

2

Quarterly Market Review Second Quarter 2023

Dear Clients,

I hope you are managing to stay cool. For those of you that aren't in Texas, I'm either getting older or it feels like Texas is sinking closer to Hades. My

daughter that is in college in Wyoming came home for a few weeks and despite all the attention I gave her, said, "I'm going back home to cooler weather." My advice, if you are planning a summer trip, follow the birds! (And have fun).

Today, I want to briefly point to some of what we have assembled in this packet. And give you a few of my thoughts on what are seeing in the market and how we are thinking about your investment today: (I'm going to try bullet point format to see if I can keep this shorter.)



Mike Mills Managing Partner CFP, CLU, CFS

As you will see from the Quarter Market Review, Portfolios have had attractive returns this quarter and for the year. Large Technology companies (which were hardest hit in 2022) have rebounded riding the Artificial Intelligence Wave, led by the "Magnificent 7": "Microsoft Corp., Apple Inc., Nvidia Corp., Amazon.com Inc., Meta Platforms Inc., Tesla Inc., and Google parent Alphabet Inc. (1) —collectively these 7 stocks have accounted for about 77% of the broader index's advance this year. These 7 stocks have grown so large; it is sometimes hard to comprehend their size and economic power. For perspective, just Apple alone is now bigger than all the companies collectively valued in France. These 7 companies make up a large portion of indexes like the S&P 500 and the NASDAQ 100 because they are size weighted. As more money is invested in indexes, the bigger a company gets the more flows it gets from its weighting in the index and the bigger it gets, and so on, and so on. A few of these companies make up such a large part of the index that they are bumping into size caps and on the next rebalance date, will have their weighting lowered, which could add some short-term selling pressure to

the index. If you study market history, in the past when a few very powerful companies made up a disproportional portion of the index, eventually these companies perceived value "maxed out" and their company size eventually plateaued until earnings could catch up or went the other direction (examples were ATT, Kodak, GE, Exxon/Standard Oil). Many of the Magnificent 7's valuations have become rich; I would contend there is probably more downside risk than upside from here.

#### (Figure 1)

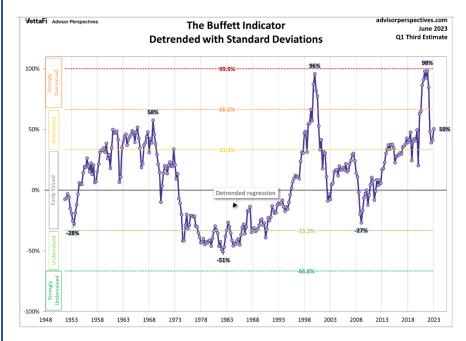


In **Figure 1** above, the picture shows the earning yield of the S&P 500 (**Earning Yield** is a company's earning divided by its price per share and gives a way to easily compare stock's yield to a bond's yield) compared to today's corporate bond yields and 3-month Treasury Bond Yield. At today's prices, investors in the S&P 500, are not receiving extra of margin of safety for owning stocks. Investors can basically earn the same expected returns in cash or bonds with

much less risk, and this is one reason we think fund flows are likely to eventually move away from large US stocks.

Over the last 10+ years the US market has had stronger than average returns, as conditions in the US have been attractive coming out of the financial crisis compared to the rest of the world, however the main reason for this is not because the US companies have grown faster it is because the multiples that investors are willing to pay has expanded, and this has occurred in the face of higher interest rates (which usually makes stocks worth less not more). There are lots of ways to think about valuations, but I like to follow the master. Below is a simple tool Warren Buffet uses to help decide how expensive or cheap different markets are relative to their economic output now labeled the Buffet Indicator.

Figure 2



With higher rates and higher than normal starting valuations it is highly likely that future investment returns will eventually need to under-perform

past returns as mean reversion is the strongest force in finance. To be fair, currency movements have exacerbated the performance divergence of US assets over international assets. From 2010 through 2022, the U.S. dollar appreciated a cumulative 33%—or 2.2%/year annualized—relative to a broad basket of foreign currencies, reducing non-U.S. asset returns denominated in U.S. dollars.

