

Q4

Quarterly Market Review
Fourth Quarter 2022

What Do We Want in the New Year?

On Happiness, Meaning and Psychological Richness



Most friend groups have that one person who always seems to be up for anything. I think you know the type I'm talking about — it's the friend who not only suggests a novel activity or offbeat restaurant but is also accommodating when you, on a rare occasion, suggest something a little different than normal.

My buddy, Mike, is that friend. Months and months of COVID-induced isolation and restricted socializing seemed to hit him particularly hard. He's a true extrovert by nature and being unable to spend time with his closest friends doing interesting things robbed him of the lifeblood of his happiness.

So, a little while back, when he texted me and a few others with a link to a local Tough Mudder race with the simple question, "WHO'S IN?" I approached his casual invitation with more consideration than I might have otherwise given it. A Tough Mudder, if you haven't heard about such things, is essentially a mud race. Though it's not really a race, per se. Rather, the event is meant to be a collaborative one. There are 5k, 10k, and 15k versions, and you can't do it and get through upwards of 30 obstacles — some of which involve minor electrocution, massive amounts of mud or army crawling through tear-gas tunnels — without the help of friends.

The main question I had for him was, "Why would anyone want to do this to themselves on a perfectly good Saturday morning?" His answer was compelling: "Parts of it just won't be fun, but you'll have a whole new appreciation for yourself afterward."

How Do You Define Leading a 'Good' Life?

Before saying more, let me explain why I'm even discussing this anecdote. The reason: It speaks to a fresh way to approach resolution-making for the new year. I suspect that what lies under the hood of many New Year's resolutions is partly a desire to be better versions of ourselves.

We want to exercise more, eat healthier, be more patient, and so on because we want to improve who we were in the prior year. We want to, in short, lead good lives, and one way to do so is to set new and loftier goals for ourselves. But before we go down that path yet again, it may be useful to contemplate what it even means to lead a "good" life.



Hal Hershfield, Ph.D.

Consultant to Avantis Investors

Hal is a Professor of Marketing and Behavioral Decision Making in the Anderson School of Management at the University of California, Los Angeles and a consultant to Avantis Investors.

His research asks, "How can we help move people from who they are now to who they'll be in the future in a way that maximizes well-being?"

What Do We Want in the New Year?

On Happiness, Meaning and Psychological Richness



Great thinkers have had a lot to say about the topic over the years, and the debate seems to boil down to two main definitions of "well-being": lives that are marked by eudaimonic well-being, or purpose and meaning, and lives that are marked by hedonic well-being, or pleasure.

Recent ground-breaking research from psychologists Shigehiro Oishi and Erin Westgate, however, raises a third possibility: a psychologically rich life, or a life that is marked by "a variety of interesting and perspective-changing experiences." ¹

As you can see in the table, happy lives, meaningful lives, and psychologically rich lives differ in key features, facilitators, and major outcomes. For instance, psychologically rich lives, in contrast to happy and meaningful lives, are driven more by curiosity, energy, time and spontaneity compared to money or a positive mindset.

To investigate the viability of this third definition of a good life, Oishi and his colleagues conducted surveys and coded obituaries — in the New York Times, a local Charlottesville, Virginia, paper and a major Singaporean newspaper — and found that the three types of a good life were distinct.

Across research samples, there was a weak negative relationship between psychological richness and happiness: Lives that were rated more psychologically rich were also slightly less happy. People might have had experiences that could be deemed "unhappy" (e.g., losing a job and needing to change careers) but could nonetheless give rise to a psychologically rich life.

There was also a small but positive relationship between psychological richness and meaning. Here's what all that means in plain terms: In rare cases, you can be happy, have meaning, and experience psychological richness. But often, the three components are independent contributors to what might be considered a good life.

