



A Joint effort in **getting you back** to Health

Q1

Quarterly Market Letter and Review
First Quarter 2022



Quarterly Market Review

Fourth Quarter 2021

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 also illustrates the impact of globally diversified portfolios and features a quarterly topic.

Overview:

OSS 401k Plan Participant Letter

Market Summary

World Stock Market Performance

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International Developed Stocks

Emerging Markets Stocks

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Global Fixed Income

Impact of Diversification

Quarterly Topic: All-Time-High Anxiety

Appendix



OSS Q4 Letter to 401k Plan Participants

Investor Expectations and How to React to Market Declines

Larry Swedroe and Charles Schwab recently penned articles which were both timely and welcomed.

Each article offers a valuable reminder of **2 important lessons** every Intelligent Investor must remember at all costs.

- 1) The Global Capital Markets are forward-looking. This means the markets are priced for the aggregate expectations from millions of intelligent and well-endowed investors voting with their most precious commodity their money. All known information is likely already reflected in current prices.
- 2) *Investing is a social science. It is NOT a physical science.* The world of investing does NOT have the fixed framework of action/reaction exhibited in chemistry and physics because investing involves humans, and humans allow emotions to affect their reactions. Thus, future outcomes based on historical events **are not set in stone**, yet they do offer the **most likely future predictor of events to come**.

Both articles (Swedroe and Schwab) are available below, as is the link to their original posting. **Both articles are worth reading** and will remind each investor that corrections in the stock, bond, real estate, and commodities markets are "normal." They should be expected. And believe it or not, they are helpful. Corrections sort the weak from the strong, eventually allowing the markets to move higher.

The summary take-away: for 99% of investors, a) education about the frequency of market corrections and their corresponding rebound is incredibly helpful; b) *inactivity*, most often outperforms *activity*.

(https://www.advisorperspectives.com/articles/2022/02/14/market-declines-are-normal) https://intelligent.schwab.com/article/stock-market-corrections-not-uncommon



Market Declines are Normal – Larry Swedroe

The S&P 500 Index closed 2021 at 4,766. On January 24, 2022, it hit a low of 4,223, a drop of 11.4%, qualifying as a correction (the conventional definition of a correction is a drop of at least 10%). Drops of this magnitude can cause investors' stomachs to roil, often leading to panicked selling. Investors might be able to avoid that mistake if they understood that drops of that magnitude occur fairly frequently – they are "normal."

To demonstrate this point, in its monthly field guide, <u>Avantis</u> showed that over the period 1926-2021, the S&P 500 experienced 29 declines of at least 10% – about once every four years. The median drop among this sample was -20.1%, and the median length of time it took for the market to return to its previous high was 194 trading days (the fastest time to recovery was just 50 days). Drops of at least 5% occurred 90 times (almost once per year on average), with an average decline of 8.9% and the average time to recovery of 62 days. Drops of at least 20% (the conventional definition of a bear market) occurred 15 times (about once every six years), with an average decline of 28.2% and the average time to recovery of 369 days (just over a year).

Significant declines are not rare events. They happen fairly frequently, and in many cases, markets recover reasonably quickly. In other words, normal times include sharp market declines and periods of higher anxiety that should be borne with equanimity, as the evidence demonstrates that efforts to time the market are highly unlikely to prove productive. Knowing your financial history will help you keep your equanimity.

Since 1950 there were nine months when the S&P 500 Index lost at least 10%. The worst loss, -21.5%, was in October 1987, and the average loss was -13.7%. Over the next three, six and 12 months, the S&P 500 Index provided total returns of 9.5%, 16.4% and 26.6%, respectively. Investors who abandoned their plans due to panicked selling not only missed out on those great returns, but they were then faced with the extremely difficult decision of determining when it was safe to get back in. That's one of the problems with market timing – you have to be right twice, not once.



You can also keep your equanimity during sharp declines if you learn to think of bear markets as necessary evils. A "necessary evil" can be defined as an unpleasant necessity, something that is undesirable but needed to achieve a result. An example of a necessary evil is taxes. Investors should also view bear markets as a necessary evil. Let's explore why.

Perhaps the most basic principle of modern financial theory is that risk and *expected* return are related. We know that stocks are riskier than one-month Treasury bills (the benchmark riskless instrument). Since stocks are riskier, the only logical explanation for investing in them is that they must provide a higher *expected* return. However, if stocks always provided higher returns than one-month Treasury bills (i.e., the expected always occurred), investing in stocks would not entail any risk – and there would be no risk premium. In fact, in 25 of the 96 years from 1926 through 2021, or 26% of the time, the S&P 500 Index produced negative returns.

The very fact that investors have experienced large losses (such as the 89% decline from September 3, 1929, through July 8, 1932) leads them to price stocks with a large risk premium. From 1926 through 2021, the S&P has provided an annualized risk premium of 7.1% over one-month Treasury bills (10.4% versus 3.3%). If the losses investors experienced had been smaller, the risk premium would also have been smaller. And the smaller the losses experienced, the smaller the premium would have been. In other words, the less risk investors perceive, the higher the price they are willing to pay for stocks. And the higher the price-to-earnings ratio of the market, the lower the future returns.

To demonstrate the imperative of keeping your equanimity during sharp declines, consider the following example. To earn the 16.3% return provided by the CRSP U.S. Total Market Index over the last 10 calendar years (2012-2021), you would have had to stay disciplined and endure 14 drawdowns of at least 5%, four of which were greater than 10%.



Investor takeaways

Market declines are a necessary evil and the very reason the stock market has provided the large risk premium and the high returns investors can earn. But there is another important point investors need to understand about market declines. Investors in the accumulation phase of their careers should view such periods not just as a necessary evil but also as a good thing. The reason is that large declines provide those investors (at least those who have the discipline to adhere to their plan) with the opportunity to buy stocks at lower prices, increasing expected returns. It is only those in the withdrawal phase (such as retirees) who should fear sharp declines because withdrawals make it more difficult to maintain the portfolio's value over the long term. Thus, those investors have less ability to take risk, which should be built into their plan.

Smart investors know that while they can't control markets, they can follow Warren Buffett's sage advice to avoid timing the market, and the key to being able to do so is to control one's temperament: "The most important quality for an investor is temperament, not intellect." If you don't have a plan, immediately develop one. Make sure it anticipates sharp declines and outlines what actions you will take when they occur (doing so when you are not under the stress that such periods create). Put the plan in writing in the form of an investment policy statement and an asset allocation table and sign it. That will increase the odds of adhering to it when you are tested by the emotions caused by both bull and bear markets. And then stay the course, altering your plan only if your assumptions about your ability, willingness or need to take risk have changed.