The spread in valuations between big and small is wider than normal and I think this continues to bode well for new money added to smaller companies in the US as managers rotate funds away the big tech like the Magnificent 7 towards less expensive areas of the market that may offer investors higher expected future returns. If you have outside money in the NASDAQ 100 or S&P 500 this might be a good time to revisit those weightings. Trees can't grow to the sky forever.

**Our thoughts on fixed income:** The yield curve is still highly inverted. (An inverted yield curve means short-term interest rates are higher than long-term rates which is unusual and can signal a future slowdown in economic activity). Inflation has proven to be stickier that the FED projected (at least that they have publicly proclaimed).

- We recently placed our 1st recent trade re-extending fixed income duration because market participants once again began to worry about inflation sticking around, and longer the rates exceeded the 4% mark. As I have mentioned in the past, I think it will be a while before we see the FED's target of 2% inflation. I think accepting it is going to be 3-3.5% range is probably a better policy plan unless the Fed wants to really hammer the economy. I think another 0.25 rate increase is most likely, but more rate increases could continue to hammer local banks and the commercial real estate markets.
- There is more pain to come in some areas like the real estate sectors as bridge loans will need additional equity to get refinanced and this will likely to cause some real estate defaults in the future. We still think prudent investors will remain invested, especially in less expensive

areas, but continue to maintain exposure to some defensive assets like short and intermediate term debt.

- When I look around DFW, people are employed, and the labor market remains in short supply of qualified employees, so wages continue to rise. As long as this trend continues, people will spend a portion of their increased earnings (this has been most evident with travel this summer). If people spend, many companies will profit, and the economy will continue to grow albeit more slowly than a year ago. It is possible that current FED policy may be able to engineer a soft landing without causing a recession, but because of the long lag between policy changes and the impact of those changes it is difficult to get this exactly right. We think investors should continue to own both stocks and bonds and that this environment warrants some caution.
- 5.25% short-term yields will continue to pull some money away from the stock markets. We favor a barbell approach owning cash/debt combined with equity risk outside of large tech in the less expensive areas of the global markets where earnings yields are higher, and valuations are lower. As we leave the safety of treasuries, we can now get 5-8% on different types of debt depending on length and credit quality. As investors worry about inflation and longer-term rates exceed 4.25% we will continue to move our duration out of short-term fixed income which offers the highest short-term returns towards bonds that offers that offer us the highest capital gains if/when rates decline (which typically happens in a market sell off caused by an economic shock or panic).
- Why we still like Value overgrowth: Many managers we follow are finding lots of gems in non-Osexy businesses. According to GMO, meaningful upside remains, in undervalued securities, "at the end of May 2023 global value would need to outperform growth by the order of 50% to return to its median level of relative valuation." (3)

- Commodities and material Dirty businesses like oil and mining have had a dramatic amount of under investment over the past 10 years, which has caused lower supply and higher prices. As is typical of capitalistic system, capital has quickly returned to these cyclical areas of the market to cash in on higher prices and in several years we think supply be able to meet demand, but in the interim (while these projects are ramping up) prices will remain elevated and profits should be attractive in these areas. I think Buffet's continued purchase of Occidental Petroleum is a prime example of the potential for attractive returns on capital in energy and materials. Our models have a significant exposure to this area because these stocks have lower valuations than big tech.
- Where institutional funds are flowing: Many of the talking heads on CNBC along with big bank allocations continue to talk up and favor value overgrowth and small over large and international over domestic for monies with 5+ year time horizon.

Price-to-book ratios of the MSCI Emerging Markets Index and the MSCI USA Index



Source: Bloomberg, MSCI, as of 03/31/2023. Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

Our portfolios should continue to capitalize on this trend. In Figure 3
above we compare how much cheaper a dollar of earnings is in the
emerging markets compared to a dollar in the US by comparing the price
to book ratios of the two asset classes. We have not lowered our
allocations to this area.

We continue to believe the surest way to win in the long run is to keep cost low by aggressively minimizing implementation cost, reduce exposure to overvalued areas of the market by rebalancing through new savings or withdrawals, maintaining broad diversification across the global markets with greater weightings on factors that offer compelling future returns, and to maintain a disciplined process to help in avoiding emotional mistakes.

