus increasing household incomes, households holding more cash in the face of low interest rates and volatile markets, and businesses drawing cash from lines of credit for precautionary capital.¹



Shortly after the Fed began raising rates in early 2022 to fight persistent inflation, U.S. bank deposits reached an all-time high (April 2022). Since that time, the Fed Funds Rate has risen sharply to around 5%, and deposit levels have retreated in part due to the opportunity to earn higher yields elsewhere. Over the last month, however, the rate of decline dramatically escalated as fear spread over the safety of deposits (especially those exceeding the FDIC insurance limit of \$250K). Nearly \$400 billion in deposits left U.S. banks over the 4-week period ending March 22—the largest 4-week decline since the start of 1973.

The concerns that led to depositor anxiety stemmed from the impact of rapidly rising rates on the balance sheets of certain banks. A simple understanding of how banks work sheds light on the matter.

Data from 1/1/2020 – 3/22/2023. Source: Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York. The Federal Funds Rate is the interest rate at which depository institutions, such as banks and credit unions, lend and borrow funds from each other on an overnight basis to maintain their reserve requirements. References to specific securities are for illustrative purposes only and are not intended as recommendations to purchase or sell securities. As of March 31, none of the funds referenced in this document had exposure to the securities referenced greater than 0.01%.



How Banks Work

Banks play an important role in the economy. Figure 2 shows how they connect savers and borrowers, a critical function for economic growth.

Figure 2 | Banks Are Critical to a Functioning Economy and Economic Growth

Assets (Loans)	- Liabilities (Deposits)	= Capital
Retail loans	Checking accounts	Retained earnings
 Commercial and industrial loans 	Savings accounts	Common equity
Bank bond portfolios	Certificates of deposit	Preferred stock
Banks receive interest on loans and fees from investments and services.	Banks pay interest on deposits from individuals and businesses.	Capital is the lifeblood of banks. It enables them to make loans and absorb operating expenses and losses.

Banks serve as the intermediary between savers and borrowers. Banks take in deposits (liabilities) that are typically held for long periods of time. That allows banks to use that money to lend to individuals and businesses (assets).

The difference between loan rates (what the bank earns) and deposit rates (what the bank pays) is the primary way banks generate earnings. Because it takes time to convert deposits to loans, banks may also invest deposits in other generally "safe" investments such as bonds from the U.S. Treasury to earn interest income until that money is needed to serve borrowers.

Bank capital is the difference between a bank's assets and liabilities. Capital serves an important role as it gives banks the capacity to grow assets (i.e., make more loans) and absorb operating expenses and losses while continuing to provide financial services.



Given the critical importance of banks to the economy and economic growth, they are heavily regulated in order to limit risks of failure and to maintain confidence in the stability of the banking system. In a nutshell, these regulations require banks to maintain minimum levels of high quality, liquid capital (i.e., can easily be used to raise/deliver cash) relative to total assets.

Through this framework, it's easy to understand the impact that rising rates may have on banks today. However, the effect can certainly vary depending on the makeup of each individual bank's balance sheet.

For banks with bonds held on their balance sheet, the current value of those bonds has dropped as rates have risen (bond prices fall as rates rise). This represents unrealized losses for the bank, and as assets go down so does bank capital.*

If deposits are stable, these bonds can be held to maturity, where banks would hypothetically receive face value. However, if many depositors are trying to get their money out at the same time (as was the case for Silicon Valley Bank) then the bank may be forced to sell bonds to raise cash resulting in the realization of losses and depleted capital. So, with stable deposits, the bank may remain viable, but in the face of a bank run the issue compounds.

Welcome News for Depositors

This may all sound like bad news, but the U.S. Treasury, FDIC, and Federal Reserve acted swiftly to try to quell fears of depositors and help banks maintain adequate capital.

First, the government moved to fully protect insured and uninsured deposits at recently failed regional banks. On March 21, Treasury Secretary Janet Yellen added that the government could protect depositors at other banks if needed, offering an additional signal that depositor money should be safe.

Further, the government provided banks with a special lending program that allows banks to source liquidity by posting assets (e.g., bonds) as collateral at face value.

These combined efforts have helped to stem the tide on any immediate bank runs and is likely welcome news for depositors and banks alike. Even more, other banks have stepped in to buy the assets of the failed banks.

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^{*}A nuance worth recognizing is that banks can hold bond securities under different accounting classifications, such as held to maturity (HTM) or available for sale (AFS). Bonds classified as HTM are those a bank intends to hold until maturity. Those classified as AFS are bonds that could either be held for an extended period or they could be sold. The difference in accounting treatment is that HTM bonds are reflected in bank capital at cost (i.e., not affected by market movements), while unrealized gains/losses on AFS bonds are recognized and do typically affect a regulator's assessment of a bank's capital adequacy.