Three Dimensions of the Good Life

| | HAPPY LIFE | MEANINGFUL LIFE | PSYCHOLOGICALLY RICH LIFE |
|--------------|---|---|--|
| | Comfort | Significance | Variety |
| KEY FEATURES | ■ Joy | Coherence | Interest |
| | Security | Purpose | Perspective change |
| | Money | Moral principles | Curiosity |
| FACULTATORS | ■ Time | Consistency | Energy |
| FACILITATORS | Relationships | Relationships | ■ Time |
| | Positive mindset | Religiosity | Spontaneity |
| OUTCOMES | Personal satisfaction | Societal contribution | Wisdom |

Source: Oishi and Westgate (2022).

¹ Shigehiro Oishi and Erin C. Westgate, "A Psychologically Rich Life: Beyond Happiness and Meaning," Psychological Review 129, no. 4 (July 2022): 790-811.

What Do We Want in the New Year?

On Happiness, Meaning and Psychological Richness



What Contributes to a Psychologically Rich Life?

Oishi's work has also found that those who are open to new experiences and more extroverted are also considerably more likely to lead psychologically rich lives. But more to the point, are there certain types of situations — rather than certain types of people — that are most strongly associated with psychologically rich lives?

Theoretically, a psychologically rich life contains "unexpectedness, novelty, complexity, and perspective change." What experiences, then, might have those ingredients in spades? Studying abroad, as it turns out, is one classic example of an experience that can enhance psychological richness.

For example, students who studied in a foreign country returned home with lives that were self-rated as more psychologically rich, but they didn't experience similar increases in happiness or perceptions of meaning. And the boost in psychological richness can be explained, in part, by regular engagement with artistic activities.

But we need not study abroad to experience such boosts in psychological richness. As Oishi and his colleagues have found, going to an escape room may be another way to inject some of the ingredients of a psychologically rich life into your own life.

Or, of course, you could just do a Tough Mudder event. In the end, I decided to go for it. And truth be told, I hated parts of it but seriously loved others. More than anything, there was a huge, unexpected element to the day: I didn't anticipate just how much of a sense of accomplishment I'd feel.

None of this is to say, though, that you must aim for a psychologically rich life. Oishi and his collaborators emphasize that there's no formula or perfect answer to the question of what we should strive for. Rather, a psychologically rich life may be one overlooked — but equally important — way of considering what it means to have a good life.

So, before thinking ahead to the goals you want to set for the next year, consider the bigger picture. Consider, in other words, what pursuits you'll want to spend your time, money, and energy on and how such expenditures will enhance your happiness, meaning, and/or sense of psychological richness.

It's a question I, for one, will ponder as I contemplate how to respond to my friend Mike's latest text, which is simply a screenshot of the Tough Mudder 2023 schedule.

Quarterly Market Review

Fourth quarter 2022

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: Time the Market at Your Peril



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 |
|-----------------------------|--------------------|-----------------------------------|----------------------------|-----------------------|-------------------|-----------------------------|
| Q4 2022 | | STO | CKS | | ВО | NDS |
| | 7.18% | 16.18% | 9.70% | 6.88% | 1.87% | 0.18% |
| Since Jan. 2001 | | | | | | |
| Average Quarterly Return | 2.1% | 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 [netged 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 December 31, 2022

| | US Stock Market | International Developed Stocks | Emerging Markets Stocks | Global Real Estate | US Bond Market | Global Bond Market ex US | |
|----------|--------------------|-----------------------------------|----------------------------|-----------------------|-------------------|-----------------------------|--|
| 1 Year | | STO | CKS | | BONDS | | |
| | -19.21% | -14.29% | -20.09% | -24.36% | -13.01% | -9.76% | |
| | | | | | | | |
| | | | | | | | |
| 5 Years | | | | | | | |
| | 8.79% | 1.79% | -1.40% | 0.92% | 0.02% | 0.52% | |
| | | | | | | | |
| | | | | | | | |
| 10 Years | 40.400/ | 4.500/ | 4.440/ | 0.000/ | 4.000/ | 0.400/ | |
| | 12.13% | 4.59% | 1.44% | 3.88% | 1.06% | 2.10% | |
| | | | | | | | |

