

Quarterly Market Review

Second Quarter 2023



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Global Fixed Income

Quarterly Topic: Let the Compounding Commence!



Quarterly Market Summary

Index returns

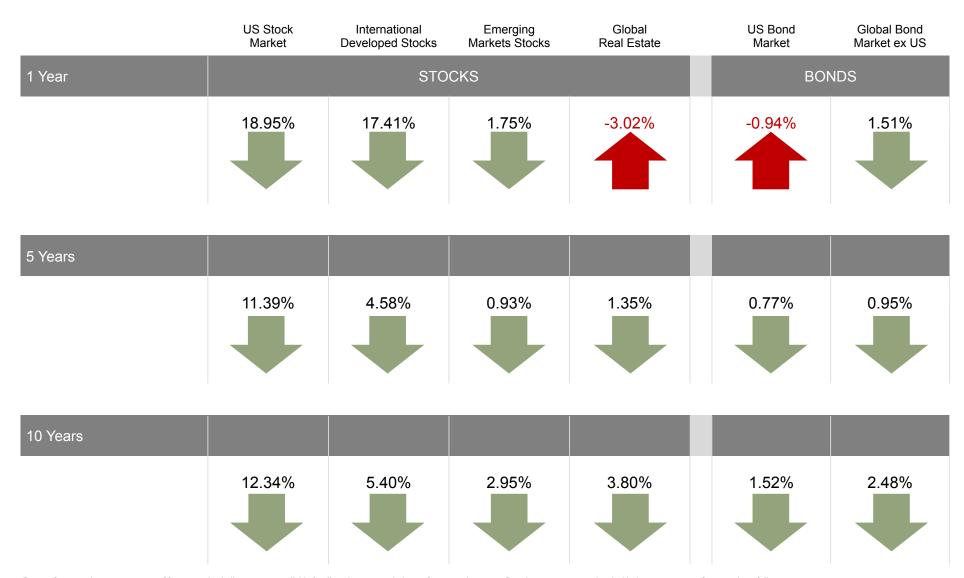
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
Q2 2023		STO		BOI	NDS	
	8.39%	3.03%	0.90%	0.71%	-0.84%	0.73%

Since Jan. 2001						
Average Quarterly Return	2.3%	1.5%	2.5%	2.2%	0.9%	0.9%
Best 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%	-5.9%	-4.1%
	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2022 Q1	2022 Q1