Our plan is to continue using both offensive and defensive investments inside your portfolio constrained by your goals and willingness to accept some risk. When markets eventually give us fear and dislocation and low bars to step over, we will then recommend considering moving some defense to offense. Until then, we hope you continue to sleep well at night knowing your money is slowly working day and night as it marches toward funding your goals.

If you have a big expense coming, an inflow of funds, or any changes that might impact your investments or if you just want to review your risk/expected investment returns, we think now is a great time to reevaluate your plan's offense and defense. We would love to RE-confirm the allocation inside your plan still has the characteristics that will give you the most confidence.

Thanks for allowing our team to travel this journey with you.

#### - Mike

### **Household items & FYI**

On the last 2 pages of this quarterly report, we have included a great article on the power of compounding by David Booth where he explains the concept of compounding and the impact of a few years can have. This article also highlights a new tax strategy that has opened up with left over 529 funds.

### **Financial Planning Idea:**

If anyone would like a high end no obligation property insurance review, we have partnered with an advisor who specializes in reviewing complex property issues like art, properties in multiple states and other issues that can arise as wealth increases. We just completed a review with another client and found several gaps. If you might find this service valuable, please let us know and we can set up an introduction as well as help get them the needed information to complete the review.

### **Upcoming Tax request:**

You may have seen an email requesting your 2022 taxes in May and June. Any day now we will be following up with a phone call to request them. As many of you know we now have a CPA in our office who will look at them and see if there are any tax planning opportunities you may want to consider, along with a report with pictures for you to look at. Having your return helps us give you better financial advice. We are not trying to step on your CPA's toes but given how busy most CPAs are we are trying to help better interface with your tax advisor by providing tax planning advice and better implementation of tax estimates, so no penalties accrue.

#### Source:

- (1). "Worried About Nvidia, Apple and Meta? Nasdaq Has Your Back" by Jonathan Levin, 7/12/23
- (2) Figure 2: VettiFi.com website
- (3) Source GMO website

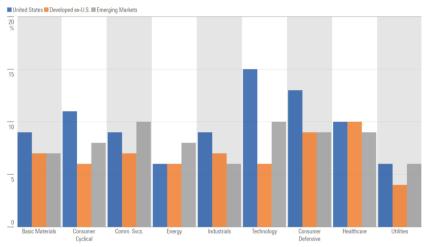
#### **Pictures Worth Looking at:**

#### Overseas companies are keeping more from their earnings...

Profitability margins of U.S. versus international equities



#### Average Annual ROIC by Sector: 2010-22



Source: Morningstar Direct. Author Calculations. Data as of Dec. 31, 2022.



#### Trailing Price/Earnings Multiple, Measured Annually: 2010-22





# **Quarterly Market Review**

Second 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: Let the Compounding

Commence!



# **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	
Q2 2023		STO	CKS		E	BONDS	
	8.39%	3.03%	0.90%	0.71%	-0.84%	0.73%	
Since Jan. 2001							
Average Quarterly Return	2.3%	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 June 30, 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	BONDS	
	18.95%	17.41%	1.75%	-3.02%	-0.94%	1.51%	
5 Years							
	11.39%	4.58%	0.93%	1.35%	0.77%	0.95%	
10 Years							
	12.34%	5.40%	2.95%	3.80%	1.52%	2.48%	

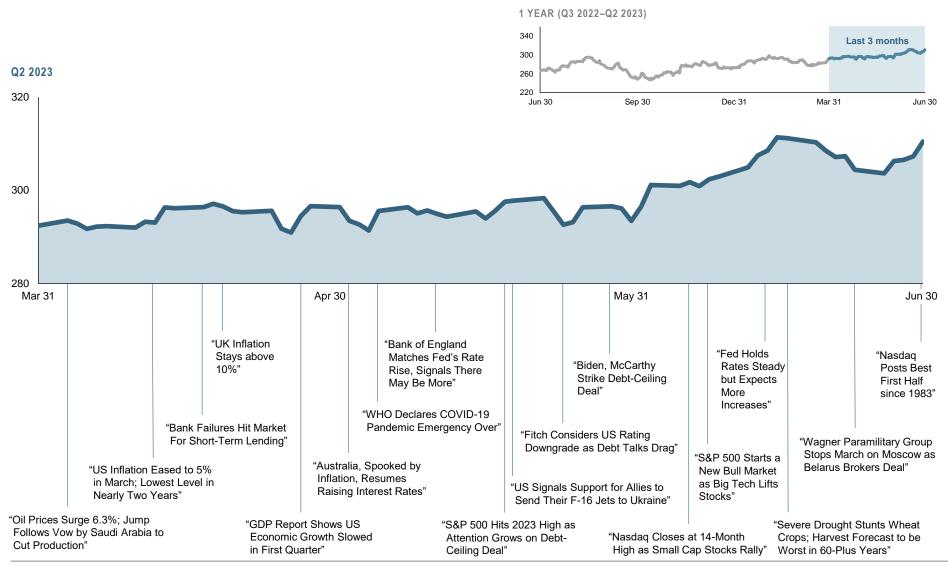
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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.