Market Corrections Are More Common Than You Might Think By David Koenig

Financial markets kicked off 2022 with renewed volatility amid persistent inflation concerns, expectations for Fed rate hikes, and escalating geopolitical tensions over Russia and Ukraine. For more insight into how geopolitical risk can affect markets, see this <u>market commentary update</u>. In late February, the S&P 500® Index closed in "correction" territory, defined as a more than 10% pullback from its last all-time high. The recent turbulence was the most severe since the 34% decline that occurred in Q1 2020.



Market corrections can cause a lot of anxiety. However, keep in mind that the S&P 500 only measures one asset class, U.S. large company stocks. Schwab Intelligent Portfolios® diversifies across stocks, bonds, commodities and cash to help moderate overall portfolio volatility and drawdowns when the equity markets become turbulent.

Additionally, financial markets have historically seen a significant pullback at some point during most years while still delivering positive returns over the full year. For example, in 2018, the S&P 500 saw a market correction of more than 10% in the first quarter of the year and again in the fourth quarter, followed by a rebound of more than 13% in the first quarter of 2019. And the tumble in Q1 2020 was followed by a positive return of 18% for the full year and a gain of more than 100% in less than two years.

These market corrections are more common than you might think. Over the seven years since Schwab Intelligent Portfolios was launched in March 2015, there have been five corrections and one bear market. A bear market is a pullback of at least a 20% decline from a recent high.

These occasional pullbacks have historically been followed by rebounds, according to the Schwab Center for Financial Research. Since 1974, the S&P 500 has risen an average of more than 8% one month after a market correction bottom and more than 24% one year later.

Investing in a diversified portfolio and maintaining the discipline to stick with your longerterm plan through these periods of volatility are among the keys to long-term investment success.



To illustrate the volatile nature of financial markets, we took a look at intra-year stock market declines over the 20-year period from 2002–2021. As you can see in the chart below, a decline of at least 10% occurred in 10 out of 20 years, or 50% of the time, with an average pullback of 15%. And in two additional years, the decline was just short of 10%. Despite these pullbacks, however, stocks rose in most years, with positive returns in all but 3 years and an average gain of approximately 7%.

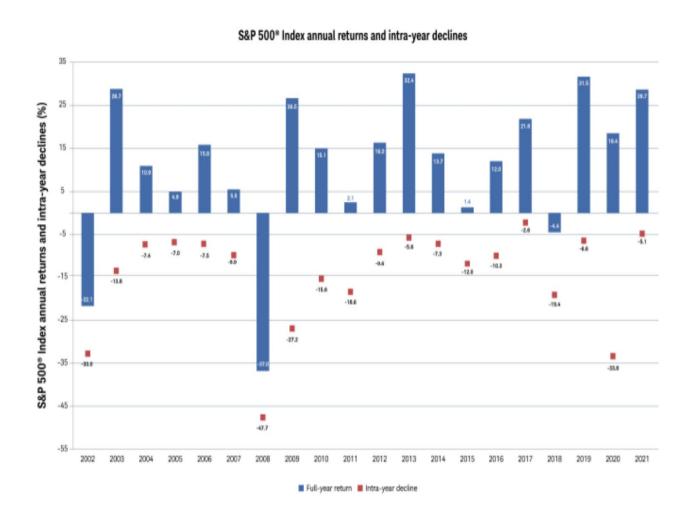


Figure 1: Stock market corrections are fairly common. Pullbacks of 10% or more occurred in 10 of the past 20 years. Source: Morningstar Direct, as of 12/31/2021. **Past performance is no guarantee of future results.**



Having a longer-term plan and sticking to it is key to investment success.

The last bull market brought gains of more than 400% over 11 years. The current bull market has seen an advance of more than 100% in less than two years, following the shortest bear market (1 month) in recorded history. A bear market of at least a 20% decline will occur again at some point, but it's important to keep it in perspective. The average bear market has lasted only about 15 months, according to the Schwab Center for Financial Research, and 80% of corrections since 1974 have not led to a bear market.

It remains to be seen whether the recent market volatility has reached its crescendo or whether the turbulence might continue. Either way, it's important to remember that market pullbacks are not uncommon — and occur in most years. These market corrections can be healthy in resetting stock valuations and investor expectations within a longer-term market advance. We know that markets can be volatile in the short term. But we also understand that having a long-term strategic asset allocation plan and sticking to that plan through periods of market volatility can help keep you on the right track toward reaching your financial goals.

David Koenig CFA®, FRM®, Vice President and Chief Investment Strategist for Schwab Intelligent Portfolios



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
4Q 2021		STO	CKS		ВО	NDS
	9.28%	3.14%	-1.31%	12.35%	0.01%	0.07%
			+			

Since Jan. 2001						
Average Quarterly Return	2.5%	1.7%	2.9%	2.7%	1.1%	1.1%
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%	-3.4%	-2.7%
Quarter	2008 Q4	2020 Q1	2008 Q4	2008 Q4	2021 Q1	2015 Q2

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 © 2022 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 2022, all rights reserved. Bloomberg data provided by Bloomberg.



Long-Term Market Summary

Index Returns as of December 31, 2021

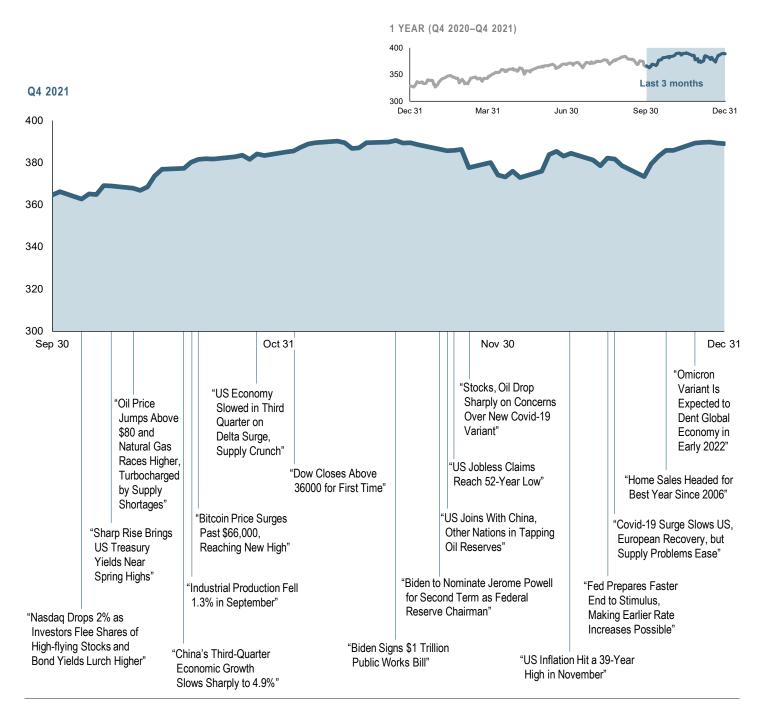
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate		US Bond Market	Global Bond Market ex US
1 Year		STO	CKS		BONDS		
	25.66%	12.62%	-2.54%	31.38%		-1.54%	-1.40%
5 Years							
	17.97%	9.63%	9.87%	8.25%		3.57%	3.11%
10 Years							
	16.30%	7.84%	5.49%	9.01%		2.90%	3.80%