What This Means for Investors

For investors, the news from the banking industry has contributed to uncertainty and market volatility. While the S&P 500 Index was positive for the month of March, albeit with heightened volatility, we've seen other stock market sectors and asset classes face declines. Bonds fared well as rates fell over the month.

We also see potential evidence of investor anxiety in recent asset flows. Over the three-week period ending March 29, significant dollars flowed into money market funds focusing on government securities. Nearly \$350 billion was added over the period, as shown in Figure 3, likely coming from a combination of market investments and bank deposits.

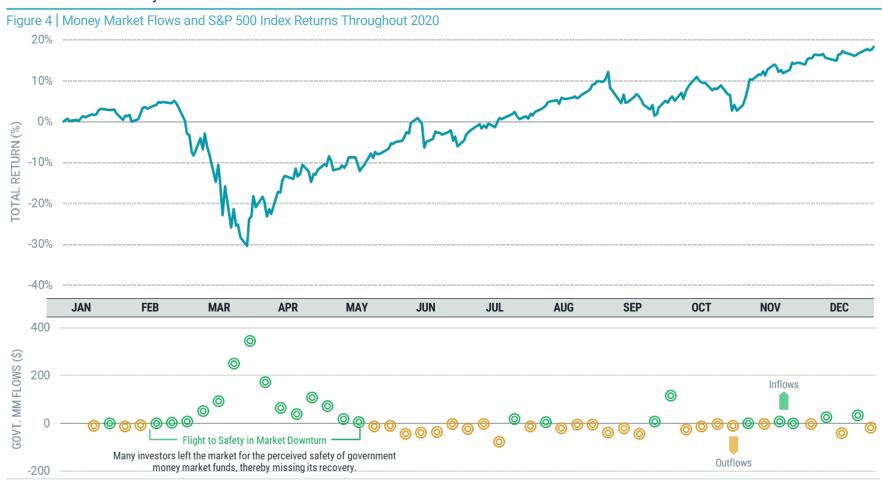
145 132 Government Money Market Flows Over the Past 20 Weeks (\$B) 100 71 56 55 50 29 27 10 7 -7 -8 -11 -14 -22 -41 -50 12/7 12/14 12/21 12/28 3/22 11/16 11/22 11/30 1/4 1/25 2/1 2/8 2/15 3/15 3/29 2022 2023

Figure 3 | Significant Dollars Flowed Into Government Money Market Funds Over the Last Three Weeks in March

Data from 11/16/2022 - 3/29/2023. Source: ICI.



We've seen similar behavior before when volatility and uncertainty has spiked. The last time we saw money market flows of this magnitude was in March 2020. As shown in **Figure 4**, many investors at that time left the market for the perceived safety of government money market funds and may have missed out on the market recovery that followed.



Data from 1/1/2020 - 12/31/2020. Source: ICI, FactSet, Avantis Investors. Past performance is no guarantee of future results.



This recent example highlights the importance of developing an investment plan adequate for each investor's risk tolerance, and sticking to it over the long term to avoid selling at times when prices may be depressed by collective anxiety.

It's fair for investors to feel uneasy about the recent events in the banking industry, but this is only one of many risks and opportunities facing markets today. Among them include how banks approach credit going forward, how that affects inflation and the Fed's course for interest rates, risk of recession and economic slowdown, geopolitical risks from war in Ukraine and potential conflict between China and Taiwan. The list goes on and on, yet so do markets, which continually assess this information and price securities for positive expected returns going forward.

We believe investors should consider that uncertainty is a part of investing. We see it today, we've seen it before, and we'll see it again. Those that embrace it within a well-diversified, long-term approach are well positioned to ride out the rough times and capture the long-term opportunity of markets.

Endnotes

¹ "Understanding Bank Deposit Growth During the COVID-19 Pandemic." Board of Governors of the Federal Reserve System. https://www.federalreserve.qov/econres/notes/feds-notes/understanding-bank-deposit-growth-during-the-covid-19-pandemic-20220603.html



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		ВО	BONDS	
	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	

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 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		ВОГ	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				2 222/		2 222/
	11.73%	4.91%	2.00%	3.26%	1.36%	2.28%
					1	