## World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2023

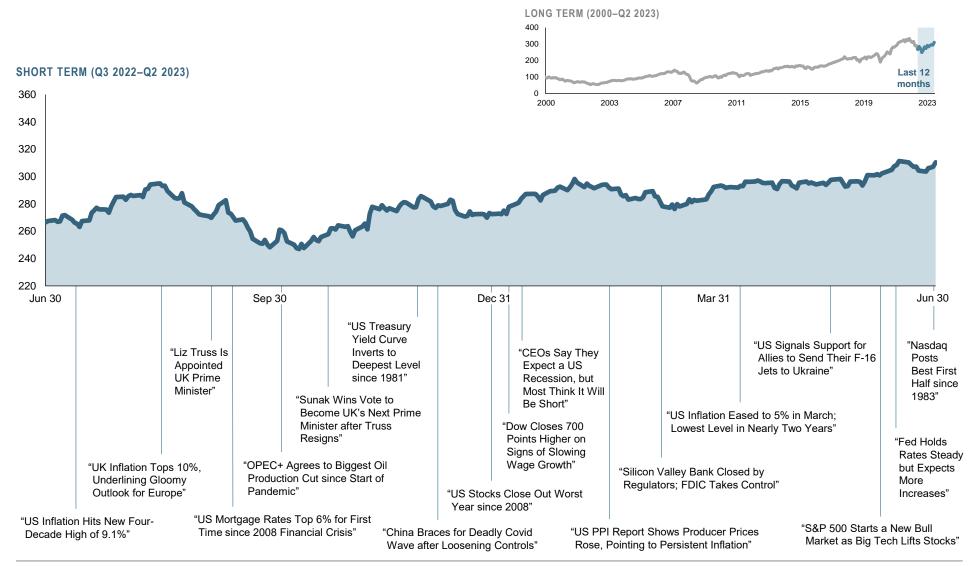


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



## 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**

### Second quarter 2023 index returns

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

Value underperformed growth.

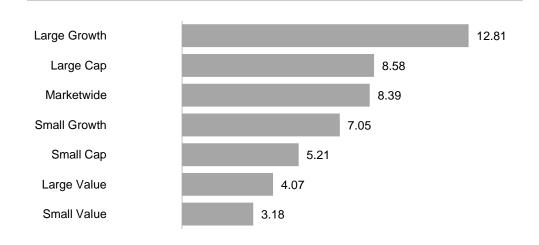
Small caps underperformed large caps.

REIT indices underperformed equity market indices.

#### **World Market Capitalization—US**



#### Ranked Returns (%)



#### Period Returns (%)

					Annualized	
Asset Class	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Large Growth	12.81	29.02	27.11	13.73	15.14	15.74
Large Cap	8.58	16.68	19.36	14.09	11.92	12.64
Marketwide	8.39	16.17	18.95	13.89	11.39	12.34
Small Growth	7.05	13.55	18.53	6.10	4.22	8.83
Small Cap	5.21	8.09	12.31	10.82	4.21	8.26
Large Value	4.07	5.12	11.54	14.30	8.11	9.22
Small Value	3.18	2.50	6.01	15.43	3.54	7.29

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 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 2023, 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

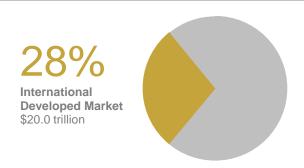
Second quarter 2023 index returns

Developed markets outside of the US posted positive returns for the quarter and underperformed the US market, but outperformed emerging markets.