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World Stock Market Performance

MSCI All Country World Index with selected headlines from Q4 2021

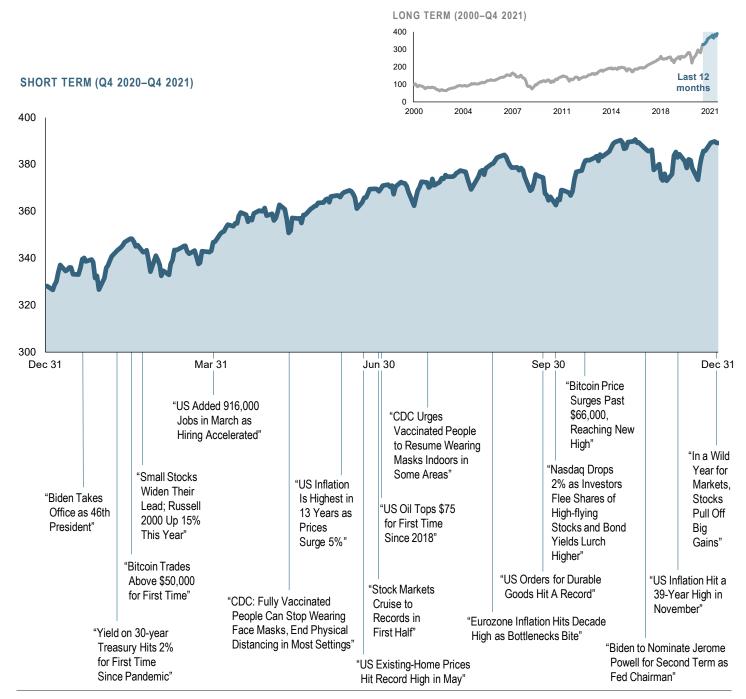


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



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 2021 Index Returns

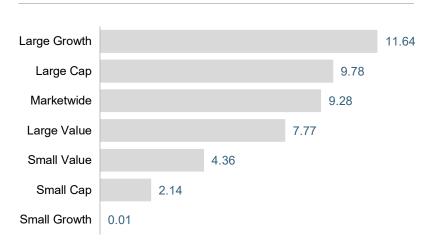
The US equity market posted positive returns for the quarter and outperformed both non-US developed markets and emerging markets.

Value underperformed growth in large cap stocks but outperformed growth in small cap stocks.

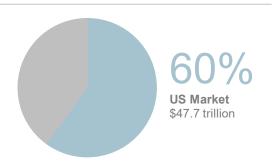
Small caps underperformed large caps.

REIT indices outperformed equity market indices.

Ranked Returns (%)



World Market Capitalization—US



Period Returns (%)

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Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Large Growth	11.64	27.60	34.08	25.32	19.79
Large Cap	9.78	26.45	26.21	18.43	16.54
Marketw ide	9.28	25.66	25.79	17.97	16.30
Large Value	7.77	25.16	17.64	11.16	12.97
Small Value	4.36	28.27	17.99	9.07	12.03
Small Cap	2.14	14.82	20.02	12.02	13.23
Small Growth	0.01	2.83	21.17	14.53	14.14

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International Developed Stocks

Fourth Quarter 2021 Index Returns

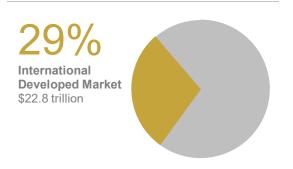
Developed markets outside the US posted positive returns for the quarter. They underperformed US equities but outperformed emerging markets.

Value underperformed growth.

Small caps underperformed large caps.



World Market Capitalization— International Developed



Period Returns (%)

orroa rectarri	0 (70)				
Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Grow th	4.27	11.57	19.11	13.37	9.66
Large Cap	3.14	12.62	14.07	9.63	7.84
Value	1.91	13.26	8.66	5.69	5.83
Small Cap	0.39	11.14	16.27	11.03	9.99

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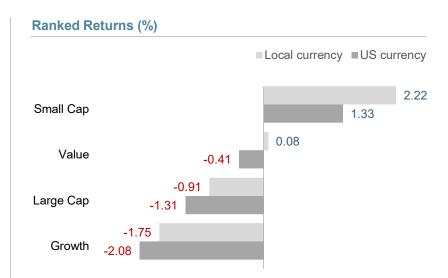
Emerging Markets Stocks

Fourth Quarter 2021 Index Returns

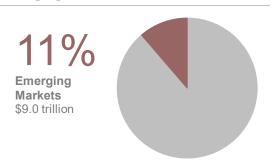
Emerging markets posted negative returns for the quarter, underperforming the US and non-US developed equity markets.

Value outperformed growth.

Small caps outperformed large caps.



World Market Capitalization— Emerging Markets



Period Returns (%)

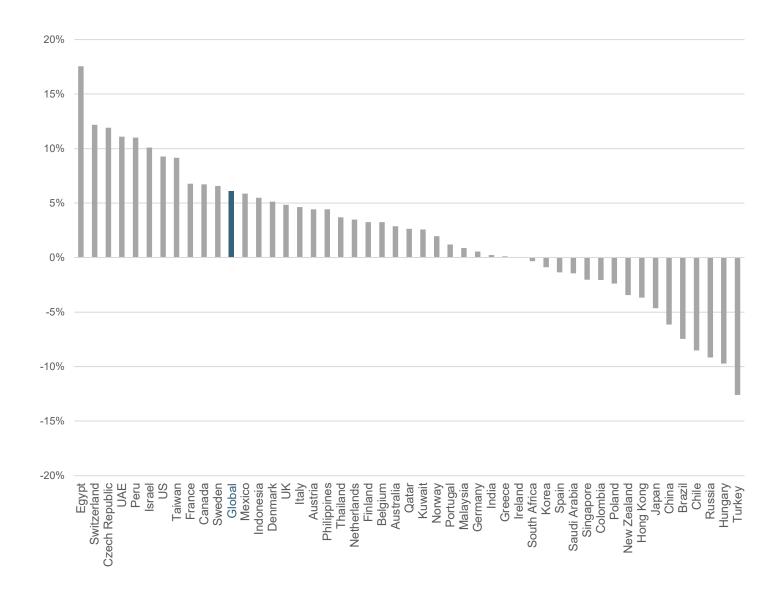
orioa rtotarno (70)				
Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Small Cap	1.33	18.75	16.46	11.47	7.42
Value	-0.41	4.00	7.08	7.02	3.31
Large Cap	-1.31	-2.54	10.94	9.87	5.49
Grow th	-2.08	-8.41	14.60	12.55	7.52

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Country Returns

Fourth Quarter 2021 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 2022, all rights reserved.