Long-Term Market Summary

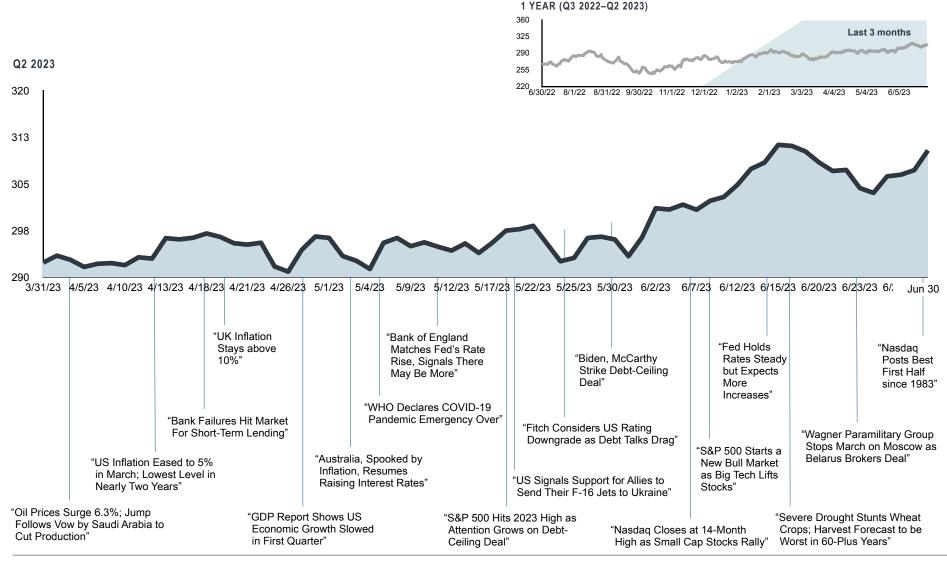
Index returns as of June 30, 2023





World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2023

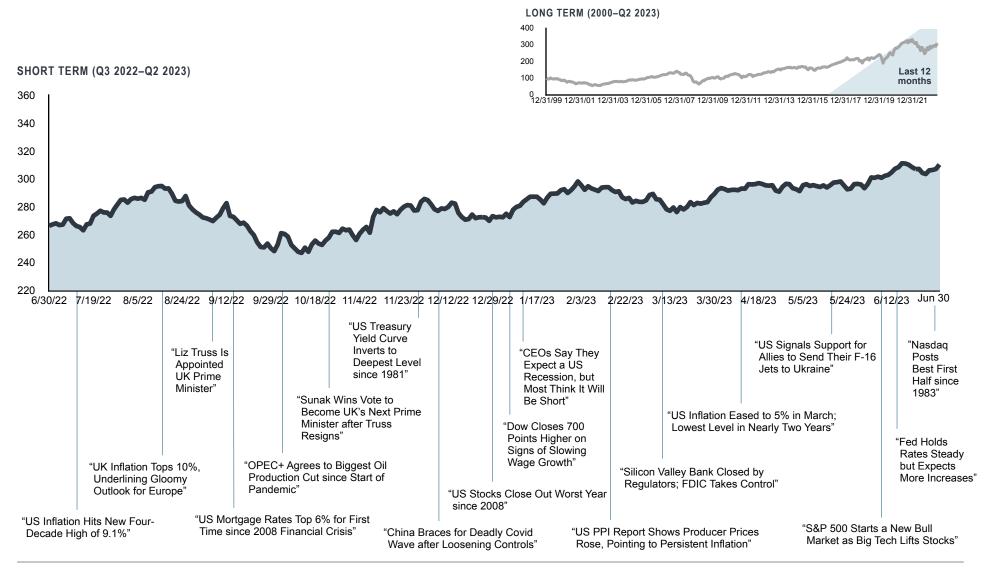


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



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

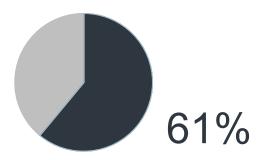
The US equity market posted positive returns for the quarter and outperformed both non-US developed and emerging markets.

Value underperformed growth.

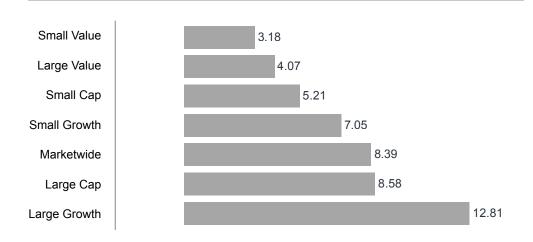
Small caps underperformed large caps.

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 Cap (Russell 1000 Index), Large Cap (Russell 2000 Index), Large Cap (Russell 2000 Index), Small Value (Russell 2000 Index), Small Value (Russell 2000 Index), Small Value Index), Market Cap represented by 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

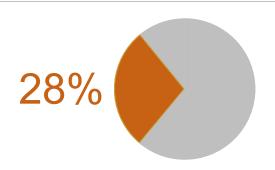
Second quarter 2023 index returns

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

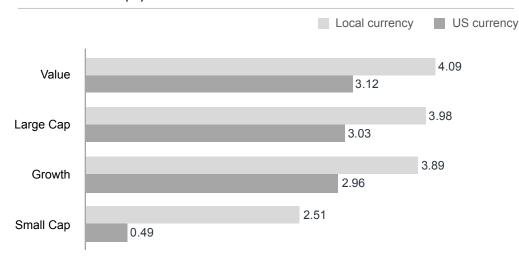
Value outperformed growth.

Small caps underperformed large caps.