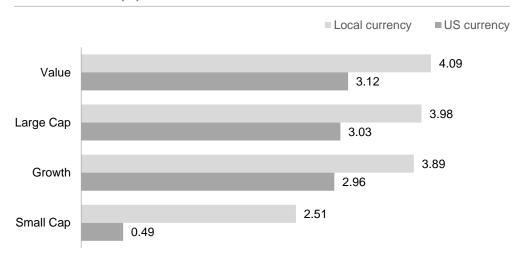
Value outperformed growth.

Small caps underperformed large caps.

#### World Market Capitalization—International Developed



#### Ranked Returns (%)



#### Period Returns (%)

					Annualized	
Asset Class	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Value	3.12	8.92	15.49	12.07	3.24	4.25
Large Cap	3.03	11.29	17.41	9.30	4.58	5.40
Growth	2.96	13.76	19.40	6.24	5.46	6.28
Small Cap	0.49	5.50	10.05	6.42	1.83	5.97

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 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**

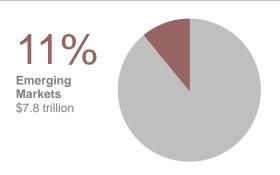
### Second quarter 2023 index returns

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

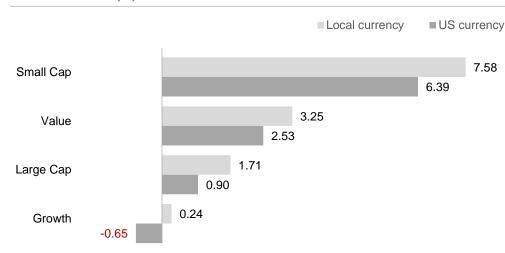
Value outperformed growth.

Small caps outperformed large caps.

#### **World Market Capitalization—Emerging Markets**



#### Ranked Returns (%)



#### **Period Returns (%)**

					Annualized	
Asset Class	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Small Cap	6.39	10.50	13.28	13.72	4.93	4.63
Value	2.53	6.53	4.13	6.27	1.22	1.99
Large Cap	0.90	4.89	1.75	2.32	0.93	2.95
Growth	-0.65	3.32	-0.45	-1.36	0.53	3.79

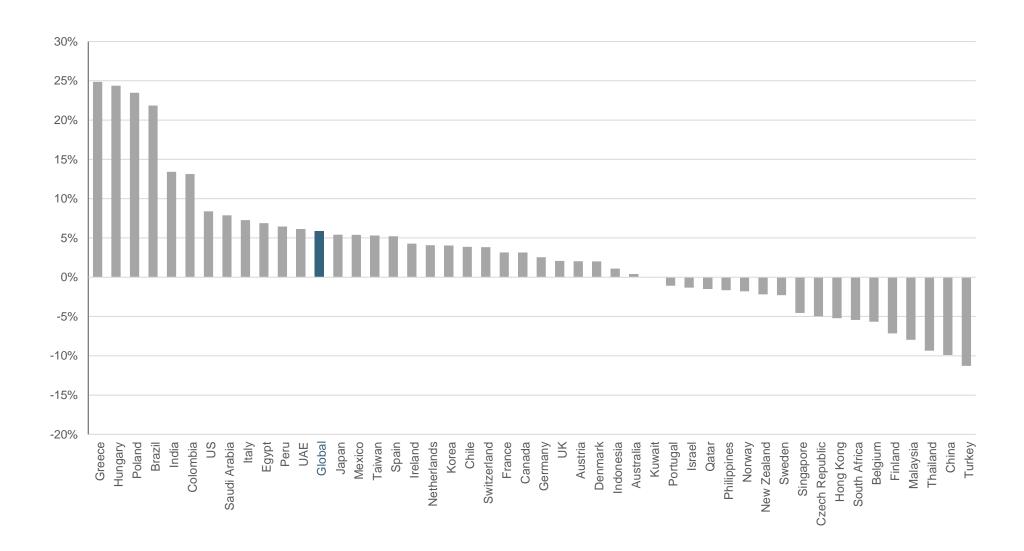
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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 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