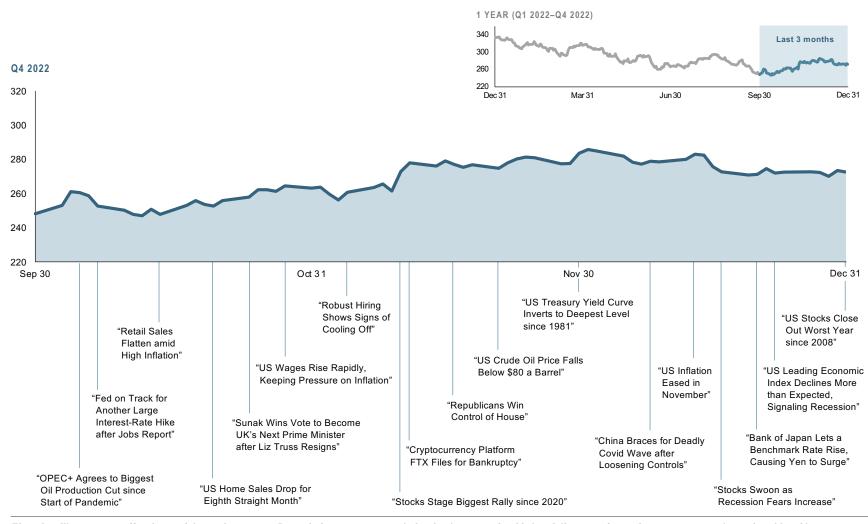
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Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net dividends]), Emerging Markets (MSCI Emerging Markets Index [net dividends]), Global Real Estate (S&P 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 Q4 2022

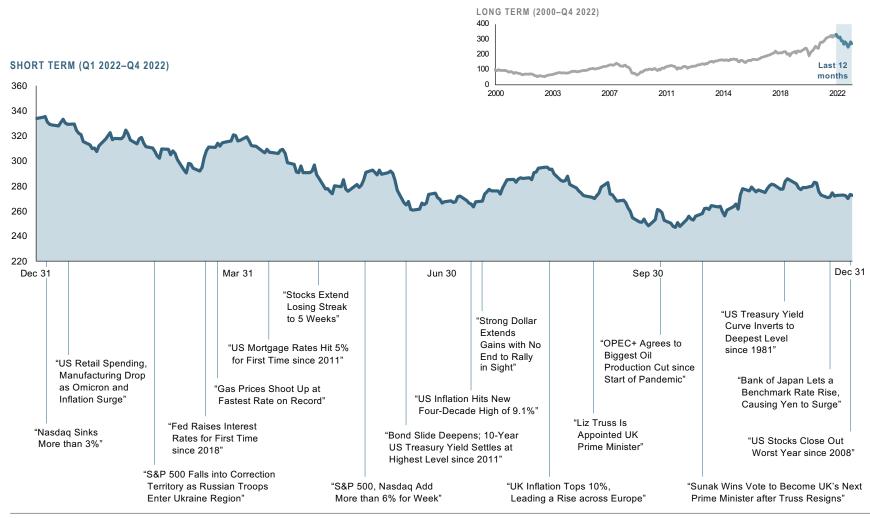


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



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

Fourth quarter 2022 index returns

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

Value outperformed growth.

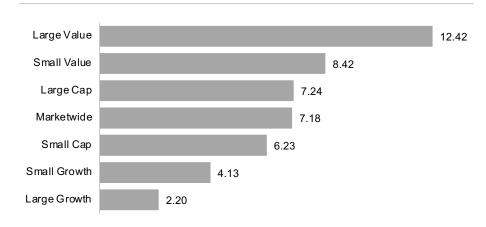
Small caps underperformed large caps.