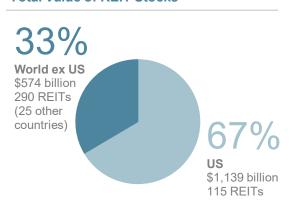
Real Estate Investment Trusts (REITs)

Fourth Quarter 2021 Index Returns

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



Total Value of REIT Stocks



Period Returns (%)

Global ex US REITS

QTR

17.22

45.91

4.54 12.70

16.84

7.79

Asset Class

US REITS

1 Year 3 Years* 5 Years* 10 Years* 9.65 10.7

6.04

* Annualized

7.17

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 © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



Commodities

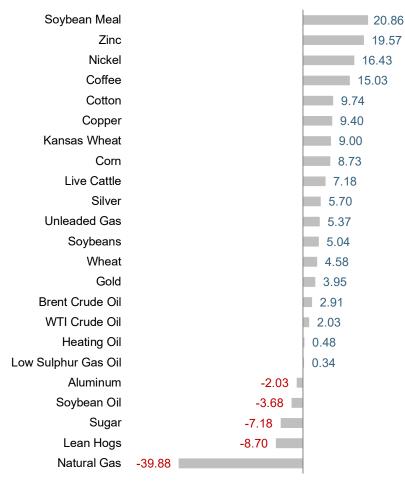
Fourth Quarter 2021 Index Returns

The Bloomberg Commodity Index Total Return returned -1.56% for the fourth quarter of 2021.

Soybean Meal and Zinc were the best performers, advancing 20.86% and 19.57%, respectively.

Natural Gas and Lean Hogs were the worst performers, declining 39.88% and 8.70%, respectively.





Period Returns (%)

Asset Class	QTR	1 Year 3 Years*	5 Years* 10	Years*
Commodities	-1.56	27.11 9.86	3.66	-2.85



Fixed Income

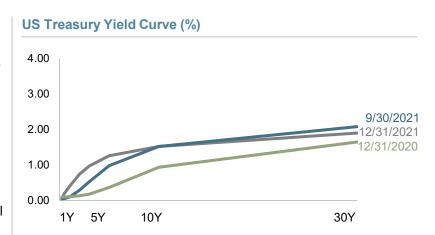
Fourth Quarter 2021 Index Returns

Interest rate movements in the US Treasury fixed income market were mixed during the fourth quarter. The yield on the 5-year US Treasury note increased 28 basis points (bps) to 1.26%. The yield on the 10-year US Treasury note remained unchanged at 1.52%. The 30-year US Treasury bond yield decreased 18 bps to 1.90%.

On the short end of the yield curve, the 1-month US Treasury bill yield decreased 1 basis point, ending at 0.06%, while the 1-year US Treasury bill yield increased 30 bps to 0.39%. The 2-year US Treasury note yield increased 45 bps to 0.73%.

In terms of total returns, short-term corporate bonds lost 0.68%. Intermediate-term corporate bonds declined 0.56%.

The total return for short-term municipal bonds was -0.05%, while intermediate-term municipal bonds gained 0.27%. Revenue bonds performed in line with general obligation bonds.





Period Returns (%) *Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Bloomberg US Government Bond Index Long	3.05	-4.57	8.78	6.53	4.53
Bloomberg US TIPS Index	2.36	5.96	8.44	5.34	3.09
Bloomberg Municipal Bond Index	0.72	1.52	4.73	4.17	3.72
Bloomberg US High Yield Corporate Bond Index	0.71	5.28	8.83	6.30	6.83
Bloomberg US Aggregate Bond Index	0.01	-1.54	4.79	3.57	2.90
ICE BofA US 3-Month Treasury Bill Index	0.01	0.05	0.99	1.14	0.63
ICE BofA 1-Year US Treasury Note Index	-0.18	-0.07	1.55	1.42	0.86
FTSE World Government Bond Index 1-5 Years (hedged to USD)	-0.52	-0.80	2.07	1.89	1.66
FTSE World Government Bond Index 1-5 Years	-1.41	-4.43	1.38	1.79	-0.33

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 © 2022 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2022 ICE Data Indices, LLC. S&P data © 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



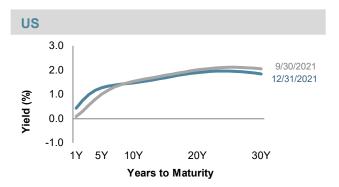
Global Fixed Income

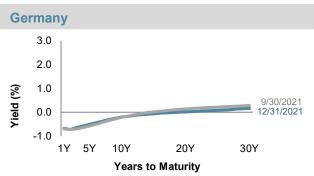
Fourth Quarter 2021 Yield Curves

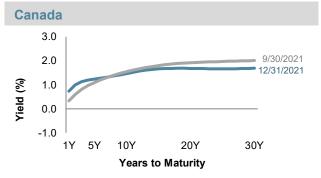
Government bond yield movements in the global developed markets were mixed for the quarter. Interest rates in many global developed markets increased along the shorter end but decreased along the longer end of their respective curves.

Term premiums were mixed in developed markets. Long-term bonds were generally the best performers, and intermediate-term bonds were generally the worst performers.

Short- and intermediate-term nominal interest rates were negative in Japan and Germany.

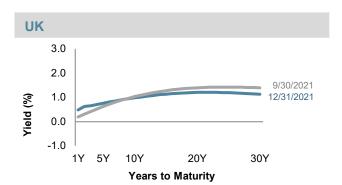


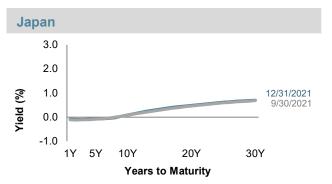




Changes in Yields (bps) since 9/30/2021

	1Y	5Y	10Y	20Y	30Y
US	33.3	26.5	-6.0	-10.8	-20.8
UK	28.9	13.3	-5.1	-19.2	-26.4
Germany	2.2	7.3	8.0	-12.1	-12.0
Japan	2.1	0.1	1.2	3.3	1.8
Canada	39.3	14.0	-7.4	-23.6	-32.0
Australia	28.3	53.6	20.6	5.7	1.0