Second quarter 2023 index returns



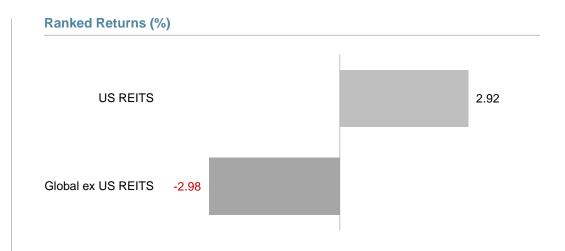
#### Past performance is no guarantee of future results.



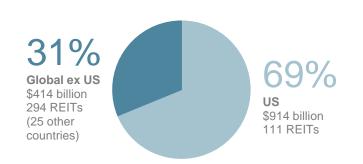
# Real Estate Investment Trusts (REITs)

Second 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	YTD	1 Year	3 Years	5 Years	10 Years
US REITS	2.92	5.77	-0.69	9.17	3.28	5.75
Global ex US REITS	-2.98	-3.85	-7.02	0.31	-2.61	1.36

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

### Second quarter 2023 index returns

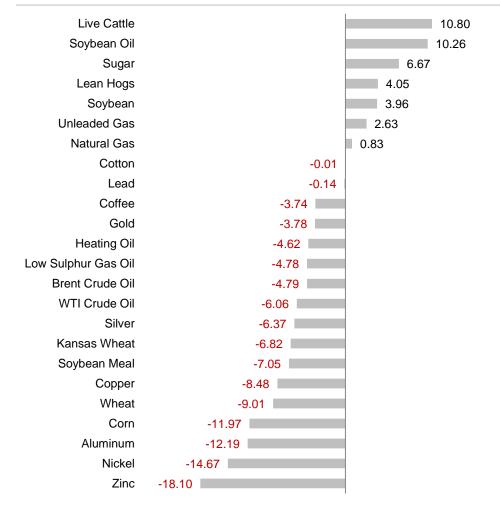
The Bloomberg Commodity Total Return Index returned - 2.56% for the second quarter of 2023.

Zinc and Nickel were the worst performers, returning -18.10% and -14.67% during the quarter, respectively. Live Cattle and Soybean Oil were the best performers, returning +10.80% and +10.26% during the quarter, respectively.

#### Period Returns (%)

				/	Annualized	
Asset Class	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Commodities	-2.56	-7.79	-9.61	17.82	4.73	-0.99

#### Ranked Returns (%)





## **Fixed Income**

### Second quarter 2023 index returns

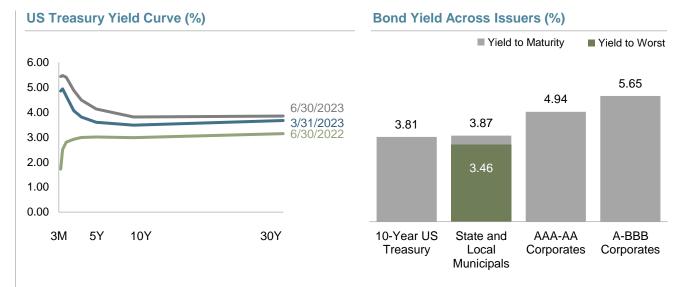
Interest rates increased across all bond maturities in the US Treasury market for the quarter.

On the short end of the yield curve, the 1-Month US Treasury Bill yield increased 50 basis points (bps) to 5.24%, while the 1-Year US Treasury Bill yield increased 76 bps to 5.40%. The yield on the 2-Year US Treasury Note increased 81 bps to 4.87%.

The yield on the 5-Year US Treasury Note increased 53 bps to 4.13%. The yield on the 10-Year US Treasury Note increased 33 bps to 3.81%. The yield on the 30-Year US Treasury Bond increased 18 bps to 3.85%.