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 Value | 12.42 | -7.54 | 5.96 | 6.67 | 10.29 |
| Small Value | 8.42 | -14.48 | 4.70 | 4.13 | 8.48 |
| Large Cap | 7.24 | -19.13 | 7.35 | 9.13 | 12.37 |
| Marketwide | 7.18 | -19.21 | 7.07 | 8.79 | 12.13 |
| Small Cap | 6.23 | -20.44 | 3.10 | 4.13 | 9.01 |
| Small Growth | 4.13 | -26.36 | 0.65 | 3.51 | 9.20 |
| Large Growth | 2.20 | -29.14 | 7.79 | 10.96 | 14.10 |

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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

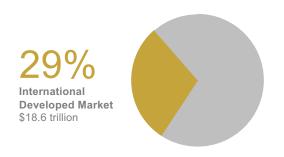
Fourth quarter 2022 index returns

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

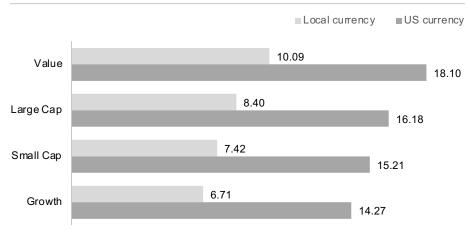
Value outperformed growth.

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 |
| Value | 18.10 | -5.64 | 1.13 | 0.56 | 3.55 |
| Large Cap | 16.18 | -14.29 | 1.27 | 1.79 | 4.59 |
| Small Cap | 15.21 | -20.59 | -0.15 | 0.45 | 5.77 |
| Growth | 14.27 | -22.68 | 0.71 | 2.56 | 5.35 |

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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 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 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

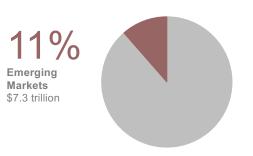
Fourth quarter 2022 index returns

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

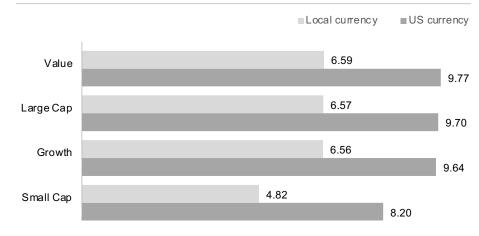
Value outperformed growth.

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 |
| Value | 9.77 | -15.83 | -2.62 | -1.59 | 0.06 |
| Large Cap | 9.70 | -20.09 | -2.69 | -1.40 | 1.44 |
| Growth | 9.64 | -23.96 | -2.93 | -1.33 | 2.68 |
| Small Cap | 8.20 | -18.02 | 5.11 | 1.06 | 3.21 |

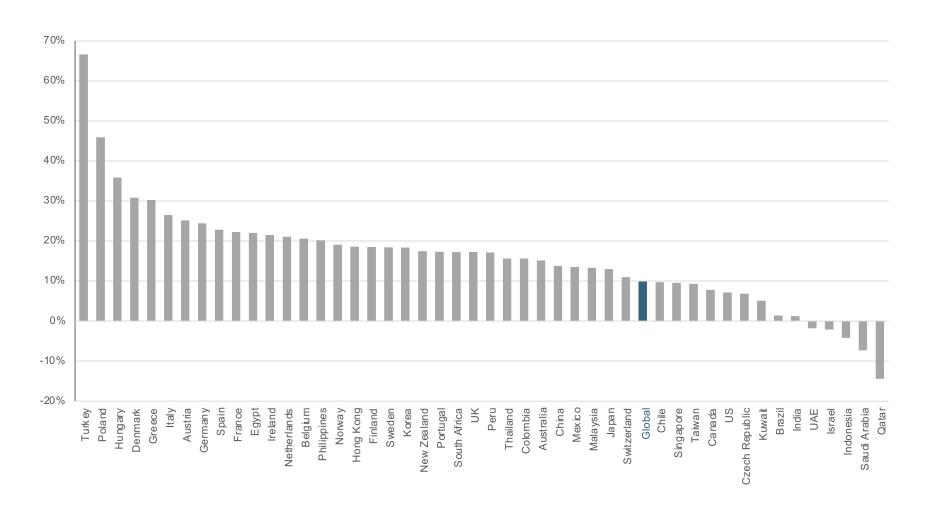
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Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns 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

Fourth quarter 2022 index returns



Past performance is no guarantee of future results.