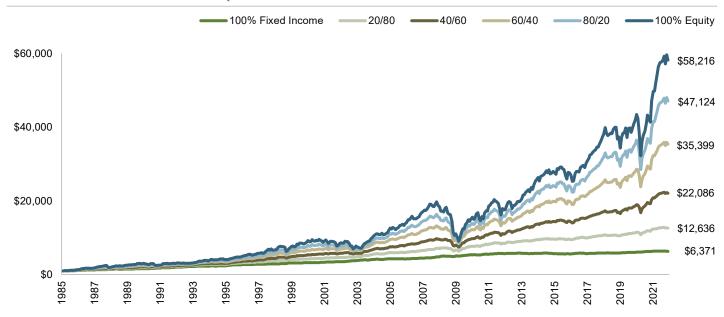
Impact of Diversification

As of November 30, 2021

These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

Period Returns (%) * Annualized									
Dimensional Core Plus Wealth Index Model	3 Months	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV ¹			
100% Equity	-1.78	23.54	15.92	14.01	12.71	14.06			
80/20	-1.65	18.55	14.51	12.50	11.57	11.73			
60/40	-1.54	13.35	12.61	10.53	9.76	9.04			
40/60	-1.43	8.37	9.15	7.57	7.17	6.12			
20/80	-1.67	3.23	5.98	4.87	4.05	3.71			
100% Fixed Income	-1.02	0.33	2.65	2.08	1.04	1.72			

Growth of Wealth: The Relationship Between Risk and Return



Diversification does not eliminate the risk of market loss. For illustrative purposes only. Past performance is no guarantee of future results. The performance reflects the growth of a hypothetical \$10,000. Assumes all models have been rebalanced monthly. See appendix for allocation information. All performance results are based on performance of indexes with model/back-tested asset allocations; the performance was achieved with the benefit of hindsight; it does not represent actual investment strategies. The index models are unmanaged and the model's performance does not reflect advisory fees or other expenses associated with the management of an actual portfolio. In particular, Model performance may not reflect the impact that economic and market factors may have had on the advisor's decision making if the advisor were actually managing client money. The models are not recommendations for an actual allocation. Indices are not available for direct investment. Backtested performance results assume the reinvestment of dividends and capital gains. Sources: Dimensional Fund Advisors LP for Dimensional Indices. Copyright 2022 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

^{1.} STDEV (standard deviation) is a measure of the variation or dispersion of a set of data points. Standard deviations are often used to quantify the historical return volatility of a security or portfolio.



Quarterly Topic: All-Time-High Anxiety

Fourth Quarter 2021

Investors are often conflicted about record-high stock prices. They are pleased to see their existing equity holdings gain in value but apprehensive that higher prices somehow foreshadow a dramatic downturn in the future. And they may be reluctant to make new purchases since the traditional "buy low, sell high" mantra suggests committing funds to stocks at an all-time high is a surefire recipe for disappointment.

Financial journalists periodically stoke investors' recordhigh anxiety by suggesting the laws of physics apply to financial markets—that what goes up must come down. "Stocks Head Back to Earth," read a headline in the *Wall Street Journal* in 2012.1 "Weird Science: Wall Street Repeals Law of Gravity," *Barron's* put it in 2017.2 And a *Los Angeles Times* reporter had a similar take last year, noting that low interest rates have "helped stock and bond markets defy gravity."

Those who find such observations alarming will likely shy away from purchasing stocks at record highs. But shares are not heavy objects kept aloft through strenuous effort. They are perpetual claim tickets on companies' earnings and dividends. Thousands of business managers go to work every day seeking projects that appear to offer profitable returns on capital while providing goods and

services people desire. Although some new ideas and the firms behind them end in failure, history offers abundant evidence that investors around the world can be rewarded for the capital they provide.

Whether at a new high or a new low, today's share price reflects investors' collective judgment of what tomorrow's earnings and dividends are likely to be—and those of all the tomorrows to come. And every day, stocks must be priced to deliver a positive expected return for the buyer. Otherwise, no trade would take place. It's difficult to imagine a scenario where investors freely invest in stocks with the expectation of losing money.

Investors should treat record high prices with neither excitement nor alarm, but rather indifference. If stocks have a positive expected return, reaching record highs with some frequency is exactly the outcome we would expect. Using month-end data over the 94-year period ending in 2020, the S&P 500 Index produced a new high in ending wealth in more than 30% of those monthly observations. Moreover, purchasing shares at all-time records has, on average, generated similar returns over subsequent one-, three-, and five-year periods to those of a strategy that purchases stocks following a sharp decline, as **Exhibit 1** shows.

^{1.} Jonathan Cheng and Christian Berthelsen, "Stocks Head Back to Earth," Wall Street Journal, February 11, 2012.

^{2.} Kopin Tan, "Weird Science: Wall Street Repeals Law of Gravity," Barron's, August 7, 2017.

³ Russ Mitchell, "Tesla's Insane Stock Price Makes Sense in a Market Gone Mad," Los Angeles Times, July 22, 2020.



Quarterly Topic: All-Time-High Anxiety

(continued from page 16)

Humans are conditioned to think that after the rise must come the fall, tempting us to fiddle with our portfolios. But the data suggest such signals only exist in our imagination and that our efforts to improve results will just as likely penalize them. Investors should take comfort knowing that share prices are not fighting the forces of gravity when they move higher and have confidence that record highs only tell us the system is working just as we would expect—nothing more.

EXHIBIT 1

All Rise

Average annualized returns for S&P 500 Index after market highs and declines

	1 year later	3 years later 5 years late 9.9% 9.6%	5 years later
After new market high	13.9%	10.5%	9.9%
After 20% market decline	11.6%	9.9%	9.6%

Past performance is no guarantee of future results.

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Appendix



Dimensional Core Plus Wealth Index Models

Weights (%)

Equity Total	0%	20%	40%	60%	80%	100%
Dimensional US Adjusted Market 2 Index	0	9	18	27	36	45
Dimensional US Large Cap High Profitability Index	0	2	4	7	9	11
Dimensional US Adjusted Market Value Index	0	2	4	7	9	11
Dimensional International Adjusted Market Index	0	3	5	8	10	13
Dimensional International Large Cap High Profitability Index	0	1	2	3	3	4
Dimensional International Vector Index	0	1	2	3	3	4
Dimensional Emerging Markets Adjusted Market Index	0	1	2	3	4	5
Dimensional Emerging Markets Value Index	0	1	2	3	4	5
S&P Global REIT Index	0	0	1	1	2	2
Fixed Income Total	100%	80%	60%	40%	20%	0%
Dimensional Short-Duration Real Return Index	20	0	0	0	0	0
Dimensional US Adjusted Investment Grade Index	0	20	20	20	0	0
Dimensional Global Short-Term Government Index (Hedged to USD)	20	0	0	0	0	0
Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD)	20	20	20	0	0	0
Dimensional Global Government/Credit 1-3 Year Unhedged Index	40	30	0	0	0	0
Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD)	0	0	0	20	20	0
Dimensional Targeted Credit Index (Hedged to USD)	0	10	20	0	0	0



Dimensional Core Plus Wealth Index Models

Period Returns as of November 30, 2021 (%)