In terms of total returns, short-term US treasury bonds returned -0.90% while intermediate-term US treasury bonds returned -1.15%. Short-term corporate bonds returned +0.07% and intermediate-term corporate bonds returned -0.16%.<sup>1</sup>

The total returns for short- and intermediateterm municipal bonds were -0.37% and -0.72%, respectively. Within the municipal fixed income market, general obligation bonds returned -0.41% while revenue bonds returned +0.04%.<sup>2</sup>



#### **Period Returns (%)**

					Annualized	
Asset Class	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg U.S. High Yield Corporate Bond Index	1.75	5.38	9.06	3.13	3.36	4.43
ICE BofA US 3-Month Treasury Bill Index	1.17	2.25	3.59	1.27	1.55	0.98
ICE BofA 1-Year US Treasury Note Index	0.42	1.67	1.93	0.23	1.30	0.89
Bloomberg Municipal Bond Index	-0.10	2.67	3.19	-0.58	1.84	2.68
FTSE World Government Bond Index 1-5 Years (hedged to USD)	-0.27	1.53	0.28	-1.15	0.95	1.14
Bloomberg U.S. Aggregate Bond Index	-0.84	2.09	-0.94	-3.96	0.77	1.52
FTSE World Government Bond Index 1-5 Years	-1.19	0.87	-0.27	-2.84	-0.77	-0.67
Bloomberg U.S. TIPS Index	-1.42	1.87	-1.40	-0.12	2.49	2.08
Bloomberg U.S. Government Bond Index Long	-2.29	3.73	-6.79	-12.02	-0.88	1.81

<sup>1.</sup> Bloomberg US Treasury and US Corporate Bond Indices.

<sup>2.</sup> 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 (SBBI) Yearbook TM, 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.



## Global Fixed Income

### Second quarter 2023 yield curves

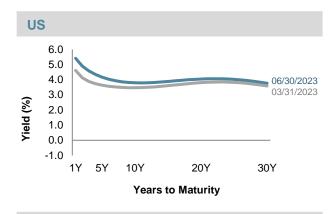
With the exception of Japan, interest rates generally increased across global developed markets for the quarter.

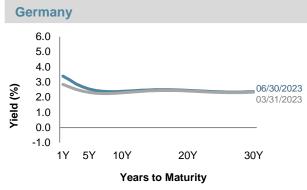
Realized term premiums were broadly negative across global developed markets.

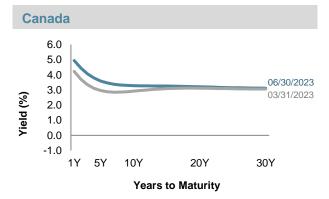
In Japan, ultrashort-term nominal interest rates were negative. In the UK, Germany, Canada, and Australia, the short-term segment of the yield curve was inverted.

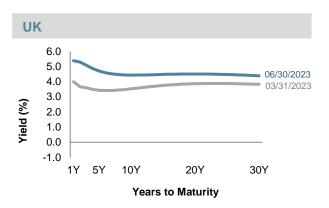
#### Changes in Yields (bps) since 03/31/2023

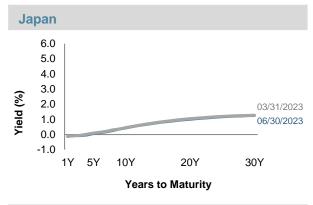
	1Y	5Y	10Y	20Y	30Y
US	79.6	53.1	32.5	23.9	18.1
UK	138.7	127.0	90.6	64.2	56.6
Germany	54.3	22.2	9.4	4.0	3.8
Japan	-1.0	-3.0	-1.8	-3.3	-1.3
Canada	72.1	63.3	36.3	8.9	6.1
Australia	118.9	92.6	72.3	57.1	54.9

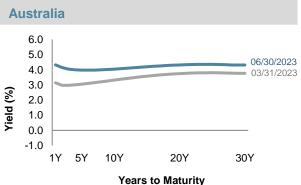














# Let the Compounding Commence!

Second quarter 2023

David Booth, Executive Chairman and Founder, Dimensional Fund Advisors

Every year, families and friends celebrate students who are graduating from colleges and universities. Parents beam with pride at their children's accomplishments and exhale in relief now that the tuition bills have finally stopped. It's a time when adults give a lot of advice, which is why I have one simple idea I want to pass along to this year's graduating class that I hope you never forget. Parents, take note too, because with college out of the way, you can get back to focusing on retirement.