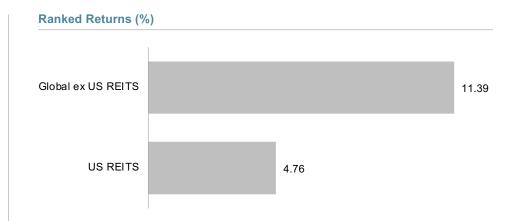
Country returns are the country component indices of the MSCI All Country World IMI Index for all countries except the United States, where the Russell 3000 Index is used instead. Global is the return of the MSCI All Country World IMI Index. MSCI index returns are net dividend. Indices are not available 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.



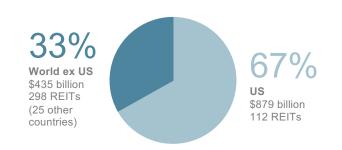
Real Estate Investment Trusts (REITs)

Fourth quarter 2022 index returns

US real estate investment trusts underperformed 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 |
| Global ex US REITS | 11.39 | -22.56 | -7.77 | -2.13 | 1.61 |
| US REITS | 4.76 | -25.96 | -1.37 | 2.50 | 5.74 |

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

Fourth quarter 2022 index returns

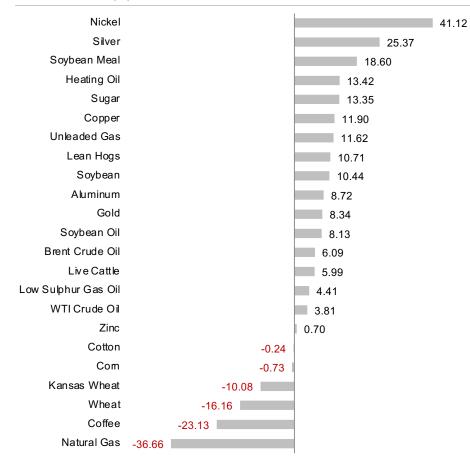
The Bloomberg Commodity Total Return Index returned +2.22% for the fourth quarter of 2022.

Nickel and Silver were the best performers, returning +41.12% and +25.37% during the quarter, respectively. Natural Gas and Coffee were the worst performers, returning -36.66% and -23.13% during the quarter, respectively.

Period Returns (%)

| | | | Annualized | | | | |
|-------------|------|--------|------------|---------|----------|--|--|
| Asset Class | QTR | 1 Year | 3 Years | 5 Years | 10 Years | | |
| Commodities | 2.22 | 16.09 | 12.65 | 6.44 | -1.28 | | |

Ranked Returns (%)





Fixed Income

Fourth quarter 2022 index returns

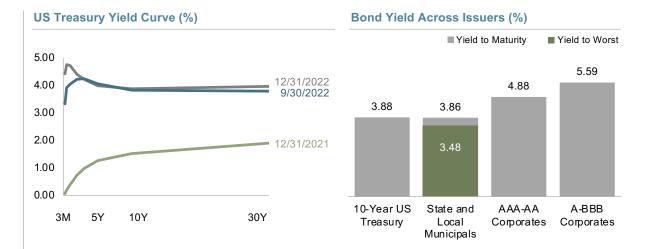
Interest rates changes were mixed in the US Treasury market for the guarter.

On the short end of the yield curve, the 1-Month US Treasury Bill yield increased 133 basis points (bps) to 4.12%, while the 1-Year US Treasury Bill yield increased 68 bps to 4.73%. The yield on the 2-Year US Treasury Note increased 19 bps to 4.41%.

The yield on the 5-Year US Treasury Note decreased 7 bps to 3.99%. The yield on the 10-Year US Treasury Note increased 5 bps to 3.88%. The yield on the 30-Year US Treasury Bond increased 18 bps to 3.97%.