World Market Capitalization—International Developed



Ranked Returns (%)



					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



Emerging Markets Stocks

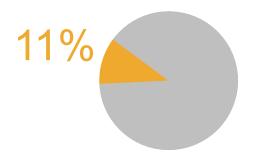
Second quarter 2023 index returns

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

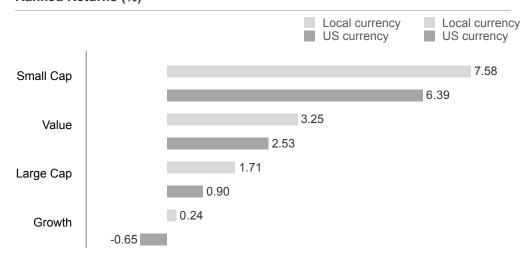
Value outperformed growth.

Small caps outperformed large caps.

World Market Capitalization—Emerging Markets



Ranked Returns (%)

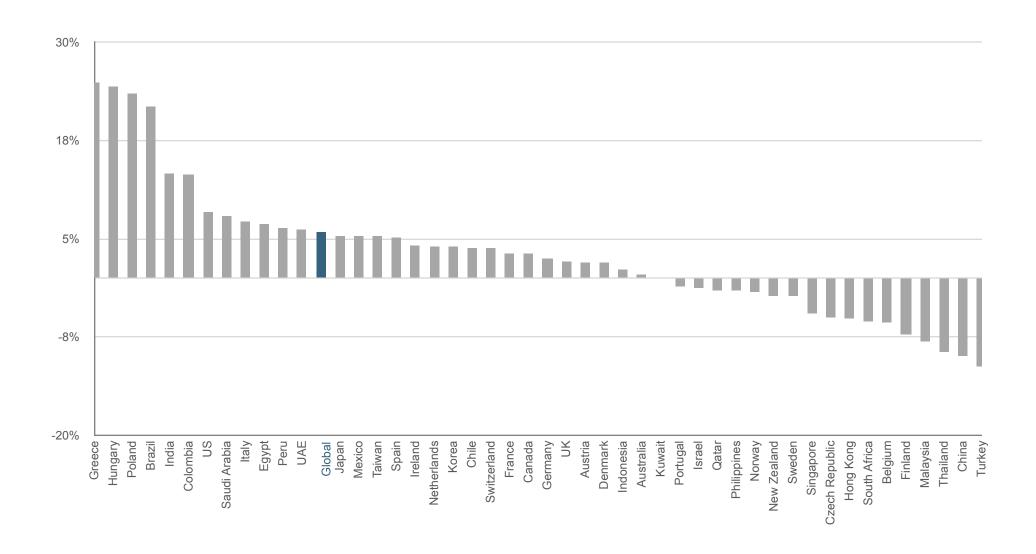


					Annualized	
Asset Class	QTR	YTD	1 Year	3 Years	5 Years	10 Years
Small Cap	6.39	10.50	13.28	13.72	4.93	4.63
Value	2.53	6.53	4.13	6.27	1.22	1.99
Large Cap	0.90	4.89	1.75	2.32	0.93	2.95
Growth	-0.65	3.32	-0.45	-1.36	0.53	3.79



Country Returns

Second quarter 2023 index returns



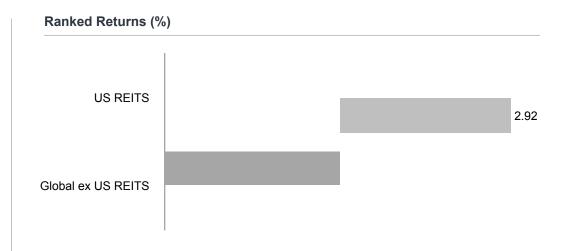
Past performance is no guarantee of future results.



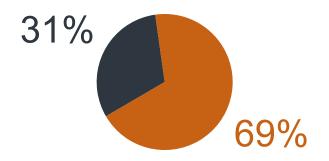
Real Estate Investment Trusts (REITs)

Second quarter 2023 index returns

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



Total Value of REIT Stocks



					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



Commodities

Second quarter 2023 index returns

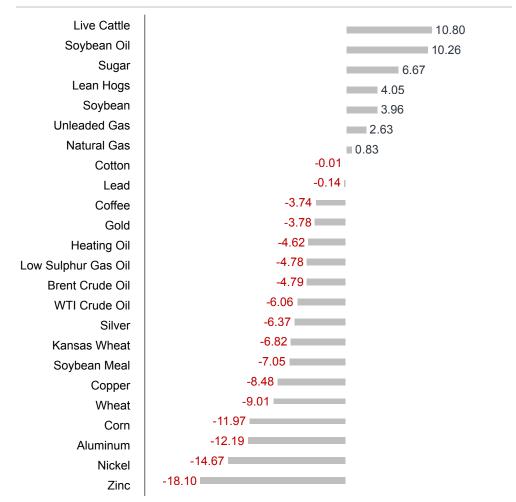
The Bloomberg Commodity Total Return Index returned -2.56% for the second quarter of 2023.