Let the compounding begin!

In case you didn't come across this idea in an econ class, let me explain compounding simply. It's the process by which the value of an investment increases over time as earnings or interest are reinvested. It's the snowball effect but with money. Here's an example.

If you're a US investor and lucky enough to have up to \$35,000 left over in your 529 college savings plan, you can roll it over into a Roth IRA starting in 2024, provided the account has been open at least 15 years.<sup>1</sup>

If you don't touch that \$35,000 for 50 years, and the market averages a 10% annualized return, which is close to its long-term historical average, then guess how much you'll have?<sup>2</sup>

A. \$1,584,074

B. \$2,551,167

C. \$4,108,680

The answer is C. Over \$4.1 million!

If you were to start this in your mid-20s and invest that same initial amount for only 45 years, you'd end up with B, or \$2.6 million. That's great, but not as great as C.

If you do it for 40 years, you'll end up with A, or \$1.6 million. Also good, but, you know, not C.

<sup>1.</sup> Laura Saunders, "Your Child Picked a College! Tee Up Your 529 Plan," Wall Street Journal, May 5, 2023.



# Let the Compounding Commence!

(continued from page 15)

Another benefit of compounding is that it can help you pursue financial goals along the way, like making a down payment on a home. But don't worry if you spent your whole college fund or took out student loans. Start with a little and get in the habit of adding when you can. As you can see from this snowballing, having a lot of time can help make up for not having a lot of money.

In addition to increasing the value of your investments, compounding can also be a valuable force in life. For example, you've made an investment in time and money over the last few years that may have an enormous effect on the rest of your life. How much money are we talking about? College graduates, on average, earn 84% more than those with a high-school education, and that adds up to an extra \$1.2 million over a lifetime.<sup>3</sup> Parents, I hope you're feeling a little better about your investment too.

But it's more than just money. When you get to be like me, someone who graduated from college more than 50 years ago, you see that you are the result of the compounding of your life's decisions, both good and bad. It's hard to quantify exactly, but it's sure there. For example, in graduate school, I decided I didn't want to be a professor. That one decision continues to have a profound impact on the rest of my life. Instead, I started a company with the people I met in graduate school. Four decades later, I'm still working with some of them. I even got to go watch my former professor and current colleague Eugene Fama receive a Nobel Prize in Economic Sciences. That was not on my bingo card when I graduated from college. Life is full of surprises, and many of them can come from how your decisions compound over decades.

So, start rolling your snowball, both in life and in investing. Let the compounding commence!

3. "How Does a College Degree Improve Graduates' Employment and Earnings Potential?", Association of Public and Land-Grant Universities.

Investments involve risks. The investment return and principal value of an investment may fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original value. Past performance is not a guarantee of future results. There is no guarantee strategies will be successful.

The investment approach discussed does not assure a positive return or a positive investment experience. There are numerous ways of approaching investing, only one of which is presented here, which may not be appropriate for every individual. 529 Plans are tax-advantaged savings plans available in the United States that are designed to help pay for education. Eugene Fama is a member of the Board of Directors for and provides consulting services to Dimensional Fund Advisors LP. The information in this material is intended for the recipient's background information and use only. It is provided in good faith and without any warranty or representation as to accuracy or completeness. Information and opinions presented in this material have been obtained or derived from sources believed by Dimensional to be reliable, and Dimensional has reasonable grounds to believe that all factual information herein is true as at the date of this material. It does not constitute investment advice, a recommendation, or an offer of any services or products for sale and is not intended to provide a sufficient basis on which to make an investment decision. Before acting on any information in this document, you should consider whether it is appropriate for your particular circumstances and, if appropriate, seek professional advice. It is the responsibility of any persons wishing to make a purchase to inform themselves of and observe all applicable laws and regulations. Unauthorized reproduction or transmission of this material is strictly prohibited. Dimensional accepts no responsibility for loss arising from the use of the information contained herein. This material is not directed at any person in any jurisdiction where the availability of this material is prohibited or would subject Dimensional or its products or services to any registration, licensing, or other such legal requirements within the jurisdiction. "Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors LP, Dimensional Fund Advisors LP, Dimensional Fund Advisors

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.