In terms of total returns, short-term US treasury bonds returned +0.94% while intermediate-term US treasury bonds returned +1.02%. Short-term corporate bonds returned +1.95% and intermediate-term corporate bonds returned +2.72%.1

The total return for short-term municipal bonds was +2.00% and +3.81% for intermediate-term municipal bonds. Within the municipal fixed income market, general obligation performed in line with revenue bonds, returning +4.19% vs. +4.21%, respectively.²



Period Returns (%)

| | | | | Annualized | |
|--|-------|--------|---------|------------|----------|
| Asset Class | QTR | 1 Year | 3 Years | 5 Years | 10 Years |
| Bloomberg U.S. High Yield Corporate Bond Index | 4.17 | -11.19 | 0.05 | 2.31 | 4.03 |
| Bloomberg Municipal Bond Index | 4.10 | -8.53 | -0.77 | 1.25 | 2.13 |
| FTSE World Government Bond Index 1-5 Years | 3.83 | -8.73 | -2.44 | -1.15 | -1.20 |
| Bloomberg U.S. TIPS Index | 2.04 | -11.85 | 1.21 | 2.11 | 1.12 |
| Bloomberg U.S. Aggregate Bond Index | 1.87 | -13.01 | -2.71 | 0.02 | 1.06 |
| ICE BofA US 3-Month Treasury Bill Index | 0.84 | 1.46 | 0.72 | 1.26 | 0.76 |
| ICE BofA 1-Year US Treasury Note Index | 0.76 | -1.02 | 0.23 | 1.09 | 0.74 |
| FTSE World Government Bond Index 1-5 Years (hedged to USD) | 0.57 | -4.49 | -0.75 | 0.73 | 0.98 |
| Bloomberg U.S. Government Bond Index Long | -0.59 | -29.19 | -7.39 | -2.19 | 0.61 |

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

^{2.} 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 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.



Global Fixed Income

Fourth quarter 2022 yield curves

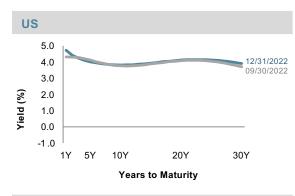
Interest rate changes were mixed within global developed markets for the quarter. Generally, interest rates increased the most along the ultrashort and longer-term segments.

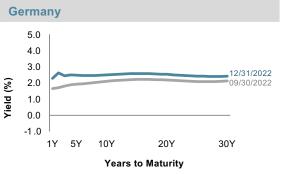
Realized term premiums were mixed within global developed markets. Intermediate-term bonds were generally the best performers and long-term bonds were generally the worst performers.

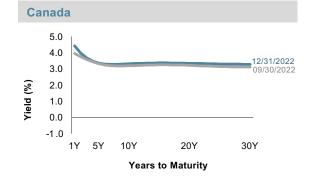
In Japan, except for ultra-short term interest rates, interest rates were generally positive. In Canada, the short-term maturity segment of the yield curve remained inverted.

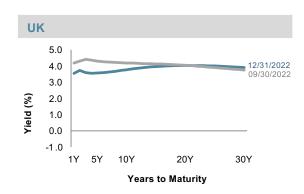
Changes in Yields (bps) since 9/30/2022

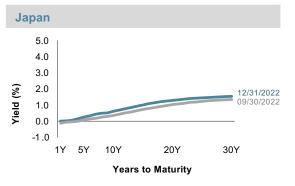
| | 1Y | 5Y | 10Y | 20Y | 30Y |
|-----------|-------|-------|-------|------|------|
| US | 41.0 | -10.2 | 4.8 | 3.6 | 19.4 |
| UK | -63.7 | -74.6 | -41.2 | -0.5 | 16.1 |
| Germany | 63.1 | 55.9 | 39.1 | 35.3 | 30.3 |
| Japan | 13.1 | 17.9 | 24.4 | 27.1 | 19.2 |
| Canada | 46.9 | 4.0 | 12.0 | 13.0 | 17.1 |
| Australia | 4.2 | 2.3 | 14.4 | 23.7 | 24.1 |