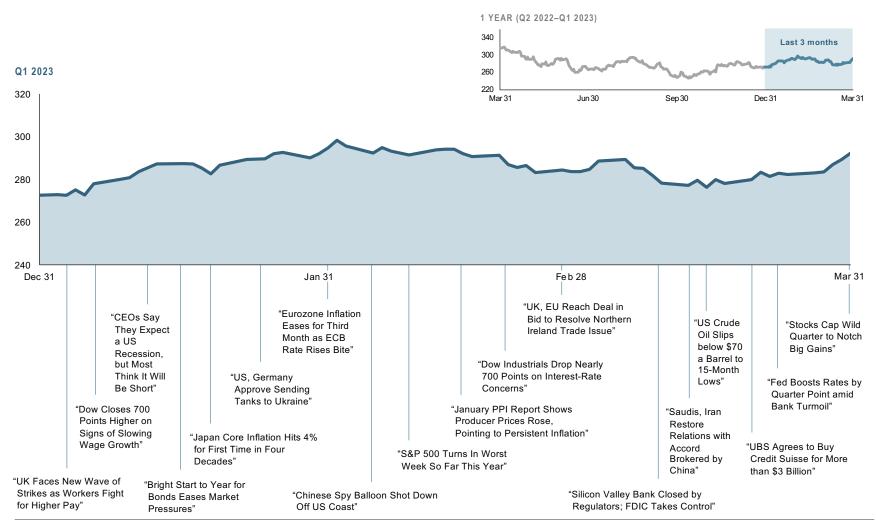
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World Stock Market Performance

MSCI All Country World Index with selected headlines from Q1 2023

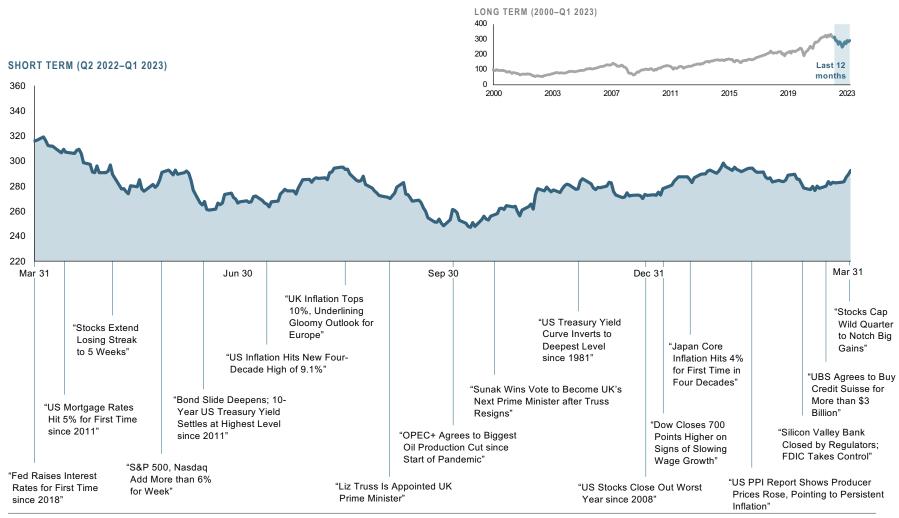


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



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.



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.

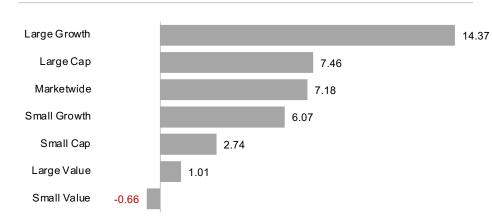
Small caps underperformed large caps.

REIT indices underperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



Period 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

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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. 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.



International Developed Stocks

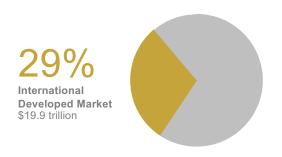
First quarter 2023 index returns

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

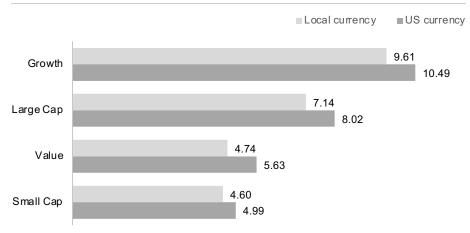
Value underperformed growth.

Small caps underperformed large caps.

World Market Capitalization—International Developed



Ranked Returns (%)



Period 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

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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 Index), Small Cap Index), Value (MSCI World ex USA Index), and MSCI Emerging Markets Index. MSCI World ex USA Index is used as the proxy for the International Developed market. MSCI data © MSCI 2023, 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

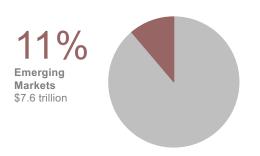
First quarter 2023 index returns

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

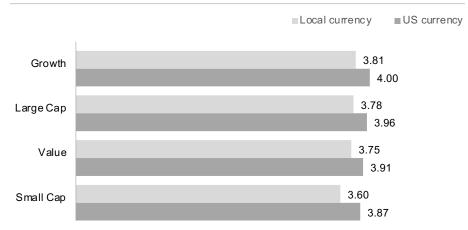
Value underperformed growth.