	1 Year	3 Years	5 Years	10 Years
Equity				
Dimensional US Adjusted Market 2 Index	27.23	18.31	16.01	15.48
Dimensional US Large Cap High Profitability Index	25.08	24.21	21.12	17.41
Dimensional US Adjusted Market Value Index	31.14	14.13	11.89	13.80
Dimensional International Adjusted Market Index	15.43	11.18	10.08	8.60
Dimensional International Large Cap High Profitability Index	14.91	13.70	11.68	8.50
Dimensional International Vector Index	16.62	10.55	9.62	8.82
Dimensional Emerging Markets Adjusted Market Index	10.47	10.49	10.11	6.37
Dimensional Emerging Markets Value Index	16.71	6.80	8.32	4.87
S&P Global REIT Index (gross dividends)	28.27	9.93	8.70	9.57
Fixed Income				
Dimensional Short-Duration Real Return Index	7.00	5.60	3.76	2.46
Dimensional US Adjusted Investment Grade Index	-1.56	5.66	3.75	3.39
Dimensional Global Short-Term Government Index (Hedged to USD)	0.07	1.76	1.62	1.26
Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD)	-1.55	1.72	1.39	1.77
Dimensional Global Government/Credit 1-3 Year Unhedged Index	-1.82	2.07	1.79	-0.16
Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD)	-0.05	7.73	5.76	6.43
Dimensional Targeted Credit Index (Hedged to USD)	0.21	4.83	3.69	4.48



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DIMENSIONAL CORE PLUS 100/0 WEALTH INDEX MODEL

January 1985-present Dimensional Wealth Index Model data compiled by Dimensional. The Dimensional Core Plus 100/0 Wealth Index Model combines the following indices: Dimensional US Adjusted Market 2 Index, Dimensional US Adjusted Market Value Index, Dimensional US Large Cap High Profitability Index, Dimensional International Adjusted Market Index, Dimensional International Vector Index, Dimensional International Large Cap High Profitability Index, Dimensional Emerging Markets Adjusted Market Index, Dimensional Emerging Markets Value Index, and the S&P Global REIT Index (gross dividends). The weight of the REIT index is based on the market capitalization weight of equity REITs within the global universe of eligible stocks and equity REITs, rounded to the nearest 1%. Within the remaining non-REIT allocation, US equities are overweight relative to their market capitalization weight. The weights of the US, developed ex US, and emerging markets equities are then rescaled to sum to the total non-REIT weight of the Wealth Index Model and are all rounded to the nearest 1%. Regional weights are rebalanced quarterly. Within the US equity allocation, each month the weights of the Dimensional US Adjusted Market 2 Index, Dimensional US Adjusted Market Value Index, and Dimensional US Large Cap High Profitability Index are 66.67%, 16.67%, and 16.67%, respectively. Within the developed ex US equity allocation, each month the weights of the Dimensional International Adjusted Market Index, Dimensional International Vector Index. and Dimensional International Large Cap High Profitability Index are 60%, 20%, and 20%, respectively. Within the emerging market equity allocation, each month the weights of the Dimensional Emerging Markets Adjusted Market Index and Dimensional Emerging Markets Value Index are equal. The Wealth Index Model returns are calculated monthly as a weighted average of the returns of the underlying indices. The Dimensional Core Plus 100/0 Wealth Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

DIMENSIONAL CORE PLUS 80/20 WEALTH INDEX MODEL

January 1985–present Dimensional Wealth Index Model data compiled by Dimensional. 80% of the weight is allocated to the Dimensional Core Plus 100/0 Wealth Index Model and 20% of the weight is allocated to the Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD). The Wealth Index Model returns are calculated monthly as a weighted average of the returns of the underlying indices. The Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD) is represented by Bloomberg US Aggregate Bond Index from January 1985 to December 1989 and the Bloomberg Global Aggregate Bond Index (Hedged to USD) from January 1990 to January 1999. The Dimensional Core Plus 80/20 Wealth Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

DIMENSIONAL CORE PLUS 60/40 WEALTH INDEX MODEL

January 1985–present Dimensional Wealth Index Model data compiled by Dimensional. 60% of the weight is allocated to the Dimensional Core Plus 100/0 Wealth Index Model and 40% of the weight is allocated to the following fixed income indices: Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD) (20%) and Dimensional US Adjusted Investment Grade Index (20%). The Wealth Index Model returns are calculated monthly as a weighted average of the returns of the underlying indices. The Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD) is represented by Bloomberg US Aggregate Bond Index from January 1985 to December 1989 and the Bloomberg Global Aggregate Bond Index (Hedged to USD) from January 1990 to January 1999. The Dimensional Core Plus 60/40 Wealth Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

DIMENSIONAL CORE PLUS 40/60 WEALTH INDEX MODEL

January 1985–present Dimensional Wealth Index Model data compiled by Dimensional. 40% of the weight is allocated to the Dimensional Core Plus 100/0 Wealth Index Model and 60% of the weight is allocated to the following fixed income indices: Dimensional Targeted Credit Index (Hedged to USD) (20%), Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD) (20%), and Dimensional US Adjusted Investment Grade Index (20%). The Wealth Index Model returns are calculated monthly as a weighted average of the returns of the underlying indices. The Dimensional Targeted Credit Index is represented by the Bloomberg US Credit 1–3 Year Bond Index from January 1985 to January 1999. The Dimensional US Adjusted Investment Grade Index is represented by Bloomberg US Aggregate Bond Index from January 1985 to January 1989. The Dimensional Core Plus 40/60 Wealth Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

DIMENSIONAL CORE PLUS 20/80 WEALTH INDEX MODEL

Dimensional Wealth Index Model data compiled by Dimensional. 20% of the weight is allocated to the Dimensional Core Plus 100/0 Wealth Index Model, and 80% of the weight is allocated to the following fixed income indices: Dimensional Global Government/Credit 1-3 Year Unhedged Index (30%), Dimensional Targeted Credit Index (Hedged to USD) (10%), Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD) (20%), and Dimensional US Adjusted Investment Grade Index (20%). The Wealth Index Model returns are calculated monthly as a weighted average of the returns of the underlying indices. The Dimensional Global Government/Credit 1-3 Year Unhedged Index is represented by the Bloomberg US Government/Credit 1-3 Year Bond Index from January 1985 to January 1999. The Dimensional Targeted Credit Index is represented by the Bloomberg US Credit 1-3 Year Bond Index from January 1985 to January 1999. The Dimensional US Adjusted Investment Grade Index is represented by Bloomberg US Aggregate Bond Index from January 1985 to January 1989. The Dimensional Core Plus 20/80 Wealth Index Model has been retrospectively calculated by Dimensional and did not exist prior to March 2020.