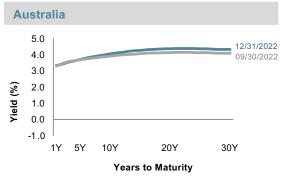














Time the Market at Your Peril

Fourth quarter 2022

David Booth, Executive Chairman and Founder, Dimensional Fund Advisors

Technology enables immediate access to everything wherever and whenever we want it. In many cases, such as staying in touch with friends and family, or learning about world events, that's a good thing. However, when it comes to investing and money management, my fear is that faster and easier ways of investing will allow people to lose more money faster and easier.

As access to investing expands, it becomes even more important to adopt an investment plan that doesn't try to actively pick stocks or time the market. The purpose of having an investment plan is so you can relax. So you don't look at the market every day, stressing out and asking, "How'm I doing? How'm I doing?" Investors actively trading are not just potentially missing out on the expected return of the market—they're stressed out, worrying about how the news alert they just received will impact their long-term financial health, and whether they can or should do anything about it.

I don't blame people for this. The financial services industry has not done a good enough job educating investors that the best approach for their long-term financial well-being is to make a plan, implement it, and stick with it.

But it has done a great job selling index funds. Over the past decade, the percentage of the stock market that is passively held has grown considerably, with equity index funds representing 52% of the US equity fund market at the end of 2021. And yet some investors appear to be

using index funds to pursue an active investment approach. For example, the largest S&P 500 ETF had the highest average daily trade volume of US-listed securities in 2021, at \$31 billion.² So instead of picking individual stocks, people seem to be acting like stock pickers when buying and selling index funds and ETFs.

Despite the overwhelming evidence and compelling story to the contrary. When economist Michael Jensen published his landmark 1968 paper, which showed that active stock pickers added no consistent value, other academics soon confirmed his insights. More than five decades and 50 years of data later, the theory still holds up. There are some stock pickers who experience success, but we don't know how to identify them before the fact. We can't separate skill from luck. Picking stocks is more like gambling than investing.

This academic research inspired the invention of the index fund, which allowed investors not only to buy the broad stock market, but also to track the performance of the manager and compare costs. I worked on one of the first index funds. When I co-founded Dimensional, we built strategies that were informed by indices but weren't limited by the same mechanical constraints. So I accepted this research early on and built a company based on it. I still believe it 50 years later. My colleagues and I weren't sure at the beginning that it would appeal to a lot of people, but it did.

^{1.} Data sourced from Morningstar; funds of funds are excluded.

^{2.} US dollars.

Time the Market at Your Peril

(continued from page 15)



I'm proud of the fact that we have always viewed marketing as a way to educate financial professionals and investors. In fact, we started by working with institutions and only expanded to individual investors by working with financial advisors who could help teach their clients how to think about the market and invest for the long term. We wanted to prevent people from making the mistake I still see too many people making.

But I fear it will only get worse. ETFs make it easier to trade. So do free platforms that allow people to trade on their phones. There seem to be as many ETFs as there are stocks that make up those ETFs. I really like ETFs. They are another chapter in this 50-year story of creating safer and better financial products for investors. Our firm has been using them to give financial professionals and investors more choice in how they access Dimensional Investing. But they are tools, and they have to be used effectively.

Which is why you may need an advisor more than ever—to help keep you from jumping from one thing to another. Our approach is to get you out of the game of worrying and guessing by having a plan that can provide peace of mind. It's a sensible approach you can live with. Trust the financial advisor who trusts the market.

The financial industry has made great strides improving the investment options available, but we have more work to do helping investors with those options. There are great solutions right in front of people. As an industry, we need to do a better job of educating current and potential clients. How the bulk of our society lives out their later years depends on it.

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. Diversification does not eliminate the risk of market loss.

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