Small caps underperformed large caps.

World Market Capitalization—Emerging Markets



Ranked Returns (%)



Period 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

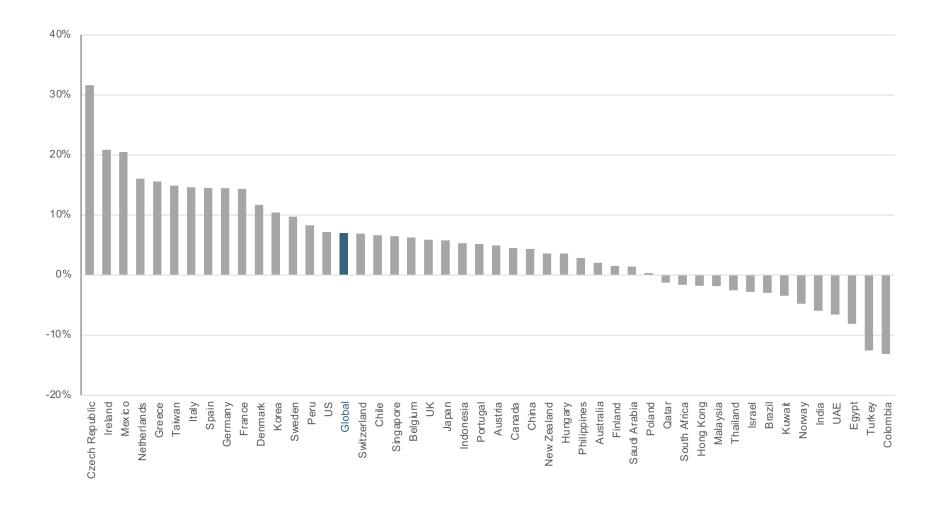
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Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns 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 Emerging Markets IMI Index used as the proxy for the emerging market portion of the market. MSCI data © MSCI 2023, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



Country Returns

First quarter 2023 index returns



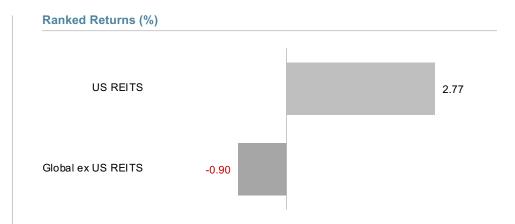
Past performance is no guarantee of future results.

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 2023, all rights reserved.

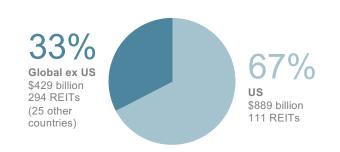
Real Estate Investment Trusts (REITs)

First quarter 2023 index returns

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



Total Value of REIT Stocks



Period Returns (%)

				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

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 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

First quarter 2023 index returns

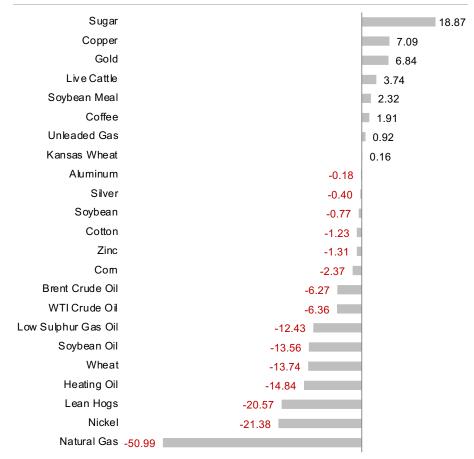
The Bloomberg Commodity Total Return Index returned -5.36% for the first quarter of 2023.

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 (%)





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Fixed Income

First quarter 2023 index returns

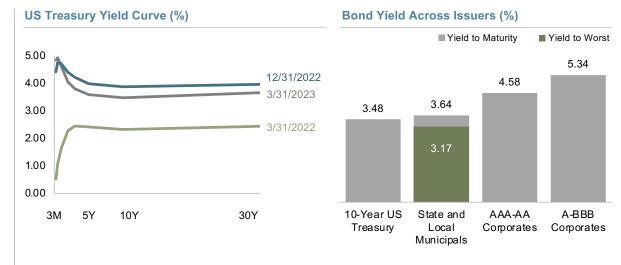
Within the US Treasury market during the first quarter of 2023, interest rates generally increased in the ultrashort-term segment and decreased in the short- to long-term segment.

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



Period Returns (%)

				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

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 M, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). 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.

^{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.

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