DIMENSIONAL CORE PLUS 0/100 WEALTH INDEX MODEL

Dimensional Wealth Index Model data compiled by Dimensional. The Dimensional Core Plus 0/100 Wealth Index Model combines the following indices: Dimensional Global Short-Term Government Index (Hedged to USD) (20%), Dimensional Global Government/Credit 1-3 Year Unhedged Index (40%), Dimensional Short-Duration Real Return Index (20%), and Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD) (20%). The Wealth Index Model returns are calculated monthly as a weighted average of the returns of the underlying indices. The Dimensional Global Short-Term Government Index (Hedged to USD) is represented by the Bloomberg US Government 1-3 Year Bond Index at 75% weight and the ICE BofA US 3-Month Treasury Bill Index at 25% weight from January 1985 to October 1992 and the Bloomberg US Government 1-2 Year Bond Index from November 1992 to January 1999. The Dimensional Global Government/Credit 1-3 Year Unhedged Index is represented by the Bloomberg US Government/Credit 1-3 Year Bond Index from January 1985 to January 1999. The Dimensional Short-Duration Real Return Index is not available back to 1985. The Dimensional Short-Duration Real Return Index is represented by Bloomberg US TIPS Index 1-5 Years from August 1997 to October 2006. Prior to August 1997, its weight is redistributed pro rata to the other fixed income indices. The Dimensional Core Plus 0/100 Wealth Index Model has been retrospectively calculated by Dimensional and did not exist prior to

Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. The returns of indices presented herein reflect hypothetical performance and do not represent returns that any investor actually attained. Changes in the assumptions upon which such performance is based may have a material impact on the hypothetical returns presented. Hypothetical backtested returns have many inherent limitations. Unlike actual performance, it does not represent actual trading. Since trades have not actually been executed, results may have under- or overcompensated for the impact, if any, of certain market factors, such as lack of liquidity, and may not reflect the impact that certain economic or market factors may have had on the decision-making process. Hypothetical backtested performance also is developed with the benefit of hindsight. Other periods selected may have different results, including losses. There can be no assurance that Dimensional Fund Advisors will achieve profits or avoid incurring substantial losses.



DIMENSIONAL US ADJUSTED MARKET 2 INDEX

January 1975-present Compiled by Dimensional from CRSP and Compustat data. Targets all securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market with an emphasis on companies with smaller capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within the small cap universe. The index also excludes those companies with the highest asset growth within the small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. The index overweights securities of companies with smaller capitalization and lower relative price to a greater degree than the Dimensional US Adjusted Market 1 Index. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to March 2007. The calculation methodology was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology was amended in December 2019 to include asset growth as a factor in selecting securities for inclusion in the index. Prior to January 1975 Targets all securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market with an emphasis on companies with smaller capitalization and lower relative price.

DIMENSIONAL US LARGE CAP HIGH PROFITABILITY INDEX

Compiled by Dimensional from CRSP and Compustat data. Targets securities of US companies with market capitalizations above the 1,000th largest company whose profitability is in the top 35% of all large cap companies after the exclusion of utilities, companies lacking financial data, and companies with negative relative price. The index emphasizes companies with lower relative price, higher profitability, and lower market capitalization. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to December 2016.

DIMENSIONAL US ADJUSTED MARKET VALUE INDEX

January 1975-present Compiled by Dimensional from CRSP and Compustat data. Targets all securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market with an emphasis on companies with smaller capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within the small cap universe. The index also excludes those companies with the highest asset growth within the small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. The index overweights securities of companies with smaller capitalization and lower relative price to a greater degree than the Dimensional US Adjusted Market 2 Index. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to March 2007. The calculation methodology was amended in January 2014 to include profitability as a factor in selecting

securities for inclusion in the index. The calculation methodology was amended in December 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

DIMENSIONAL INTERNATIONAL ADJUSTED MARKET INDEX

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets with an emphasis on companies with smaller market capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within their country's small cap universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

DIMENSIONAL INTERNATIONAL LARGE CAP HIGH PROFITABILITY INDEX

Compiled by Dimensional from Bloomberg securities data. Targets large cap securities in the eligible markets whose profitability is in the top 35% of their country's large cap securities, after the exclusion of utilities and companies with either negative or missing relative price data. The index emphasizes companies with lower relative price, higher profitability, and lower market capitalization. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to December 2016.

DIMENSIONAL INTERNATIONAL VECTOR INDEX

Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets with an emphasis on companies with smaller market capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within their country's small cap universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. The index overweights securities of companies with smaller capitalization and lower relative price to a greater degree than the Dimensional International Adjusted Market Index. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. The returns of indices presented herein reflect hypothetical performance and do not represent returns that any investor actually attained. Changes in the assumptions upon which such performance is based may have a material impact on the hypothetical returns presented. Hypothetical backtested returns have many inherent limitations. Unlike actual performance, it does not represent actual trading. Since trades have not actually been executed, results may have under- or overcompensated for the impact, if any, of certain market factors, such as lack of liquidity, and may not reflect the impact that certain economic or market factors may have had on the decision-making process. Hypothetical backtested performance also is developed with the benefit of hindsight. Other periods selected may have different results, including losses. There can be no assurance that Dimensional Fund Advisors will achieve profits or avoid incurring substantial losses.



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DIMENSIONAL EMERGING MARKETS ADJUSTED MARKET INDEX

Compiled by Dimensional from Bloomberg securities data. Targets all securities in the eligible markets with an emphasis on companies with smaller market capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within their country's small cap universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

DIMENSIONAL EMERGING MARKETS VALUE INDEX

January 1990-present Compiled by Dimensional from Bloomberg securities data. Targets securities of companies whose relative price is in the bottom 33% of their country's companies, after the exclusion of utilities and companies with either negative or missing relative price data. The index emphasizes companies with smaller capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability within their country's small cap universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

S&P GLOBAL REIT INDEX

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DIMENSIONAL SHORT-DURATION REAL RETURN INDEX

Compiled by Dimensional using data provided by Bloomberg. Includes securities in Bloomberg US 3-5 Year Government, Credit Aaa, Aa, A, Baa indices; Bloomberg US 1-3 Year Government, Credit Aaa, Aa, A, Baa indices; Bloomberg Inflation Swap USD 2YR Zero Coupon Index (Excess Return); and Bloomberg Inflation Swap USD 5YR Zero Coupon Index (Excess Return). For the fixed income component of the index, we do the following: (1) Securities can be over- or underweighted based on government/credit spreads. When the difference in yields between credit and government bonds is narrow, government bonds may be overweighted. When the difference in yields between credit and government bonds is wide, government bonds may be underweighted. (2) Securities can be over- or underweighted with respect to their market cap weight based on credit spreads. When the difference in yields between AAA+AA and A+BBB is narrow, AAA+AA bonds may be held

above market cap weight. When the difference in yields between AAA+AA and A+BBB is wide, AAA+AA bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is narrow, BBB bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is wide, BBB bonds may be held above market cap weight. (3) The duration of the index is based on the term spread (of real yields) between the real yields of the 3-5 year and 1-3 year credit bonds. Real yield is defined as nominal yield minus inflation swap rate. When the term spread is wide, the duration of the index can be longer than the duration of Bloomberg US Credit 1-5 Year Index. When the term spread is narrow, the duration of the index can be shorter than the duration of Bloomberg US Credit 1-5 Year Index. (4) The duration of the government component is based on the term spread (of real yields) between 3-5 year government bonds and 1-3 year government bonds. When the term spread is wide, the duration of the government component can be longer than the duration of Bloomberg US Government 1-5 Year Index. When the term spread is narrow, the duration of the index can be shorter than the duration of Bloomberg US Government 1-5 Year Index. We use the 2-year and 5year inflation swap indices to construct an index to match the duration of the fixed income component. The Dimensional index return is the sum of the fixed income component and the inflation swap index return component. Rebalanced monthly. The index has been retroactively calculated by Dimensional and did not exist prior to January 2020.