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

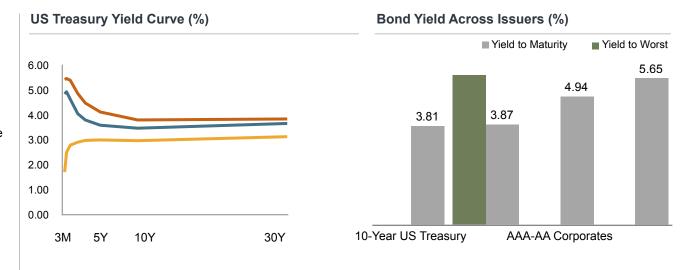
Interest rates increased across all bond maturities in the US Treasury market for the quarter.

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%.1

The total returns for short- and intermediate-term 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%.²



					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

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

^{2.} Bloomberg Municipal Bond Index.

One basis point (pps) 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 represent the ICE BofA US Corporates, ABA-Ara cade, A-BaB Corporates and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, inflations, and fixed income factor data © 50.015ks, Bonds, Blis, Inflations, and fixed income factor data © 50.015ks, Bonds, Blis, Inflations, and fixed income factor data © 50.015ks, Bonds, Blis, Inflations, and fixed income factor data © 50.015ks, Bonds, Blis, Inflations, and fixed income factor data of 50.015ks, Bonds, Blis, Inflations, and fixed income factor data of 50.015ks, Bonds, Blis, Blis,



Global Fixed Income

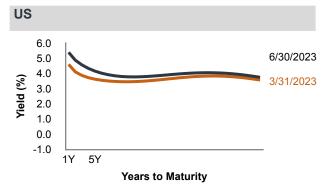
Second quarter 2023 yield curves

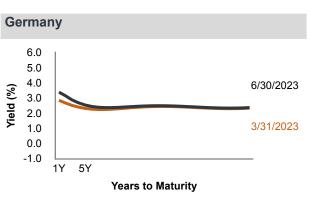
With the exception of Japan, interest rates generally increased across global developed markets for the quarter.

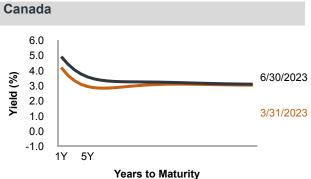
Realized term premiums were broadly negative across global developed markets.

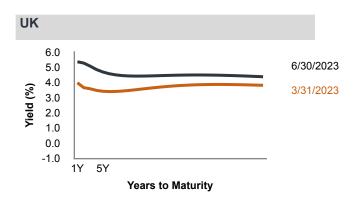
In Japan, ultrashort-term nominal interest rates were negative. In the UK, Germany, Canada, and Australia, the short-term segment of the yield curve was inverted.

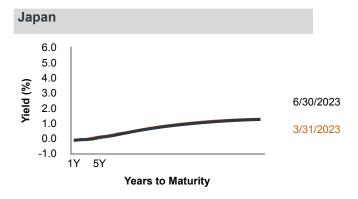
Yield (%) Yield (%)

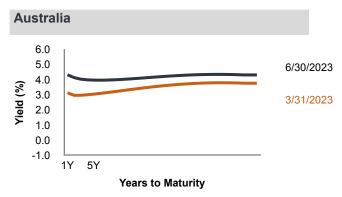












Changes in Yields (bps) since 03/31/2023

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





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.¹

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?²

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.

^{1.} Laura Saunders, "Your Child Picked a College! Tee Up Your 529 Plan," Wall Street Journal, May 5, 2023.

^{2.} In US dollars. Based on S&P 500 Index annual returns, 1926–2022. S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.



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. 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.