DIMENSIONAL US ADJUSTED INVESTMENT GRADE INDEX

Compiled by Dimensional using data provided by Bloomberg. Includes securities in Bloomberg US 3-10 Year Government, Credit Aaa, Aa, A, Baa indices; and Bloomberg US 1-3 Year Government, Credit Aaa, Aa, A, Baa indices. Securities can be over- or underweighted based on government/credit spreads. When the difference in yields between credit and government bonds is narrow, government bonds may be held above 50%. When the difference in yields between credit and government bonds is wide, government bonds may be held below 50%. Securities can be over or underweighted with respect to their market cap weight based on credit spreads. When the difference in yields between AAA+AA and A+BBB is narrow, AAA+AA bonds may be held above market cap weight. When the difference in yields between AAA+AA and A+BBB is wide, AAA+AA bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is narrow, BBB bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is wide, BBB bonds may be held above market cap weight. The duration of the index is based on the term spread between 5-10 year government/credit bonds and 1-3 year government/credit bonds. When the term spread is wide, the duration of the index can be longer than the duration of Bloomberg US Aggregate Index. When the term spread is narrow, the duration of the index can be shorter than the duration of Bloomberg US Aggregate Index. The duration of the government component is based on the term spread between 5-10 year government bonds and 1-3 year government bonds. When the term spread is wide, the duration of the government component can be longer than the duration of Bloomberg US Government Index. When the term spread is narrow, the duration of the index can be shorter than the duration of Bloomberg US Government Index. The index has been retroactively calculated by Dimensional and did not exist prior to January 2017.

Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. The returns of indices presented herein reflect hypothetical performance and do not represent returns that any investor actually attained. Changes in the assumptions upon which such performance is based may have a material impact on the hypothetical returns presented. Hypothetical backtested returns have many inherent limitations. Unlike actual performance, it does not represent actual trading. Since trades have not actually been executed, results may have under- or overcompensated for the impact, if any, of certain market factors, such as lack of liquidity, and may not reflect the impact that certain economic or market factors may have had on the decision-making process. Hypothetical backtested performance also is developed with the benefit of hindsight. Other periods selected may have different results, including losses. There can be no assurance that Dimensional Fund Advisors will achieve profits or avoid incurring substantial losses.



DIMENSIONAL GLOBAL SHORT-TERM GOVERNMENT INDEX (HEDGED TO USD)

Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of Bloomberg Global Aggregate 1-2 Year Index; includes global government bonds only. Within the eligible universe, we apply market weights to construct the index. Currency exposure is hedged to USD. Rebalanced monthly. The index has been retroactively calculated by Dimensional and did not exist prior to January

DIMENSIONAL GLOBAL SHORT-TERM GOVERNMENT VARIABLE **MATURITY INDEX (HEDGED TO USD)**

Compiled by Dimensional using FTSE data © 2022. Includes securities in the FTSE World Government Bond 1-3 Years and 3-5 Years indices. Countries: Austria, Australia, Belgium, Canada, France, Germany, Japan, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the UK, and the US. Countries with the steepest yield curves are overweight with respect to their market cap weight. For countries included, duration corresponds to the steepest segment of that country's yield curve. Currency exposure is hedged to USD. Rebalanced monthly. The index has been retroactively calculated by Dimensional and did not exist prior to January 2019.

DIMENSIONAL GLOBAL GOVERNMENT/CREDIT 1-3 YEAR **UNHEDGED INDEX**

February 1999-present Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of Bloomberg Global Aggregate Index, includes global government bonds and global investment grade corporate bonds. Within the universe, the index identifies the yield curves that offer higher expected returns, and the duration ranges on those yield curves offering higher expected returns, and assesses the increased expected returns associated with allocation to bonds with different credit qualities. It then overweights (with respect to their market cap weight) bonds of yield curves, duration ranges, and credit qualities that offer higher expected returns. It also employs credit quality, currency, and duration requirements relative to the eligible market. Returns are in USD, unhedged. Rebalanced monthly. Prior to February 1999 Compiled by Dimensional using data © 2022 by FTSE. Includes securities in the FTSE World Government Bond 1-3 Years Index. Countries: Austria, Australia, Belgium, Canada, France,

Germany, Japan, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, UK, and the US as data becomes available. Rebalanced monthly based on market weights. The index has been retroactively calculated by Dimensional and did not exist prior to January

DIMENSIONAL GLOBAL ADJUSTED FIXED INCOME MARKET **INDEX**

(HEDGED TO USD)

Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of the Bloomberg Global Aggregate Index and Global High Yield Index. Includes global government bonds, global investment grade corporate bonds, and global BB corporates. Eligible currencies: AUD, CAD, CHF, EUR, GBP, JPY, USD. Currency exposure is hedged to USD. Within the universe, the index identifies the yield curves that offer higher expected returns, the duration ranges on those yield curves offering higher expected returns, and assesses the increased expected returns associated with allocation to bonds with different credit qualities. It then overweights (with respect to their market cap weight) bonds of yield curves, duration ranges, and credit qualities that offer higher expected returns. It also employs credit quality, currency, and duration requirements relative to the eligible market. The index has been retroactively calculated by Dimensional and did not exist prior to January 2018.

DIMENSIONAL TARGETED CREDIT INDEX (HEDGED TO USD)

Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of Bloomberg Global Aggregate Index and Global High Yield Index, includes global investment grade corporate bonds and global BB corporates only. Within the universe, the index identifies the yield curves that offer higher expected returns, and the duration ranges on those yield curves offering higher expected returns, and assesses the increased expected returns associated with allocation to bonds with different credit qualities. It then overweights (with respect to their market cap weight) bonds of yield curves, duration ranges, and credit qualities that offer higher expected returns. It also employs credit quality, currency, and duration requirements relative to the eligible market. Currency exposure is hedged to USD. Rebalanced monthly. The index has been retroactively calculated by Dimensional and did not exist prior to January 2020.